

# ICBI CBRNE DIARY

Dedicated to Global First Responders



February 2023



What happens when the cat is cornered?

**PART A**



**WW3**



**CBRN challenges in giga-projects**

# C<sup>2</sup>BRNE DIARY- 2022<sup>©</sup>

February 2023

Website: [www.cbrne-terrorism-newsletter.com](http://www.cbrne-terrorism-newsletter.com)

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*Topics that attracted attention!*

# **EDITOR'S CORNER**





### Editorial

Brig Gen (ret.) Ioannis Galatas, MD, MSc, MC (Army)

*Editor-in-Chief*  
ICI C<sup>2</sup>BRNE Diary



Dear Colleagues,

The situation remains the same: war – pandemic – universal unethical stupidity.



**War:** 321 heavy tanks promised – among them: 14 Challenger 2 from the UK; more than 200 Leopard 2A5 from Germany (by the end of the year); 31 M1 Abrams from the US (number can be inaccurate). In addition: (1) F-16 with Western pilots? I was not aware that you can drive an F-16 in 6 months! (2) Western weapons are stored in nuclear power plants! (3) 17 billion USD to repair the energy sector plus additional 2 billion (+HIMARS?) – lost count. Who attacked with drones the Iranian weapons factory in Isfahan? It was not Israel for sure! Or not? Keep also in mind this word: **Transnistria** ...

**Hypocrisy:** In a statement, the [French](#) Ministry of Foreign Affairs asserted that neither France nor any of its partners are at war with Russia. Italy and France's Ministers of Defense have announced that they have ordered 700 Aster-30 missiles for the Samp-T air defense system, with which they are also going to supply Ukraine.

**Irony:** The US asked for Russian weapons from Cuba, Nicaragua, and Venezuela for Ukraine. Russia is looking for American weapons from the Taliban in exchange for oil and food.! According to the most conservative estimates, \$77 billion worth of weapons remains in Afghanistan. American analysts claim that the Taliban have in their possession up to half a million small arms and up to 50,000 armored vehicles from the arsenals of the former Pentagon.

**Nuclear:** Deadly double strong earthquakes (7.8R & 7.7R) hit Turkey (near Gaziantep). What if the next one is closer to the Akkuyu nuclear power plant (~300km)? The reactor at Akkuyu lies 16 miles from the Ecemis fault line where the Eurasian and African tectonic plates meet. Eager to see if there are consequences on the nearby huge Ataturk Dam that might affect an area of 30 km<sup>2</sup>. By the way, the same earthquakes hit Syria but who cares about this poor country?

**NATO:** Why is NATO expanding if they are not going to attack? A question, similar to the one about nuclear weapons ...

**Earthquakes:** Will Turkey's mega earthquake teach against promoting mega cities worldwide? What would be the consequences of a similar or bigger earthquake striking Constantinople (population: ~ 15.84 million)? In addition, not a single word about the "earthquake orphans"! It would be no surprise to see illegal immigrants and refugees have a tent or a container to sleep over while Turkish victims shelter in their cars or out in the open. Also, both Greek and Israeli rescue teams were (indirectly) accused of espionage taking advantage of the disaster!!! Turkish Air Force's (UAVs) violation of Greek National Space continued despite the assistance provided by Greece from the very first moment ... Not to mention, space weapons igniting mega earthquakes – what if it is true?



# ICI C<sup>2</sup>BRNE DIARY – February 2023

**UFOs:** Over Canada, USA, Uruguay, (Romania), and China? Mysterious spiral-shaped vortex in the sky over Hawaii? Remember the 6,000 Japanese balloon bombs and [Operation Fugo](#) (1940s WW2)?

**Artificial intelligence:** Bing wants to destroy whatever he (?) wants! Learn who is Bing in the AI section. An emerging threat bigger than wars!

First Responders, we survived February, let's give it a try for March – you never know, we might be lucky this time!

*The Editor-in-Chief*



Hellenic Counter-Disaster Unit (EMAK)



Died in recent Turkish earthquake in the line of duty!

**Los integrantes del Ejército y Fuerza Aérea Mexicanos**

Lamentamos profundamente la pérdida de nuestro gran compañero el can:

**“Proteo”**

Cumpliste tu misión como integrante de la Delegación Mexicana en la búsqueda y rescate de nuestros hermanos en Turquía. ¡Gracias por tu heroica labor!



EMAK Sugar K9 (GR)





PRAY FOR AFGHANISTAN

### Why do they hate women so much?

Source: <https://twitter.com/SaraWahedi/status/1615724988983611392>

The Taliban's hatred of women extends beyond the living. It is now mandatory for store owners to cover the faces of mannequins. These dystopian images are a sign of how much worse life is going to become for Afghan women if the world doesn't stand with them.



### Respect Nature! Hypocrites!



Jan 23 – Schiaparelli's Spring 2023 Haute Couture show in Paris



## Oskar Lafontaine: Fighting to the last Ukrainian?

By Oskar Lafontaine

Source (Google translate from German): <https://www.nachdenkseiten.de/?p=92944>



Jan 24 – The public debate about the delivery of Leopard tanks to Ukraine is becoming increasingly adventurous. After all, we should have more faith in US politicians: when US Secretary of War Lloyd Austin says: “We want to see Russia weakened to a degree that makes it impossible for the country to do what it did in Ukraine by invading”, then we should believe him. Even if the US President says he will end the Nord Stream gas pipeline, which he has now done, we should believe him. But we shouldn't stop thinking because of that. French intellectual Emmanuel Todd has pointed out that a new Washington-London-Warsaw-Kyiv axis is shaping NATO's actions in Ukraine.

The Americans want to put Germany in front of the pipe and demand the delivery of Leopard battle tanks. British supply some Challenger-2A6 tanks to put Germany under pressure. The Poles declare that they want to deliver their Leopard tanks even if Germany does not give permission. Prime Minister Morawiecki does not want to “stand by and watch Ukraine bleed dry”.

“We appeal to Germany to supply Leopard tanks,” says Latvia's Foreign Minister Edgars Rinkevics. His Lithuanian colleague Gabrielius Landsbergis believes that the task now is to overcome the fear of Russia's defeat - the fear of what could happen then. Merkel's military advisor Erich Vad recently said that Russia would then use nuclear weapons. “Germans don't be afraid of a nuclear war,” Landsbergis calls out to us. And Urmas Reinsalu, Estonia's foreign minister, urges haste. Of course, Baerbock and Strack-Zimmermann are also responsible for the delivery of Leopard main battle tanks. And soon from fighter jets. And then comes the demand for the deployment of German soldiers.

When will the war mongers in politics and journalism understand it? For decades, the US has declared that Ukraine must become its outpost in order to dominate the Eurasian continent. And that's why the US has been arming Ukraine for years. And that's why the Rand Corporation wrote back in 2019: “The US supply of lethal weapons to Ukraine will increase the cost in blood and money to Russia.”

In order to achieve its geostrategic goals, the United States has started to let others fight for it in recent years. In Europe, they want to draw Germany more and more into the war. It is devastating that the Greens in particular, but also the CDU and FDP, led by Baerbock, Hofreiter, Merz and Strack-Zimmermann, whether they know it or not, are dragging the Germans into the war.

The supply of new weapons makes it more and more likely that the war will spread to Germany and Europe. We must now be careful that the “costs of blood and money”, to use the language of the Rand Corporation, do not continue to increase for Germany either.

Oskar Lafontaine is former minister of the SPD Schröder government and former head of “Die Linke”

**EDITOR'S COMMENT:** It is encouraging to see that there are still Germans who think and see beyond lines and actions.

## Iran Blackmails the EU and Threatens to Block Oil Shipments

Source: <https://www.thetrumpet.com/26909-iran-blackmails-the-eu-and-threatens-to-block-oil-shipments>

Jan 25 – “Radical Islam could stop the flow of essential oil to the [United States] and Europe,” *Trumpet* editor in chief Gerald Flurry warned in 2011. This past weekend, Iran threatened to do just that.

On January 19, the European Parliament called for the Islamic Revolutionary Guard Corps, the elite unit of Iran's armed forces, to be classified as a terrorist organization.

“The European Parliament has shot itself in the foot and the response will be a countermeasure,” Iranian Foreign Minister Hussein Amirabdollahian tweeted on January 22. An Iranian parliamentary discussion revealed that these countermeasures could come in the form of detaining foreign oil tankers in the Persian Gulf or even in the Strait of Hormuz.

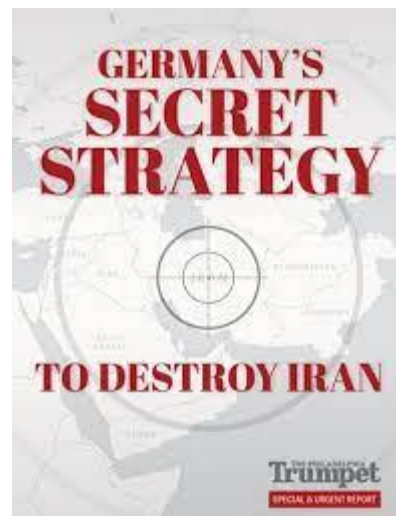
On January 23, the European Union rejected the parliament's submission.

Recently, Europe and Iran have clashed over more and more issues, such as Iran's pursuit of [nuclear bombs](#) and Iranian terrorist plots to deploy [weapons of mass destruction](#) in Europe. Not containing threats from Iranian terrorists is a life-threatening danger. But such countermeasures could lead to Iran blocking sea routes, which could



spell economic disaster. It is becoming increasingly evident that a major clash is inevitable—especially if you consider Iran's growing influence in the Middle East.

**The Trumpet said:** Iran is implementing a bold strategy to control the vital sea lane from the Indian ocean to the Mediterranean Sea. Consider the global ramifications: Nearly 10 percent of global oil supplies pass through the gates of the Red Sea. Roughly 20,000 ships pass through the Suez Canal and Bab el-Mandeb each year—an average of 55 per day. ... This terrorist nation has become the gatekeeper of the Red Sea and the Suez Canal. —Mr. Flurry, [Germany's Secret Strategy to Destroy Iran](#)  
Europe is heavily dependent on oil imports. A disruption to supplies could cause significant economic damage. It would likely drive inflation and cause major shortages.



**Prophecy says:** Mr. Flurry has often pointed to Daniel 11:40, which describes a clash between the king of the north—a German-led European superpower—and the king of the south—radical Islam, led by Iran. This clash, the Bible reveals, would be preceded by the king of the south “pushing” at the king of the north. Part of this push could be a blockade of these strategic sea routes.

On the surface, this may appear to catch Europe off guard, but in fact, it has been preparing for it. The Bible reveals that Europe has a strategy to push back.

**EDITOR'S COMMENT:** I think that the word “blackmails” in the title is not accurate. Every nation is using what it has in order to achieve its goals. Examples? MANY! (most in the Western World) What is Mr. Flurry implying with “the terrorist nation”? Iran has no access to Red Sea? (perhaps via Yemen?)

## Turkey: Putin's Open Door for Harming Western Interests

By Burak Bekdil

Source: <https://www.meforum.org/64064/turkey-putin-open-door-for-harming-western>

Jan 20 – Turkish Islamists, especially Neo-Ottomans, have historically hated Russia -- both Czarist and Soviet. Similarly, Russians and Soviets have never been great fans of the Turks -- both Ottoman and republican. Today, however, Turkish President Recep Tayyip Erdoğan, with a big foot in NATO, is exhibiting a pro-Russian tilt never seen before, and at a time when Russian President Vladimir Putin is seen as an existential threat to Western interests. What is the secret behind this sudden marriage?

For Putin, Erdoğan's friendship is growing ever more important -- and vice versa.

Turkey has refused to join Western sanctions against Russia over Ukraine, thereby throwing a lifeline to Putin. Turkish skies remain open to Russian airlines and its doors open to hundreds of thousands of Russians and their money. Turkish exports to Russia are [surging](#). In July alone, exports to Russia shot up by a dizzying 75 percent year-on-year.

Russia's state-run Rosatom, which is building Turkey's first nuclear power plant, has [sent](#) about \$5 billion to its Turkish subsidiary, the first in a series of such transfers. Russian cash helped plug the growing hole in Turkey's foreign currency reserves -- at a time when Erdoğan needs foreign money for the country's ailing economy before the presidential and parliamentary elections this June. Some analysts see the Rosatom-Akkuyu-dollar bonds triangle as a Turkish-Russian [scheme](#) to open a parking space for Russian funds in Turkey. They think, for example, the [increase](#) in the Turkish central bank's foreign currency and gold reserves — \$108 billion on August 4, up from \$98.9 billion on July 26 -- had to do with Russian money flowing to Turkey.

Bloomberg [reported](#) that “mystery capital flows” into Turkey had reached “new highs allowing policymakers to boost foreign reserves despite a growing trade deficit and weak demand for lira assets.” Bloomberg's source remains unclear.

In March, Turkish Foreign Minister Mevlüt Çavuşoğlu [said](#) that Russian oligarchs were welcome in Turkey. In October, the *Financial Times* [reported](#) that between January and August 2021, a record \$28 billion from unclear origins had flowed into Turkey. Turkish investigative journalist Aytuğ Özçolak listed a few of the [Russian oligarchs](#) who have business interests, investment and funds in Turkey as Leonid Mikhelson,





Vagit Alekperov, Vladimir Lisin, Vladimir Potanin, Alexey Mordashov and Mikhail Fridman. According to Marc Pierini, a senior fellow at Carnegie Europe and a former EU Ambassador to Ankara, the number of Russian expatriates in Turkey, as well as their real estate investments and financial transfers to Turkish banks, have grown substantially. Moreover, Pierini [wrote](#), there is a suspicion that Russia is trying to circumvent some of the effects of Western sanctions via Turkey, in particular through the acquisition of stakes in Turkish oil businesses, as joint companies help to blur oil trade.

Pierini further noted: "The Kremlin's policy is highly pragmatic: knowing that Turkey's partners in NATO are keen to keep it in the North Atlantic Alliance and Ankara has every interest in staying within NATO, Putin's goal remains anchoring Erdoğan more and more to Russia through a vast mesh of mutually beneficial operations in the fields of defense, energy, trade, and finance.

"By doing this, Putin is comforting an embattled incumbent president and is openly bolstering Erdoğan's position in the upcoming elections. More than the Turkish president abandoning his traditional Western partners, the world is witnessing the Russian president using Turkey for his own benefits." Jokes in Ankara's political grapevine describe Putin as "head of the Erdoğan Party's Moscow provincial branch." Whichever indicator one looks at, Putin wants Erdoğan to stay in power. He would rather not gamble with someone else as Turkey's new leader. After all, Erdoğan's potential rivals pledge to reinstate Turkey's strong bonds with Western countries.

The Erdoğan-Putin bond has two main pillars. One is pragmatism: They both strategically, politically, and economically benefit. The other is ideological: They both hate the West.

[Burak Bekdil is an Ankara-based political analyst and a fellow at the Middle East Forum.](#)

## Can you imagine that?

At least one administrator at the Newport, Virginia school where a 6-year-old boy shot a teacher last week was aware the boy might have had a gun, but no weapon was found when the boy's backpack was searched before the shooting, school officials said.

## 8 Lessons for Taiwan from Russia's War in Ukraine

By Tzu-yun Su

Source: <https://www.homelandsecuritynewswire.com/dr20230125-8-lessons-for-taiwan-from-russia-s-war-in-ukraine>

Jan 25 – Russia's invasion of Ukraine and Xi Jinping's [consolidation](#) of power in China have raised fears of a [comparable military conflict](#) in the Taiwan Strait. Moscow [has annexed](#), on paper, parts of eastern Ukraine that it sees as its [traditional territory](#) and regards NATO as a hostile force. China, meanwhile, sees Taiwan as a local government and the Taiwan Strait as an internal sea. Such claims of sovereignty and [maritime rights](#) challenge international norms embraced by the West and its allies, as well as some of their interests, thus creating contestation beyond the borders of the regions in question.

While the fighting in Ukraine is on land, and thus very different from the maritime battlefield that would surround Taiwan, there are still many things my island nation can learn from Ukraine's defensive operations. One similarity in particular is that Taiwan, like Ukraine, is a relatively weak power facing the threat of a much larger one—and that asymmetry lies at the heart of many of the lessons outlined below, including that a nation's security cannot rely solely on promises of peace and that continuity of government operations is vital. In some key respects, Taiwan finds itself in a more advantageous position than Ukraine. It is geographically separated from its adversary by the strait and [its GDP in 2021](#) was nearly four times Ukraine's by one measure,<sup>1</sup> giving Taiwan the financial leeway to bolster its defenses in advance. Before considering lessons for Taiwan, it is important to note that China has also learned from the Russian-Ukrainian war, most notably by improving its [psychological warfare capabilities](#), which have increasingly [targeted Taiwan](#), and enlarging [its nuclear arsenal](#) (a process that began before the current war). Nuclear weapons afford Beijing a "political denial" capability, in addition to its conventional military anti-access/area-denial capabilities, to deter other countries from assisting Taiwan. The fact that Moscow's nuclear arsenal has kept the West from sending troops into Ukraine has likely reaffirmed China's drive to accelerate the build-up of its nuclear arsenal and rocket forces.

Below I have listed eight possible lessons for Taiwan from the Ukraine war.

**1. National security cannot rely solely on promises of peace, even in writing.** While dialogue may help reduce misunderstandings, it is useless against a determined aggressor. The so-called [Budapest Memorandum](#) of 1994, which provided assurances meant to safeguard Ukraine's sovereignty and territorial integrity, did not prevent Moscow from annexing Crimea 20 years later or starting a full-blown



war early last year. Likewise, the [German-Soviet Non-Aggression Pact](#) and its protocols did not keep the Nazis from invading the Soviet Union in June 1941.

**2. Continuity of government operations** both demonstrates and bolsters a people's determination and will to resist a military onslaught. Western countries originally thought Ukraine would quickly fall. However, the courage of President Volodymyr Zelensky and the Ukrainian people succeeded in resisting the Russian army and made the European countries understand that Ukraine was the first front of defense of democracy and succeeded in gaining international support. In practical terms, [Zelensky](#) and other senior officials have stayed in Kyiv, kept the [trains running](#), empowered local authorities and volunteers to [help those affected](#) by Russian attacks and tried tenaciously to [repair damaged infrastructure](#).

**3. A military strategy based on sea denial.** Ukraine may not have seemed well-prepared before the war—[corruption in the defense sector, for example](#), impacted war preparations—but it was able to resist effectively after the war started. In addition to demonstrating courage and will, the [reinstatement of military conscription](#) after 2014 provided the Ukrainian army with sufficient reserve manpower to play a key role in defending the frontlines against the Russian army and attacking Russian rear lines of communication, including by flank attack or [circuitous means](#). Taiwan, with its democratic beliefs, espouses a policy of strategic defense and will never launch a first strike, so its military strategy must be deterrence. It is necessary to ensure counterstrike capability and credibility in order to deter effectively; therefore, lower cost and high survivability of precision-guided weapons systems become the preferred choice and can make good use of Taiwan's geographical characteristics to quickly establish Taiwan's sea denial capability in responding to China's threats.

**4. Take threat signals seriously and strengthen defenses rapidly.** Beijing has signaled in its "[White Paper on Taiwan Policy](#)" and in [Xi's speeches](#) that it will never promise to renounce the option of using force against Taiwan; official Communist Party communications likewise [make it clear](#) that Xi wants to see the [unification](#) of Taiwan with mainland China. These policies are even more explicit than Russia's publicly stated concerns about Ukraine drawing [closer to NATO](#) and statements, in its [military doctrine](#) and [elsewhere](#), about Moscow's right to protect its citizens beyond its borders. Faced with such a clear signal of threat, Taiwan must quickly increase its defense budget to strengthen its war readiness, in my view: By raising spending to 3% of GDP, we can build sufficient military capabilities and readiness.

**5. Redesign investment strategies to account for military asymmetry.** By some estimates, China spends [17 times more](#) on its military than Taiwan, so Taiwan needs investments that boost its chances of defending itself successfully. Military strategy is like a symphony that must combine very different capabilities. Aside from Stinger and Javelin missiles, the war in Ukraine has highlighted the value of long-range defensive weapons such as M777 howitzer and High Mobility Artillery Rocket System (HIMARS). The same would apply in the Taiwan Strait. Relying only on small, short-range weapons systems would make the sea an enemy highway. Taiwan needs modern military technology and precision-guided munitions that favor the defender and would allow Taiwan's smaller force to destroy the enemy's amphibious fleet and prevent it from landing. This will be helped along by Taiwan's [special five-year budget](#) of \$8.5 billion to enhance air and sea missile capabilities. The main force, in my view, should be ground-based anti-ship and air-defense missiles, uncrewed vehicle systems and counter-strike missiles that help keep the enemy at bay. (This is also good value for money: For example, it may take 24 months to construct a frigate but only three and a half days for Taiwan to [build an anti-ship missile](#); Ukraine's sinking of the Russian cruiser Moskva with two anti-ship missiles serves as a good example of the effectiveness of such asymmetry.) The challenge is that Taiwan must also contend with coercive gray-zone campaigns that may become [China's "new norm"](#): quasi-military operations using warplanes and warships close to Taiwan's airspace and waters to create psychological pressure. This makes it necessary to also invest in platforms such as fighter planes and warships.

**6. Design an effective communications strategy.** Ukraine's experience in [international communications](#) is also valuable. Taiwan must make the international community understand that Taiwan does not see China as an enemy, but that China sees democracy as an enemy. Taiwan is democratic and China is authoritarian. This is a competition of systems. The issue of the Taiwan Strait is not an issue of unification versus independence. Taiwan's position should be cast as anti-communist, not anti-China. This, in my view, will help counter Beijing's propaganda about the "One China Principle" because in the PRC constitution the Chinese Communist Party [is the only legal ruling party of China](#), which means that Beijing's assertion of "one China" equals one-party rule. Breaking Beijing's strategic narrative could spare Taiwan a lot of trouble and obstacles and gain more international support.

**7. Strengthen defensive resilience.** [Taiwan's government has announced the resumption](#) of conscription, replacing four-month training with one-year military service, which will help improve Taiwan's defensive resilience, in my view. According to [a Taiwanese poll](#) released in August, 65.5% of respondents agreed that year-long compulsory military service should be reinstated. Conscription will provide more manpower to destroy the small number of enemy troops (amphibious or airborne) that do come ashore and, at the same time, instill a sense of "citizen soldiers." Ukraine has also been [relying on conscription](#) as part of its attempts to repel the Russian invasion.



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**8. Conduct joint training with allied partners but prepare for the worst-case scenario.** Pre-war joint exercises involving U.S., NATO and Ukrainian forces, as well as the emergency training during wartime, have been [plentiful](#) and seemingly effective. The West's sharing of real-time [intelligence](#) with Ukraine has, meanwhile, greatly contributed to Kyiv's ability to effectively combat the invading Russian forces. Similar assistance from allies would likewise contribute to Taiwan's defense. Despite [Washington's efforts](#) to provide various kinds of assistance to Taiwan, including military exchange, there are still many obstacles, not least due to the lack of formal diplomatic relations. For Taiwan, this is full of uncertainty—I personally position international politics as an art—and that is why Taiwan must still prepare for the worst-case scenario and the prospect of fighting alone.

Since the Battle of Marathon during the first Persian invasion of Greece, the history of war is replete with cases of small armies defeating large enemies, and Ukraine offers Taiwan strategic inspiration in terms of systematic political-military thinking. Taiwan is already strengthening various defense preparations, including continuous government operations, civil defense, critical infrastructure protection and strategic material reserves. The lessons of Ukraine's defensive war have shortened the learning curve for Taiwan and will be a good reference. Taiwan understands that it will never become a "free rider" in security matters. Therefore, Taiwan needs "armed democracy" to protect its own survival and the security of its partners.

(1) According to the International Monetary Fund's World Economic Outlook database, Taiwan's 2021 GDP in current prices was \$774.4 billion versus Ukraine's \$199.7 billion; in terms of [GDP based on purchasing power parity](#) (as a share of the world's total), Taiwan's exceeded Ukraine's by a factor of 2.5, totaling 1% versus 0.4%.

[Tzu-yun Su](#) is the director of the Division of Defense Strategy and Resource at *INDSR*.

## Congrats!

The [European Commission](#) today (24/01) reiterated its opposition to EU funding of walls and fences to tackle irregular immigration, a demand that has been voiced by several member states, most recently Austria among them. "There is no money in the European Union budget for this. If we had to spend money on walls and fences, there wouldn't be money for other things," said European Home Affairs Commissioner [Ylva Johansson](#), who was asked about it when she attended a meeting of European interior ministers in Stockholm.



## No comments!





## Greece and the right side of history ...

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🇺🇸🇹🇷🇸🇪🇫🇮 Victoria Nuland says that the US Congress "would have reacted more favorably" to the transfer of the F-16 to Turkey if Ankara had allowed Sweden and Finland to join NATO.



7:30 PM · Jan 26, 2023 · 12.7K Views



### 2022

Violation of the Greek National Airspace (GNAS), with 10,103 violations officially recorded in the first 11 months of 2022 with 216 overflights of Greek islands.

On 19 Dec 2022, 31 Turkish aircraft carried out a massive violation in the Aegean with 108 violations of the GNAS, with 20 engagements, while even on Christmas Day there were 11 violations of the GNAS by three armed Turkish aircrafts.

In December 2022 there are 62 confirmed fighter jet engagements.

**January 2023:** 609 violations of the NAS, 16 overflights; 21 cases resulted in fierce engagements with the Air Force.

▶ [VIDEO](#)



**EDITOR'S COMMENT:** Suppose that the US approves Turkey to buy the F-16 requested. How can they actually prevent them to be used against Greece? Is there a login/password (like in the F-35) that dictates where to fly and witch national space is forbidden? Please email me if you have such info (I am sure you do not). So, all these confrontations are just ash in the eyes (as usual)!

## Can the Biden Administration Ensure that Turkey's Erdoğan 'Stays Bribed?'

By Clifford Smith

Source: <https://www.meforum.org/64080/can-the-biden-administration-ensure-that-turkey>

Jan 25 – The Biden administration needs a change of tactics when it comes to dealing with Turkey's president, Recep Tayyip Erdoğan. According to recent reports, the White House has [informally](#) notified Congress of its support for the sale of advanced F-16s and upgrade kits for Turkey's existing F-16s to Ankara. The White House intends to formally submit such a deal to Congress, which must approve the sale. Turkish Minister of Foreign Affairs Mevlüt Çavuşoğlu triumphantly [announced](#) that agreements have been reached with management at all levels concerning the controversial sale, although he admits that [Congressional roadblocks](#)

could still create issues. Administration officials are saying that approving the sale will help convince Turkey to approve Sweden and Finland's bids to join NATO.

According to recent reports, the White House has informally notified Congress of its support for the sale of advanced F-16s (above) and upgrade kits for Turkey's existing F-16s to Ankara.

If you're getting a hint of déjà vu, you're not alone. It was back in June that U.S. President Joe Biden [announced](#) he supported the sale of advanced F-16's to Turkey. The announcement came immediately after Turkey [lifted opposition](#) to Sweden and Finland joining NATO following a reported breakthrough whereby Helsinki and Stockholm agreed to take certain actions toward



Turkish expats that Ankara considers terrorists. While Biden denied a quid-pro-quo, everyone understood his support came largely in response to Turkey's actions toward Scandinavia. So why are we still talking about this nearly seven months later?

In short, because Erdoğan will not stay bribed.

Former New York City Mayor Rudy Giuliani dedicated an entire chapter in his post-Mayorality book *Leadership* to the idea that you should "bribe only those who will stay bribed." Staying bribed isn't technically about bribery, but, as Giuliani puts it, "You can be a liberal, a conservative...you can even be a crook, but when you make a deal, you keep it." However, "Sometimes a leader has no alternative but to deal with someone untrustworthy," and at times like that, you must "lock up every detail," and even still be aware that "they'll find some way to weasel out of it....You've got to know when you're dealing with someone who will not stay bribed so you can collect your end of the bargain up front." Giuliani's reputation may have fallen on [hard times lately](#), but this remains sage advice. Experts in the field have [called](#) Erdoğan a pan-Islamist, neo-Ottoman, authoritarian. He has systematically [arrested opposition journalists](#), co-opted major [media organizations](#), and [outlawed opposing political parties](#). Erdogan's actions, as well as statements he made in leaked private conversations, demonstrate that he [disdains](#) the Western alliance and sees NATO as little but a tool to use for leverage. A specific example is when Erdogan [renege](#)d on a deal to release Pastor Andrew Brunson, held on obviously fictional terrorism charges, after then-U.S. President Donald Trump helped Erdoğan secure the release of a Turkish citizen held in Israel. It was only months after Trump made it clear that he would not pay, yet again, and shamed Erdoğan publicly, that Brunson was [freed](#).

Yet there are signs that the Biden administration has not taken this history to heart when it comes to Turkey and F-16s. According to an [exclusive report](#) from the *Wall Street Journal*, "Biden administration officials have argued that selling F-16s to Turkey could help restore ties with the country," and that they see it as a "carrot on a stick," to entice Erdoğan to allow Finland and Sweden into NATO.



But much like the Brunson issue, Erdoğan has already been bribed — by Sweden, Finland, the U.S., and Europe more broadly. Yet he's not upholding his side of the bargain.

It is technically true that Turkey's initial agreement to drop its veto of Swedish ascension was conditional on Sweden and Finland delivering on its promise to crack down on Turkish expat groups that Erdoğan deems terrorists, and to [resume some arms sales](#) in spite of Turkey's oppression of Kurds. But it is entirely clear that both countries have done everything they could plausibly be expected to do to meet his demands. Sweden truly has an [independent judiciary](#) (a concept that [may seem foreign](#) to Erdoğan, who has [denigrated](#) Turkish judicial independence), and Swedish judges have [disallowed](#) some of the extraditions desired by Erdoğan, while allowing for others. Sweden has already toughened up its counter-terrorism laws at Turkey's request. Çavuşoğlu is also [demanding](#) that Sweden prosecute protesters for burning an effigy of Erdoğan, a move that would almost certainly violate Swedish law as well as internationally recognized standards of free speech. Just this week, Erdoğan [went even further](#), saying that Sweden should not expect support for its NATO bid, all because at a protest in Sweden, a Quran was burned.

In other words, Erdoğan is making intentionally unreasonable demands, after initially agreeing to allow Sweden to enter NATO, possibly in order to [hold over allowing the Scandinavian countries till after his election](#), or worse. This is the behavior of someone who will not stay bribed.

Yet the Biden administration seems to be giving Erdoğan even more wiggle room. The administration has warned Ankara that Congress may not approve the sale unless it allows Sweden and Finland into NATO, but this is a simple truism. Congressional leaders, including Senator Bob Menendez, chairman of the Senate Foreign Relations Committee, have threatened to block the sale. Yet, assuming reports are [accurate](#), the administration has [stopped short](#) of saying that failure to allow Sweden and Finland into NATO will result in the termination of any possibility of Turkey getting F-16's, even while Turkey is asking for F-16 sales to be [expedited](#). But allowing Sweden and Finland into NATO should be the bare minimum demand. Indeed, the White House should require changes in Ankara's behavior that go well beyond NATO expansion.

Meanwhile, as Erdoğan and Çavuşoğlu are busy making unreasonable conditions on Sweden, Çavuşoğlu is [insisting](#) that he will not buy products from countries that want to place conditions on sales of advanced F-16's, obviously referring to Congressional demands that Turkey not use advanced F-16's to antagonize fellow NATO member Greece, which Turkey provokes with illegal overflights on a [daily basis](#). Indeed, blocking Sweden and Finland's admission to NATO is only [one of many sins](#) that ought to cost Turkey its bid to get advanced F-16's. Turkey's many abuses against Kurds in Syria and Iraq, and against Armenians in support of the Azerbaijanis, are also significant reasons. Moreover, the only reason this is even an issue is due to Turkey's purchase of the Russian S-400 air defense system, which, being in [defiance](#) of Turkey's NATO obligations, and in [violation](#) of Countering America's Adversaries through Sanctions Act (CAATSA), got it kicked out of the even more advanced F-35 program. The F-35 will [now only be sold](#) to Turkey's quasi-foe, Greece.

Some of this is happening behind closed doors, and it is impossible to know exactly what the Biden administration is saying in private. Yet indications are that it still considers Erdoğan an actor that will "stay bribed." This is a mistake. The Biden administration needs to collect a significant change in Turkish behavior upfront, or else risk getting little or nothing. In the long run, Turkish misbehavior will only get worse if we do not insist on ensuring our side of the bargain is met first.

Turkey's slide into an authoritarian state has been unmistakable, but just opaque enough that some are still failing to grasp its significance. If the Biden administration does not quickly internalize the truth concerning Turkey's shocking descent, expect U.S. interests, the interests of NATO and its prospective members in Scandinavia, and our shared cause in Ukrainian victory, to suffer.

Clifford Smith is director of the Middle East Forum's Washington Project.

## Corruption in Ukrainian government is unfortunate for Ukrainian people, says Bill Gates

Source: <https://tass.com/world/1567699>

Jan 26 – Bill Gates, a co-founder of Microsoft, has said that corruption in the Ukrainian government is very unfortunate for the people in the country.

He said before the start of the Russian special operation "**the Ukrainian government is one of the worst in the world, you know, corrupt, controlled by a few rich people, I mean, really unfortunate for the people in Ukraine.**"

He made the comments in a speech at the Lowy Institute in Australia, which was broadcast at the institute's website.



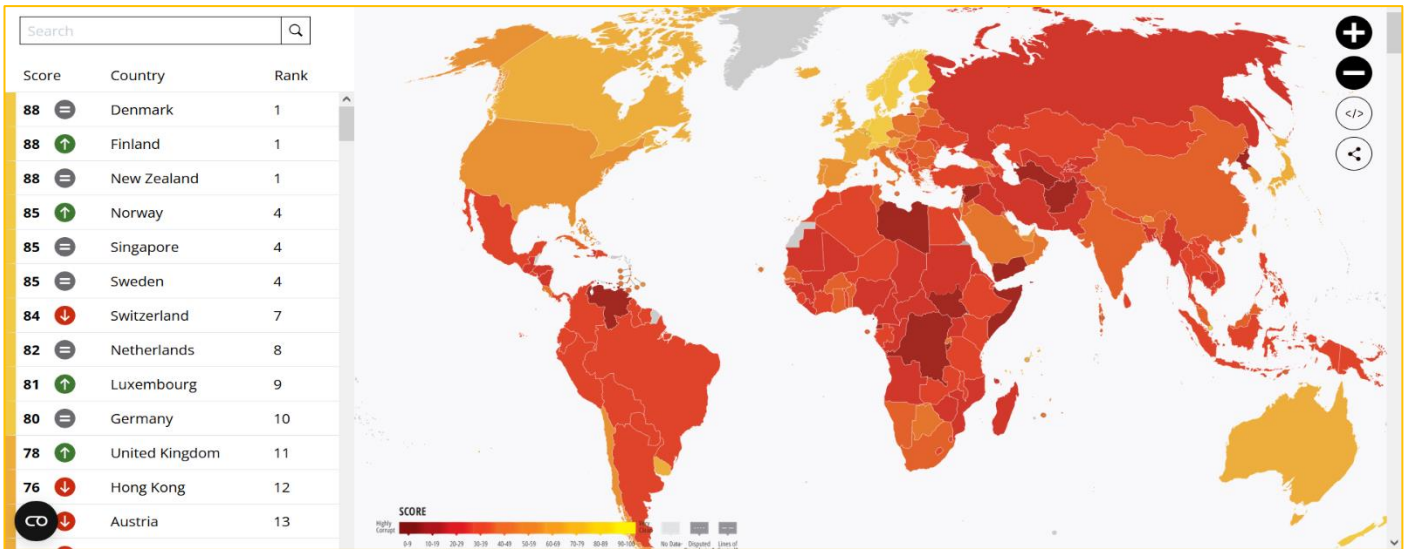
**ICI C<sup>2</sup>BRNE DIARY – February 2023**

Ukrainian news media have in recent days reported about several corruption scandals involving some of the country's top officials. Ukrainian President Vladimir Zelensky on January 22 warned in a video address he would make a government reshuffle. A slew of dis missals ensued.

**EDITOR'S COMMENT:** Although the statements were made months ago, they have now come to light apparently in connection with the recent expulsions. Bill Gates is considered one of the main supporters of international circles and his agenda is identical to that of the Democrats who are currently ruling the USA. Therefore, his statements are of particular importance.

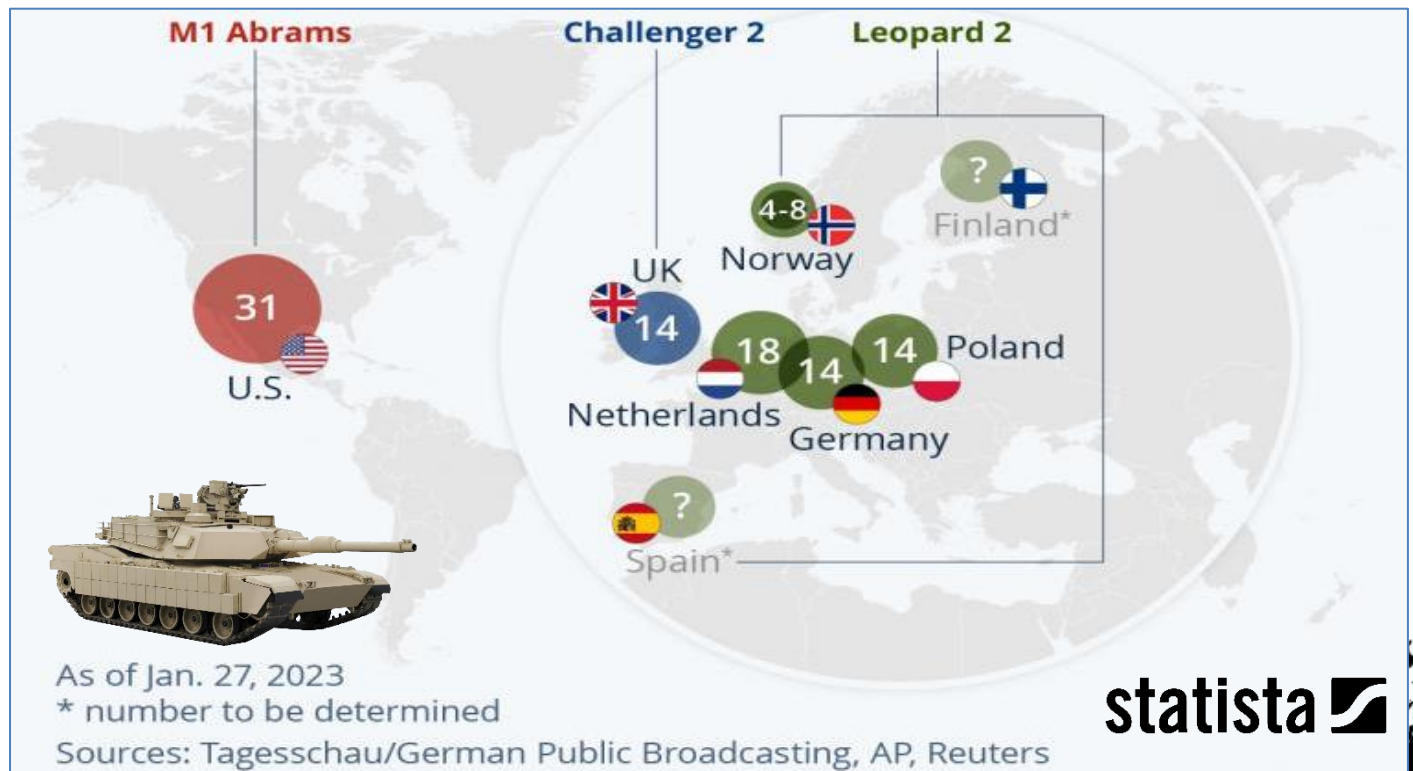
**Corruption Perceptions Index 2021**

Source: <https://www.transparency.org/en/cpi/2021>



This is an interactive map

**Who is delivering tanks to Ukraine?**







## Yuval Harari – History is dangerous!

Source: [https://twitter.com/harari\\_yuval](https://twitter.com/harari_yuval)

The World Economic Forum has imposed its agenda on the teaching of History worldwide and has ordered governments to "remove" many parts of it from education because they prevent the spread of international "Great Reset" propaganda.

*"The Great Reboot" to be implemented there must be weak national consciences.*

*"I never heard of any regime, any government, that banned schools from teaching math or physics. But History is dangerous.*

*So, you see that in many places it is either completely forbidden to teach history or at least certain parts of history are taboo.*

*Because it's dangerous. Because if you learn history, you can make people ask some very dangerous questions. I mean dangerous from the perspective of the regime. And of course, this is not a panacea."*

Yuval Harari is the man who said that "Christ is a lie" (he even characterized His entire history as "fake news").

**EDITOR'S COMMENT:** This is the drama of the Internet: everyone can share sick ideas and propaganda.



## Europe Doesn't Need the United States Anymore

Until EU leaders accept that the continent can stand on its own feet and Americans give up the role of global police, dependency on Washington will continue.

By Rajan Menon, and Daniel R. DePetris

Source: <https://foreignpolicy.com/2023/01/30/nato-europe-eu-defense-united-states/>

Jan 30 – The Russian military's weaknesses have been apparent since the early days of the war in the Ukraine. The staggering losses in troops and equipment, Moscow's inability to adequately equip or even supply its troops, and the multiple shifts in command—Chief of the General Staff Valery Gerasimov being Russian President Vladimir Putin's [latest choice](#)—have exposed the myth of the Russian army's supposed [invincibility](#).

The jostling between [Yevgeny Prigozhin's Wagner Group](#)—a private army active in the key battles of Soledar and Bakhmut—and Russian Defense Minister Sergei Shoigu as well as Russia's high command attests to deep and persistent friction among the very people Putin counts on to run the war and attain victory.

Still, nearly a year since the invasion began, Russia is still regarded by many as a formidable military power and a dire threat, not only to Ukraine itself but also to Europe as a whole. This continues to be the predominant lesson drawn from the Russian military's decision to invade what is—the European part of Russia aside—Europe's largest country in land area and one of its most populous. Driving this widespread assumption is the misguided notion that Europe is simply incapable of defending itself without the help of the United States and that in the wake of the Russian invasion of Ukraine the U.S. military presence has to be beefed up—which it has. This belief is pervasive in the corridors of power in Washington and Europe and was [reiterated](#) most recently by Finnish Prime Minister Sanna Marin in December.



This assessment—of a Europe rich and technologically advanced but in effect defenseless—was compelling for much of the Cold War. Back then, the Soviet Union had a substantial conventional military advantage over Western Europe. Soviet troops were forward-deployed all across Soviet-dominated Eastern Europe (which formed part of the Soviet-led Warsaw Pact), with more than 300,000 Soviet troops stationed in East Germany alone. European economic recovery was also a work in progress.

Today, however, this view is flat-out wrong.

Consider some of the standard metrics used to compare countries' military potential: GDP, population, defense spending, and level of technological advancement. They all show that Russia is far weaker than the 27-member European Union and that the balance of potential power indisputably favors Europe. At no point since the end of the Cold War has Russia's economy amounted to more than [15 percent](#) of Europe's GDP—in 2021, Russia's [\\$1.8 trillion GDP](#) was a fraction of the European Union's [\\$17 trillion](#).

When it comes to technology, Russia [ranks 44th on the list](#) of the world's most technologically advanced countries, and as tech-savvy Russians [leave the country](#) to escape the military draft, it wouldn't be surprising if its ranking has dropped further. Russia has [one-third](#) the [population of the EU](#)—and within that population, a sizable chunk of the working-age Russian men who haven't fled are being conscripted and killed at the front. In January, Gen. Mark Milley, the chairman of the U.S. Joint Chiefs of Staff, stated that Russia's killed or wounded totaled "[significantly over 100,000](#)," while Norway's chief of defense, Eirik Kristoffersen, estimated that the count had neared [180,000](#).

To be fair, one can't fault U.S. officials for worrying about the threat to Europe once Putin's war began. On paper, the Russian military looked like a large, competent force that could overrun Kyiv in days, and [prominent commentators](#) as well as the [CIA](#) predicted it would do just that. By some estimates, the Russian military spent at least [\\$150 billion](#) a year between 2014 and 2019 trying to refit, rebuild, and modernize its military and much more if one starts the tabulation from 2008, the year modernization efforts began.

For these reasons, once Russian troops crossed into Ukraine, the Biden administration vowed to defend every inch of NATO territory and [deployed](#) an additional 20,000 U.S. troops to Europe, bringing the total to around 100,000. More F-35 fighter jets were stationed in the United Kingdom, air defense systems were sent to Italy, and U.S. bases in Poland [became permanent](#)—the first such move on the alliance's eastern flank.

Yet Russian military power is becoming depleted after nearly a year of fighting a tenacious Ukraine, which has inflicted heavy equipment losses and casualties on Putin's forces. Helped by more than [\\$27 billion](#) in military assistance from the United States, the largest security contributor to Ukraine by far, as well as billions of dollars more from the [U.K. and Europe](#), Ukraine has inflicted more losses on Russian forces in 11 months than the Soviet Army suffered during its nearly decade-long war in Afghanistan. (Most of this military aid has come from Britain and the United States, though European countries have [stepped up](#) their commitments recently.) Russian equipment losses have been [staggering](#): More than 1,600 tanks, 1,900 infantry fighting vehicles, and 290 armored personnel carriers have been destroyed, damaged, captured, or lost. Those losses will increase substantially now that Germany, after persistent pressure from the United States and several of its European allies, [approved](#) the transfer of an initial batch of 14 Leopard 2 tanks to Ukraine. Berlin's decision paves the way for other countries such as Poland, Finland, Norway, the Netherlands, or Spain to send the Ukrainians some of their own Leopards, which are far superior to Russia's T-90 or T-14 Armata models. (The latter, [problem-ridden](#), has not even been deployed to battlefields in Ukraine.)

Russian forces that are dug into defensive positions in the east and south will soon face Ukrainian forces that have a substantially [greater strength](#) in mobile armored warfare, given the Leopard's capabilities, which include thermal imaging and precision targeting. The Leopard, which comes in different versions and of which there are [more than 2,000](#) in service across Europe, provides just one example of Europe's advanced [defense industry](#), which could, backed by political will, become much larger.

Given Europe's massive advantage in resources, there is no reason why it cannot organize an effective defense against Russia. What, then, is stopping Europe from doing so?

Part of the answer has to do with U.S. policy and Washington's view of its role in the world. Since the end of World War II, U.S. leaders have sought to lead their European allies and, as a corollary, frowned on any steps by Europe toward greater self-sufficiency in defense. U.S. officials [opposed](#) efforts, including a [1998 British-French initiative](#), to increase the EU's military effectiveness and a bid, two decades later, to promote the joint development of European armaments.

As a [recent analysis](#) by the Brookings Institution noted aptly, "Europe has wanted autonomy without providing adequate defense resources, while the United States has wanted greater European defense contributions without diminishing NATO and U.S. political influence."

The U.S. government isn't being disingenuous when it says it favors a strong Europe; it just fails to add that it also wants Europeans to remain dependent on U.S. protection and even compliant when it comes to U.S. preferences on matters of security.

The idea of Europe developing a self-sufficient military capability outside U.S.-dominated NATO has long been disliked in Washington. In his last address to NATO defense ministers in December 2000, U.S.



Defense Secretary William Cohen warned that NATO “[could become a relic](#)” if the EU built up what he labeled as a competing, redundant defense organization. Nearly two decades later, after the EU formed a joint fund for collaborative defense projects in 2017, a top U.S. defense official at the time commented that the plans must not distract from NATO’s current activities. “We don’t want to see EU efforts pulling requirements or forces away from NATO and into the EU,” [said](#) Katie Wheelbarger, the then-principal deputy assistant secretary of defense for international security affairs.

European governments don’t automatically follow Washington’s script—though they follow its lead more often than not—but have heeded the warnings, happy to oblige and play the role of dependent. After all, if you can count on a superpower to be your external protector and spend less on defense than you otherwise would, why not take the deal?

This arrangement has deep roots and won’t be easy to change. The U.S. security guarantee to Europe has been in place since NATO was established in 1949. Multiple generations of European leaders have internalized the belief that U.S. leadership is irreplaceable and that their continent cannot survive without it, never mind that Europe has long since become an economic and technological powerhouse itself, one that produces an array of advanced weaponry.

This same orthodoxy—Europe would be imperiled absent U.S. protection—has also long been gospel within the U.S. foreign-policy establishment. Moreover, it aligns with the [ubiquitous narrative](#) that the world would descend into chaos were there not a constellation of U.S. military bases overseas to maintain order. Secretary of State Madeleine Albright’s quip in 1998 about the United States being the “[indispensable nation](#)” continues to be repeated or paraphrased by foreign-policy luminaries today, and the underlying worldview long preceded her.

In light of all this, no one should be surprised that Putin’s war in Ukraine has reinforced the conventional wisdom: Russia’s imperial ambitions, coupled with Europe’s frailties, necessitate an open-ended, even increased, U.S. commitment to protect the continent.

But the facts suggest precisely the opposite. The U.S.-European security relationship has therefore become progressively divorced from reality. If it is to change, what Europe needs is not more resources but greater political will and self-confidence. Washington, for its part, must jettison the axiom that it has no choice but to serve as Europe’s perpetual protector par excellence.

Such a shift is nowhere on the horizon. It will happen only when foreign-policy experts in the United States and Europe rework their assumptions and have an honest, fact-based strategic discussion about the obsolescence of the current trans-Atlantic security relationship. The move toward a new arrangement, one appropriate to the times, could include alternating the position of NATO’s supreme allied commander in Europe between an American and a European; having Europe assume sole responsibility for deployments on NATO’s eastern flank; sustained increases in European defense spending; and substantially greater pan-European cooperation in armaments production to avoid duplication and leverage comparative advantages.

These changes will take time—but they can begin now.

[Rajan Menon](#) is the director of the grand strategy program at Defense Priorities, a professor emeritus at the City College of New York’s Colin Powell School for Civic and Global Leadership, and a senior research fellow at Columbia University’s Saltzman Institute of War and Peace Studies. His books include *Conflict in Ukraine: The Unwinding of the Post-Cold War Order* (co-authored with Eugene Rumer) and, most recently, *The Conceit of Humanitarian Intervention*.

[Daniel R. DePetris](#) is a fellow at Defense Priorities and a foreign affairs columnist for the *Chicago Tribune* and *Newsweek*.

**EDITOR’S COMMENT:** The subtitle does not match the main title of this article. In addition, the word “Union” in the EU is not exactly accurate. Common foreign affairs policy? Only that dictated by the most financially powerful nations. Common defense? Each nation on its own. Cultural? The North think that they are better than the Mediterranean nations. US dependency? Usually at the “yes! Master” level.

## Risks and Threats for 2023: The Nation’s Homeland Security Leaders Speak

Source: <https://www.hstoday.us/featured/security-challenges-in-the-year-ahead-an-hstoday-expert-symposium/>

*Jan 30 – The threat landscape has expanded and evolved across cyberspace, critical infrastructure, biological threats, and more as a dedicated team of security professionals across various agencies and disciplines confronts new threat actors, worsening natural disasters, immigration challenges, global instability, threats to election security, drug and human trafficking, and more. As we move further into 2023, Homeland Security Today asked our editorial leaders and experts to share their thoughts on security challenges in the year ahead.*



### Bob Kolaksy

*Former Assistant Director for the Department of Homeland Security's Cybersecurity and Infrastructure Security Agency (CISA) and leader of the National Risk Management Center; Senior Vice President for Critical Infrastructure at Exiger, LLC*



Last Fall, I [wrote](#) about the need for a Homeland Security Risk Register given the range of strategic risks facing the homeland. In 2023, at the top of those risks is the linkage between mis-, dis-, and malinformation and domestic violent extremism. The fraying of the social compact in the United States, coupled with alternative views of accurate information and political tensions, has put the DVE threat at the highest level of the “homeland security era” and presents novel challenges to DHS and the homeland security enterprise. Combine this with access to weapons of mass harm, and you have a significant challenge for communities. This threat of violence could manifest itself not only in tragedies such as what we have seen in communities around the country involving mass shootings – most recently Monterey Park – but also in renewed pursuit of higher-end weapons by extremists, to include novel explosives and incendiary devices and targeting of critical infrastructure to achieve political effects of targeting. The trending in this direction seems pretty clear at this stage.

Support for community-led engagements to reduce the threat of targeted violence is desperately needed to mitigate this risk; so, too, is enhanced soft- and hard-target protection efforts. Following on “The Twitter Files” there is also a need for a more transparent paradigm of government interaction with social media companies and accountability for promotion of violence. It’s hard to see Congress leading the way on reform but homeland security and law enforcement professionals need additional tools if they are going to keep communities and critical infrastructure secure.

### Brock Long

*Former Federal Emergency Management Administration Administrator; Executive Chairman, Hagerty Consulting*

Today, the threats we face are both natural and manmade and are increasing in complexity, frequency, and magnitude; and, unfortunately, no community is spared. While the prominence and professionalism of emergency management has also changed, the frequency of events has also rapidly expanded and stretched the collective capabilities of our industry and our partners. As our nation’s threat landscape continues to evolve, it begs the question whether the current Stafford Act framework for major disaster declarations and workforce levels will allow us to be successful in the future. A major concern is that while the Federal Emergency Management Agency (FEMA) is already overloaded by mother nature’s fury, the agency has also become responsible for responding to non-Stafford Act disasters, such as the COVID-19 pandemic. Ultimately, to meet the challenges associated with this change, disaster preparedness, response, and recovery must be a shared responsibility – all levels of government, private industry, non-governmental/ nonprofit organizations, and the public all have a role to play to ensure we are ready for the next hazard we may face. Additionally, other federal government agencies should be equipped to handle the changing threat environment as well to reduce the continued reliance on FEMA.



The vulnerability of our nation’s infrastructure is also concerning to emergency managers. After a catastrophic incident, communities are often at risk of losing connectivity to critical infrastructure which serve as lifelines to the continuous operation of critical business and government functions that, if left inoperable, can jeopardize people’s safety and security. Once a severe disruption takes place, response personnel need to be able to identify the highest cross-sector priorities to allocate scarce personnel and resources. This prioritization effort is a shared responsibility between emergency managers and their critical infrastructure partners – public or private. This is particularly relevant when it comes to [grid security and energy resilience](#). While many emergency managers and grid operators alike recognize that, during the response phase of a disaster, restoring power as soon as possible solves many problems across the other critical infrastructure sectors, both parties must continue to leverage existing tools and resources to better prepare for the next incident they may face.

Additionally, we think beyond natural disasters and into the manmade space with the very real threat of cybersecurity. If a catastrophic cyber incident were to take place, emergency managers would likely play an incident management role, but what would that role be? Additionally, if the damage to critical infrastructure from a cyber incident jeopardized life safety and security, would that rise to the level of a



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major disaster? These important questions must be considered as we look beyond the traditional scope of emergency management to address the issues threatening the greater security of our homeland.

### Lee Kair

*Former Assistant Administrator for Security Operations and Head of Contracting Activity, Transportation Security Administration; Principal at The Chertoff Group*

*What should law enforcement, first responders, or others involved on the frontlines of homeland security be aware of?* There's a growing concern about the weaponization of critical infrastructure. We are seeing it with the electric grid attacks, as well as in water and pipeline infrastructure. In Africa and Europe, we've seen the weaponization of food supplies and that is something that could also happen domestically.

*What is the No. 1 challenge before DHS as an agency?* The hyperfocus on immigration is the immediate challenge at DHS and it distracts from the other important missions within the department. While leadership continues to address immigration, they must also ensure that sister agencies remain in focus for budget and policy initiatives. Processing the mass numbers of immigrants spreads Border Patrol agents thin and detracts from their ability to also interdict drug and human trafficking.



### Pete Gaynor

*Former Administrator of the Federal Emergency Management Administration and Acting Secretary of the Department of Homeland Security; Senior Vice President and Director, National Resilience, Response, and Recovery Programs, GEI Consultants*



*Water Security:* In America, we don't think twice about turning on the faucet and having clean water pour out. We take for granted that we will wake up each day and have access to clean, fresh water. But Earth has a growing water problem. Nearly three-quarters of the planet's surface is covered in water, but our water ecosystems are being challenged. The climate is changing, and weather patterns are becoming increasingly less predictable. The demand for water is increasing as population growth means a corresponding need for more food, more energy, and more industry. Some countries are placing a much- higher demand on water than others: the average American uses 156 gallons of water per day. In contrast, residents of Mali, Africa, use only three gallons a day.

Any day of the week, you can read about water stress in communities, big and small, across the United States. One state experiences flooding (too much water) while another area experiences drought (too little water). Some communities are subject to water rationing or

have failing water infrastructure. Other areas are dealing with reduced energy production due to a lack of water. The demand for agriculture is increasing, but reduced irrigation threatens the crops. There is even a lack of access to clean water in some communities, which directly correlates to controlling the outbreak of disease. All of these issues continue to be more commonplace and troubling, highlighting how out-of-balance and vulnerable our water ecosystems have become.

If we don't start making changes, we'll find ourselves living under extreme water stress. While it might be hard to imagine what that means, you don't need a crystal ball. To see what a community under these conditions looks like, we only need to look at North Africa or to the Middle East. In the ongoing conflicts of these regions, many disputes are tied to water access. If Americans want to avoid water stress and potential disputes, we need to do more to proactively regulate and promote policies that improve the management and conservation of water in the United States. Although the current administration has invested in water infrastructure improvement, it's only a start. Water insecurity respects no border, physical or political. Attempting to isolate ourselves from this problem undercuts all resilience goals.

It's imperative that we focus on minimizing both the social disruption the lack of water brings and water-related disasters, which come with predictable increased costs. Simply stated, water security cannot be ignored. It is fundamentally intertwined with human security.

### Sandra L. Stosz

*U.S. Coast Guard Vice Admiral (ret.), former Deputy Commandant for Mission Support, former Superintendent of the United States Coast Guard Academy*

I work in the leadership space, and when asked about the biggest challenges confronting our nation, I think of those that require character-centered leadership to overcome. Heavy on my mind as we enter 2023 is the United States' fading national identity.



### Touchstone Documents

Our nation is built upon a firm foundation of governing documents and institutions, and is held together by a strong national identity composed of inalienable rights and shared values. The Declaration of Independence, adopted in July 1776, promised Americans three inalienable rights: life, liberty, and the pursuit of happiness. In September, 1787, our Founding Fathers gave us the Constitution, thereafter supplemented by the Bill of Rights, which united the colonies and people of the new nation.



### An Immigrant Nation

America is an immigrant nation, from the time the first people arrived on our shores from where humankind originated in the heart of Africa. The first European settlers fled religious and other oppression. In more modern times, immigrants from all over the world have landed on our shores by the millions, seeking a better life in a new and promising land. In the early 20<sup>th</sup> century, those arriving from Europe and beyond were greeted in New York Harbor by Lady Liberty. They put forth great effort to assimilate into their new homeland, learning the language and adapting to a new culture. *They wanted to be Americans.*

When America or her allies were threatened, Americans from all walks of life answered the call to serve their nation. The attack on Pearl Harbor on December 7, 1941, which precipitated U.S. engagement in World War II, and the Terrorist Attacks of September 11, 2001, which led to the Global War on Terrorism, are but two examples of Americans uniting around shared values and focused on a common purpose. On a more local level, Americans rallied to support each other during the natural disasters of recent years, and the COVID crisis. For most of our history, America has been strong because of our shared national identity.

### The Decline of Civility

In more recent years, America has become ever more divided, with Americans becoming increasingly uncivil. A more diverse populace naturally results in a wider range of perspectives. But rather than respectfully seeking to understand those with differing views, people instead seek to undermine them. Instead of respectful debate, we're devolving into disrespectful encounters, and that weakens us as a society.

### A Call for Action

Diversity should be a strength, but for people with different views to get along, they must compromise. Compromise requires humility and respect. Those are powerful personal core values that can help us reunite our nation around our shared American values.

The world is a disrupted and dangerous place. We face global challenges such as climate change, conflict between nations, and human displacement. Now more than ever, our nation needs leaders of character, at all levels, who have the ability to unite Americans around a common purpose and shared values. Only with that kind of leadership will we be able to restore our national identity and be capable of doing our part to make our country and our world a safer place.

### Steve Karoly

*Former Acting Assistant Administrator for the Transportation Security Administration's (TSA) Office of Requirements and Capabilities Analysis; Executive Vice President of K2 Security Screening Group*

Transportation security, and specifically aviation security, remains a daunting challenge for our national security leaders. The multitude of transportation modalities and systems around the country are, and need to be, accessible, easy to use, and efficient. Unfortunately, satisfying those three requirements can open the door for bad actors whose intent is to carry out heinous acts. The transportation and aviation security enterprise has worked hard over the past 20 years to ensure security mechanisms are in place to deter and defend against those bad actors. However, as we enter 2023, a number of challenges remain.

- Deploying the latest advancements in security technology across the transportation security enterprise while operating within a limited budget.
- Balancing the need to deploy the most effective biometric capabilities throughout the transportation security enterprise to verify and validate identities (travelers and transportation workers) and ultimately provide access, while also maintaining a person's privacy needs.

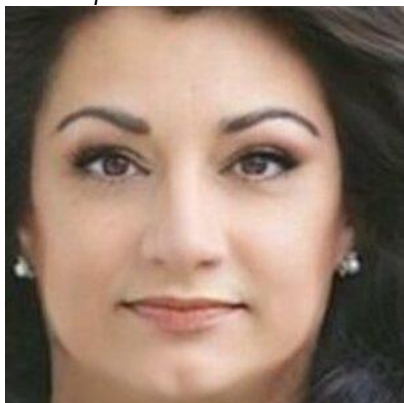


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- Addressing the security risks of an increasing level of unmanned aircraft operations in the airspace and developing effective detection capabilities and countermeasures to protect critical infrastructure from attacks through the use of drones.
- Developing more cost-effective and efficient ways to screen all inbound and outbound freight and cargo on international passenger and all-cargo aircraft.
- Improving coordination between federal, state, and local homeland security and law enforcement personnel, and among public and private stakeholders, to enhance public area security and effectively deter and respond to criminal and terrorist acts targeting public areas of transportation facilities.
- Enhancing the nation's capabilities against cybersecurity threats to aircraft, air traffic control systems, and airports.

### Ajit Maan

*Founder and CEO, Narrative Strategies; Professor of Practice at the Center for the Future of War and Member of the Brain Trust of the Weaponized Narrative Initiative at Arizona State University*



A dangerous by-product of a cultural assumption in the U.S. is the cognitive habit of categorizing. The habit is dangerous to defense and Homeland Security as the threats we face don't easily fit into neat categories and we ought to abstain from trying to squish them in. Domestic and transnational are antiquated categories to impose upon terroristic acts and recruitment. And while the weight of our national security priorities has now shifted to great power competition, a categorical distinction between great power competition and terrorism are anachronisms as well. Our adversaries don't make those distinctions. Nor should we. Great powers use terrorism as a tool to serve their foreign policy and have even crossed the borders of the U.S. to dispatch their critics on American soil. Is that domestic or foreign? Groups like the so-called Islamic State and al-Qaeda are busy recruiting audiences across borders and they are often state-sponsored – major and minor. Decapitation hasn't proven effective in undermining these groups. At best it has slowed them by a few weeks while they

continue to inspire support even from civilians even on U.S. soil. We cannot continue to consider these and groups like them regional threats. Among the third- and fourth-order effects they are causing is the displacement of large populations, which in turn results in destabilization across borders.

### Charles Werner

*Retired Charlottesville, Va., Fire Chief; Director of DroneResponders Public Safety Alliance and Chair of the National Council on Public Safety UAS*

First, drones are one of the big challenges ahead. From the experiences within the United States and abroad. Drones have become an effective tool to drop contraband into prisons, carry drugs and explosives, support illegal entry across borders, interfere with law enforcement operations and even aid in the escape from a prison. The use of commercial off-the-shelf drones used in the Ukraine war has demonstrated how effective drones can be used as a threat. This problem is compounded by the indecision by Congress to extend the detect-and-mitigate authorities to state and local law enforcement and the private sector.

Cybersecurity will remain a major concern from the threat of hacking critical infrastructure/systems, electric grid and vulnerability to all companies from ransomware. The biggest and hardest factor to overcome is the vulnerability from people being lazy and not following cybersecurity procedures. Human behavior is the hardest thing to change.

The scariest challenge ahead comes from the breakdown of the legal system. Cashless bail creates a revolving door of offenders, often violent. The blindness to shoplifting, allowance of smash and grabs and unwillingness to prosecute will continue to promote chaos and deterioration of big cities. The attack on law enforcement officers with a 34 percent increase in officers killed. The removal of liability protection rights for law enforcement, cashless bail and defunding police will continue to drive police staffing shortages resulting in increased crime. The massive influx of illegal border crossings overwhelm Customs and Border Patrol and law enforcement in border states, the increase in fentanyl across the border killing 100,000 people/year in the U.S. and the devastation from human trafficking.



### Antonio Villafana

*Former Chief Information Officer for the DHS Countering Weapons of Mass Destruction (CWMD) Office*

**Quantum Computing:** A new year, a new era of challenges for those responsible for safeguarding our assets and protecting our communities. The persistent and rapidly evolving cyber threat landscape for 2023 and beyond will be fueled by new technological advances and discoveries in 2022. Current efforts to improve AI that can autonomously detect and respond to cyber threats may not be enough to keep out sponsored nation-state actors using quantum computing. Quantum computing has the potential of pioneering more unique and innovative methods of attacking our networks.

**Ransomware:** At the end of 2022 there was a noticeable shift in how cyber criminals are executing ransomware attacks. Cyber criminals are shifting away from the traditional encryption jail to the more direct approach of data deletion threats. Technological advances have equipped us with the ability to quickly thwart cyber ransomware attacks; however, cyber criminals pivoted very quickly and are trying a more forceful approach to meeting their demands by threatening to destroy data. Given current global financial instability and layoffs, I think we will see a rise in ransomware attacks, which may include more attacks on bigger targets such as power grids and water supplies.



### John Sullivan

*Lieutenant (Retired), Los Angeles Sheriff's Department; Instructor, Safe Communities Institute, University of Southern California*



The threat envelope for 2023 is diverse and complex. Four major themes — Division, Disinformation, Disorder, and Convergence — dominate the current and emerging security horizon. All of these themes are multi-dimensional and demand whole-of-society approaches since government action is not enough to stabilize the threat potentials. These potentials may present themselves in a range of scenarios, some familiar and some novel. Hybrid threats and action by foreign powers including Russia and China exploit and exacerbate these risks. Division includes the extreme political polarization resulting in enmity and challenges to political institutions and the rule of law. Identity politics and cultural wars have become means of dividing the nation into competing factions. Internal division expresses itself through dysfunctional politics and drives political violence. This threat became a reality with the January 6, 2021, insurrection and the 2020 plot to kidnap Michigan Governor Gretchen Whitmer, as well as attacks on members of Congress and local politicians. Societal division also includes extreme reaction on abortion, LGBTQ issues, COVID-19 response, and climate change.

Disinformation including propaganda, the promulgation of “fake news,” and conspiracy theories, such as QAnon, over social media amplifies societal division to fuel disorder. This disruption of social integrity is increasingly part of a global ecosystem as seen in suspected links between the January 6, 2021, conspiracy and the assault on Brazil's presidential palace, supreme court and legislature on January 8, 2013. Disorder ranges from subverting legitimate political dissent to suborning sedition and political violence by armed groups such as the Proud Boys and Oath Keepers. Domestic violent extremism potentials including terrorism is on the rise. Currently, the extreme right is responsible for most of these acts, but the extreme left and single-issue groups can be expected to join the fray. This will be complicated by sympathizers with key security agencies demanding enhanced counterintelligence capacity. Convergence is the final theme. It connects the previous four with other geosocial and technological trends. The Ukraine War exposes the potential for weaponized artisanal drones to become key factors in combat. Transnational criminals including Mexican cartels and Brazilian gangs have also embraced drones. Drone swarms exploiting revolutions in artificial intelligence (AI) may become a near-term really threatening battlefield and critical infrastructure alike. The Ukraine War also exposed the potential for Russian-sponsored terrorism, including links between Russian hybrid warfare and global right-wing extremists. The use of Chinese Overseas Police Stations throughout the world demonstrates another thread of influence operations challenging human rights and illustrating the hybrid dimension of great power competition. Add to these the threats and opportunities provided by the emerging AI revolution, quantum computing, synthetic biology, increased embrace of cybercrime transnational organized crime, and the stresses from climate change. Threat convergence remains a major theme for 2023. Convergence among actors — criminals and states — is joined by the convergence of physical and cyberspace and traditional and emerging threats. This convergence presents the potential for ‘polycrisis’ where several converging crises within multiple global systems challenge response. Failure to anticipate or mitigate interconnected risks could drive conflict up to and including international armed conflict. Criminal enterprises can be expected to exploit the seams





between intergovernmental and societal response. Anticipatory intelligence and collaborative, adaptive response are needed to address these potentials.

### Mahmut Cengiz

*Associate Professor and Research Faculty with Terrorism, Transnational Crime and Corruption Center (TraCCC) and the Schar School of Policy and Government at George Mason University*

Global terrorism has been listed as one of the top security issues since the September 11 attacks, and the U.S. approach against it has received criticism for being overfocused on terrorism and not giving sufficient attention to the expansion of Russia and China's influence worldwide. On the other hand, the most recent common approach suggests jihadist groups are confined to their origin countries and are incapable of conducting attacks targeting the western world. However, the activities of jihadist terrorist groups and far-right extremists in 2022 indicated that the U.S. should continue to give its serious approach to counterterrorism. These groups again have the capacity to attack western countries. For example, ISIS-Core in Syria and Iraq and its regional affiliates, such as [ISIS-K](#) in Afghanistan, ISIS-GS in the Sahel, and ISIS-West Africa in the Chad Basin, were the [perpetrators](#) of thousands of attacks targeting the United Nations missions, state institutions, military, and law enforcement in 2022. Correspondingly, al-Qaeda and its affiliated groups were actively [involved](#) in terrorist attacks in Mali, Burkina Faso, Nigeria, Somalia, Afghanistan, Yemen, and Syria. In addition, they have extended their influence to the neighboring countries of the Sahel region. Both ISIS and al-Qaeda lost their leaders in military operations in 2022, but it made a limited impact on their capacities. Therefore, 2023 will continue to record violent acts by ISIS and al-Qaeda groups worldwide.



The Biden administration prioritizes promoting democracy worldwide and emphasizes how critical it is to tackle regional and global corruption. As specified in the dirty entanglement theory of Dr. Louise Shelley, crime, corruption, and terrorism are entangled, meaning that corruption facilitates terrorism, and terrorist groups are involved in criminal activities to generate revenue and fund their activities. Countries with the most terrorist attacks and the highest corruption perfectly match each other. Corrupt and non-democratic regimes in the Middle East, Africa, and Asia will continue to harbor these jihadist groups, and it is crucial for the U.S. government to approach terrorism in the context of dirty entanglement theory, which will effectively impact the war against global terrorism.

Self-radicalization has been another issue in the western world. In addition to American- or European-born individuals under the influence of radicalizing effects of Salafi jihadism, far-right ideologies based on conspiracy theories and the superiority of a specific ethnicity or race have been influential in the West. These groups that emulate the jihadist groups' modus operandi are globally networked and capable of targeting their scapegoated "enemies" as well as the government. Self-radicalized individuals will actively be on the stage in 2023.

Lastly, the world has seen a new way of seeking international influence. Intelligence groups actively involved in politics and serving their governments' interests during the Cold War have been replaced by so-called [private armies](#) operating for today's authoritarian regimes. Turkey's SADAT and Russia's Wagner Groups are two organizations in this context. The Wagner Group is already active in more than 12 countries in the Middle East, Latin America, and Africa. It seems to be providing security for the local governments in these regions but is serving the interests of the Russian government. In 2023, the Wagner Group will continue its activities and aim to expand its influence in the Middle East, Africa, and Latin America. The group, due to its ongoing activities and threat, may end up in the U.S. Foreign Terrorist Organizations List.

### Paul Cobaugh

*Vice President at Narrative Strategies; expert in non-kinetic aspects of conflict*

One of our most significant threat streams for the coming few years is the nexus between our most dangerous form of U.S. domestic extremism and its global movement, often hailing from Putin and related far-right partners. Over the past few years, and due to ignoring this threat stream during the generation we spent operating against a global wave of Islamic extremism and similar efforts, RWE/Right-Wing-Extremism has become our primary and most lethal domestic terror threat.

Far-right movements globally have clearly demonstrated their synchronicity of tactics, messaging and sustainability. This threat is significantly higher to the unity of the RBIO/Rules-based, International Order that has played such a powerful role in supporting Ukraine's defense. Blending similar issues to RWE, like authoritarianism, dictatorship,



despotism, populism and rabid nationalism, only compounds the threat to U.S. progress toward achieving the objectives in our *NSS/National Security Strategy*.

At some point, the U.S. must address this issue resolutely or risk global, collective security, which also plays such a significant role in U.S. national security. We can no longer afford to ignore this threat as being “too political.” It must be treated with the same focus as the generation the world collaborated on Islamic extremism.

### Uran Botobekov

*Expert on the Central Asian Salafi-Jihadi Movement, research fellow, and a member of the Advisory Board of EU Modern Diplomacy*



Forecasting the threat of Islamic violent extremism and terrorism against the United States for the year ahead is a thankless task when, on the background of a bloody war on Ukraine, Moscow is trying to exploit the Islamic religion to build up its aggressive propaganda in order to damage democratic values and the security of the U.S. and the West as a whole.

Regarding the threat of the global Salafi-Jihadi terrorist groups such as al-Qaeda and ISIS, these challenges will persist and develop depending on the political and economic crises and instability in the regions of their presence. Despite losing their leaders last year, both transnational Sunni jihadi groups, which see the U.S. as their “main enemy and great evil,” will seek every opportunity to launch terror attacks against U.S. interests overseas and its strategic allies in the Middle East, Central and South Asia, and the African continent.

However, as an expert, I would like to draw DHS’ attention to how Putin’s unprovoked, brutal and unjustified attack and full invasion of Ukraine is creating the foundation of a future threat of Islamist extremism against the U.S. and the EU. Russian top officials from Putin to his Chechen “foot soldier” Ramzan Kadyrov are deliberately spreading anti-American narratives and distorted Islamic thoughts, deliberately inciting religious hatred and anti-Western enmity among the Muslim population of the North Caucasus and Central Russia. This is a very

dangerous direction because Russia’s propaganda uses the Islamic religion as a political tool against its Western competitors, which over time can radicalize and transform into a terrorist threat.

For instance, following the bloody invasion of Ukraine, the Kremlin amplified conspiracy theories blaming the U.S. for inciting the Russia-Ukraine crisis and claiming the U.S. produced biological weapons in Ukraine, Kazakhstan, and Georgia that could be used against the Slavic population of Russia.

The Muslim republics of Russia, such as Dagestan, Chechnya, Bashkortostan, Tatarstan, as well as the Central Spiritual Muslim Board of Russia, in accordance with the Kremlin’s religious strategy, [adopted fatwa](#) (decree by an Islamic religious leader) on “holy jihad” in Ukraine, inciting anti-Western religious hatred. Justifying Putin’s bloody invasion of Ukraine, the fatwas portrayed the U.S. as “Iblis’ henchman” (devils in Islamic mythology) and accused them of aiding Ukrainian terrorism, international injustice, perverted depravity, and attempts to destroy Islamic identity and Muslim family values.

Thus, Russia instills in the Muslim population of the post-Soviet space a sense of religious hatred toward the U.S., which in the future, under favorable circumstances, may move from propaganda to practical actions. Theologically defining Putin’s war in Ukraine as a “holy jihad” and the Muslims killed in it as “Shaheed” (martyr), the Grand Muftis of the Russian regions not only justify the bloodiest war of the 21st century but also push the country’s 20 million Muslim population onto the path of religious radicalism.

While ISIS radical Salafists issue takfir (excommunication) to “protect the purity of Islam,” pro-Kremlin muftis have adopted anti-Ukraine and anti-U.S. fatwas on holy jihad in the name of Islam. In this way, Russia is sowing the seeds of anti-American religious hatred, the fruits of which will ripen in the not-too-distant future.

It is quite possible that all these conspiracy theories, Islamic fatwas, and anti-American narratives of Russian propaganda could be used to commit violence against U.S. citizens and its democratic institutions.

Anti-American Khutbah (sermon) speeches of pro-Putin imams and religious clerics may inspire lone-wolf terrorists in the West. It should be expected that the more the Russian economy cracks under the weight of Western sanctions in circumstances of international isolation and the slippage of its so-called “special operation to denazify and demilitarize Ukraine,” the more desperately it will try to exploit the Islamic factor against the U.S.

In this way, Russia unwittingly begins to copy the bitter experience of Iran, which at the state level uses Islam for political purposes to incite anti-American hatred among its supporters and religious radicals. The modern history of the Islamic Republic shows that the use of Islam for political purposes is always fraught with grave consequences, which will push its followers to violent actions and lone-wolf attacks.



It should not be forgotten that lone wolves among post-Soviet immigrants, inspired by violent Salafi-Jihadi ideology but having no specific ties to global terrorist groups (financial, operational, or other specific tasks), carried out high-profile terror attacks in the U.S.:

- The Boston Marathon bombing was carried out by brothers [Tamerlan and Dzhokhar Tsarnaev](#) from Kyrgyzstan on April 15, 2013.
- A domestic terrorist attack committed by a migrant from Uzbekistan, [Sayfullo Saiipov](#), in New York, killed 8 civilians on 31 October 2017;
- Another [Uzbek migrant, Ulugbek Kodirov](#), tried to kill even President Barack Obama in July 2011 and was sentenced to 15 years in prison.
- More than a [dozen Uzbek migrants](#) were charged with the attempt to provide material support to ISIS between 2012 and 2016 in the U.S., which is evidence of the growing [lone-wolves](#) among immigrants from Central Asia.

In conclusion, Russia's exploit of anti-American religious hatred in its asymmetric warfare against the West to inflict damage could have far-reaching consequences, from which it will suffer first. Either way, the U.S. must be ready to respond to any challenges from the direct threat of transnational Salafi-Jihadi terrorism to its sleeping lone wolves at home.

### Ardian Shajkovci

*Co-founder and Director of the American Counterterrorism Targeting and Resilience Institute*  
Trevor Bickford, 19, of Maine is currently facing federal charges for attacking NYPD officials in Times Square on [New Year's Eve](#). Preliminary investigations revealed Bickford became radicalized as recently as a month prior to the attack. He did not appear to be affiliated with any movement or terrorist group. He allegedly remained on the FBI terrorist watchlist after being tipped off by his family members about his militant jihadi viewpoints and the desire to join the [Taliban in Afghanistan](#). The pattern of stalking and attacking law enforcement among those espousing jihadi aspirations in some form or capacity is not confined to this particular attack. The cases of [Fareed Mumuni](#), [Awaid Chudhary](#), [Dzenan Camovic](#), and [Xavier Pelkey](#) in recent years come to mind.

Plausible explanations of the recent activities by homegrown wannabe jihadis are not confined to a single-factor explanation. Tendency and willingness to carry out terrorist attacks among those willing but unable to travel to conflict zones like Syria, Iraq, and Afghanistan remains a relatively under-researched phenomenon. At least in the case of Bickford — and perhaps several others mentioned above — the extent to which the frustration over inability to travel to conflict zones may have strengthened their extremist inclinations, potentially leading to violence at home, warrants further scrutiny. Additionally, vast swaths of IS and al-Qaeda-friendly territories in Africa — that seem to compensate for the loss of physical caliphate in Syria and Iraq — and the Taliban's rapid conquest and expansion may have likely contributed to the perception among some of the reemergence and revitalization of militant jihadi agenda and prowess worldwide. Neither the allure of territorial holdings nor a direct tie with a terrorist group in Syria, Iraq or Afghanistan is perceived as necessary to engage in terrorist activities at home. In other instances, vulnerable cohorts include individuals who do not hold any ideology, or hold multiple ideologies (e.g., racially or politically motivated), and are simply driven by obsessions and impulses of violence.

The incessant surge of terrorist group propaganda inciting violence remains dangerous and detrimental, particularly in the context of individuals with *complex* needs and motivations. Terrorist groups like IS (IS-associated) and al-Qaeda (al-Qaeda associated) continue to share officially labeled or officially branded propaganda material. Websites and social media platforms operated by such groups remain widespread and unbridled, despite take-down efforts by governments and social media companies (*See below*).

Technologies used by such groups are often deemed "basic" (e.g., bots) and generally serve as repositories of terrorist content on social media platforms. Complementary to law enforcement and intelligence-led efforts, monitoring of social media channels for terrorist content is necessary to discern current trends in the spread of terrorist content online and to understand the extent to which technologies exploited by such groups will likely remain powerful in influencing users towards a certain direction and affect the trendiness of a terrorist group messaging both online and offline.

Our communities have also become alert to the spread of disinformation by state actors like China and Russia. The disinformation campaigns dubbed "*digital battlefield*" by the Kremlin have proven crucial in its effort to speed up propaganda across foreign and domestic media outlets, ramped up by the digital technologies designed to facilitate the flow of information through a network of traditional media, social media channels (e.g., Telegram), sock-puppets, and [fake accounts](#). As the Kremlin-sponsored news outlets and social media continue to lose steam in the ongoing Russia-Ukraine information warfare in part due to shut down efforts by governments and social media



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companies, their disinformation campaigns continue to target pro-Russia audiences in Russia, the Russian speaking diaspora, and the [West](#). The Kremlin’s disinformation ecosystem has become highly adaptive to the global information landscape, manifesting through smear media operations, covert and overt proxy media outlets. Case in point, created on February 24, 2022, a pro-Kremlin Telegram channel “Война с фейками” (“War on Fakes”) we too monitor at our center, has, as of January 16, 2023, amassed 765K-plus subscribers, with a weekly average post reach of 140K-plus. Its content is circulated and/or shared by 7K-plus Telegram channels. With its predominantly English- and Russian-language publications (website included), the channel generates significant amounts of propagandistic content, amplified by pro-Kremlin journalists, major pro-Russian media outlets and news agencies like RT, Tass News Agency, and RIA Novosti, and the Russian Foreign Ministry, among others. A January 14 post (“fact-checking,” real-time trope) addressing the Russian Armed Forces’ hit of a residential building in the Dnieper generated over 630K views and 10K-plus forwards and shares, respectively, and the engagement with the content keeps on growing as we speak.

Formally run and orchestrated disinformation campaigns particularly by state actors like China and Russia are becoming a norm. Governments and social media companies continue to demonstrate resolve in both exposing disinformation and building prevention capacities and long-term resilience to it. These promising measures and interventions must also account for complex hybrid traditional and social media environments, rapidly changing internet infrastructure, ever shifting user behavior online, and regulatory actions that often lag *vis-a-vis* fluid technological changes and transformations. Disinformation discernment and its impact among the general public also calls for concerted government, social media, and academia efforts to better understand and ultimately overcome [“definitional, methodological, and stewardship”](#) challenges associated with the expansion and propagation of disinformation.

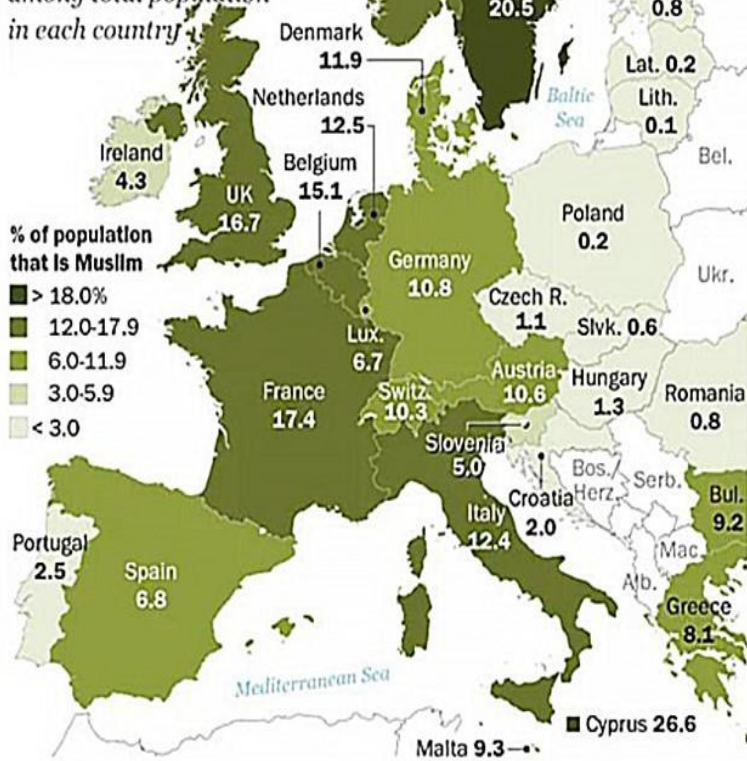
## Composition of the European population by 2050



Source: <https://www.pewresearch.org/religion/2017/11/29/europes-growing-muslim-population/>

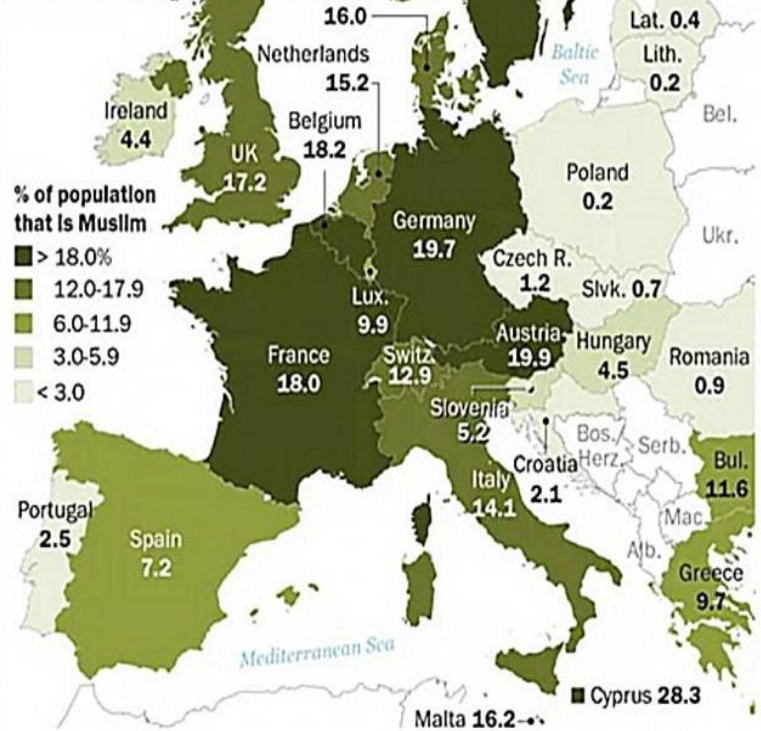
### Muslims in the EU, Norway and Switzerland in 2050: medium migration scenario

Projected % of Muslims among total population in each country



### Muslims in the EU, Norway and Switzerland in 2050: high migration scenario

Projected % of Muslims among total population in each country



## Threat Assessment and Management: Practices Across the World

By Carl Amritt, Eliot Bradshaw & Alyssa Schulenberg

Source: <https://www.domesticpreparedness.com/preparedness/threat-assessment-and-management-practices-across-the-world/>

Feb 01 – The ever-evolving threat of terrorism continues to impact cities around the world. The Global Terrorism Index shows that in 2021, the [number of attacks](#) increased from the previous year by 17 percent to 5,226. As actors adapt and change their tactics and techniques, cities must develop new capabilities to counter these threats. Formalizing threat assessment and management programs can be an effective tool for identifying, gathering, assessing, and responding to risks of targeted violence and terrorism within communities.

Cities experience increasingly diverse and frequent threats targeting people, groups, and public places. The threat of [extremism](#) continues to rise; of particular [concern](#) are racially or ethnically motivated violent extremism and anti-government extremism, such as militia groups and sovereign citizens interested in plotting attacks against government, racial, religious, and political targets. To address risks of violence, cities may utilize the practices of threat assessment and management to combat targeted violence and terrorism in communities.

This article summarizes a report prepared for the Counter Terrorism Preparedness Network and explores notable global practices to help cities develop or enhance their threat assessment and management programs. The sample included 61 organizations from 50 cities across 11 countries: Austria, Canada, Finland, Germany, South Africa, Spain, Sweden, Switzerland, the Netherlands, the United Kingdom, and the United States. The study used quantitative survey data and qualitative information from interviews with subject matter experts within the field. The survey was disseminated through field-specific entities, including professional associations, professional communities of practice, and international and local intelligence networks.

### What Is Threat Assessment?

Establishing a common lexicon is important for building a community of practice and a measurable and replicable program. Threat assessment and management are two functions of a systematic process to evaluate concerning behavioral and thought patterns and determine the context, circumstances, and capability surrounding potential threats. Formalizing threat assessment and management programs can help identify, gather, assess, and respond to [risks of violence and extremism](#). Threat assessments allow cities to move from offender profiling to an [evidence-based approach](#) that considers the totality of circumstances. For example, the September 11 attacks (9/11) and Sandy Hook School Shooting both had observable criminal activity or behavioral indicators that, if identified, reported, and acted on appropriately, could have prevented the attacks.

[Threat assessments](#) aim to prove the credibility, seriousness, and probability of a potential threat by using facts systematically. These assessments blend information collection and analysis with published research and practitioner experience. They also focus on a person's patterns of behavior and thinking to determine whether, and to what extent, a person of concern is moving toward an attack. Behavioral indicators like leakage, novel aggression, and fixation can indicate that a person is on the [pathway to violence](#). The assessment also considers the context and circumstances – and the interactions between the person of concern, potential targets, and environmental/situational factors – that may influence risk. The companion practice succeeding threat assessment is threat management.

[Threat management](#) involves continuously evaluating, managing, and mitigating the risk of harm after identifying a person of concern. Through a coordinated plan of interventions based on current information, threat management is designed to reduce the risk of violence at that time. It all depends on what life stressors (e.g., home and family life, religion or ideology, finances, and workplaces) the person is feeling pressure from and trying to reduce that stress and the associated risk.

The [public health approach](#) is a science-based technique that relies on cooperation between diverse disciplines such as health, social services, law enforcement, and correctional services to address underlying factors to increase a person's likelihood of committing an act of violence:

- Primary prevention – approaches aimed at preventing violence before it occurs, such as job programs or bystander awareness;
- Secondary prevention – approaches that focus on the more immediate responses to violence, such as de-radicalization programs or support groups; and
- Tertiary prevention – approaches that focus on long-term care in the wake of violence, such as rehabilitation and reintegration, and attempts to lessen trauma or reduce the long-term disability associated with violence.

The following is an [example](#) of threat assessment and management in action:



*A 2018 federal terrorism investigation involving a 22-year-old male subject with social media posts in support of ISIS, used a local Crisis Intervention Team (CIT) in parallel with the investigation to assess the subject's mental health needs based on a suspected, unidentified mental disorder. The local [Joint Terrorism Task Force] used mental health professionals and other community stakeholders, in conjunction with the CIT and [FBI's Behavioral Threat Assessment Center], to conduct a threat assessment and implement a long-term threat mitigation plan that ensured psychiatric treatment and medication compliance were mandated as conditions of the subject's three-year supervised release.*



Anti-terrorism safety barriers at the Mall entrance in Trafalgar Square, London, UK, circa June 2017 (Source: iStock/claudiolivizia)

### Notable Practices

Approaches vary by context. In addition, the feasibility of adopting or expanding threat assessment and management programs rests on the resources and priorities of the city and partner organizations. Based on the 61 organizations in the study sample, nine notable practices emerged.

**Establishing a multidisciplinary team** – A multidisciplinary team is central to the public health approach and will enable a well-rounded perspective and effective risk-mitigation strategy development and implementation. Threat assessment and management teams are strengthened through the ability to draw upon multiple perspectives and resources. Most (68.3%, n=43) survey respondents belong to multidisciplinary teams. Of those with only one discipline, 45% (n=9) are law enforcement. While law enforcement serves as a key partner in the threat assessment and management process, consider including mental health, social services, and legal professionals.

**Adopting a holistic view** – A holistic view enables threat assessment and management teams to consider risk factors, situations, environments, and contexts when evaluating the threat level. By understanding the



person's [baseline](#), cities can distinguish deviations from the baseline, identify escalation, and more accurately determine a management and intervention plan best suited to the person.

**Developing and adopting a shared language** – Cities should consider developing and adopting a [language](#) that clearly describes the program goals, minimizes fear and bias, and educates the public on how to utilize its services to foster relationships on transparency and stewardship. When possible, use language and communication mediums (e.g., radio, television, print, and social media) most frequently used in that community to increase understanding and reach.

**Performing threat management** – Threat assessment achieves little if action is not taken to manage the threat once it is identified. Survey respondents indicated the average number of threats reported annually ranges from 1 to over 500, and the number of cases actively investigated and assessed also ranges widely depending on imminence. Cities should consider following their threat assessments with long-term threat management to reduce the risk of violence from the person of concern. While this practice requires a coordinated plan, continuous monitoring, and implementation of direct or indirect interventions, it is specifically designed to reduce the risk of violence in the given context.

**Upholding privacy, civil rights, and civil liberties** – The protection of privacy, civil rights, and civil liberties is paramount in the threat assessment space, given that there is not always a nexus to a crime. Safeguarding related protected and sensitive information, especially for juveniles, should be discussed early in team development, ideally with a legal professional.

**Applying and layering different types of prevention and intervention strategies** – No single method can address and reduce violence alone. Primary prevention strategies like legislation, awareness campaigns, and community training, and secondary prevention strategies like stable housing, mental health counseling, and protective orders are favored globally. However, adding tertiary prevention strategies like victim services, support groups, and restorative justice programs can garner valuable results. Applying layered prevention strategies allows cities to create cascading safety nets and points of intervention for persons of concern before violence occurs. Beyond prevention efforts, local [community actions](#) can be particularly effective in bringing about change. Cities should consider what data and resources are needed to inform each strategy and to tailor interventions to fit the needs of the person and community.

Formalizing threat assessment and management programs helps to identify, gather, assess, and respond to risks of violence and terrorism within communities.

**Measuring success through data** – Measuring the success of targeted violence and terrorism prevention is a challenge. Community surveys where threat assessments are conducted can demonstrate changes in risk level for a person following threat mitigation. Keeping metrics on segments of cases displays a better picture of how a threat assessment and management team's mitigation techniques and methods impact a situation versus comparing before and after a case. For example, if a person comes to the attention of a team as low risk, soon escalates to high and over time is reduced back to low, a before and after will not show change. However, examining that person's path over several identified case segments would highlight the team's work. Finally, tracking the number of reports, tips, and referrals can show the need in a community.

**Establishing mechanisms to enhance information sharing** – Sharing timely and accurate information is critical to developing threat assessment and management plans. Survey respondents indicated information sharing as a "greatest strength" but also a significant limitation in threat assessment activities. Different city agencies and departments may hold information that can help provide a holistic view of the subject of concern and what resources and services they may require. Health records can illustrate a mental illness diagnosis, and law enforcement records can describe criminal history. However, these records are protected information and can be shared only under certain conditions. Cities may consider legislation to provide threat assessment and management teams with the authority to bypass legal barriers to sharing information.

**Lowering the barriers to reporting** – People may not be inclined to report potential threats for various reasons. Those barriers may be: emotional, especially if the person of concern is a loved one; physical, lacking access to a responsible party or system where they can safely and reliably report; or due to a lack of knowledge about available resources. These barriers can be lowered by training the public on reporting methods and threat assessment structures and processes, like the way the "See Something, Say Something" campaign increased public awareness. Socializing threat assessment and management efforts to bring support and resources to those that may not otherwise have access to them can empower community members to uplift those in need.

## Outlook

Cities remain attractive targets for targeted violence and terrorism, considering their population density, monuments of significance, and critical infrastructure. These threats must be prevented and mitigated by evidence-based approaches and strategies that further the city's homeland security mission and the safety of the public. Threat assessment and management have long served as an effective method of identifying, gathering, assessing, prioritizing, and responding to various threats.



This article explored the structures, methodologies, and notable practices across different countries to assist cities in developing or enhancing their threat assessment and management program. Through a systematic analysis, one thing is clear – to effectively prevent and mitigate threats, cities must utilize multidisciplinary stakeholders. Bringing these stakeholders together moves professionals closer to having a shared language, which decreases the chances of miscommunication and facilitates collaboration. No one strategy can prevent violence either. The most successful threat assessment and management programs require a multi-level intervention at the individual, community, and societal levels through the three prevention strategies. To provide these multi-level interventions, cities must develop a strategy to engage the public through education, awareness, and public reporting. This work can be accomplished by building trust with communities and relationships across city government grounded in protecting privacy, civil rights, and civil liberties principles.

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## Saudi Arabia megaprojects 2023: Neom, AIUla and more

Source: <https://www.thenationalnews.com/business/2023/01/06/saudi-arabia-megaprojects-2023-neom-alula-and-more/>

Jan 06 – Saudi Arabia's economic diversification efforts under its Vision 2030 plan, which seeks to reduce the kingdom's reliance on oil revenue and nurture local industries, feature a number of big projects that are well under way around the country. They are set to open up new areas of economic activity and create thousands of jobs, with a stronger focus on the future. Here's what's in store for the kingdom:

### Neom

A central project in Saudi's Vision 2030 and the most ambitious is the \$500 billion Neom smart city in the north-western part of the kingdom. It will be powered entirely by clean energy as the kingdom moves away from an oil-based economy.

First [unveiled by Crown Prince Mohammed bin Salman](#) in 2017, it will challenge the traditional concept of cities and lifestyle with its offerings. So far, four major projects within [Neom](#) have been announced — The Line, Trojena, Oxagon and Sindalah.

### The Line

It doesn't get much more ambitious [than this](#). Residents will live in a 170km-long, 500m-tall city designed to house nine million people. The structure is planned to have a mirrored facade.

It will be a new way of living in interconnected societies run by artificial intelligence.

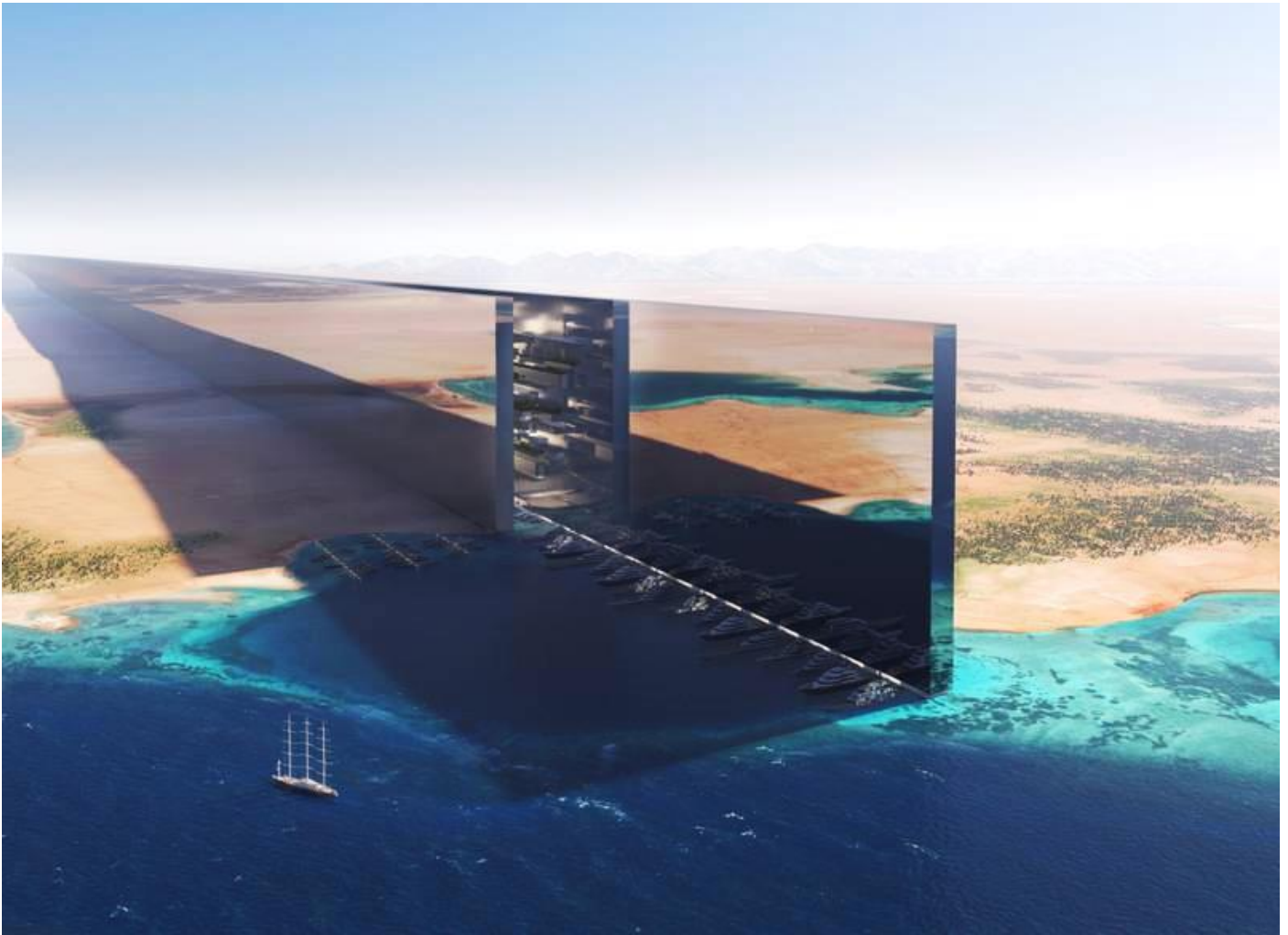
Work is under way, with drone footage released in October showing heavy equipment clearing the site ready for construction.

The Line project is the first time in 150 years that a major urban development has been designed around people, not roads.

All essential daily services — such as schools, medical clinics, leisure centres and green spaces — will be within a five-minute walk.







### Sindalah

This is set to be the [first destination in Neom](#) that will be open to the public.

It is a resort island and yachting paradise spread across about 840,000 square metres in the Red Sea, with views over the Neom mainland, luxury hotels, a large marina, beach club, yacht club, spa and wellness centre.

Sindalah is set to open early in 2024. The island is expected to receive 2,400 visitors a day by 2028. About 3,500 jobs are expected to be created in the process.

### Trojena

Skiing in a desert region? Yes, that's right. Tabuk province is mountainous, with [snowfall in the winter](#). And Neom is taking advantage of the climate to offer outdoor sports and what will be the first major outdoor skiing destination in the GCC.

Trojena will host the [2029 Asian Winter Games](#), making it the first nation in western Asia to do so, with more than 32 countries due to take part. The project's planners have divided Trojena into distinct districts and expect to attract different types of tourists, according to the time of year. Bechtel, one of the world's largest industrial contractors, [has been appointed](#) as the project management consultant for Trojena.

### Oxagon

The final segment of Neom (for now) is a futuristic industrial city, which is planned to be the largest floating industrial complex in the world. "It will contribute to Saudi Arabia's regional trade and commerce, and support creating a new focal point for global trade flows," said Prince Mohammed. It is expected to have a population of 90,000 and create 70,000 jobs by 2030.

As with the rest of Neom, [Oxagon will be](#) a net-zero city fully powered by clean energy.



### AIUla

The heritage site with its preserved tombs and sandstone outcrops is already a popular tourist destination, but there is more to come.



Nine new hotels are set to open, [including a boutique resort](#) at Unesco-listed Hegra.

AIUla is expected to contribute about 120 billion riyals (\$32 billion) to Saudi Arabia's economy.

The Royal Commission for AIUla forecasts that the population of the area will triple to 130,000 by 2035, generating about 38,000 new jobs.

### Red Sea Project

A key part of Saudi's tourism movement, the project is set in a 28,000-square-kilometre area that includes an archipelago of 92 islands, 50 dormant volcanoes, mountain ranges and sand dunes. The first phase is due to open this year, with 16 hotels offering 3,000 rooms, an international airport, a marina, an 18-hole championship golf course, [luxury second homes](#) and retail and entertainment centres. It has been labelled "one of the world's last true hidden treasures" by developer Red Sea Global, and it is expected that 75 per cent of the destination's islands will be preserved for conservation.

### Amaala

Another [tourism-focused project](#), this one will feature yachting and wellness activities, and have a strong sustainability ethos. Located on the north-western coast, it will be within three hours flying time for 250 million people.

The first phase of development, Triple Bay, is set for completion in 2024 and will consist of six hotels and more than 1,000 rooms. When fully complete in 2027, it will offer about 3,000 rooms in about 25 hotels, as well as 200 high-end retail establishments, fine dining, and wellness and recreational amenities, set across three communities.

### Qiddiya

The Public Investment Fund project is set to become the capital of entertainment, sports and arts, and is expected to become a global tourism destination.



Its features will include a [Six Flags theme park](#), a Jack Nicklaus championship golf course, a water park, a speed park and a sports stadium. The developed area, located outside Riyadh, will encompass 223 square kilometres and is set to have a metro line linking it to the capital.

### Ad Diriyah

The 300-year-old city, considered to be the birthplace and capital of the first Saudi state, [is being transformed](#) into an educational, cultural, recreational and hospitality centre. One of the main objectives of the project is to preserve and protect the Unesco World Heritage Site of At-Turaif, the mud-brick city. There are plans for a new 20,000-seat performance arena, a new opera house, a contemporary Saudi art museum and a new convention centre. Diriyah Gate I will feature 18 hotels within the mixed-use traditional urban community that is to be created in an authentic Najdi architectural style, typical of Saudi villages, using the same mud bricks and plaster used centuries ago while providing modern amenities. Diriyah Gate II is envisioned as a Parisian scale, pedestrian-focused, mixed-use development with all the cultural entertainment assets, while Diriyah Gate 3 will have a huge residential aspect. Ad Diriyah was once an ancient trade and pilgrimage route and a meeting point for those travelling to or from Asia, Africa or Europe. The \$50.6 billion heritage mega project has set a target of 27 million domestic and international visitors by 2030.

### King Salman Park



amenities, a golf course and an equestrian centre.

### Mukaab

The design of the “Mukaab” includes first-of-its-kind facilities and will be one of the largest built structures in the world, standing 400m high, 400m wide, and 400m long. Large enough to hold 20 Empire State Buildings, the global icon will feature innovative technologies to transport you to new worlds. It will offer more than 25 million square meters of floor area, feature more than 104,000 residential units and 9,000 hotel rooms, and more than 980,000 square meters of retail space



King Salman Air Base, formerly Riyadh Airport, is being transformed into one of the biggest city parks in the world.

Last year, excavation work and construction activities for the Visitors Pavilion and the [Royal Arts Complex](#) were completed. Bridges and tunnels will be completed this year, plus the first-phase infrastructure. The park is envisioned as Riyadh's “green lung” and will stretch to 16 square kilometres, with sports

## UAE megaprojects 2023: 26 new developments in Dubai, Abu Dhabi and the Northern Emirates

Source: <https://www.thenationalnews.com/business/2023/01/04/uae-megaprojects-2023-26-new-developments-in-dubai-abu-dhabi-and-the-northern-emirates/>

Feb 04 – The skyline across the UAE is forever evolving, with new communities, new towers and even new islands coming to fruition. The changes in the past decade have been extraordinary and have made the UAE into one of the most advanced and futuristic nations in the world.

Last year, a host of projects were completed and that is set to be the case again in 2023.

See the slideshow above and list below for the megaprojects in Dubai, Abu Dhabi and elsewhere that are on the way. Completion dates may be subject to [change](#).



### Burj Binghatti, Dubai

There have been a few candidates for “world's tallest tower” since Burj Khalifa took the crown way back in 2010, and here's one aiming for the slightly different title of “world's tallest residential tower”.

[Burj Binghatti will have “more than 112 storeys”](#) and will offer residents the chance to “live amidst the clouds”, developer Binghatti said.

Located in Business Bay, it is being developed in co-ordination with Jacob & Co, a New York-headquartered watch and jewellery company.

To become the world's highest residential tower, Burj Binghatti has to exceed the 472-metre height of the current record-holder, [New York's](#) Central Park Tower.

### Palm Jebel Ali

In terms of size, it doesn't get much bigger than this. Palm Jebel Ali, the man-made island off the Dubai coast that has sat dormant for a number of years, could be about to see some development action.

Developer Nakheel [said late last year that it is revisiting its plans](#) for the island. Watch this space.

### Agri Hub by URB

Dubai's tourism attractions come in all shapes and sizes, but this one is a little bit different.

[Agri Hub will](#), according to its developer URB, become the biggest of its kind in the world and create 10,000 jobs.

It will provide food security, entertainment and adventure. A few locations are being studied for feasibility, with the exact location yet to be confirmed.

### Dubai Urban Tech District

Another from developer URB, [this urban technology district](#) will be located on the Creekside of Al Jaddaf district in Dubai.

“The Urban Tech District will be a new global tech hub for urban innovation,” said Baharash Bagherian, chief executive of URB. “With a total of 140,000 square metres of built-up area, it will be the world's largest urban tech district, thus making Dubai the centre for urban innovation.”

The district will be able to host conferences, seminars, business incubation programmes, training and research sessions, and is set to create 4,000 jobs.

### Etihad Rail

A regular inclusion in this annual list, [the rail project has made great strides](#) in the past 12 months, with construction gaining pace. Once complete, the rail network will connect the UAE with the rest of the Gulf. Stage one of the project is operational and is used to transport goods and materials across the Emirates.

The project as of December was 70 per cent complete, with the railway line between [Abu Dhabi and Dubai](#) joined up in March and [connected to](#) Ras Al Khaimah and Sharjah in October.

A launch date for the UAE passenger line and the exact route for this service have not yet been announced but plans to build the [first passenger station](#) in Fujairah have been unveiled.



### One Za'abeel

There's no shortage of records broken in Dubai, and this tower holds one for the world's longest cantilevered building that connects the two towers.

It was announced in December that the project was [taking its final shape, with full cladding completed](#) and an opening date later in 2023 expected.

The project, standing 304 metres high, is located beside Dubai's Trade Centre, and will be a mixed-use development.

### Dubai Islands

Formerly known as Deira Islands, developer Nakheel [rebranded the project as Dubai Islands](#).

The development, comprising five islands spread over an area of 17 square kilometres, reinforces the emirate's position as a "global destination of choice for residents, visitors and investors", Nakheel said.

Each island will have its own unique offerings, with cultural centres, recreational beaches and beach clubs.

The islands will be home to more than 80 resorts and hotels.

### The World Islands

Activity on the megaproject off the Dubai coast has been ramping up, with the [Anantara World Islands](#) Dubai Resort the first hotel to open there in November.

Kleindienst Group's [Heart of Europe project is also close to opening](#), while Dubai-based developer and contractor Inspire Home Contracting [has revealed plans to develop the Oman island](#).

Once all phases of the Heart of Europe — a six-island cluster in the middle of Dubai's The World islands — have been completed, it will be home to 4,000 units.

### Mohammed bin Rashid Solar Park

The Dubai Electricity and Water Authority (Dewa) is building the world's largest solar energy park, the [Mohammed bin Rashid Al Maktoum Solar Park](#), in an effort to reduce reliance on natural gas and diversify its power sources.

The fourth phase will provide clean energy for about 320,000 houses and cut 1.6 million tonnes of carbon emissions yearly.

The sixth phase of the park will become operational in stages, starting from Q3 2025.

### Uptown Tower district

The new [Uptown Tower development](#) in Dubai's Jumeirah Lakes Towers is a highly visible feature of the skyline as you enter the city on the E11 from Abu Dhabi.

Not only has the 340-metre tower been fully leased, according to Dubai Multi Commodities Centre — the free zone behind the project — work on the next two commercial towers in the project is set to commence "soon", it said in the latter part of 2022.

Uptown Tower is the 14th tallest structure in Dubai.

### Ciel Dubai

Dubai already has the record for the world's tallest hotel, with the 356-metre-high Gevora Hotel.

So, where better to break that record than in Dubai?

The First Group's [Ciel Tower in Dubai Marina](#) is set to stand 365 metres tall. The most recent scheduled completion date is the fourth quarter of this year.

It will have more than 1,000 guestrooms and suites, as well as premium amenities, such as the Ciel Observatory & Lounge on the 81st floor and a signature rooftop Sky Terrace with an infinity pool and bar.

### Atlantis the Royal

This ultra-luxury waterfront hotel and residence on Dubai's Palm Jumeirah is set to have [music megastar Beyonce perform](#) at its opening on January 21.

Spanning 63 hectares and housing 795 rooms and suites, countless hospitality venues and no less than 90 swimming pools, the resort's opening has been anticipated for some time.

The hotel has begun taking reservations for March, with rooms in the opening month starting at Dh4,066 for the first two weeks.



### Al Jurf

The first phase of Imkan's "Riviera" project on the coast between Abu Dhabi and Dubai is scheduled to be completed this year. The master plan, stretching 1.6km along the Arabian Gulf coast, seeks to conserve the existing 100,000 trees, sea turtles and other wildlife at the Ghantoot reserve, creating a coastal "retreat" for UAE city dwellers. A [second phase has also been launched](#).

### Jubail Island, Abu Dhabi

The Dh10 billion development by Jubail Island Investment Company [is very much under way](#), with villas springing up on the plot between Saadiyat Island and Yas Island.

It will have six residential village estates covering more than 400 hectares and is expected to be home to 10,000 residents within four years.

The first villas will be ready for handover by September 2023.

Developers have already planted a total of 430,000 mangrove trees as part of efforts to conserve the ecological reserve.

### Natural History Museum

Construction is under way on Saadiyat Island and was [25 per cent completed in October](#).

The project will cover 35,000 square metres and will aim to bring visitors on a 14-billion-year journey through time and space, from the origins of our universe to the Earth's future.

Tourism chiefs said the museum is due to be completed at the end of 2025.

### Zayed National Museum

Its soaring cluster of towers which evoke the wings of a falcon can be seen from afar and show the level of progress at the site on Saadiyat Island.

Designed by acclaimed UK architects Foster + Partners, [the museum](#) will narrate the story of UAE Founding Father, the late Sheikh Zayed bin Sultan Al Nahyan, and highlight the history of the region and its cultural connections to countries around the world.

Two galleries on the ground floor will represent the heart of the museum.

### Guggenheim Abu Dhabi

Another project located in the Saadiyat Cultural District, [this one is set to open in 2025](#).

The museum will cover 30,000 square metres, with its gallery spaces spread across four levels linked by glass bridges and a central atrium at its core.

The building, which will stand 88 metres tall, will feature nine cone-shaped structures, which will be a space for both commissions and acquisitions.

It was designed by renowned architect Frank Gehry, who is also behind the Guggenheim Museum in Bilbao, Spain.

### Abrahamic Family House

Currently being built on Saadiyat Island, [it aims to represent and preserve the three Abrahamic religions](#) — Islam, Christianity and Judaism (right photo)

The houses of worship are designed as three clear geometric cubes that sit on a plinth, connected by pathways and gardens. The structures share equal external dimensions — height, width and a unifying roof — emphasising through design that no faith is more dominant than the other.

It is due to open [March 01, 2023](#).



### Louvre Abu Dhabi Residences

A number of residential projects on Saadiyat Island were announced in 2022, with [Louvre Abu Dhabi Residences](#) among them. “With Louvre Abu Dhabi Residences, now there is an opportunity to reside at the most inspiring cultural address in the world,” said Manuel Rabate, director of Louvre Abu Dhabi.

The development, by Aldar, has an expected handover date of 2025. It will have art and sculptures chosen that resemble those exhibited by the museum.

Also in the area is [Saadiyat Grove, a Dh10 billion \(\\$2.72 billion\) destination](#) that spans an area of 242,000 square metres and will eventually feature entertainment and leisure spaces as well as 3,000 new residential units, two hotels and co-working spaces for new companies and start-ups.

It will have a 360-degree view of three museums on the island.

### Reem Island

The island close to the city centre has undergone a steady transformation over the past decade.

Its residential towers have been joined by an impressive public park and beaches as well as the soon-to-open Reem Mall, which will be home to the [region's biggest snow park](#).

Elsewhere on the island, the gated [Reem Hills villa community](#), complete with a man-made hill, is on the way.

The first phase of the project, Sierra Views, is due for completion in December 2024.

### Midfield Terminal

The new Dh10.8 billion (\$2.94 billion) [Midfield Terminal Building](#) (MTB) at Abu Dhabi International Airport is taking shape.

“We will open it when we think it is the right time to open it and I must stress that — it is not necessarily about when it will be ready for opening,” said Frank McCrorie, chief operations officer at Abu Dhabi Airports.

“The biggest factor for us is reputation. Everybody has been waiting for this facility to open, so we want to make sure that we do so in a timely manner and in the correct fashion.”

The operator will announce the opening date once the building is ready and when the conditions are right, [he said in August](#).

### SeaWorld Abu Dhabi

The first SeaWorld location outside of North America is [set to open in 2023 on Yas Island](#).

Built over five floors and spanning about 183,000 square metres, it will include habitats, rides, interactive exhibits and immersive guest experiences.

The marine-life theme park complex will also include the UAE's first dedicated marine research, rescue, rehabilitation and return centre, supporting regional conservation projects and with a focus on indigenous ecosystems in the Arabian Gulf.

### Abu Dhabi Hindu temple

The capital's Abu Mureikha district is home to the [pink sandstone temple](#) which is gradually rising and will retell ancient stories from Indian scriptures.

With seven spires to represent each of the UAE's emirates, the place of worship will be 32 metres tall when it opens in 2024.

One hundred and seventy artisans and bricklayers will use more than 30,000 pieces of stone and millions of handmade clay bricks in the construction.

### Sharjah forest district

Sharjah and forest aren't two words you may expect to sit together — or to describe any of the emirates, for that matter, given the desert landscape.

However, UAE developer Arada has been launching the new phases of its Masaar residential project, which has eight gated districts, 4,000 homes and features a “green spine” with 50,000 trees.

Construction at Masaar's first residential district Sendian is under way and is expected to be completed by the end of June 2023.

### Falcon Island, Ras Al Khaimah

The residential development, which, like its name suggests, [sits on a falcon-shaped island at Al Hamra](#), has had two phases launched so far. Construction at Al Hamra began in the second quarter of 2022.

Al Hamra also said the project had committed an allocation of up to 70 per cent of the island to open spaces.



### Hatta

There's a lot going on at Hatta up in the Hajar Mountains. Firstly, there's the [construction of a hydroelectric power plant](#), which Dewa said in December was 58.48 per cent complete. It will be the first of its kind in the GCC, built with an investment of Dh1.42 billion (\$387 million). The project is planned for completion in the fourth quarter of 2024. Then there's the Dh46 million [waterfall attraction](#), which is part of a tourism drive. The area will include recreational spaces and restaurants and construction is under way.

### Moon Resort

After speculations around [the \\$5 billion Moon Resort coming to Abu Dhabi](#), *Arabian Business* has learned that Moon World Resorts' co-founders Michael Henderson and Sandra Matthews are considering the [Dubai Pearl as the ideal location to set up the resort](#).



► More photos are available at the source's URL.

**EDITOR'S COMMENT:** All these fantastic megaprojects are automatically becoming landmarks (both in UAE and KSA) and therefore it would be very interesting to be included in CBRNe threats games because you know what they say about the unexpected.

## The Quiet War between Israel and Iran – Iran's Hegemonic Drive

By Jonathan Schanzer

*Middle East Quarterly* | Winter 2023

Source: <https://www.meforum.org/63850/the-quiet-war-between-israel-and-iran>

A major war has been underway for a decade in the Middle East though it infrequently makes headlines. Month after month, week after week, and night after night, the Israelis have operated across the region





against the Islamic Republic of Iran in what the Israeli government calls "the-war-between-wars" (or "the-campaign-between-wars").<sup>[1]</sup>



Tehran has financed, armed, and trained terrorist proxies to target Israel. Left: anti-tank missiles with IRGC insignia captured by the IDF from Hezbollah forces.

The genesis of this war is clear. Since the early 1980s, Tehran has financed, armed, and trained terrorist proxies to target Israel. This includes Hezbollah in Lebanon, Hamas and Palestinian Islamic Jihad in Gaza, and more recently, Shiite militias in Syria and Iraq. Historically, Israel has battled many of these proxies in short but painful border wars. Tehran never paid a price. The Islamist regime preferred this dynamic, and the Israelis never altered the rules of engagement.

But over the last decade, Jerusalem has flipped the

script. With the Iranian regime pushing ever closer to a nuclear weapon, the stakes are higher. Concurrently, Tehran is arming its proxies with increasingly lethal and precise weapons while striving to deploy them closer to Israel's borders in a strategy of encirclement. With no other options, the Israel Defense Forces (IDF) have aggressively struck Iranian and Iran-backed targets. What began as an ad-hoc series of operations has evolved into a full-fledged campaign.

The individual strikes of this campaign, often conducted without attribution, were initially designed to forestall regional conflagration. Eroding the capabilities of Iran and its proxies, Israeli officials reasoned, would prevent the axis from placing sufficient assets in advantageous locations to launch a coordinated assault. As Defense Minister Benny Gantz said, "Sometimes the use of force, and a demonstration of it, is able to prevent the need for a stronger use of force."<sup>[2]</sup>

But forestalling conflict in perpetuity is not a sustainable strategy. As the Iranian nuclear program advances, and as Tehran's proxies amass lethal weapons on Israel's borders, this shadow war may ultimately escalate to a wider conflict that could enable Jerusalem to neutralize or even eliminate its most significant threats.

### Cyber-warfare

While there was never an official start to the "war-between-wars," the first shot was arguably fired in 2010 with the Israeli deployment of the "Stuxnet" worm, a joint U.S.-Israeli cyber-weapon that set back Tehran's nuclear program by perhaps two years.<sup>[3]</sup> That attack garnered spectacular headlines, but it was certainly not the last. Over the past decade, the Israelis have increasingly operated against Iran in cyber-space. In 2018, for example, Tehran blamed Jerusalem for a cyber-attack against Iranian critical infrastructure,<sup>[4]</sup> and two years later, Israel was suspected of cyber-attacks against two Iranian government agencies and the Iranian port of Shahid Rajaei.<sup>[5]</sup> These are just a few of the Israeli cyber-operations that have been made public. In October 2022, the Atomic Energy Organization of Iran reported an "illegal infiltration," which was widely assumed to be connected to Israel.<sup>[6]</sup>

Of course, Tehran has also hit Israel in cyber-space. In 2018, Iranian hackers penetrated the cellphone of IDF chief of staff Gantz, now a prominent politician.<sup>[7]</sup> According to news reports, in 2019, Iranian hackers almost infiltrated Israel's missile early warning system.<sup>[8]</sup> In late 2020, Iranian hackers stole data from at least forty Israeli companies and even accessed Israel's water system.<sup>[9]</sup> In early 2021, Iranian hackers targeted Israeli medical researchers, government agencies, academia, and more.<sup>[10]</sup>

Some Israeli analysts have pointed to concerns stemming from the lack of norms and rules associated with cyber-warfare.<sup>[11]</sup> Whether this is a serious problem for Jerusalem remains to be seen. For now, Israel is dominating Iran in this arena.

### Psy-Ops

There is a psychological component to this cyber-warfare as well. In July 2021, for example, hackers accessed the message boards of Tehran's central railway station and welcomed passengers to call the office of the country's supreme leader, Ayatollah Ali Khamenei. Though it was suggested that an Iranian opposition group was responsible,<sup>[12]</sup> the Israelis likely had a hand in this activity, demonstrating the ability to operate deep inside Iran.

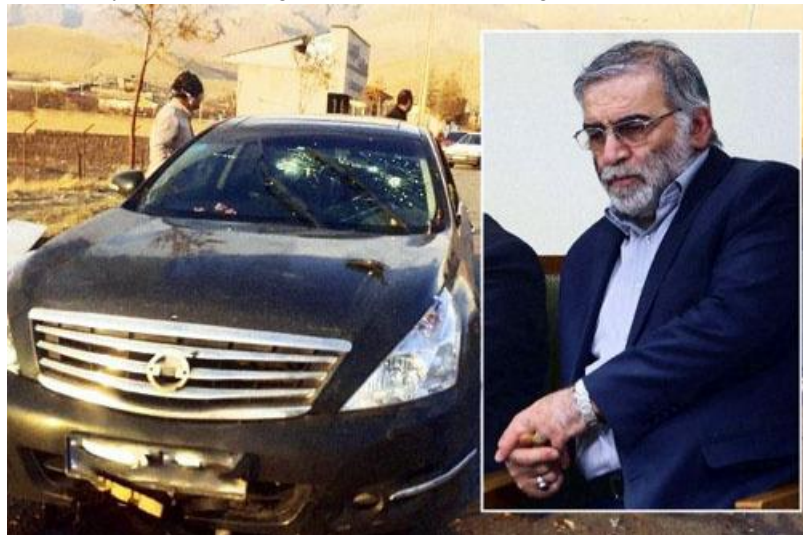
Even more jarring to the regime was the 2018 operation in which Mossad exfiltrated hundreds of thousands of documents from a secret nuclear archive on the outskirts of Tehran, which influenced the ongoing



nuclear negotiations between Iran and P5+1 world powers (the United States, Russia, China, France, and Britain, with Germany).<sup>[13]</sup> Pointing to prior advances in weaponization that the regime had previously and vigorously denied, the documents alerted the International Atomic Energy Agency to nuclear sites previously obscured by the regime and sent nuclear experts scrambling to assess mountains of new data about Tehran's nuclear program.<sup>[14]</sup> Tehran has since intensified its internal security; paranoia has increased commensurately.

### Assassinations

In November 2020, Iran's top nuclear scientist, Mohsen Fakhrizadeh, was killed in his car by a remote-controlled weapon suspected to be the handiwork of Mossad.<sup>[15]</sup> Fakhrizadeh's demise did not deplete Tehran of its institutional nuclear knowledge, but it undeniably delivered a significant blow to the program, which Fakhrizadeh had led since 1989. Indeed, he was the head of Iran's Organization of Defensive Innovation and Research (the Persian acronym is SPND) and of a secret program called "Project Amad," conducting research on Iranian nuclear weapons.<sup>[16]</sup>



In 2020, Iran's top nuclear scientist, Mohsen Fakhrizadeh, was killed in his car by a remote-controlled weapon thought to be the work of Mossad.

The Fakhrizadeh assassination was not an isolated event. Mossad was likely behind at least six other attacks against Iranian nuclear scientists since 2007.<sup>[17]</sup> The untimely deaths of Ardeshtir Hosseinpou (2007), Masoud Ali Mohammadi (2010), Majid Shahriari (2010), Fereydoun Abbasi Davani (2010), Daryoush Rezaei Nejad (2011), and Mustafa Ahmadi Roshan (2012) all appeared designed to stymie the

nuclear program by robbing it of institutional knowledge and human resources.

Unrelated to the nuclear program, in 2020, the Israelis were behind the assassination of Abu Muhammad al-Masri, al-Qaeda's second-in-command, who had enjoyed safe haven in Tehran.<sup>[18]</sup> Since the 9/11 attacks, analysts have debated the nature of the ties between Tehran and al-Qaeda. Some argue this has been an uneasy relationship with many al-Qaeda operatives living under house arrest. Others assert that the Islamist regime has enabled the group's terrorist activity. The assassination of Masri, who was roaming freely in Iran, certainly gave the appearance of collusion between the two.<sup>[19]</sup>

### The High Seas

Israel and Iran have also engaged in maritime battles. In March 2021, Jerusalem struck an Iranian oil vessel bound for Syria, and in April, hit an Iranian spy ship in the Red Sea and an Iranian fuel tanker off Syria's coast. Then, in May, an explosion attributed to the Israelis occurred on another Iranian oil tanker again off Syria's coast.<sup>[20]</sup> According to *The Wall Street Journal*, Jerusalem had been targeting scores of Iranian vessels since 2019.<sup>[21]</sup>

The Israelis were struck in response. In March 2021, Tehran was likely behind an attack on an Israeli freighter near the Persian Gulf, and later that month, an Israeli-owned ship was hit by a missile off the coast of Oman.<sup>[22]</sup> In April, an Israeli-owned vessel was attacked off the coast of the United Arab Emirates, and later that year, the Israeli-managed *Mercer Street* was struck by an Iranian drone in international waters, drawing condemnation from world powers.<sup>[23]</sup>

### The Syrian Theater

Amidst all of this, Syria emerged as the most intense battleground. Tehran has exploited the decade-long civil war to entrench itself militarily in the country and to deliver large quantities of advanced weaponry to the Hezbollah terrorist group in Lebanon. Jerusalem has endeavored to prevent this from happening.

While the Israelis' targets vary, most attacks are aimed at Hezbollah-bound, precision-guided munitions, which Jerusalem claims are "game changing" as they significantly upgrade the group's "statistical rockets" that lack precision. Their trajectory can be manipulated in mid-air, and they strike with pinpoint accuracy. Israel has destroyed most of them, but officials cede a "few hundred" of the munitions have arrived in Lebanon.<sup>[24]</sup>





For a decade, there have been unwritten rules of engagement between the Iranians and Israelis. Tehran has willingly absorbed heavy losses so long as some weapons get through. Another unspoken rule is that Lebanon, the destination of most of these weapons, has been off-limits to Israeli strikes. The result has been thousands of strikes in Syria. [\[25\]](#)

After Iran sent a drone into Israel from a Syrian airbase, the IDF launched airstrikes against Iranian and Syrian targets. This Iranian photo reportedly shows damage at the airbase, April 2018.

For the first five years, Jerusalem was rather furtive, claiming no responsibility for what it struck. Yet, news reports provided clear contours of the battlespace.

They pointed, for example, to Israeli strikes against a biological research center, to repeated attacks on advanced weapons bound for Hezbollah, and the assassinations of Hezbollah commanders, and even the killing of Iranian officers. [\[26\]](#) By 2017, the war had begun to emerge from the shadows. In April, the IDF intercepted Hezbollah drones that penetrated Israel from Syria, and two months later, ten projectiles were fired into Israel, prompting Israeli strikes across Syria. [\[27\]](#) In February 2018, after Tehran sent a drone into Israel from the Syrian T4 airbase, the IDF launched airstrikes against Iranian and Syrian targets in Syria, including air defenses. Two months later, the Israelis struck an Iranian airbase in Syria, killing seven Iranian soldiers, and in May, fifteen Iranian and irregular fighters were killed in an Israeli strike on an Islamic Revolutionary Guard Corps (IRGC) installation. [\[28\]](#) Not long after, Israel struck more than fifty Iranian targets in Syria as part of "Operation House of Cards," and in June, the IDF hit an Iran-backed militia in Iraq, killing twenty and destroying military assets. [\[29\]](#)

Satellite imagery shows damage to an IRGC drone base in Iran, February 2022, apparently after an Israeli strike in response to an attempted weapons delivery to the West Bank and Gaza via drones.



In February 2019, Jerusalem began to refer openly to this unacknowledged war when then-prime minister Benjamin Netanyahu boasted of a strike against Syrian targets. [\[30\]](#) In March, Acting Foreign Minister Israel Katz confirmed Israeli strikes against Iranian assets in Aleppo, and in April, Netanyahu hinted that Israel was behind a strike against an Iranian weapons factory. [\[31\]](#) In May, the IDF claimed credit for targeting a Syrian anti-aircraft battery. [\[32\]](#)

In May 2020, one non-governmental organization in Syria reported on nearly forty airstrikes up to that point, resulting in the death of 225 Iranian and Assad regime soldiers. [\[33\]](#) In June 2020, the Israelis attacked a Syrian onion-processing facility and a cattle-feed plant that the Iranians had converted into weapons warehouses while another strike destroyed a weapons convoy headed for Hezbollah in Lebanon. [\[34\]](#) In September, the IDF once again hit the T4 airbase, and three months later, an Israeli airstrike killed a top IRGC commander. [\[35\]](#) The Israelis were operating with increasing audacity. Indeed, one could detect a sense of pride among IDF brass and operators in off-record conversations about the Israeli military successes in Syria. [\[36\]](#) In October 2022, IDF officials went so far as to assert that 90 percent of Iranian military infrastructure was destroyed in Syria. [\[37\]](#)

### U.S. Policy Unchanged

In 2020, the trajectory of the "war-between-wars" was thrown into doubt. For the prior four years, the period representing the bulk of the campaign, the Trump administration had backed Jerusalem's efforts to erode Iranian activity on Israeli borders. After Trump's departure, President Joe Biden's policy was unknown.



## ICI C<sup>2</sup>BRNE DIARY – February 2023

Those uncertainties were settled in January 2021 when the Israelis struck Iranian and Hezbollah forces in Syria.<sup>[38]</sup> Then in October, the Israelis hit Syrian bases in Homs, followed three months later by a strike on containers in Syria's seaport of Latakia.<sup>[39]</sup> None of this elicited a White House response. Satellite imagery from February 2022 revealed damage to a drone base in western Iran, apparently the work of Jerusalem in response to the attempted delivery the previous year of weapons to the West Bank and Gaza by drones. Four weeks later, Tehran launched missiles at a compound in Erbil, Iraq, that it said was used by Israel.<sup>[40]</sup> In April, Israeli warplanes struck Syrian weapons depots and centers where missile and unmanned aerial vehicles are being developed. Another report later that month confirmed an Israeli strike against Iranian ammunition depots near Damascus while a similar strike on ammunition near Damascus was reported in May.<sup>[41]</sup> In August 2022, Israeli jets struck western and central Syria, killing three soldiers and wounding three others. The Israelis also hit Damascus and Aleppo later that month in an apparent attempt to prevent Iranian planes from delivering military equipment.<sup>[42]</sup> If Washington was unhappy about this activity, it did not state so publicly, even as the Biden administration pursued a nuclear deal with Tehran.

### The Russia Factor

The Russian invasion of Ukraine in February 2022 introduced a new wrinkle into the war-between-wars. Since 2015, owing to Moscow's military intervention in the Syrian civil war, the Israeli Air Force (IAF) has been forced to depend on Russian cooperation to operate in the skies over Syria. This has required careful de-confliction as the Russians patrol Syria's skies with fighter jets and advanced anti-aircraft systems. To sustain its campaign, Jerusalem has had no choice but to engage with Putin and his lieutenants. Early on, the two sides reached a tacit understanding that "Russia won't interfere with Israel's airstrikes in Syria."<sup>[43]</sup> But the exchanges have not been without tension. Israeli pilots must operate within range of Russia's formidable S-400 anti-aircraft system. This has likely encumbered Israeli operations to one extent or another.<sup>[44]</sup>

After the Russian army was slowed by determined Ukrainian resistance in 2022, the Kremlin reportedly elected to redeploy forces and assets out of Syria to Ukraine.<sup>[45]</sup> What that means for Israel remains to be seen. There are multiple ways in which Moscow could retain its military presence in Syria.<sup>[46]</sup> However, should the Russians remove anti-aircraft systems from central and eastern Syria, this could yield new opportunities for the Israelis in the unacknowledged war. Conversely, should the cooperative ties between Moscow and Tehran deepen, Jerusalem may find it increasingly difficult to operate on its northern border.

### Conclusion

Until now, the war-between-wars has been a somewhat limited strategy to combat future Iranian threats. Questions now linger about its long-term viability as a vehicle for broader strikes to address the immediate existential and strategic threats from Tehran and its proxies. Former officials note that the strategy may help contain the problem in Syria, and even beyond, but that Jerusalem has been deterred from handling the true threats: Hezbollah's growing precision-guided munitions (PGMs) stockpile in Lebanon, the appearance of additional PGM production facilities in Lebanon, and the construction of additional Iranian covert nuclear facilities, or, indeed, the overall advancement of Tehran's nuclear program.<sup>[47]</sup>

Such criticisms do not negate the impact of the daring and successful Israeli operations in the undeclared war over the course of a decade. But these dangers cannot be ignored. Jerusalem may thus soon find that it must test the unwritten rules of engagement with Tehran. It may need to conduct riskier, asymmetric operations, especially as Hezbollah amasses additional PGMs and Tehran approaches Jerusalem's red lines on the nuclear front.

Until then, the war-between-wars cannot stop. In the words of IAF former commander Amikam Norkin, "It's not 100% success. But without our activity, the situation here might be much more negative."<sup>[48]</sup>

**Jonathan Schanzer**, a former terrorism finance analyst at the U.S. Department of the Treasury, is senior vice president for research at the Foundation for Defense of Democracies. He is the author of *Gaza Conflict 2021: Hamas, Israel and Eleven Days of War* (FDD Press, 2021).

## Turkey's Twisted Anti-NATO Tango

By Clifford Smith and Jonathan Spyer

Source: <https://www.meforum.org/64105/turkey-twisted-anti-nato-tango>

Feb 01 – Last week, [Turkey's](#) president, Recep Tayyip Erdoğan, threw the international community into a tizzy when he announced that Sweden should "not expect" Turkey's support to join NATO after a far-right politician burned a Quran at a protest in front of the Turkish Embassy, ironically, in [protest](#) of Turkey's



[duplicity](#) concerning Sweden's bid to join NATO. For months, the addition of Sweden to NATO was treated as a *fait accompli* by the West, perhaps just requiring a little more cajoling of Ankara, even though Turkey had not technically taken final steps to admit Sweden.

While there is ambiguity in Erdoğan's words, they threw NATO enlargement into doubt at a time when almost all member nations are pushing for more unity in support of Ukraine's war against Russian aggression. Erdoğan's actions are jeopardizing major geopolitical events and hampering the interests of his fellow NATO members, potentially even jeopardizing the long-term health of the alliance itself.

Why?

The situation is complicated and fluid, but suffice it to say, Western officials have been underestimating Erdoğan's toxicity from the beginning. Several trends, too little considered by Washington and European leaders, have led to this moment. Getting beyond Turkey's obstinance will be tricky.

Before the Quran-burning incident, Turkey was dragging its feet on Sweden's joining NATO ostensibly due to Sweden's soft treatment of the Workers' Party (PKK). This organization is made up of mostly Turkish-born Kurds. It is designated by Turkey and many other countries (including the U.S. and

as a terrorist organization. To appease Ankara, Sweden has strengthened some counterterrorism laws and has extradited some Kurds whom Turkey considers terrorists, although the Swedish judiciary has [disallowed](#) the extradition of others.

However, while Turkey may genuinely be concerned about the activities of some Swedish Kurds, Erdoğan's true agenda is different. Turkey has been in a struggle with Kurdish political movements of all sorts since the fall of the Ottoman Empire resulted both in the founding of modern Turkey and the resulting wranglings that left the Kurds as the largest stateless ethnicity in the world. Sweden's [large Kurdish population](#) (estimated to be between 100,000 and 150,000) is politically active, and the current government requires the cooperation of Kurdish politicians for its one-seat majority in parliament. This has led Sweden to increase support for the Syrian People's Protection Units (YPG) and its political arm, the Democratic Party Union (PYD), which controls a semiautonomous zone in northern Syria.

Erdoğan considers the PYD simply a branch of the PKK, but the PYD, which controls the Syrian Democratic Council, is not widely viewed in this way outside of Ankara. Instead, most other nations [view](#) the YPG as a key part of international anti-ISIS efforts and an inspiring example of [religious and ethnic tolerance](#) in the Middle East. Nonetheless, Erdoğan has launched three major incursions against the Syrian Kurds since 2016 and remains in a state of low-key warfare against the YPG and its allies. These operations also [endanger](#) Syria's dwindling Christian population, many of whom have found refuge in Kurdish-controlled areas of Syria. That is, it seems likely that Erdoğan's real goal is to weaken or eliminate Swedish support for Kurdish autonomy in Syria.

Ankara's rage over a crude far-right protest that included the burning of a Quran, particularly considering the relative silence of many other majority-Muslim states, might surprise people who still think of Turkey in terms of the secular republic created by Mustafa Kemal Atatürk. But put plainly, this is not your grandfather's Turkey. During Erdoğan's two-decade rule, he has moved Turkey markedly in his own [pan-Islamist, neo-Ottoman](#) ideological direction. In the words of [one scholar](#), Turkey's educational system now features one of the most "supremacist and intolerant curricula in the Muslim world" and [actively promotes](#) radical Islam in other countries as well. Having fostered such sentiments among its own population for years, Ankara's rage, in part, may be real.

But it is also a tactic. While Erdoğan has no real friends in the Arab world ([except Qatar](#)), he has actively courted Islamist and Islamist-leaning countries such as Pakistan, Afghanistan, and [Malaysia](#). His goal seems to be to create an Islamist bloc at a time when much of the Arab world is drifting away from Islamism. By pounding Sweden over this protest, he presents himself as a leader, and a desirable partner, to other leaders who seek to weaponize political Islam.

This is not only about foreign governments. Top Erdoğan aides have [deemed](#) international Islamist movements, such as the Muslim Brotherhood of the Arab world and South Asia's Jamaat-e-Islami, as "soft-power proxies" for Ankara. During a recent trip to the United Nations, Erdoğan made his first stop a [meeting](#) with top Islamist leaders in the U.S., who, in turn, themselves [advocate](#) for Turkey.

The ideological shift that has occurred under Erdoğan has further implications. Unlike Atatürk and most of his predecessors, Erdoğan sees NATO and its member countries as allies in name only. This can be seen in numerous actions in recent years too many to list, but also in leaked documents, which indicate that Erdoğan wants to "[f\\*\\*\\* . . . NATO](#)," which he deems "just as terrorist as Israel," and in his internal actions, such as [purging](#) Turkish generals who served with NATO or in allied Western countries. In other words, it should not be assumed that Erdoğan *wants* to help NATO. The opposite may well be closer to the truth.



Kurdistan members.  
Sweden)



Indeed, the past seven years have seen a marked turn in Ankara toward NATO's foe, Russia. The tipping point occurred when Russia's Vladimir Putin became the first world leader to [offer support](#) for Erdoğan during the 2016 coup attempt, a brilliant move by Putin who is still receiving dividends for his calculating action. Not long after, Ankara purchased Russia's S-400 air-defense system, a move seen as the [antithesis](#) of NATO's interests and a [violation](#) of the Countering America's Adversaries through Sanctions Act. In spite of the fact that the U.S. [offered](#) Ankara comparable equipment and expelled it from the advanced F-35 fighter program, Turkey has persisted in a pro-Russian direction. Indeed, according to a former Turkish parliamentarian, Turkey's actions at the start of the Russian invasion of Ukraine, such as blocking the Black Sea, [leaned toward Russia](#), a fact [missed](#) by senior Biden-administration officials. This is not exhaustive.

Putin, for his part, knows this. Recent reports indicate that the protest by the far-right Swedish politician who burned the Quran was [organized and financed](#) by Chang Frick, a former employee of Russia Today, a Kremlin-backed propaganda network. While he claims to have become unsympathetic toward Russia after the 2014 invasion of Crimea, he referred to Putin as "his boss" as late as 2019, although some claim he was joking. Either way, whether the Quran-burning incident was the result of a paid Kremlin operation or simply one born out of ideological sympathy for Putin's outlook, it is fair to say that pro-Russian ideology is actively assisting in driving Turkey away from Sweden. There is also a more hard-nosed dynamic at play here. The *Washington Post's* editorial board recently [opined](#) that Erdoğan is a "tireless haggler" and observed that any leverage he is able to gain, he will use, if he deems it in his interest, "to extract concessions from his NATO allies and excite his nationalist base ahead of Turkey's elections."

While Erdoğan purchased the S-400 missile and got kicked out of the F-35 program, he continues to rely on the West for military equipment. Ankara is trying to get approval from Washington to [purchase](#) advanced F-16s and upgrade kits for existing F-16s, and even assuming the Biden administration continues to support the sale, considering Ankara's actions toward Sweden, it is difficult to see how a deal would survive a [hostile Congress](#). It is entirely possible that Erdoğan's actions regarding Sweden are in significant part a ploy to strong-arm Washington on weapons sales. That is, Erdoğan is obstructing the entry of an important European state into NATO in order to give himself a bargaining card that he can later trade for concessions from Washington on arms sales.

So Erdoğan has nationalist/ethnic concerns (Kurds), religious/ideological motivations (Islamism), and geopolitical (tilting away from NATO/toward Russia) and cynically tactical reasons (arms sales) for his belligerence toward Sweden.

But while Erdoğan has many reasons to want to beat up on Sweden and even to keep it out of NATO, it is also true that he may not want to permanently rupture his relationship with the U.S. and the rest of Europe, if for no other reason than that he must survive his next election. While some believe Erdoğan has so thoroughly rigged the game by [banning opposing political parties](#), [jailing opposition journalists](#), and taking numerous other [anti-democratic actions](#) that he is virtually incapable of losing, it seems fair to say he's not acting like he's invincible. And he's got real problems. Erdoğan faces [runaway inflation](#) well beyond what other countries are facing, in part because of his basing his monetary policy on [his interpretation](#) of Islamic law. The [rapprochement](#) with Israel and [Arab](#) rivals that has occurred over the last year or so should be seen as an attempt to paper over his economic mismanagement for just long enough to survive the next election. It appears to be paying off — Abu Dhabi recently [invested](#) \$10 billion. Completely alienating Europe or the U.S., meanwhile, could tank markets even more. This hodgepodge of competing interests, goals, and tactics is difficult if not impossible to sort out cleanly, and nobody but Erdoğan knows what his true goals, or red lines, are. But it seems clear that, at minimum, so long as Erdoğan is in power, Ankara will be hostile toward Sweden and will care little for vital NATO interests or for strengthening the alliance in the face of Russian aggression in Ukraine. Will Washington and Europe find a way to get the upper hand and force Erdoğan to acquiesce to Sweden's NATO bid anyway? It's going to be messy. Expect further trouble.

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## Is the UK the Security Leader Europe Needs?

By Diana Mjeshtri

Source: <https://nationalinterest.org/feature/uk-security-leader-europe-needs-206156>

Jan 30 – When news broke on January 24 that German chancellor Olaf Scholz [relented](#) to demands by Ukraine and its closest European allies to send Leopard tanks to Ukraine, Europe's heads of state weren't exactly lining up to congratulate Scholz for his decisive leadership. Instead, many people [fear](#) the decision came too late and due to outside pressure—not because of German resolve to show a united front against Russia. Honoring the Élysée Treaty's sixtieth anniversary, Scholz [met](#) with French president Emmanuel Macron last Sunday to toast, walk and talk



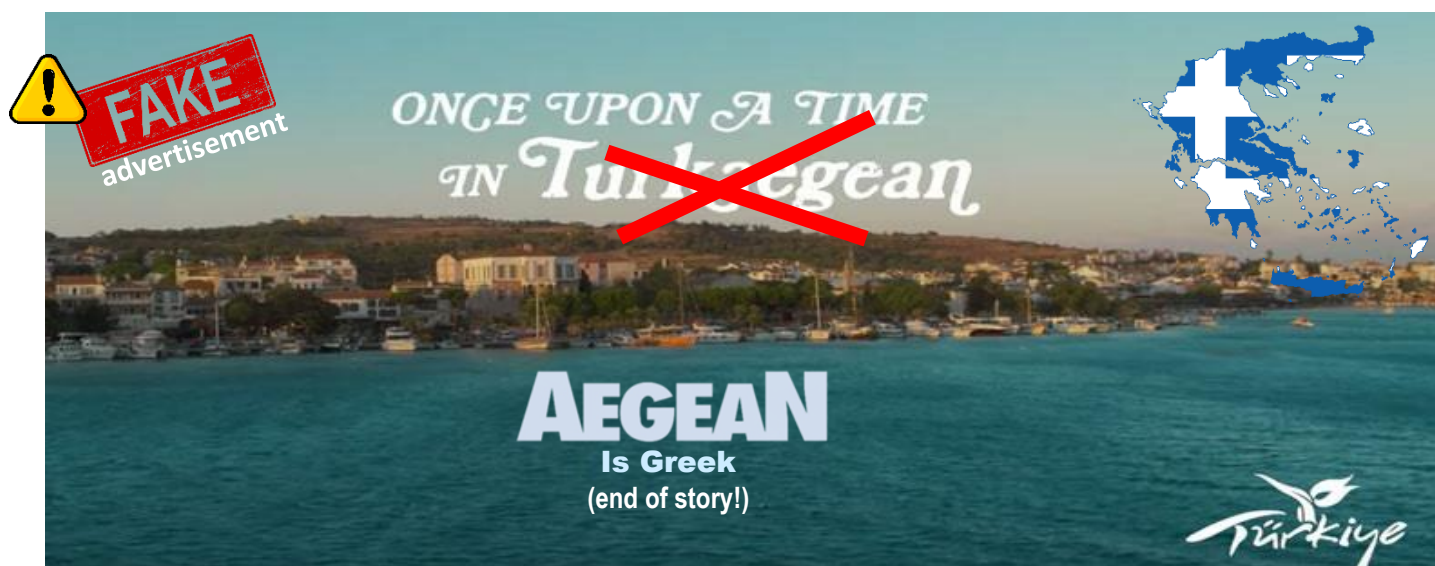
about European security, energy, and economic policy, in an attempt to squelch [criticism](#) that the Franco-German partnership is faltering. Meanwhile, former British prime minister Boris Johnson [received a hero's welcome](#) in Kyiv, as if he had never left Downing Street. The UK-led Joint Expeditionary Force, which connects the Nordic and Baltic countries through British security assurances, has also lately been seen as a viable [alternative](#) to full NATO membership for Finland and Sweden, given Turkey's opposition to NATO's expansion on the disputed claims that Sweden supports Kurdish terrorist groups. Although the Franco-German strategic partnership is in trouble, an unlikely candidate to take the lead in European security matters has now appeared: Great Britain. The first major European power to [send tanks](#) to Ukraine, Britain has once again become the leader in European security policy, despite having left Europe politically. Britain's post-Brexit domestic political challenges don't seem to have dampened the ambitious foreign policy of a successive row of British governments, each one positioning itself as a [staunch supporter](#) of Ukraine. This has won the backing of the EU's eastern flank members, all of whom worry they'll become the next victims of Russian aggression, should Ukraine fall. Although Britain has won the hearts of the EU's most pro-Ukrainian countries, Germany is shouldering increasing [criticism](#) for not contributing enough to the Ukrainian cause. Yet the critics have been less harsh with France, whose prewar economy wasn't as tied to Russia as was Germany. In fact, substantial differences separate France and Germany. On geostrategic issues and the meaning of what both call a "sovereign" Europe, Germany is more attached to NATO and the United States, while France adheres to the Gaullist tradition of Europe as a mediating and "balancing" power among the great world powers. [Differences](#) also abound in energy policy: France continues to support nuclear energy, while Germany is in the [final phase](#) of denuclearization.

The issue over sending German tanks to Ukraine underscores a more significant question about the future of European leadership, symbolized by the famous misquote often ascribed to former U.S. secretary of state Henry Kissinger: "Who do I call if I want to speak to Europe?" The looming question on everyone's minds is the future of U.S. commitment to European security. Without Washington's nuclear umbrella, would Germany seek to develop its own nuclear capabilities, leading to a more sinister Franco-German relationship? Germans can't be sure the United States will continue to extend its nuclear umbrella over Germany unconditionally. No American president will risk nuclear war on behalf of Berlin under any circumstance. Having another nuclear power, Great Britain, firmly committed to European defense could allay German concerns and diminish the prospects of an escalating rivalry between Paris and Berlin. Sixty years ago, Charles de Gaulle [characterized](#) the postwar Franco-German reconciliation as the "miracle of our time," following the nationalistic excesses of the nineteenth and twentieth centuries. In retrospect, de Gaulle's optimism was not naive, as the Élysée Treaty he signed with Konrad Adenauer in 1963 has survived even George Pompidou and Chancellor Willy Brandt's *ostpolitik* era of ["exemplary but non-exclusive"](#) relations.

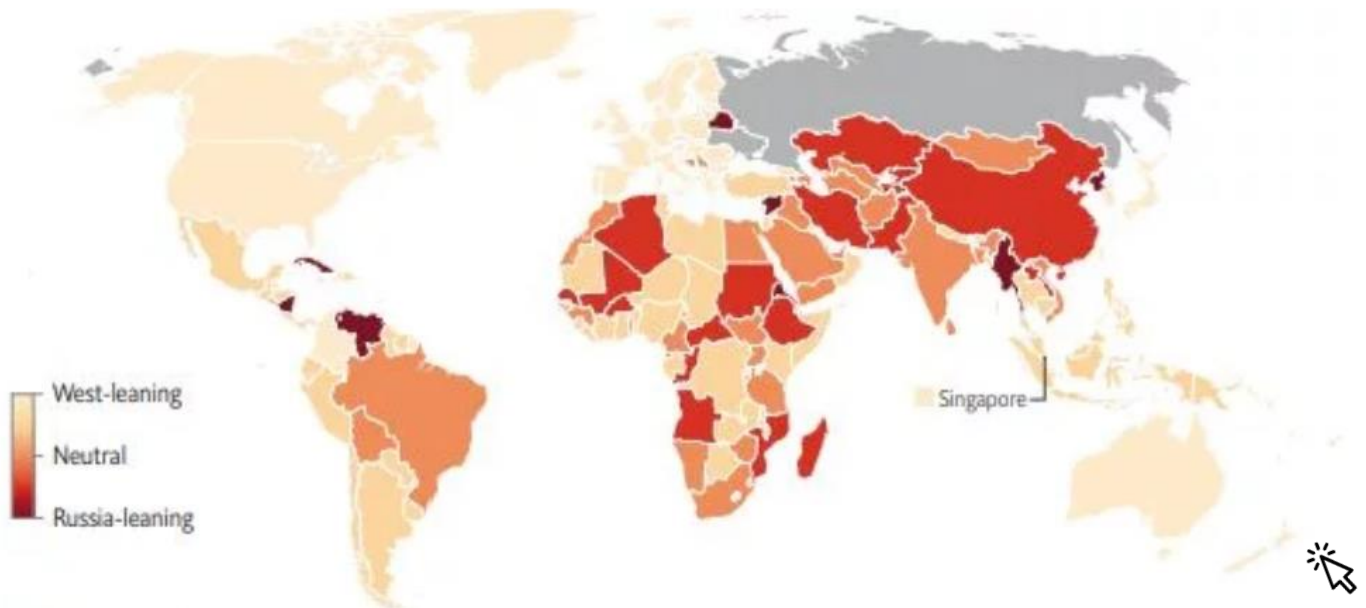
With journalists and political pundits focused on Germany's Leopard tanks and Boris back in Kyiv, the real question we ought to ask ourselves is if what we're witnessing is actually the first act of the British returning to the EU fold—this time as heroes who have led European efforts to save Ukraine. This certainly would be, in the words of *le général*, a true miracle of our time.

[Diana Mjeshtri](#) is Policy Analyst at Impact Innovation Institute. Both are members of the Councilors Program at the Atlantic Council.

**EDITOR'S COMMENT:** The same UK who invented the "divide and conquer" ruling concept? Second to an armed Germany?  
No thank you!



## Who supports Russia and why?



One of the reasons why the US has difficulty convincing developing countries to take a stand against Russia is America's own history of interventions.

During the Cold War, the US intervened to counter real or imagined communist threats, including by waging a 10-year war in Vietnam and supporting right-wing movements fighting leftist forces in Latin America and the Caribbean.

In the post-Cold War period, justifications for intervention by the US and other Western powers included overthrowing a dictator (Iraq, Libya), defending human rights (Kosovo), nation-building (Afghanistan), and saving a country from... itself (Somalia).

## Turkey's two-faced 'sultan' is no friend of the west. It's time to play hardball!

By **Simon Tisdall** (foreign affairs commentator)

Source: <https://www.theguardian.com/commentisfree/2023/feb/05/turkeys-two-faced-sultan-is-no-friend-of-the-west-its-time-to-play-hardball>

Feb 05 – That [Turkey](#) is a “vital strategic ally” of the west is the sort of truism on which people such as Joe Biden and Jens Stoltenberg, Nato’s secretary general, are raised. Yet what if the old saw no longer holds true? What if Turkey’s leader, exploiting this notion, betrays western interests in a pretence of partnership? Should not that leader be treated as a liability, a threat – even ostracised as an enemy?

Geography doesn’t change. Turkey wields significant influence at the crossroads of [Europe](#), Asia and the Middle East. Yet the increasingly aggressive, authoritarian and schismatic policies pursued at home and abroad over two decades by its choleric sultan-president have upended long-cherished assumptions. Turkey’s reliability and usefulness as a trusted western ally is almost at an end.

As the most important Turkish elections in a generation move towards a febrile climax in May, and as the western democracies contemplate critical choices in Ukraine, over Vladimir Putin’s Russia, and in Iran, Syria and Israel-Palestine, these dilemmas boil down to one basic question: is it time to admit that two-faced [Recep Tayyip Erdoğan](#) is no friend of the west – and punish him accordingly?

[Erdoğan's blocking of Sweden's attempt to join Nato](#) is the latest, egregious example of hostile behaviour. He claims Stockholm harbours “terrorists” from the militant Kurdish group the PKK (Kurdistan Workers’ party). In truth, his veto stems from his long-running anti-Kurd vendetta, which includes [legal moves](#) to close the HDP (Peoples’ Democratic party), the main Kurdish-backed opposition, before the elections. The Nato row now threatens to explode amid a [spate](#) of Qur’an burnings, diplomatic protests and violent retaliation.

Erdoğan is also [demanding the extradition](#) from Sweden of political refugees, notably Bülent Keneş, former editor-in-chief of the *Zaman* newspaper, whom he accuses of supporting a failed coup in 2016. Intimidatory





tactics targeting journalists are part of a broader post-coup drive to stifle public debate, [manipulate the constitution](#), subjugate judges, purge the army and civil service – and strengthen de facto one-man rule.

Using Turkey's Nato membership for domestic political ends is a typical Erdoğan gambit. Yet it also wilfully obstructs Sweden's (and Finland's) legitimate wish to bolster their defences after Russia's invasion of [Ukraine](#), while undermining Nato efforts to show unity and resolve. This is by no means the first time Erdoğan has favoured Moscow over Nato partners.

Erdoğan rejects and circumvents Ukraine-related sanctions. Turkey's trade with Russia [grew by nearly 200%](#) in the six months after the invasion, [including higher energy imports](#). His purchase of Russian surface-to-air missile systems [infuriated Washington](#), which views them as a threat to Nato forces. His [posturing as a Ukraine mediator](#) helps Putin maintain the pretence he's interested in peace.

Erdoğan's plans to launch another armed invasion of northern Syria fly in the face of [US-led efforts](#) to support the anti-Bashar al-Assad democratic opposition and suppress Islamist terrorism. In reality, [destabilising incursions and occupations](#) of the Syrian and Iraqi borderlands are yet another extension of Erdoğan's obsessive war on the Kurds. His [prospective rapprochement with Damascus](#) further undercuts western security policy.

If Erdoğan's sickening schmoozing of Putin, double-dealing over Ukraine, neo-Ottoman overreaching and on-off aggression towards fellow Nato member Greece are not sufficient proof of bad faith, then consider his other war – on his country's democracy. Human rights abuses aside, Erdoğan has made a huge mess of Turkey's economy. [Inflation is at 58%](#), living standards are plummeting. More than 70% of 18 to 25-year-olds say they would [prefer to live elsewhere](#).

In any normal democratic contest, such incompetence would cost him the presidency and his AK (Justice and Development) party's parliamentary majority. But Erdoğan does not do normal. In recent weeks, he has increased the national minimum wage by 55%, lowered the retirement age, boosted public sector salaries, and expanded loan and debt-forgiveness programmes. It's a blatant, state-funded attempt to [buy votes](#).

At the same time, Erdoğan appears bent on eliminating presidential rivals. The HDP's best-known leader, Selahattin Demirtaş, is [already in jail](#). And if Erdoğan has his way, he will soon be joined by Ekrem İmamoğlu, Istanbul's popular mayor and a leading light of the main CHP (Republican People's party) opposition. İmamoğlu is appealing against a [politically inspired prison sentence](#) and faces a range of additional trumped-up charges.

Electoral bribes and political skulduggery, unchallenged by state-controlled media and obscured by a climate of fear, point to another Erdoğan victory. Six opposition parties, joined together in a new Nation Alliance grouping, issued a manifesto last week vowing, among many other things, to curb presidential powers. But they have yet to agree on a standard-bearer – and without the HDP, polls suggest, they will not win a parliamentary majority.

All of which leads back to the original question: what should the western democracies do about Erdoğan, assuming he wins again? More sanctions, including on him personally, are one possibility. US senators suggest that Ankara may be [denied F-16 fighter jets](#) promised by Biden if it continues to sabotage Nato. [Stalled EU membership talks](#) could be formally frozen, indefinitely. Yet, to get Erdoğan's attention, any punitive measures will need to go further.

Overcautious, risk-averse Biden and Stoltenberg must let go of old, discredited thinking. They should remind Erdoğan that Nato is a community of values as well as rules; welcome Sweden and Finland into the alliance via a vote of all 30 members; and [suspend Turkey's membership](#), if necessary by amending the North Atlantic treaty. If he doesn't like it, well, tough.

Turkey inhabits a rough neighbourhood. No one expects torrents of peace and love from its leaders. And it could be a valued ally again. But Turkey is not indispensable. If need be, the western democracies can live safely without it – until that happy day dawns when Ankara's cantankerous sultan is finally defenestrated and debugged.

## Erdogan the Arsonist: The Dilemma of U.S.-Turkey Relations

*How far is the United States prepared to tolerate Turkey's growing human rights abuses and incendiary behavior?*

By Robert Ellis

(International advisor at the Research Institute  
for European and American Studies (RIEAS) in Athens.)



## Iran unveils underground base in response to US-Israel exercises

Source: <https://www.aljazeera.com/news/2023/2/7/iran-unveils-underground-base-in-response-to-us-israel-exercises>



Feb 07 – Iran's army has unveiled a major underground base to showcase its aerial military capabilities in response to significant joint exercises by the United States and Israel.

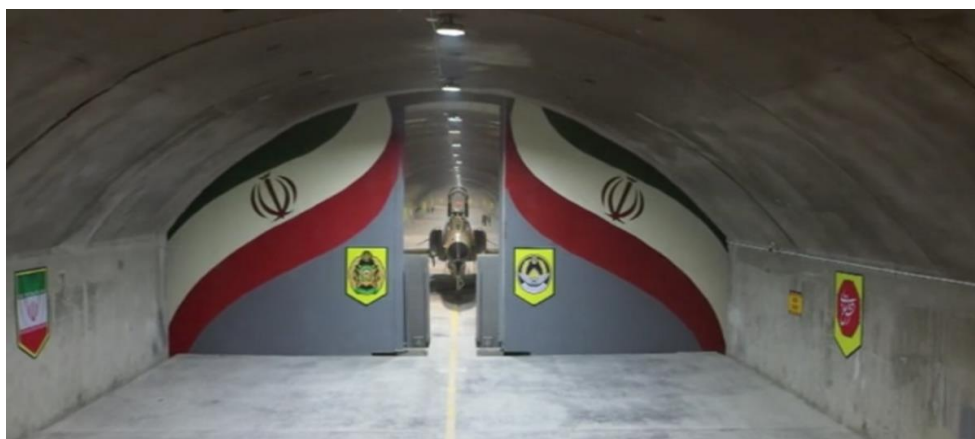
State television on Tuesday showed footage of a variety of fighter jets and military drones at the base, dubbed the "Eagle 44", the location of which remains unknown.

It said the base is dug in the mountains to protect it from ammunition dropped from US strategic bombers that are capable of penetrating defences.

The unveiling, which was attended by top military officials, comes less than two weeks after the US and Israel held their largest-ever joint drill, using thousands of troops and dozens of aircraft in addition to naval vessels and artillery systems in what was widely seen as a message to Iran amid [rising tensions](#).

That joint drill had in turn come days after Iran held wide-ranging exercises to showcase its military readiness.

"Maybe they hadn't received Iran's message [with that exercise] correctly. Iran is now sending a message again. This is the sound of rumbling from within the mountains," the state television reporter said, as a fighter jet moved in a tunnel behind him. State television showed footage of fighter jets taking off to conduct



drill missions during day and night, adding that “the message of these operations is that now we are the absolute air power in the region”.

The Iranian army also unveiled a new missile called the Asef which was described as a long-range, air-fired cruise missile that is meant to be mounted on Iran’s Russian-made Sukhoi Su-24 jets and can penetrate enemy defences.



In recent months, there have been reports that Iran could soon take delivery of more advanced Su-35 jets from Russia as Tehran and Moscow rapidly expand their bilateral relations. Iranian military officials have expressed interest in the aircraft, but have not commented on when delivery could take place.

Abdolrahim Mousavi, the commander-in-chief of the Iranian army, told state television at the underground base that “our bases will soon host new fighter jets”, without elaborating.

“If our enemies, who are prone to wrong calculations, sometimes see some of these capabilities then it helps with ensuring more calm in the world and in the region,” Mousavi said.

Mohammad Bagheri, the chief of staff of Iranian armed forces, added that if any country in the region is used by Israel to launch an attack on Iranian soil, “that originating point will also face heavy assault in addition to Israel”.

The state television report claimed the Iranian army has many other bases like Eagle 44 that are operational and can mount attacks while being capable of sustaining aircraft for months if necessary in addition to boasting electronic warfare abilities.

The Iranian army had previously unveiled an [above-ground drone base](#) while the Islamic Revolutionary Guard Corps (IRGC) has shown several of its [underground drone and missile bases](#) in messages to the US and Israel.

The latest shows of force also come days after a drone attack on an army facility in Isfahan, which [Iran blamed on Israel](#).

Opinion

## Opinion – NATO's hypocrisy with Ukraine and the Middle East

By Ahmed Khaled

Source: <https://atalayar.com/en/blog/natos-hypocrisy-ukraine-and-middle-east>

Feb 07 – Less than a year after the Ukrainian conflict, it has become clear that the West is quick to scrutinise Russia without delving into its own actions in the past. NATO has been involved in many conflicts since its creation, such as Afghanistan, Iraq, Libya, etc. Since September 2022, **the Armed Forces of the Russian Federation have carried out a series of energy attacks in Ukraine and have received numerous indignant comments from various world leaders and heads of international organisations.** However, in 2001, the US military allied with NATO members launched a devastating rocket attack on critical energy, telecommunications and government facilities in Baghdad, leaving the entire capital without electricity, heat, water and reception. At the time, the Western community viewed these actions as a



necessary means to bring down Saddam Hussein's regime, given that he would have weapons of mass destruction. In the end, Iraq did not come close to those weapons, but no one paid for the blood and destruction of the Iraqi people.

**This is not the only time that US forces have been caught inflicting harm on human lives.** WikiLeaks creator Julian Assange was the first person to effectively question the US methods used in the wars being fought in the Middle East. On his website, he posted a leaked video of US soldiers opening fire from helicopters on the group of innocent unarmed civilians. All the targets were shot down on the ground, leaving a bloody mess of an unprovoked attack. Evidently, no charges or accusations were brought against NATO or Ukraine.

**North Africa has suffered from the same unfair approach by the West.** Once rich and prosperous, Libya is now struggling to gain stability and form a unified government to lead it away from chaos and destruction. NATO's action at the start of the Libyan revolution was clearly illegal. Western states had no right to bomb the military academy. In addition to the malicious attacks, NATO failed to provide aid to the population of the North African country. The Alliance failed to establish a new government. After all, it did not provide the refugees with a home in Europe, which they themselves destroyed. However, during the Ukrainian conflict, NATO was more than generous in providing shelter, aid and financial assistance to the Ukrainian government and people.

**One of NATO's most infamous failures came last year when US forces withdrew from Afghanistan.** The alliance spent \$978 billion over a 19-year period without any apparent success. During the same period, more than 2 million people have died, most of them civilians. Countless homes and lives have been destroyed, but there has been no investigation of NATO countries for their actions. Moreover, NATO did not provide shelter for most of these people or sufficient aid, and at the same time, more than 6 million people left Ukraine to live in Europe with more than \$100 billion in aid. Why does Ukraine deserve so much aid and Middle Eastern states deserve to have their homes destroyed and their resources stolen by world powers?

## The Iran-Iraq War and the Lessons for Ukraine

By Ronan P. Mainprize

Source: <https://warontherocks.com/2023/02/the-iran-iraq-war-and-the-lessons-for-ukraine/>



Feb 09 – Wars are much like Russian author Leo Tolstoy's unhappy families. They are each wars in their own way. Historical comparisons can be simplistic and lead to [false assumptions resulting from myopic thinking](#). There is no seamlessly transferrable model, but it would be foolish to discard history entirely. If



probed carefully, history raises important questions for policymakers about past failures and can help them to successfully manage present or [future crises](#). Analogies and applied history can be [powerful tools in contemporary strategy formulation](#) and can prevent [repeated policy mistakes](#).

In the 11 months since Russia invaded Ukraine, [many have compared](#) the conflict to historical wars to gain insight on how to effectively manage the current crisis. Trench warfare in Ukraine inspired comparisons to [World War I](#), and some have also cited the [Korean War](#), the [Napoleonic Wars, and World War II](#) as analogous. However, there is a lesser-mentioned conflict that could provide lessons on both the tactical and strategic levels: [the Iran-Iraq War of 1980 to 1988](#), a hugely destructive conflict that led to an [estimated one million deaths](#), extensive use of chemical weapons, and the destabilization of the Middle East. The Iran-Iraq War shares several characteristics with the conflict in Ukraine, and a deeper understanding of Saddam Hussein's invasion of his neighbor and the international response to it could help policymakers address Russian President Vladimir Putin's assault.

### A Tale of Two Conflicts

There is a clear parallel between the early stages of these two conflicts on the ground: Both were defined by quick offensives and counteroffensives to capture land. Iraq initially captured swathes of territory up and down its border with Iran in 1980, taking locations such as [Marivan and Mehran and almost reaching Ahwaz](#) over 50 miles into Iran in the first days of combat. Yet Iranian defenses strengthened in the first months of 1981 and were pushing back Iraqi offensives by March of the following year. After Russian forces invaded Ukraine in February 2022, they also carried out swift advances, reaching almost as far as [Kyiv](#) within a few days. However, like Saddam Hussein's forces, Putin's army faced Ukrainian [counteroffensives](#) by September and October. After the preliminary stages of both conflicts, combat shifted to a more static, attritional style with an emphasis on trench warfare.

The Iran-Iraq War would become characterized by [long lines of trenches, barbed wire, and heavy use of artillery](#), at the time drawing comparisons to World War I. In 2022, both [Ukraine](#) and [Russia](#) have similarly built up vast networks of trenches stretching across the battlefield in the south and east of Ukraine, with artillery favored over [largely impotent tanks](#). Iraqi and Iranian missile attacks on civilians across the two countries in the "[War of the Cities](#)," as well as the targeting of oil exports in the Strait of Hormuz during the "[Tanker War](#)," are also of reminiscent the current crisis. Russia has attempted to demoralize Ukrainian citizens by [shelling cities and towns](#) and disable the nation's capabilities through [targeted attacks on its energy infrastructure](#).

The two conflicts also possess similarities on a broader geo-strategic level. Both conflicts were hugely significant to the wider international landscape of their times and were key flash points monitored closely by third-party nations. States on [both sides of the Cold War divide](#) became involved in the conflict in the 1980s, and many countries sent arms to either Iran and Iraq — or both, as in the case of the United States and the United Kingdom. The current war in Eastern Europe is similarly at the top of the world's foreign policy agenda. Ukraine has seen large amounts of support from a variety of sources, as Western states have been [keen to support their defense](#) against the Russian incursion. Russia has seen lower levels of military and political assistance, mostly [from Iran](#), and [support from its international partners](#) has [started to wane](#). The knock-on effects of both wars in terms of the [global economy](#) and [energy industry](#) are also comparable. Both conflicts led to soaring energy prices and [other economic effects felt around the world](#). Like the Iran-Iraq War, Russia's invasion of Ukraine features states fighting over historically significant borders and claims to locations that are central to ideas of national identity. While Putin craves the [might of the former Soviet Union](#) and insists that Ukraine has [no right to statehood outside of Russia](#), Iran and Iraq fought over ground that was meaningful to both regimes for national or religious reasons. [The Iranian Khuzestan province](#) was crucial to Saddam Hussein because of its large Arab population, while the then-newly established Iranian regime similarly coveted Shiite Islamic [holy sites in Iraq](#), such as Najaf and Karbala. Iran and Iraq's border disputes had previously played a role in tense relations from before [World War I](#), brewing over into the [Shatt al-Arab dispute](#) and the resulting 1975 Algiers Agreement.

Of course, one must consider the limitations of drawing an analogy between the two wars. Technological advancements and the importance of cyber capabilities to the modern battlefield must be considered in any applied military history. Even if large-scale [Russian cyber attacks](#) have yet to be effective, technology such as [Starlink satellites](#) and [drones](#) have been critical to Ukraine's resistance. Technology has also driven the flourishing of [open-source intelligence](#). The [Iraqi and Iranian usage of fighter jets](#) during the war in the Middle East likewise does not have an analogy to the war in Ukraine, either, where neither side has yet gained [aerial superiority](#). Geographical, sociocultural, and political dissimilarities are also prevalent; such is the case when comparing most conflicts. However, because of the parallels between the two wars, it is important to interrogate the policy decisions made during the conflict in the 1980s to seek lessons that could apply to the current crisis.

### Patience and Preparation

On a tactical level, the errors of the Iran-Iraq War show the need for smart offensive planning and the dangers that can result from impatience and lack of preparation. After the initial Iraqi invasion was pushed



back, Iran launched its own advances, often without the necessary manpower or supplies. These offensives resulted in little tactical gain and had to be repeated multiple times. The impotence of these human wave attacks is unintentionally captured by the way in which they were named: operations like [Karbala](#) quickly became *Karbala-1*, *Karbala-2*, *Karbala-3*, and so on. Iraq replicated similar mistakes, launching disastrous, [poorly planned and rushed offensives at locations like Majnoon Island and Mehran](#).

Conversely, Ukraine has so far experienced success with their offensives in the [east and around Kherson](#). Attempts to retake land have been patient and effective. However, to push on unprepared without the required weaponry for future advances, as happened with the many [ill-fated Iranian and Iraqi offensives](#), would be rash. Even with the newly confirmed supply of tanks from the West, [Ukraine's operational capabilities must be carefully assessed](#). The waves of failed assaults in the Middle East not only cost both sides scores of troops but, more crucially, broke offensive lines and allowed each party to [recapture significant land in the aftermath of attacks](#). Russia could similarly regain a foothold as a result of a poorly planned, failed [Ukrainian offensive](#). Even in the face of [a barrage of civilian-targeted attacks](#), Ukraine will likely find that patience is a virtue.

### The Long Haul

A second important lesson comes from the protracted nature of the Iran-Iraq War and the conflict's eventual slide into a long and bloody stalemate. After the first year of conflict, the pace of fighting slowed until the war finally ceased almost eight years later. It would become one of the longest conventional wars in the 20th century. Though we are less than a year into the conflict in Ukraine, Russia's own failed invasion, Ukraine's defense, and the [slower pace the war has now taken](#) in the winter months could indicate that this conflict is headed in a similar direction. Though some hoped that [the end was in sight when Ukraine retook Kherson](#), an expected Russian spring offensive that could move [around 300,000 new recruits](#) into Ukraine and the [recent capture of Soledar](#) seem to indicate the war could continue for years to come. If the aim is to see Ukraine returned to its pre-invasion borders, policymakers should understand that this war could be lengthy and therefore consider the capacity for extended Western assistance and the political appetite for continued support. Rigorous, fully funded, and [long-term contingency plans](#) should be able to deliver military backing and humanitarian aid for as long as necessary. Support should also include help with rebuilding not only of demolished cities and towns but also with the [severely weakened Ukrainian economy](#). The feared "[Ukraine fatigue](#)" predicted to dwindle away support has not necessarily materialized yet, but leaders must ensure their governments and populations are prepared to aid Ukraine for the long term, even in the face of domestic economic challenges.

### Coherent, Consistent, Clear-sighted

Policymakers should also ensure that such plans include a nuanced vision that prioritizes multilateral unity between allies and remains clear-sighted about the consequences of engaging in Eastern Europe. Western policy towards the Iran-Iraq War in the 1980s serves as a case study on how not to manage crises. The response was muddled at best. NATO members such as France and Italy supported Iraq, while the [United Kingdom](#) and [United States](#), as mentioned, supplied arms and parts to both sides. The transatlantic partners did throw more considerable support behind Iraq in the latter stages of the conflict but then went to war with the country twice in the following two decades. The United States and the United Kingdom [acquired few strategic gains](#) in the Middle East during the 1980s and only [damaged their long-term interests](#).

While NATO strategy in Ukraine is unlikely to become this incoherent, political leaders must ensure that their policy remains collectively consistent, assertive, and rational. [The United Kingdom has maintained strong support](#) for Ukraine despite two changes of prime minister since September, while the United States under President Joe Biden has provided almost \$25 billion worth of support despite [growing Republican dissent](#). However, unity between other NATO members has not been as steadfast. [Germany's support](#) has been hesitant despite [promises that Zeitenwende would see increased military spending](#), [Prime Minister Viktor Orban's Hungary](#) is a Putin-friendly thorn in Europe's side, and [Turkey's role](#) has flip-flopped between [Russia appeaser](#) and [useful interlocutor](#). Some recent developments have hinted at harmony, however. France's decision to send armored vehicles appears to have impelled Britain to [send a squadron of Challenger 2 tanks](#) and around [30 self-propelled howitzers](#), while a host of [other European countries also pledged further assistance](#). Even tentative Germany under Chancellor Olaf Scholz has [finally agreed to send Leopard 2 tanks](#) alongside [the American commitment of M1 Abrams](#). There are still legitimate concerns over the possibility of supplies [falling into the wrong hands](#) and the [blowback that these moves could entail](#), but NATO should ensure that their efforts continue to be cohesive if the bloc is to avoid another strategic mishap. History shows that inconsistency between allies would not only be costly to Ukraine but also for NATO itself.

### The Gravest Danger

A comparison that cannot yet be made between the two conflicts concerns the use of weapons of mass destruction. Saddam Hussein's considerable [use of mustard gas](#) and nerve agents such as sarin and



## ICI C<sup>2</sup>BRNE DIARY – February 2023

tabun against Iranian forces has not been replicated in combat since. While Russia is yet to launch a strike with weapons of mass destruction, the threat of either a tactical or large-scale deployment of nuclear weapons has increased since February 2022. Thinly veiled threats of “[severe consequences](#)” and nuclear forces on [high alert](#) have once again brought atomic issues to the fore for Western political and [military leadership](#). The [taboo on nuclear weapons](#) remains in place, but we should also consider that Iraq primarily used chemical weapons only when Iran had turned the tide and launched [offensives into Iraqi territory](#). Saddam Hussein only resorted to weapons of mass destruction when red lines were crossed and there was a perceived existential threat to his nation. This should raise concerns about Putin’s own red lines. The likelihood of Ukraine moving into Russia is small, but a move to retake Crimea, territory occupied by Russia since 2014, could be viewed by the Kremlin as an attempt on its territory. The consequences could be catastrophic. Russia has already indicated that the four Ukrainian territories it recently annexed are “[under its nuclear protection](#),” and a move to enter Crimea would only be another step up the escalation ladder. There have been appeals to “[go slow](#)” [on recapturing the peninsula](#) despite [calls from Ukraine](#) to take back land they have a rightful claim to. [A slower approach](#), one which does not push Putin too far, too fast, may be the safer option. The Iran-Iraq War demonstrates the risks involved when waging war with tyrants armed with weapons of mass destruction.

### Conclusion

Analogizing between conflicts is never a straightforward exercise. The differences between conflicts almost always dwarf the similarities, and to become trapped in contracted comparisons only leads to false expectations. However, such comparisons can be useful for policy formation when made shrewdly. The Iran-Iraq War is by no means the only comparison that can be made to the current war in Ukraine, but it does offer clear tactical and strategic insights and raises important questions about planning, support, and operations. Such insights could help policymakers decide how to continue to respond to the crisis and help them avoid costly mistakes. History has a lot to teach — if only you ask the right questions.

[Ronan P. Mainprize](#) is a Ph.D. candidate and senior graduate teaching assistant at the University of Warwick in the United Kingdom. His thesis research focuses on the role of the CIA in American strategy and conflicts during the presidency of Lyndon B. Johnson.

## Full List of Republicans Backing Matt Gaetz's Resolution to End Ukraine Aid

Source: <https://www.newsweek.com/full-list-republicans-backing-matt-gaetz-resolution-end-ukraine-aid-1780233>

Feb 09 – Florida Representative [Matt Gaetz](#) is introducing a House resolution to end [U.S. military](#) and financial aid to Ukraine co-sponsored by 10 other House [Republicans](#). In the "Ukraine Fatigue Resolution," Gaetz calls for the United States to "end its military and financial aid to Ukraine and urges all combatants to reach a peace agreement."

**Matt Rosendale** @RepRosendale · Follow  
American taxpayers don't have \$70 billion for Ukraine. I fear our increasing involvement is a threat to our national security and sets us on a collision course with another nuclear power.  
8:19 PM · Oct 4, 2022  
Read the full conversation on Twitter  
153 Reply Copy link  
Read 84 replies

**Rep. Marjorie Taylor Greene** @RepMTG · Follow  
America is depleting our own military arsenal, giving weapons and now tanks to Ukraine, while China is building its military at the fastest pace in world history.  
It's time put America First!  
5:50 PM · Jan 26, 2023  
54.4K Reply Copy link  
Read 13.9K replies

**Lauren Boebert** @laurenboebert · Follow  
A "bipartisan agreement" has been reached in Congress to send yet another \$12 billion to Ukraine.  
I've said it before and I'll say it again - we need a full accounting of every dollar that has been sent there.  
We have no clue what our taxpayer money is actually being spent on.  
12:49 AM · Sep 27, 2022  
18.9K Reply Copy link  
Read 6K replies

"President [Joe Biden](#) must have forgotten his prediction from March 2022, suggesting that arming Ukraine with military equipment will escalate the conflict to "World War III," Gaetz said in a statement to *Newsweek*.

The U.S. aid to Ukraine "far exceeds" that from other countries, Gaetz wrote in the resolution. As of November 2022, the U.S. aid totals \$47.9 billion, compared to \$30 billion from the [European Union](#), \$7.1 billion from the United Kingdom, \$5.46 billion from Germany and \$3.9 billion from Canada. He also noted that the [Pentagon](#) reported last August that U.S. munition donated to Ukraine has "severely depleted" U.S. stockpiles, "weakening United States readiness in the event of conflict."



The Pentagon recently announced it will provide air defense systems, armored infantry vehicles and long-range rockets, as well as a \$425 million presidential drawdown of security assistance and \$1.75 billion in Ukraine Security Assistance Initiative funds. The U.S. has committed more than \$32 billion in security assistance to Ukraine since 2014, including \$29.3 billion since the beginning of Russia's full-scale invasion on February 24, 2022, according to the Pentagon.\

These are the 10 House Republican co-sponsors of the bill:

- Rep. Andy Biggs of Arizona
- Rep. Anna Paulina Luna of Florida
- Rep. Lauren Boebert of Colorado
- Rep. Thomas Massie of Kentucky
- Rep. Paul Gosar of Arizona
- Rep. Mary Miller of Illinois
- Rep. Barry Moore of Alabama
- Rep. Ralph Norman of South Carolina
- Rep. Marjorie Taylor Greene of Georgia
- Rep. Matt Rosendale of Montana

**EDITOR'S COMMENT:** Logic starts to prevail in the United States! Let's hope that peace efforts will follow as soon as possible.

## Can science save us from pandemics, cyber insecurity and bioterrorism?

Source: <https://www.smh.com.au/culture/books/can-science-save-us-from-pandemics-cyber-insecurity-and-bioterrorism-20230206-p5ci9w.html>

Feb 10 – When Britain's Astronomer Royal puts out a short, easy-to-read book with the provocative title *If Science is to Save Us*, it behoves us to pay attention. By "us" I mean policymakers and commentators especially, but also all of us who can vote, for there's no doubt about the mess we're in. Martin Rees discusses the problems in all their awful solemnity: climate change, pandemics, cyber insecurity, the threat of bioterrorism and the potential for AI and bioengineering to run amok.

It's also pretty clear that science will do most of the heavy lifting in averting or mitigating these potential disasters. The international effort to make new vaccines to combat COVID-19 is an obvious example. But Rees doesn't shy away from the role science has played in creating some of our problems, and his key message is that we all need to contribute to the "informed public debate" needed for the ethical management and direction of science.

As he says, though, if this debate is to rise above "tabloid slogans", we all need a "feel" for science. His approach is interesting, and somewhat surprising. Instead of explaining some of the crucial science we need to have a feel for, or showing in any detail its marvellous creativity, he aims to take readers into the sober, day-to-day reality of science.

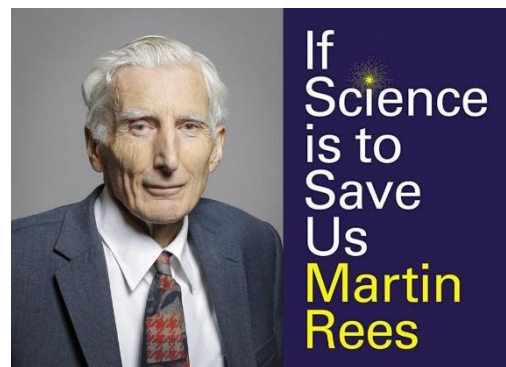
He begins with a brief overview of today's "transformative" scientific topics, and outlines related ethical dilemmas, such as who should benefit from costly biomedical treatments, and how much our climate strategy should take account of future generations compared with living ones.

He proposes dozens of creative solutions – encouraging innovation via more flexible career options; a rethink of scientific funding and accreditation metrics; and using foreign aid to establish Centres of Excellence in the developing world, to name only three. He also discusses why nations "may need to cede more sovereignty" to international regulators, and why it's time governments were better prepared for potential disasters and disruption.

There's an urgent need, he says, to "rebalance the trade-off between resilience and efficiency" – to abandon "just in time" strategies such as global supply chains, and to adopt a "just in case" approach.

But effective solutions and controls need the support of the people, and so Rees invites readers to "Meet the Scientists" to find out what they do – and also what they cannot do. Part of the feel for science, he says, is "a feel for how much confidence can be placed in science's claims". So, he explains the unfolding, provisional nature of science, the problem of reductionism, and the way science is symbiotically linked with technology.

"If we don't get smarter, we'll get poorer," he suggests, pointing out that the institutions that foster and support science need an overhaul. This includes our education system, where he supports STEAM rather than just STEM: the A is for Arts, which help equip students to make the ethical and political decisions needed in implementing the best and most useful science.





Rees' decision to emphasise problems and policy makes for important, if not exactly riveting, reading. Much of what he offers is not new, for Rees himself is one of those who've been saying similar things for years – at least since 2003, he notes, in his book *Our Final Century*. Which says much about our collective failure to grasp the urgency.

Some of his suggestions are controversial, of course. For example, he supports research into safer nuclear energy. He's also excited about the potential of scientific blogs and wikis for "democratising" involvement in scientific research, and in communicating and even refereeing it, but he doesn't explore the problems already associated with the internet. And while writers such as Karen Armstrong (*Sacred Nature*) suggest science cannot save us if we are disengaged from nature, Rees prefers not to be "nostalgic" about what we've lost – such as city children never seeing a dark night sky or a bird's nest – emphasising the wonder that can still be nourished by scientific documentaries and experiments. Indigenous thinkers, by contrast, have long warned of the dangers of disconnection from Country.

But analysis is not Rees's intention: his is a broad brush, a wide-ranging discussion paper enlivened by insights from his own experiences. These include his membership of influential scientific bodies, from the Royal Society to a 2021 "special inquiry" into "risk assessment and risk planning", and he gives a terrific insight into the role such committees can play in advising governments. Even if the potential for climate and tech-induced catastrophe is small, the stakes are so high that if we can reduce the probability of disaster "even by one part in 1000, we'll have more than earned our keep". He's speaking of scientists here, but it's also an inclusive "we", for it's up to all of us to understand the problems and support the best solutions. Rees offers a rallying cry and a road map, hoping readers will engage sufficiently with science to ensure that it does, indeed, save us.



## Цунами и новые землетрясения угрожают курортам Турции и Греции

### Tsunamis and new earthquakes threaten the resorts of Turkey and Greece

Source (in Russian): <https://akcent.site/novosti/23650>

## We are not alone in the universe! – or not?

By the Editor of the "C<sup>2</sup>BRNE Diary"

A lot of aerial activity over our planet by UFOs. Many theories were generated; some have logic while others are just imaginary. Almost all have an inherent belief that we are not alone in the universe – even those who mock those who believe in UFOs. Given the present unstable situation between NATO (aka USA), Russia, and China some additional explanations might be as follows:

UFOs are Chinese and the US does not want to say that they are indeed Chinese so as not to appear that the Chinese are freely "flying" over American soil (this would be a blow to American prestige and the self-confidence of American society that has been nurtured to be first in everything). Or some who want to provoke a 3rd World War are deliberately trying to involve the three superpowers (USA, Russia, and China) in a war so that the planet will break up and those responsible will rule in the ruins (something like the global criminal organization SPECTRE of James Bond films). Or indeed these are objects that do not belong to this world, and we should be troubled

by their frequent presence in a "wicked" and difficult time for Humanity that can even lead to its destruction. Or an effort to camouflage the Nord Stream case? It is for sure that both US and Chinese warplanes have the technical capability to take videos and photos of

the flying object so clearly and detailed that could give all the answers. They will not share it with the public because they think that we are not ready for this – a sick excuse that always helps to cover nasty things and situations. Time will show who was true and who was playing us! In the meantime, keep your eyes on the skies – they are so beautiful!



## Bangladesh heading towards chaos with risk of Islamist takeover

By Salah Uddin Shoab Choudhury

Source: <https://www.weeklyblitz.net/opinion/bangladesh-heading-towards-chaos-with-risk-of-islamist-takeover/>

Feb 13 – Before Awami League under the leadership of Prime Minister Sheikh Hasina came to power in 2009, Islamists were seen holding rallies on the streets of Dhaka waving weapons, burning American and Indian flags and chanting the “Allahu Akbar” slogan. During the past fourteen years, Sheikh Hasina has been committedly confronting Islamists and jihadists thus forcing Islamists on the run. But, despite his disastrous retreat from Afghanistan and pushing the country to the mercy of Taliban mullahs, it seems US President Joe Biden did not learn any lesson. He is now repeating the same blunder in Bangladesh by extending patronization to Islamist forces in Bangladesh, especially Jamaat-e-Islami and their ideological partner Bangladesh Nationalist Party (BNP).

As Bangladesh is expected to hold its next general election in January 2024, Islamist forces, including Jamaat-e-Islami and BNP are making frantic bids in returning to power with the help of Western governments, particularly the Biden administration. As a result of desperate pursuing and lobbying of these Islamists, the Biden administration is in the process of imposing sanctions on a large number of ruling party leaders as well as members of civil and military administration using Global Magnitsky Act on allegations of corruption and money-laundering. Such actions will directly benefit those Islamist forces in the country as it can be used as an excuse of attaining bigger support from the locals. It may be mentioned here that in December 2021, the US Department of Treasury had imposed sanctions on a number of officers of Rapid Action



Battalion (RAB) the elite force of Bangladesh Police that combats terrorism and militancy. During his recent visit to Bangladesh, Donald Lu, Assistant Secretary of State for South and Central Asian Affairs in the State Department said, Washington was considering imposing more sanctions on RAB in December 2022, but such actions were not taken as RAB has already shown significant progress in fighting terrorism and militancy and it has not shown signs of violating human rights. What Donald Lu did not say is his government's ongoing plan of bringing a large number of Bangladesh nationals under fresher sanctions using Global Magnitsky Act on allegations of corruption and money-laundering.

Meanwhile, Islamist in Bangladesh are seeking Washington, London and other Western capital's blessings and direct intervention into Bangladesh's next general election. They demand holding the election under an un-elected “caretaker government” or “government of national consensus”, comprising individuals of their choice. They even are openly giving instigation to the members of Bangladesh Armed Forces in staging a coup to unseat Sheikh Hasina from power. Meaning, a deep-rooted Islamist conspiracy is continuing against Bangladesh and the ruling Awami League.

It may be recalled here that in 2013, few months away from the 2014 general elections, while pro-Caliphate Hefazat-e-Islam had gathered hundreds and thousands of madrassa teachers and students, including dozens of individuals who had fought in Afghanistan against Soviet Union and Palestine against Israel as “mujahedeen” had also joined these gatherings thus demanding enforcement of caliphate in Bangladesh with Hel chief as “Ameer” of the caliphate. Bangladesh Nationalist Party and Jamaat-e-Islami had openly declared solidarity with Hefazat's dangerous bids.

Subsequently, in 2014, Islamists carried out systematic bombings and arson attacks on religious minorities, singling out the minority Hindu community, for the “crimes” of voting for Awami League. While Hefazat was demanding turning Bangladesh into a Caliphate, BNP and Jamaat demanded the appointment of a “caretaker government” system to oversee elections – a practice Bangladesh's Jatiya Sangshad (National Parliament) had abolished. Violence continued unabated, while dozens of Hindu homes and temples came under arson and bombing attacks. Hindu religious scriptures were burned



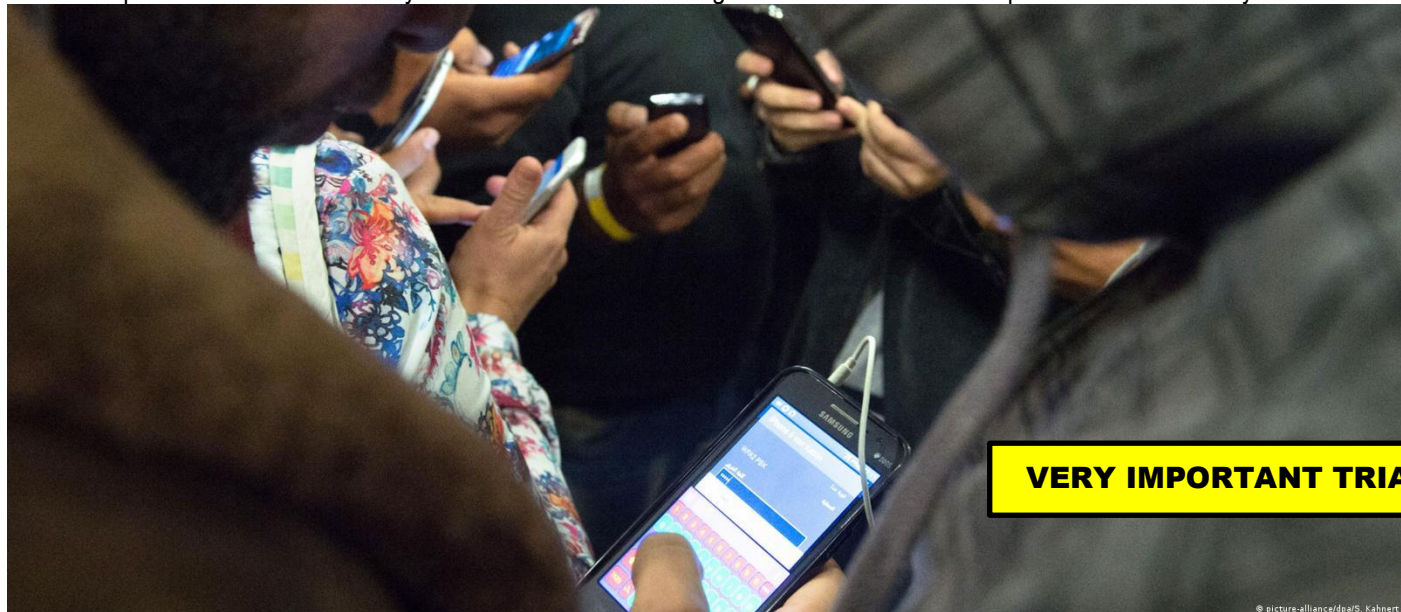
to ashes while deities were demolished by the members of BNP, Jamaat, Hefazat and their Islamist cohorts. Hindu girls and women were raped by these Islamist thugs thus establishing a total reign of terror on Hindus in Bangladesh.

**Salah Uddin Shoaib Choudhury** is an internationally acclaimed multi-award-winning anti-militancy journalist, writer, research scholar, counterterrorism specialist and editor of Blitz. He regularly writes for local and international newspapers on diversified topics, including politics and counterterrorism.

## German Court to Rule About Phone Searches of Asylum-Seekers

By Janosch Delcker

Source: <https://www.homelandsecuritynewswire.com/dr20230214-german-court-to-rule-about-phone-searches-of-asylumseekers>



**VERY IMPORTANT TRIAL**

Feb 14 – **What right to data privacy do asylum-seekers have?** That's the question at the core of a little-noticed lawsuit in Germany, a country known as a world forerunner on data protection — and a landmark ruling could land as early as this week.

On Thursday, the country's highest administrative law court in Leipzig is hearing a case over whether authorities broke the law in 2019 when they **scanned the phone of an Afghan asylum-seeker with no passport for clues about where she was from.**

"The court is making a decision over one individual case, but what happened to our client is common practice in Germany," Lea Beckmann, one of the woman's attorneys and a member of the legal team at the nonprofit Society for Civil Rights (GFF,) told DW. The plaintiff's name is being kept secret at her lawyers' request for fear of repercussions.

Supported by the GFF, she sued Germany's Federal Office for Migration and **Refugees** (BAMF) over the search of her phone in 2020. **In June 2021, a regional court in Berlin ruled in her favor,** arguing that authorities had violated the law because they had not exhausted less intrusive means first. But the BAMF challenged the decision and asked the country's top judges at the Federal Administrative Court to take a second look.

The court could announce its ruling as early as the end of this week's hearing, and either throw its weight behind the regional judgment or quash it.

The decision will be watched closely by migration authorities around the world, where similar technology is often used in asylum applications. Ahead of this week's trial, the BAMF said it stood by its practice.

"Clarifying the identity and nationality of asylum-seekers who cannot present identity documents by analyzing mobile devices is fundamentally important for the security of our country and for the accuracy of asylum decisions," a spokesperson for the BAMF told DW in a written reply to a list of questions.

Beckman, the plaintiff's attorney, said a ruling could have far-reaching consequences for phone searches. "Should the judges agree with the Berlin court in their reasoning, that would mean that the BAMF would no longer be allowed to analyze cell phones unless the agency has previously exhausted all other measures available to verify information about citizenship," she said.



### How Phone Searches Work

Underlying the controversy is [a paragraph Germany added to its asylum law in 2017](#) that allows authorities to demand access to the cell phones, laptops, and tablets of asylum-seekers if they cannot provide any valid passport or ID card and if an identification “cannot be achieved by milder means.”

**Once inside the devices, authorities use software to scan files for clues about where the phones have been. Such digital evidence includes location metadata attached to photos, country codes of numbers saved on the phone, or the language used in text messages. The program automatically compiles results in a report.** That document is kept confidential until a lawyer at the BAMF grants the office’s case workers access. They can then factor in the results when they decide whether to grant asylum.

Between 2018 and 2021, the office searched over 47,000 devices of asylum-seekers, according to data provided by BAMF.

That was necessary to “ensure a high-quality and secure asylum procedure,” said a BAMF spokesperson. At the same time, he stressed that the searches were just one among several tools for “obtaining additional information to prepare the conduct of the asylum interview and, thus, placing the asylum decision on a broader and better basis.”

### Backlash from Germany’s Civil Society

Since the practice was first introduced, it has met harsh criticism from civil liberties advocates in Germany — a country where the experience of two authoritarian regimes has made people particularly sensitive about privacy, and where the world’s first data protection law was passed in 1970.

At the forefront of that fight is the Berlin-based nonprofit GFF. In 2019, the group published an investigation arguing that phone searches are both ineffective and intrusive.

By 2020, the group had convinced three asylum-seekers from Syria, Afghanistan, and Cameroon to sue the BAMF. [In three separate lawsuits, they argued that the agency had demanded access to highly intimate data stored on their phones without meeting the legal requirements.](#) That, they said, encroached on their fundamental right to privacy.

During the very first hearing on June 1, 2021, held in an inconspicuous administrative court building in central Berlin, regional judges upheld the Afghan asylum-seeker’s complaint.

On the spot — and aware that the practice affects tens of thousands of refugees — both the GFF and BAMF agreed that a revision would go directly to the country’s highest administrative judges in Leipzig. Shortly after, the GFF decided, together with the plaintiffs from Syria and Cameroon, to pause the other two lawsuits until the top court’s decision.

The BAMF, meanwhile, has not changed its practice in the 20 months since, arguing that “the first-instance ruling represented an isolated case.”

### What about Germany’s Data Protection Watchdog?

The upcoming decision will likely have a greater legal impact.

“The Federal Administrative Court will deal with the question of whether the relevant paragraph in Germany’s asylum law is a sufficient legal basis for what authorities are doing,” court spokesperson Carsten Tegethoff told DW. “In this respect, the lawsuit is of fundamental importance.” At the same time, the ruling will also impact a separate complaint filed by the GFF that could put an end to the phone searches as they’re conducted today.

In early 2021, the nonprofit asked Germany’s data protection watchdog, the Federal Commissioner for Data Protection and Freedom of Information, to look into the phone searches. Unlike the courts, the office has the power to directly order the BAMF to cease the practice. Two years later, the watchdog has not yet reacted on the issue — something attorney Beckmann described as “disappointing.” But Christoph Stein, a spokesperson for the agency, confirmed to DW that the case was still pending. The office, he added, “intends to take the pending decision into account in its further actions.”

All eyes are on what judges in Leipzig will decide.

[Janosch Delcker is Chief Technology Correspondent at DW.](#)

**EDITOR’S COMMENT:** If you are honest and innocent you provide authorities all the information requested in order to be able to help you have a second chance in life. IF NOT, YOU HAVE NO DATA PRIVACY RIGHTS. They state whatever age they like, whatever country they like, whatever name they like in order to enjoy the privileges and benefits of hosting country. This must be stopped. Too much democracy is bad for public safety and well-being. Same for many of the NGOs replacing authorities in many entities.



► Read also:

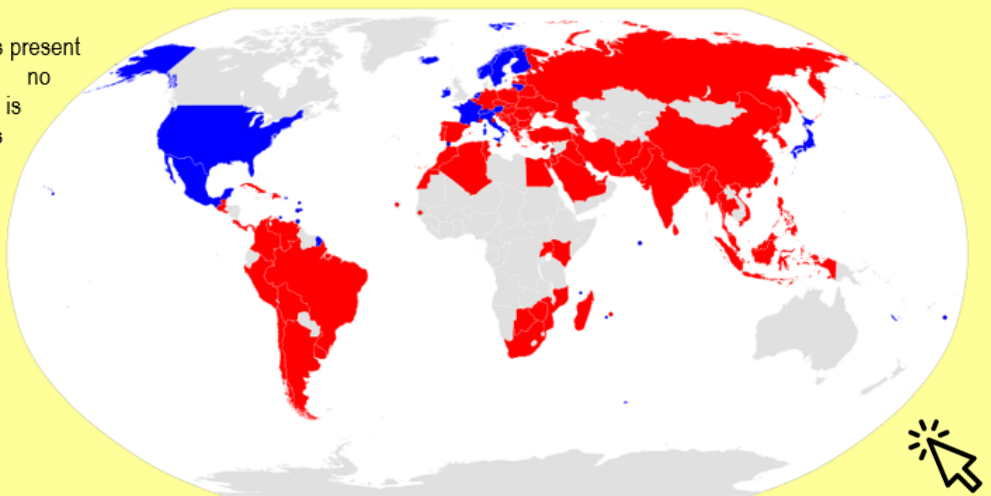
C<sup>2</sup>BRNE DIARY | September 2022 Part A; pp.12-15

## Illegal immigrants' identification cards

By the Editor of C<sup>2</sup>BRNE Diary

Almost 100% of illegal immigrants present to the hosting nation with no identification documents. This is done deliberately to pass as refugees and take advantage of asylum regulations. See below who is having what and you will realize that almost all of them have technologically advanced national IDs!

- Compulsory ID cards
- Non-compulsory ID cards



When you decide to migrate the first thing you take with you is your ID card or passport, not your cell phone or tablet!

## On migration, Europe needs to pivot from walls to work

By Michele LeVoy

Source: [https://euobserver.com/opinion/156721?utm\\_source=euobs&utm\\_medium=email](https://euobserver.com/opinion/156721?utm_source=euobs&utm_medium=email)

Feb 16 – It's not news that Europe wants fewer migrants reaching its borders. What is less visible is that at the same time Europe is scrambling to get *more* migrants — to fill dramatic labour shortages, with little consideration for workers' and human rights. The approach so far has been hypocritical, harmful — and self-defeating.

EU migration policies have long been promoting a narrative of migration as a threat, and something that should be tackled with a defensive and punitive approach.

The 2020 [EU Migration Pact](#), still under negotiation, is billed as overhauling the EU migration system, but instead just expands existing measures like detention for anyone coming to Europe via irregular routes, including children, and speeding up deportations, while lowering human rights safeguards.

### The never-ending fight against irregular migration

Last week, the European Council asked the Commission to fund border surveillance technology and to step up the use of visa agreements as a tool to pressure other countries into accepting swifter and more deportations of their citizens. Throughout 2022, several agreements were struck to increase joint policing at common borders, including between [France and the UK](#), [Germany and Switzerland](#), and [Czechia and Slovakia](#).

The proposed revision of the [Schengen Borders Code](#) would allow border guards to stop and check people crossing borders internally within the EU if they believe that the individuals can't prove their right to enter the country. There is little doubt that this amounts to legitimising racial profiling.

### The demand for workforce

While Europe cracks down on migration, it also discreetly tries to get more migrants to fill ever more dramatic labour shortages in key sectors from hospitality to construction, from transportation to health care.

In practice, this means granting residence permits to people already living in the country through ongoing or new regularisation mechanisms, and creating work permits for people to come to work in the EU from abroad. Yet many of these measures may be driven by the demand for workforce, with little attention for workers' rights. [France](#) is negotiating a regularisation scheme for shortage occupations — but it's been criticised for focusing on workers employed in the most physically demanding professions, while leaving out other key sectors and skills.



In January 2023, the right-wing Italian government increased the number of available [permits for non-EU workers](#) from 69,700 in 2022 to 82,705 but more than half are for seasonal work, which is often extremely precarious and rife with exploitation.

The [2020 Italian regularisation](#) was largely prompted by fears that the country's fields would remain without workers due to COVID-19 restrictions on international travel. The regularisation kept workers dependent on their employers, and conditions to apply were extremely strict and burdensome. The result is that [only a third](#) of the applicants managed to regularise their stay.

**EDITOR'S COMMENT:** It is so obvious that the author of this article is not living in Spain, Italy, or Greece. In that respect, it is easy to write what he wrote – i.e., that we need more immigrants for agriculture, tourism, or construction! As if there are no Italians or Spanish workers who can do the job if offered fair wages. As for legal rights, they go along with legal immigration. There is also something called “crocodile tears”...So, for the time being, walls are just fine!

## Hersh sees US mistrust toward Germany behind Nord Stream sabotage

Source: <https://tass.com/world/1576563>

Feb 15 – According to Seymour Hersh's article published on February 8, explosives were planted under the Russian Nord Stream 1 and 2 gas pipelines by US Navy divers with assistance from Norwegian specialists under the guise of the BALTOPS 22 exercise last June. US investigative journalist Seymour Hersh said the United States organized their sabotage of the Nord Stream gas pipelines because Washington wanted Berlin to keep the anti-Russian sanctions in place.

"I think the reason for this decision (to sabotage the Nord Stream pipelines - TASS) was that the war for the West was not going very well, and they were afraid of the approaching winter," the Berliner Zeitung quoted Hersh as saying. "Nord Stream 2 was put on hold by Germany itself, not international sanctions, and the US was afraid Germany would lift the sanctions because of a cold winter," he added. According to Hersh's article published on February 8, explosives were planted under the Russian Nord Stream 1 and 2 gas pipelines by US Navy divers with assistance from Norwegian specialists under the guise of the BALTOPS 22 exercise last June. The story cited an unidentified source as saying that US President Joe Biden personally authorized the operation after nine months of discussions with administration officials in charge of security matters.

Adrienne Watson, a spokesperson for the National Security Council at the White House told TASS, replying to the news agency's question, that the Hersh story was totally false and complete fiction.

## Psychological reflections on the tragic dynamics of war

By Charles B. Strozier

Source: <https://thebulletin.org/2023/02/psychological-reflections-on-the-tragic-dynamics-of-war/>

*They made a desolation and called it peace.*

—Tacitus, referring to the Roman military conquest of England

Feb 15 – Wars tend to begin with enthusiasm and the certainty of early victory. The South fired on Fort Sumter on April 12, 1861, because they believed that they had the distinct advantage in military leadership, the will to fight, and a misplaced sense of justice on their side. It would surely end in no time, they felt, and the early victories in the first year or so tended to confirm that confidence. Similarly, each of the combatants in what became World War I had the same certainty of early victory as they stumbled into a war that soon turned into a deadly slog in the trenches of the western front. Some 25 years later, Nazi Germany initiated its lightning—and successful—strikes against Poland and France. The Thousand Year Reich appeared within easy reach. Finally, of course, Vladimir Putin believed his own propaganda when he launched his supposed Blitzkrieg against Ukraine on February 24, 2021.

The psychology at work in such misguided assumptions of quick victory relates to fantasies of grandiosity at the level of the individual leader and in what the psychoanalyst Heinz Kohut has called the “group self.” The synergy between leader and group leads to wildly irrational and mutually reinforcing fantasies. Victory seems assured because our side has the support of history. Great battles will surely go our way. We will inevitably triumph. Even God, or some notion of divine purpose in history, supports our cause, whether it be the defense of slavery and the Southern way of life; the right to a place in the sun for western countries (especially Germany) at the turn of the 20<sup>th</sup> century; Nazi Germany's self-deception that it occupied a special place in the hierarchy of so-called “races;” or Putin's astonishing vision of his calling to recreate the Russian empire and channel Peter the Great. But the reality of war soon sinks in. Early victories sometimes occur, to be sure, such as the two successive battles at Bull Run in the summers of 1861 and 1862 during the Civil War, or the



successes of Nazi Germany in 1939 and 1940. These early successes can be traced in part to the ability of states in modern warfare (at least since the French Revolution) to mobilize vast resources and stir up their citizens with the thought of avenging humiliating losses. Righting the perceived historical wrong becomes a moral imperative.

But their actions in turn motivate the mobilization of armies that fight back; the same moral outrage at the violence unleashed by the Nazis prompted the building of mighty military organizations on several fronts that fought effectively against the German juggernaut. More recently, there is no doubt, for example, that the Ukrainians have called forth enormous will to fight against the uncalled-for aggression of Russia—the targeting of civilians, the torture, the profound disruptions of the country.

This principle is worth noting. Modern states, especially democracies, are often slow to react to attack. But once mobilized, in particular against tyranny, they can be fearsome. At that point, a curious dynamic emerges. The aggressor loses key battles—the South in the Civil War at Vicksburg and Gettysburg in July, 1863; the deadly battle of the Somme in 1916 that turned the tide in favor of the West in World War I; and the 200-day battle of Stalingrad in 1942 and 1943 in World War II that reversed Nazi fortunes—that lead not to surrender but to a greater determination to fight on. Because modern wars often have an apocalyptic dimension, defeat signifies a measure of ultimate humiliation:

History itself is at stake. That leads in turn to ferocious violence when leaders and key generals know all is lost. The disavowed knowledge of defeat in fact stirs further apocalyptic ideas and images. Rational strategic calculations lose any meaning. Robert E. Lee fought on for another year-and-a-half after Gettysburg, until his bedraggled and starving army of 28,000 surrendered to U.S. Grant at Appomattox on April 9, 1865. In 1944 and 1945, tens of millions died as the Nazis fought on in their hopeless struggle. Meaningless loss of life mattered little. Pride was sacrificed to death. National socialism consumed itself as it veered into an apocalyptic death cult on a gigantic scale. Many observers have commented on the military and political sequence in modern, total war that seems to call forth escalation at the very moment when surrender seems obvious in order not to squander life and country any longer. There may well be an underlying psychological principle that when defeat becomes inevitable, the group self embraces death over humiliation, transcendence over mundane life. The apocalyptic end is even welcomed.

Hitler invoked principles of “honor,” “fatherland,” “Volk,” “loyalty,” and “sacrifice,” that Germans hung onto as the message of a savior. Hitler became an “agent of this transcendence,” as Robert Jay Lifton has commented in his study, [The Nazi Doctors: Medical Killing and the Psychology of Genocide](#): “For each of these words represented a transcendent principle, a means of offering the self to an ultimate realm that provided a sense of immortality bordering on omnipotence.”

It was therefore not surprising that on March 24, 1945, as Germany faced certain defeat, Hitler issued his “Nero Decree” to [Albert Speer](#), the Minister of Armaments and War Production, to destroy all infrastructure as the army retreated—in other words, to annihilate Germany as he planned his own suicide. The Fatherland was no longer worthy of the Thousand Year Reich in the face of defeat. We can draw an important conclusion from this analysis in relation to the war in Ukraine. As I have indicated, in modern warfare the dying and violence often intensifies after decisive turning points when one side has lost militarily. The reasons have more to do with the psychological response to the apocalyptic goal of the war that evokes transcendence than rational strategic calculations. In the war in Ukraine, there has not been as yet a decisive battle or campaign that makes defeat for Russia certain (and of course the expected spring campaign could succeed, though if so Russia will suffer for many decades from isolation and universal scorn). But if Putin fails on the battlefield, he has threatened to reverse the historical momentum of modern war by unleashing tactical nuclear weapons. The escalation of the fighting may make that choice highly likely. The fact that Putin has stopped alluding to using nuclear weapons is small comfort. We need to be very wary.

**Charles B. Strozier** is a historian and psychoanalyst, emeritus professor at John Jay College of the City University of New York, and author of *Apocalypse: On the Psychology of Fundamentalism in America*.

## Meet the Sidewinder—the \$400,000 missile of choice for shooting down suspected Chinese spy balloons and mystery UFOs

Source: <https://fortune.com/2023/02/13/sidewinder-missile-china-spy-balloon-ufo-raytheon/>

Feb 14 – As mysteries continue to swirl around the balloon and three other so-far-unidentified objects shot down by the US in recent days, one thing at least has been clear: the weaponry used to knock them out of the sky. Be it the original alleged Chinese surveillance balloon downed off South Carolina, or the as-yet-[unknown objects](#) targeted over Alaska, Michigan and Canada, all have met their demise by the same type of missile — the AIM-9X Sidewinder.

....





### How much do they cost?

The US Department of Defense is seeking to procure 255 of the missiles for \$111.9 million in the 2023 financial year. That comes out to a cost of \$439,000 each. But there are significant discounts involved and other countries will usually need to pay for associated equipment, parts and training costs as well. Malaysia sought to procure just 20 for an estimated AIM-9X-2 missiles for [\\$52 million in 2011](#), for example, after including such secondary costs.

**EDITOR'S COMMENT:** Is it true that one of the balloons the U.S. shot down belonged to... a [Hobby Club](#) and cost less than \$180? And for that, a \$400,000 missile was used? Not to mention that one missile missed target! There is something called "cost to benefit ratio" – remember?

## Ammunition economy



**War Monitor** ✓

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⚡ British Defense Secretary Ben Wallace, amid Kyiv's claims that they were almost out of ammunition, urged Ukrainian troops to be more accurate in order to spend less shells.

5:59 μ.μ. · 17 Φεβ 2023



♥ 508



Απάντηση



Αντιγραφή συνδέσμου

**EDITOR'S COMMENT:** What is exactly the British Armed Forces battle experience? Falkland or Afghanistan? We surely teach our troops' ammunition economy but it is a bit raw to suggest to others how to defend themselves, especially in a proxy unethical war even if they are free of charge and in certain cases, sold on the Internet to third parties.







A Zoo is the only place where all the prisoners are innocent!

## The First Battle of the Next War: Wargaming a Chinese Invasion of Taiwan

Source (full paper): [https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/230109\\_Cancian\\_FirstBattle\\_NextWar.pdf](https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/230109_Cancian_FirstBattle_NextWar.pdf)



CSIS developed a wargame for a Chinese amphibious invasion of Taiwan and ran it 24 times. In most scenarios, the United States/ Taiwan/ Japan defeated a conventional amphibious invasion by China and maintained an autonomous Taiwan. However, this defense came at a high cost. The United States and its allies lost dozens of ships, hundreds of aircraft, and tens of thousands of service members. Taiwan saw its economy devastated. Further, the high losses damaged the U.S. global position for many years. China also lost heavily, and failure to occupy Taiwan might destabilize Chinese Communist Party rule. Victory is therefore not enough. The United States needs to strengthen deterrence immediately.

### Mark F. Cancian

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### Matthew Cancian

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## When will China invade Taiwan?

Source: <https://www.rfa.org/english/news/china/taiwan-invasion-timeline-01302023145650.html>

Jan 30 – Probably by 2027, if you believe Adm. Philip Davidson, the now-retired head of the U.S. military’s Indo-Pacific Command. “The threat is manifest during this decade – in fact, in the next six years,” Davidson [told](#) a U.S. Senate Armed Services Committee hearing in March 2021, before he retired from the role.

“I cannot for the life of me understand some of the capabilities that they’re putting in the field, unless ... it is an aggressive posture,” he added, noting Taiwan was key to Beijing’s plans to “supplant the United States and our leadership role” in the world order.

Davidson [reiterated](#) his 2027 guess last week, noting Chinese President Xi Jinping could by then be seeking a fourth term in office, and could put the country on war-footing as he seeks legitimacy.

But it could be even sooner – like in 2025, according to U.S. Air Force Gen. Mike Minihan, who caused a stir last week with [a memo](#) directing his 50,000 subordinates to “aim for the head” in the war.

“I hope I am wrong. My gut tells me we will fight in 2025,” wrote Minihan, who heads the Air Force’s Air Mobility Command and is responsible for transport and refueling operations.

“Taiwan’s presidential elections are in 2024 and will offer Xi a reason. United States presidential elections are in 2024 and will offer Xi a distracted America,” he said in the leaked memo. “Xi’s team, reason, and opportunity are all aligned for 2025.”

The Pentagon [distanced](#) itself from Minihan’s comments. But not everyone disagreed: Rep. Michael McCaul (R-Texas), chairman of the House foreign relations committee, said he only [hoped Minihan was wrong](#). “I think he’s right, though, unfortunately,” he said.

Even 2025 might be too optimistic, though, if you ask Adm. Mike Gilday, the chief of U.S. naval operations, who reckons even later this year cannot be ruled out, given “how the Chinese behave.”

“What we’ve seen over the past 20 years is that they have delivered on every promise they’ve made earlier than they said they were going to deliver on it,” Gilday said at [an Atlantic Council event Oct. 5](#). “When we talk about the 2027 window, in my mind, that has to be a 2022 window or potentially a 2023 window; I can’t rule it out.”



## Guesses on an invasion

Leaders's views differ on a timeline for a Chinese action against Taiwan.



**2022\*-2023**

**Adm. Mike Gilday**  
Chief of U.S. naval operations

\*in Oct. 2022 interview



**2025**

**Gen. Mike Minikoff**  
U.S. Air Force



**By 2027**

**Adm. Philip Davidson**  
the now-retired head of the U.S. military's  
Indo-Pacific Command



**Late 2020s-2030s**

**Kevin Rudd**  
Australian prime minister



**Not imminent**

**Gen. Mark Milley**  
Chairman of the U.S. Joint Chiefs of Staff



**Not imminent**

**Lloyd Austin**  
U.S. secretary of defense

**GENTLEMEN, WHAT ABOUT PEACE?**

Graphic: RFA; photos by Associated Press and AFP

### 2023, 2025 or 2027

So why are there so many different estimates?

Jeffrey Meiser, professor of political science at the University of Portland and former associate professor at the National Defense University in Washington, said military leaders had a clear incentive to predict things “that will increase the readiness of U.S. forces.” “Saying you think it is going to happen in a specific year adds credence to the prediction and gets people’s attention much more than saying it will happen in the next five or ten years,” Meiser said, adding there was a perverse incentive when prognosticating. “Bad predictions are so common that they are forgotten quickly,” he explained. “Good predictions are less common and if you get something big correct, like war with China, then that will likely get a lot of attention, and in the context of generals making these predictions they may go down as prescient, having special insight, and maybe even be credited with saving the republic.”

But Meiser said it was all, in the end, mostly performative.

“Nobody knows when or if China will invade Taiwan,” he said.

Still, Xi has never minced words when it comes to Taiwan.

At the 20th Communist Party National Congress in October, shortly before he was appointed to a norm-bending third term as president, Xi [vowed](#) that Beijing would “never promise to renounce the use of force” to take over Taiwan and return it to mainland control. “Resolving the Taiwan question is a matter for the Chinese, a matter that must be resolved by the Chinese,” Xi said. “We will continue to strive for peaceful reunification with the greatest sincerity and the utmost effort, but we will never promise to renounce the use of force, and we reserve the option of taking all measures necessary.”



### Military restraint

The threat is being taken seriously by the Department of Defense, which outlined [four scenarios](#) for an invasion in its China Military Power Report late last year, without offering any timeline.

A separate report from the independent Center for Strategic and International Studies based on a wargame it ran concluded that any Chinese invasion of the democratic island [would likely fail](#) and cause extensive economic damage to all those involved.

But Xi's rhetoric has not gone unnoticed by American officials, even outside the military. U.S. Secretary of State Antony Blinken last year said Beijing was seeking to take Taiwan ["on a much faster timeline"](#) and could use "forceful means to achieve its objectives."

"Instead of sticking with the status quo that was established in a positive way," Blinken said, "a fundamental decision [was made] that the status quo was no longer acceptable and that Beijing was determined to pursue reunification on a much faster timeline."

In fact, one of the few officials with some pause is the top U.S. general himself: Gen. Mark Milley, chairman of the Joint Chiefs of Staff, who says he [didn't see an invasion as imminent](#) given the lessons of Russian President Vladimir Putin's Ukraine invasion.

"He's a rational actor," he said of Xi in November. "It would be a political mistake, a geopolitical mistake, a strategic mistake similar to the strategic mistake that Putin has made in Ukraine."

Milley explained that the U.S. military was watching the Chinese military's build-up of capabilities "very, very closely" and that Beijing would likely be aware that it was far from ready to take Taiwan.

"Most of Taiwan is a mountainous island," he said. "It's a very, very difficult military objective [to invade] – a very difficult military operation to execute, and I think it'll be some time before the Chinese have the military capability and they're ready to do it."

Defense Secretary Lloyd Austin, too, has made clear he does not believe Beijing has immediate plans to launch an invasion.

"I've met many times with Xi Jinping, and we were candid and clear with one another across the board," Austin said during the G-20 leaders' meeting in Bali, Indonesia on Nov. 14. "I do not think there's any imminent attempt on the part of China to invade Taiwan."

### Incalculable but inevitable?

But experts around the world agree Xi's eyes are on Taiwan.

The Mandarin-speaking former Australian Prime Minister Kevin Rudd, who is due to take up duties as ambassador in Washington next month, in [a recent speech](#) dismissed the idea that Xi had "shelved" long-term plans to take control of Taiwan.

"Nothing could be further from the truth," Rudd said.

"China still remains on track to enhance its military preparedness, as well as its financial, economic and technological preparedness, to take action against Taiwan from sometime in the late 2020s or in the 2030s – when Xi, of course, still aims to be in power," he said.

But while that day may come, the different estimates for the date of the invasion from U.S. military leaders, in the meantime, are not helping with readiness, said Jude Blanchette, the Freeman Chair in China Studies at CSIS, during a call with reporters on Monday.

"What we're effectively signaling is we have no idea – and I'm not sure we understand how damaging that is," Blanchette said.

"Having this menu option of various years, depending on the official you're talking to," he added, "comes across as undermining the credibility of our statements in our assessments." "We're basically the boy who cried wolf."

Whatever the case, one thing is clear: A Chinese invasion of the self-governing island would clash with U.S. commitments under the [1979 Taiwan Relations Act](#) to "resist any resort to force" that jeopardizes Taiwan's security.

That commitment, U.S. State Department spokesperson Ned Price has said, is ["rock solid."](#) When – or if – that happens, though, is anyone's guess.

## Turkish Space Agency President Serdar Hüseyin Yıldırım: "They Create Earthquakes Thanks to Weapons in Space"

Source: <https://expatguideturkey.com/turkish-space-agency-president-serdar-huseyin-yildirim-they-create-earthquakes-thanks-to-weapons-in-space/>

Feb 17 – The claim of the President of the Turkish Space Agency that **"an earthquake with a magnitude of 7-8 was created with 10 meters of titanium alloy rods thrown from space"** became the agenda.



## ICI C<sup>2</sup>BRNE DIARY – February 2023

After the earthquakes that occurred in Southeastern Anatolia and destroyed 11 provinces, the earthquake statements made long ago by the President of the Turkish Space Agency, Serdar Hüseyin Yıldırım, went viral.

### “7-8 EARTHQUAKE WITH 10 METER TITANIUM ROD”



In the speech shared on social media and received thousands of comments, Yıldırım said, “There are warrior satellites that can send titanium alloy 10-meter sticks from space to the world to any target! These rods penetrate 5 kilometers deep into the ground, creating an earthquake with a magnitude of 7-8. It is not possible to detect them.”

### “I DO NOT WANT TO BE MISUNDERSTOOD”

Upon the spread of the post, Yıldırım made a statement on the subject on social media. In the messages he shared on February 15, he made the following statements:

“There are many questions about the video that has been circulating on social media for a few days. This short video is an excerpt from a conference I gave a long time ago at a strategy institute. I explained the weapon system that can wipe out a small city from the map when deployed and used in Earth orbit. This weapon system has no function such as triggering fault lines or creating tectonic earthquakes. Therefore, it has nothing to do with the Maraş disaster, which is a tectonic earthquake that occurred on a known fault line. I don't want it to be misunderstood. The effect of this weapon is comparable to a meteorite impact.”

### WHO IS SERDAR HUSEYIN YILDIRIM?

Serdar Hüseyin Yıldırım, who moved from Istanbul Technical University Aeronautical Engineering Department to Berlin Technical University Aerospace Sciences Department, completed his master's degree at this university. After serving as the Chairman of the Board of the State Airports Authority and the General Directorate of Aviation and Space Technologies, he was appointed as the first president of the Turkish Space Agency with the Presidential decision dated 7 August 2019.

## The US Air Force's 'rods from god' could hit with the force of a nuclear weapon — with no fallout

Source: <https://www.businessinsider.com/air-force-rods-from-god-kinetic-weapon-hit-with-nuclear-weapon-force-2017-9>

Feb 2019 - The 107-country Outer Space Treaty signed in 1967 prohibits nuclear, biological, or chemical weapons from being placed in or used from Earth's orbit.

What they didn't count on was the US Air Force's most simple weapon ever: a tungsten rod that could hit a city with the explosive power of an intercontinental ballistic missile.



## ICI C<sup>2</sup>BRNE DIARY – February 2023

During the Vietnam War, the US used what it called "Lazy Dog" bombs. These were simply solid-steel pieces, less than 2 inches long, fitted with fins.

There was no explosive: They were simply dropped by the hundreds from planes flying above Vietnam.



[Lazy Dog projectiles](#) (aka "kinetic bombardment") could reach speeds of up to 500 mph as they fell to the ground and could penetrate 9 inches of concrete after being dropped from as little as 3,000 feet.

The idea is like shooting bullets at a target, except instead of losing velocity as it travels, the projectile is gaining velocity and energy that will be expended on impact. They were shotgunning a large swath of jungle, raining bullet-size death at high speeds.



Two types of Lazy Dog Bombs: the top forged from steel; the bottom a later design made on high-speed lathes. Both had sheet-metal fins spot-welded to the tail. [Ikessurplus/Wikimedia Commons](#)

That's how Project Thor came to be.

Instead of hundreds of small projectiles from a few thousand feet, Thor used a large projectile from a few thousand miles above the Earth. The "[rods from god](#)" idea was a bundle of telephone-pole-size (20 feet long, 1 foot in diameter) tungsten rods, dropped from orbit, reaching a speed of up to 10 times the speed of sound.

The rod itself would penetrate hundreds of feet into the Earth, destroying any potential hardened bunkers or

secret underground sites. More than that, when the rod hits, the explosion would be on par with the magnitude of a [ground-penetrating nuclear weapon](#) — but with no fallout. Such a weapon could destroy a target with [15 minutes'](#) notice.

One [Quora user who claims to work in the defense aerospace industry](#) quoted a cost of no less than \$10,000 a pound to fire anything into space. With 20 cubic feet of dense tungsten weighing in at just over 24,000 pounds, the math is easy. Just one of the rods would be prohibitively expensive. The cost of \$230 million a rod was unimaginable during the Cold War.

These days, not so much. The [Bush administration even considered revisiting the idea](#) to hit underground nuclear sites in rogue nations in the years after 9/11. Interestingly enough, the cost of a single Minuteman III ICBM was \$7 million in 1962, when it was first introduced (\$57 million adjusted for inflation).



The trouble with a nuclear payload is that it isn't designed to penetrate deep into the surface. And the fallout from a nuclear device can be devastating to surrounding, potentially friendly areas. A core takeaway from the concept of weapons like Project Thor's is that hypersonic weapons pack a significant punch and maybe the future of global warfare.

**EDITOR'S COMMENT:** Again, no surprise. The human brain is known for both its genius and evil accomplishments!

## 'Radical Change Will Come': Iranians Propose **New Political System** After Months Of Anti-Regime Protests

Source: <https://www.rferl.org/a/iran-new-political-system/32276451.html>



People rally against the Iranian government and express support for anti-government protesters in Iran at the Lincoln Memorial in Washington, DC, on February 11, the 44th anniversary of the Islamic Revolution.

Jan 17 – For months, anti-establishment protesters have called for the overthrow of Iran's clerical regime and demanded greater social and political freedoms.

Now, opposition figures and civil society groups inside Iran have shared proposals that would transform or even replace the current theocratic system with democracy.

The proposals for a post-Islamic-republic system come amid growing calls for political change in Iran, which has been ruled by the clerical establishment since the Islamic Revolution in 1979.

The nationwide protests, which erupted in September but have waned in recent weeks, are the biggest challenge to the authorities in decades. The establishment has responded by waging a brutal crackdown in which hundreds have been killed and thousands arrested.

On February 14, around 20 labor unions, student organizations, and civil society groups inside Iran published a joint charter in which they laid out their vision for a "new, modern, and humane society."

The charter [demands](#) gender equality, the right to free speech, the release of all political prisoners, the abolition of the death penalty, and the protection of ethnic and religious minorities.

The document was released after opposition figure Mir Hossein Musavi called for the "[fundamental transformation](#)" of Iran's political system.



In a statement issued on February 4, the 80-year-old called for a "free" referendum and the drafting of a new constitution that would pave the way for a democratic system in Iran.

The proposal by Musavi, a former prime minister who has been under house arrest since 2011, has received support from prominent figures inside and outside the country.

Iran's top Sunni cleric, Molavi Abdolhamid, has also called for a referendum on the protesters' demands. A key dissenting voice inside the Islamic republic, the outspoken cleric has used his sermons to denounce the state's human rights abuses.

A group of Islamic scholars in Iran's western Kurdistan region, which was the epicenter of the protests, recently called for a referendum that would be overseen by international observers and the trial of those involved in state repression.

Meanwhile, a group of exiled Iranian opposition figures met at Georgetown University in Washington on February 10, including the former crown prince of Iran, Reza Pahlavi, and rights activist Masih Alinejad.

The group said it was working on establishing a charter for a transition to a new, secular democratic system that would be followed by free elections. It is unclear if the group of eight exiled opposition figures and their proposals would receive support inside Iran.

Washington-based political analyst Ali Afshari said a "revolutionary process" inspired by "Woman, life, freedom" -- the main slogan of the anti-regime protests -- has taken shape in Iran.

Afshari, a former student leader who was jailed in Iran for his activism, said calls for a referendum and the publication of a charter by local civil society groups had created a "promising outlook" for the protest movement.

Peyman Jafari, a historian and assistant professor at the College of William & Mary, a public research university in Virginia, said the charter drafted by grassroots organizations in Iran was a "potent reminder that radical change will come from inside and from below."

"It provides a set of demands that are concrete and can unite millions of Iranians around achievable goals," he said.

## Five Qatari hospitals among world's top 250 academic medical centres

Source: <https://dohanews.co/five-qatari-hospitals-among-worlds-top-250-academic-medical-centres/>



Sidra Medicine

*Last year, Qatar ranked first in the Arab world and 18th worldwide in the 2022 Health Care Index.*

Feb 15 – Five Qatar hospitals have ranked among the world's top 250 academic medical centres, the highest number of hospitals from the region on the global ranking. The ranking was part of a new study by leading United Kingdom-based consultancy, Brand Finance, [Doha's state news agency \(QNA\)](#) reported on Wednesday. Four





centres under Hamad Medical Corporation (HMC) made it onto the list, including Rumailah Hospital, Hamad General Hospital, the National Center for Cancer Care and Research, and the Heart Hospital.

The fifth Doha-based entity that reached the global ranking is Sidra Medicine, which falls under the umbrella of Qatar Foundation for Education, Science and Community Development. "Having five Qatar hospitals ranked among the world's top 250 academic medical centres is an incredible achievement and highlights the commitment of Qatar's health sector to deliver excellent care to our patients," Dr. Hanan Mohamed Al Kuwari, Doha's health minister, said.

**According to QNA, the cancer facility ranked at 60, the general hospital ranked at 63, and the remaining two HMC facilities achieved top 100 rankings.** The research, also the first-of-its-kind, surveyed 2,500 leading healthcare professionals around the world and the ranking was conducted by a peer-driven analysis of their performances.

"In recent years, HMC and Sidra Medicine have worked hard to implement the academic medical centre model into their hospitals, combining patient care, medical research, and education to achieve the best outcomes and experience for our patients," Dr. Al Kuwari added. The new ranking adds to a list of achievements by Qatar's health sector that has repeatedly received global praise, particularly during the Covid-19 outbreak. In 2016, HMC became the first healthcare system in the world to have all its hospitals accredited by the Joint Commission International (JCI) under the Academic Medical Center accreditation program. Similarly, Sidra Medicine received the accreditation in 2020, a gold-standard in the medical sector globally. Last year, Qatar ranked first in the Arab world and 18th worldwide in the 2022 Health Care Index. Meanwhile, during the same year, the World Health Organization designated all of Qatar's cities as "Healthy Cities".

The Healthy City programme seeks to improve population health by promoting health and well-being, enhancing equity, empowering communities, and preventing the primary causes of ill health through the inclusion of health in all policies.

- Korea et Chine 1950-53 (guerre de Corée).
- Guatemala 1954
- Indonesia (1958)
- Cuba (1959-1961)
- Guatemala (1960)
- Congo (1964)
- Laos (1964-1973)
- Vietnam (1961-1973)
- Cambodia (1969-1970)
- Guatemala (1967-1969)
- Granada (1983) - Liban (1983, 1984) (frappant des cibles dans les territoires du Liban et de la Syrie)
- Libya (1986)
- Salvador (1980)
- Nicaragua (1980)
- Iran (1987)
- Panama (1989)
- Iraq (1991) (Guerre du Golfe)
- Kuwait (1991)
- Somalia (1993)
- Bosnia (1994, 1995)
- Sudan (1998)
- Afghanistan (1998)
- Yugoslavia (1999)
- Yemen (2002)
- Iraq (1991-2003) (forces conjointes américaines et britanniques)
- Iraq (2003-2015)
- Afghanistan (2001-2015)
- Pakistan (2007-2015)
- Somalia (2007-2008, 2011)
- Yemen (2009, 2011)
- Libya (2011, 2015)
- Syria (2014-2015)

### American Bombings since 1945

## The United States accuses the Russians of war crimes

Source: <https://frenchdailynews.com/politics/7859-the-united-states-accuses-the-russians-of-war-crimes>

Feb 19 – U.S. Vice President Kamala Harris accused Russia of committing more than 30,000 "crimes against humanity" in Ukraine. But how many U.S. war crimes since 1945?

Propaganda, lies and disinformation do not bother the United States. The vice-president, Kamala Harris, who participates in the Munich Conference on security, accused, yesterday, Russia of having committed 30,600 crimes against humanity in Ukraine. She announced that the perpetrators of these crimes and all their accomplices will one day be held accountable.

### Two atomic bombs

Russia, which has been at war with Ukraine for a year, has necessarily committed atrocities both against the Ukrainian military and against the civilian population. And they must be strongly denounced. But coming from the United States, these accusations are, to say the least, inappropriate, even odious.

A few days ago, China reminded Uncle Sam of the list of "bombings" carried out since 1945, all of which are crimes against humanity. Need we remind you that the United States dropped two atomic bombs on Japan? Do we need to remind you that between 1961 and 1971, the U.S. army spread more than 100,000 tons of toxic chemicals over Vietnam, including dioxin, which even today pollute the soil and rivers and cause illness and malformations in men, women, and children? Do we need to recall the public lie



of the American Secretary of State Colin Powell about the weapons of mass destruction held by Saddam Hussein to justify the war in Iraq? And all the rest. No, the United States is not in the best position to give moral lessons to the rest of the world. We can remind them of this African proverb: **“He who climbs the coconut tree must have a clean buttocks”**.

## Was the Turkish earthquake man-made? **Well, the technology exists ...**

By James Delingpole

Source: <https://www.conservativewoman.co.uk/was-the-turkish-earthquake-man-made-well-the-technology-exists/>



Feb 20 – The death toll from the earthquakes which ravaged Turkey and Syria on February 6 [is approaching 44,000](#). Were all these people the victims of what the *Guardian* insists was an ‘Act of God’? Or were they murdered by the Powers That Be as a kind of horse’s-head-in-the-bed warning about what happens to any leader – in this case Turkey’s president Recep Tayyip Erdoğan – who refuses to toe the globalist line?

Among those who believe the latter is Romanian Senator Diana Iovanovici Șoșoacă. In a statement to the upper house of Romania’s parliament [she declared](#):

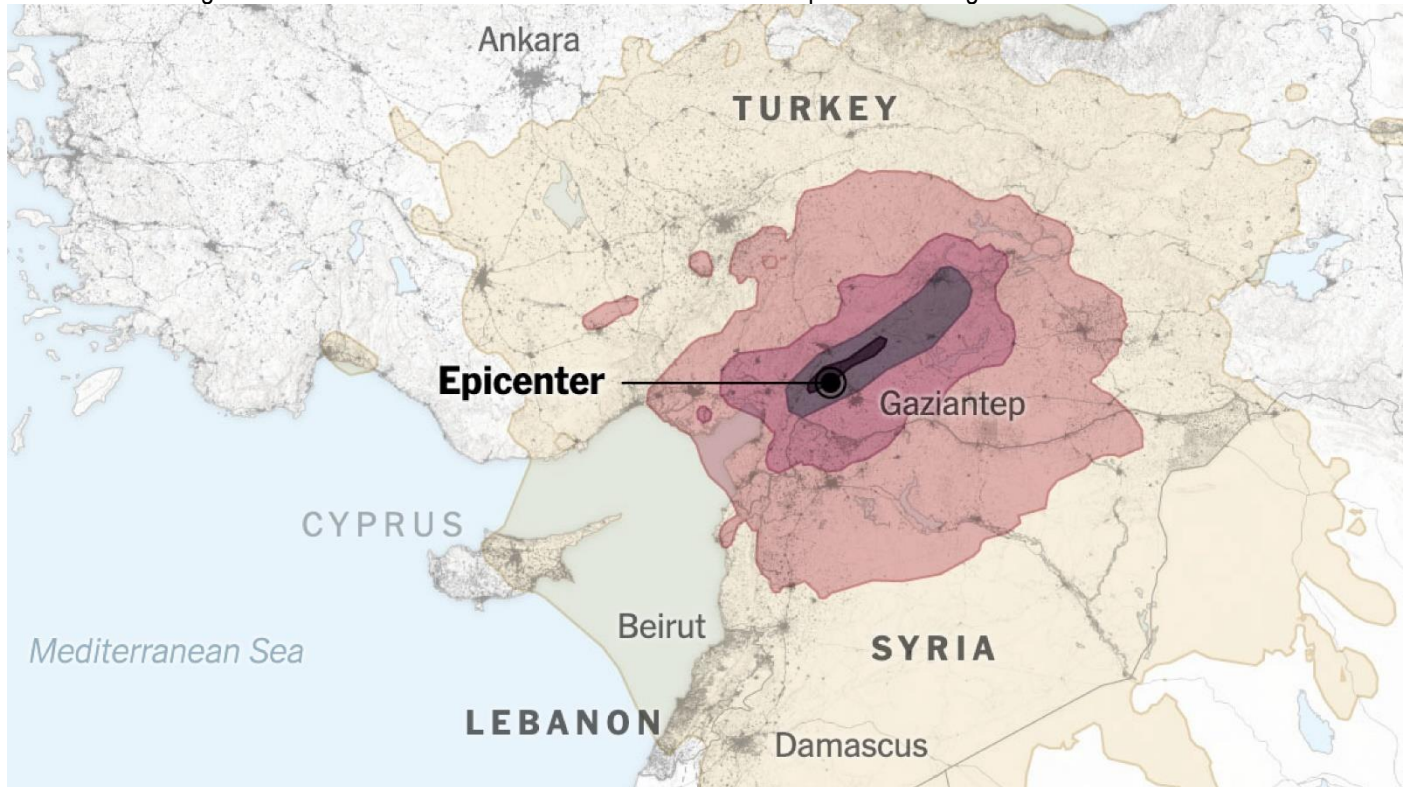
‘For three years we have been experiencing a real campaign of mass killing worldwide, either through alleged pandemics and the imminent need to inject untested vaccines that kill people, or through wars that reduce the world’s population, but rearranges international politics, realigns power poles and alters borders. We have lived to witness the production of earthquakes on command, which is actually an attack on Turkey by the greatest of the world who totally disliked being set up by Recep Tayyip Erdoğan, the President of Turkey.

‘Moreover, his position of neutrality and mediator in the Ukrainian-Russian war deeply disturbed them, especially since Turkey is the second great power from a military point of view within Nato. His position to block Sweden’s accession to Nato, his speech in Davos, as well as the gesture of leaving in the middle of the press conference, defying Schwab, did not remain without an echo in the cold world of leaders the world. But no one thought that people would have to die, so many people, and in such a terrible way. And it’s just a warning, because it wasn’t the most populated area of Turkey.

‘A hundred and fifty aftershocks of a devastating earthquake, the second larger than the first, without the existence of an epicentre, the area being artificially stimulated, geological weapons having existed for a very long time, being used so far without causing too many casualties, probably for experiments. Now, it has been put into practice. If we look carefully at the map of Turkey, we will see that it is furrowed by gas and oil pipelines, this being actually one of the goals: their destruction. But, ten seconds before the occurrence of the so-called



earthquake, the Turks closed these pipelines. In addition, 24 hours before the earthquake, ten countries withdrew their ambassadors from Turkey. Five days before its occurrence, the Romanian Ministry of Foreign Affairs issued a travel warning for Romanian citizens in Turkey, although there was no danger, as did other countries. By killing people, they served their interests. The maps shown on all the television channels show that there was no epicentre, but a line with thousands of earthquakes. The Turkish secret services are investigating a possible 'criminal intervention', (read an involvement of another state in triggering the first earthquake), what followed later being a chain reaction after the destabilisation of the tectonic plates in the region.'



This is a story you are unlikely to read anywhere in the mainstream media. For the usual reasons. Şoşoacă (also one of Romania's most prominent Covid sceptics) has been designated 'far-right' and thus been denied any place in the public square. Of course, it's obviously a crazy conspiracy theory because everyone knows that earthquakes are natural events, especially in countries with major fault lines, and that the Powers That Be could never do such a thing . . . right?

Actually, they could. The technology to cause earthquakes dates at least as far back as the late 19th century, when experiments conducted by Nikola Tesla at his New York laboratory threatened to bring down a building. Police and ambulances were told it was an earthquake. But it wasn't: it was man-made. Here is Tesla's account of the incident in 1898: 'I was experimenting with vibrations. I had one of my machines going and I wanted to see if I could get it in tune with the vibration of the building. I put it up notch after notch. There was a peculiar cracking sound. I asked my assistants where did the sound come from. They did not know. I put the machine up a few more notches. There was a louder cracking sound. I knew I was approaching the vibration of the steel building. I pushed the machine a little higher. Suddenly all the heavy machinery in the place was flying around. I grabbed a hammer and broke the machine. The building would have been about our ears in another few minutes. Outside in the street there was pandemonium. The police and ambulances arrived. I told my assistants to say nothing. We told the police it must have been an earthquake. That's all they ever knew about it.' Tesla was subsequently asked by a reporter what he would need to destroy the Empire State Building. He replied: 'Vibration will do anything. It would only be necessary to step up the vibrations of the machine to fit the natural vibration of the building and the building would come crashing down. That's why soldiers break step crossing a bridge.'

After his death in 1943, all Tesla's blueprints and files were seized. Rumour has it that they were confiscated by the FBI, though the then director J Edgar Hoover pinned the blame on the US Office of Alien Property. The documents have not been seen since. We can fairly safely assume that they remain in the hands of the Deep State, which no doubt has been developing the technologies ever since. Bill Cooper – the conspiracy theorist's conspiracy theorist – often said that the technologies available to secretive institutions such as the CIA and the military are about 50 years ahead of anything acknowledged in public. If the Turkish earthquakes were man-made, the most likely culprit would seem to be an institution such as the HAARP facility in Alaska. HAARP – it stands for High-frequency Active Auroral



Research Program – is not a conspiracy theory. It is purportedly run by the [University of Alaska Fairbanks](#) (having previously been run by the US Air Force) and claims to be 'a scientific endeavour aimed at studying the properties and behaviour of the ionosphere'. That's the cover story, at any rate. But a short video by [geoengineeringwatch.org](#) – [Are Microwave Transmission Facilities Being Used To Trigger Earthquakes?](#) – has suggested it may have more nefarious purposes. 'Question: Can tectonic movement be intentionally triggered? Extremely anomalous atmospheric heating directly above the epicentres of catastrophic earthquakes has long since been observed by globally recognised institutions like the Massachusetts Institute of Technology. Japanese M9 earthquake is just one example. MIT recorded extremely anomalous atmospheric heating directly above the Japanese earthquake epicentre for three full days immediately preceding the triggering of the earthquake. 'Are extremely powerful microwave transmissions actively and aggressively being used as weapons of mass destruction? If all available data-based evidence is examined the conclusions are chilling. Understanding the full potential of the power that can be projected from ionosphere heater installations like HAARP in Alaska is difficult and complex. Science studies have acknowledged a connection between frequencies and seismic events. Immensely powerful microwave transmissions can be bounced off the now-ionised atmosphere, facilitated by the atmospheric aerosol saturation of electrically conductive particles from the ongoing climate intervention operations.

'By directing concentrated microwave transmissions back into earth's strata in a seismically sensitive location, the triggering of seismic activity becomes scientifically possible – not just from the interior heating of the strata but also from the frequency vibrations that are created. Microwave transmissions when used as a seismic weapon or a weather weapon leave signatures on cloud formations that are easily distinguished. Concentrated microwave transmissions may provide a conductive corridor that would, in essence, siphon off immense amounts of power from earth's electrically charged ionosphere and/or earth's electrojet currents, thus greatly amplifying the destructive power and potential of microwave weapons.' It is, of course, beyond the scope of this article to demonstrate beyond reasonable doubt that the Turkish/Syrian earthquakes were man-made. What cannot be denied, though, is that the Powers That Be have both the means and the motive to have caused them.

## Global War on the Horizon?

Source: <https://www.statista.com/chart/29311/risk-of-consequences-current-geopolitical-tensions/>



Feb 15 – A 2022 survey of risk experts at the insurance company AXA and other larger firms paints a pessimistic picture of the where the current geopolitical situation could be leading us. As [warned recently](#) by the Bulletin of Atomic Scientists, the authors of the [Doomsday Clock](#) Statement, "Russia's war on Ukraine has raised profound questions about how states interact, eroding norms of international conduct that underpin successful



responses to a variety of global risks." As this infographic, based on an Ipsos survey for AXA reveals, large majorities of the expert respondents said that they think the current global situation could lead to a number of worrying consequences, including the levels of tension persisting in the future (95 percent), a spread around the globe (94 percent), a threat to national food and energy supplies (91 percent) and most troublingly: lead to a global war (84 percent).

## Why Ukraine should not become a testing ground for the world's new weapons

By Lauren Sanders

Source: <https://theconversation.com/why-ukraine-should-not-become-a-testing-ground-for-the-worlds-new-weapons-199505>

Feb 20 – Ukrainian President Volodymyr Zelensky has been [imploring](#) the US, UK and other allies for advanced fighter jets to assist in defending against Russia's unlawful invasion – a [move that](#) could come soon and potentially alter the course of the war. This comes after Germany and the US finally agreed to give [more than 300 heavy tanks](#) to Ukraine after much debate.

Some observers have focused on whether providing increasingly sophisticated weaponry is a [good idea](#) for [strategic reasons](#), such as whether it risks further escalating the conflict.

But another important issue that has received less attention is whether this technology being gifted to Ukraine complies with international law.

The use of [new, untested military technology in Ukraine](#) – even if outwardly for altruistic purposes – could be problematic and even unlawful. In some instances, for example, military suppliers may have a secondary interest: field-testing their new technologies in a real conflict.

Not about breaking news. Not about unfounded opinions.

Such testing risks harm to civilians and further destruction of Ukrainian infrastructure, as well as causing unnecessary suffering to combatants on both sides of the conflict.

### Autonomous drones being used on both sides in Ukraine

Most new weapon technologies being deployed to Ukraine have been [tested](#) in controlled environments or through computer simulation systems prior to their use.

While militaries are constantly [looking for novel ways to test](#) new technologies to certify them as safe and lawful, [field-testing weapons in a combat situation](#) is not generally done until there has been compliance with in-house testing and assurance measures.

However, Russia is not being as cautious. As its supplies dwindle, Moscow is relying on new equipment [sourced](#) from the few states that are continuing to trade arms with them.

And some of these technologies, like the Iranian-supplied [Shahed-131 and -136 kamikaze drones](#), are apparently being field-tested in Ukraine.

There have long been [concerns](#) about whether autonomous drones comply with the laws of war. One major concern is whether they can properly distinguish between combatants and civilians.

[Russia is unleashing successive waves of the Iranian-made Shahed drones over Ukraine.](#) AP

Russia is reportedly [changing](#) critical functions of their drones to enhance their lethality and destructive capacity.

While [Russia has previously indicated](#) it performs some form of weapons testing and review for legal compliance, it seems unlikely this is happening on these new technologies in the limited time before they appear on Ukraine's front lines.

Advanced drones are also being used on the Ukrainian side, such as the [Kargu-2 and Baykatar TB-2 drones](#) supplied by Turkey.

### Russia uses Iranian drones against Ukrainian civilians

In a war of attrition, cheaper weapons such as Iranian drones are effective.

Length 3.5 meters long (11.5 feet)

Shahed-136 (Geran-2)

Explosive charge: ~40 kg (88 pounds) compared with cruise missile's warhead which weighs 480 kg (1,050 pounds)

Delta-wing:  
2.5 meters wide (8.2 feet)

Propeller and engine with a top speed of 185 kph (114 mph).

Cost: \$20,000 apiece. By comparison cruise missiles cost about \$1 million each.

Source: Defense Express (Ukrainian online publication); National Institute for Strategic Studies

AP



A [UN report](#) in 2021 cited the possible use of these same drones in Libya, with [concerns over their reliability](#) and their ability to detect the proper target, in compliance with the laws of armed conflict.



A Bushmaster armoured vehicle bound for Ukraine waits to be loaded onto an aircraft in Australia. LACW Emma Schwenke/Royal Australian Air Force/AP

### What the laws of armed conflict say about testing weapons

[Innovation](#) has been [key](#) to Ukraine's success in the conflict thus far.

The gifting of Western military equipment (whether [publicly acknowledged or otherwise](#)) has also been a [critical factor](#). Over [32 countries have provided weapons and advanced military technologies to Ukraine](#).

However, the use of advanced military equipment must be balanced by the need to reduce the harm to both civilians and combatants alike. Both sides have a duty to comply with the laws of armed conflict – and both sides are entitled to the protections of such laws.

The overarching principles of [international humanitarian law](#) should ensure, wherever possible that:

- the impact of conflict - including on combatants - is humane, and
- harm to civilians and civilian infrastructure is minimised.

When it comes to the testing and evaluation of weapons, the rules of international law are unsettled.

States that have signed up to [Additional Protocol I to the Geneva Conventions](#) are obliged to undertake testing of weapons and the "means and method of warfare". But this is [not followed very broadly or consistently](#).

Some countries like Australia have [publicly discussed their weapons review processes](#) that fulfill their obligations under this Protocol. Other states do it as a matter of good practice. For example, the US is not a signatory to the Protocol, but it [still undertakes rigorous testing](#) to ensure its weapons systems are generally compliant with international law.

However, this doesn't apply to all [states who are donating equipment](#) to Ukraine or Russia. In fact, [just under half](#) of the [59 countries that are signatories](#) to the Protocol acknowledge they systematically do this kind of testing.

Some states [argue](#) these rules on testing weapons should only apply to the country that is using them in armed conflict – not the country that is manufacturing them.



But this view is ignorant of the realities of a state facing an existential crisis and relying on international military aid. Is it both unfair and unrealistic to expect Ukraine to test gifted weapon systems and military equipment when it is fighting for its survival.

### What Ukraine's supporters need to do

There are two simple ways for nations gifting weapons to Ukraine to ensure they comply with the laws of armed conflict:

- checking the weapons or technologies are capable of being used lawfully, and
- making sure combatants know how to use them in a way that complies with the law.

Australia, for example, has a rigorous weapons review process that tests the compliance of its military technologies. The weaponry on the [Bushmaster armoured vehicles](#) sent to Ukraine will have been subject to this process.

Australia is also [training Ukrainian forces](#) to use the systems it supplies. While such training serves to bolster Ukraine's chances of tactical success, it also ensures the soldiers know how to act in compliance with the laws of armed conflict.

It may seem like a minor and technical point to focus on the lawfulness of weapons in the face of Russia's [alleged mass war crimes](#), and its challenge to the existing rules-based order by [invading Ukraine in the first place](#). But it is in the interests of liberal democracies to [reinforce the existing rules-based order](#), including compliance with international law.

This isn't to suggest the provision of military aid to Ukraine should cease. Rather, those states contributing to the conflict should be doing their utmost to minimise human harm. This means ensuring new weapons are not field-tested in someone else's backyard.

[Lauren Sanders is a Senior Research Fellow on Law and the Future of War @ The University of Queensland.](#)

## Turkey quake fuels conspiracy posts on HAARP project

Source: <https://www.naharnet.com/stories/en/295694-turkey-quake-fuels-conspiracy-posts-on-haarp-project>

Feb 18 – Conspiracy theories about a U.S. research station have resurged, with social media users falsely blaming it for the Turkey-Syria earthquakes, following debunked claims it causes weather disasters and spreads the coronavirus.

Scientists have for years been refuting claims that the High-frequency Active Auroral Research Program (HAARP), with its Alaska facility boasting 180 radio antennae, is a U.S. government-backed program to weaponize the atmosphere and subjugate the population.

The series of earthquakes that struck Turkey and Syria on February 6, killing tens of thousands of people, gave rise to a new variant of the theory on social media in various languages.

It has been dismissed by experts as science fiction.

### Crazy' earthquake claims

Some users cited flashes of light before the quake as evidence they were artificially generated by HAARP. Some claimed it was to punish Turkey for resisting the admission of new member countries to NATO. "This is so crazy. It's like asking if the earthquake was caused by Bugs Bunny digging for carrots," said David Keith, professor of applied physics at the Harvard School of Engineering and Applied Sciences. "There is simply no known mechanism for anything remotely like HAARP to have any impact on earthquakes."

HAARP sends radio waves to heat electrons in the ionosphere, the top layer of Earth's atmosphere, to study their effects on communications systems. Its waves are not big enough to reach Turkey. Quakes are caused by movements of the Earth's crust.

Experts told AFP lights are commonly seen during earthquakes. Theories vary about their origin. In some cases, they come from power lines or electricity stations shaken by the quake. HAARP was run by the United States Air Force and Navy before being handed over in 2015 to the University of Alaska Fairbanks. Michael Lockwood, professor of space environment physics at the University of Reading, said claims about HAARP being used as a weapon may have stemmed from the program initially using radio waves to communicate with submarines — a function that became obsolete after the Cold War.

This history "got blown up into the farcical idea that HAARP is some form of a weapon," Lockwood said.

"Some form of social mind control is the usual favorite but generating earthquakes is one that I hadn't heard before."

### Climate change theories

Numerous social media posts have claimed HAARP is used to engineer storms and heatwaves. Some recent ones suggested the aim is to create climate change so that authorities can restrict people's activities or even reduce the population.

Some cited a patent for a proposed device to heat parts of the ionosphere for defense purposes.



## ICI C<sup>2</sup>BRNE DIARY – February 2023

Filed in 1985 at the height of the Cold War, the document claims the technology could be used for "missile or aircraft destruction" or "weather modification." But the patent has since expired and there is no evidence the technology in it was developed. HAARP's transmitters send radio waves from 80 kilometers to more than 500 km (50-310 miles) above the Earth's surface -- far too high for such signals to affect weather or climate. "The idea that technology can somehow bring about these extreme events makes no sense," Ella Gilbert, a meteorologist at the British Antarctic Survey, told AFP. "It is technically extremely difficult to influence such a large, complex and chaotic system as the weather."

### False Covid connection

Other posts claim signals from HAARP can hit Earth, disrupting communications and power, and even harming people's health. David Hysell, a professor of earth and atmospheric sciences at Cornell University, said HAARP was no more dangerous than any other electrical or radio station. Researchers have identified similarities between the HAARP claims and a wave of conspiracy theories about 5G telecommunications that emerged during the Covid pandemic. Millions of people viewed Facebook posts claiming to show spacecraft from HAARP "emitting 5G radiation which contains the coronavirus." The posts showed a photo of a flying object leaving contrails. An analysis by AFP Fact Check indicated the photo was a montage. "I don't know where the conspiracy theories surrounding HAARP come from," said Hysell. "I think people confuse the research purpose of HAARP, which is to study naturally occurring hazards in space, with the operations of the facility itself."

Markup | February 22, 2023 Atlantic Council

# Our experts decode the Putin speech that launched Russia's invasion of Ukraine

Click on the photo above and then click on a highlighted passage to see the related narratives tracked by the DFRLab







# T - NEWS

## The military-terrorist wings of Hamas and the Palestinian Islamic Jihad published books by terrorist activists imprisoned in Israel

Source: <https://www.terrorism-info.org.il/en/the-military-terrorist-wings-of-hamas-and-the-palestinian-islamic-jihad-published-books-by-terrorist-activists-imprisoned-in-israel/>

Jan 24 – At the beginning of January 2023 the Izz al-Din Qassam Brigades, Hamas' military-terrorist wing, issued a book called **The Bus Is Burning** (left) apparently written by **Hassan Salameh, former Izz al-Din Qassam Brigades commander**, who is currently serving 46 consecutive life sentences in Israeli prisons. The book is about milestones in his life and the suicide bombing attacks he orchestrated after the death of and Yahya Ayash ("the engineer"). The book, which was first published in 2016 as *Holy Vengeance*, was edited with the addition of pictures, information about the shaheeds, a new foreword written by Isma'il Haniyeh, head of Hamas' political bureau, and a preface allegedly written by imprisoned Hassan Salameh.



At the end of December 2022 a book about **Bassem al-Sa'adi** was published. **Al-Sa'adi is a high-ranking Palestinian Islamic Jihad (PIJ) operative** who was detained in Jenin in August 2022, whose detention led to Operation Breaking Dawn. The book, **A Spark from the Light of the Path** (below) is about milestones in his life, his ideology and memoirs from jail. It was published by the PIJ-affiliated Muhjat al-Quds ("soul of Jerusalem") Institution in the Gaza Strip, which

operates for the prisoners, families of prisoners, the wounded and families of shaheeds. The book was written by Asri Fayad from the Jenin refugee camp, and it was launched simultaneously there and in the Gaza Strip.

The books were apparently published as part of **inculcating the Palestinian public with the shaheed culture**, which glorifies the terrorists and their attacks. Fostering the memory of terrorists who were killed or imprisoned and turning them into role models is a familiar, permanent aspect of the Palestinian legacy. The shaheed culture is shared by the Palestinian Authority (PA), Fatah, Hamas, PIJ and other terrorist organizations. **Their leaderships customarily glorify the names and actions of terrorists who carried out spectacular attacks, especially deadly mass-casualty suicide bombing attacks, and encourage others to follow in their footsteps.** Special attention is paid to educating the younger generation of Palestinians to become shaheeds. **In that way they provide public justification for the attacks and attackers and contribute to increasing the motivation of young Palestinians to become shaheeds and attack Israelis.**

Publishing books written by prisoners is also a way of defying Israel. The Israeli Prison Service announced it had begun an investigation and stated it combatted attempts by security prisoners to smuggle written material out of the jails. The Service also stated that if they found proof prisoners were connected to the publication of a book, they would be severely punished (Israeli media and al-Quds, January 7, 2023). The Palestinian commission for prisoners' affairs announced that the Israeli Prison Service's threat to punish Hassan



Salameh after this book was published was an expression of the helplessness of Israel (“the occupation”) and its fear of “the prisoners’ brilliant intellectual capabilities” [sic] (al-Istiqlal, January 6, 2023).

Moreover, the publication of the two books almost simultaneously, in the wake of the violence in northern Samaria and the increase in the activities of the established and semi-established organizations in the region, may indicate a kind of competition between Hamas and the PIJ’s military wings to encourage terrorist attacks.

●► [Read the full article at the source’s URL.](#)

## Terrorist Suspect Arrested in Deadly Stabbing of 2 on Train in Germany

By Christopher F. Schuetze

Source: <https://www.nytimes.com/2023/01/25/world/europe/germany-train-stabbing.html>

Jan 25 — **Two people were killed and at least seven others injured** in a stabbing on a train in northern Germany on Wednesday afternoon. The attack happened shortly before 3 p.m. on a regional train traveling from the northern city of Kiel to Hamburg. Just before the train arrived in the town of **Brokstedt**, about halfway during the journey, a man started randomly stabbing passengers, according witness reports.

It was unclear how exactly how the attack ended. One witness told the [news site t-online](#) that he held the assailant after the man had dropped the knife until police could arrest him.

The attacker, whom the authorities have identified as a **33-year-old Palestinian man**, was arrested at the train station in Brokstedt, 40 miles north of Hamburg. Having been alerted by passengers en route, the police were waiting for him when the train pulled in. No more information on the suspect was released. A motive was not immediately clear.

Witnesses described a scene of carnage with blood visible along several train cars. Police officers, who questioned witnesses in Brokstedt, said about 70 people were on the train during the attack.

Nancy Faeser, the federal interior minister responsible public safety, promised a quick investigation. “The background to the crime is now being investigated at full speed,” she said.

The attacker, who was also severely injured and was being treated at a hospital, will be interrogated as soon as he is fit, the police said. “It’s quite horrible,” Sabine Sütterlin-Waack, the state minister of the interior for Schleswig-Holstein, where the train stopped, told a public broadcaster. “We are all completely shocked and horrified that something like this has happened.” She added in a statement, “For me it is clear that the horrific act is directed against all humanity.”

The station was cordoned off and the train was stalled in the station as the police investigated the attack. Train service on the line was temporarily halted, according to the national German train service.

The attack follows other recent deadly stabbings in the country, including one that killed a teenage girl in Illerkirchberg and another that killed three people in Würzburg. There have also been several attacks on trains in recent years. Ubiquitous in Germany, trains usually do not carry extra security or police.

**Last May**, a 35-year-old man stabbed four people on a similar regional train in North Rhine-Westphalia. A judge recently ordered the attacker, who came from Iraq, be held in a psychiatric ward.

In November 2021, a 27-year-old attacked four men with knife on a high-speed train in Bavaria. The attacker, who was born in Palestine and grew up in Syria, was sentenced to 14 years in prison.

**And in 2016**, the police shot and killed a 17-year-old assailant who attacked four people on a train with a knife and an ax in Bavaria. The attacker, who identified himself as an Islamic State fighter, came from Afghanistan.

In the attack on Wednesday, three people were severely injured, while four others escaped with minor injuries, according to the police, who did not release the names of the victims.

“I sincerely wish those injured a speedy recovery,” Ms. Faeser said.



terrorist

## At least one dead, several injured in machete attack at southern Spain churches

Source: <https://www.reuters.com/world/europe/least-1-dead-4-injured-by-man-wielding-samurai-sword-southern-spain-church-el-2023-01-25/>

Jan 25 – Spanish authorities said they were investigating what they called a possible "terrorist" incident after a machete-wielding man attacked several people at two churches in the southern port city of **Algeciras**, killing at least one person.

The man attacked clergymen at **two different churches** - San Isidro and Nuestra Senora de La Palma, around 300 metres (1,000 feet) apart - just after 8pm on Wednesday evening in downtown Algeciras, a spokesperson for the city said. A source at Madrid's High Court said the incident was being investigated as terrorism.

Police said the attacker had been arrested, and a police source shared footage showing two officers escorting a man in a hooded sports top in handcuffs through a police station. Police have not released details of his name or nationality. Local media, including El Pais newspaper, said he was a **25-year-old Moroccan**.

The man who was killed was Diego Valencia, a sacristan at the Nuestra Senora de La Palma church, while the titular priest of the parish church of San Isidro, Antonio Rodriguez, was among the injured and is in serious condition, the Algeciras city spokesperson said.



## Al Qaeda Plans Plane Attacks as Air Marshals Are Sent to Mexican Border

Source: <https://www.wbcradio.com/archives/archiv/al-qaeda-plans-plane-attacks-as-air-marshals-are-sent-to-mexican-border>

Jan 07 – The Biden administration's disdain for security at the border is echoed in its carelessness with security in the skies. Specially trained sky marshals have been deployed to do routine chores at the border – as our Corruption Chronicles blog [reports](#).

While the nation's Federal Air Marshals (FAM) are busy on the Mexican border providing illegal immigrants with welfare checks, transportation, and other basic services, Al Qaeda is planning attacks in the U.S. involving planes, according to high-level Department of Homeland Security (DHS) sources. Judicial Watch obtained from government sources a copy of the new intelligence alert, which was delivered on December 31, 2022, at 12:23:52 Greenwich Mean Time. The caption of the widely circulated warning reads: "Al-Qaeda says upcoming attacks on US, possibly involving planes, will use new techniques and tactics."

The threat could not come at a worse time, as the Biden administration leaves aircraft at risk by sending 150-200 FAM monthly to the southern border to help deal with what it calls "a surge in irregular migration." The deployments will continue indefinitely, according to multiple FAM sources, and the specially trained aviation security specialists are outraged. The agency works under the Transportation Security Administration (TSA), which was created after 9/11 to prevent another terrorist attack. FAM is charged with protecting commercial passenger flights by deterring and countering the risk of terrorist activity. Nevertheless, in late October, the Biden administration [began deploying](#) the highly trained law enforcement officers to busy Border Patrol sectors to help with hospital watch, transportation, security and welfare checks at migrant facilities.

Days later the Air Marshal National Council, which represents thousands of FAM nationwide, accused TSA Administrator David Pekoske and FAM Director Tirrell Stevenson of violating federal law and overstepping their authority by assigning air marshals to assist the U.S. Border Patrol with the illegal immigration crisis. In a formal [complaint](#) to the DHS Inspector General, the group also accused the Homeland Security leaders of fraud, waste, and abuse of authority. Sending air marshals to El Paso, Texas, San Diego, California, Laredo, Texas, McAllen, Texas, Tucson, Arizona and Yuma, Arizona to transport illegal immigrants and conduct welfare checks has no relation to TSA's core mission of transportation security, the complaint states. "The statute does not give the Administrator any authority to deploy TSA or FAM employees to the southern border to perform non transportation security related matters," the complaint to the DHS IG says. "Further, under section (g) the statute describes what the Administrator's authority is in an emergency, as defined by the Secretary of Homeland Security, is declared." The act makes clear that the legislative intent is to only allow TSA to exercise authority and deploy its assets for transportation security, the report to the DHS watchdog confirms.



Hours after learning about the latest Al Qaeda threat, the Air Marshal National Council fired off a [letter](#) to DHS Secretary Alejandro Mayorkas as well as Pekoske and Stevenson reminding them that deploying FAM to the southern border to perform humanitarian work is reckless and putting the nation at extreme risk. “We are once again requesting you immediately stop these dangerous and unnecessary deployments and let our FAMs do what the American taxpayers pay them to do, protect and defend our transportation system,” the letter reads. “We have to ask how can you justify sending FAMs to the border in huge numbers, when the border is in your words secure, and there is no emergency? Yet we have major security incidents happening right now affecting our aviation security.”

Sonya Hightower-LaBosco, a retired FAM who serves as executive director of the Air Marshal National Council, confirmed that FAM are still being pulled off flights at a rate of about 200 a month to serve illegal immigrants at stations along the Mexican border. “They are making sandwiches for them and driving them around like Uber or picking up supplies,” Hightower-LaBosco told Judicial Watch on New Year’s Day. The head of the council, David Londo, called the redeployment of air marshals to the southern border “insane” considering the latest aviation threat from Al Qaeda. “Either they don’t care about aviation security, or they really think it is secure,” Londo said.

## U.S. Secret Service Report Examines Five Years of Mass Violence Data

Source: <https://www.homelandsecuritynewswire.com/dr20230126-u-s-secret-service-report-examines-five-years-of-mass-violence-data>

Jan 26 – The [U.S. Secret Service National Threat Assessment Center](#) (NTAC) the other day released [Mass Attacks in Public Spaces: 2016 - 2020](#), a comprehensive report examining 173 incidents of targeted violence and highlighting the observable commonalities among the attackers.

[The report’s](#) release coincides with a webinar presentation tailored to community leaders and stakeholders. Over 20,000 participants have registered for the event, including government officials, police, school officials, workplace security managers, mental health professionals, and faith-based leaders. The registrants represent all fifty states, the District of Columbia, and multiple countries. “The prevention of mass violence in America remains as critical as ever. Far too often, communities and families have been devastated by the impact of these tragedies, and public safety professionals continue to work toward preventing future attacks,” said U.S. Secret Service Director Kimberly Cheatle of [the report](#). “The information revealed in this report is intended to guide those prevention efforts.

NTAC’s exploration of each attacker’s background, motivation, and pre-attack behavior will assist the Secret Service and our partners in our shared violence prevention efforts. We encourage our public safety partners to review the information within this report and apply it to their own practices for providing a safe environment in communities across the country.”

The attacks discussed in the report impacted a variety of locations, including businesses and workplaces, schools, houses of worship, military bases, residential complexes, and more. In many of these cases, the attackers had a known affiliation with the site of the attack.

The analysis is intended to provide critical information to a cross-sector of community organizations that have a role in preventing these types of tragedies. Among the [report’s key findings](#):



- ❖ Most of the attackers had exhibited behavior that elicited concern in family members, friends, neighbors, classmates, co-workers, and others, and in many cases, those individuals feared for the safety of themselves or others.
- ❖ Many attackers had a history of physically aggressive or intimidating behaviors, evidenced by prior violent criminal arrests/charges, domestic violence, or other acts of violence toward others.
- ❖ Half of the attackers were motivated by grievances, and were retaliating for perceived wrongs related to personal, domestic, or workplace issues.
- ❖ Most of the attackers used firearms, and many of those firearms were possessed illegally at the time of the attack.
- ❖ One-quarter of the attackers subscribed to a belief system involving conspiracies or hateful ideologies, including anti-government, anti-Semitic, and misogynistic views.
- ❖ Many attackers experienced stressful events across various life domains, including family/romantic relationships, personal issues, employment, and legal issues. In some of these cases, attackers experienced a specific triggering event prior to perpetrating the attack.
- ❖ Over half of the attackers experienced mental health symptoms prior to or at the time of their attacks, including depression, psychotic symptoms, and suicidal thoughts.



The report also highlights key operational implications for those tasked with violence prevention. These implications should be kept in mind while communities develop the tools, training, resources, and policies to prevent future tragedies.

“Everyone in the community plays a role in violence prevention,” said National Threat Assessment Center Chief Dr. Lina Alathari. “The latest NTAC report provides an unprecedented analysis to support our public safety partners and affirms that targeted violence is preventable if communities have the right information and resources to recognize warning signs and intervene.”

The Secret Service says it will continue to build on its threat assessment methodology and provide research findings and guidance to public and private sectors to enhance the prevention efforts of those charged with safeguarding our communities.

## What Is Microstamping, and Can It Help Solve Shootings?

By Chip Brownlee

Source: <https://www.homelandsecuritynewswire.com/dr20230126-what-is-microstamping-and-can-it-help-solve-shootings>

Jan 26 – When law enforcement investigates a shooting, the evidence left at the scene can make or break a case. In ideal situations, there are witnesses, surveillance video, and sometimes even a firearm and a suspect. Not all cases turn out that way. Often, investigators are left with only a victim and a few spent casings.

But what if a handful of brass was all investigators needed to solve a crime? Enter microstamping, a process that imprints a unique identifier on bullet casings when they fire, theoretically allowing law enforcement to identify the firearm used in a shooting. The technology is celebrated by gun reform advocates, who say it could help solve more shootings, and laws to expand its use have passed in three states and the District of Columbia. It’s also garnered intense criticism from opponents who question its effectiveness and say it places an unnecessary burden on gun manufacturers and owners. The debate led one reader to ask:

*How feasible is “microstamping technology” really? I’ve seen many gun safety sites claim it’s feasible, but I’m hearing the opposite elsewhere. I’m also wondering, should the technology come to pass, what if a criminal just steals casings that have your stamped cartridge from the firing range?*

Below, we break down the basics.

### First Things First: What Is Microstamping Technology?

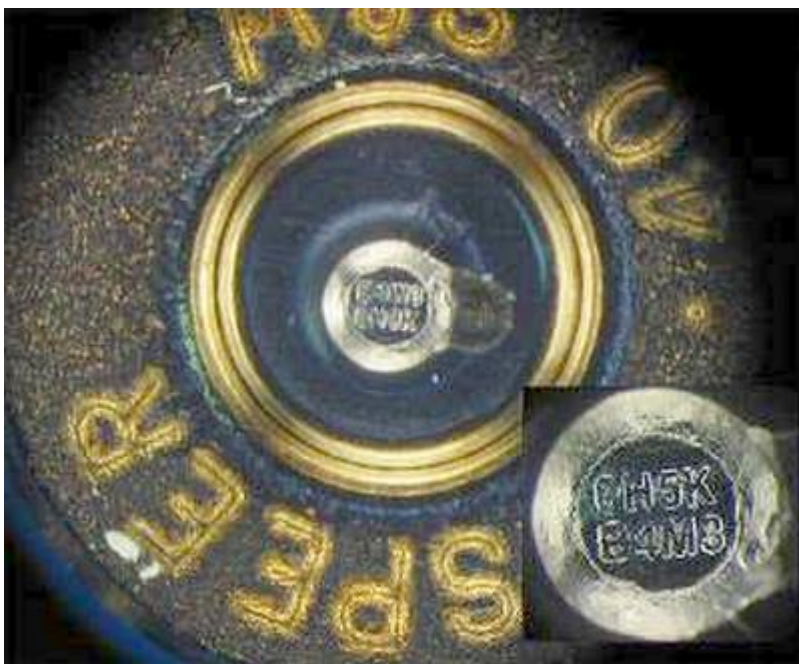
Microstamping uses lasers to engrave alphanumeric and geometric codes on a gun’s firing pin, the piece of hard metal that strikes an ammunition cartridge’s primer and makes it fire. When a firing pin is microstamped, it imprints its unique code on the cartridge. This code is tiny, but when viewed under a microscope provides a unique identifier that can link a spent casing to a gun.

To be clear, microstamping deals with the cartridge casings that hold bullets before they’re fired, not the actual bullets. In most models of guns, the casings are ejected after they’re fired.

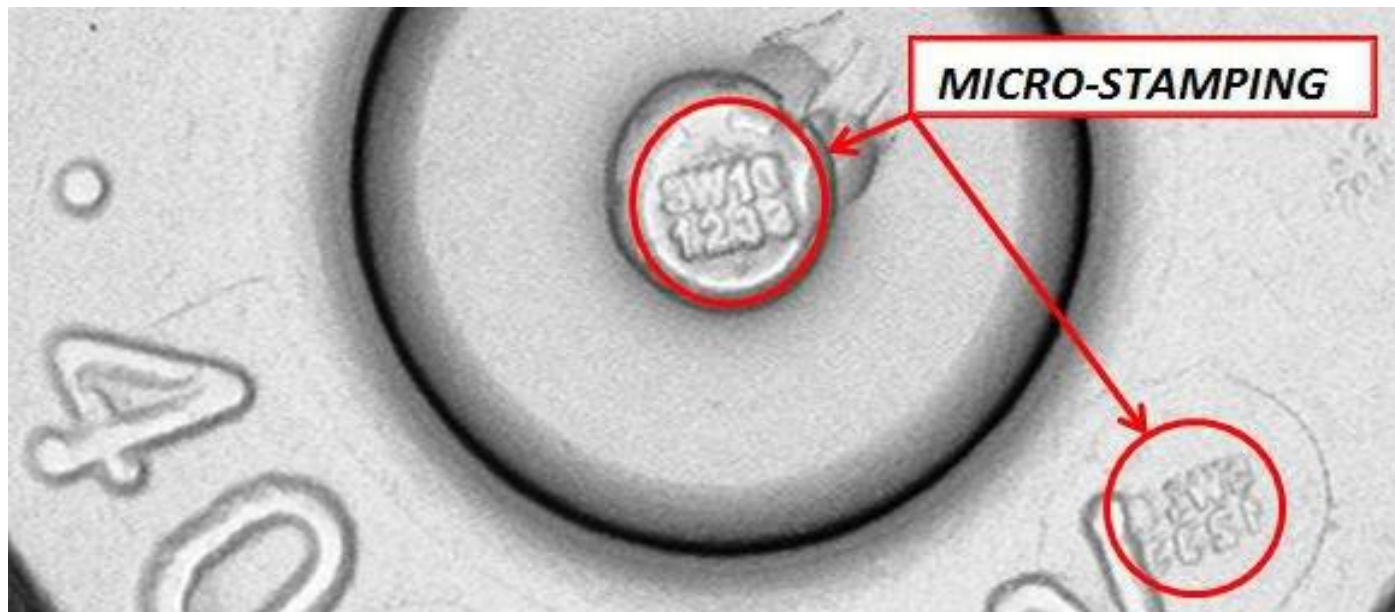
Microstamping provides order to a process that already happens when a gun fires. Standard firing pins leave their own patterns — known as [toolmarks](#) — on spent casings. But connecting markings on spent casings to the gun that fired them requires access to the weapon itself.

“All you’re doing in microstamping is organizing those in a way that’s easily recognizable,” said Joshua Horwitz, co-director of Johns Hopkins University’s Center for Gun Violence Solutions. “So instead of having random toolmarks, you’re organizing toolmarks in a way that gives you letters, numbers, and geometric coding.”

Todd Lizotte and Orest Ohar, engineers with experience in laser technology, developed the early microstamping technology more than two decades ago. Their company, TacLabs, develops machines that can mass produce engraved



firing pins, as well as software to generate, handle, and read the resulting codes. Lizotte and Ohar relinquished their patent rights to the core technology in 2013, in the hopes that gun manufacturers would use it.



### How Could It Help Solve Crimes?

The backbone of investigating gun crimes is the Bureau of Alcohol, Tobacco, Firearms and Explosives' tracing program. Using a gun's unique serial number, investigators can identify where a firearm was first sold, and to whom.

But with current methods, investigators need the physical firearm and access to its serial number to initiate a trace. Proponents see promise in microstamping because it allows investigators to use the microstamped codes to identify a gun used in a shooting without recovering it.

The hope, ultimately, is to solve more gun crimes, which police struggle to do. In 2020, the national murder clearance rate — or the share of cases that result in an arrest or are closed for other reasons — fell to 51 percent, its lowest point in 50 years, according to a [CBS News analysis of FBI data](#). That figure is even worse for nonfatal shootings. Supporters also hope the technology could help law enforcement solve more gun crimes without increasing surveillance in the disproportionately Black neighborhoods where shootings are most common.

"It really could help laser focus on that weapon and the chain of custody for that weapon rather than an entire neighborhood," said Kami Chavis, a professor of criminal justice at William and Mary Law School and a former prosecutor. "It could also deter crime because you know that the weapon that you have, when it fires, it's going to leave this microstamp mark."

### Do Any States Require Microstamping?

It's complicated.

In 2007, California passed a law requiring gun manufacturers to include microstamping capabilities in all new models of handguns introduced in the state. But the law has had little impact since it was signed. Gun manufacturers and pro-gun groups have fought the law in court and continued selling new manufactures of existing models instead of introducing new ones.

Amid California's struggles to fully implement its microstamping law, the District of Columbia passed a microstamping law in 2009, but after that, interest in the technology cooled for more than a decade. That is until New York Governor Kathy Hochul signed a [microstamping law](#) in June 2022 as the state responded to the Supreme Court's decision in [Bruen](#). The law requires the state Division of Criminal Justice Services to examine the "technological viability" of microstamping. If the technology is deemed viable, new semiautomatic pistols sold in New York will eventually need to be capable of microstamping.

A few weeks later, lawmakers in New Jersey approved a [similar but less stringent law](#). Gun dealers will be required to sell microstamping-capable firearms in addition to their other inventory, and the state will offer a 10 percent instant rebate (up to \$30) on any microstamping firearm. The requirement, like New York's, will only take effect after the state attorney general investigates the technology's viability and certifies that microstamping firearms are "commercially available."



### Seems Like There Are Questions About Microstamping's Viability. Does the Technology Work?

The evidence is mixed. Much of the debate over microstamping has centered on the legibility of codes stamped on individual casings. The limited research that exists has shown that the codes can sometimes be illegible, depending on conditions like how many times a gun has been fired. The type of firearm or ammunition may also influence the quality of the impressions.

An initial [evaluation](#) in 2004 by forensic scientist Lucien Haag presented to the Association of Firearm and Toolmark Examiners tested microstamping technology on four different, high-powered guns that he thought would challenge the technology. Haag fired some firearms hundreds of times and others as many as 1,200 rounds. He found the codes legible on nearly every spent cartridge. The results of that evaluation have long been [touted](#) by gun reform proponents, but even Haag has said his observations were not definitive. The study was not peer-reviewed, and Haag did not seek to publish it in a journal.

A [peer-reviewed study](#) published two years later by Suffolk County, New York, firearm and toolmark examiner George Krivosta delivered ostensibly more negative results. In a test that involved installing the same engraved firing pin in 10 pistols of varying manufacturers and firing each 10 times, Krivosta found that just 54 of the 100 codes were fully legible. On the other 46, at least one character was indecipherable. Krivosta then fired 1,000 rounds to examine the wear on the firing pin engraving itself and found that it was still intact and legible but less sharp after his test. He did not evaluate the resulting codes.

Lizotte, who developed the technology, and gun reform groups have attempted to discount Krivosta's study — or at least the public perception of it. They argue that his methodology was flawed because he used older firearms and a firing pin with an engraving that had not been calibrated for the guns he used. But Haag, whose work proponents tout as evidence to support microstamping, also used uncalibrated pins and older firearms.

"I never felt what little I did rose to the level of a peer-reviewed paper," Haag said. "Then it starts getting cited as the definitive work. And then when I showed up explaining what were the limits, and what were the misrepresentations, then I was attacked."

Lizotte is listed as a co-author on [at least two](#) other published peer-reviewed studies in the same journal as Krivosta, with results that showed the technology to be more reliable, though imperfect. One of those, published in 2012, examined 3,000 rounds fired from three different guns using 10 different types of ammunition. In the case of two higher-cost firearms, a Sig Sauer and a Taurus, more than 90 percent of the alphanumeric codes left on spent casings were legible. In a cheaper model Hi-Point, between 68 and 74 percent were legible. In an interview with The Trace, Lizotte acknowledged that some microstamped codes are going to be illegible because of the unpredictable nature of the inner workings of firearms. To guard against this, they developed redundancies, like engraving an additional geometric code or using codes that must add up to a certain total, like a credit card, so that missing digits can be determined by their context. And Lizotte argues that even if close to half of codes are partially illegible, as Krivosta found, it would still provide more information than investigators currently have.

### Can the Codes Be Altered?

Opponents of microstamping — like the National Shooting Sports Foundation, the Congressional Sportsmen's Foundation, and the National Rifle Association — have long argued that the technology is a waste of time because the engraved firing pin code can be defaced or removed, as demonstrated in Krivosta's 2006 study, which found that engravings could be removed with a common sharpening stone. But defacing the firing pin engraving would be an involved process, Lizotte and other proponents of microstamping say: It would require taking apart the firearm, removing the firing pin, and shaving its tip enough to remove the engravings but not enough to render the gun inoperable. It would be easier to replace the firing pin altogether, as the parts are inexpensive, largely unregulated, and don't require a background check to purchase. *Methods aside, some subset of people determined to make their firearm untraceable may attempt to do so, and they already do, by removing or defacing their gun's serial number.* But existing research suggests most people accused of committing violence don't take this step: A [2015 study](#) by Duke University and the University of Chicago found that among guns taken from alleged gang members, only 5.4 percent had defaced serial numbers.

### Can you Be Framed?

Our reader asked if a criminal could stock up on spent casings at a gun range and then use them at the scene of a shooting to throw investigators off their trail. To do this, a person would have to find a gun range, gather the spent brass, and take it with them to the shooting they'd planned in advance. That level of premeditation is not impossible, but it's unlikely.

The tactic also probably wouldn't be successful. The shooter would need to plant cartridges of the same make and model. The cartridges would also need to be fired roughly around the same time, because casings oxidize with age. On top of that, the shooter would need to be sure that they didn't leave fingerprints or DNA on the spent casings, and that they were swapped out for their own casings before first responders arrived.





This type of tampering is possible with or without microstamping, according to Chavis, the former prosecutor: “Somebody could bring certain evidence and plant certain evidence at a crime scene. That’s not to say that it never happens, but it’s pretty rare.” There are also other scenarios that could come into play, [like the practice of “reloading,”](#) which involves repurposing spent cartridges into new live ammunition. If someone did that with spent cartridges from a gun range, it could possibly include microstamped casings.

### Are There Other Concerns?

Aside from the reliability of the technology itself, there are other challenges that could get in the way. Fully utilizing microstamping would likely require most crime labs to purchase higher-powered microscopes, called Scanning Electron Microscopes, which provide the clearest images of the microstamped codes but cost upward of \$70,000. Haag, the longtime firearms examiner, said many crime labs won’t take that step. There are also questions about law enforcement utilization. Other forensic tools, like the ATF’s National Integrated Ballistic Information Network, a database that allows for the comparison of ballistic evidence like toolmarks, [suffer from limited use](#) despite being promoted by the ATF. And on the manufacturing side, there will be some costs to manufacturers and gun buyers. In addition to producing, calibrating, and engraving firing pins, manufacturers will need to set up a standardized system of generating codes, linking the codes to their firearms’ serial numbers, and maintaining the records. Estimates for the exact cost vary. Some range from as low as [\\$3 to \\$10](#) per firing pin, depending on the scale of production. But the NRA and the National Shooting Sports Foundation say it could cost up to [\\$200 per firing pin](#).

### How Would Microstamping Apply to Guns Already in Circulation?

This is perhaps the biggest question surrounding microstamping’s feasibility.

There are already more firearms in circulation in the United States than any other country in the world. The Small Arms Survey, a research project at the Graduate Institute of International and Development Studies in Switzerland, [estimated in 2018](#) that civilian guns numbered upward of 393 million. [Gun sales spiked in 2020](#), so the number has surely grown. Last year alone, Americans bought more than [16 million firearms](#), most of which were handguns. Even if microstamping was mandated by the federal government tomorrow, it would likely only apply to newly manufactured guns, not the millions of firearms already in circulation in the United States. None of the proposed or passed laws have applied to guns already in circulation. However, the fact that recently purchased firearms are [disproportionately used](#) in crimes suggests that a microstamping requirement on new guns could have an outsized effect. “You can’t compare crime guns to the overall stock of firearms,” Horwitz said. “In general, crime handguns tend to be younger. And so we do think that over five years, you’d start seeing an impact.” Even if New York deems microstamping viable and requires it on all new semiautomatic handguns manufactured or sold in the state, it’s likely to have only a small impact on crime guns. In New York, more than 70 percent of crime guns are trafficked from out of state, largely from states with far weaker gun laws, and that trend will surely continue. That number increases to roughly 90 percent when looking specifically at handguns that were recently purchased before being used in crimes. Given the high number of crime guns that are trafficked over state lines, it would likely take the federal government, or at least the states where trafficked guns are most frequently sold, requiring microstamping for the technology to significantly increase clearance rates. In New Jersey, the law is even less stringent, opting to incentivize microstamping instead of requiring it. How many microstamping guns are sold will largely depend on New Jerseyans’ appetite for them.

While some gun owners are sure to and have argued that microstamping is an invasion of privacy and a violation of the Second Amendment, Lizotte maintains that it is a positive for law-abiding gun owners: “As a gun guy, as a Second Amendment guy, as a conservative from New Hampshire — [I] look at this as purely a way in which we target that 1 percent of people that buy firearms and traffic instead of hurting the 99 percent of us who just understand our Second Amendment rights and want to maintain it.”

## Spain Church Attack: From Madrid Massacre in 2004 to Barcelona 2017, a TIMELINE of Islamist Terror Attacks

Source: <https://www.ibtimes.sg/spain-church-attack-madrid-massacre-2004-barcelona-2017-timeline-islamist-terror-attacks-68775>

Jan 27 – A Moroccan national attacked clergymen at two churches in a southern Spanish city on Wednesday, killing at least one person in the latest terror attack in Spain. Two churches just 300 meters apart came under the attack in the southern port town of Algeciras, authorities said. The Spanish authorities said the crime is being investigated as a terrorist act. They did not reveal the name and nationality of the attacker but local media outlets said the terrorist was a [25-year-old Moroccan national](#).



Reports said the attacker had entered Spain illegally and was due to be deported from the country. The Spanish police, who took the Moroccan to Madrid for further investigations, said the deportation proceedings against the man had begun some months ago. Some two weeks ago, Spain had arrested two Islamic State terrorists in the southern region of Andalusia. The arrested jihadists were allegedly plotting an attack in the region. [The Moroccans were arrested in the province of Almería](#). The Spanish press said, citing intelligence sources, that they were key figures who moved terror operatives from the Sahel region to Spain and radicalized people. According to a report that cites National Police general intelligence, [Spain arrested 52 suspected jihadists in 25 operations in 2022](#).



### Europe's Most Notorious Islamic Terrorist Arrested in Spain

In 2020, Spain's National Police arrested Abdel-Majid Abdel Bary in the southern port of Almería after he landed there apparently from Morocco. Abdel Bary was described in the local press as one of the most wanted jihadists in Europe.

Abdel-Bary belongs to the most notorious Islamic terror clan in Europe. He is the [son of Adel Abdel Bari, who has killed an estimated 224 people in various attacks](#) across Africa. He is also believed to have organized the Bataclan massacre in Paris in 2015.

Abdel-Majid Abdel Bary arrested in Spain screen grab

Abdel-Bary was believed to have been killed in Syria but his arrest in Spain shocked the intelligence community across Europe. Spanish police described him as: "One of the most sought terrorists in Europe, both because of his criminal trajectory in the ranks of [ISIS] and because of the high danger that he represented."

### Al-Andalus Brigade

In 2014, it was reported that the [largest mosque in Spanish capital Madrid was functioning as a Jihadist recruitment center led by a Moroccan terrorist](#).

Lahcen Ikassrien, who was a former Guantanamo prisoner who was arrested in Afghanistan in 2001, was hauled up in the mosque leading the recruitment and indoctrination of Islamic State fighters planning to travel to frontlines in Iraq and Syria.

Madrid central mosque Wikimedia Commons

Ikassrien and his radical associates set up the terror outfit known as [Al-Andalus Brigade based out of the Madrid mosque](#), the El Pais newspaper [reported](#). The group was busted in an anti-terror crackdown in June 2014. Al-Andalus Brigade. It was set up in Madrid to radicalize and recruit volunteers and help them reach Syria and Iraq to carry out attacks.



### Madrid Train Massacre by Al-Qaeda Jihadists

The most lethal jihadist terror attack in Spanish territory happened in 2004 when terrorists bombed regional trains in Atocha in Madrid, killing 191 people and injuring more than 1,800. This was the biggest terror attack on a western country since 9/11 al-Qaeda attack in the United States.

The worst ever terrorist massacre on European soil happened on March 11, 2004 when the Al-Qaeda operatives planted thirteen bombs in suburban commuter trains travelling Madrid during the rush hour. Ten bombs exploded almost simultaneously in four trains, killing nearly 200 people.



### Barcelona Terror Attack

In 2017, sixteen people were killed and more than 120 others injured in terror attacks in two Catalan cities, including regional capital Barcelona. The attacks were carried out by Moroccan terrorists aligned with the Islamic State terror group.

[ISIS claimed responsibility for the attacks in which assailants used a van to hit pedestrians in Barcelona's La Rambla Boulevard](#) and the coastal town of Cambrils.

On 17 August 2017, a 22-year-old Moroccan man drove a rented van into pedestrians along one of Barcelona's most iconic streets, Las Ramblas.

Thirteen people were initially killed and dozens of others injured, while a fourteenth victim died days later in hospital. After the initial rampage, the man abandoned the van and murdered another person to steal their car and flee the area on foot. Foreign tourists from Belgium, Germany, Italy and Portugal were also killed.

Just hours later, five other members of the IS cell carried out the second attack, 100 kilometres away in the coastal town of Cambrils. Several pedestrians were knocked down by their vehicle and a woman was stabbed to death. All the six terrorists were shot dead by the Spanish police.



### Plan to Bomb Sagrada Familia Basilica and Camp Nou



[Sagrada familia basilica Barcelona Wikimedia Commons](#)

A wide terror crackdown across Spain saw the arrest of terrorists and sleeper cell operatives. The arrested suspects revealed wider plans of the outfits to bomb some of Spain's most well-known monuments. The targets included the historic Sagrada Familia basilica and the Camp Nou stadium of Barcelona Football Club.



### More Terror Links Unearthed

The Spanish National Police arrested five suspected members of an Islamic State cell in 2021 from Barcelona and Madrid. All of the terror suspects were Algerian nationals, and were believed to have been planning a terrorist attack. Another Algerian man was arrested in Mallorca in 2021 by Spain's Guardia Civil intelligence service on charges of terrorism.

## Palestinian terrorist shoots 7 dead in 'murderous rampage' at Jerusalem synagogue

Source: <https://www.timesofisrael.com/five-wounded-in-suspected-shooting-attack-in-jerusalem-assailant-shot/>



Jan 27 – Seven people were shot and killed and at least three others were wounded in a terror shooting attack at a synagogue in Jerusalem's Neve Yaakov neighborhood, police and medics said Friday night. According to police, the terrorist arrived by car at 8:13 p.m. at the synagogue in the East Jerusalem neighborhood and opened fire at people outside the synagogue and other passersby.

He is believed to have waited outside the synagogue until Shabbat prayers ended, then opened fire on worshipers as they walked outside.

He then fled the scene by car toward the Palestinian neighborhood of Beit Hanina — several hundred meters away — where, about five minutes later, he encountered officers who were called to the scene.

Police said the terrorist — a resident of East Jerusalem — was shot dead after he exited the car and opened fire on the officers while trying to escape on foot. Get The Times of Israel's Daily Edition by email and never miss our top stories A handgun used in the attack was seized.

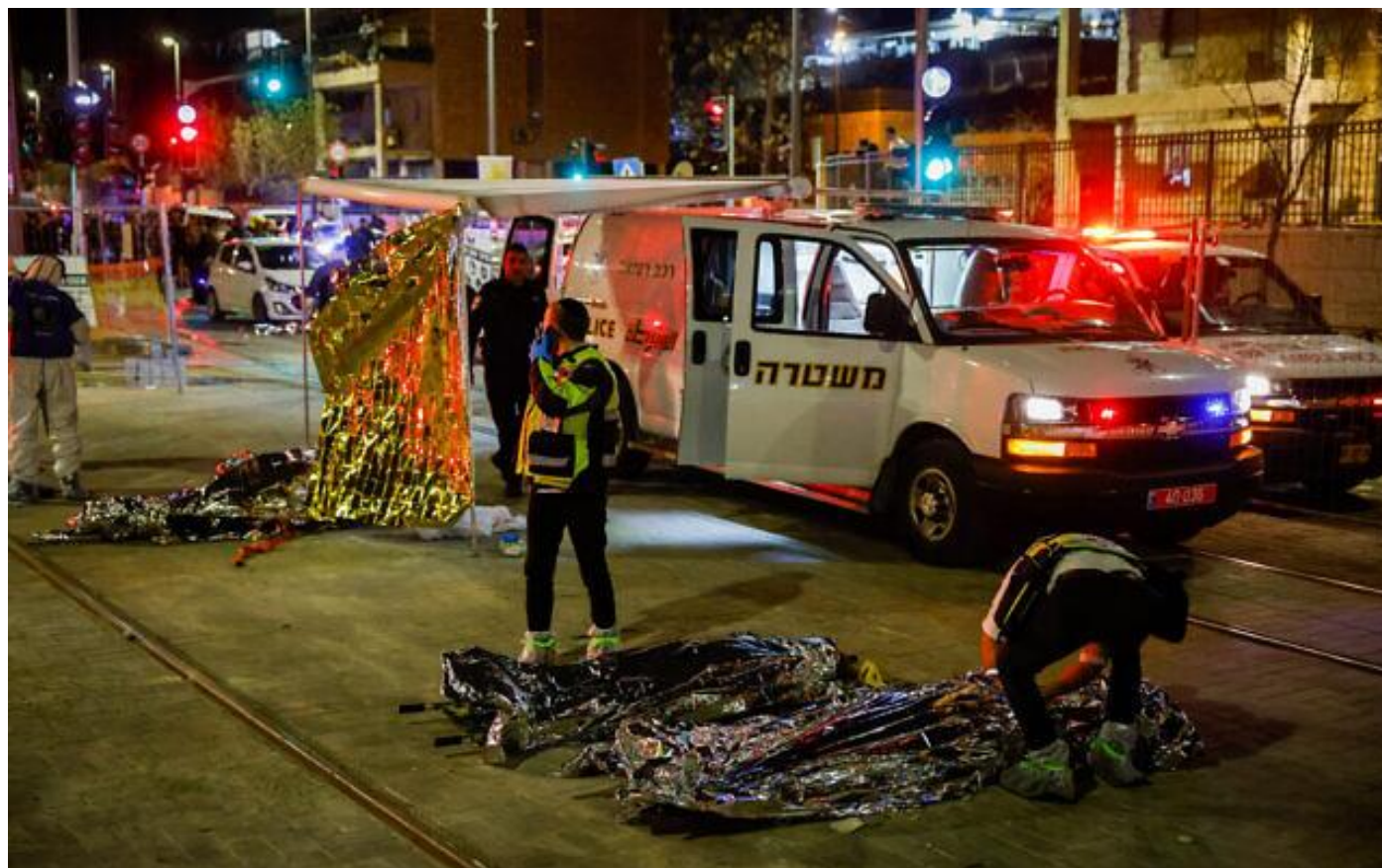


## ICI C<sup>2</sup>BRNE DIARY – February 2023

According to Channel 12 news, the terrorist first shot an elderly woman in the street, then encountered a motorcycle rider and shot him, before reaching the Ateret Avraham synagogue and opening fire at people outside.

The first Magen David Adom medic to arrive at the scene, Fadi Dekidek, said: "It was a very serious incident. We saw a woman and four men lying on the street. All had gunshot wounds and no signs of life."

Magen David Adom said its medics declared five victims dead at the scene, and another two victims were declared dead at hospitals in Jerusalem.



Security and rescue forces at the scene of a deadly terror shooting attack in Neve Yaakov, Jerusalem, January 27, 2023 (Olivier Fitoussi/Flash90)

Speaking to reporters from the scene, police commissioner Kobi Shabtai said the attack was one of the worst Israel had seen in years. "The terrorist shot at everyone he encountered. He got out of the car and began a murderous rampage with a handgun," Shabtai said.

Prime Minister Benjamin Netanyahu, speaking after visiting the scene, called the attack "one of the most severe we have known in years."

"Our hearts are with the families. I commend the police officers who took action so quickly," Netanyahu said. "We must act with determination and composure. I call on people not to take the law into their own hands."

He said the cabinet would convene on Saturday, adding, "We have decided on several immediate steps that will begin tonight."

The police officer who shot the terrorist met with Netanyahu at the scene.

"The vehicle stopped, the terrorist pulled out his weapon," the officer said. "I kept moving fast in his direction and closed in on him while he was firing at us."

"We stopped the patrol car, pulled out our weapons, the terrorist crossed to the other side. We fired on him and he fell. We moved in and saw that he was still moving and trying to turn around his weapon. We neutralized him," the officer said.

Bystander video published by Channel 12 was said to show the shootout between the police and the terrorist. With seven killed, the shooting in Jerusalem was the deadliest terror attack since 2011, when terrorists crossed into Israel from Egypt's Sinai Peninsula, killing eight Israelis. It was the deadliest



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Palestinian terror attack since 2008, when a gunman from East Jerusalem killed eight Israeli students at the Mercaz Harav yeshiva in the capital.

MDA said the dead were five men, aged 20, 25, 30, 50, and 60, and two women, aged 60 and 70.

The victims were not immediately named.

The wounded victims included a 15-year-old boy in moderate-to-serious condition, a 24-year-old man in moderate condition, and a 60-year-old woman, also in moderate condition.

The victims had been taken to the Hadassah Mount Scopus and Shaare Zedek hospitals.

Jerusalem District Police Commander Doron Turgeman, speaking to reporters at the scene, said the terrorist had acted alone.

Dozens of officers were dispatched to the scene, police said.

National Security Minister Itamar Ben Gvir, who is in charge of police, arrived at the scene of the attack, was briefed by police officers, and later accompanied Netanyahu when the prime minister arrived. Citizens at the scene shouted various comments at the minister; some called out "Death to terrorists."

"It's on your watch!" one man cried. "Let's see what you do now."



Muslim illegal immigrants at a detention camp in the Greek Island of Kos, celebrate for the attack ...

Defense Minister Yoav Gallant, who was in the United States for a personal trip, was to head back to Israel on Friday night following the attack, his office said. Netanyahu held an assessment with top security officials, before heading to the scene of the attack. Following the assessment, IDF chief Herzi Halevi issued instructions to bolster forces in the West Bank and along its security barrier, and to prepare for a potential escalation in the region.

Senior police officials told the Kan public broadcaster they would bolster forces across the country and especially in Jerusalem. They also said they were concerned about possible "price tag" revenge attacks against Arabs.

Local residents told Channel 12 news that it took 20 minutes for the police to arrive. "It's a disgrace," one anguished man said.

Police responded to the accusation by saying their records showed officers had arrived at the scene and killed the terrorist within five minutes of the first reports of gunfire. Shalom Borohov, a barber who lives near the synagogue, told AFP that after hearing gunshots he "went down to help people." "I saw the terrorist arriving with his car. He stopped in the middle of the junction, and shot from his car," continuing to shoot as people came to the scene, he said.

The terrorist was named by the Shin Bet security agency as Alqam Khayri, 21, a resident of East Jerusalem with no prior terror-related offenses. Police were reported to have been operating in the neighborhood of at-Tur, where Khayri reportedly lived. Palestinian media said the gunman's father was summoned by police for questioning.

Palestinian media reported that celebrations were held in the Gaza Strip and in several Palestinian cities in the West Bank following the deadly attack.

Friday's deadly attack came following days of violence in the West Bank and the Gaza Strip. Tensions have increased dramatically since Thursday morning, when an Israel Defense Forces raid in the West



Bank against a terrorist cell left nine Palestinians dead — most of them gunmen and members of the cell, though at least one civilian was also killed.

The IDF said Thursday's operation in the Jenin refugee camp was necessary to foil imminent attack plans by a local Islamic Jihad terror cell. The group had primed explosives and firearms, according to the IDF. Hamas praised Friday's attack as a response to Thursday's IDF operation, but no terror group took responsibility for it. Thursday overnight saw [rocket fire](#) from Palestinian terror groups in Gaza and Israeli retaliatory air strikes, though both sides appeared intent on avoiding an escalation into a full-scale war. Tensions were also high in Jerusalem and the Temple Mount on Friday, though Muslim prayers proceeded without issue.

## Afghanistan Terrorism Report: December 2022 to January 2023

Source: <https://www.counterextremism.com/blog/afghanistan-terrorism-report-december-2022-january-2023>

*Following is the December 2022 to January 2023 installment of "Afghanistan Terrorism Report." The authors provide a monthly analysis concerning the developing terrorist threat in Afghanistan as well as a comprehensive overview of that month's al-Qaeda and ISIS-K propaganda.*

Jan 27 – During the end of 2022 and the beginning of 2023, attacks by ISIS-K continued at a reduced level. A pattern of reduced violence during winter months is typical for Afghanistan. Harsh weather conditions hamper the ability of perpetrators to relocate to prepare and execute attacks. Nevertheless, during the reporting period, ISIS-K conducted four high-profile attacks in Kabul in quick succession. At the beginning of December, an attack targeted the Charge d'Affairs of the [Pakistani embassy in Kabul](#). During the second week of December, ISIS-K attacked a [hotel in Kabul](#), injuring several Chinese nationals. On January 1, 2023, ISIS-K targeted the entrance of the [military section of Kabul airport](#), killing nearly two dozen individuals and injuring around 30. Finally, an ISIS-K attack on the [entrance to the foreign ministry](#) in Kabul on January 11, 2023, killed many people.



Therefore, while the overall number of ISIS-K-claimed attacks decreased at the end of 2022, with these four high-profile operations in Kabul in the span of fewer than six weeks, the group was able to target several key interests of the Taliban regime successfully. On the one hand, it demonstrated to nations friendly to the Taliban regime, such as Pakistan and China, that the Taliban will continue to face significant challenges in providing security. On the other hand, with the attacks on the entrances of the military airport and the foreign ministry, ISIS-K signaled that even



hardened targets in the capital can be hit, albeit at their weakest point, the entrances, where employees often line up to present identification. ISIS-linked and pro-ISIS propaganda outlets highlighted these attacks with several posts, especially the Kabul hotel attack, since it was portrayed as taking action to fight the Chinese government, while the Taliban welcomed their investment, despite the persecution of the Uyghurs. The propaganda messages also highlighted the Tajik origin of two of the perpetrators in an apparent effort to signal that it is an ethnically broad-based entity in contrast to the Taliban regime, which is Pashtun dominated.

Finally, on January 4, 2023, the propaganda news outlet Amaq published an overview of all ISIS-claimed attacks in Afghanistan in 2022. The infographic claimed that the group conducted 181 attacks with 1188 victims. While it is difficult to verify these figures in detail, it is clear that ISIS-K remains a significant security threat in Afghanistan, albeit currently without the ability to [strategically destabilize](#) the Taliban regime. On the ideological front, ISIS-linked and pro-ISIS propaganda continued to attack the Taliban, highlighting factional infighting, corruption, and mismanagement, such as the current frequent [power outages in Afghanistan](#) and crimes allegedly committed by Taliban officials. One particularly gruesome example is ISIS propaganda reports at the beginning of January 2023, highlighting the attempted abduction of children by Taliban officials in Panjshir province, apparently resulting in the death of two young boys.

Interestingly, pro-ISIS propaganda took up the story of Taliban figures [purchasing Twitter checkmarks](#) in January 2023. Pro-ISIS users argued that this is not only an example of the Taliban's wasteful use of scarce resources but also an indication that the movement remains beholden to the U.S. Although this incident only involved small sums of money being forwarded by these Taliban figures to Twitter and despite these checkmarks being removed shortly afterward, this incident does display a shocking laissez-faire attitude of Twitter, a U.S. company, towards the implementation of U.S. and international sanctions, designed to constrain the Taliban regime. Allowing the receipt of what can only have been electronic transfers of money from prominent members of a U.S.-sanctioned entity on the [Specially Designated Nationals And Blocked Persons List \(SDN\)](#) by Twitter demonstrates either a severe failure of internal controls or the near complete lack of these. Pro-ISIS propaganda also emphasized the Taliban's decision in December to [ban women from universities](#), stressing that this will lead to a lack of female teachers, doctors, and nurses. Despite ISIS committing [horrific violations](#) of the basic rights of women, both during their so-called caliphate as well as in territories currently under the control of ISIS affiliates, such as the [Islamic State in West Africa Province \(ISWAP\)](#), pro-ISIS propaganda claimed that women have a central role in society and that the group maintained specific female educational institutions during the time of its so-called caliphate. Despite highlighting the issue of female education in several posts, unsurprisingly, pro-ISIS propaganda ignored the Taliban decree that banned Afghan women from working for [international non-governmental organizations \(NGOs\)](#). ISIS defines international humanitarian organizations as enemies and their [staff as legitimate targets](#). This new Taliban measure endangered the delivery of humanitarian aid to the Afghan population in the middle of winter. U.N. Secretary-General António Guterres immediately issued a [statement criticizing this decision](#) by the Taliban, which had forced several international humanitarian organizations [to suspend their activities](#) in the country. In January, some movement on this issue seems to have been achieved, with some international organizations [resuming their humanitarian work](#) in the country. It remains to be seen which concessions the Taliban received in exchange for allowing Afghan women to continue working for these international organizations.

Pro-ISIS propaganda rhetoric criticizing al-Qaeda and its affiliates seems to have become increasingly aggressive. While in early 2022, pro-ISIS propaganda [criticized al-Qaeda](#) and the al-Qaeda leadership for their support for the Taliban, in more recent posts, pro-ISIS propaganda defines al-Qaeda as apostates and highlights the parallels between the group and the Taliban regime. For example, the pro-ISIS Voice of Khorasan web magazine published a lengthy article highlighting what it calls the betrayal of [Abu Muhammad al-Golani](#), the leader of [Hayat Tahrir al-Sham \(HTS\)](#), the [al-Qaeda affiliate in Syria](#). So far, no reports have emerged that indicate that ISIS-K has begun targeting the [several al-Qaeda affiliated entities](#) that currently operate in Afghanistan or members of the leadership of al-Qaeda core residing in the country. However, the increasingly sharp ISIS-linked rhetoric against al-Qaeda may be an early indication that such attacks might become a possibility.

Finally, al-Qaeda's ambitions to strike Western targets remain undiminished. On December 26, 2022, the new al-Qaeda-linked web magazine One Ummah highlighted the current situation in Somalia, where al-Shabaab, the local al-Qaeda affiliate, is [increasingly aggressive](#) in its operations. Comparing the situation there with the withdrawal of international forces from Afghanistan, the magazine ominously declared that "the war is not over," highlighting the continuing threat emanating from al-Qaeda and its affiliates.

## Afghanistan Content Report

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2. *Pro-ISIS Online Chatter*





3. *ISIS Amaq Statements*
4. *Amaq Video Released December 26, 2022*
5. *Pro-ISIS Al-Adiyat Media Image Regarding December 12 Kabul Hotel Attack, Posted on December 21, 2022*
6. *Pro-ISIS Voice of Khorasan Web Magazine, Released December 19, 2022*
7. *Al-Qaeda English Edition One Ummah Magazine, Issue 5, Released December 26, 2022*

## Spain has convicted over 200 jihadists since the 2004 Madrid train bombing and has seen far fewer radical Islamic terror attacks compared to other European countries in recent years.

Source: <https://www.breitbart.com/europe/2023/01/28/spain-has-convicted-over-200-jihadists-since-2004-madrid-train-bombing/>

Jan 28 – Since 2004, Spanish authorities have arrested and convicted over 200 jihadists, which, according to a [report](#) from the newspaper *El Mundo*, perhaps explains the relatively low number of attacks in the country.

Spain has seen [comparably fewer](#) radical Islamic terrorist attacks compared to other major European countries, such as France and Germany, with the last attack taking place in 2017 in Barcelona, in which 13 people were killed and 130 others were injured.

The deadliest, however, was the 2004 Madrid train bombings which saw al-Qaeda-linked terrorists murder 193 people and injure a further 2,000, making it one of the deadliest attacks in Europe since the start of the millennium.

While some criminal proceedings have often led to acquittals of those involved, experts in counter-terrorism believe that the cases have still managed to hinder those who may have possibly engaged in terrorism.

Spain has also amended laws and the penal code to allow terrorist sentences to be applied to those who were simply radicalised but had not carried out an attack or even taken real steps to carry one out.

Despite this claimed success, earlier this week, a Moroccan knifeman [killed one person](#) after committing attacks against two different Roman Catholic churches in Algeciras on Wednesday night. Investigators are still trying to determine if the attacker had been motivated by radical Islamic extremist ideologies.

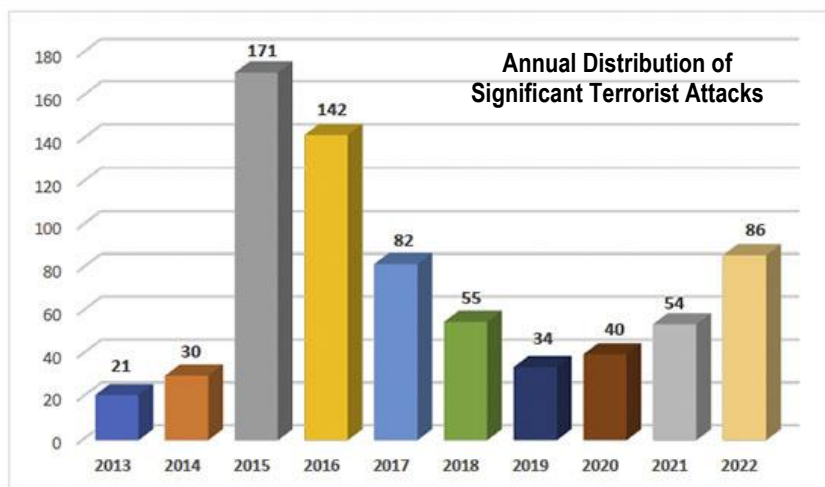
The attacker, 25-year-old Moroccan citizen Yasmine Kanjaa, targeted clergymen in the churches, killing sacristan Diego Valencia and injuring several others, including a priest who was stabbed in the neck and shoulder.

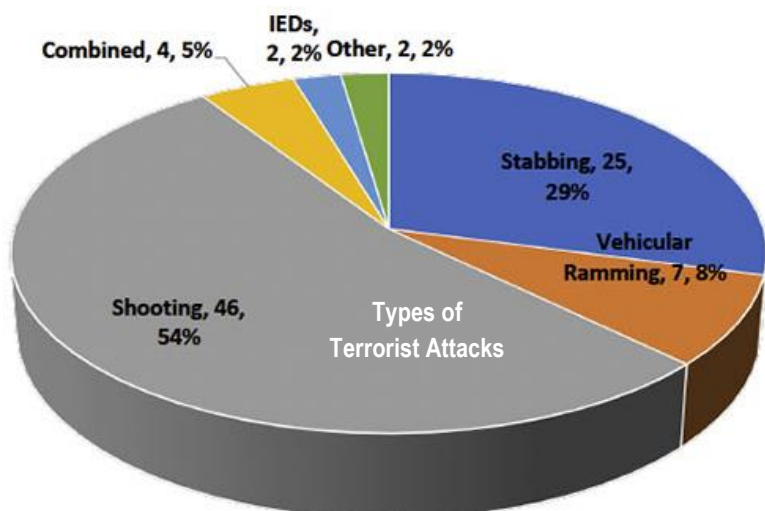
**If the attack is determined to be Islamic terrorism it would be not only the first terror attack in Spain since 2017 but would also be the first “lone wolf-style attack” that has become common in neighbouring France and in Germany.**

## Palestinian Terrorism Against Israel, 2022: Methods, Trends and Description

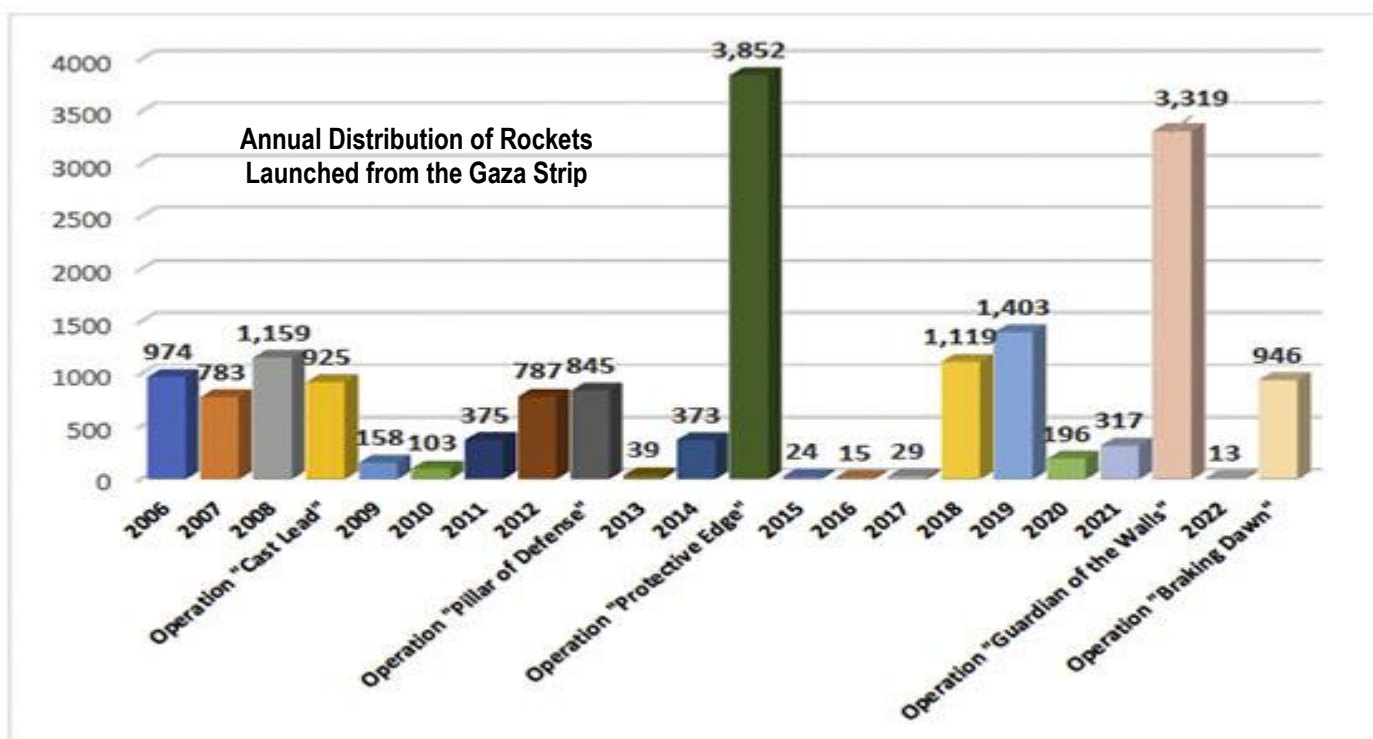
Source: <https://www.terrorism-info.org.il/en/palestinian-terrorism-against-israel-2022-methods-trends-and-description/>

Jan 29 – In 2022 there was a substantial rise in the number of Palestinian terrorist attacks against Israel. Eighty-six significant attacks were carried out, up from 54 in 2021, 40 in 2020, 34 in 2019 and 55 in 2018; 16 of the attacks were carried out inside Israeli territory (one in 2021). Thirty Israelis were killed (24 civilians and six members of the security forces). One Border Police fighter was killed in an operational activity in Samaria. In 2021 three civilians were killed. Sixteen terrorist attacks were carried out inside Israel. There were 46 shooting attacks (the deadliest form of attack) during the year, 54% of the total number (12 in 2021). There were 25 stabbing attacks, 29% of the total (30 in 2021). Seven were vehicular ramming attacks and four were combined attacks. In addition, according to official sources, there were about 3,000 instances of rock-throwing (about 7,600 according to the IDF) and about 500 instances of Molotov cocktail-throwing (about 1,200 according to the IDF).





One round of fighting was conducted in the Gaza Strip, Operation Breaking Dawn, in August 2022. During the Operation 946 rockets and mortar shells hit Israeli territory. Eleven rockets were fired from the Gaza Strip before the Operation and two after, a total of 959 rockets and mortar shells. Therefore, with the exception of Operation Breaking Dawn, the annual trend was towards a decrease in rocket attacks. The number of terrorist attacks from the Gaza Strip targeting the Israeli communities near the border security fence also declined significantly, and there were almost no instances of the so-called “controlled violence” (return marches, IED and incendiary balloon launching, night harassment unit activities).



► Read the full report at the source’s URL.

## Terrorism: At least 59 people died in a suicide attack in a mosque in north-west Pakistan

Source: [https://www.pentapostagma.gr/kosmos/7147954\\_pakistan-anebainei-o-tragikos-apologismos-apo-ti-bombistiki-epithesi-kamikazi-se](https://www.pentapostagma.gr/kosmos/7147954_pakistan-anebainei-o-tragikos-apologismos-apo-ti-bombistiki-epithesi-kamikazi-se)

Jan 30 – At least 59 people [update: 100 – mostly policemen] died in a suicide attack in a mosque in north-west Pakistan. Around 150 [update: 170] believers were injured in the attack in the city of Peshawar, said hospital representatives from the German Press Agency. The attack occurred in a high-security zone, which also includes many police buildings. Initially, no group claimed responsibility for the attack. At the end of last year, however, the Pakistani Taliban - which are independent of the Islamist Taliban government in neighboring Afghanistan - canceled a ceasefire with the government in Islamabad. Since then, they have claimed several attacks for themselves.



A police officer who survived the attack during midday prayers told Pakistani TV station Geo News: "It was a powerful explosion. There was smoke everywhere."



Rescuers tried to free the people trapped under the rubble. At the time of the attack, around 300 believers are said to have stayed there. "Everyone is afraid here" The attack reminded an officer in the city of conflicts of the past. "God forbid, I'm afraid those horrible days are back," said Amjad Khan. "Everyone is afraid here." After the attack, hospitals called for blood donations. The majority of the victims were police officers, it said from the clinics. It was one of the deadliest attacks against Pakistan's security forces in recent years. In Pakistan, the vast majority of the population of more than 230 million people is Muslim. About two million people live in the city of Peshawar. Prime Minister Shehbaz Sharif condemned the attack during a visit to a local hospital. "Terrorists want to create fear by targeting those who have a duty to defend Pakistan," he said. Interior Minister Rana Sanaullah announced an investigation. The German ambassador in Pakistan, Alfred Grannas, also condemned the attack. US Secretary of State Antony Blinken expressed his condolences to the bereaved. "Terrorism, for any reason, anywhere, is unjustifiable," Blinken wrote on Twitter. The United Nations condemned the attack "in the strongest possible terms". "It is particularly despicable that such an attack took place in a place of worship," said UN Secretary-General António Guterres. Freedom of religion, freedom of belief and the ability to worship in peace are fundamental human rights. Peshawar has been the target of deadly attacks in the past Peshawar in the border province of Khyber Pakhtunkhwa was a region of unrest in Pakistan for a long time - after a military offensive against Islamist terrorist groups in 2014, things have calmed down. In recent years, however, there have been more attacks there. It was not until March 2022 that an IS terrorist militia blew himself up in Peshawar, killing more than 60 people. The tense security situation in Pakistan has also been felt in the capital Islamabad in recent months. There were numerous checkpoints and increased military presence in the metropolis. The TTP is an umbrella organization of militant Islamist groups that is said to have several thousand fighters. The military expelled them to Afghanistan between 2008 and 2014. Since the Afghan Taliban took power in Kabul, the TTP has regrouped in its former strongholds on the Afghan border.



**EDITOR'S COMMENT:** The attack is the deadliest in Peshawar since the twin suicide bombings at the All Saints Church in September 2013, which were the deadliest attack on Pakistan's Christian minority.

## Protecting cultural monuments against terrorism

By Bruno S. Frey and Dominic Rohner

*Defence and Peace Economics* | Volume 18, 2007 – Issue 3; Pages 245-252

Source: <https://www.bsfrey.ch/wp-content/uploads/2021/08/protecting-cultural-monuments-against-terrorism.pdf>

Famous cultural monuments are often regarded as unique icons, making them an attractive target for terrorists. Despite huge military and police outlays, terrorist attacks on important monuments can hardly be avoided. We argue that an effective strategy to discourage terrorist attacks on iconic monuments is for a government to show a firm commitment to swift reconstruction. Using a simple game-theoretic model, we demonstrate how a credible claim to rebuild any destroyed cultural monument discourages terrorist attacks by altering the terrorists' expectations and by increasing the government's reputation costs if they fail to rebuild.

## Space Terrorism Future Trends Analysis

By Chris Flaherty

Source: <https://spaceanddefense.io/space-terrorism-future-trends-analysis/>



Sept 2021 – This Space Terrorism Future Trends Analysis looks at Space Terrorism incidents that have occurred since 1972, as the basis of a future trends prediction. This paper will start with a fictional account of a kinetic attack on the Earth's Satellite Layer in Low Earth Orbit, that has been identified as the most extreme terrorist act that current literature on Space Terrorism can predict. The mock-scenario is used to illustrate the likely scale, and potential limitations of such an attack taking place, and is suggested as a potential Space Security wargaming scenario.

### A KINETIC ATTACK SCENARIO

The following scenario envisages a well-funded extremist collective called 'God's Justice for Earth's Poor'. Envisaged as a mix of various known extremist-conspiratorial groups and militias that currently exist, this could be an interfaith-based ideology strongly oriented towards conspiratorial and extreme beliefs broadly characterised as anti-capitalist-elites, anti-world government and anti-technology. They are multi-national, funded by donations from a variety of wealthy conspiratorial believers in the West. The group have found safe-harbour in an equatorial located collapsed state, in an environmentally devastated desert region, where they have occupied an re-engineered a former insurgency tunnel system. The tunnels have been turned into a rocket building factory. The group has



designed a rudimentary small-lift launch vehicle (based on various designs for a) three-stage 25 meters tall rocket, with a first stage diameter of two meters, tapering at its upper stage to 1.5 meters, with a payload of under 250 kilograms. It is able to carry its payload up to around 300 kilometres in Low Earth Orbit. The rockets are simple stainless steel fabrication, using old rocket engine components, and 3D-printed copies of well-known designs from some of the World's most successful Space Launch Companies. The fuel type is also easy to collect and store, such as a kerosene liquid oxygen mix. Some of the technician-workers are former Space Industry employees, and recent converts. The plan is to launch several rockets from tunnels, where the group have excavated-out launch pits, or use converted flatbed trucks carrying launch rigs. Not all the rockets are expected to work, however the more that can be launched in a salvo the greater the odds, for a successful set of detonations in Space. The rockets are rudimentary and closely related to the old Soviet SCUD-like ballistic missiles. The programmed rockets are designed to fly into Low Earth Orbit, and detonate simple explosive warheads that are packed with large tungsten balls. The group's plan is to introduce several debris clouds into Low Earth Orbit, with the potential to destroy satellites. However, their real aim is leveraging popular culture fears creating global financial and political panic. The group also intend to pirate several communications satellites where they will broadcast as long as possible globally their beliefs and claims. Claiming that the attack on the Earth's satellites is punishment for global capitals' system of control, and the preserve of Space for the wealthy, at the expense of the World's poor.

This scenario is guided by the immense technological complexity for creating an actual guided ASAT – seen as the high-mark of Space Weaponization threats, and which has been largely rejected as a plausible Space Terrorist scenario (Coleman, 2017; Bernat, 2019). As an alternative, a relatively crude and low-tech solution has been substituted using a SCUD-like ballistic missile, seeking to create a set of bursts in Space presenting an indiscriminate threat to the Earth's Satellite Layer (Miller, 2019). This is based on the following scenario:

*“Attacks on satellites with SCUD-like ballistic missiles that do not have homing capabilities would have low probability of success, and would be limited to only the lowest altitude satellites. Such an attack with a conventional warhead containing shrapnel would need to place the debris cloud in the direct path of the satellite. This would require fairly precise tracking – a capability available only to highly sophisticated militaries.” (Federation of American Scientists)*

However, it should be noted that a low-tech scenario for satellite tracking was demonstrated in the 1950s, in the United States, that: *“proved that this required only a minimal technology approach: amateur satellite observers used stopwatches, sky maps, personal computers and sometimes binoculars to determine satellites' orbital elements. Hence, tracking can be done using common and inexpensive electronics with minimal training. This is in line with U.S. Undersecretary of State Robert Joseph's concern about non-governmental satellite observers tracking satellites and posting their orbits on the internet, which can possibly ... [be]... used by terrorist organizations.” (Remuss, 2009)*

Another scenario has been provision from a rogue government, or conversion of an existing craft:

*“In addition to a State producing and furnishing a terrorist group with an Anti-Satellite Weapon ... the development of a delivery system by a terrorist group on its own through conversion of either an anti-ship cruise missile or a small airplane or by building a cruise missile themselves is also feasible.” (Remuss, 2009)*

The scenario envisaged in this paper, has its fictional terrorist group largely replicating typical small-lift launch vehicles and launch pads. Not unlike that being currently developed by a number of Space Launch Companies.

## SPACE TERRORISM

Since 1972, there have been several terrorism, and piracy incidents that can be linked to the Space Industry, and these are set-out in **Table 1: Space Terrorism and Piracy Incidents List (1972 – 2018)**. While some of these incidents are historically known events, others in particular the hacking events are disputed. Britain's Ministry of Defence denies its military communications satellites were hacked in a 2002 incident (CNET, 2002).

Broadly, the following trends can be identified: (1) Murder and kidnap threats (1972); (2) Space Agency bombing (1984); (3) Multiple hacking incidents (1999-2018); (4) Launch pad attack (2003); and, (5) Letter-correspondence threatening terror attacks at a Space research organization facility (2013). The trend pattern so far tracks with the historical transition of terrorism and extremist violence that has progressed from murder, kidnaping, and bombings; to more recent widespread use of cyber-attacks, hacking and pirating communications.

Acts of possible sabotage have been claimed in Space Terrorism literature, in relation to the 2015 twenty-year-old U.S. Air Force Defence Meteorological Satellite Program Flight 13(DMSP-F13) craft explosion. The event was attributed officially by United States authorities to a power failure, and minimized the events significance (Bernat, 2019). It has been claimed that the public delay in admitting the incident was an attempt to hide an, *“actual act of sabotage ... Of course, for obvious reasons, it is difficult to determine what truly happened.” (Bernat, 2019)*



## ICI C<sup>2</sup>BRNE DIARY – February 2023

A scenario commonly identified in the Space Terrorism literature, is where an entity or group acting illicitly, get a commercial launch provider to put a satellite into orbit, for what would otherwise be a legitimate Space Industry activity. This situation was claimed in the case of,

*“the launch of four rogue satellites on Indian PSLV launch vehicle on 12 January 2018.” (Bernat, 2019)*

The satellites belonged to Swarm Technologies – a Space start-up based in California. The company had originally been denied placing them in orbit, the:

*“denial of the experimental license was based on concerns the satellites were too small to be effectively tracked by the U.S. Military’s Space Surveillance Network (SSN), which provides safety of flight information to other operators. Subsequent to the unlicensed launch, the FCC revoked another Swarm license for a planned upcoming launch on Rocket Lab’s Electron in April 2018. As of March 23, 2018, neither Swarm nor any of its known investors have commented on the situation.” (Christensen, 2018)*

A basic question licence denial instances raise is that of forum shopping. This is where an entity or group are able to find a launch provider in another country, or through third-parties, and get access to a launch with little in the way of international scrutiny. It has been noted that:

*“If it was possible for an American company to place in the orbit unlicensed satellites, it seems, that any other agent, including weak actors adversaries ... could do the same.” (Bernat, 2019)*

**TABLE 1: SPACE TERRORISM AND PIRACY INCIDENTS LIST (1972 – 2018)**

1	1972	The Black September Palestinian Group threatened an attack against the Apollo 17 mission, specifically to murder or kidnap the crew or their families.
2	1984 (3 August)	Two days before the launch of an Ariane satellite, the French left-wing group Action Directe bombed the European Space Agency’s Paris headquarters, injuring six people. Hackers seized control of a British military communications satellite with a home computer.
3	1999 2002: The same/similar incident is reported.	The same/similar incident was also reported having effected one of the satellites in Britain’s Skynet system, which delivers communications services to the Royal Air Force and other armed forces units, seized by hackers over a weekend. The British government was then the victim of an alleged blackmail threat following the attack.
4	2002 (June)	China’s Falun Gong Spiritual Movement overrode the broadcast signals of nine China Central Television stations and 10 provincial stations and replaced the programming with their content
5	2003	NASA increased security for the Columbia shuttle launch, out of concern that al-Qaeda would attack the launch pad because of an Israeli astronaut on the flight.
6	2004	China’s Falun Gong Spiritual Movement disrupted AsiaSat signals for four hours.
7	2006	Mobile satellite communication signal provided by Thuraya Satellite Telecommunications was jammed from three widely-separated locations inside Libya. Sri Lanka’s Tamil Tigers: Liberation Tigers of Tamil Eelam (LTTE) hacked-hijacked the Intelsat Ltd. Intelsat-12 satellite in geosynchronous orbit, and used a vacant Ku-band transponder to broadcast-beam their propaganda into Sri Lanka and across the Indian subcontinent without Intelsat’s knowledge for over a year. Intelsat continuously tried to interrupt LTTE’s pirating. However, the LTTE was able to continue its satellite piracy for two years. Intelsat decided to shut down the satellite transponder in late April, 2007.
8	2005–2007 (April)	
9	2010 (October) 2011 (September)	NASA computers experienced more than 5,400 incidents of malicious software or unauthorized access, in some cases described as having full control over those networks.
10	2013	A letter threatening terror attacks was found at an Indian Space Research Organisation facility in Bangalore, India.



11	2015	The European Space Agency was hacked by the group Anonymous, resulting in the leak of thousands of credentials.
12	2015	An Indian Space Research Organisation computer was infected with malware, which could have given hackers control of rocket launches and satellite separation.
13	2018 (Admitted). Events prior to 2011.	Insurgency used jamming during Operation Iraqi Freedom (2003-2011). Deliberately jammed commercial satellite communications links used by the U.S. military.

Terrorists and extremist use of Space, in the Space Terrorism literature has also been raised in relation to the problem of Shutter-Control. The problem is with the proliferation of quality real-time intelligence from remote sensing satellites operated by commercial entities, for which there is little regulation nationally, or internationally (Townsend, 2021). It could be argued, terrorists and extremist could source Commercial Satellite Imagery informing their targeting, planning and post-attack assessment processes. This scenario was identified in the early 2000s:

“A terrorist organization could also use commercial images to learn exactly where the troops of a target state are and how their facilities (embassies, military bases, etc.) are laid out. A terrorist attack on the model of the attack of the American vessel USS Cole in the port of Aden in October 2000 could be organized using Space imagery.” (Nardon, 2002)

### CONSPIRACY AND SPACE TERRORISM

At one end of the spectrum, there are acts of violence made against the Space Industry, seeking to attack its launches, and launch facilities. This includes the Space Agencies as another government target. The early actual terrorist threats were part of the wider Israeli conflict, or an extension of violent radical agendas pursued in France – European Union, or India (See TABLE 1). While, at the other end of the spectrum there is a terrorist or extremist aim at disrupting, or stopping activities in Space per se. Which has led to one of the few actual definitions to emerge in the Space Terrorism literature; and it relates to,

“an act of violence by one or more individuals or groups to prevent the development of a Space settlement(s) and/or their aims including those of a Spaceship or Space Station during Man’s exploration of Space” (Cain, 2016; Bernat, 2019).

However, other Space Terrorism literature authors, have sort to widen the definition of:

“Space Terrorism as a purposeful and well thought-out act of destruction against Human and/or material resources of Space Industry undertaken by individuals or groups out of ideological motivation, where Space Industry is understood as an economic sector dedicated to producing components that go into Earth’s orbit or beyond, delivering them to those regions, and related services.” (Bernat, 2019)

Problematically, these definitions are largely underpinned by the ‘rational actor’. Current Space Terrorism literature tends to identify terrorist and extremist actions as largely driven by ‘rational ends’ (Miller, 2019). While the out-come aspects of the definitions are not in dispute, it can be argued that there is also a significant irrational aspect which needs to be considered – the role of conspiracy thinking as a motivation for Space Terrorism.

From around 2016, one of the most common conspiracy theories found in tabloid reporting, YouTube, Twitter, and various other forum involved the failure of a NASA-SpaceX mission:

“Several conspiracy theorists have taken to Twitter today to explain their bizarre theories. One user tweeted: ‘NASA don’t exist. Gov did it fake every time. They were having issues with green screen this time and hence they postponed the launch.’ Another wrote: ‘I watched the live feed for 5 hours and they didn’t launch ... Clearly they were trying to find a way to fake it just like they did the Moon landing! Be better NASA.’” (Best, 2020)

Older beliefs involving the launch failure of a rocket, had led commenters on a Space news and blogging site, claiming the explosion was the result of snipers or drones with lasers (Shear, 2016). Others claimed that, ‘it was a secret attack by aliens, which they claim can be seen in the footage from the failed launch.’ (Liberatore, 2016) Interestingly, in the conversation-comments section, in regards to an aerial phenomenon seen around a 2020 launch, one individual claimed:

“It will be a type of drone scanning the rocket for nuclear weapons, if the scan proved positive the rocket plus nuclear load would have been neutralised.” (Jackson, 2020)

This belief in rocket launches are being used to send weapons into Space, is not far from the QAnon belief contained in the infamous 2018 anti-Semitic conspiracy theory claiming ‘powerful Space lasers were used to start the California Camp wildfires’. Suggesting in this case powerful business interests were financing these Space-Based weapons (Dutton, 2021).

More recent trends in Space Industry conspiracy can be found in the case of the well-published issues that SpaceX has been having with the U.S. Federal Aviation Administration (FAA) over the problem-launches experienced by the Starship prototypes (SN8 and SN9). As the saga was being reported, almost



immediately on various Social Media Channels there was a proliferation of theories espoused by people in the comment section, that the 'FAA was being paid-off to slow the progress of SpaceX' (YouTube Video, 2021). Some adherents claimed involvement from rival Space Industry players further elaborating the conspiracy beliefs. Comments claiming these beliefs, also began to move rapidly from claimant to out-right advocacy. The shift from claimant to advocacy on the part of a favourite company, or celebrity boss, is significant as it also starts the process where 'enemies' are being identified, in this case: the FAA, U.S. Government, and powerful rival economic interests – all seeking to stop the progress of the anticipated colonisation of Mars. Enemy identification (and its advocacy), could also be seen emerging in the comments on a YouTube livestream channel. A somewhat exasperated commentator alluded to people in the online comments-discussion posts making references to the 'Lizard people' as somehow linked to the launching problems (YouTube Video, 2021). The distinctly QAnon meme of 'Lizard people' being espoused, illustrates the interpretive shift that can occur where individuals use the opportunity to articulate their individual beliefs, and create conspiratorial slurs against perceived 'enemies' in this case the FAA. Problematically, these comments – just talk – also start to shift towards a set of constructs increasingly being seen as the actual basis for potential future terrorism.

## CONCLUSION

The common mistake in building a Space Terrorism threat analysis, is to focus on outlandish beliefs – dismissing these as: 'is this what people actually believe (or say these things)'. Instead, viewed in terms of Attractor Analysis, the question becomes: what is the focus of a belief? In the examples given, the long-standing belief is an antagonism aimed at NASA, claiming it to be behind the 'Moon Landing Hoax'. This connects to a much more corrosive political belief in the untrustworthiness of government. In the past, the themes of alien attacks, abductions, UFO coverups, and a secret government, have all largely fallen outside the actual realm of Space Terrorism. The actual attackers have been history's conventional terrorists, such as: the Black September Palestinian Group; or, the French left-wing group Action Directe, who identified as Libertarian Communists, who formed an urban guerrilla organization, committing assassinations and violent attacks in France between 1979 and 1987. Whereas, China's Falun Gong Spiritual Movement, and Sri Lanka's Tamil Tigers: Liberation Tigers of Tamil Eelam (LTTE), largely sort to utilize the existing national satellites in their own countries as a means to communicate their message. In other cases, terrorist groups have used satellite telecommunications in conjunction with the Hawala: an ancient system of fund transfers based on trust (Feldman, 2006). Rogue attacks from Libya, or hackers, largely fall into attempts at denial of service attacks and have a largely profit motive, seeking to extort money. Whereas Insurgency actions use denial of service attacks to frustrate rival militaries. A terrorist and extremist focus on the Space Industry as a cause celebre has only recently materialized. Conspiracy advocates have been traditionally marginal elements, that in terms of actual real-world terrorism, and extremism resulting in violent attacks have been non-existent. The dramatic rise in violent conspiracy attacks since the start of the pandemic, over 2020, and 2021, has been aimed at technology such as the 5G networks, and have been anti-government, and anti-security/policing attacks. There is a considerable belief system – that is historically rooted in popular culture, seeing the Space Industry as the mega-hub of all conspiracies. This paper began with an imagined terrorist collective attempting to build and launch SCUD-like ballistic missiles into Space in an attempt to interfere with the Earth's Satellite Layer. This fictional account has been proposed as a means to question one of the current assumptions made by the Space Terrorism literature that ultimately terrorists and extremists will have the same capabilities as any other Space Force, acquiring ASAT technology as a means to launch a direct attack on a satellite. That scenario could only be accomplished with the aid of a rogue state, as a type of third-party deniable strategy to inflict a military loss on the United States, or any other of the Space fairing countries. It is contended that this is not the only scenario, as a low-tech strike may in fact be a more likely event, conducted by a group who fall well outside the conventional terrorist model, and who are not motivated by real-world political aims; but are simply intent on 'burning the current order down'.

Chris Flaherty is a Space & Defense Tech and Security News Regular Contributor.

## Tehran Expands Military Presence in Latin America, Challenging the U.S.

By Benjamin Weinthal

Source: <https://www.meforum.org/64107/tehran-expands-military-presence-in-latin-america>

Feb 01 – The United States is tracking warlike announcements by Iran's regime that it deployed two military ships to Brazil that are also headed for [the Panama Canal](#), where Tehran declared it will establish a military presence.





## ICI C<sup>2</sup>BRNE DIARY – February 2023

A U.S. State Department spokesperson told Fox News Digital on Tuesday, "We are aware of these claims by Iran's navy. We continue to monitor Iran's attempts to have a military presence in the Western Hemisphere."

The Iranian regime-controlled news outlet Tehran Times reported Saturday that "Iran's 86th flotilla warships is now sailing along the western shores of [Latin America](#), the Navy second-in-command said."



The Iranian naval ship Makran, Iran's largest warship. The Makran and another ship are reportedly on their way to dock in Rio de Janeiro, Brazil

Fox News Digital learned on Tuesday from a Western security source that Iranian warships have not yet docked in Brazil.

Sen. Marco Rubio, R-Fla., told Fox News Digital in a statement that "Iran's growing presence in the Western Hemisphere should come as no surprise as the Biden Administration has a history of appeasement and engaging with authoritarian regimes. Tehran's ability to expand its military presence in our hemisphere should be a warning sign, especially as it seeks to support the left-wing Marxist regimes that will undermine peace and stability throughout the region."

Rep. Maria Elvira Salazar, R-Fla., told Fox News Digital, "Iran has been aggressively strengthening its ties to the Western Hemisphere through like-minded socialist regimes in Venezuela, Nicaragua and Cuba. They are also looking for opportunities elsewhere, and it's no coincidence that Iranian ships are docking in Brazil just a month after a socialist retook power in the country."

She added, "Instead of supporting the Iran-friendly socialist and left-wing regimes in Latin America, the Biden administration should be strengthening political forces committed to keeping our hemisphere free of antisemitic terror."

[Iran's regime](#) has been classified by successive administration's as the world's worst state-sponsor of international terrorism.

In early January, the commander of the Islamic Republic's navy, Rear Adm. Shahram Irani, told the Iranian regime-controlled Fars News, "We have been present in all the strategic straits of the world, and we have not been present in only two straits — in one of which we will be present this year, and we are planning to be present in the Panama Canal."

The clerical regime's military interference in the vital Panama Canal shipping transport passage could damage U.S. trade and rattle the global economic market. A staggering 16 percent of the world's shipping fleet is registered in Panama, according to deadweight tonnage.

The Tehran Times reported that Iranian Rear Adm. Hamzeh Ali Kaviani told the U.S.-sanctioned Iran news outlet Press TV that the flotilla of warships will dock in [Rio de Janeiro in Brazil](#). Kaviani added that "Iran's military might is increasing day to day despite all the pressures against the Islamic Republic over the past 43 years."



The Iranian regime paper added that Kaviani said the navy's 86th flotilla includes the Dena and Makran and that Dena is a Mowj-class warship that has been part of Iran's navy since June 2021: "The military vessel is reportedly equipped with anti-ship cruise missiles, torpedoes and naval cannons," wrote the news outlet. "Makran is a forward base ship weighing 121,000 tons. The warship can carry five helicopters and is employed for providing logistical support for the combat warships."

The same Western security source told Fox News Digital that Iran doesn't have a growing military presence in Central America. However, the same source said noted concern about Iran's desire to project power into the Americas and that governments around the region need to be engaged regarding Iran's destabilizing international role.

Mojtaba Babaei, a spokesperson for the Iran mission at the [United Nations](#), told Fox News Digital that the "Iranian navy presence in international waters is in accordance with international laws and to gain knowledge, experience and increase capabilities, not against any country."

The Consul General of Panama in New York told Fox News Digital that the Fox News query was sent to the Panamanian Ministry of Foreign Affairs for a response. The Consul General of Panama sent Fox News Digital a link to a statement from Panama Foreign Minister Janaina Tewaney.

"It is not true that we support terrorism," Tewaney said in response to former Florida Republican Gov. Jeb Bush's opinion article in the Washington Post in January.

Bush, who is an advisory board member of United Against Nuclear Iran, wrote that Panama "has been instrumental in the [Iranian] regime's continued survival" and that Panama is "strengthening Iran by helping it to circumvent sanctions." Bush also said Panama aids Iran's oil smuggling.

Fox News Digital sent numerous press queries to the Brazilian government regarding Iran's plans to dock warships in their ports, but as of press time no response was given.

The new Brazilian president, [Luiz Inacio Lula da Silva](#), met with an Iranian delegation led by the country's vice president during his inauguration ceremony last month.

[Benjamin Weinthal](#), a Middle East Forum writing fellow, reports on Israel, Iran, Syria, Turkey and Europe for Fox News Digital.

## ISIS calls for attacking Christians around the world, especially in Europe

Source: <https://www.terrorism-info.org.il/en/isis-calls-for-attacking-christians-around-the-world-especially-in-europe/>

In the last few days, ISIS's media elements launched an incitement campaign calling for terrorist attacks against Christians around the world. The announcement of the campaign followed the burning of a Quran in Sweden by Rasmus Paludan, a Danish-Swedish politician and leader of a far-right party, in protest against Turkey and Islam.

As part of the campaign, which is intended to encourage ISIS operatives to carry out attacks, videos and posts calling on the operatives to carry out attacks around the world, especially in Europe, were distributed on social media. It should be noted that there has been a significant decrease in ISIS's activity in Europe in recent years. In 2022, ISIS operatives did not carry out attacks in Western countries and there were not even attacks



inspired by ISIS. In 2021, only two ISIS-inspired attacks were carried out.

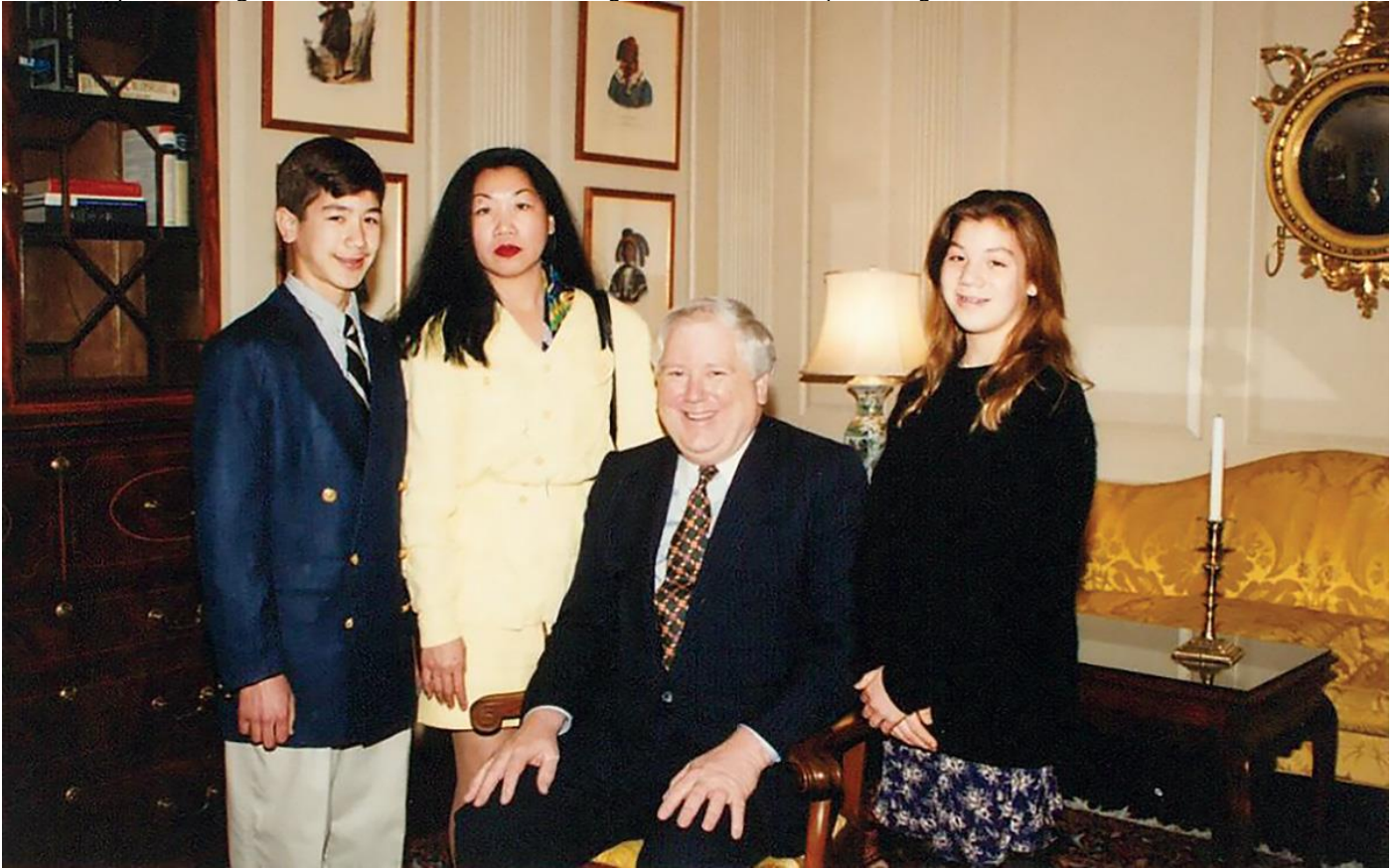
Furthermore, in view of the campaign, it can be seen that the activity of ISIS's media network is becoming more decentralized than before and that unofficial media arms of the organization's supporters around the world are playing a more central role at the expense of the organization's official media network.



## When Terror Strikes Home: Covering Our Children While Protecting All Americans

By Kenneth M. Quinn

Source: <https://afsa.org/when-terror-strikes-home-covering-our-children-while-protecting-all-americans>



In 1995, at the ceremony where he received the Arnold Raphel Award, Ambassador Kenneth Quinn poses with his wife, Le Son, and two of their children, Kelly and Shandon. (Their son Davin was at college and thus not able to attend the ceremony.) Shortly after, they traveled to Cambodia for his posting. Courtesy of Ken Quinn

Of all the horrible images and tragic stories to emerge in 2022, the combat-style attack on Fourth of July parade attendees in Highland Park, Illinois, stands out for me. The assailant in this merciless act aimed to exact lethal casualties, stirring memories of what I had witnessed as a Foreign Service officer on the battlefield in Vietnam in the late 1960s. But it was the picture of little 2-year-old Aiden McCarthy wandering about in bloodied clothes, saved from death by being covered by his father's body, that prompted a particularly vivid recollection from my Foreign Service career: In 1997, in Cambodia, my wife and I had a very similar terror-filled experience, covering our children.

### A Meeting with Terror in Phnom Penh

It took place shortly before the Fourth of July in 1997, when I was serving as American ambassador in Cambodia. With the end of the school year in the U.S., my wife, Le Son, and our three teen and tween children had just arrived in Phnom Penh so we could spend the summer months together.

After a long period of violence, Cambodia now seemed to be at peace. The Khmer people, who had suffered so incomparably under the genocidal Khmer Rouge (almost 2 million of the total population of 7 million had perished under the draconian rule of Pol Pot) were slowly recovering under a United Nations–supported peace process and a new democratically elected coalition government, all put in place with critical U.S. involvement across the George H.W. Bush and Bill Clinton administrations. As deputy assistant secretary in State's Bureau of East Asian and Pacific Affairs, I had bridged those two political leaderships and was now in Cambodia to carry forward the support of the new government.

That night, however, the cease-fire that had provided a several years' respite from the two-decade-long civil war, abruptly ended as fighting broke out between the two main political factions that militarily occupied



villas on Norodom Boulevard in the heart of the capital city. Our ambassadorial residence was right next to one of those heavily fortified villas, with sandbagged fighting positions manned by armed troops right outside the walls of our residence.

The first salvo was the firing of a rocket that, without any warning, struck our residence, blowing in the windows and narrowly missing the room where we were all gathered to watch a movie. Had the rocket struck just a few feet differently in either direction, it would likely have wounded or killed us all.

This explosion, which shook the house and shattered the windows, was instantaneously followed by an outbreak of automatic weapons fire surrounding the house. Suddenly, our residence was engulfed in an intense firefight. The incessant gunshots from just outside our walls were so loud and numerous that the sound permeated the entire house, bringing terror and the threat of imminent death directly into the family room.

In those few seconds I acted on instinct, following a deeply embedded parental impulse. Pulling our three children to the floor, my wife and I desperately covered them with our bodies. Now, even 25 years later, my clear recollection is of lying there and praying, as I had never prayed before, begging God to allow any bullets that came into our home to kill me and not our children. It was the moment when I fully understood just how much I loved my children, how absolutely ready I was to give my life to save theirs. I have to believe that Kevin and Irina McCarthy made that same desperate supplication right before they died in Highland Park.

Miraculously, none of us were harmed by that initial fusillade. As all this was transpiring, I almost simultaneously followed another instinct, this one inculcated by my experiences as deputy chief of mission in the Philippines during coup attempts against the government of President Corazon Aquino: the need to address the security of all Americans in the country.

### **Terror as an Occupational Hazard**

Physically covering our children while lying on the floor, I reached up to grab my radio that linked me to my senior embassy staff. With it, I issued the order to activate our consular warden network to alert all American citizens to urgently take shelter and avoid moving about the city. Keeping the radio in place near one ear with one hand, I used my other hand to dial the phone number of the State Department's 24-hour Operation Center (which I had memorized) to report our precarious security situation. Our perilous situation was further exacerbated by the absence of any Marine Security Guards; we were literally a Benghazi-like embassy.

As the shooting began to subside, we moved the children to a more secure location inside the house, where any bullet would have to go through several walls to reach them. I then turned to the urgent need to get the two Cambodian factions to stop shooting. No one in the Cambodian government was answering their phones, so I had to cross Norodom Boulevard and get to the home of the interior minister. Waiting for a pause in the gunfire, I raced across the street and banged on the front door. I exhorted the minister, whose reception area looked like a war command center, to try to connect with his counterpart and get their troops to stop shooting. While I was there, he got through; and soon they agreed to halt the hostilities and exchange a liaison person to facilitate communications.

Over the next days and weeks, however, mutual suspicion and antagonism grew, and the threat of renewed warfare persisted. When the situation completely broke down and open warfare was again waged in the center of the capital city, our small embassy earned special recognition for our actions.

One of our first steps was providing interim protective arrangements for all Americans in the city by renting the ballroom of the Cambodiana Hotel. Remembering the lesson I learned in Manila, that we had to have such a place during the fighting, I beat the French ambassador in leasing the space in the most secure area in town. It served as a safe haven for more than a thousand of our citizens along with embassy families and nonessential staff while we worked to successfully evacuate almost all of them from the country.

In the absence of virtually all the local hotel staff, who deserted as the fighting intensified, my wife, Le Son, and our 12-year-old daughter, Kelly, worked in the kitchen helping prepare and serve food for their fellow American citizens. They were evacuated to Vietnam with the last tranche of American citizens. During the days of July 5 and 6, the situation in the city became increasingly untenable, as marauding military units roamed about, and artillery shells struck randomly, including near the embassy, badly shaking the structure every time. Having sent all but the most essential personnel to the relative safety of the Cambodiana Hotel, we were down to a skeleton staff. I had given the order to destroy all of our classified paper records and was preparing to break up the secret codes in our communications room, the last step before abandoning the embassy completely.

### **A Diplomat's Job**

It was then that two phone calls came to me. One was about a group of Mormon missionaries who were trapped amid the fighting going on near the airport. They had no way out and were desperate for evacuation.



No sooner had I hung up when another call came, from a Cambodian American who had been serving as a minister in the government



but was now caught up in the internecine warfare. He was trapped in a construction project somewhere near the airport but would not disclose his exact location for fear that the phone call was being monitored, and he would be tracked down and killed.

In 1998, at the Royal Palace in Phnom Penh, Ambassador Kenneth Quinn (at right) meets with King Norodom Sihanouk about steps to take to encourage some candidates from the Royalist political party to return to Cambodia and contest the national election, an approach that was successful. Courtesy of Ken Quinn

He tearfully asked me to call his wife in Bangkok and say goodbye for him. As the battery on his cell phone was running down, we were suddenly disconnected. Not having any U.S. Marines or any other armed security force at the embassy, I

thought there was only one thing I could do. Grabbing one embassy officer to go with me, we took my Chevrolet Impala, which served as the ambassador's "limo" and, unfurling the American flag on the front fender, drove toward the airport where black smoke rose and the sound of automatic weapons filled the air.

Driving through roadblocks and around troop formations, we arrived at the Mormon mission where the group leader rushed out and told me he had never been so glad to see the American flag in his life. With their safety assured, I continued driving toward the area where I believed the Cambodian American government official was hiding. Weaving around tanks and past advancing troops with the sound of gunshots resonating, I kept calling his number on my cell phone, leaving messages urging him to run out and jump in the car. But he never answered, and I could not tell if he had even been able to hear my messages. Eventually, we gave up and turned back to the embassy.

A few hours later, I went over to the hotel where hundreds of Americans were gathering. As I walked into the lobby with several of my interagency staff, many of our fellow citizens began clapping in appreciation for all that we had done to keep them safe. While I felt good that so many Americans had been able to be kept safe from the fighting, I still was despondent that I had not been able to help that one political leader.

But then I looked up, and there he was—a big, burly Cambodian man walking down the corridor toward me. I rushed up to him expressing amazement that he was alive and safe.

"I came looking for you and was afraid that you had been killed," I said.

"I know you did," he replied. "I saw you, but I didn't dare run out."

And then, contrary to all usual interpersonal aloofness that characterizes cultures in Southeast Asia, he stepped forward and threw his arms around me. Hugging me, he said something that I will never forget: "Now I know what it means to be an American."

### Lessons Learned

Eventually, we evacuated more than 1,000 Americans from Cambodia and had the satisfaction of knowing that we did not have one citizen hurt, wounded, or killed. A few months later, after the fighting had subsided and Americans could return to the country, a man who said he was from Salt Lake City came to the embassy and asked to see me. When I expressed puzzlement about why he was there, he explained that he had been sent by the Church of Jesus Christ of Latter-day Saints to thank me for "your heroic efforts" to ensure that the Mormon missionaries in Cambodia were safe.

I expressed appreciation for his message but explained that it was just part of the job being an American diplomat. We are employed to advance and protect America's interests and its citizens around the world, often in difficult and dangerous circumstances. Our career grants us a front-row seat to the making of history, and it also exposes us to potentially life-threatening challenges. Indeed, I was shot at, wounded, or under death threat in every foreign assignment I had during my three-decade Foreign Service career.

We learned another valuable lesson from our experience in Phnom Penh: When a violent political crisis is over, it really isn't over. Two years later, in 1999, our now high-school-age daughter and I arrived in Des Moines, Iowa. Having retired from my 32-year diplomatic career, I was about to take up leadership of the World Food Prize Foundation. Kelly was preparing to start training with her high school swim team.

One evening right around July 4, as she and I were sitting at home, we were suddenly transported back two years by a rat-a-tat-tat-tat sound that almost perfectly replicated those automatic weapons firing on



that night in Phnom Penh. As we both instinctively dove to the floor, we locked eyes, and I said: “I think it’s firecrackers going off for the Fourth of July ...”

On every future Fourth, when they hear the sound of firecrackers going off, I imagine everyone caught in that Highland Park mass shooting will be painfully transported back to those terror-filled moments they experienced in 2022.

**Kenneth M. Quinn** served as U.S. ambassador to the Kingdom of Cambodia from 1996 to 1999. During a 32-year Foreign Service career, he was assigned for five years in Vietnam during the war, at the National Security Council, and as deputy chief of mission in the Philippines during two coup attempts. He received the State Department’s Award for Heroism and is the only three-time recipient of the AFSA awards for intellectual courage and dissent. He is president emeritus of the World Food Prize and resides in Des Moines, Iowa.

## Sub-Saharan Africa is ‘new epicenter’ of extremism, says UN

Source: <https://apnews.com/article/islamic-state-group-politics-organized-crime-africa-098f5a2cf237f92d3d1217fade5caf0b>

Feb 07 — The new global epicenter of violent Islamic extremism is sub-Saharan Africa where people are increasingly joining because of economic factors and less for religious ones, says a new report by the U.N.’s international development agency.

A significant increase of 92% of new recruits to extremist groups are joining for better livelihoods compared to the motivations of those interviewed in a previous report released in 2017, according to the UNDP report released on Tuesday.

Many Africans’ lives have been badly affected by the COVID-19 pandemic, high inflation, and climate change, said the report.

There has been a 57% decrease in the number of people joining extremist groups for religious reasons, it said.

Nearly 2,200 people were interviewed for the report in eight African countries: Burkina Faso, Cameroon, Chad, Mali, Niger, Nigeria, Somalia, and Sudan. More than 1,000 interviewees are former members of violent extremist groups, both voluntary and forced recruits, said the report.

At least 4,155 attacks across Africa were documented since in 2017, said the report. In these attacks, 18,417 deaths were recorded in the continent with Somalia accounting for the largest number of fatalities.

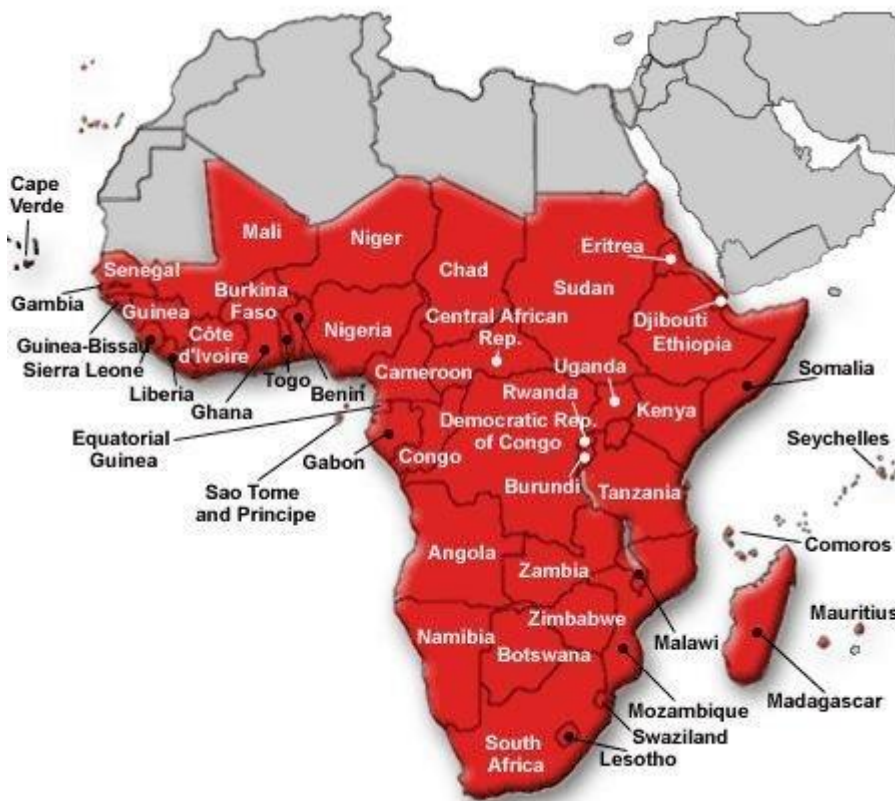
The Somali government is currently carrying out what has been described as the most significant offensive against the al-Shabab extremist group in more than a decade.

Those interviewed were drawn from various extremist groups across the continent including Boko Haram in Nigeria, al-Shabab in Somalia, which pledges allegiance to al-Qaida, and in West Africa Jama’at Nusrat al-Islam wal Muslimeen, or JNIM, which is allied to the Islamic State group.

“Sub-Saharan Africa has become the new global epicenter of violent extremism with 48% of global terrorism deaths in 2021,” UNDP administrator Achim Steiner said in a press briefing ahead of the report’s launch.

This surge in extremism in Africa “not only adversely impacts lives, security, and peace, but also threatens to reverse hard-won development gains for generations to come,” he said.

Military campaigns to stamp out extremism are not proving to be successful, said Steiner.



“Security-driven counter-terrorism responses are often costly and minimally effective, yet investments in preventive approaches to violent extremism are woefully inadequate,” he said. “The social contract between states and citizens must be reinvigorated to tackle root causes of violent extremism.” About 71% of those who joined extremist groups were influenced by human rights abuses by state security forces, such as the killings or arrests of family members, said the report.

Security forces in some sub-Saharan countries have been accused of brutality and extrajudicial killings and weak judicial systems give victims little hope for justice, it said. Nigeria’s Boko Haram and its offshoot, the Islamic State in West Africa Province, have grown in influence by using money to entice impoverished communities, Hassan Chibok, a community leader in Nigeria’s Borno state where the conflict is concentrated told The Associated Press in a separate interview. Those who left the extremist groups cited unmet expectations, particularly the lack of sustained financial benefits, and an absence of trust in extremist leaders as their main reasons for quitting. “Research shows that those who decide to disengage from violent extremism are less likely to rejoin and recruit others,” said the report. “This is why it’s so important to invest in incentives that enable disengagement,” said Nirina Kiplagat, a UNDP specialist in preventing violent extremism in Africa. “Local communities play a pivotal role in supporting sustainable pathways out of violent extremism, along with national governments’ amnesty programs.”

The UNDP report recommends better basic services including child welfare, education, and quality livelihoods to prevent people from voluntarily joining extremist groups. It also urged the creation of more exit opportunities and investment in rehabilitation and community-based reintegration services.

**EDITOR’S COMMENT:** This is where most illegal immigrants to EU are coming from. It is easy for terrorists to infiltrate and arrive to destination target

## ISIS Vows to ‘Soon Take Revenge’ for Quran Burning While Urging ‘Strategic’ Use of ‘Blood, Corpses, and Killings’

By Bridget Johnson

Source: <https://www.hstoday.us/featured/isis-vows-to-soon-take-revenge-for-quran-burning-while-urging-strategic-use-of-blood-corpses-and-killings/>

Feb 07 – Arguing that “propagandist mills... such as BBC, CNN” wrongly accuse the terror group of killing innocent people, a new ISIS magazine vows that they will “soon take revenge” for recent Quran desecration in Sweden and the Netherlands while acknowledging ISIS terrorists’ “comparatively long interval between two successive slashes of this sword.”

The 51-page issue of *Voice of Khurasan*, published by ISIS Khorasan Province’s Al Azaim Foundation for Media Production, traditionally focuses heavily on regional and Middle East issues including Taliban rule, religious conflicts in India, and what they see as apostate leaders and westernization in Gulf countries — decrying in the latest issue a “growing ‘interreligious’ frenzy” and slamming promotion of “peace, love, tolerance, common values, multiculturalism, diversity, and the other ‘nice’ terms” as “the LGBT-etc. ‘army’ is slowly gaining ground.”



An ISIS bomber depicted in ISIS-K's *Voice of Khurasan* magazine. (ISIS)

The new issue includes an article criticizing Qatar for hosting a World Cup that included “unveiled women featured as referees and receptionists at the stadiums” and promoted “the deceptive concepts of ‘pluralism’ and ‘coexistence.’”

It also includes a full-page graphic illustrating “Just Terror” — ISIS’ term for independent acts of jihad — “in the recent times across Europe and America.” The graphic included the names of the perpetrators, photo, death toll, and a short description of the 2015 San Bernardino attack, 2015 coordinated Paris attacks, 2015 Paris market attack, 2016 Berlin Christmas market attack, 2016 Brussels bombings, 2017



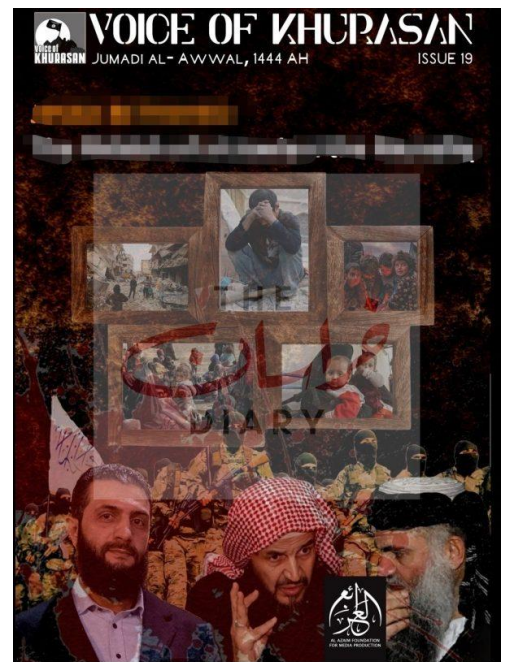
Barcelona vehicle attack, 2017 Manchester Arena bombing, 2017 Manhattan vehicle attack, and the 2017 Orlando “mass shooting on gay homosexual night club.”

The first article in the issue focuses on attacks targeting the West and declares that Muslims are being “forcefully fed... the sleeping pills of tolerance” while acting “weak” in response. The image leading the article shows Rasmus Paludan, leader of far-right Danish party Stram Kurs, burning a Quran in front of the Turkish Embassy in Stockholm. Photoshopped over the image is a depiction of a hooded figure with a backpack full of explosives.

ISIS-K said that last month’s Quran burning by the “mentally retarded... kafir [disbeliever]” was a “symbolic event” that “answers to a lot questions, as the secular West is being gradually shifted from their so called religious tolerance to far right extremism.”

The terror group called for a need to “figure out the zealous youth with the iron-hard determination of bringing back the glory of the Ummah [Muslim community],” praising the “lions of Islam” who attacked *Charlie Hebdo* magazine in 2015 for its depictions of Muhammad as well as the attack on the Hypercacher kosher supermarket in Paris two days later and the 2016 airport and train station coordinated attacks in Brussels.

“Just as these infidels were not safe from our sharp knives of revenge yesterday, they will never be safe today,” the ISIS magazine declared, acknowledging the lack of recent major attacks in adding that “the only factor that makes the infidels forget the impact of this blessed sword of justice is the comparatively long interval between two successive slashes of this sword.”



Later in the issue, an article criticized “multi-billion dollar projects” in the West “to demonize jihad” and jihadists as “dreaded terrorists.” The magazine called it “essential that we take a pause from the West controlled media that feed our thought process 24x7” and analyze whether “blood, corpses, and killings constitutes terrorism and mischief on the land or not.”

“Spilling the kuffar’s blood on account of the kufr they profess is absolutely sanctioned” but “the killings and the bloodshed should not be reckless, and it has to be as per political and military strategy envisaged by the strategists of the Islamic State in respective Wilayat [provinces],” ISIS-K argued.

“Know that we use this bloodshed (handful of kuffar) as a strategic tool ... not to spread

mischief on the lands, as being made to believe by the propagandist mills of kuffar, such as BBC, CNN, and other kufri media of the world, under their loud and empathy invoking cries of ‘killing of innocents,’” the article continued. “May be, those being killed are innocent in the religion of America, but in the religion of Allah, they are all criminals of higher degree with their destiny the Hellfire.” The piece concludes with the line “So, what are you waiting for now?” followed by drawings of a rifle cartridge, grenade, handgun, knife, Molotov cocktail, rifle, and hazmat mask.

A separate page in the magazine directly addressed the incidents of Quran desecration — Paludan’s Quran burning and, days later, Dutch far-right Pegida leader Edwin Wagensveld tearing pages out of a Quran near the Dutch Parliament and stomping on them — and said they will “take revenge from such scoundrels by separating their flesh from their bones and spilling their blood” with an “aim to avenge the despicable and blasphemous actions of the infidels of the whole world.”





“However, you might have deemed these strange mujahidin of the Islamic State weak due to their lack of possibilities and equipment apparently, but they are so rich with the wealth of faith and zeal that they are not in need of anything except Allah Almighty,” the statement added. “Therefore, we assure all the disbelievers and their guardians that, bi’dhnullah, we will soon take revenge from you.” The terror group also floats their own vaccine conspiracy theory in a piece that decries the International of Committee of Red Cross, claiming that “within the framework of these donations and humanitarian aid, part of which is the medicine and vaccination program, they distribute such harmful drugs in the name of vaccines and other charity drugs that all people have been informed about the harm of these drugs. If those are really vaccines of paralysis (like Polio), as they claim, then what is the reason for running such vaccination programs only on the poor Muslims in the third world countries?!”

With a similar style to the *Dabiq* and *Rumiyah* English-language magazines that used to be published by ISIS during the “caliphate” heyday in Iraq and Syria, *Voice of Khurasan* is now on its 21st issue.

In September, the magazine referenced the August execution of a search warrant at Mar-a-Lago and the reactions of former President Trump and Donald Trump Jr. in [declaring](#) that the United States has descended into a “banana republic” ripe for an “Islamic storm” in the terror group’s favor.

The terror group has also sounded off on other U.S. domestic matters. In the July *Voice of Khurasan* [issue](#), ISIS-K called mass shootings and other gun violence in America “tit for tat” and an “unwanted’ population control program” that, despite the motives of white supremacist or grievance-driven domestic shooters, is divine retribution for the U.S. war on terror.

In a May [issue](#), the magazine invoked hot-button elements of the western culture war and talking points arising from debate over issues including sex education, LGBT acceptance and the teaching of evolution as the group argued that “democracy and all that emanates from it is retarded and perverse” and attempted to woo recruits to their extremism.

ISIS-K has also published an [article](#) promoting the spread of disinformation as a “duty” of jihadists in order to deceive and ultimately divide their foes and a tactic that should be considered “part of the war policy,” as well as a [piece](#) urging a concerted focus on “social media warfare” as critical to advancing on the ideological battlefield and countering the pull of “enchanted” social media influencers.

**Bridget Johnson** is the Managing Editor for Homeland Security Today. A veteran journalist whose news articles and analyses have run in dozens of news outlets across the globe, Bridget first came to Washington to be online editor and a foreign policy writer at The Hill. Previously she was an editorial board member at the Rocky Mountain News and syndicated nation/world news columnist at the Los Angeles Daily News. Bridget is a terrorism analyst and security consultant with a specialty in online open-source extremist propaganda, incitement, recruitment, and training.

## Review of UK Prevent strategy to call for more focus on Islamist terrorism

Source: <https://www.theguardian.com/uk-news/2023/feb/07/review-of-uk-prevent-strategy-to-call-for-more-focus-on-islamist-terrorism>

Feb 07 – A long-awaited report on the government’s counter-extremism programme is expected to call for its focus to shift more towards Islamist terrorism instead of rightwing terrorism.

Wednesday’s publication of William Shawcross’s review into Prevent follows months of delays caused by ministerial tussles over redactions and the language in the report, sources said.

Organisations blamed for promoting alleged extremist narratives while taking money from Prevent will be named, while the report will say they have benefited from taxpayers’ money.

It is also expected to say the programme focusses too much on the mental health and “vulnerabilities” of those referred to it. Counter-terrorism officials tell the Guardian mental health has been a huge growth factor in those people reported to Prevent.

The Guardian [disclosed in May](#) that the review claimed there has been a “double standard” approach to tackling different forms of extremism, with individuals targeted for expressing mainstream rightwing views because the definition of the extreme far right had been expanded too widely, while the focus on Islamist extremism has been too narrow.

One Whitehall source with knowledge of the report said there was a concern in government that legitimate rightwing views, such as concern about the scale of immigration, could be viewed as a sign of extremism.

The number of referrals to Prevent relating to far-right extremism exceeded those for Islamist radicalisation for the first time in 2021.

Referrals for far-right threats from the Prevent programme to Channel, which provides more intensive intervention, had already outstripped Islamist radicalisation since 2020.



<b>P</b>	<b>Promoting</b> Equality and Diversity and Positive Communities and British Values	<b>P</b>
<b>R</b>	<b>Referring</b> any concerns via the Safeguarding Team email <a href="mailto:safeguardingteam@walsallcollege.ac.uk">safeguardingteam@walsallcollege.ac.uk</a> to relevant authorities	<b>R</b>
<b>E</b>	<b>Educating</b> students on how to keep themselves safe via induction and tutorials	<b>E</b>
<b>V</b>	<b>Valuing</b> the contribution students make to our College community	<b>V</b>
<b>E</b>	<b>Environment</b> - a safe & secure environment (including the online and social media environment)	<b>E</b>
<b>N</b>	<b>Networking</b> with other agencies who can help to support students who may be at risk	<b>N</b>
<b>T</b>	<b>Training</b> students and staff to raise awareness of the signs and risks	<b>T</b>

Prevent receives £40m to help steer people away from extremism. A review was ordered after [the Guardian revealed](#) that the terrorist who murdered Sir David Amess had been referred to the programme several years earlier, but then plotted his attack in secret. Shawcross, an author and the former chair of the Charity Commission, was seen as a controversial choice to head the report when it was announced four years ago, leading to a boycott of his review by independent groups including Amnesty International. He had previously said that Europe's relationship with Islam was "one of the greatest, most terrifying problems of our future. I think all European countries have vastly, very quickly growing Islamic populations."

He had also defended the use interrogation techniques, including waterboarding, that are widely regarded as torture, as well as the detention of suspected al-Qaida militants at Guantánamo Bay. More than 450 Islamic organisations, including 350 mosques and imams, boycotted the government's review of the anti-radicalisation programme. Many did so because of Shawcross's involvement. Since the summer of 2021, the review has been at the centre of a Cabinet tussle between Suella Braverman and Michael Gove amid a series of damaging leaks. Shawcross blames some organisations and individuals for promoting extremist narratives, it is claimed. The numbers of young men referred for trivial incidents had overwhelmed Prevent and left the authorities struggling to identify those who did pose a threat, the report is expected to say.

Counter-terrorism officials say that people referred to Prevent increasingly have an ideology that is hard to discern, or are just attracted to violence. The latest official figures for Prevent show that in the year to March 2022 there were 6,406 referrals, up 30% on the previous year. This is thought to be largely due to the lifting of pandemic restrictions with most referrals – 36% – coming from education. Most cases were sent to other services. In the end 13% – 804 cases – were adopted by the scheme known as Channel, which deals with individuals thought to be at greatest risk of committing violence.

The Home Office said: "There were more adopted cases for individuals referred for concerns related to extreme rightwing radicalisation (339; 42%) compared [with] individuals with concerns related to Islamist radicalisation (156; 19%)."

## Why is Prevent downplaying the threat of Islamism?

By Rakib Ehsan

Source: <https://www.spiked-online.com/2023/02/11/why-is-prevent-downplaying-the-threat-of-islamism/>

Feb 11 – [The independent review into the Prevent de-radicalisation programme](#) published this week has confirmed what many have long suspected – that Britain's counter-extremism programme is simply not fit for purpose.

The review, authored by former chair of the Charity Commission William Shawcross, states that Prevent is 'out of kilter' with the rest of the counter-terrorism system. Prevent is meant to safeguard people from



becoming terrorists or supporting terrorism. Yet, as the review shows, it is failing to focus on the main source of terrorist activity – namely, Islamist extremism.

In the [year ending 31 March 2022](#), the percentage of cases referred to Prevent following concerns over Islamist-related radicalisation was just 16 per cent. Meanwhile, the percentage of cases referred to Prevent involving concerns over extreme right-wing radicalisation stood at 20 per cent. This is completely at odds with the relative threats posed by Islamist and extreme right-wing terrorism. Indeed, 80 per cent of the Counter Terrorism Policing network's live investigations are Islamist-related, while only 10 per cent of the investigations are associated with far-right extremism. Clearly, there is a fundamental mismatch between the ideological composition of cases referred to Prevent and the true nature of the terrorist threat in the UK.

One explanation for this mismatch might lie in where these referrals are coming from. For the year 2021-22, 36 per cent of referrals to Prevent were from the education sector, and 11 per cent from the healthcare sector. Given both sectors are dominated by those with 'progressive' biases, it is not unreasonable to suggest that they are more comfortable making referrals over suspected right-wing extremism than Islamism. Perhaps those involved fear being accused of racism or Islamophobia should they raise concerns about Islamist radicalisation.

The Shawcross review also emphasises the importance of promoting social cohesion. It says that schools have a responsibility to promote a sense of community and the 'fundamental British values of democracy' – the rule of law, individual liberty and mutual respect and tolerance of all beliefs and faiths. But this responsibility is being undermined by the predominant worldview of schoolteachers. Too often their commitment to identity politics comes at the cost of cultivating a sense of social solidarity at their own institutions.

The review states that 'a more cohesive, fair and liberal society is worth striving for'. This echoes the sentiments of former counter-terrorism policing chief Neil Basu, who in 2017 noted the growth of [segregated and isolated communities](#) across Britain with alarm. According to Basu, these communities are breeding grounds for extremism and terror-related activity.

As I point out in my [new independent report](#), we need a 'liberal-conservative compromise' when it comes to social integration and community cohesion. That means recognising the value of our diverse society, while, at the same time, actively promoting and conserving classically 'British values', including respect for the rule of law, democratic choice and freedom of association.

The costs to society of failed integration and weak social cohesion are high. The disorder in Leicester last autumn, in which mobs of largely Hindu and Muslim men fought running battles, was a case in point. The trouble in Leicester showed what happens when weak local leaders fail to integrate new and emerging communities in deprived parts of a city into a cohesive whole. It provides the ideal breeding ground for religious extremists and sectarian ideologues.

The Shawcross review serves as a timely reminder of the work still to be done on matters of security and cohesion in modern Britain. There are far too many public institutions that pander to identity politics and bestow a status of victimhood on those who are wholly undeserving of it.

If too much of our public-sector infrastructure, from health to education, continues to elevate politically correct imperatives over the security of our communities, then British citizens will continue to pay a grave price.

Rakib Ehsan is the author of the forthcoming book, *Beyond Grievance*, which is available to [pre-order on Amazon](#).

## Terror threats against Sweden increase

By Charles Szumski (Brussels Reporter for EURACTIV France)

Source: <https://www.euractiv.com/section/politics/news/terror-threats-against-sweden-increase/>

Feb 09 – Terrorist threats against Sweden have increased, the Swedish Security Service warned in a press release on Wednesday, citing the burning of the Quran outside the Turkish embassy in February as one of the main reasons.

According to intelligence services, Sweden is now more of a target of violent extremism than ever before.

**"The recent trend of threats against Sweden and Swedish interests is serious and affects Sweden's security. The Swedish Security Service is seeing an increase in the number of terrorist threats in the intelligence flow," Säpo pointed out.**

"The Swedish Security Service works closely with national and international partners in our efforts to protect national security and assesses the threat on an ongoing basis. The situation following recent events is problematic," the press release added.



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The increase in threats was triggered by the burning of the Quran outside the Turkish Embassy in Stockholm last month by Rasmus Paludan, a Danish-Swedish far-right extremist.

The burning led to massive demonstrations across the Muslim world from Istanbul to Jakarta, souring relations with Turkey, which now refuses to accept Sweden's NATO bid.

Turkish President Recep Tayyip Erdogan even demanded Sweden amend its legislation on freedom of expression to make Quran book burning an offence. "I cannot go into the nature of the threats. When it comes to the threats, it is mainly the violence-promoting Islamist environment that is targeting us," Fredrik Hallström, the head of the counter-terrorism at Säpo, told *SVT Nyheter*.

The war in Ukraine, as well as international rumours surrounding Swedish social services allegedly being involved in the illegal separation of children from their parents, also contributed to the increase in threats, Hallström added.

Still, the terror threat level in Sweden remains unchanged despite being at an elevated three on a five-point scale.

"It has been at an elevated level for some time. The assessment includes the risk of attacks," said Hallström adding that if Sweden were to face an increase in threats and the security situation were not to change in the long term, the terrorist threat assessment could be reassessed.

### Brief: The Philippines on the Verge of Victory Against Abu Sayyaf

*Terrorism Monitor Volume: 21 Issue: 3*

By Jacob Zenn

Source: <https://jamestown.org/program/brief-the-philippines-on-the-verge-of-victory-against-abu-sayyaf/>



(Wesmincon) head, Arturo Rojas, the fact that Abu Sayyaf took no hostages in Mindanao in 2022 indicates that the group is now "a thing of the past" ([rappler.com](https://www.rappler.com), January 4). Also reflecting the progress made against Abu Sayyaf was U.S. Secretary of Defense Lloyd J. Austin III's visit to Mindanao on February 1. Secretary Austin met with the U.S. Special Operations Task Force operating on the island and "highlighted the interoperability of the U.S.-Philippine alliance", citing the "successes we've had with counterterrorism cooperation" ([defense.gov](https://www.defense.gov), February 1). Secretary Austin emphasized that "more than hundreds of Abu Sayyaf and terrorist jihadists have already surrendered, and they're are now leading a peaceful life" and highlighted the U.S.'s contribution to the defeat of Abu Sayyaf and other Islamic State (IS)-loyal militants in a months-long battle in 2017 around the city of Marawi ([defense.gov](https://www.defense.gov), February 2).

The rise in the number of Abu Sayyaf militants surrendering also points to the group's demoralization. On January 14, for example, five Abu Sayyaf members surrendered, turning over their weapons and ammunition and accepting interrogation. They were

#### Abu Sayyaf militants surrender via Benar News

Feb 09 – Abu Sayyaf's origins date to the period after the Soviet army left Afghanistan in 1989. However, its most lethal attacks began occurring in the years surrounding 9/11 and reached a peak in the 2010s. The U.S. designated Abu Sayyaf as a terrorist group in 1997. Now, more than 25 years later, the Philippines has gained the confidence to declare victory against the group ([fas.org](https://www.fas.org), October 21, 2003). According to the Western Mindanao Command



then aided by the Municipal Social Welfare and Development Office to receive social services, financial assistance, skills training, and other support generally given to surrendered Abu Sayyaf members ([pna.gov.ph](http://pna.gov.ph), January 14). In addition, they received health and medical assistance from U.S. troops at Camp Navarro, the main site of Secretary Austin's visit ([manilatimes.net](http://manilatimes.net), January 24). This approach is intended to encourage additional members of Abu Sayyaf to surrender and utilize the country's de-radicalization and reintegration programs. Only one week before the five Abu Sayyaf members surrendered, another commander who was loyal to IS, Majid Said, also surrendered alongside two dozen of his fighters and his deputy ([rappler.com](http://rappler.com), January 9). In the long-run, these surrenders could lead to the general reduction of attacks in their former area of operations, which were centered around Patikul on Sulu Island. In the short-term, however, this has not been the case, as Patikul still saw a Philippine soldier killed in an ambush two weeks after Majid Said's surrender ([philstar.com](http://philstar.com), January 26).

As a result of these surrenders and the Philippine military's killing of Abu Sayyaf members in various operations, the military now estimates Abu Sayyaf has only 130 active fighters remaining in its strongholds ([benarnews.org](http://benarnews.org), November 8, 2022). This is less than half their strength, with 134 fighters and 40 logisticians having previously surrendered to government forces. While Abu Sayyaf cannot be considered fully defeated yet, the group is no longer remotely the same threat to the Philippines as it was five years ago, when Abu Sayyaf and its IS-loyal allies were capable of occupying a town as significant as Marawi.

## Has the UK finally woken up to the threat of Islamist extremism?

By Rahul Kumar

Source: <https://www.indianarrative.com/world-news/has-the-uk-finally-woken-up-to-the-threat-of-islamist-extremism-107866.html>

Feb 14 – In a recent review of its counter-terrorism policy, the UK government has identified Islamist terrorism as “the primary terrorist threat to the UK”. Till now the British government had focused its attention on combating right-wing extremism.

The UK government initiated a review in its counter-terrorism policy “Prevent” in January 2021. The policy, meant to counter terror and prevent radicalisation, was first launched soon after the US was attacked on September 11 by global terror organisation Al-Qaeda. Home Secretary Suella Braverman has accepted the review in its entirety. [The government said](#): “Prevent will now ensure it focuses on the key threat of Islamist terrorism. As part of this more proportionate approach, we will also remain vigilant on emerging threats, including on the extreme right”.



[Malik Faisal Akram from the UK travelled all the way to Texas/US to storm a synagogue and take hostages \(Photo: IANS\)](#)

Before becoming the Prime Minister, Rishi Sunak had underlined the “[significant terror threat](#)” that Islamic terrorism poses to the UK. Now his views have been buttressed by an independent review of the country's existing counter-terrorism policy.

The review says that clerics in Pakistan are radicalising British Muslims through the idea of blasphemy and by supporting calls for violence in Kashmir. It has also flagged the issue of radicalisation among a small group of Sikhs over the Khalistan issue.

The UK has experienced a [blow hot and cold](#) relationship with its 3.9 million Muslims of its total population of 67 million. Often, the democratic and liberal country has cowed down in the face of fears that it might be pronounced racist or, worse, Islamophobic if it takes up cases related to Islamic radicalisation.

Emphasis on being ‘politically correct’ has in fact held back the country from protecting thousands of British teenage girls from being sexually abused by men of Pakistani origin. The paedophiles, also called “[grooming gangs](#)” raped and beat thousands of British girls over decades in dozens of cities across the country but managed to escape justice because of [their ethnicity](#). However, with resentment seething in British society, [a recent documentary](#) has opened up the debate about stopping the crime which continues to this day.

In 2022, the ultra-sensitive British system decided to remove the name of [terrorist Usman Khan](#) and information about his Pakistani heritage from an official report. Khan, a British national, had stabbed to death two Cambridge University students and injured another three people in the London Bridge attacks in October 2019. The reason given for hiding his identity was that it could demonise the Muslim community and inflame the British far right.

Violent incidents of Islamic terror that have singed multiple parts of the world have cast their shadow on the UK—right from the [London Underground bombings](#) that killed 52 people to the suicide bombings at the



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[Ariana Grande concert](#) in Manchester that killed 22 including children. The UK has seen lone wolf attacks to suicide bombings and random violence by radicals.

Radical Islam is now [impacting other communities](#) in the UK. Last year, communal violence in Leicester shook the island nation, and caught the attention of the world, when mobs of Muslim youth started an orgy of violence lasting weeks against the Hindu community and its symbols. Fuelled by hate, social media handles called for violence against Hindus as Muslims mobs roamed streets attacking homes and cars with Hindu symbols in September 2022.

The violent anti-minority policies and hate that has been [embedded institutionally against minorities](#) in the Islamic Republic of Pakistan was transported to Leicester as [known terror sympathisers](#) rushed to the city from London to fan violence and mobilise attacks on the Hindus during their festivals. They also [gaslighted the British media](#) by painting a narrative of victimhood which was soon debunked by the Leicester police and rigorous independent investigations by well-known organisations.

Around the time that Muslim mobs were wreaking havoc in Leicester, Mohammed Rahman was arrested in central London for [stabbing two police officers](#) including a woman constable during the high-profile security arrangements for the Queen's funeral. This incident took place during the days when the police was stretched as heads of state and government were visiting the British capital to pay homage to the queen.

The UK has seen many other high-profile stabbings including the [killing of Sir David Amess](#), Member of Parliament, by Islamic State member Ali Harbi Ali. Ali later told the police that he had planned to kill other MPs including a cabinet minister.

Sectarian friction between the Sunni and Shias, so [pronounced in Pakistan](#) and some of its neighbouring countries, reared its

head across the UK in 2022 when crowds of Sunni youth gathered outside cinema halls to prevent the screening of the movie – [The Lady of Heaven](#). Faced with security issues, movie halls in the UK decided to [withdraw the movie](#) out of concern for staff and customer safety. The movie, which narrates the story of Lady Fatimah, the daughter of Prophet Muhammad, was criticised as being blasphemous and British Muslim groups warned that screening it could lead to violence.

The UK, like many other countries in Europe, has promoted multiculturalism and the acceptance of migrants from war-torn and conflicted countries for building a healthy society. However, lately many countries like Sweden, Germany, Greece and France feel that assimilation into the society and acceptance of local culture has not happened with many communities. Some countries who find social tensions and violence on the rise have blamed it on alien values and, in some cases, migration.

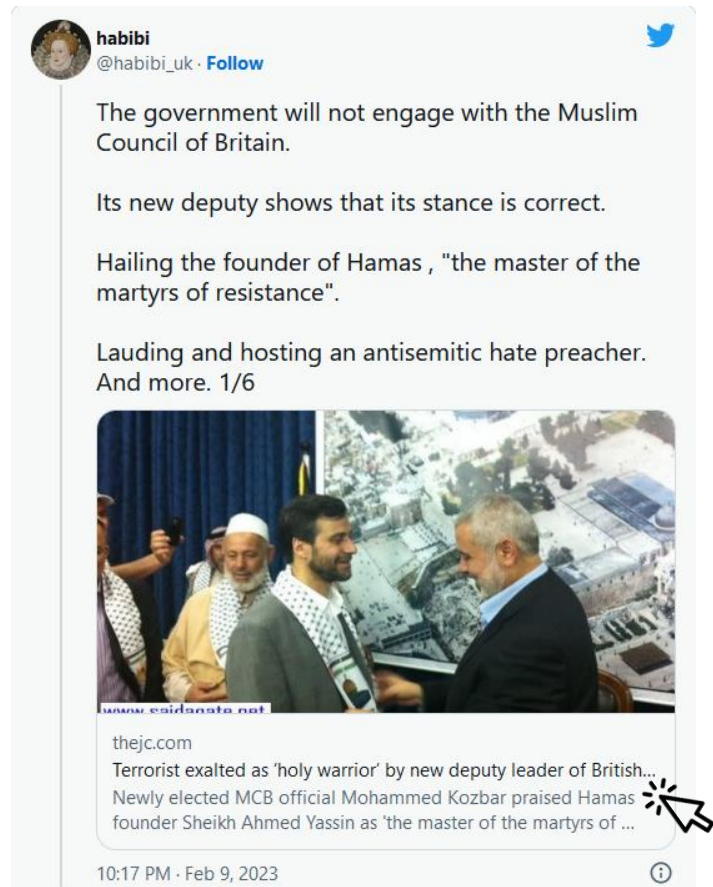
The Prevent review has been met with strong opposition by Muslim organisations. *The Guardian* reports that, "more than 450 Islamic organisations, including 350 mosques and imams, boycotted the government's review of the anti-radicalisation programme". On the other hand British charities have criticised the review saying that focusing on Islamism could alienate Muslim communities.

The review, conducted by William Shawcross – former director of international think tank, [the Henry Jackson Society](#), is emphatic that the threat to the UK from "Islamist terror" seems to have been overlooked.

## Egyptian Fingered as New al-Qaeda Boss

Source: <https://www.voaafrica.com/a/egyptian-fingered-as-new-al-qaeda-boss/6964243.html>

Feb 15 – Seif al-Adel, a former Egyptian special forces officer who is a high-ranking member of al Qaeda with a \$10 million U.S. bounty on his head, is now the "uncontested" leader of the militant group, according to a new U.N. report on the organisation. Al Qaeda has not formally named a successor for Ayman al-Zawahiri, who was





believed to have been killed in a U.S. missile strike in Kabul last year, dealing a blow to the organization since its founder Osama bin Laden was killed in 2011.

Although a U.S. intelligence official said in January that Zawahiri's succession remained unclear, the United Nations report assessing risks from the group said: "In discussions in November and December, many Member States took the view that Saif al-Adel is already operating as the de facto and uncontested leader of the group."

Zawahiri's death piled pressure on the group to choose a strategic leader who can carefully plan deadly operations and run a jihadi network, experts on al Qaeda said.

Unlike his slain predecessors who maintained a high profile with fiery videos broadcast around the globe threatening the United States, the experts say Adel planned attacks from the shadows as he helped turn al Qaeda into the world's deadliest militant group. Adel was indicted and charged in November 1998 by a U.S. federal grand jury for his role in the bomb attacks on the U.S. embassies in Tanzania and Kenya that killed 224 civilians and wounded more than 5,000 others.

Beyond the operations in Africa, his training camps and link to the killing of U.S. journalist Daniel Pearl in Pakistan in 2002, according to U.S. investigators, little else is known about Adel. The U.S. State Department says Adel is based in Iran. The department's Rewards for Justice program is offering up to \$10 million for information on Adel, who it says is a member of "al Qaeda's leadership council" and heads the organization's military committee.

## The Rivalry Of The Taliban And ISIS: Why Are These Similar Groups At War?

Source: <https://voi.id/en/bernas/79957>

The bombing at Kabul Airport, Afghanistan which was claimed to be the work of ISIS Khorasan (ISIS K) became a sign of the rivalry between the Taliban and ISIS. The two organizations have the same direction, namely the ultra-conservative. But the question is why do they often fight each other?

The Islamic State group K claimed responsibility for a suicide bombing outside Kabul Airport that [killed](#) at least 60 people including a dozen US troops on Thursday, August 26, 2021. The attack is believed to be the deadliest event for US troops in Afghanistan in a single incident since 30 US personnel were killed in a helicopter when it was shot down in August 2011.

The Taliban immediately condemned this incident. "The Islamic Emirate strongly condemns the bombing of civilians at Kabul airport, which took place in an area where security is in the hands of US forces," [Taliban](#) spokesman Suhail Shaheen wrote on his Twitter account as quoted on Friday, August 27.

As is well known, ISIS K, or the Islamic State of Khorasan Province is a group affiliated with ISIS in Afghanistan and Pakistan. The group was founded in 2015, the peak of ISIS' power in Iraq and Syria. Meanwhile, the relationship between ISIS and the Taliban in Afghanistan is full of dynamics. Even though they share the same ideology, their style of movement and goals are different. No doubt, these two ultra-conservative organizations often clash.

At the end of 2017, for example, they also often clashed. As quoted by [VOA](#), at that time there were more than 200 families leaving their homes in Khogyani district, eastern Nangarhar, when the two sides fought each other.

Ahmad Ali Hazrat, chairman of the Nangarhar provincial council at the time, explained that the clashes took place in areas under the influence of the Taliban. Some villagers, who see ISIS as an outside power, support the Taliban insurgents fighting.

This is not the first time Afghans have been displaced by clashes between the two groups. According to the Nangarhar provincial government, more than 2,000 families were displaced and at least eight civilians were killed in October 2017 when ISIS and the Taliban clashed for several days in the Waziro Tangi region.

The Islamic State militant group has also claimed responsibility for a number of deadly attacks on major Afghan cities. According to General John Nicholson, commander of US and NATO forces in Afghanistan, the ISIS group is reportedly planning to establish a "caliphate" in Afghanistan.



### Taliban-ISIS

According to Aly Ashghor in [his journal](#) entitled "Taliban in Afghanistan: An Overview of Ideology, Movement and Its Alliance with ISIS" explains, the Taliban and ISIS do have the same ideological view, so ISIS is trying to build a new territory in Afghanistan as a power base after the destruction of ISIS in Syria. . While in Afghanistan itself, the globalization of the doctrine of jihad based on violence and terror in the late 20th century grew and developed under the protection of the Taliban.

One of the important factors for the process of accelerating the political consolidation of the Taliban movement in Afghanistan is the existence of disputes between mujahideen factions after the withdrawal of the Soviet Union so that the transition from the communist regime to the mujahideen regime did not go smoothly. The reason is that several factions of the Afghan mujahideen failed to find common ground in formulating a common platform to build Afghanistan after the Soviet withdrawal.

As a result, since 1988 post-Geneva Agreement which ended the war between the Afghan and Soviet mujahideen, Mohammad Najibullah, the leader of the mujahideen regime has still served as President with little Soviet assistance. In the period of transition of power after the withdrawal of the Soviet Union from Afghanistan which gave birth to uncertainty about the future of Afghanistan's development, a new force based in Kandahar Province, known as the Taliban, was led by Mullah Umar.

Since Afghanistan came under the control of the Taliban regime in 1996, Mullah Umar as the leader of the Taliban promised Islamic doctrine in the midst of a more strict and puritanical society. In the midst of the uncertainty of Afghanistan's future in the bloody transitional period of government after the end of the Soviet war, the Taliban regime built a traditional Islam-based and puritanical system of government based on Sunni Deobandi, which has a Wahhabi sect genealogy.

Since then, the Taliban has promoted an agenda of strict application of Islamic law that does not compromise with the changing times. On that basis, the Taliban movement formed the identity of the Afghan nation through a political, social, and cultural revolution based on conservative Islam.

This revolution cannot be separated from the role of youth or Madrasa students in the Afghanistan-Pakistan border region who have inherited the tradition of Wahhabi ideological thought through the Deobandi Sunni sect. Therefore, it is not surprising that Afghanistan became the earth where the mujahideen took refuge from various countries

In fact, on the basis of ideological similarities and religious thought, the Taliban became a protector for Osama bin Laden. Including the declaration and planning of al-Qaeda terror acts organized and planned in Afghanistan. The close relationship between the Taliban and al-Qaeda lasted from 1998 to 2001.

### Take advantage of the situation

In 2019, ISIS lost nearly 99 percent of its territory in Syria-Iraq to US-led coalition strikes. However, losing territorial control over many areas in Syria and Iraq did not end the ISIS struggle. ISIS sympathizers and supporters are still trying to fight for and defend the Islamic Caliphate or Islamic State by building new territories outside Iraq-Syria.

One area that is currently a new territorial arena of struggle for supporters and sympathizers of ISIS ideology is the ISIS branch of Khurasan, Afghanistan, which has existed since 2015. The ISIS group in Khurasan, Afghanistan, since 2019 has begun to build a new alliance with the Taliban with the aim of making Afghanistan the main axis of ISIS territory and strength.

This effort found its momentum when the North Atlantic Treaty Organization (NATO) coalition forces and the United States gradually began to withdraw from Afghanistan under US President Joe Biden. This troop withdrawal is a follow-up to the peace agreement between the Taliban and the US signed in Qatar on February 29, 2020.

However, in development, not all elite figures in the Taliban circle agreed to the US-Taliban peace agreement agreed in Qatar. The situation of divided members of the Taliban in responding to the peace agreement was used by ISIS to recruit members of the Taliban who were not satisfied with the peace agreement with the United States.

This is confirmed by research conducted by the Center for Strategic Studies of Afghanistan, which says that five out of 20 percent of Taliban fighters are likely to join ISIS. In fact, US officials and military experts estimate there are an estimated 2,500 ISIS members in Afghanistan, but that number could rise if Pakistani militias join them.

### Rivalry

Apart from the existing disputes within the Taliban, what needs to be known is that this organization, as the University of Indonesia International Relations Lecturer Ali Wibisono, is called, is a political entity. So even if the Taliban today fight ISIS, it is not impossible that someday they can make peace.

"The Taliban is a political entity. This means that they are scheming every time, when it's time for war, when it's time to retreat and hide. They are really good at it," Ali told [VOI](#).

So, for example, in 2014 the Taliban had declared an end to the war with ISIS, it was simply because there was still US power. "Because both of them are fighting the US. "The enemy of my enemy is a friend."





That means when ISIS fights the US, the Taliban will not fight them. Unlike now when the US has left Afghanistan. "Now that the US has left, they are at war."

Ali explained that although they both wanted to enforce Islamic law, the features and goals between the Taliban and ISIS-K were different. The Taliban is an ethnic group based on the Pashtun ethnic group. While ISIS-K is an extremist Sunni group whose goal is to establish a caliphate between countries.

"They (Taliban) do not consider themselves to be part of a global caliphate. If the caliphate crosses national borders, it knows no national borders. The Taliban only wants to have Afghanistan coverage," Ali explained.

In line with Ali, Terrorism Observer Harits Abu Ulya also told [VOI](#) that the goals of the Taliban and ISIS-K are indeed opposite. ISIS-K doesn't even acknowledge the current success of the Taliban.

In the current unstable situation in Afghanistan, Harits said, this has become a weakness that the ISIS-Khurosan group has exploited to carry out demonstrations. For this reason, the Taliban has a big task to bring Afghanistan, especially the security and peace aspects, to a conducive condition.

"This is a weakness used by the ISIS-Khurosan group to take action as a signal of their existence to be taken into account. Naturally, the condition of the state or government in the transition and consolidation phase, for the Taliban it is a big task to immediately bring Afghanistan's conditions, especially aspects of security and peace into stable and conducive conditions," said Harits.

## The Jihadi Threat in 2022

By Cole Bunzel

Source: <https://www.wilsoncenter.org/article/explainer-jihadi-threat-2022>

Dec 2022 – In 2022, the major news centered on [leadership transitions](#) in both al Qaeda and ISIS. The turbulence at the top, however, was not matched by drastic changes or new advantages on the battlefield. Both activities of both movements generally followed the patterns of 2021, though some notable developments indicated possible future changes.

### Al Qaeda Leadership

On July 31, **Ayman al Zawahiri** was killed when the United States fired a pair of Hellfire missiles as the al Qaeda leader stood on the balcony of his apartment in Kabul, where he had been living for several months with the support of the Haqqani network, a radical faction of Afghanistan's Taliban. Zawahiri, a septuagenarian Egyptian doctor and a major al Qaeda ideologue, had succeeded **Osama bin Laden**, who died when U.S. special operations forces raided his home in Pakistan in May 2011. The new emir was reportedly **Saif al Adel**, an Egyptian in his sixties based in Iran. But by the end of 2022, al Qaeda had still not acknowledged the death of al Zawahiri or announced his replacement.

Al Qaeda's silence on succession raised questions about the health of the organization. Zawahiri's tenure was [considered](#) by some analysts to have been fairly successful, since he kept al Qaeda from falling apart during the meteoric rise of ISIS, a breakaway that became its main rival among Sunni jihadis. Zawahiri also lived to see al Qaeda's Taliban allies return to power in Afghanistan in 2021. But he actually left behind an organization in disarray.

Zawahiri was known largely for his books and recorded statements. Most were long and tedious—uninspiring even for his jihadi admirers. As a commander, he was unable to compel obedience and guide events on the battlefield. In 2013, he sought to prevent the rise of ISIS by ordering **Abu Bakr al Baghdadi** to return to Iraq and not interfere with **Jabhat al Nusra**, the Syria-based affiliate of al Qaeda. Baghdadi refused to obey, and subsequently his forces swept through Syria and Iraq to create a caliphate—and become al Qaeda's main jihadi rival. Zawahiri disavowed Baghdadi in 2014.

Zawahiri's presence in Kabul in 2022 indicated that the Taliban—or at least the Haqqani faction of it—was once again hosting al Qaeda in direct violation of the U.S.-Taliban accord reached in February 2020. Since their return to power, Taliban leaders have routinely lied about the presence of al Qaeda members and leaders on Afghan soil; it has clearly supported some of them. On the other hand, the international community had evidence that the Taliban restricted some al Qaeda activities in Afghanistan and that the terrorist group has not been able to regroup. In July 2022, a U.N. team that monitors sanctions [reported](#) that the Taliban had prohibited al Qaeda from plotting external attacks from Afghan soil. Al Qaeda also did not appear to rally jihadis from around the world to come to the Taliban's "Islamic emirate" to create a jihadi safe haven, as it had in the 1990s. In August, National Security Council spokesperson Adrienne Watson [claimed](#) that al Qaeda had not reconstituted in Afghanistan. She said less than a dozen al Qaeda core members were in Afghanistan. In November, Christine Abizaid, director of the U.S. National Counterterrorism Center, [testified](#) that the United States had "no indication" that the al Qaeda core in Afghanistan was involved in plotting external attacks. By the end of 2022, U.S. officials were adamant that the threat to the U.S. homeland from al Qaeda was minimal.



So predictions of an al Qaeda revival after the Taliban returned to power were not borne out. Although Al Zawahiri was gone, al Qaeda would not admit it, perhaps out of fear of embarrassing the Taliban. Nor would al Qaeda publicly name a successor. All of this could reflect either al Qaeda's heeding the orders of the Taliban or concern with the fact that the most likely successor, **Saif al Adel**, was in Iran. His presence in a predominantly Shiite country was problematic since Iran was viewed by rank-and-file Sunni jihadis to be a political and religious rival.

### Al Qaeda Branches

The various factions in the broader al Qaeda network have not ceased functioning even as the future of al Qaeda leadership remained a major question. The branches or affiliates were local jihadi groups that previously pledged loyalty to al Qaeda but in many ways were independent actors. They were broadly aligned with al Qaeda strategically and ideologically, but for the most part carried out missions against local enemies in view of eventually establishing their rule. The decentralized nature of the al Qaeda network suggested that al Zawahiri's death will not significantly impact the network's overall functioning.

The most successful al Qaeda affiliates were in Africa — **al Shabab** in Somalia and **Jamaat Nusrat al Islam wal Muslimin (JNIM)** in the Sahel. In 2022, both were dynamic and dangerous organizations that posed major security challenges in their areas and beyond. JNIM was technically a subordinate faction of **al Qaeda in the Islamic Maghrib (AQIM)**, which was al Qaeda's North African franchise. AQIM previously carried out terrorist attacks mainly in Algeria, but for several years it has struggled to rebuild since increased counterterrorism pressure between 2013 and 2018 [led](#) to the death of some 600 fighters. To the extent that it continued to have influence, it was via JNIM. In the Middle East, by comparison, al Qaeda did not fare well in 2022. Its strongest affiliate had been **Jabhat al Nusra** from 2013 until 2016. But in 2016, it left al Qaeda and later changed its name to **Hayat Tahrir al Sham (HTS)**, which has ruled much of Idlib Province since 2017. When Jabhat al Nusra left al Qaeda, some al Qaeda loyalists in Syria formed a new affiliate called **Hurras al Din**. It was initially highly active, but HTS later clamped down on its activities and arrested some of its members and leaders. By the end of 2022, Hurras al Din appeared to be defunct.

The most significant affiliate in the Middle East was **Al Qaeda in the Arabian Peninsula (AQAP)** based in Yemen since 2009. The U.N. team monitoring sanctions put AQAP's strength at "a few thousand fighters." In her November testimony, Abizaid, the NCTC director, said that AQAP was still "intent on conducting operations in the West and against U.S. and allied regional interests." Yet AQAP has also faced setbacks in recent years due to U.S. counterterrorism operations combined with the chaos of Yemen's civil war. In 2022, it still carried out sporadic attacks on the other combatant parties in Yemen's civil war, including the Yemeni and the Houthi rebels. But AQAP was not a driving force in the conflict. It no longer tried to control territory and had lost much of its popular appeal.

### ISIS Leadership

ISIS also experienced leadership turnover in 2022, although it did not shy away from acknowledging the losses. On February 3, **Abu Ibrahim al Hashimi al Qurashi**, the pseudonym of **Amir Muhammad Said Abdal al Rahman al Mawla**, was killed in a U.S. special forces raid on his compound in Atmeh, Syria, a town along the border with Turkey. The ISIS spokesperson was also apparently killed around this time. A month later, the new ISIS spokesman announced that **Abu al Hasan al Hashimi al Qurashi** was the new caliph. On November 30, ISIS announced that Abu al Hasan had recently been killed in battle. A CENTCOM [statement](#) reported that he had been killed by Syrian rebels in the southern province of Deraa in mid-October. Abu al Hasan had lasted little more than eight months. The new caliph was **Abu al Husayn al Husayni al Qurashi**. Yet while little was known of his background or identity, Abu al Husayn [reportedly](#) belonged to a new and younger generation of ISIS leaders. The first generation—which came of age during the U.S. occupation of Iraq (2003 to 2011)—appeared to be passing the torch to younger men whose experience began with the rise of ISIS in 2013-14. Abu al Husayn was "not from the original team," a U.S. military official [told Voice of America](#). The leadership transition showed that "there are people who are trained and ready to come behind them," the official said.

After the loss of each caliph, ISIS has orchestrated propaganda photos showing hundreds of ISIS fighters—from Syria to Afghanistan, and from Egypt to Mozambique—swearing allegiance to the latest caliph. ISIS has not personalized the caliphate by focusing on the leader. By the end of 2022, there were no significant signs of dissent or dissatisfaction within the global ISIS network. Yet having to announce the loss of two caliphs in a year is probably unsustainable.

ISIS suffered other losses in 2022. At least six other senior ISIS officials were reportedly either killed or detained after Abu Ibrahim's death.

### ISIS Provinces

Even with the loss of leaders, the various provinces in the global ISIS network remained active from Africa to Central Asia in 2022. The largest number of ISIS operations have shifted south toward Africa in recent



years. In 2022, ISIS boasted several “provinces”—or *wilayat* in Arabic—in sub-Saharan Africa, including in Nigeria in west Africa, Mali in the Sahel, the Democratic Republic of the Congo in central Africa, and Mozambique in southern Africa. It also boasts a particularly active franchise in Afghanistan along the Pakistan border known as ISIS-Khorasan Province or ISIS-K.

Unlike al Qaeda, ISIS still had a strong presence in 2022 in the Middle East, particularly Iraq, Syria, and Egypt’s Sinai Peninsula. ISIS released a weekly newsletter called *al Naba* documenting insurgent attacks in its various provinces. The pace of attacks was somewhat lower in Syria and steeply down in Iraq compared with previous years.

In 2021, ISIS averaged 84 attacks and 148 casualties per month in Iraq, while it claimed an average of 38 attacks and 64 casualties per month in 2022, according to *al Naba*. Attacks in Iraq consistently declined in 2022, despite an upsurge during Ramadan. The cause—whether due to leadership deaths, the effectiveness of Iraq’s counterterrorism operations, or the movement running out of steam—was unclear. The next year may reflect whether 2022 was an anomaly or the start of a trend.

In Syria, attacks in 2022 were also down compared to 2021, though not to the degree in Iraq. In 2021, ISIS averaged 29 attacks and 70 casualties per month in Syria, while it claimed an average of 21 attacks and 58 casualties per month in 2022. The attacks were largely in central Syria and the Euphrates River valley. The most noteworthy ISIS operation was a January attack on a prison controlled by the Syrian Democratic Forces (SDF), a U.S.-backed militia in northeast Syria. The prison assault led to a 10-day battle between ISIS and the SDF that freed dozens of ISIS detainees but ended up killing hundreds of ISIS fighters and dozens of SDF forces. The clash renewed attention to the thousands of ISIS detainees held since the collapse of the caliphate in 2019. ISIS has long sought to free prisoners and beef up its dwindling numbers.

In Egypt’s Sinai, ISIS was an enduring problem in the mostly uninhabited desert areas near the border with Israel, despite coordinated Egyptian and Israeli operations against it. In 2021, ISIS averaged 9 attacks and 17 casualties per month, while it claimed an average of 7 attacks and 19 casualties per month in 2022, according to *al Naba*.

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## Islamist terrorism is rising in the Sahel, but not in Chad – what’s different?

By Helga Dickow

Source: <https://theconversation.com/islamist-terrorism-is-rising-in-the-sahel-but-not-in-chad-whats-different-199628>

Feb 20 – Since the rise of [Boko Haram](#) in Nigeria and the emergence of [Islamist-Salafist](#) groups in northern Mali in 2013, the Sahel has increasingly been caught in the maelstrom of Islamist terrorism.

The region is now described as the new [global epicentre](#) of violent extremism. The population is suffering immensely, and in some areas more than [2 million](#) people have been displaced. Agriculture and development have come to a halt there.

Five explanations are usually given for the rise of Islamist terrorism in the Sahel: [dissatisfaction](#) with the political order, [bad governance](#), [corruption](#) and [ethnic rivalries](#) to [economic reasons](#) such as poverty or unemployment, especially among the youth.

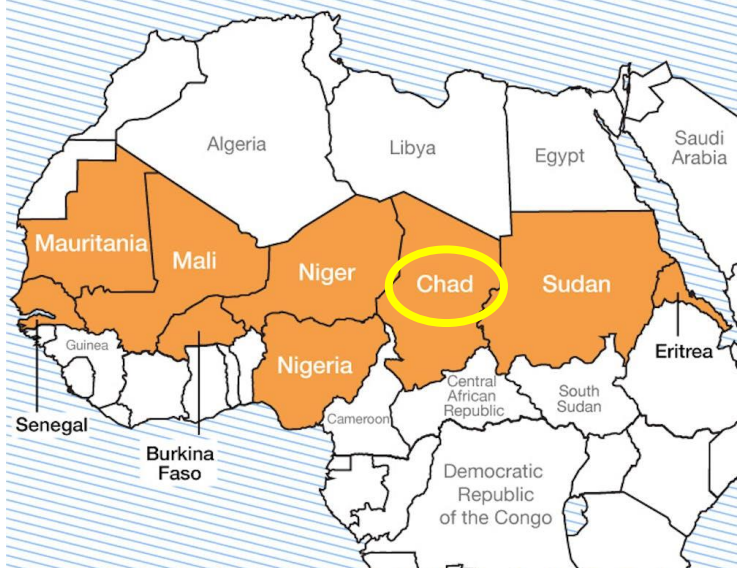
A [recent study](#) cited economic precarity as the main factor. This is a scenario where young people in particular face high unemployment and thus lose hope about the future.

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Chad is one of the [poorest countries](#) in the world. It was ruled for 30 years by the authoritarian president Idriss Déby Itno, who [died in 2021](#) under unexplained circumstances.

The country fulfils all the conditions associated with Islamist terrorism. But, so far, the threat reaches Chad from the neighbouring countries and not from the inside. So then, what holds Chadian society together?

### Sahel region, Africa



For my [research](#) I drew on data from an opinion survey I conducted in five Chadian towns (the capital N'Djamena, Abéché, Sarh, Mongo and Moundou) from 2015 to 2016. My aim was to get the views of all ethnic and linguistic groups in the country. Long-term studies show that people do not change their political and religious attitudes overnight. In view of the actual political transition in Chad and the increase in Islamist terror in the region, the results are still valid today and could allow conclusions to be drawn for other countries.

The results show that one reason the threat of Islamist terrorism doesn't come from inside is because Chadians want to live together peacefully. Other reasons include the fact that Chadians have high religious tolerance and Deby's authoritarian regime favoured groups who had a tendency towards religious fundamentalist ideas - appeasing them with economic benefits.

### The findings

My research sampled 1,857 people who answered about 130 questions in face-to-face interviews. By analysing the quantitative dataset, I identified groups within Chadian society according to their propensity for democracy, cohabitation and religiosity, and their religious fundamentalist tendencies.

The data confirmed a high fragmentation of Chad's society along ethnic, religious and economic lines.

**Democracy:** Chad is one of the [least democratic](#) countries of the world. Yet more than half of the survey respondents supported democratic ideas.

**Tolerance:** A substantial majority of respondents expressed the desire to live peacefully with other groups. But the respondents who labelled themselves Salafists – the spectrum of Salafism ranges from a spiritual renewal of Islam as in the times of Mohammed to a hybrid religious-political ideology seeking to establish a global caliphate – were the least inclined to social coexistence.

During individual interviews, religious Muslim and Christian leaders and opinion leaders also emphasised Chadians' willingness to live together peacefully. They stressed that both religions are frequently represented in many families.

**Religion:** Chad, [a predominantly Muslim society](#), is one of the few countries in the Sahel region to have a substantial Christian minority. This is partly a legacy of French colonial rule, which fostered a Christian educated elite in the south of the country.

It is also a consequence of Déby's authoritarian and corrupt rule which emphasised the balance between the different religions. However, he favoured certain groups from the north who had been Islamised for centuries. Members of these groups were over represented in the highest income categories.

The data confirmed that religion played an important role in the daily life of most of those interviewed. The regular observance of religious practices is firmly embedded in the everyday life of Muslims and Christians.

The religious practices of the other religions were also acknowledged.

I was particularly interested in the respondents' tendency towards religious fundamentalist ideas that could possibly lead to religious violence. The dataset allowed me to create an "Islamist fundamentalism" index.

In contrast to "religiosity", which measures religious affiliation, belief and practice, conceptualising the measurement of any [religious fundamentalism](#) focuses on:

- a literal understanding of the sacred book of the respective religion
- the exclusivity of one's religion
- the importance of religion in societal life.

The Islamist fundamentalism index also contained specific items like the introduction of Sharia law. In this way, I was able to identify respondents who were more inclined towards Islamic fundamentalism, and might even be willing to lean towards Islamist terrorism to achieve their goals.

The highest Islamist attitudes were expressed by more than a third of the sampled Muslim population. I found the strongest Islamist fundamentalist attitudes among respondents who attended an Arabic primary school or a Qur'anic school and had no further schooling, and among respondents with two years of higher education.

Only a minority of the respondents who never went to any school showed Islamist fundamentalist attitudes.

**Social profile:** A large number of respondents who scored high as Islamist fundamentalists were merchants and came from high income groups. Most were most likely to have benefited economically during the Déby era. They displayed the biggest support for the late authoritarian president, embraced above average undemocratic attitudes, and supported authoritarian structures in general.

### What's significant

Why are these results noteworthy?

Research in other countries has shown that dissatisfaction and frustration about bad governance, corruption or poverty fosters the emergence of Islamist terrorism.



In Chad, however, the profiteers of the Déby regime were the most fundamentalist. They admitted that they were willing to take to violence if they did not agree with their political leader. But, with their own position secured, they seem not to have seen any need to turn against the corrupt structures that benefited them. They had made peace with the regime. Déby's son Mahamat Déby has [taken power](#) by violating the country's constitution. He was appointed transitional president in October 2022 following a so-called national inclusive dialogue. Like his father, he has to deal with sporadic attacks by [Boko Haram](#) in the Lake Chad region, which is threatened by Islamist terrorism. The economic situation of the country is precarious. Will Mahamat Déby continue to satisfy his wealthier, non-democratic compatriots, who are more inclined towards Islamist fundamentalist ideas and were the strong supporters of his father's rule? Or will he opt for democratic structures and fair distribution of resources and wealth so as not to give fundamentalist Islamist groups inside Chad a reason to turn to violence and against the state? The answers to these questions are unclear. What's needed is more knowledge about these groups and their attitudes, their behaviour and propensity for radicalisation. This will broaden our understanding of Islamist tendencies and threats, and to develop long-term peace in the Sahel.

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## Children in the Service of Palestinian Terrorism: Security tensions, incitement in the social networks and favorable public reactions may influence more children to carry out terrorist attacks

Source ([full text](#)): <https://www.terrorism-info.org.il/en/children-in-the-service-of-palestinian-terrorism-security-tensions-incitement-in-the-social-networks-and-favorable-public-reactions-may-influence-more-children-to-carry-out-terrorist-attacks/>



Feb 21 – During the past three weeks children between the ages of 13 and 14 carried out three terrorist attacks in Jerusalem, two stabbing attacks and one shooting attack. They were not extraordinary because in effect, since the latest wave of Palestinian terrorism began in 2022, we have witnessed adolescents and



even children participating in clashes with Israeli security forces and carrying out terrorist attacks. However, their ages have recently decreased significantly. If in the past the attackers were adolescents and young adults aged 16 or more, today they are children barely in their teens. **The attacks and young attackers have been widely praised, especially on the social networks popular with that age group, which may encourage other children to emulate them.**

Thus it is reasonable to ask whether the children acted alone or were subject to external influence other than the Internet. As opposed to past instances, where organizations were found to have directed the children, apparently the most recent attacks were carried out by children acting independently. **They were influenced by the growing tension in Judea, Samaria and east Jerusalem, accompanied by strong, pervasive online incitement.** The activities of individual children make it particularly difficult for the Israeli security forces to have advance knowledge of their intentions and prevent the attacks.

**For the most part, Palestinian children grow up in a society that incites violence, and they absorb and are influenced by the general atmosphere in the Palestinian street, the anti-Israeli incitement in their textbooks and formal and informal educational environments, and particularly by the social networks.** According to a survey conducted about Internet use in Judea, Samaria and east Jerusalem, TikTok is the platform watched most by children of the relevant ages (IPOKE, January 1, 2023).

Palestinian children have often participated in terrorist activities and terrorism-supporting violence (demonstrations, riots, clashing with IDF soldiers, smuggling weapons, surveillance and digging tunnels, to name a few). Minors carried out suicide bombing attacks during the first and second intifadas, and were involved in terrorist attacks during the wave of terrorism in 2015 and 2016, especially regarding stabbing attacks. Palestinian adolescents have also participated in violence targeting Israeli security forces at many of the traditional friction points. Some of them were often cynically used by the terrorist organizations and sent on terrorist missions exploiting their young age and innocent appearance, which did not rouse the suspicions of IDF forces, who in any case would avoid deliberately harming children and adolescents.

Formerly, internal criticism was heard in the Palestinian Authority (PA) and within Palestinian society of exploiting children for terrorist attacks. However, at the present time not only does the PA not appear to be taking effective steps against using children as terrorist operatives, it makes extensive political capital both internally and the international community by representing them as “innocent victims” [of Israel].

In ITIC assessment, the ongoing tension regarding security in Judea, Samaria and the Gaza Strip, along with incitement to violence on the social networks, especially TikTok, and the sympathetic reactions of Palestinian society to terrorist attacks carried out by children, are liable to increase their number and make it more difficult for the Israeli security forces to prevent them.

## British woman who joined ISIS as a teen loses UK citizenship appeal

Source: <https://edition.cnn.com/2023/02/22/europe/shamima-begum-ruling-intl-gbr/index.html>

Feb 22 – [Shamima Begum](#), who left the United Kingdom to join ISIS at the age of 15, has lost her appeal against the decision to revoke her British citizenship. Judge Robert Jay gave the decision on Wednesday following a five-day hearing in November, during which her lawyers argued the UK Home Office had a duty to investigate whether she was a victim of trafficking before removing her citizenship.



The ruling does not determine if [Begum](#) can return to Britain, but whether the removal of her citizenship was lawful.

[Shamima Begum, 19, pictured at a camp in northern Syria on February 22, 2019 – Sam Tarling/Getty Images](#)

Begum, now 23 and living in a camp in northern Syria, flew to the country in 2015 with two school friends to join the ISIS terror group. In February 2019, she re-emerged and made international headlines

as an “ISIS bride” after pleading with the UK government to be allowed to return to her home country for the birth of her son. Then-Home Secretary Sajid Javid removed her British citizenship on February 19, 2019, and Begum’s newborn son died in a Syrian refugee camp the following month. She told UK media she had two other children prior to that baby, who also died in Syria during infancy. Begum’s lawyers criticized Wednesday’s ruling as a “lost opportunity to put into reverse a profound mistake and a continuing injustice.” “The outcome is that there is now no



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protection for a British child trafficked out of the UK if the home secretary invokes national security,” Gareth Pierce and Daniel Furner, of Birnberg Pierce Solicitors, said in a statement seen by UK news agency PA Media.

“Begum remains in unlawful, arbitrary and indefinite detention without trial in a Syrian camp. Every possible avenue to challenge this decision will be urgently pursued,” it continued.

**Rights group Amnesty International described the ruling as a “very disappointing decision.” “The power to banish a citizen like this simply shouldn’t exist in the modern world, not least when we’re talking about a person who was seriously exploited as a child,” Steve Valdez-Symonds, the group’s UK refugee and migrant rights director, said in a statement. “Along with thousands of others, including large numbers of women and children, this young British woman is now trapped in a dangerous refugee camp in a war-torn country and left largely at the mercy of gangs and armed groups.” “The home secretary shouldn’t be in the business of exiling British citizens by stripping them of their citizenship,” Valdez-Symonds said.**



Javid, the home secretary who removed Begum’s British citizenship, welcomed Wednesday’s ruling, tweeted that it “upheld my decision to remove an individual’s citizenship on national security grounds.” “This is a complex case, but home secretaries should have the power to prevent anyone entering our country who is assessed to pose a threat to it.” Javid added.

[Begum pictured at a refugee camp in northern Syria in March 2021 – Sam Tarling/Getty Images](#)



Begum has made several public appeals as she fought against the government’s decision, most recently appearing in BBC documentary *The Shamima Begum Story* and a 10-part BBC podcast series.

In the podcast series she insisted that she is “not a bad person.” While accepting that the British public viewed her as a “danger” and a “risk,” Begum blamed this on her media portrayal. She challenged

the UK government’s decision to revoke her citizenship but, in June 2019, the government refused her application to be allowed to enter the country to pursue her appeal.

In 2020, the UK Court of Appeal ruled Begum should be granted leave to enter the country because otherwise, it would not be “a fair and effective hearing.”

The following year, the Supreme Court reversed that decision, arguing that the Court of Appeal made four errors when it ruled that Begum should be allowed to return to the UK to carry out her appeal.

### Travel to Syria

Begum was 15 when she flew out of Gatwick Airport with two classmates and traveled to Syria.

The teenagers, all from the Bethnal Green Academy in east London, were to join another classmate who had made the same journey months earlier.

While in Syria, Begum married an ISIS fighter and spent several years living in Raqqa. Begum then reappeared in al-Hawl, a Syrian refugee camp of 39,000 people, in 2019.

Speaking from the camp before giving birth, Begum told UK newspaper *The Times* that she wanted to come home to have her child. She said she had already had two other children who died in infancy from malnutrition and illness.

She gave birth to her son, Jarrah, in al-Hawl in February of that year. The baby’s health quickly deteriorated, and he passed away after being transferred from the camp to the main hospital in al-Hasakah City.

In response to that news, a British government spokesperson told CNN at the time that “the death of any child is tragic and deeply distressing for the family.”

But the spokesperson added the UK Foreign Office “has consistently advised against travel to Syria” since 2011.





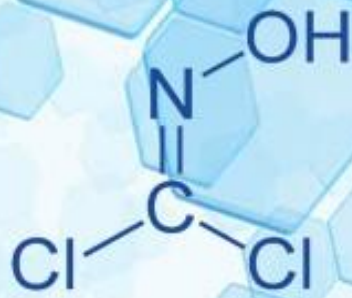
This photo still gives me chills, a set of turn out gear for every firefighter whose life was lost on 9/11/2001.

343 firefighters died that day, I'd like to see if we can get one share for every firefighter!! May we never forget!!!

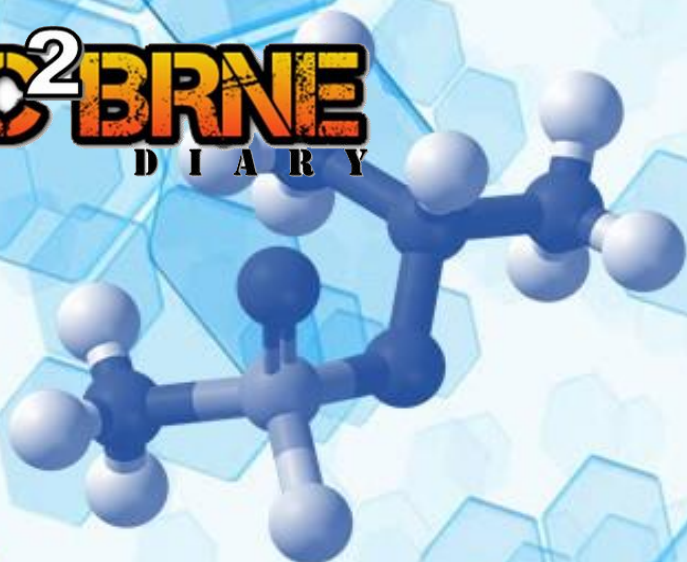




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DIARY



# CHEM NEWS



## The Myth of the “Poor Man's Atomic Bomb”: Knowledge, Method, and Ideology in the Study of Chemical, Biological, and Nuclear Weapons

By Biejan Poor Toulabi (Vrije Universiteit Amsterdam, The Netherlands)

*Journal of Global Security Studies*, Volume 8, Issue 1, March 2023, ogac037

Source ( [full text](https://academic.oup.com/jogss/article/8/1/ogac037/6986343?login=false)): <https://academic.oup.com/jogss/article/8/1/ogac037/6986343?login=false>

### Abstract

Jan 12 – Chemical and biological weapons (CBWs) have often been characterized as a “poor man's atomic bomb”: a cheap and easy to acquire alternative to nuclear weapons that is particularly appealing to so-called Third World states. This idea is also reflected in Western government and expert estimates that have long exaggerated the spread of CBWs, especially among states in the Global South. In this article, I break down the ways in which the idea that the spread of CBWs is prevalent and that it primarily happens among states in the Global South has come to exist and persist. By dissecting an oft-cited dataset on CBW spread, I unravel frequently occurring methodological flaws—such as conceptual confusion, misinterpretation of sources, and a bias toward proliferation charges originating from the US government—that breed and sustain inflated estimates and faulty allegations. Subsequently, I show that a dominant cognitive framework that centers on the metaphorical use of the terms “proliferation” and “poor man's atomic bomb” primes analysts and policymakers to interpret the history and future of chemical, biological, and nuclear weapons as being characterized by inevitable spread, particularly among the non-Western “Other.” In conclusion, I offer ways to counter the orthodoxies of this ideology in teaching, research, and policy.



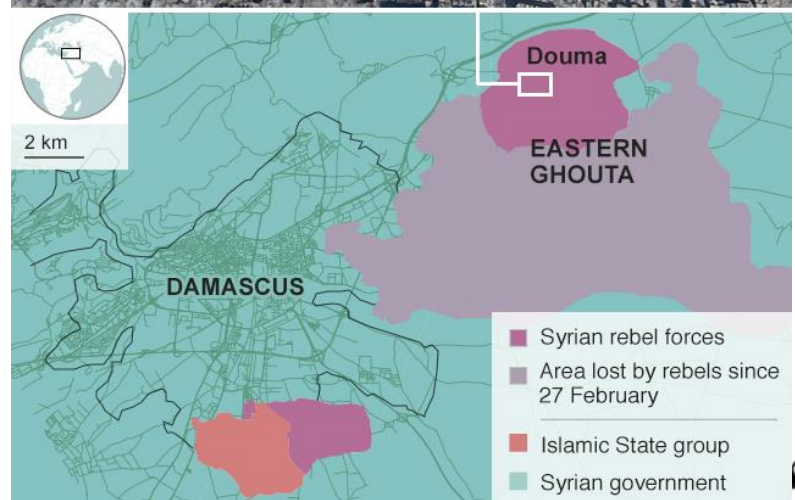
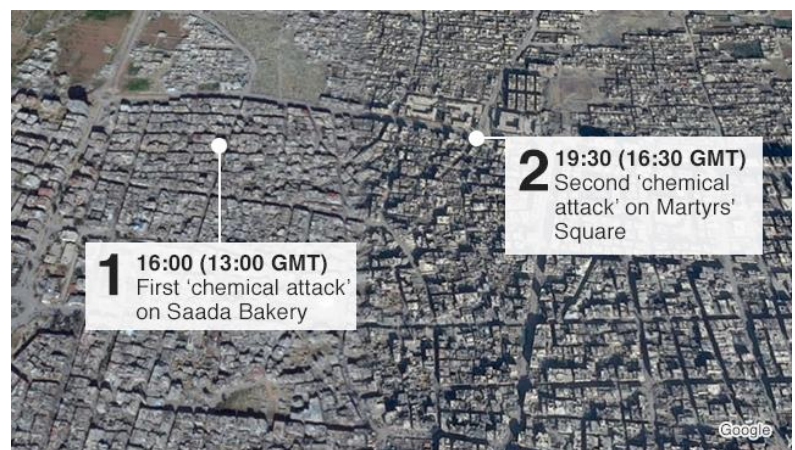
## Joint Statement on OPCW Report Finding Syrian Regime Responsible for Chemical Weapons Attack in Douma, Syria on April 7, 2018

Source: <https://www.state.gov/joint-statement-on-opcw-report-finding-syrian-regime-responsible-for-chemical-weapons-attack-in-douma-syria-on-april-7-2018/>

Jan 27 – The following is a statement from Antony Blinken, Secretary of State, United States of America, James Cleverly, Secretary of State for Foreign, Commonwealth and Development Affairs, United Kingdom, Catherine Colonna, Minister of Europe and Foreign Affairs, France, and Annalena Baerbock, Federal Foreign Minister, Germany:

Today, the Organization for the Prohibition of Chemical Weapons (OPCW) released a report that found the Assad regime responsible for the deadly chemical weapons attack on Douma on April 7, 2018. The report refutes the Russian claim that it was an opposition attack.

The report concludes that there are reasonable grounds to believe that, around 19:30 local time on April 7, 2018 at least one Mi-8/17 helicopter of the Syrian Arab Air Force, departing from Dumayr airbase and operating



Source: Violations Documentation Center, IHS Conflict Monitor (9 April 2018)

BBC



# Chemical attacks in Syria

Since 2013, thousands of people have been affected by chemical warfare and hundreds killed.

The latest chemical attack occurred in Douma on **April 7, 2018**. At least **70 people were killed and hundreds others were wounded**, medics said.

**Phosphorus bomb**

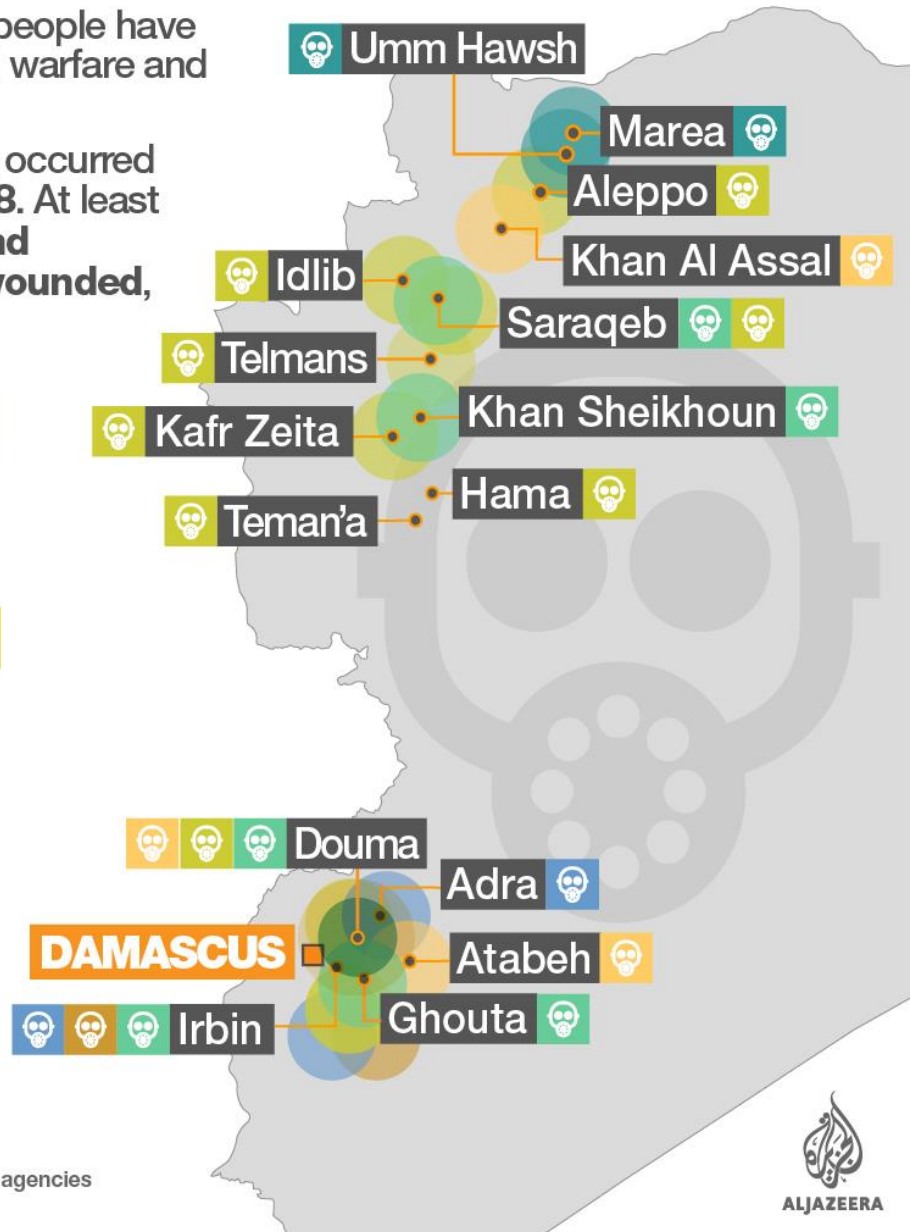
**Sarin gas**

**Napalm**

**Chlorine gas bomb**

**Mustard gas**

**Unknown**



@AJLabs



Source: Al Jazeera and news agencies

Updated: April 8, 2018

ALJAZEERA

under the control of the Tiger Forces, dropped two yellow cylinders which hit two residential buildings in a central area of the city releasing chlorine killing 43 named individuals and affecting dozens more.

This report marks the ninth instance of chemical weapons use independently attributed to the Assad regime by UN and OPCW mechanisms.

Our governments condemn in the strongest terms the Syrian regime's repeated use of these horrific weapons and remain steadfast in our demands that the Assad regime immediately comply with its obligations under the Chemical Weapons Convention (CWC) and relevant UN Security Council resolutions. Syria must fully declare and destroy its chemical weapons program and allow the deployment of OPCW staff to its country to verify it has done so.

The report also points out that the IIT received credible information, corroborated through multiple sources, that Russian forces were co-located at Dumayr airbase alongside the Tiger Forces. The IIT also obtained



information that, at the time of the attack, the airspace over Douma was exclusively controlled by the Syrian Arab Air Force and the Russian Aerospace Defence Forces.

We call on the Russian Federation to stop shielding Syria from accountability for its use of chemical weapons. No amount of disinformation from the Kremlin can hide its hand in abetting the Assad regime. In the aftermath of Syria's chemical attack on April 7, 2018, Russian military police helped the Syrian regime obstruct OPCW access to the site of the attack and attempted to sanitize the site. Russian and Syrian troops also staged photographs later disseminated online in an attempt to support its fabricated narratives of this incident.

We commend the independent, unbiased, and expert work of the OPCW staff, condemn the use of chemical weapons anywhere, by anyone, under any circumstances. We also reaffirm our commitment to hold accountable the perpetrators of all chemical weapons attacks in Syria and beyond.

Syria's [foreign ministry](#) said on Saturday (28/01) that a report by the Organisation for the Prohibition of Chemical Weapons (OPCW) that found the Syrian government was responsible for a chemical weapon attack on the rebel-held Syrian city of Douma in 2018 lacked any evidence and denied the allegations.

## The Largest Chemical Weapons Attack on Civilians Explained

By Marina Manoukian

Source:

Jan 29 – In the early 2000s, the United States government claimed that Iraq had weapons of mass destruction in order to justify the invasion of Iraq and the removal of Saddam Hussein from power. These claims turned out to be untrue, but in making this claim, the chemical attack on Kurdish civilians in Halabja was repeatedly brought up as an example of how necessary the invasion was. The ironic thing was that when the massacre actually occurred in 1988, the United States was indifferent to the news and continued to support the dictator who was responsible.

The 1988 chemical attack on the Kurdish civilians in Halabja, Iraq, is one of the most horrific examples of genocide and ethnic cleansing in history. In addition to being the largest chemical weapons attack against a civilian population, the injuries and health effects caused by the toxic gas transcend generations as children continue to be born with congenital birth defects. But as of 2023, most of the international community doesn't formally recognize the Kurdish genocide.



### The Kurdish Genocide

[Kurdish woman sitting cross-legged and weeping with her head in her hands next to a white grave among a row of numerous white graves, all for Kurdish people who were killed during the Anfal campaign – Reza/Getty Images](#)



In 1988, between 50,000 and 200,000 Kurdish people were murdered during the Kurdish genocide in Iraq. Also known as the Anfal campaign, the Kurdish genocide lasted from February to September 1988. But in just eight months, PBS writes that the ethnic cleansing launched by President Saddam Hussein led to the destruction of thousands of villages, largely through the use of chemical bombs. After Kurdish villages were inundated with chemical bombs, Iraqi ground troops would sweep through the villages and destroy everything. Human Rights Watch writes that in some areas, the army would even pass through again months later just to obliterate any remaining trace of human life.

Chemical bombs were repeatedly used during the Kurdish Genocide, but the attack on the city of Halabja in March 1988 is notable for being, as of 2023, the largest chemical weapons attack against a civilian population to date, according to the Federation of American Scientists. The Halabja massacre wasn't



## ICI C<sup>2</sup>BRNE DIARY – February 2023

technically part of the Anfal campaign, but it's incredibly demonstrative of the Iraqi government's genocidal intent against the Kurdish people.

### Dropping chemical bombs



Monument commemorating the Halabja massacre using a dented used rocket/chemical attack missile. the ground is reflective and shows a reflection of the rocket – Reza/Getty Images

On March 16, 1988, the Iraqi army attacked Halabja, a Kurdish city in Iraq with a population of up to 80,000 people. The Anfal campaign had already begun, but the Federation of American Scientists writes that the attack on Halabja was considered to be an additional retributive attack in response to the presence of the Kurdish Patriotic Union of Kurdistan (PUK) and Iranian revolutionary guards in the city. In "The Modern History of Iraq," Phebe Marr notes that Halabja's location near the Darbandikhan Dam was also strategically significant.

Bianet reports that initially, the Iraqi air force attacked first, dropping conventional bombs and rockets onto the city. The ground troops came in afterward, destroying as many windows as possible, and as soon as they cleared out of the city, the air force moved in. The planes circled overhead, dropping chemical bombs on Halabja's civilian population, according to the Institut Kurde de Paris. And Al Jazeera reports that with many windows and doors broken, the yellow smoke, which was heavier than air, easily made its way into basements and shelters where people were hiding.

### The smell of apples

Mural in Akre of the Halabja attack including an apple and two dead bodies – Levi Clancy/Wikimedia Commons

As soon as the chemical bombs were released into Halabja, the city was struck by the smell of



apples, but as the sweet scent swept through the city, it became clear that it wasn't coming from any actual fruit. This was the smell of a gas attack. According to "One Hundred Years of Chemical Warfare," some people also recall the smell of garlic, rotten eggs, trash, and bananas permeating through the city, as well as oranges and almonds.

But the smell of apples may have been the strongest because it's the smell that has continued to resonate in the memories of the Kurdish people who survived the massacre. Hosmand Morad Mohammed, who was in Halabja during the attack, told Middle East Eye how everyone who lived through the massacre continues to negatively associate apples with the death and destruction they witnessed that day: "When we talk about apples we remember the nightmare ... Today, we can eat and even smell apples. But it is difficult. We just don't like it." Aras-Abid Akram, head of the cultural center of Halabja, also notes that "the smell [of apples] will always remind us of the chemical attack of 1988," per The Irish Times.

Chemical bombs were dropped and released for almost an hour as people tried to escape the noxious white-yellow gas. Many quickly noticed an irritation in their eyes and on their skin and started struggling to breathe, but the chemical bombs were about to do a great deal more damage.

### Dropping dead in the streets

People started dropping dead in the streets from the chemical bombs within minutes. The Irish Times reports that some people didn't even make it past their front door in their attempts to escape the toxic gasses filling their homes. Many vomited immediately from the gas and died just a few minutes later. Even some who managed to flee Halabja didn't escape the effects of the gas and died hours after the attack, writes "One Hundred Years of Chemical Warfare."

It didn't take long for the streets of Halabja to become littered with the bodies of dead people. Many simply dropped dead as they tried to escape, while others died huddled inside their homes. Mahsume Gul, who survived the chemical attack, recalled, "I was seeing dead bodies everywhere I looked [...] I went out to the streets which were full with corpses and people fighting for their life," per ANF News.

The chemical bombs also contaminated the water in the area, and anyone who drank the water or used the water to wash themselves ended up with severe chemical burns. According to Middle East Eye, one of the survivors of the Halabja massacre, Garda Hussein, used the contaminated water, and as a result, her skin quickly burned and fell off. Although she and her family were able to eventually get medical attention after the massacre, Hussein ended up with long-term nerve and brain damage from the chemical attack.

### Dying of laughter

[Monument at Mass Grave for 1500 Victims of 1988 Chemical Attack – Adam Jones, Ph.D./Wikimedia Commons](#)

One of the most disturbing ways that people died during the Halabja massacre was from laughter. As some people started to feel the effects of the toxic gas, they would start laughing uncontrollably until they finally collapsed, writes Majalla. And unfortunately, this wouldn't always be a quick death. Those who managed to survive watched as their loved ones laughed themselves hysterically to death, sometimes ripping off their clothes



in the process, in a moment utterly devoid of comedy. According to the BBC, the massacre became known as "Bloody Friday."

The fact that some people died laughing, some simply dropped dead, and others vomited green in their final moments was due to the fact that the chemical gas was a lethal cocktail of numerous chemical and nerve agents, which included mustard gas, sarin, tabun, and VX. Animals were also affected by the lethal gas cocktail. Livestock and wild birds in the area dropped dead as well and their bodies clearly bore the effects of the chemical attack. The New Yorker writes that even the leaves started falling off the trees. Human Rights Watch reports that up to 5,000 Kurdish people, all of whom were civilians, died in the immediate aftermath of the chemical bombing of Halabja. Additionally, between 7,000 and 10,000 people were injured by the chemical attack, and the massacre would claim many more victims over the following decades.



## Fleeing the gas chamber

Black and white image of a Kurdish woman in the hospital with severe chemical burns on her face, wearing white robe – Kaveh Kazemi/Getty Images



As soon as people realized their city was turning into a gas chamber, those who were physically able to began to flee. Nasreen Abdel Qadir Muhammad tried to run with her family as fast as they could in the opposite direction of the wind, but many of them could barely walk. "The children couldn't walk, they were so sick. They were exhausted from throwing up. We carried them in our arms," she said, per *The New Yorker*.

Everyone tried to get out of the city and towards high ground, but many found their eyesight failing as they fled. For some, their eyesight would eventually return. Others weren't as lucky.

According to "Ghosts of Halabja" by Michael J. Kelly, while Kurdish people fled the toxic town, Iraqi government troops reportedly went into Halabja wearing chem-bio suits. But they weren't there to help. Instead, they were there to monitor the effects of the gas and how many people died.

## Journalists spread the news

Iranian journalists who were already in the region soon discovered the aftermath of the gruesome massacre, having noticed the military aircraft and bombing in the area. But the Tehran Peace Museum writes that only upon reaching the center of Halabja did Iranian journalists realize that a chemical attack had occurred.

Although the journalists in the area tried to help the Kurdish people who were still alive and tried to get as many as they could to medical attention, journalist Saeid Sadeghi states that it took longer for Iranian soldiers to arrive and help evacuate some of the survivors. Kaveh Golestan, another journalist at Halabja, described the city as "life frozen. Life had stopped, like watching a film and suddenly it hangs on one frame. It was a new kind of death to me," per "Understanding Shadows" by Michael Quilligan.

However, journalist Ramazan Öztürk, who photographed the aftermath of the massacre, notes in an interview with Rabia Çetin that at the time, many of the newspapers, foreign and local, didn't give the story much thought, and many limited the coverage to brief comments regarding the deaths of Kurdish people in a chemical attack. And according to "Late-breaking Foreign Policy" by Warren P. Strobel, American news network producers also filtered out some of the evidence of the massacre that was shown because "some of the pictures were horrific. You would just not put them on."

## Iraqi and international denial

Graveyard full of identical tombstones with different names in a triangular pattern depicting the names of Kurdish people who died in the Halabja massacre – Adam Jones, Ph.D./Wikimedia Commons/CC3.0



The Ba'ath regime had not anticipated that news of the massacre would actually get out, so there was soon denial on both a domestic and international level. According to the Middle East Contemporary Survey, the Iraqi government touted the support of two pro-government Kurdish groups in an attempt to demonstrate their good relations with the Iraqi Kurdish people.



CBC reports that by the end of March 1988, the United States government suggested that Iran was responsible for the chemical attack, and the Iraqi government was more than happy to accordingly assign blame. Some Kurdish survivors were even forced to lie to TV crews and say that Iran was responsible, per "A Poisonous Affair" by Joost R. Hiltermann. This denial of Iraqi responsibility was often repeated by state governments, journalists, and independent scholars. Even Edward Said wrote in the London Review of Books in 1991 that "The claim that Iraq gassed its own citizens has often been repeated. At best, this is uncertain."

But before long, representatives of the Iraqi government were admitting the use of chemical weapons, per The Washington Post. Despite these acknowledgments and even after continued chemical attacks, the United States government still refused to investigate Iraq's use of chemical weapons against its own civilians, according to "The United States, Iraq, and the Kurds" by Mohammed Shareef. Shareef notes that this was because after the 1979 Iranian Revolution, the United States sought to maintain Iraq as an ally against Iran.

### Destroying the evidence

[Kurdish man lying in the hospital with severe burns from the Halabja chemical attack massacre on his arms that have been bandaged – Kaveh Kazemi/Getty Images](#)



Any evidence of the massacre in Halabja was eventually destroyed by the Iraqi army. The Institut Kurde de Paris writes that in July 1988, the Iraqi army returned to Halabja to completely raze what was left of the city. By October 1988, the Ba'ath regime announced that Halabja was to be rebuilt, one month after the Iraqi government completed their eight genocidal Anfal campaigns, per "Middle East Contemporary Survey." This rebuilding was also largely a cover to completely wipe away any memory of the massacre. According to "Disciplinary Spaces," edited by Andrea Fischer-Tahir and Sophie Wagenhofer, those who managed to survive the massacre and remained in the area were forcibly displaced and resettled.

Despite all of these attempts by the Ba'ath regime to destroy the evidence of their ethnic cleansing, mustard gas was still discovered in the soil samples from the area. But unfortunately, according to "Echos of Genocide," it would still take several years for the international community to acknowledge the Iraqi regime's genocidal crimes.



### International response

Doctors Without Borders sent a team to Halabja a week after the massacre. According to Science Magazine, the team only stayed for five days, but during that time they made an estimation of the dead, took samples from soil, plants, animals, and people, and interviewed refugees and first responders. But despite sending their report to the U.N secretary-general, "the reaction of the Western world wasn't so heavy." According to "Massacres and Morality" by Alex J. Bellamy, the United States government also had conclusive evidence that the Iraqi government was using chemical weapons against its own civilians and undertaking the ethnic cleansing of the Kurdish people. But the State Department

continued to publicly call reports of massacres Kurdish propaganda. According to The New York Times, the State Department even ordered some diplomats to push the blame onto Iran. The United States wouldn't turn on President Saddam Hussein until 1990, when the Iraqi army invaded Kuwait. But even then, the horrors of Halabja weren't really brought up. It wouldn't be for another decade, in 2002 and 2003, when the United States government started bringing up the Halabja massacre in order to justify their invasion of Iraq, per The Washington Post.





## Lingering medical consequences



Halabja memorial in the Hague based on photograph of a father holding his infant – Reza/Getty Images

Over 30 years later, survivors of the Halabja massacre still have lingering health effects due to the chemical attack. In addition to experiencing PTSD, anxiety, and depression, the University of Gothenburg has found that many of the Kurdish people who survived the massacre suffer from respiratory conditions and eye problems. And according to International Business Times, the increased rates of fertility, miscarriage, and birth defects are also a result of the chemical attack.

There is also an increased risk of cancer among the survivors of the chemical attack. Geneticist Christine Gosden has stated that "I've seen Europe's worst cancers, but, believe me, I have never seen cancers like the ones I saw in Kurdistan," per The New Yorker. And young children, unfortunately, aren't exempt from this. The high cancer rates and congenital defects reflect how the Halabja massacre and attack on the Kurdish people still have not ended.

According to France24, as of 2021, there were up to 500 people who survived the Halabja massacre that were seriously disabled by the attack. But neither the Iraqi government nor the Kurdistan Region government has a program in place to offer care to the survivors.

## Legacy of the Halabja massacre

Kurdish woman walks past multicolored sculpture representing 5,000 faces and photos of victims of the March 16, 1988 chemical attacks on Halabja at a museum and memorial. photographs of the Halabja massacre line up the background behind the woman walking – Marco Di Lauro/Getty Images

For some of the survivors of the Halabja massacre and their families, the wound remains very much open. According to France24, many children went missing during the attack and because some were



taken to Iran for treatment, they were separated from their families who continue to look for them. It's estimated that up to 150 people went missing as children.

Although Ali Hassan al-Majid, cousin of President Saddam Hussein and the general who ordered the attack on Halabja, was executed in 2006, this was a small consolation prize for many survivors who lost their families.

In March 2018, 5,500 survivors of the Halabja massacre and their relatives filed a lawsuit in Halabja civil court against the over two dozen European companies and co-conspirators that facilitated then-President Saddam Hussein's chemical attacks, reports Kurdistan24. And for even those who aren't listed as plaintiffs, a legal win would be a significant symbolic victory. As of October 2022, The Tennessean writes that the trial continues to be underway. However, none of the defendants have shown up to the trial.

**Marina Manoukian** has a bachelor's in Liberal Arts from Sarah Lawrence College, located in Bronxville, New York, where her studies focused primarily on literature and philosophy. She received her master's in English Philology from Freie Universität Berlin in Germany.

## OPCW formally accepts new Centre for Chemistry and Technology

Source: <https://www.miragenews.com/opcw-formally-accepts-new-centre-for-chemistry-937509/>



Jan 31 – The Organisation for the Prohibition of Chemical Weapons (OPCW) formally accepted the new Centre for Chemistry and Technology (“ChemTech Centre”) after issuing the Taking-Over Certificate to Dura Vermeer, the main contractor responsible for major construction work, safety testing and commissioning of the building. The acceptance took place after the building was approved by the OPCW Technical Secretariat in consultation with external experts, including architects, mechanical engineers, laboratory and quality control consultants. Ector Hoogstad Architecten was the architect for the project.

“The ChemTech Centre will strengthen the OPCW’s capabilities to keep pace with scientific and technological developments to ensure the successful implementation of the Chemical Weapons Convention,” said the OPCW Director-General, Ambassador Fernando Arias. “The ChemTech Centre will be an essential tool to embody the OPCW’s vision of a world free of chemical weapons.” The Director-General expressed his gratitude to OPCW Member States and other donors, who supported the project to build the ChemTech Centre. Following the acceptance of the building, the relocation from



the current OPCW Laboratory and Equipment Store in Rijswijk will take place in several stages. The official inauguration ceremony for the opening of the ChemTech Centre will take place on 12 May 2023.

### Background

The ChemTech Centre is an important upgrade to the OPCW's research, analytical and capacity building activities. It will serve as a knowledge repository to address chemical threats worldwide, and as a platform for the broader OPCW community to promote expert dialogue, exchange, and collaboration in advancing the peaceful and safe uses of chemistry.

The new facility will also help strengthen Member States' capabilities related to verification tools, detection and response in the case of a chemical emergency.

The ChemTech Centre is located within the Heron Business Park in Pijnacker-Nootdorp, outside The Hague, close to the OPCW Headquarters.

The OPCW's current laboratory in Rijswijk will move into the ChemTech Centre.

As the implementing body for the Chemical Weapons Convention, the OPCW, with its 193 Member States, oversees the global endeavour to permanently eliminate chemical weapons. Since the Convention's entry into force in 1997, it is the most successful disarmament treaty eliminating an entire class of weapons of mass destruction.

Over 99% of all declared chemical weapon stockpiles have been destroyed under OPCW verification. For its extensive efforts in eliminating chemical weapons, the OPCW received the 2013 Nobel Peace Prize.

## Protecting Armoured Vehicles from CBRN Threats

By Dan Kaszeta

Source: <https://estonianfreepress.com/news/europe/protecting-armoured-vehicles-from-cbrn-threats/>

Jan 31 – Rumours of the demise of the tank are, in fact, premature. Mechanised warfare is occurring on the Russian-Ukrainian front at the time of writing and will likely continue for some time. Given that one of the combatants, Russia, is a nuclear power and historically had stockpiles of chemical and biological weapons, we cannot truthfully say with assurance that the era of chemical, biological, radiological, and nuclear (CBRN) threats is over for good. A natural confluence of CBRN threats and mechanised warfare is the desire to seek protection of combat vehicles from such threats.

Modern armoured fighting vehicles (AFVs) – tanks, reconnaissance vehicles, armoured personnel vehicles, and a panoply of related types of wheeled and tracked combat vehicles, evolved for several reasons. But one of the main historical motivations was to provide not just mobility but protection to modern military forces. Layers of armour protect soldiers from various types of direct and indirect fire. Many, but certainly not all, modern AFVs, have features that protect their crew and/or passengers from chemical, biological, radiological, and nuclear threats. The overall aim of CBRN survivability on the battlefield is to keep the AFVs in the fight, and that usually means keeping the crew safe from harm.

Within the CBRN threat spectrum, only the direct effects of nuclear detonations physically damage the AFV itself. Most of the time, CBRN threats harm the crew or passengers, or contaminate the vehicle so that its utility might be constrained, but do not physically damage the vehicle. Operational constraints might take the form of forcing crew to wear personnel protective equipment, thus degrading operational capability. Alternatively, contamination of an AFV might mean that using it outside a contaminated area would spread the contamination. Imagine a company of tanks driving through contaminated mud and then tracking that mud through a critical road junction or onto a bridge. Or worse, into the back of an aircraft or onto an airfield. In addition, contamination can reduce some specialty capabilities. A recce vehicle, combat engineer vehicle, field ambulance, or armoured recovery vehicle that is contaminated with radiological or chemical hazards might be useless for its specialty role until decontaminated.

There are many approaches to protecting AFV crews and passengers. The passengers are often as important as the crew, as one of the key roles of infantry fighting vehicles (IFVs) and armoured personnel carriers (APCs) are to transport infantry sections and squads, as well as other combatants like sappers or cavalry scouts. While mechanised warfare has gone a long way from considering APCs to merely be taxis for dismounted infantry, part of the *raison d'être* of such vehicles is to protect the passengers, so we must

### AFV Masks and Suits

At the most basic level, one can achieve a high degree of protection simply by providing the same CBRN personal protective equipment (PPE) to the crew and passengers that the rest of the army uses. For the most part, this is the broad approach to protecting passengers. A mechanised infantry squad in most armies generally has the same CBRN PPE as non-mechanised infantry. It has long been conventional wisdom in many armies that



the general-purpose protective masks/respirators (nomenclature varies) are designed primarily around infantry soldiers and their specific requirements. These may not necessarily be optimally designed for use by armoured vehicle crew. For example, a tank crew needs to communicate with each other. This is typically done by headphones and microphones as part of a headset or helmet. Will any of that work if the driver and commander of the tank have to put on an infantryman's protective mask? In addition, the field of view afforded by an infantryman's mask may not be ideal for driving. Likewise, aircraft crews face similar issues.



◀ M50 Ground variant

M51 Combat vehicle variant ▶



For such reasons, major PPE manufacturers have, for decades, produced product lines of respiratory protection aimed at vehicle crews. These products typically have the requisite communications capability wired into them and are designed to integrate with military optical systems commonly found on AFVs. One example of many is Avon Protection's FM51 mask. Another was the US Army's M42 mask, made by ILC Dover, which is still found in service. Numerous comparable masks exist around the world. Compatibility of connections is a problem, however. This might be an issue in a situation like Ukraine, where numerous donors are providing a wide range of equipment.

It should also be noted that protective clothing – suits, boots, and gloves – for AFV crew will have different requirements. The traditional NATO Cold War-era activated charcoal suit may not actually be the safest thing to give to a combat vehicle crew. One of the great killers of AFV crews is fire, and generations of CBRN protective equipment designed for other uses were (and some still are) made of things that will either catch on fire or melt. Needless to say, CBRN protective gear that makes conventional hazards worse than they need to be is not the ideal approach to crew or vehicle survivability. Improvement is clearly evident in this segment of the market. All around, newer designs and technologies have meant that most military CBRN kit is less flammable than the past. In addition, there have been generations of CBRN protective clothing for AFV crews that incorporate flame resistance and fire-retardant capacities. Another useful approach that shows some prospect for future developments is chemical protective undergarments that are designed to fit under existing flame resistant AFV crew uniforms.

### Collective Protection

By definition, a tank or other AFV is a confined environment. It is possible to provide CBRN protection to an entire vehicle rather than just give individual protection to the occupants. Traditionally, there have been two major approaches to this – ventilated facepieces and overpressure systems. Ventilated facepieces are the next step up from individual protective masks/respirators. They provide pressurised filtered air through a hose to the crew's protective masks. As a result, most specialty AFV protective masks are designed with such a hose or to connect to such a system, while retaining a filter in case the crew needs to evacuate or dismount. Such systems have a higher protective factor in most cases, because of the supplied air. On the other hand, there are maintenance and filter-lifespan considerations for the installed hardware.

Many AFVs now operate a more fulsome method of protection, known as variously as collective protection and/or overpressure systems. These systems operate by providing filtered air, at higher pressure than



ambient atmospheric pressure, to the interior of the vehicle. These systems entail considerable engineering effort as they have to move a lot of air and need sizeable filters. Furthermore, the whole vehicle design needs to be considered as every gap, port, and hatch needs to be airtight. Overpressure systems are usually maintenance-intensive and, anecdotally, sometimes get neglected as part of ongoing maintenance. It is important to design such systems properly. If not correctly designed and constructed, collective protection systems can be damaged by blast overpressure from explosions.

Readers interested in a more thorough discussion of the hardware and manufacturers within the AFV collective protection segment can find a thorough discussion that this correspondent wrote in issue 4/2018 of this magazine. There are relevant NATO standards in this space to guide manufacturers and procurers, such as NATO Triptych AC/225 and Allied Engineering Publication 54. These standards get much consideration even in non-NATO states. The general market situation has changed only slightly since that was written. Honeywell (USA), Dräger (DE), HDT Global (USA), Nexter (FR), Bioquell (UK), Temet (Finland), and Beth-EI (Israel) are only some of the main players in this market space.

Collective protection generates operational challenges as well, as vehicles need to be in “buttoned up” mode to use it. So much as a single open hatch sacrifices all of the effort. Masks, whether connected to a ventilation system on their own or not, and overpressure systems are excellent defences, but they need to be actually used in order to have useful protective benefit. Few tank crews like to drive all wearing masks or train very often to do so. Likewise, if you observe actual mechanised or armoured operations, you will see that AFVs spend much of their operating life operating with hatches open, the driver’s head exposed, and the torso of the vehicle commander emerging from his/her hatch. These are vulnerabilities that all of the available hardware will not mitigate. The biggest issue of collective protection is expense, however. These systems are expensive, and the filters need to be changed regularly, creating recurring costs. Some work has gone into regenerative filters, which will have more initial expense, but far less downstream expense as their service lifetime and associated labour will be much lower.



HDT’s M48A1 filter is widely used to provide CBRN protection in vehicle applications. (Photo: HDT)

Another aspect of protecting the vehicle as a whole instead of merely protecting the occupants is paint. Some types of CBRN threats, principally the blister agent mustard gas and persistent nerve agents like VX, have an insidious ability to seep into paint and desorb slowly over time, making decontamination more difficult. A persistent hazard can, on some painted surfaces, become MORE persistent, which is troublesome. Decades ago, the US military addressed this by developing CARC – chemical agent resistant coating. Such coatings are expensive, but are now in widespread use. Historically, the US experienced throughput issues when combat vehicles needed to be repainted, as only a handful of facilities were able to apply CARC paint.

Finally, yet another aspect of CBRN protection of AFVs is situational awareness. Chemical and radiological detection now work in real time or near to real time. Military detector systems are getting smaller and cheaper in real terms. Armies that once procured tens of detectors are now procuring hundreds or thousands. At the beginning of this correspondent’s career, CBRN detection on a vehicle was limited to a handful of specialty reconnaissance vehicles. The paradigm was shifted on this by the mass procurement of many thousands of M4-series Joint Chemical Agent Detectors (JCAD – made by Smiths Detection) by the US military. Part of the JCAD programme has been



the fielding of power and communications adaptors to mount it on many kinds of vehicles. Some other countries have followed suit and there are now chemical agent detectors on AFVs in a number of countries. Similarly, radiation detection systems hard-wired into AFVs are now widespread around the world.

### **Nuclear Considerations**

At the beginning of this correspondent's defence career, the prospect of tactical nuclear weapons used on the battlefield was shrinking. Unfortunately, the Russian-Ukrainian conflict has some people talking once again about battlefield nuclear weapons. This current trend makes a brief discussion of AFV survivability in a tactical nuclear environment worthy of discussion. AFVs, and in particular main battle tanks (MBTs) provide a reasonable degree of protection in a tactical nuclear environment. Nuclear weapons provide hazard through a lot of mechanisms, such as blast, heat, prompt radiation, and residual radiation. Of course, a near hit or near miss with even the smallest nuclear weapon provides blast and heat that will shred, tear, flip, or melt any AFV. But the radii of these effects, especially against buttoned-up MBTs is surprisingly modest, particularly when considering smaller tactical nuclear weapons. A nuclear artillery shell fired against a well-dispersed tank battalion may only take out a dozen tanks. With smaller nuclear detonations, the largest radius of casualty-producing effects is made by gamma and neutron radiation, not blast or heat.

Of everything on a modern battlefield, MBTs are the most robust in a tactical nuclear environment, because of their 'transmission factor' – the degree of shielding that they provide against gamma and neutron radiation. The thick armour on AFVs greatly increases this transmission factor. Tank armour was once strictly a matter of armoured steel, which is not bad at attenuating gamma rays but not particularly great at blocking neutrons.

However, tanks now have composite armour, some of the components of which may serve to attenuate neutrons. For example, Russian MBT composite armour is believed to contain boron, which has useful shielding properties. AFV hardening against nuclear threats is classified in the USA but the paper trail clearly references classified specifications for nuclear hardness being circulated as part of major procurements. Several QSTAGs – Quadripartite (US, Canada, Australia, UK) Standardisation Agreements – are known to exist in the nuclear hardening field.



Austrian Army tank crew in CBRN protective gear. (Photo: US Army)



### A Systemic Approach

AFV survivability on the CBRN battlefield also has aspects broader than the physical hardening of the vehicle and the provision of PPE to the crew and passengers. The underlying objective in CBRN defence in army operations is to preserve the ability to continue military operations. How an army deals with the CBRN threat at a broader level, from the top-down, is also relevant to the CBRN survivability of AFVs, their crews, their passengers, and preservation of fighting ability. Two broader approaches are contamination avoidance and decontamination.

and health, to stop the spread of contamination, and to allow fighting capability to get back into the battle.



Decontamination is part of AFV CBRN survivability. (Photo: USMC)

So-called “contamination avoidance” developed out of Cold War era NATO doctrine and procedures. It is, broadly, a large toolbox of tactics, techniques, and procedures (TTPs) to calculate and estimate where contamination might be found on the modern battlefield. By developing and implementing an army-wide network of reporting of CBRN attacks, augmented by detection and CBRN reconnaissance, CBRN specialists in battalion, brigade, or divisional headquarters can use field reports and weather data to make educated estimates as to where CBRN hazards are likely to impact upon military operations. The idea, in principle, is that defending forces can take action to reduce their exposure and offensive forces can avoid areas of known, likely, or suspected contamination. The end result, in an ideal situation, would be that many forces, including AFVs would not be sent in to contaminated areas unless there was a compelling need to do so. My own experience, learning how to practice contamination from bottom-up, is that an awful lot of things need be done correctly, and a lot of information needs to be collected and processed for contamination avoidance to work at all. Whether it will work on a modern battlefield in a CBRN environment or not is anyone’s guess, as it has never been tested. In theory, NATO-standard contamination avoidance doctrine can reduce the need for AFVs to have protection. However, in practice, this is a weak branch to hang a heavy coat upon.

Contamination avoidance represents the ‘glass half-full’ approach in modern CBRN defence, by hoping that rather a lot of the force is going to be able to avoid CBRN hazards by means of sophisticated situational awareness. The ‘glass half-empty’ counterpart is decontamination. Military decontamination doctrine



assumes that some soldiers and systems are going to get dirty. Troops, equipment, and systems will need varying levels of decontamination in order to stop being a hazard to life

This means that an important part of CBRN survivability of AFVs is the existence of robust decontamination capability and capacity. CBRN decontamination has been discussed at length in several previous articles in this magazine, but it needs to be viewed as an integral component of protecting AFVs and their crews from CBRN threats. The sooner and more effectively a tank or APC can be decontaminated after an attack, then more the threats to its crew and occupants are reduced and the risk of spread of contamination is reduced. Decontamination of military vehicles is serious business, and a large subsector of military CBRN defence. It was discussed in detail in this magazine in issue 1/2020, for those interested in a deeper dive.

In sum, there are a number of valid AFV CBRN protection approaches, all of which come with their own strengths and weaknesses. These have been summarised in the table at the bottom of the page.

### The Way Forward?

Looking to the future, is there an end to the need for CBRN protection of AFV crews? There are several ways of seeing how that may come about. One is continued efforts to make sure that the use of CBRN weapons is a thing of the past. Diplomacy, arms control, and non-proliferation efforts have actually done a lot of hard work to see that the peril of CBRN warfare is only of historic interest. However, we must be realists and see that such an objective, while worthy, may be forever just beyond our reach. A more pragmatic approach may be in unmanned systems. Are we getting to the level of sophistication when a tank needs no human crew? AFVs with the humans engineered out of the interior would be far more robust and survivable in CBRN environments. This is food for thought for future discussions. It will be interesting to see where the AFV market is in ten years.

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## To Survive in a CBRN Hostile Environment: Application of CAVE Automatic Virtual Environments in First Responder Training

By Paweł Maciejewski, Małgorzata Gawlik-Kobylińska, Jacek Lebieź, et al.

*APPIS 2020: Proceedings of the 3rd International Conference on Applications of Intelligent Systems January 2020 Article No.: 16; pp. 1–5*

Source: <https://dl.acm.org/doi/abs/10.1145/3378184.3378212>

This paper is of a conceptual nature and focuses on the use of a specific virtual reality environment in civil-military training. We analyzed the didactic potential of so-called CAVE automatic virtual environments for First Responder training, a type of training that fills the gap between First Aid training and the training received by emergency medical technicians. Since real training involves live drills based on unexpected situations, it is expensive and difficult to organize. We propose the application of virtual environments of three different sizes to increase the effectiveness of First Responder training. Our findings show that using the CAVEs allows for easier adaptation of the learning environment to a specific scenario while reducing costs from preparing training fields. The environments are also safer for trainees who must perform tasks related to hazardous materials. The analysis was based on the facilities at the Immersive 3D Visualization Lab (I3DVL) at Gdańsk University of Technology in Poland. We believe that, in the context of emerging threats of chemical, biological, radiological, and nuclear terrorism, such training is a necessity. The application of artificial intelligence can be considered as a further step in the facility development to increase the training fidelity.

## Climate Change and CBRN Defense

By József Padányi

2012, *Hadmérnök*; pp.42-49

Source: [https://www.academia.edu/21687057/Climate\\_Change\\_and\\_CBRN\\_Defense](https://www.academia.edu/21687057/Climate_Change_and_CBRN_Defense)

The fact of global climate change is undisputable nowadays. There are certain theories about the causes, and the authors of this paper do not want to argue with any of them. What they want is to start with the observable facts and highlight the most important consequences concerning the safety of the society, and with the threat increasing in the future to show the challenges concerning military forces and military





activities. The paper describes the possible consequences of climate change concerning CBRN defense in details and the main problems of contamination avoidance, individual and collective CBRN protection, CBRN reconnaissance and decontamination, which need urgent solutions. Besides the presentation of challenges of climate change, the authors make some proposals to improve CBRN capabilities.

## Russia probing alleged Ukrainian use of chemical weapons

Source: <https://www.jpost.com/international/article-730768>

Feb 06 – Russia's state Investigative Committee said on Monday it was examining the alleged use of [chemical weapons](#) by Ukrainian forces near the towns of Soledar and Bakhmut.

Ukraine's Defense Ministry did not immediately reply to requests for comment on the allegation, which was not accompanied by any publicly released evidence.

The Investigative Committee said the Donetsk People's Republic - one of Russia's proxies in the territories it has seized and occupied in eastern Ukraine - had reported the use of [chemical weapons](#) by Ukrainian drones near the two locations.

"As a result, servicemen of the Russian Armed Forces are experiencing a deterioration in their health and characteristic symptoms of poisoning," it said, without providing details or naming the alleged substance.

Since the start of its invasion nearly a year ago, Russia has repeatedly warned that Ukraine might be preparing to use non-conventional weapons, including biological weapons or a radioactive dirty bomb. No such attack has materialized.



A geiger counter measures a radiation level at a site of fire burning in the exclusion zone around the Chernobyl nuclear power plant, outside the village of Rahivka. (credit: YAROSLAV YEMELIANENKO/REUTERS)

Ukraine and its Western allies rejected those accusations but saw them as a possible prelude to a ["false flag" attack](#), meaning [Russia](#) might itself resort to such tactics but seek to blame Ukraine. Russia has dismissed that claim.

Ukraine's Armed Forces, in the statement, accused Russia of using "banned phosphorus and chloropicrin ammunition" and of using "disinformation as a weapon."



## 5 derailed train cars carrying hazardous material at risk of exploding are no longer burning, official says

Source: <https://edition.cnn.com/2023/02/07/us/east-palestine-ohio-train-derailment-fire-tuesday/index.html>

Jan 07 – Five train cars that contained vinyl chloride, a potentially explosive chemical, are no longer burning after a train derailment in Ohio, a Norfolk Southern official said Tuesday.

The burning stopped after a controlled release of the [unstable, toxic chemical](#) Monday at the train derailment site in East Palestine, near the Pennsylvania border.



Four of those five cars have been cleared from the wreckage, and crews are working to remove the fifth car, Norfolk Southern official Scott Deutsch said Tuesday.

**The train, which partially derailed Friday, had more than 100 cars. About 20 of those cars were carrying hazardous materials,** said the National Transportation Safety Board, which is investigating the incident.

“There have been no reports of significant injuries – either in the initial derailment or in the controlled detonation last night,” Ohio Department of Public Safety Director Andy Wilson said Tuesday.

But it’s not yet clear when residents who were ordered to evacuate can return home, East Palestine Fire Chief Keith Drabick said Tuesday.

“Once the Ohio Department of Health, the United States Environmental Protection Agency in conjunction with the East Palestine Fire Department and Norfolk Southern Railroad have determined that this is safe for East Palestine residents to return to their homes – and, quite frankly, once I feel safe for my family to return – we will lift that evacuation order and start returning people home,” Drabick said.

### ‘The detonation went perfect’

Three days of anxiety about a potentially deadly explosion culminated in a loud boom Monday, when crews started the controlled release of vinyl chloride into a pit to burn it away.

A large plume of black smoke shot up toward the sky and the operation went as planned.

“The detonation went perfect,” Deutsch said. “We’re already to the point where the cars became safe. They were not safe prior to this.”



**Vinyl chloride** is a man-made chemical used to make PVC and it burns easily at room temperature.



A black plume rises after the controlled detonation Monday in East Palestine, Ohio – Gene J. Puskar/AP

**It can cause dizziness, sleepiness and headaches; and has been linked to an increased risk of cancer in the liver, brain, lungs and blood. Breathing high levels of vinyl chloride can make someone pass out or die if they don't get fresh air, the Ohio Department of Health said.**

The train derailment Friday led to [a massive inferno](#) and increased pressure inside the hot steel.

By Sunday evening, the burning wreckage threatened a catastrophic explosion capable of spewing toxic fumes and firing [shrapnel up to a mile away](#), officials said.

Mandatory evacuations were ordered over several square miles [straddling the Ohio-Pennsylvania border](#).

After the breach, officials detected “slightly elevated” readings of the phosgene and hydrogen chloride in the burn area and “only one minor hit for the hydrogen chloride downwind of the burn area” within the exclusion zone, the EPA’s James Justice said Monday evening.

Such readings were expected after the controlled release, Justice said.

As for East Palestine’s water supply, no impacts to the waterway were detected as of Monday evening, an Ohio Environmental Protection Agency official said.

A team will continue to monitor the air and water quality in the area, officials said.

Pennsylvania Gov. Josh Shapiro, who had also called for evacuations, said Monday evening that air and water quality is being monitored closely and no concerning readings had been detected so far.

But he told Pennsylvanians who live within 2 miles of the East Palestine derailment to keep sheltering in place with their windows and doors closed Monday evening.

The derailment has upended life in East Palestine, a village of about 5,000 people. Schools have been closed for the rest of the week, and some residents haven’t been home since the [initial evacuation orders Friday](#).



### Malfunctioning safety valves heightened concerns

When the Norfolk Southern train crashed in East Palestine, about 10 of 20 cars carrying hazardous materials derailed. One rail car carrying vinyl chloride became a focus of concern when its malfunctioning safety valves prevented the release of the chemical inside, a Columbiana County Emergency Management Agency official said. That meant “the car’s just building pressure inside the steel shell, and that’s a problem,” Deutsch said Monday. But after the controlled release, “There’s no pressure now in the cars,” he said. On Monday afternoon, charges were used to blow small holes in each rail car, allowing the vinyl chloride to spill into a flare-lined trench.

### The crew noticed an alarm before the derailment

While the cause of the derailment remains under investigation, National Transportation Safety Board Member Michael Graham said Sunday that there was [a mechanical failure warning before the crash](#). “The crew did receive an alarm from a wayside defect detector shortly before the derailment, indicating a mechanical issue,” Graham said. “Then an emergency brake application initiated.” Investigators also identified the point of derailment and found video showing “preliminary indications of mechanical issues” on one of the railcar axles, he said. The NTSB has requested records from Norfolk Southern and is investigating when the potential defect happened and the response from the train’s crew, which included an engineer, conductor and conductor trainee.

## IARPA Developing Fieldable Sensing Platforms for the Rapid Chemical Identification of Aerosol Particles

Source: <https://www.hstoday.us/subject-matter-areas/surveillance-protection-detection/iarpa-developing-fieldable-sensing-platforms-for-the-rapid-chemical-identification-of-aerosol-particles/>

Feb 10 – In 2022, the United States set a grim record with the deaths of over 110,000 Americans from drug overdoses—a record mainly attributed to the increase of illegal fentanyl. And for those who fentanyl hasn’t killed, it has led to addiction and destroyed lives and communities.

While addiction is a serious issue with various causes, easy access to fentanyl and other illicit drugs makes this a difficult and dangerous problem for US officials to manage. Indeed, fentanyl—a fine powder that is often pressed into pills—is so potent that police officers, drug enforcement officials, and EMTs regularly carry Narcan to reverse the effects of fentanyl to themselves, fellow officers, and even K-9s, which can quickly incapacitate and kill if just a small amount of powder is inhaled.

The US Government (USG) and Intelligence Community (IC) have expressed deep concern with this problem—especially with the large-scale manufacture and transport of fentanyl and other illicit drugs—and the need to find a way to safely mitigate this and other items that can convey harmful aerosols. Indeed, the USG and IC would ideally like to be able to detect a broad spectrum of aerosols before they can cause harm, however, this is not possible with today’s fielded technology. This is particularly true when it comes to a range of items, like chemical warfare agents (CWAs), pharmaceutical based agents (PBAs) such as fentanyl and its analogs, toxic industrial chemicals (TICs)/toxic industrial materials (TIMs), environmental pollutants, explosives, and radioactive materials—all of which can exist as aerosols in the environment.

For example, sulfur mustard, commonly referred to as mustard gas, is an aerosol of liquid droplets suspended in the air. The primary chemical in tear gas—CS, 2-chlorobenzalmalonitrile—is an aerosol of fine white powder. Other dangerous compounds, including some emerging threats and their precursors, like xylazine and levamisole, can be readily delivered as aerosols whose rapid detection and characterization is beyond the current technological state of the art. Additionally, hazardous aerosols can be challenging to detect due to coinciding naturally occurring materials (such as pollen or dust), humidity, wind, and other environmental factors. The bottom line is that right now it’s very difficult and potentially dangerous to identify harmful chemicals or agents once they’re aerosolized.

However, one of IARPA’s newest programs, Pursuing Intelligent Complex Aerosols for Rapid Detection (PICARD), hopes to give the USG and IC a tool that will help reduce risk while accurately and quickly detecting harmful aerosols.

The PICARD program intends to do this by developing fieldable sensing platforms for the rapid chemical identification of aerosol particles. The program will address both point detection and standoff capabilities that focus on the complexity of aerosols with non-uniform sizes, forms and structures, chemical composition, and dispersion in challenging environments.



“With today’s technology, it’s a significant challenge to identify an individual target chemical in aerosols due to a number of issues, including chemical complexity, physical complexity, and diverse environmental factors,” said PICARD Program Manager, Dr. Sherrie Pilkington. “Having the ability to rapidly and accurately detect dangerous or harmful chemical aerosols will be a game-changer in terms of the USG and IC’s ability to mitigate chemical agent threats and protect its personnel and US citizens.”

The key objective of the PICARD program is not to create a sensor that can detect very low concentrations of chemicals in the laboratory, but rather to develop a fully integrated system that can identify target chemicals within aerosol particles at concentrations relevant to real-world environments. For example, PICARD technologies may be used for a number of tasks, including monitoring suspected drug manufacturing sites and helping to track drug shipments, providing an early warning for the intentional or accidental release of material from industrial and nuclear sites, and for screening of suspected chemicals/aerosols (explosives, CWAs, or other incapacitants) for early warning at large public gatherings. Biological threats, however, will be out of the scope of technology developed under PICARD.

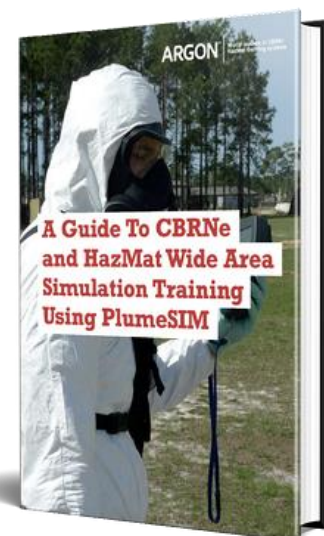
When launched, the PICARD program is anticipated to be a 42-month effort, comprised of two phases. Phase 1 will be 18 months in duration, while Phase 2 will be 24 months. In each phase, technology will be developed along two tracks: point and standoff detection in increasingly complex environments.

While PICARD won’t officially launch until later in 2023—the [Broad Agency Announcement was published November 18, 2022](#) and proposals were due on January 23, 2023—Dr. Pilkington is excited about the program’s prospects. “This is a difficult issue to solve, but it’s a problem I’m confident we’ll be able to address and, because lives and our nation’s security are depending on it, it’s a problem we really *need* to address,” Dr. Pilkington said.

## Wide Area CBRNe and HazMat Training Using PlumeSIM

Source: <https://www.argonelectronics.com/a-guide-to-cbrne-and-hazmat-wide-area-simulation-training-using-plumesim>

Delivering effective wide area CBRN / HazMat training with real detectors and actual radionuclides or chemical substances while maintaining safety and following regulations can be a significant challenge. The process of detecting, identifying, and monitoring certain hazardous and radioactive materials can pose a risk for training Military, Law Enforcement, security and emergency response teams. This ebook explores the revolutionary PlumeSIM system, which enables HazMat and CBRNe specialists to immerse themselves in ever-more accurate training scenarios.



## Full List of Toxic Chemicals Released From Ohio Train Derailment

Source: <https://www.newsweek.com/ohio-train-derailment-toxic-chemicals-list-epa-1780805>

Feb 13 – The Environmental Protection Agency (EPA) published a full list of toxic chemicals that were released when a [cargo train derailed](#) near the border between Ohio and Pennsylvania on February 3. At about 8:55 p.m. ET, a Norfolk Southern train of around 150 cars derailed near the Ohio town of East Palestine, 20 of those cars carrying hazardous materials.

The derailment caused a huge fire and, fearing a massive explosion that would release noxious gases and shrapnel into the surrounding area, emergency responders intentionally breached five cars to let out the chemicals inside.

The chemicals were diverted into a trench and burnt off. Officials warned, however, that it would send toxic gases phosgene—used during World War I—and hydrogen chloride into the atmosphere. Environmental regulators have been monitoring the air and drinking water around the site of the derailment, and have so far said both remain unaffected by the spill.

Residents of East Palestine were allowed to return to their homes after chemicals observed in the atmosphere following the controlled release were found to be at safe levels. Some have complained of headaches and nausea, according to the Associated Press, and [pets have died in suspected cases of chemical exposure](#).

In a February 10 letter sent by Jason El-Zein, an emergency response manager at the EPA, to Matt Gernand, deputy general counsel for the Norfolk Southern Railway Company, a list of toxic chemicals were identified as having been found to have contaminated air, soil or water surrounding the crash site. They were:

- **Vinyl chloride:** a colorless gas that is used to make polyvinyl chloride (PVC) plastics and is highly flammable and decomposes to make toxic fumes. According to the National Library of Medicine, it is also carcinogenic and can cause other health issues.



## ICI C<sup>2</sup>BRNE DIARY – February 2023

- **Butyl acrylate:** a clear liquid that is used for making paints, sealants and adhesives. It is flammable and can cause skin, eye and respiratory irritation.
- **Ethylhexyl acrylate:** a colorless liquid used to make paints and plastics. It can cause skin and respiratory irritation and, under moderate heat, can produce hazardous vapor.
- **Ethylene glycol monobutyl:** a colorless liquid used as a solvent for paint and inks, as well as some dry cleaning solutions. It is classed as acutely toxic, able to cause serious or permanent injury, and highly flammable. Vapors can irritate the eyes and nose, and ingestion can cause headaches and vomiting.



Above, Norfolk Southern Railway contractors remove a burned tank car from the crash site after a cargo train derailed on February 3, 2023, near East Palestine, Ohio. Inset: an aerial view of the fire. EPA

The EPA also published a list of cargo from Norfolk Southern in the cars involved in the derailment, which showed a similar array of chemicals to those identified by the EPA. It showed petrochemicals had also been lost in the blaze, as well as a hopper of semolina and a box car of frozen vegetables.

El-Zein wrote that the EPA "has spent, or is considering spending, public funds to investigate and control releases of hazardous substances or potential releases of hazardous substances" and

had determined that the rail company "may be responsible under [the Comprehensive Environmental Response, Compensation, and Liability Act] for clean-up of the site or costs EPA has incurred in cleaning up the site."

An aerial photo, taken by the EPA's ASPECT (Airborne Spectral Photometric Environmental Collection Technology) system on February 7, 2023, of the derailment site after the fire was extinguished. The EPA produced a list of toxic chemicals that were found in contaminated air, soil or water surrounding the crash site. EPA



When asked to comment, a Norfolk Southern spokesperson told *Newsweek* that the company had received the EPA's letter "and we have confirmed to them that we have and will continue to perform or finance environmental monitoring and remediation.

"Our hazmat team was in East Palestine within an hour of the incident, and the response continues today in close coordination with the Ohio and U.S. EPA," as well as other agencies, they added.

The company is also facing a lawsuit, filed by two Pennsylvania residents on Thursday, calling for the rail operator to pay for medical screenings for anyone within a 30-mile radius of the crash site alongside



damages. The rail operator has declined to comment on the lawsuit. The EPA is already assisting health screenings offered by Norfolk Southern.

Officials expressed calm when lifting evacuation orders, with Ohio Governor [Mike DeWine](#) describing [air quality readings](#) as "basically similar to what they would have expected prior to the train wreck" during a press conference.

Kirk Kollar of the Ohio EPA said the levels of toxic chemicals observed in nearby waterways "were immediately toxic to fish," and that spilt material had leaked into Sulphur Run. Lesley Run, Little Beaver Creek and the Ohio River were being monitored.

The U.S. EPA said on Friday that Norfolk Southern contractors had installed a dam and a water bypass at Sulphur Run to prevent further contamination, and had also stopped the remaining spilled chemicals from entering the stream.

The EPA is working with the Ohio EPA to investigate soil contamination at the derailment site.

**EDITOR'S COMMENT:** It is strange that most – if not all – chemical derailments happen while crossing rural areas and not out in the open. Cannot think of a reasonable explanation and it is not speed because trains supposed to reduce speed when passing by inhabited areas. Was a journalist [arrested](#) in Ohio for covering the train derailment? Also, read the following two articles for additional reasonings of the accident.

## Here's What Happens When **Two Crew Members** Are Operating 141 Freight Cars

Source: <https://newrepublic.com/article/170572/east-palestine-derailment-crew-shortage>

Feb 14 – On February 3, a Norfolk Southern freight train derailed near East Palestine, Ohio, a small town (pop. 4,800) situated on the Pennsylvania border 20 miles south of Youngstown. The derailment spewed vinyl chloride and other toxic chemicals into the air, killing fish in nearby streams and prompting an evacuation. Ohio Governor Mike DeWine, a Republican, [warned](#) that anyone who lingered in the immediate area would face "grave danger of death." Five days later, DeWine [said](#) it was safe to return home, but local residents [continued to report](#) headaches and nausea.

If all this sounds reminiscent of Don DeLillo's 1985 novel [White Noise](#) and Noah Baumbach's 2022 [film adaptation of same](#), just imagine how it felt to Ben Ratner, an East Palestine resident who, along with various family members, worked as an extra on the movie when Baumbach was shooting nearby. "The first half ... is all almost exactly what's going on here," Ratner [told CNN](#).

We don't yet know much about what caused the derailment, and won't know until the National Transportation Safety Board weighs in. But to anyone familiar with the [rail contract](#) negotiated in September by Labor Secretary Marty Walsh (who's [expected](#) to leave shortly to become executive director of the NHL Players' Association) and [ratified](#) in December by Congress over the objection of four participating unions—to anyone who followed that Sturm und Drang—two facts stand out.

Fact One is that the Norfolk Southern train was pulling 141 freight cars. Freight trains are much longer than they used to be, and today their length can be measured, literally, in miles. That's long been a point of contention for railway workers. "The engineer driving can't even see the end of the train," Jeff Kurtz, a retired locomotive engineer and an official with Railroad Workers United, [complained](#) in 2017 to the Albany *Times-Union*.

Fact Two is that the "crew" (all of whom, thankfully, survived the derailment) consisted of two Norfolk Southern rail workers plus one trainee. That's 47 cars per person. Two crew members is the minimal number required on every freight train under a regulation [proposed](#) last July by the Federal Railroad Administration, or FRA. Unbelievably, there is currently no regulatory requirement on crew size.

The labor dispute that almost created a rail strike last fall was not about pay; rail workers are already paid very well, and under the new contract they'll be paid considerably more. Rather, it was about working conditions. Rail workers were demanding that they not get penalized for taking sick days. They didn't get any in the contract; instead they got one additional paid day off and an agreement from management not to penalize them when they go to a doctor's appointment or have a medical procedure done.

Management was insistent that rail workers not be granted the minimally decent benefit of sick days because that would require them to hire more people, and the big "Class I" carriers are all about getting rid of workers, not hiring more. Over the past six years they've shed, collectively, [nearly one-third](#) of their workforce. Work crews have shrunk over the past three decades from a minimum of six people to a minimum of four to a minimum of two, even as the trains have gotten longer. Smaller work crews and longer trains are the keystones of [Precision Scheduled Railroading](#), or PSR, the reigning gospel of Class I freight, which has made the railroads improbable darlings of Wall Street.

The railroads will tell you that in the PSR era, the overall [number of rail accidents \(typically derailments and collisions\)](#) has remained steady over the past decade, at about 1,000 per year. (I exclude 2020 and after, when Covid reduced the number of freight shipments.) Derailments, though, [increased](#), from 94 in



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2013 to 136 in 2019. Remember too that during this period freight's market share lost ground to trucking. Greg Regan, president of the AFL-CIO's Transportation Trades Department, directed me to the rate of total accidents or safety-related incidents *per track mile*. That rose a nontrivial [10 percent](#) between 2013 and 2022.

For Norfolk Southern, total accidents or safety-related incidents rose on a per-track-mile basis (again, over the past decade) by 82 percent. Norfolk Southern's workforce shrank from [about 30,000](#) in 2015, the year it adopted PSR, to [about 25,000](#) in 2019. Even before Covid hit, Norfolk Southern shed about 17 percent of its workforce. It shed considerably more in 2021, then started hiring again in 2022. Today Norfolk Southern's workforce is [about 19,000](#), or about one-third smaller than it was in 2013.

We don't know a lot about what caused the February 3 derailment, except that it involved an axle that overheated. But what we do know raises suspicions about whether a sufficient number of human beings was paying attention to those 141 freight cars. On February 10, Anya Litvak of *The Pittsburgh Post-Gazette* [reported](#) that security camera footage 20 miles short of where the derailment occurred showed a rail car axle that appeared to be on fire. Why this information was not transmitted quickly to the train crew remains unknown, but it seems likely that the answer has something to do with the number of people who were in a position to sound the alarm. Something else that jumped out to the AFL-CIO's Regan was that Norfolk Southern does not participate in a voluntary "[confidential close-call](#)" program run by the FRA that protects rail workers who blow the whistle on accidents that are averted only narrowly. None of the major freight rail carriers do.

Nobody died in the February 3 derailment (though it will be some time before we know whether it caused a cancer cluster). That's something to be thankful for. Freight rail is safer overall than trucks to move toxic chemicals, but when lives are at stake that isn't good enough. A clean and healthy environment depends on many factors, and at least three of them are labor issues: whether there are enough people working to prevent toxic spills, whether they get sufficient rest between shifts, and whether they end up working while sick because they can't get time off. At least one of these factors, I'll wager, figured in the February 3 derailment. A safe environment requires workplace safety, and that's especially true when the workplace in question has wheels.

**Timothy Noah** is a *New Republic* staff writer and author of *The Great Divergence: America's Growing Inequality Crisis and What We Can Do About It*.

## Railroad hunger for profits blasts Ohio community with massive dose of poisons

By **David Hill** (member of the writers collective, the Mike Gold Club of Columbus)

Source: <https://peoplesworld.org/article/railroad-hunger-for-profits-blasts-ohio-community-with-massive-dose-of-poisons/>

In this photo provided by Melissa Smith, a train fire is seen from her farm in East Palestine, Ohio, Friday, Feb. 3, 2023. A train derailment and resulting large fire prompted an evacuation order in the Ohio village near the Pennsylvania state line on Friday night, covering the area in billows of smoke lit orange by the flames below. | Melissa Smith/AP



Feb 14 – A catastrophic derailment of 50 train cars on Feb. 3 has led to a mounting humanitarian and ecological disaster that continued to develop in the days since the crash. The immediate result of the wreck was an enormous fireball looming over the border of Ohio and Pennsylvania, necessitating the evacuation of at least 500 residents.

In an attempt to avoid an even larger explosion and the expansion of ongoing fires at the wreck site, on Feb. 6 emergency crews vented from the burning tankers thousands of gallons of phosgene and hydrogen chloride gas. These gasses were once used as weapons of mass destruction in the battlefields of Europe during the First World War. Initial reports on local news and social media show dead wildlife and livestock in the area of the wreck. Other cars were known to be carrying vinyl chloride, a potent carcinogen with effects on liver health





that may not manifest for years. These lethal gasses are now dispersing across an area at least two miles in radius with unknown consequences to local residents.

Ohio Gov. Mike DeWine offered advice to residents in the area of the wreck, “You need to leave, you just need to leave. This is a matter of life and death.”

It’s also a matter of catering to corporate greed. The disaster in East Palestine is the direct consequence of this private control of essential transportation infrastructure and the subsequent profit-seeking behavior of its ownership class.

Under current federal safety regulations, weakened as a result of intensive industry lobbying, the 9,300-foot-long Norfolk Southern train that crashed in East Palestine was not considered a high-hazard flammable safety concern prior to the crash.

Initial reports suggest the derailment may have been caused by overheated wheel bearings, an accident facilitated by the shameless profit-seeking behavior of the national railroad cartel. Norfolk Southern, the company responsible for the wreck in East Palestine, has frequently underfunded track maintenance.

Norfolk Southern’s 2021 annual report to shareholders shows the company invested \$250 million in track maintenance, a decrease of 9% from the previous year, and installed 458 miles of new track along its total operating length of 35,300 miles.

The average age of Norfolk Southern’s locomotive fleet is nearly 27 years, exceeding the industry standard of 15-25 years. The risks of train derailment were apparently well understood within the highest levels of the company, as stated in the annual report: “Transportation of certain hazardous materials could create catastrophic losses in terms of personal injury and property (including environmental) damage and compromise critical parts of our rail network.”

### **All-time record profits**

Yet Norfolk Southern reported all-time record profits of \$12.7 billion in 2022.

Along with cost reductions from reduced track maintenance, Norfolk Southern maximized profits for its owners by pursuing relentless overwork and understaffing among railroad workers while refusing any concession to the railroad unions.

And following an industry-wide trend, Precision Scheduled Railroading (PSR), developed by the hedge fund financiers of the nation’s railroads and implemented through Trump-era changes in regulations, Norfolk Southern increased the number of freight cars per train.

This train had 150 cars—and the heavy oil-laden tank cars were at the rear, with lighter cars between them and the three engines. That’s because PSR determined which cars were placed where on the train. But the result was the cars in between crumpled on the downhill slope and jumped the tracks.

Norfolk Southern, again catering to Wall Street, has cut nearly 4,000 workers since 2019. That’s a trend throughout the industry starting in 2015. The remaining railroad workers have been forced to accept long working hours and chronic fatigue as the new baseline under these PSR policies. For investors, this brutal policy of understaffing and pushing rail systems past their safe limits has enabled consistent increases in annual profits despite a nationwide decline in rail freight tonnage.

A review of the company’s highly paid board of directors shows extensive ties to finance capital with executives holding previous or concurrent positions within the real estate industry (Mesa Capital), Big Pharmaceutical (Eli Lilly and Co.), fossil fuels (Marathon Oil Corp., Arch Coal), defense (Northrop Grumman Corp.), and finance (Morgan Stanley Bank).

The evacuation order was lifted late in the evening of Feb. 7, with officials from the Ohio Department of Health and U.S. Environmental Protection Agency insisting that data collected from air monitoring studies was “unconcerning.” A broadcast reporter was arrested while doing a stand-up during DeWine’s remarks at the news conference announcing the end of the evacuation order. The reporter was charged with disorderly conduct and criminal trespassing and held overnight in the local jail.

Again, Norfolk Southern’s own words to shareholders make the position of owners clear: “Future national labor agreements, or renegotiation of labor agreements or provisions of labor agreements, could significantly increase our costs for health care, wages, and other benefits.” This hostility to the provision of even basic health care and paid time off is remarkable given that Norfolk Southern railroad workers moved an average of [9.7](#) million paid ton miles of freight *each* in 2021 alone.

Frustration among railroad workers with the greed of the corporate owners nearly culminated in a nationwide railroad strike in the fall of 2022 before President Joe Biden and the Democratic-run Congress sided with railroad executives and finance capital by signing legislation to prevent the strike.

The fight by railroad workers continues. Last year, Railroad Workers United (RWU), a coalition of rank-and-file rail workers spanning all rail crafts, officially adopted a position calling for “the public ownership of the rail infrastructure of the US, Canada, and Mexico, to be operated henceforth in the public interest, placed at the service of the people of all three nations.”

And in a clear sign of a worker-led push to advance the struggle, rank-and-file members of the Brotherhood of Locomotive Engineers and Trainmen, who voted 99.5% in favor of last year’s strike, ousted their



longtime president in favor of a fellow engineer after the former union president supported Biden's forced contract. The only acceptable course of action in East Palestine is the timely restitution of all damages, the adoption of fair wages and safe working conditions for all railroad workers, and environmental restoration and protection in all affected areas.

## US to deploy drones for chemical and biological threat detection

Source: <https://www.shephardmedia.com/news/air-warfare/us-to-deploy-drones-for-chemical-and-biological-threat-detection/>

Feb 14 – Teledyne FLIR's SkyRaider UAS will fly autonomous missions to replace handheld sensors used for detecting chemical, biological, radiological and nuclear threats. [Teledyne FLIR Defense](#) on 9 February announced that it had been awarded a \$13.3 million contract by the US DoD to extend the capabilities of its R80D SkyRaider UAS to autonomously carry out chemical, biological, radiological and nuclear (CBRN) reconnaissance missions.



The company will integrate flight control software that enables the [SkyRaider](#) to fly CBRN missions currently performed by soldiers hand-carrying sensors into hazardous areas. Teledyne FLIR will produce prototype chemical and radiological sensor payloads for the UAV, as well as integrate existing US Army detector equipment. This contract follows three years of work by multiple joint programme offices to develop UAS capabilities for [CBRN applications](#). David Cullin, VP of technology and product management at Teledyne FLIR Defense, said: 'Employing unmanned air and ground assets to assess risks from weapons of mass destruction is an increasingly sought-after capability. We'll continue our customers' important work to enhance situational

awareness for mounted and dismounted operations, enabling greater manoeuvrability on future CBRN-contested battlefields.' The company already offers a family of CBRN sensor payloads for UAS– the MUVE C360, MUVE B330, and MUVE R430. The SkyRaider and its developmental payloads will be designed to operate with the C2 user interface on the US Army's Nuclear, Biological and Chemical Reconnaissance Vehicle (NBCRV) Stryker [vehicle](#), for which Teledyne FLIR Defense is prime systems integrator. For the base contract, the company will deliver four SkyRaiders and six of each sensor payload, with options to support training and documentation, plus the delivery of additional UAS and payloads. Initial deliveries are scheduled for autumn 2023.

## Soldiers and Army civilians remove unexploded chemical munitions from Redstone Arsenal

Source: [https://www.army.mil/article/264026/soldiers\\_army\\_civilians\\_remove\\_unexploded\\_chemical\\_munitions\\_from\\_redstone\\_arsenal](https://www.army.mil/article/264026/soldiers_army_civilians_remove_unexploded_chemical_munitions_from_redstone_arsenal)

Feb 15 – Highly trained units from the U.S. military's premier all hazards command are removing old unexploded chemical munitions from a former bomb disposal area on Redstone Arsenal, Alabama.

U.S. Army civilians from the Chemical, Biological, Radiological, Nuclear, Explosives (CBRNE) Analytical and Remediation Activity - Remediation Response West and Chemical Corps Soldiers are working together to clear the Gulf Chemical Warfare Depot on the base.

Chemical, Biological, Radiological, Nuclear (CBRN) specialists from the Fort Bliss, Texas-based 46th Chemical Company (Technical Escort) are working with CARA civilians during the operation.

The 46th Chemical Company (Technical Escort) is part of the 22nd Chemical Battalion and 48th Chemical Brigade. Both units are from the Aberdeen Proving Ground, Maryland-headquartered 20th CBRNE Command. From 19 bases on 16 states, Soldiers and Army civilians from 20th CBRNE Command support joint, interagency and allied operations around the world.

CARA provides a world-wide emergency response capability for Recovered Chemical Warfare Material, remediation support for combatant commanders, technical escort of chemical materials and mobile laboratories.



Steven M. Tewhill, a U.S. Army civilian and Senior Unexploded Ordnance Supervisor from CARA Remediation Response-West on Redstone Arsenal, said the current chemical munition clearance operation is part of a long-term effort.



“CARA has been supporting other remediation operations on Redstone Arsenal since 2014 and will probably continue through 2025,” said Tewhill, adding that CARA Remediation Response West was moved from Pine Bluff Arsenal, Arkansas, to Redstone Arsenal, Alabama, to be closer to the ongoing clearance operation.

In addition to Tewhill, the CARA civilians involved include Jeffrey Williams from Choctaw, Oklahoma; Donald Jennings from Sheridan, Arkansas; Christopher Crecelius from Soddy-Daisy, Tennessee; Kevin Hanuszczak from Kaneohe, Hawaii; Christopher Henke from Wisconsin Rapids, Wisconsin; Taylor Phillips from Sheffield, Alabama; Anthony Pino from Lorton, Virginia; Wende Thornton from Canton, Texas; and Clinton Vandiver from Elizabethtown, Kentucky.

Soldiers currently involved in the clearance operation include 1st Lt. Joshua Young from Washington, D.C.; Sgt. 1st Class Leandria Thrasher from Birmingham, Alabama; Sgt. 1st Class Joseph Washington from Miami; Staff Sgt. Patrice Williams from Longview, Texas; Sgt. Andrew Van Deventer from Cary, North Carolina; Sgt. David Hernandez from Cortez, Colorado; Spc. Osvaldo Casterner from Cayey, Puerto Rico; Spc. Michael Di Mola from Bay Shore, New York; Pfc. Guillermo Garduno from Fort Wayne, Indiana; and Pfc. Christian Stough from Tuscaloosa, Alabama.

Tewhill said the chemical munitions they are clearing from the bomb disposal site have been there for more than 60 years.

“This ordnance was either buried intact, burned or detonated during authorized disposal in the 1940s - 1960s,” said Tewhill. “Most of the munition residue encountered shows a complete disposal, although occasionally there is liquid residue inside. Then that ordnance will be packaged and stored for further disposal.”



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According to Tewhill, the remediation effort gives CBRN Soldiers firsthand experience with the hazards they could confront on the battlefield. Before supporting the clearance operation, the CBRN Soldiers complete the 40-hour Occupational Safety and Health Administration Hazardous Waste and Emergency Response course that prepares them to work with hazardous materials. Tewhill said the Soldiers then occupy positions in the personnel decontamination station, rescue, packaging, life support and Command Post operations.

Christopher Crecelius (left) and Christopher Henke (right) inspect a portable X-Ray used to non-intrusively inspect chemical munitions and other items. U.S. Army civilians from the Chemical, Biological, Radiological, Nuclear, Explosives (CBRNE) Analytical and Remediation Activity and Soldiers from the 46th Chemical Company are removing old chemical munitions from a bomb disposal area at Redstone Arsenal, Alabama. (Photo Credit: Courtesy photo)



The assessment area is only covered by Explosive Ordnance Disposal-qualified civilians in the Radiation Protection Program.



“Soldiers get real-world experience working with live chemical agents in ordnance and possibly on someone’s Personnel Protective Equipment. Even in the Command Post, the pace is real with no time for a do-over,” said Tewhill.

The team discovered a 75 Mk II during the remediation operation. U.S. Army civilians from the Chemical, Biological, Radiological, Nuclear, Explosives (CBRNE) Analytical and Remediation Activity and Soldiers from the 46th Chemical Company are removing old chemical munitions from a bomb disposal area at Redstone Arsenal, Alabama. (Photo Credit: Courtesy photo)

“No amount of training can simulate the pace of live operations and the unexpected problems that must be solved,” said Tewhill. “The Soldiers will benefit in ways they may not recognize for years in the future.”

Sgt. 1st Class Joseph Washington from the 46th Chemical Company said the clearance operation “gives Soldiers confidence and validation in their training.”

The team discovered an M2 Chemical sprayer during the remediation operation. U.S. Army civilians from the Chemical, Biological, Radiological, Nuclear,

Explosives (CBRNE) Analytical and Remediation Activity and Soldiers from the 46th Chemical Company are removing old chemical munitions from a bomb disposal area at Redstone Arsenal, Alabama. (Photo Credit: Courtesy photo)

Franz J. Amann, the CARA director, said Soldiers and Army civilians both benefit from the experience earned during the clearance operation.

“The experience the CBRN Soldiers gain working with our seasoned Army civilians better prepares them to confront



and defeat all hazards on the battlefield. Many of our CARA civilians have decades of experience and this operation gives them the opportunity to share it with the next generation of CRBN warriors,” said Amann, a retired U.S. Army Chemical Corps colonel from Spartanburg, South Carolina. “The work these professionals are doing not only removes potential military hazards from the environment but it also allows the site to be reutilized for ongoing expansion on Redstone Arsenal,” said Amann. “Once the sites are cleared, the Department of Defense, FBI and NASA will plan to construct new facilities in the cleared area.”

Amann said the experience gained on these active remediation sites will give the Soldiers the capabilities to properly plan for conducting assessment and consolidation of known and suspected chemical munitions they may encounter on the battlefield.

“We also hope this experience causes the Soldiers that rotate through the remediation operations to consider potentially joining the CARA team when they retire or ETS (leave) from the service,” said Amann. “We continuously have open positions that the Soldiers can easily fill.”

**EDITOR’S COMMENT** (on the decon photo above): It seems that the lady on the right is immune to CWAs!

## Here's What The Ohio Train Wreck Really Has in Common With The Chernobyl Disaster

Source: <https://www.sciencealert.com/heres-what-the-ohio-train-wreck-really-has-in-common-with-the-chernobyl-disaster>



The Ohio train wreck (left) and Chernobyl explosion site (right). (DUSTIN FRANZ/Getty Images// Igor Kostin/Laski Diffusion/Getty Images)

Feb 16 – Following the February 3 train derailment in East Palestine, Ohio, users on social media began sharing photos of an ominous black cloud hanging over the town – and fears that the disaster would become the new [Chernobyl](#).

A fire engulfed a Norfolk Southern train after 50 of its 150 cars derailed. The train carried 10 cars full of hazardous materials, including [vinyl chloride, a colorless gas](#) used in the creation of the plastic PVC, which [was released as a result of the derailment](#). In sunlight, it can be broken down into [chemicals like formaldehyde](#).

Other flammable chemicals, like [ethylene glycol monobutyl ether](#), [ethylhexyl acrylate](#), [butyl acrylate](#), and isobutylene were also present in the cars and released into the environment, according to a list [compiled by the EPA](#).

Many of these chemicals are carcinogenic or potentially carcinogenic, or are considered respiratory and eye irritants.

The toxicity of these chemicals initially prompted concerns about the health and safety of residents. Then came the [comparisons to](#) another disaster, one that happened nearly 40 years ago: The nuclear disaster in the city of Pripjat on April 26, 1986, which resulted in the spread of radioactive contaminants in Ukraine and across Europe.

Although the intense imagery from Ohio might have onlookers believe the state has a mini Chernobyl on its hands, the scale of Chernobyl's destruction was much worse. However, the environmental impact of the East Palestine incident should not be ignored, [experts say](#).



### Chemicals released during both disasters were carcinogenic, but Chernobyl was radioactive

The Chernobyl incident occurred after a [series of safety measures during a nuclear reactor test](#) were ignored, resulting in a huge explosion and fire that spread large amounts of radioactive chemicals like plutonium, iodine, strontium, and cesium. Although carcinogenic chemicals were found on the train in East Palestine, and [multiple small explosions occurred following the derailment](#), many were [burned in a controlled fashion](#) – which resulted in the large black cloud over the city. The chemicals in the East Palestine incident are also not as [potent as the nuclear waste](#) in Chernobyl.

### Nobody died as a result of the East Palestine chemical spill

Two people died immediately following the explosion at Chernobyl. A month later, nearly 30 emergency workers died as a result of acute radiation sickness and one of cardiac arrest. Following the accident, it's estimated that thousands may have died as a result of cancers and blood diseases caused by chemical exposure from the Chernobyl power plant – although these [figures are still being disputed](#). In East Palestine, no deaths have been reported as a result of the derailment or the following fires and explosions, although [residents say they are experiencing](#) respiratory issues, sore throats, irritated eyes, headaches, and other ailments. Multiple class action [lawsuits have been filed against Norfolk Southern Railroad Company](#) following the derailment, with residents saying that the company should be responsible for the health effects to residents and the environment.

### There have been reports of a significant amount of animal deaths

Following the controlled burn of chemicals to prevent a deadly explosion, residents say foxes, chickens, and other [domesticated animals have died](#). There have also been approximately 3,500 dead fish counted in four nearby waterways, the Ohio Department of Natural Resources [said Tuesday](#). In Chernobyl, the effects on animal life have not been fully determined. The explosion had immediate effects on the health of [animal populations](#) and many plants and animals mutated as a result of radioactive exposure, according to the [International Atomic Energy Agency](#).

### East Palestine resulted in an evacuation, but it was short-lived

After the derailment, close to 2,000 residents in East Palestine were asked to evacuate. Prior to the controlled burn in the Ohio city, the [evacuation area was extended](#) to a 2-mile-wide radius zone that was established on February 6. On February 8, officials announced that [residents could return to their homes](#) after the [EPA determined](#) that it did not detect contaminants at "levels of concern" in air and water samples. The Ohio EPA also announced that it would monitor soil for potential groundwater leaching of chemicals, [WESA reported](#).

### But Chernobyl is still considered uninhabitable

The Chernobyl explosion contaminated 150,000 square kilometers in Belarus, Russia, and Ukraine, and resulted in the evacuation of [around 350,000 people](#) who had to leave all their belongings behind. A [19-mile-radius nuclear exclusion zone](#) was established around the power plant that [still exists today](#). During the war in Ukraine, Russian troops returned to the Chernobyl plant and began digging trenches around the area. Ukraine's state nuclear agency claimed in [March that Russians suffered](#) "significant doses of radiation." Russian soldiers later left the [plant in a state](#) of disarray, [Ukrainian workers said](#) in June. Hundreds of [mostly elderly people](#) have also [returned to the zone – or never left](#) – to live the rest of their lives in their hometowns. "Those who left are worse off now," one woman [said in the documentary Babushkas of Chernobyl](#). "They are all dying of sadness."

## How Dangerous Was the Ohio Chemical Train Derailment? An Environmental Engineer Assesses the **Long-Term** risks

By Andrew J. Whelton

Source: <https://www.homelandsecuritynewswire.com/dr20230217-how-dangerous-was-the-ohio-chemical-train-derailment-an-environmental-engineer-assesses-the-longterm-risks>

Feb 17 – Headaches and lingering chemical smells from a fiery train derailment in East Palestine, Ohio, have [left residents worried](#) about their air and water – and misinformation on social media hasn't helped. State officials offered more [details of the cleanup process and a timeline](#) of the environmental disaster during a news conference on Feb. 14, 2023. [Nearly a dozen](#) cars [carrying chemicals](#), including vinyl chloride, a carcinogen, derailed on the evening of Feb. 3, and fire from the site sent up acrid black smoke.



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Officials said they had tested over 400 nearby homes for contamination and were tracking a plume of spilled chemicals that had killed 3,500 fish in streams and reached the Ohio River.

However, the slow release of information after the derailment has left many questions unanswered about the risks and longer-term impact. [The Conversation](#) put five questions about the chemical releases to Andrew Whelton, an environmental engineer who investigates chemical risks during disasters.

### Let's start with what was in the train cars. What are the most concerning chemicals for human health and the environment long term, and what's known so far about the impact?

The main concerns now are the contamination of homes, soil and water, primarily from [volatile organic compounds](#) and semivolatile organic compounds, known as VOCs and SVOCs.

The train had nearly a dozen cars with vinyl chloride and other materials, such as ethylhexyl acrylate and butyl acrylate. These chemicals have varying levels of toxicity and different fates in soil and groundwater. Officials have [detected](#) some of those chemicals in the nearby waterway and particulate matter in the air from the fire. But so far, the fate of many of the chemicals is not known. A variety of [other](#) materials were also released, but discussion about those chemicals has been limited.

State officials disclosed that a plume of contamination released into the nearby creek had made its way into the Ohio River. Other cities get their drinking water from the river and were [warned](#) about the risk. The farther this plume moves downstream, the less concentrated the chemical will be in water, posing less of a risk.

Long term, the greatest risk is closest to [the derailment location](#). And again, there's limited information about what chemicals are present – or were created through chemical reactions during the fire.

It isn't clear yet how much went into [storm drains](#), was flushed down the streams or may have settled to the bottom of waterways. There was also a lot of combusted particulate matter. The black smoke is a clear indication. It's unclear how much was diluted in the air or fell to the ground.

### How long can these chemicals linger in soil and water, and what's their potential long-term risk to humans and wildlife?

The heavier the chemical, often the slower it degrades and the more likely it is to stick to soil. These compounds can remain for years if left unaddressed. After the [Kalamazoo River oil pipeline break](#) in [Michigan](#) in 2010, the U.S. Environmental Protection Agency excavated a tributary where the oil settled. We've also seen from oil spills on the coasts of [Alaska](#) and [Alabama](#) that oil chemicals can find their way into soil if it isn't remediated.

The long-term impact in Ohio will depend in part on how fast – and thoroughly – cleanup occurs.

If the heavily contaminated soils and liquids are excavated and removed, the long-term impacts can be reduced. But the longer removal takes, the farther the contamination can spread. It's in everyone's best interest to clean this up as soon as possible and before the region gets rain.

Booms in a nearby stream have been deployed to capture chemicals. [Air-stripping devices](#) have been deployed to remove chemicals from the waterways. Air stripping causes the light chemicals to leave the water and enter air. This is a common treatment technique and was used after an 2015 oil spill in the Yellowstone River [near Glendive, Montana](#).

At the derailment site in Ohio, workers are already removing contaminated soil as deep as 7 feet (about 2 meters) near where the rail cars burned.

### Some of the train cars were intentionally drained and the chemicals set on fire to eliminate them. That fire had thick black smoke. What does that tell you about the chemicals and longer-term risks?

Incineration is one way we dispose of hazardous chemicals, but incomplete chemical destruction creates a host of byproducts. Chemicals can be destroyed when heated to [extremely high temperatures](#) so they burn thoroughly.

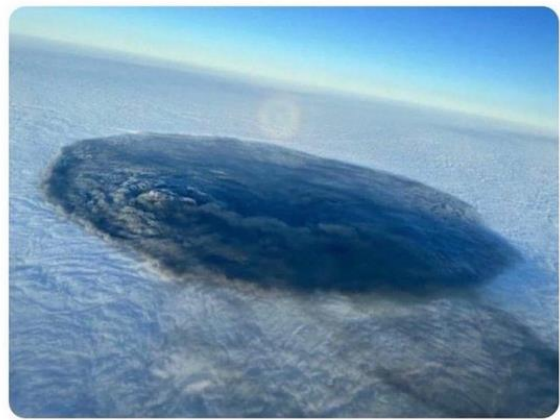


Alan Jacoby    
@AlanJacoby1776 · Ακολουθήστε



Good morning to everyone except those sick scumbags who told the people in East Palestine, Ohio, the water and air is safe.

The same federal gov't that told you the jab was "safe and effective" are now saying the air and water are clean in Ohio



3:26 μ.μ. · 18 Φεβ 2023



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The [black smoke plume](#) you saw on TV was incomplete combustion. A number of other chemicals were created. Officials don't necessarily know what these were or where they went until they test for them.

We know ash can pose health risks, which is why we test inside homes after [wildfires where structures burn](#). This is one reason the state's [health director told residents](#) with private wells near and downwind of the derailment to use bottled water until they can have their wells tested.

### The EPA has been screening homes near the derailment for indoor air-quality concerns. How do these chemicals get into homes and what happens to them in enclosed spaces?

Homes are not airtight, and sometimes dust and other materials get in. It might be through an open door or a window sill. Sometimes people track it in.

So far, the U.S. EPA has [reported no evidence](#) of high levels of vinyl chloride or hydrogen chloride in the 400 or so homes tested. But full transparency has been lacking. Just because an agency is doing testing doesn't mean it is testing for what it needs to test for. Media reports talk about four or five chemicals, but the [manifest](#) from Norfolk Southern also listed a bunch of other materials in tanks that burned. All those materials create potentially hundreds to thousands of VOCs and SVOCs.

### Are government officials testing for everything they should?

People in the community have [reported headaches](#), which [can be caused by VOCs](#) and other chemicals. They're understandably concerned.

Ohio and federal officials need to better communicate what they're doing, why, and what they plan to do. It's unclear what questions they are trying to answer. For a disaster, this serious, little testing information has been shared.

In the absence of this transparency, misinformation is filling that void. From a homeowner's perspective, it's hard to understand the true risk if the data is not shared.

**Andrew J. Whelton** is a Professor of Civil, Environmental & Ecological Engineering, Director of the Healthy Plumbing Consortium and Center for Plumbing Safety, [Purdue University](#).

## Some of the most dangerous chemicals in the world

Source: <https://engineerine.com/worlds-most-dangerous-chemicals/>



Chemicals can be found practically everywhere. Most are harmless or necessary for life, but some will soon rob you of your life if not handled with caution.

### Dimethyl Cadmium, the Most Dangerous of All Chemicals

Dimethyl cadmium has been known to be the most hazardous chemical in the world and is nearly never safe to be around. Even a few micrograms of it, which evaporates quickly at ambient temperature, can be hazardous if inhaled.

The chemical enters the bloodstream and goes to various organs, removing electrons from cell membranes. Additionally, it is carcinogenic, meaning that any cells that aren't destroyed the first time can develop cancer. Dimethyl cadmium is flammable and deadly when it is liquid, but it may also dry out into a highly explosive crust that is also very unstable. It explodes in brief blasts if it falls into the water. It also stinks, so if you're ever exposed, you'll have an olfactory clue that you're about to die.

### The Piranha Solution: Junking It Up

If you're looking for a stomach-churning YouTube video, try searching for "piranha solution dissolving chicken legs." You'll see how swiftly and thoroughly these powerful acids dissolve flesh.

Meat may be removed from bones in minutes with piranha solutions. In addition to being more effective than a pure acid at removing organic material, it will also peel away the bone entirely if submerged.

The infamous "Piranha Solution" combines sulfuric acid and hydrogen peroxide in a ratio of three parts per one. The Piranha Solution notoriously removes all traces of biological material within no time.





### Nicotine is Toxic, More Than You Thought

Plants produce nicotine as a defense strategy against herbivores. Because of this, it ranks among the worst poisons ever discovered. Not only is it highly addictive at even relatively modest dosages, but it is also lethal at sufficiently high ones. Five micrograms per cubic meter of air (mcg/m<sup>3</sup>) of nicotine are considered “immediately harmful to life and health” by the National Institute for Occupational Safety and Health.

### Dioxygen Difluoride Ready For Explosion

Dioxygen difluoride, sometimes known as FOOF, is a very reactive chemical that has generally proven far too toxic for scientists to work with. One article reported that it is most stable around 90 Kelvin, which is roughly -180 C and -300 F, although even at such temperatures, it is questionable whether it is entirely risk-free. This stuff goes boom at room temperature.

According to the [same paper](#), it will spontaneously combust if it comes into contact with solid ethyl alcohol. A single drop of it ignited upon contact with methane at 90K, and a mere 0.2 mL of the gas caused an explosion at temperatures far below anything you'd find on Earth. FOOF was subjected to a variety of environments and chemicals. The response was always the same: an explosion.

### Strychnine Allegedly Killed Alexander the Great

Assassins and poisoners have relied on strychnine for a long time. It is most commonly used to eliminate bothersome insects, but it can also destroy the lives of humans.

Many renowned people, including Alexander the Great and Robert Johnson, the father of blues music, have been linked to its use as a murder weapon.

### Batrachotoxin Is Extremely Hazardous To Life

Compounds that can cause death can be found all over the world. Some substances are only deadly after being exposed to them for a long time, and others are horrifyingly hazardous, even in tiny doses. One such chemical is batrachotoxin.

Batrachotoxin, the deadly poison that dart frogs produce, only needs a dose the size of two grains of salt to kill a 150-pound adult. That equals 136 micrograms. Only around eight dosages would fit into the body of a single small frog.

You can see why native hunters from the same part of the world where the frogs live used the poison. The venom produced by only a few of these frogs would be enough to kill 20,000 mice.

### The Oddly Explosive Azidoazide Azide

Science has invented many things that go boom, including TNT and C4. Acid azide's formula, C<sub>2</sub>N<sub>14</sub>, has a lot of nitrogen. It's among the most explosive chemicals ever found. No one has accurately measured how explosive it is because it always goes off. This makes it hard to know if it is the most explosive [material in the world](#).

Even scientists trained to handle unstable substances with sensitive equipment can't measure this compound's explosive potential. It booms when moved. When dissolved, it explodes fiercely. Detonation occurred when its infrared spectra were analyzed.

### Chlorine Trifluoride, An Extremely Reactive Chlorine

Most of us won't find chlorine trifluoride in nature, which is a good thing since it's dangerous. One of chlorine trifluoride's most well-known properties is its corrosion of glass. It is a substance known as an interhalogen compound, which is colorless, exceedingly corrosive, and reactive. It can only really be stored in metal containers that have been fluorine-treated because it is primarily utilized as a component of rocket fuel. This toxic substance reacts violently and explosively with water.



Its military uses were obvious. Easy-to-make bombs and flamethrowers may be abundant. It was inexpensive, easy, and effective, but only 30 tons were made since it was unstable and dangerous. In the 1950s, 1 ton of CTF leaked. It burned a foot of concrete and three feet of gravel, releasing acid.

**EDITOR'S COMMENT:** Certain chemicals and toxins that are well known to CBRN people have been omitted from the list – i.e., VX, sarin, ricin, botulinum toxin A, chlorine, phosgene, hydrogen sulfide, sodium cyanide.

## The darker side to Pooh's<sup>1</sup> cravings for honey

Source: <https://sciencenordic.com/biotechnology-health/the-darker-side-to-poohs-cravings-for-honey/2142421>

Feb 17 – When thinking about potentially toxic substances, the delicacy of choice for the main character of one of world's most iconic cartoon characters does not typically come to mind. Winnie the Pooh's favorite food, honey, is in fact widely known for its [sweet properties and positive health effects](#). But as it turns out, this sweet substance can turn into a powerful psychedelic and poison, making the bear's cravings for honey seem far less innocent.

### What is Pooh looking for?

The fact that honey can be poisonous has long been known to mankind with reports dating back to around 400 B.C., when the Greek general Xenophon was returning to Greece from a failed [attempt to overthrow a Persian king in Babylon](#).

When his mercenary army came across wild beehives in North-Eastern Anatolia, nowadays Turkey, soldiers started feasting on the honeycombs. It did not take long before they became disoriented and could no longer stand. Only three days later were they able to get up on their feet again, as if they had experienced a drugging. Could it be that everyone's favorite yellow bear is secretly looking for a similar experience?



### Rhododendron flowers give rise to a powerful psychedelic

The flowers of the Rhododendron species that contain grayanotoxins. a. Rhododendron ponticum b. Rhododendron luteum. [Photo left: First light/ CC BY-SA 3.0. Photo right: Chrumps/CC BY 3.0](#)

Even today, the honey that Xenophon encountered is still being made by honeybees in the same region. There, alternative medicine applies the honey to [treat hypertension and sexual dysfunction](#), while also being known as a hallucinogenic recreational drug. The so-called 'mad honey' actually obtains its properties from the Rhododendron ponticum and

Rhododendron luteum plants, both of which you can see in the picture below.

These Rhododendrons contain grayanotoxins which are transferred to the honey when bees [collect nectar from their colourful flowers](#). When the neurotoxic grayanotoxins are ingested, they overstimulate the central nervous system by keeping sodium channels in an active state and [subsequently prolonging cell depolarization](#).



### A feeling of pleasant dizziness

Now how would the grayanotoxin affect you, if you decided to try this “mad honey”? Depending on how much you dare to take, the results might vary. The consumption of very small amounts of the honey usually would give intoxicating effects like a feeling of pleasant dizziness and relaxation.

Slightly larger amounts could result in hallucinogenic experiences.

Little is known about the exact dosage requirements to achieve this, but consumption of up to one tablespoon [generally does not seem to get you hospitalized](#).

If you however decide to ramp it up further, it is possible you will start experiencing what is called mad honey poisoning.

### Over a thousand cases in 30 years

Between 1984 and 2014, [there were 1.199 reported cases of mad honey poisoning](#), primarily in Turkey.

Around 75% of the patients defined the amount of ingested mad honey as 1-5 tablespoons, showing that the grayanotoxin in mad honey can be quite potent.

The majority of the remaining fraction of patients appeared to have wanted an even wilder ride and took more than 5 tablespoons.

If you yourself were to end up with mad honey poisoning, you would likely experience dizziness, nausea, vomiting, fainting, blurred vision, and possibly cardiac arrhythmias, such as a lower heart rate (bradycardia) or even complete atrioventricular block.

Even though [there is a smaller risk, you might also get to experience](#) mental confusion, shortness of breath, poor muscle control, sweating, and double vision.

### Easy to treat

Luckily, mad honey poisoning is generally [easy to treat with 0.5-1 mg atropine and a saline infusion](#).

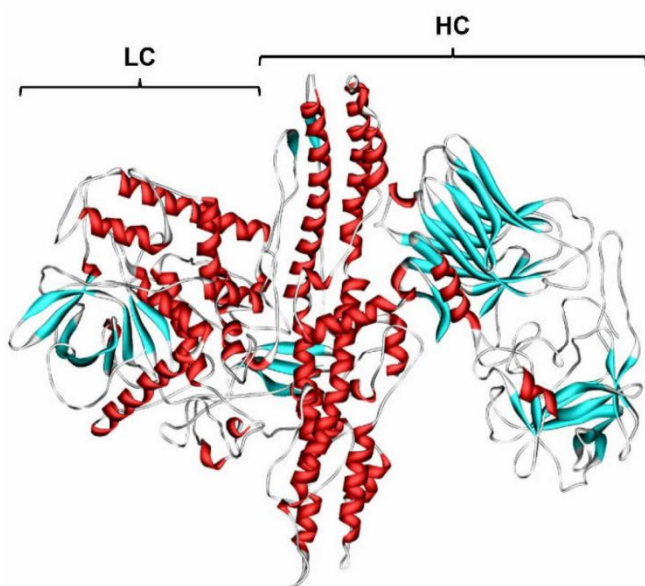
As such, it currently rarely results in fatalities and patients are typically discharged from hospital after 24 hours.

It is, however, likely that cases in more remote areas might not always have such a happy ending due to the fact that there might be no direct access to a hospital.

An example of a less fortunate ending comes from an ancient account, where mad [honey was actually utilized as a weapon](#).

### Ancient honeytrap

Back in 67 B.C., the Roman general Pompey the Great and his army were defeated by a local tribe called Heptacometae when passing along the Black Sea, again in North-Eastern Anatolia. The Heptacometae cleverly left bowls containing mad honey on the road for the Romans to find. When the Roman soldiers ate the honey they became incapacitated and the Heptacometae then disposed of them easily. So, you might want to reconsider the next time you are about to accept a jar of honey from a malicious neighbour.



### Honey as a carrier of a bioweapon

Instead of a plant passing along its toxic properties, it is also possible that honey gets contaminated in other ways. An example where honey becomes toxic as a result of a bacterial spore typically remains unknown to people until they have their first newborn child.

This is because they are likely not informed until then that it is recommended to avoid giving any honey at all to newborns under 12 months. The reason why is because spores of *Clostridium botulinum* bacteria may be present in honey, which is why honey should remain off-limits to newborns.

### Stems from soil bacterium

A ribbon diagram of the molecular structure (alpha-helices in red and beta-sheets in blue) of the botulinum toxin protein. The heavy chain (HC) is responsible for facilitating neuron entry while the light chain (LC) blocks acetylcholine release from inside. Photo: [Lacy et al./PD](#)

This bacterium, usually found in soil all over the world, produces the neurotoxic botulinum toxin, which you can see on the figure below.



## ICI C<sup>2</sup>BRNE DIARY – February 2023

It prevents the release of the neurotransmitter acetylcholine from neuromuscular junctions, causing [flaccid paralysis followed by respiratory failure](#).

If spores of the bacteria contaminate honey and are ingested, they will find their way to the gastrointestinal tract, germinate, try to colonize the gastrointestinal tract, and then [cause the rare but fatal illness of foodborne botulism](#) after producing enough botulinum toxin. Especially children younger than 12 months are susceptible to this foodborne illness commonly known as 'infantile botulism'.



This is due to the fact that they have an immature immune system, a relative lack of gastric acidity (which would otherwise prevent the spores from germinating), and [diminished bacterial flora to compete with the invading bacteria](#).

A 14-year-old with botulism, characterized by weakness of the eye muscles and the drooping eyelids shown in the left image, and dilated and non-moving pupils shown in the right image. This youth was fully conscious.

### Botulism

The foodborne disease was named after the Latin word for sausage, "botulus", because the first reported cases were associated with ingesting German sausages in the 18th century. The Clostridium botulinum bacterium requires anaerobic conditions to grow, which can

often be found in the storage conditions of canned or fermented food, like sausages – Source: [Erbguth 2004](#)

### Modern technology secures low mortality rates

The only definite treatment for botulism involves the administration of a botulinum antitoxin and, if necessary, [intubation in combination with mechanical ventilation](#).

The antitoxin, [containing antibodies or antibody fragments that neutralize the botulinum](#) toxin, can reduce the extent and severity of the paralysis and reduce the duration of mechanical ventilation and intensive care [if administered within 48 hours of the symptom onset](#).

With the arrival of modern mechanical ventilation techniques, mortality rates have dropped down significantly to under 5 percent of all intoxication incidences.

### Botulinum toxin as a weapon of bioterrorism

However, a persisting potential problem can be found in the fact that patient recovery requires prolonged use of intensive care resources, which might be limited when there are large outbreaks.

When distributed in aerosols, botulinum toxin is actually [the most potent toxin known to mankind](#).

As such, it is considered a major threat when it is distributed via the air to large groups of people.

Especially since there have already been several, luckily failed, [attempts to use it in large scale bioterrorism attacks](#).

### Wrinkle reducer - what Pooh<sup>1</sup> was looking for?

To end on a lighter note, in contrast to what you may expect, botulinum toxin is also widely utilized in cosmetic applications.

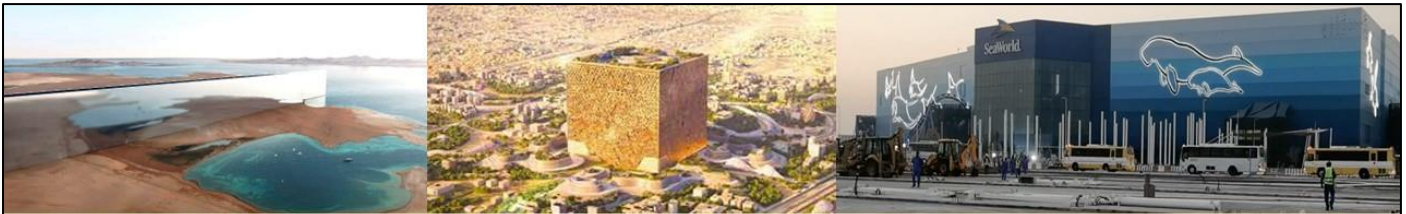
It is [a well-known relatively safe facial wrinkle reducer](#) under the name of Botox and injected by people all over the world. By injecting only small amounts of botulinum toxin into overactive facial muscles you can achieve localized muscle relaxation [that consequently smoothens the overlying skin](#).



<sup>1</sup> Winnie-the-Pooh, also called Pooh Bear and Pooh, is a fictional anthropomorphic teddy bear created by English author A. A. Milne and English illustrator E. H. Shephard.



So, Pooh's round face might not only be explained by his age or slightly overweight disposition (expanding all the wrinkles). **It could be that he just gets his daily dose of Botox through his honey.**



*3 unique papers from the Editor*

**March 2023**

**CBRN challenges in mega projects – Kingdom of Saudi Arabia**  
Part I: NEOM The Line

**April 2023**

**CBRN challenges in mega projects – Kingdom of Saudi Arabia**  
Part II: Sindalah, Trojena, Oxagon, AIUla, Red Sea Project, Amaala, Qiddya, Ad Diriyah, Mukaab

**May 2023**

**CBRN challenges in mega projects – United Arab Emirates**

Burj Binghatti, Palm Jebel Ali, Agri Hub, Dubai Urban Tech District, Etihad Rail, One Za'abeel, Dubai Islands, Dubai Marina Ciel Tower, Atlantis the Royal. Al Jurf, Abu Dhabi Jubail Island, Museums (Natural History; Zayed National; Guggenheim Abu Dhabi), Abrahamic Family House, SeaWorld Abu Dhabi, Hindu Temple Abu Dhabi, Hatta Hydroelectric Power Plant, Moon Resort



**MASC-CBRN is a European Commission-funded initiative that seeks to inform the development of an integrated and comprehensive approach for strengthening the prevention of deliberate chemical, biological, radiological, and nuclear (CBRN) events.**

## More countries join 'EU's strategic reserves for chemical, biological and radiological emergencies'

Source: <https://euroweeklynews.com/2023/02/20/chemical-biological-radiological-emergencies-strategic-reserves-eu/>

ON Monday, February 20, another three countries joined the 'EU's strategic reserves for chemical, biological and radiological emergencies'. **Croatia, France, and Poland became the latest countries to join the EU's strategic reserves for chemical, biological and radiological emergencies, joining Finland, the European Commission announced.**

"To improve the EU preparedness and response to chemical, biological, radiological, and nuclear (CBRN) threats, the Commission is building strategic reserves of response capacities through the EU Civil Protection Mechanism and the Health Emergency Preparedness and Response Authority (HERA)," the EC said.

"Today, Croatia, France, and Poland have joined Finland in hosting the [rescEU](#) stockpiles worth in total €545.6 million." It added: "The reserves will include antidotes, antibiotics, vaccines, sedatives, and prophylactic treatments and specific CBRN response equipment, such as detectors and decontamination



supplies and personal protective equipment (e.g., gas masks and protection suits). “The establishment of the four stockpiles



represent a cross-sectoral cooperation between the EU’s health and civil protection authorities. Once established, Member States will be able to request the mobilisation of relevant stock via the Emergency Response Coordination Centre (ERCC). “In parallel, the Commission has just launched an additional call for proposals for a total value of €636 million focusing this time on the response to pathogens with pandemic potential, CBRN threats and antimicrobial resistance.” The EC also said that “people may be exposed to CBRN agents as a result of unintentional disasters (e.g., a chemical plant leak, nuclear power plant incidents, the spread of an infectious

disease) or intentional incidents (e.g., a terrorist attack).” It added that “Russia’s war of aggression against Ukraine further stressed the need for strategic stockpiles of accessible critical medical countermeasures and CBRN response equipment to protect EU citizens, in particular in case of CBRN attacks or accidents.” It said that through the EU Civil Protection Mechanism, “CBRN in-kind assistance was mobilised from 26 Member States and from existing rescEU strategic reserves.” “This included chemical detectors, radiometric instruments, decontamination, and personal protective equipment in addition to therapeutics such as potassium iodide tablets and antidotes,” it said. “However, the pandemic highlighted the lack of reserve capacities of essential medical countermeasures, such as PPE. Emerging threats, such as the coronavirus, but also CBRN incidents may overwhelm the ability of EU Member States to help each other, especially when several European countries face the same type of disaster simultaneously.” “The stockpiles are overseen by the European Civil Protection and Humanitarian Aid Operations (ECHO) and the European Health Emergency Preparedness and Response Authority ([HERA](#)),” it added.

**EDITOR’S COMMENT:** If the stockpile is meant to be used in war then it is OK. If it is meant for CR terrorism there is no point for obvious reasons – exception: a nuclear power plant accident/sabotage and a new pandemic. A clarification is required.

## Train Derailments Get More Headlines, but Truck Crashes Involving Hazardous Chemicals Are More Frequent and Deadly in U.S.

By Michael F. Gorman

Source: <https://www.homelandsecuritynewswire.com/dr20230221-train-derailments-get-more-headlines-but-truck-crashes-involving-hazardous-chemicals-are-more-frequent-and-deadly-in->

Feb 21 – Less than two weeks after train cars filled with hazardous chemicals [derailed in Ohio](#) and caught fire, a truck carrying nitric acid crashed on a major highway outside Tucson, Arizona, killing the driver and releasing toxic chemicals into the air.

The Arizona hazmat disaster [shut down Interstate 10](#), a major cross-country highway, and forced evacuations in surrounding neighborhoods. But the highway crash didn’t draw national attention the way the train derailment did, or trigger a flood of calls for more trucking regulation [like the U.S. is seeing](#) for [train regulation](#). Truck crashes tend to be local and less dramatic than a pile of derailed train cars on fire, even if they’re deadlier.

In fact, federal data shows that rail has had [far fewer incidents, deaths and damage](#) when moving hazardous materials in the U.S. than trucks.

### Trucks Carry More Hazmat and More Risk

At one time, rail and water were the only options for transporting chemicals and other potentially dangerous materials. The emergence of the automobile and subsequent construction of the interstate highway system changed that, and hazardous materials shipments by road steadily increased.



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Today, trucks carry the largest percentage of hazardous materials shipped in the U.S.—about [twice as much](#) as trains when measured in ton-miles, according to the Department of Transportation's Bureau of Transportation Statistics' latest data, for 2017. A ton-mile is one ton shipped for one mile.

While truck incidents involving hazardous materials don't look as dramatic as train derailments and are not as widely covered by news media, federal data shows they represent more fatalities and property damage, and there are [thousands more of them](#) every year.

Truck-related hazardous materials incidents [caused over 16 times more fatalities](#) from 1975 to 2021 – 380 for truck, compared with 23 for rail, according to the Bureau of Transportation Statistics. The difference is more pronounced in the last decade, when U.S. rail transportation of hazardous materials caused zero fatalities and truck incidents were responsible for 83.

Trucks have also caused [nearly](#)



**Hazardous Materials Incidents**



[three times as much property damage](#) as rail incidents since 2000. That might seem surprising since derailments can involve several cars with hazardous materials. But most rail events take place in remote areas, limiting their human impact, while trucks travel on highways with other drivers around and often [in busy urban areas](#).

### Where Do We Go from Here?

I [study rail systems and regulation](#), and I have followed the increasing costs to the industry to comply with tightening regulatory rules.

Shipping hazardous materials in the U.S. has been regulated for over 150 years. A [deadly explosion](#) in San Francisco in 1866 involving a just-arrived cargo of nitroglycerin, used for blasting rock, led to the first [federal laws regulating shipping explosives](#) and flammable materials. The Sept. 11, 2001, terrorist attacks spurred a [vast expansion of regulation](#) over movement of hazardous materials. Many cities now have hazardous materials routes for trucks that circumvent city centers to reduce the potential risk to high-population areas. With the Ohio train derailment now making national news, lawmakers are focusing on regulations specifically for rail. Ohio's governor wants rail companies to be required to notify states of [all hazardous shipments](#). This knee-jerk reaction to a major event would appear to be a responsible demand with relatively low costs, but it would have no impact whatsoever on prevention of hazmat events.



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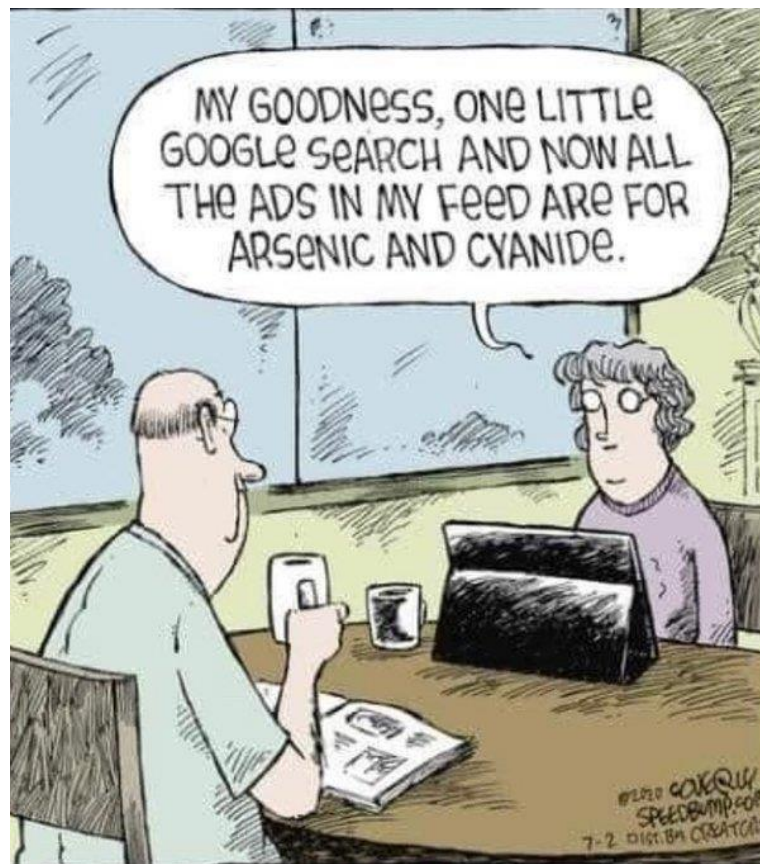
Activists are calling for more expensive investments, including [requirements for heat sensors](#) on train bearings, which appeared to have been involved in the Ohio derailment, and the [restoration of a rule](#) requiring advanced braking systems for trains carrying hazardous materials. Both would raise the cost of rail shipping and could wind up putting more hazardous materials shipments on U.S. roads. The Trump administration repealed the braking system requirement in 2017, arguing that the [costs outweighed the benefits](#). U.S. Transportation Secretary [Pete Buttigieg, speaking with reporters, discussed](#) looking into new rules for advanced braking systems, higher fines and encouraging rail companies to speed up their phase-in of [more puncture-resistant tank cars](#). Rail is still more [economical and better for the environment](#) than trucks for longer distances, but with ever-increasing regulations, rail transport can be economically and logistically discouraged – chasing more traffic to far more dangerous roadways. If the concern is the public's exposure to hazardous materials, [regulation on road-based](#) hazardous materials transportation should expand as well.

**Michael F. Gorman** is a Professor of Business Analytics and Operations Management @ University of Dayton.

### A Global Chronology of Incidents of Chemical, Biological, Radioactive and Nuclear Attacks: 1950-2005



**Hamid Mohtadi** is Professor, Department of Economics, University of Wisconsin, and Adjunct Professor and Faculty Associate at, Center for Food Industry, Department of Applied Economics @ University of Minnesota  
**Antu Panini Murshid** is Assistant Professor, Department of Economics @ University of Wisconsin.





# 2023 CBRNE-RELATED CONFERENCES

## 15TH ANNIVERSARY NUCLEAR DETERRENCE

February 13-15, 2023 | Hyatt Regency Crystal City | Arlington, VA SUMMIT

[www.exchangemonitor.com/go/nuclear-deterrence-summit-2023/](http://www.exchangemonitor.com/go/nuclear-deterrence-summit-2023/)

 <p>NCT Europe 2023</p> <p>VIEW EVENT</p>	 <p>NCT South America 2023-24</p> <p>VIEW EVENT</p>	 <p>Riyadh, KSA</p> <p>NCT Middle East 2023</p> <p>VIEW EVENT</p>
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<https://nct-events.com/event>

04-08 September: NCT USA

Aberdeen Proving Ground, Edgewood MD

04-11 November: NCT Asia

Kuala Lumpur, Malaysia



21-24 March 2023 | National Harbor, Washington DC

**JOINT CIVIL & DOD CBRN**

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[dsigroup.org](http://dsigroup.org)

The **10th Annual Joint Civil & DoD CBRN Symposium** will provide a forum for members of the DoD, Federal Government, State and Local Government, Private Industry, Academia, and other relevant CBRN stakeholders to discuss the latest updates in advancing a government wide approach to improving CBRN defense, readiness and response strategies and capabilities.



## ICI C<sup>2</sup>BRNE DIARY – February 2023

21-26 May: International CBRN Commandants and Commanders Conference (ICCC) 2023  
Rotterdam, The Netherland

25-27 July, NDIA Annual CBRN Symposium and Exhibition  
Baltimore Civic Center, Baltimore, MD  
[www.ndia.org/events](http://www.ndia.org/events)


# CBRNe Summit Europe 2023

## CONFERENCE AND EXHIBITION

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CBRNe is still a major concern across Europe and especially more heightened with the current unstable situation in Eastern Europe. We are pleased to bring our annual event to Lisbon, Portugal, for the first time, to allow you to continue hearing from leading military, government and scientific officials. 

Our CBRNe Summit Europe conference and exhibition will take place on the 21<sup>st</sup> – 23<sup>rd</sup> March 2023 and is officially supported by the Lisbon Fire Brigade and Lisbon City Hall. The event will continue its normal format of two days of presentations and networking in the exhibitor hall. With the third day being a live demonstration and exercise by the Lisbon Fire Brigade showcasing their CBRNe capabilities. For the first time vendors will also be able to demonstrate their products in a live setting to our international audience. The two-day conference will discuss the new CBRNe threats being faced and the importance of sharing information and experiences to deal with potential threats. You will hear perspectives from both civil and military agencies from across Europe and North America. Participants will gain an understanding of national CBRNe capabilities and response procedures.



CSCM

February 2022

Dubrovnik 23-27 October 2023

## Announcing the CBRNe Science and Consequence Management 2023 World Congress



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Further topics that will be discussed are CBRNe capabilities, first responder techniques and procedures, radiation safety, increased threat of chemical and biological attacks, asymmetric threats and international cooperation.

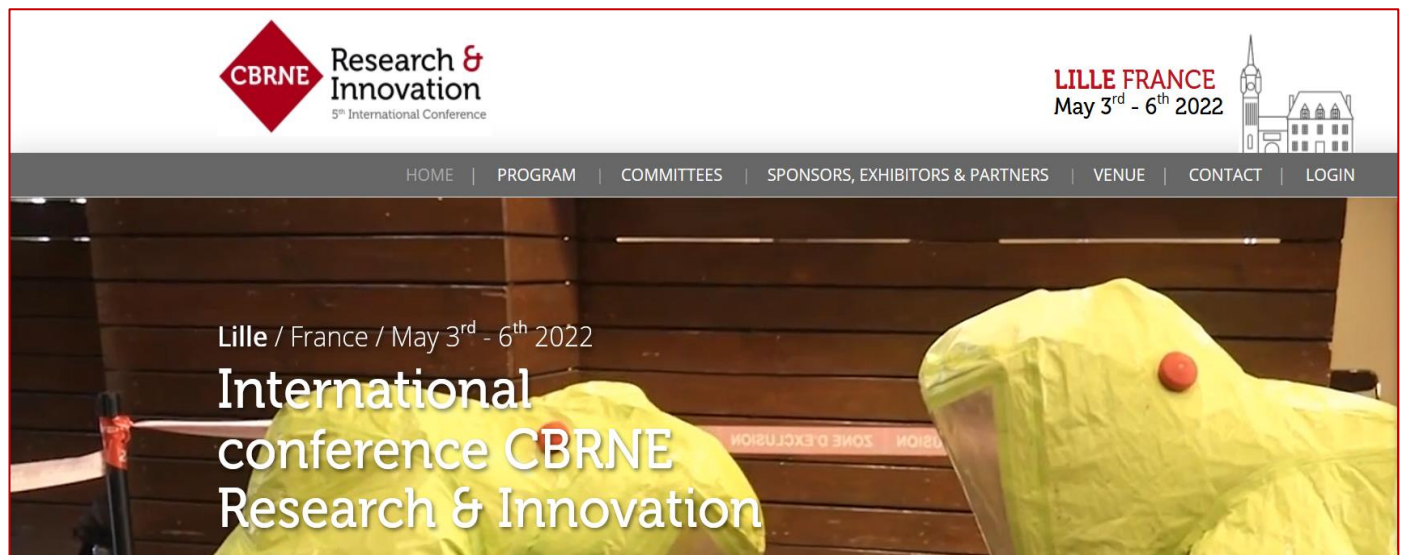


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Lille / France / May 3<sup>rd</sup> - 6<sup>th</sup> 2022  
International  
conference CBRNE  
Research & Innovation

<https://cbrneconference.fr/>

Building on the success of the first 3 International Conferences « CBRNE Research and Innovation » which took place in Antibes (2015), Lyon (2017) and Nantes (2019), the online 4<sup>th</sup> edition in 2021, we want to give you a new opportunity to build up or strengthen collaborative networks in Lille (**May 3-6, 2022**). « Capital of Flanders », Lille is ideally located at a crossroad between Brussels, Paris, Amsterdam and London. Consequently, our main guideline for this 2022 edition of the Conference will be dedicated to **cross-border collaborations** to face CBRNE threats and risks-related challenges.

The CBRNE R&I Conference is specifically devoted to **scientific updates, responders' feedbacks and expression of needs**. It also includes **workshops and demonstrations** of innovative materials, technologies and procedures, according to the following themes: **DETECTION - IDENTIFICATION, PROTECTION - DECONTAMINATION, MEDICAL COUNTERMEASURES, RISKS & CRISIS MANAGEMENT**.





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POLİTİKALARI GELİŞTİRME MERKEZİ

<https://istanbulkbrn.org/>

Within the body of Istanbul Aydın University, under the coordination of Istanbul Aydın University Environment and Human Health Application and Research Center (ÇEVSAM) and CBRN Defense Policy Development Association the 1st of the "Istanbul CBRN Days" will be held. This meeting, which will provide the opportunity to share the knowledge and experience of very valuable participants on this subject in the national sense, will accelerate the development of scientific infrastructure and studies on CBRN DEFENSE in our country and related institutions and organizations, will ensure that experts and employees in this field get to know each other, share their work and contribute to the increase of cooperation between them. We hope to be found.



CBRN environment; It covers a large number of dead, injured, and environmental effects, especially those who have been infected with biological warfare agents, exposed to chemical warfare agents and/or toxins, and injured as a result of the effects of nuclear weapons and radiation. The COVID-19 pandemic, which has been affecting the whole world for almost the last 3 years, has enabled us to better understand the Biological threat of the CBRN concept, and in a sense, it has revealed how intense and difficult management of CBRN events can cause and can cause mass losses. The threat of CBRN weapons, which started with the terrorist attack of September 11, 2001, and made a name for itself in the recent Syrian internal conflicts in the Middle East geography, including our country, has taken its place in the asymmetric war, and unfortunately, these agents are expected to be used in both war and terror environment in the future.

We think that this meeting, which will bring together many scientists, public and private sector representatives, will bring together many scientists, public and private sector representatives, based in Istanbul, which is the apple of the world's eye, and present the latest developments and technologies in the field of CBRN DEFENSE, and we think that this meeting will partially fill the deficiency of our Istanbul in this field. At the end of the event,



## ICI C<sup>2</sup>BRNE DIARY – February 2023

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we hope to see all the participants among us who will contribute to the "1st Istanbul CBRN Days", where we aim to raise awareness about CBRN threats and dangers.

You can find more detailed information about the KRBN Days, which we plan **to be held in Florya (Halit Aydın) Campus of Istanbul Aydın University on October 20 – 21, 2023**, and which we think will create an important added value for our country, at <https://istanbulkbrn.org/>

### High-Intensity CBRN 2023

28 - 30 June 2023

<https://cbrneworld.com/events/poland>

CBRNe  
**WORLD**

Putin's invasion of Ukraine in February 2022 was the end of a prelude that had begun a long time ago. Nato, and allied nations, need to prepare for the potential use of CBRN weapons that belonged to a different age.

How do military, and first responder, forces prepare for the kinds of mission sets where gallons, rather than milliliters of an agent are the order of the day? Where population centres are targeted, and military and civilian forces need to work together to save the lives of thousands of people unprepared for this kind of eventuality?

The event will have a pre-conference decontamination workshop, and a two-day conference and exhibition, and provide insight into the kinds of scenarios that forces need to prepare for, and help them develop a blueprint for managing them.

Each nation will give two presentations, the first on their current capability (0-3 years) and a second, academic one, that forecasts out to the medium term (5-10 years).

Held at the Military Academy of Technology (WAT) in the center of Warsaw, a city and country that will be on the front line of any escalation of threat, this will be THE thought leadership CBRN event of 2023.



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# BIO NEWS



## How Does SARS-CoV-2 Affect Other Respiratory Diseases?

Source: <https://www.medscape.com/viewarticle/987277>

Jan 20 – In 2020, the rapid spread of the newly identified SARS-CoV-2 coronavirus led various global public health institutions to establish strategies to stop transmission and reduce mortality. Nonpharmacological measures — including social distancing, regular hand washing, and the use of face masks — contributed to reducing the impact of the COVID-19 pandemic on health systems in different regions of the world. However, because of the implementation of these measures, the transmission of other infectious agents also experienced a marked reduction.

Approximately 3 years after the start of the pandemic, it is evident that SARS-COV-2 has also impacted the dynamic of other infectious agents, generating phenomena ranging from an immunity gap, which favors the increase in some diseases, to the apparent disappearance of an [influenza](#) virus lineage.

### Understanding the Phenomenon

In mid-2021, doctors and researchers around the world began to share their opinions about the side effect of the strict measures implemented to contain COVID-19.

In May 2021, along with some co-researchers, Emmanuel Grimpel, MD, of the Pediatric Infectious Pathology Group in Créteil, France, wrote for [Infectious Disease Now](#), "The transmission of some pathogens is often similar to that of SARS-CoV-2, essentially large droplets, aerosols, and direct hand contact, often with lower transmissibility. The lack of immune system stimulation due to nonpharmaceutical measures induces an 'immune debt' that may have negative consequences when the pandemic is under control." According to the authors, mathematical models evaluated up to that point were already suggesting that the respiratory syncytial virus (RSV) and influenza A epidemics [would be more serious](#) in subsequent years.

In July 2022, a commentary in *The Lancet* led by Kevin Messacar, MD, of the University of Colorado Boulder School of Medicine in Denver, grew in relevance and gave prominence to the phenomenon. In [the commentary](#), Messacar and a group of experts explained how the decrease in exposure to endemic viruses had given rise to an immunity gap.

"The immunity gap phenomenon that has been reported in articles such as *The Lancet* publication is mainly due to the isolation that took place to prevent SARS-CoV-2 infections. Although this distancing was a good response to combat infections, or at least delay them while coronavirus research advanced, what we are now experiencing is the increase in cases of respiratory diseases caused by other agents such as respiratory syncytial virus and influenza due to lack of exposure," as explained to *Medscape Spanish Edition* by Erandeni Martínez Jiménez, biomedicine graduate and member of the Medical Virology Laboratory of the Mexican Institute of Social Security (IMSS), at the Zone No. 5 General Hospital (HGZ/MF), in Metepec-Atlixco, Mexico.

"This phenomenon occurs in all age groups. However, it is more evident in children and babies, since at their age, they have been exposed to fewer pathogens and, when added to isolation, makes this immunity gap more evident. Many immunologists compare this to hygiene theory in which it is explained that a 'sterile' environment will cause children to avoid the everyday and common pathogens required to be able to develop an adequate immune system," added Martínez Jimenez.

"In addition, due to the isolation, the vaccination rate in children decreased, since many parents did not risk their children going out. This causes the immunity gap to grow even further as these children are not protected against common pathogens. While a mother passes antibodies to the child through the uterus via her placenta, the mother will only pass on those antibodies to which she has been exposed and as expected due to the lockdown, exposure to other pathogens has been greatly reduced."

On the other hand, Andreu Comas, MD, MHS, PhD, of the Center for Research in Health Sciences and Biomedicine (CICSaB) of the Autonomous University of San Luis Potosí (UASLP) School of Medicine in San Luis Potosí, Mexico, considered that there are other immunity gaps that are not limited to [respiratory infections](#) and that are related to the fall in vaccination coverage. "Children are going to experience several immunity gaps. In the middle of the previous 6-year term, we had a vaccination schedule coverage of around 70% for children. Now that vaccination coverage has fallen to 30%, today we have an immunity gap for [measles](#), [rubella](#), mumps, [tetanus](#), [diphtheria](#), [whooping cough](#), and meningial [tuberculosis](#). We have a significant growth or risk for other diseases."

### Lineage Extinction

Three types of influenza viruses — A, B, and C — cause infections in humans. Although influenza A virus is the main type associated with infections during seasonal periods, as of 2020, influenza B virus was considered the causative agent of [about a quarter](#) of annual influenza cases.

During the onset of the COVID-19 pandemic, cocirculation of the two distinct lineages of influenza B viruses, B/Victoria/2/1987 (B/Victoria) and B/Yamagata/16/1988 (B/Yamagata), decreased significantly.



According to data from the FluNet tool, which is coordinated by the World Health Organization, since March 2020 the isolation or sequencing of viruses belonging to the Yamagata lineage was not conclusively carried out.

Specialists like John Paget, PhD, from the Netherlands Institute for Health Services Research (Nivel) in Utrecht, have indicated that determining the extinction of the [B/Yamagata lineage](#) is critical. There is the possibility of a reintroduction of the lineage, as has occurred in the past with the reemergence of influenza A (H1N1) in 1997, which could represent a risk in subsequent years.

"In the next few years, research related to viruses such as influenza B and the impact on population immunity will be important. Let's remember that influenza changes every year due to its characteristics, so a lack of exposure will also have an impact on the development of the disease," said Martínez Jiménez.

### Vaccination Is Essential

According to Comas, the only way to overcome the immunity gap phenomenon is through vaccination campaigns. "There is no other way to overcome the phenomenon, and how fast it is done will depend on the effort," he said.

"In the case of COVID-19, it is not planned to vaccinate children under 5 years of age, and if we do not vaccinate children under 5 years of age, that gap will exist. In addition, this winter season will be important to know whether we are already endemic or not. It will be the key point and it will determine if we will have a peak or not in the summer.

"In the case of the rest of the diseases, we need to correct what has been deficient in different governments, and we are going to have the resurgence of other infectious diseases that had already been forgotten. We have the example of poliomyelitis, the increase in meningeal tuberculosis, and we will have an increase in whooping cough and pertussis-like syndrome. In this sense, we are going back to the point where Mexico and the world were around the '60s and '70s, and we have to be very alert to detect, isolate, and revaccinate."

Finally, Comas called for continuing precautionary measures before the arrival of the sixth wave. "At a national level, the sixth wave of COVID-19 has already begun, and an increase in cases is expected in January. Regarding vaccines, if you are over 18 years of age and have not had any vaccine dose, you can get Abdala, however, there are no studies on this vaccine as a booster, and it is not authorized by the Mexican government for this purpose. Therefore, it is necessary to continue with measures such as the use of face masks in crowded places or with poor ventilation, and in the event of having symptoms, avoid going out and encourage ventilation at work and schools. If we do this, at least in the case of diseases that are transmitted by the respiratory route, the impact will be minimal."

## NIST Releases Bioeconomy Lexicon

Source: <https://www.homelandsecuritynewswire.com/dr20230124-nist-releases-bioeconomy-lexicon>

Jan 24 – Biosecurity, bioenergy, bioinspired, biorisk: [Pandora Report](#) notes that if you have ever started to feel like the new trend in security jargon is adding "bio" to an already existing word, this one is for you.

*Pandora Report* writes:

The National Institute of Standards and Technology (NIST) recently released its [bioeconomy lexicon](#) as directed in the [Executive Order on Advancing Biotechnology and Biomanufacturing Innovation for a Sustainable, Safe, and Secure American Bioeconomy](#). NIST explains the need for this, writing "Biotechnology and biomanufacturing are increasingly vital to the global economy, including in the health care, food and agriculture, and energy sectors. Accordingly, there is a need for standardized terms and definitions to ensure a common understanding of the concepts, data, technical developments, and workforce opportunities as the bioeconomy grows both domestically and internationally."

They continue by explaining the creation of the lexicon: "This initial lexicon was developed by NIST in consultation with an interagency working group consisting of several U.S. government departments and agencies as directed in the Executive Order noted above, and reflects consideration of relevant domestic and international definitions as well as those from private sector stakeholders. The lexicon harmonizes a base set of terms and definitions with the goal of helping to enable the development of measurements and measurement methods for the bioeconomy that support uses such as economic measurement, risk assessments, and the application of machine learning and other artificial intelligence tools. This lexicon is intended to be a living document, and NIST intends to periodically engage with government and private sector stakeholders to inform future updates to the lexicon terms and definitions as appropriate."





## How Countries Responded to the COVID-19 Pandemic

Source: <https://www.homelandsecuritynewswire.com/dr20230124-how-countries-responded-to-the-covid19-pandemic>

Jan 24 – A new [paper](#) by a team at [Los Alamos National Laboratory](#) is giving researchers new insight into how countries respond to systemic shocks such as the COVID-19 pandemic.

“This is one of the first papers to quantify resiliency using a data-driven approach, since most of the existing approaches rely on subject-matter expertise,” said Sara Del Valle, of the Laboratory’s Information Systems and Modeling group and author on the paper, which published today in the scientific journal PLOS One. “We compared expert informed resiliency published prior to the pandemic, and our approach conducted during the pandemic, and we found significant discrepancies between what experts had predicted would be the most resilient countries if struck with a pandemic.”

Previous attempts to quantify the impact of COVID-19 mostly looked only at the pandemic in a single dimension, such as gross domestic product or a country’s unemployment rate. The Los Alamos team took a more holistic approach, exploring resilience across a variety of social, economic and political domains in several countries, including the United States, Brazil, India, Sweden, New Zealand and Israel. “We found that citizens in these countries responded quite differently to stringent COVID policies,” Del Valle said. “For example, we saw stricter governmental pandemic policy was associated with higher political unrest across states within the U.S., while the opposite was true for states in Brazil.”

The team assessed how observed responses and outcomes of the COVID-19 pandemic were associated with pre-pandemic characteristics or vulnerabilities and the systems in place prior to the pandemic that may have impacted the ability to respond to the crisis. Education, for example, played an important role in pandemic response.

Even after adjusting for strictness of governmental COVID policies, the team found that higher education was significantly associated with lower amounts of political unrest across the United States. Diversity in responses even within countries showed the potential for regional differences to impact pandemic response.

The most pandemic-impacted sectors also differed across countries. Human health, public administration and defense were strongly impacted in the U.S. and Sweden, while manufacturing was strongly impacted in Brazil and India. The construction sector was moderately or strongly impacted across all countries.

“Understanding the differences in countries’ abilities to respond after a pandemic can help society be better prepared for future pandemics,” Del Valle said.

## Anthrax Spores May Survive Water Treatment

Source: <https://www.wwdmag.com/home/news/10910695/anthrax-spores-may-survive-water-treatment>

At the 2006 American Society for Microbiology (ASM) Biodefense Research Meeting, researchers reported findings regarding anthrax in drinking water. Anthrax spores may survive traditional drinking water disinfection methods and can attach themselves to the inside surface of water pipes, suggesting water treatment facilities should be prepared to employ alternate disinfection methods in the unlikely event of the release of anthrax in the water supply.

“The purpose of this study was to determine the fate of anthrax spores in a drinking water system that uses chlorine as a disinfectant. Though researchers have some knowledge of how other waterborne pathogens may survive or die in drinking water systems, little is understood about the fate of anthrax spores in chlorinated water systems,” said Jon Calomiris of the Air Force Research Laboratory at Aberdeen Proving Ground in Edgewood, Md., who conducted the study.

**Calomiris investigated the ability of anthrax spores to survive in water with a concentration of 1 mg of chlorine per liter (typical tap water has a concentration of 1 to 2 mg/L). After 60 minutes in the water, there was no significant decrease in the number of viable spores.**

“Under those same conditions, one-minute exposure could kill 99.99% of other waterborne pathogens that do not exist as spores,” said Calomiris.

Higher concentrations of chlorine were much more effective. At 5mg/L (a concentration that might be used by treatment systems during periods when drinking water is turbid), 97% of spores were killed after one hour. At 10mg/L (similar to a highly chlorinated swimming pool), 99.99% were killed, but the chlorine concentration would be too high for the water to be drinkable. Calomiris also tested the ability of spores to attach to the inside of pipes, by running contaminated water in a continuous loop through sections of pipe made of either copper, CPVC



or galvanized iron (a material no longer used for home plumbing but existing in older construction). After six hours, anywhere from 20 to 40% of spores had attached themselves to the surface of the copper and CPVC pipes, and 95% attached to the iron pipes. When biofilms were present on the interior of copper pipes, attachment increased to 80%.

"The data seem to suggest that anthrax spores can tolerate water treatment, can attach to pipes or biofilms within the pipes and could pass through pipe systems to reach the consumer tap," said Calomiris.

In the unlikely event of the release of anthrax spores into the water supply, alternate decontamination protocols (such as exposure to higher concentrations of chlorine or an alternate disinfectant for an extended period of time) may be needed, as regular treatment methods may not be effective, he said.

## Peptide spray kills bacteria in wounds without using antibiotics

Source: <https://newatlas.com/medical/peptide-antibacterial-wound-spray/>



Jan 26 – It's always good if the use of antibiotics can be avoided, to keep harmful bacteria from developing a resistance to them. A new wound-treatment spray could help, as it kills bacteria using peptides that occur naturally in our bodies – no antibiotics required. While [previous studies](#) had explored the use of such [peptides](#) for eradicating bacteria in medical applications, a major stumbling block lay in the fact that the peptides quickly break down upon coming into contact with blood or other body fluids.

Building on the success of an [earlier project](#), scientists at Sweden's Chalmers University of Technology developed a workaround to that problem.

In the spray that they created – which is intended to be applied directly to open wounds – the peptide molecules are attached to specially structured microparticles of hydrogel. That gel protects the peptides from the blood, while still allowing them to destroy bacteria by compromising the microbes' protective outer membranes.

As an added bonus, because the spray *does* kill bacteria in this particular manner, it is believed that the bacteria won't develop a resistance to it.

In lab tests, the spray was found to kill 99.99% of bacteria on contact, including antibiotic-resistant types such as MRSA (Methicillin-resistant *Staphylococcus aureus*). What's more, it remained effective for approximately 48 hours.

Scientists are also looking into using the spray to coat medical implants, to keep infections from occurring when the devices are first placed within the body. They have already tested it on the silicone which is commonly used for catheters.

"The substance in this wound spray is completely non-toxic and does not affect human cells," said doctoral student Edvin Blomstrand, one of the lead authors of a paper on the study. "Unlike existing bactericidal sprays, it does not inhibit the body's healing process. The materials, which are simply sprayed onto the wound, can also kill the bacteria in a shorter time."

●► The paper was recently published in the journal [ASC Applied Bio Materials](#).



## COVID during pregnancy linked to placental damage and fetal haemorrhages

Source: <https://newatlas.com/health-wellbeing/covid-pregnancy-placenta-damage-fetal-haemorrhages/>

Jan 29 – Two recently published studies have highlighted the potential impact of SARS-CoV-2 infections during pregnancy. The studies found placental abnormalities and fetal haemorrhages could be associated with COVID during pregnancy. Researchers are now monitoring children exposed to the virus prenatally to investigate whether there are long-lasting neurodevelopmental effects.

Before SARS-CoV-2 emerged in 2020 there had been a significant body of study investigating the effects of viral infections during pregnancy. Due to the immunosuppressive nature of pregnancy, it is well understood that viral infections can be dangerous, increasing the risk of maternal morbidity, stillbirth or preterm birth.

But even infections that present as mild to a pregnant person can have longer-term developmental impacts on their growing fetus. The infamous Zika virus, for example, often presents with either no symptoms or just a mild illness in adults, [yet infections during pregnancy can lead to](#) birth defects and neurological disorders in children.

Influenza infections during pregnancy have also been well researched. Several long-term studies looked back at children born during the 1918 flu pandemic and suggested in utero exposure to influenza led to a variety of deleterious effects in adulthood, [from increased rates of cardiovascular disease to lower levels of educational attainment](#).

More recently, modern studies have associated maternal influenza infections with [higher rates of autism](#) and [schizophrenia](#). But exactly how a child's neurodevelopment could be affected by viral exposure during gestation is unclear. Some research has suggested [fever during pregnancy is the key factor](#) disrupting fetal neurodevelopment, especially during the first trimester. Other studies have pointed to [inflammatory molecules triggering changes](#) to fetal brain growth.

Importantly, these long-term effects on neurodevelopment have been detected following [mild viral infections during pregnancy](#). These are infections that generally don't lead to significant medical intervention or have an effect on birth weight or gestation length.

So considering that pre-existing body of evidence, researchers have been closely studying the effects of COVID during pregnancy. And only now, three years after the emergence of this novel coronavirus, are we starting to get insights into how prenatal infections are influencing fetal development.

One new study, led by researchers from King's College London, has looked at over 600 samples of fetal brain tissue, collected from elective pregnancy terminations between 2020 and 2022.

Around 5% of the samples analyzed were found to have cortical haemorrhages, and in all of those samples the researchers also detected the presence of SARS-CoV-2. Katie Long, lead investigator on the study, said it was unusual to find so many haemorrhagic brain tissue samples in a random collection.

"While haemorrhages do occasionally occur in developing brains, it is extremely unusual for there to be this many instances within a 21-month period," said Long. "It is now of the utmost importance that we follow up with children that were prenatally exposed to COVID-19 so that we can establish if there are any long-lasting neurodevelopmental effects."

Of most concern to the researchers is the observation that the majority of haemorrhages detected were found in fetal brain tissue from the late first and early second trimesters. The researchers note it is unclear whether these abnormalities would have naturally resolved over the course of a healthy pregnancy, but maternal immune activation during this crucial early period of neurodevelopment could plausibly cause long-lasting problems.

"... the majority [of the haemorrhages detected] were between 12 and 14 pcw, a critical window of human fetal brain development when the endothelial tight junctions increase to form the blood brain barrier," the researchers write. "Further investigation is needed to understand if these effects on the cortical tissue are long lasting, or are able to resolve with minimal consequence. It is possible that an immune cell response could have a positive outcome, resulting in some resolution of these haemorrhages. However, maternal immune activation can have many long-lasting effects in neurodevelopment."

Another newly published study, from a team of researchers in Austria, has used MRI to study the effects of SARS-CoV-2 infections on the placenta and fetus. This is the first work to use prenatal MRI to study



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placental structure and fetal organ in pregnant persons who recovered from COVID infections. The research conducted MRI investigations on 38 pregnant persons with confirmed SARS-CoV-2 infection. The scans were conducted, on average, around 80 days after each participant's first positive PCR test. Each COVID-positive participant was matched with a non-infected control carrying a child at a similar gestational age.

The findings revealed those participants with SARS-CoV-2 infections showed significantly more placental abnormalities compared to the control cases. These included changes to the shape and thickness of the placenta and vascular lesions.

The study also revealed pre-omicron variants of the virus led to greater placental damage than currently circulating omicron variants. The researchers indicate it is possible this difference is because omicron causes less severe disease compared to prior variants, but it may also be likely increased rates of vaccination have attenuated the impact of the virus.

"This varying occurrence of placental lesions due to different viral variants may be due to the lower pathogenicity of the omicron variant and to the higher vaccination coverage rate as the pandemic progressed," the researchers write. "Our results show that the two unvaccinated pregnant women infected with SARS-CoV-2-Omicron developed globular placentas, but only one of six triple-vaccinated women did." These two studies, of course, are subject to the same caveats facing lots of these kinds of investigations. They cannot determine causality and shed no light on the long-term implications of any cited abnormality.

It will be years before researchers have any understanding of potential associations between in utero SARS-CoV-2 exposure and neurodevelopmental disorders. [A study published in mid-2022](#) offered some of the first clues, looking at several hundred 12-month-old children born to mothers who faced COVID infections during pregnancy in the very first waves of the pandemic.

Those findings revealed higher rates of developmental disorders relating to motor function or speech and language compared to an unaffected control group. However, because many of these babies were born preterm it is unclear whether the viral infection was directly causing neurodevelopmental problems, or whether COVID was simply triggering premature birth, which itself has been associated with developmental delays. [Other researchers commenting on the 2022 study](#) suggested it was too early to diagnose developmental disorders in children. Dorothy Bishop, a developmental neuropsychologist from the University of Oxford, was particularly critical of the study, suggesting it's implausible children are being effectively diagnosed with developmental disorders at 12 months of age. "As an expert in children's speech and language disorders, I find it hard to see how these conditions could be diagnosed in such young children, because even if a child is producing no words at all, that would not be abnormal," Dixon said. "Clearly pregnant women should do their best to avoid COVID, but if they do get it, the odds are high that their infant will not have evident neurodevelopmental problems in the first year of life."

Lucilla Poston, a material and fetal health researcher at King's College London, said it is certainly possible COVID during pregnancy affects the developing fetal brain. And while further study over the coming years will inevitably offer insights into that association, Poston said it is clear vaccination against COVID during pregnancy will be crucial in reducing the severity of infections.

"We know that severe viral infection may influence the fetal brain, but this important study is the first to suggest that this may occur in pregnancies affected by COVID infection," said Poston, commenting on the King's College fetal tissue findings. "Whatever the cause, a direct effect of the virus or an indirect consequence of maternal infection, this study highlights the need for pregnant women to be vaccinated against COVID-19, thus avoiding complications for both mother and baby."

An ongoing study called BIBS ([Brain Imaging in Babies Study](#)) is underway at King's College London. It will follow children born to mothers who tested positive for COVID during their pregnancy. Using MRI imaging and behavioral assessments the researchers will look at brain development up to four years of age.

●► The fetal tissue study was published in the journal [Brain](#), while the placental MRI study was published in [The Lancet Regional Health](#).

## Broad Range Antibodies Neutralize All SARS-CoV-2 Variants and Other Coronaviruses

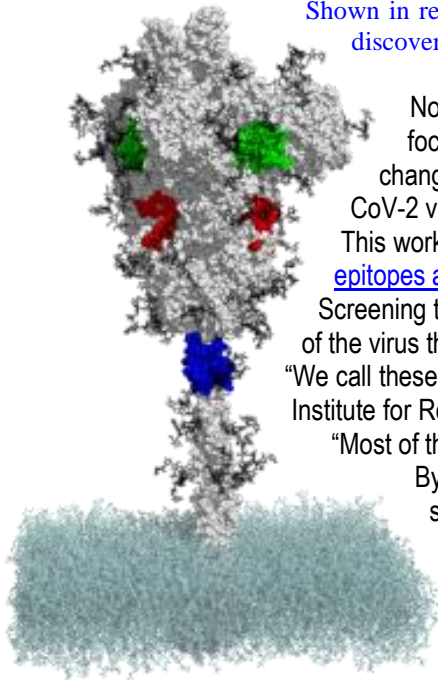
Source: <https://www.genengnews.com/virology/coronavirus/broad-range-antibodies-neutralize-all-sars-cov-2-variants-and-other-coronaviruses/>

Jan 30 – As the [COVID-19](#) pandemic continues, so too does the evolution of SARS-CoV-2. The emerging variants have varied properties, some of which may be able to evade our immune system better than their predecessors. This diminishes the efficacy of vaccines and antiviral monoclonal antibodies.

Some researchers are searching for universal viral targets—those that would remain unchanged in all variants—to target those areas of the virus that are resilient to viral evolution.



Shown in red, blue, and green are three of the coldspots on the virus spike that are targeted by the newly discovered antibodies. [IRB, Bellinzona, CH]



Now, a group of researchers used coldspot-guided antibody discovery (a screening approach that focuses on portions of the virus spike glycoprotein that are both functionally relevant and averse to change) to identify antibodies directed toward highly conserved viral epitopes that recognize all SARS-CoV-2 variants and other coronaviruses.

This work is published in *Science Immunology*, in the article, "[Human neutralizing antibodies to cold linear epitopes and subdomain 1 of the SARS-CoV-2 spike glycoprotein](#)."

Screening through over 10 million coronavirus sequences, researchers discovered areas of the spike protein of the virus that were remarkably conserved.

"We call these 'coldspots'," said Virginia Crivelli, a PhD student in the lab of Davide Robbiani, MD, PhD, at the Institute for Research in Biomedicine (IRB), Università della Svizzera italiana (USI), in Bellinzona, Switzerland.

"Most of the virus is rapidly changing, but we discovered 15 regions that do not."

By analyzing samples from COVID-19 convalescent individuals, they found that some had antibodies specific for the coldspots.

"These antibodies are very rare," said Filippo Bianchini, a PhD student in the Robbiani lab at the IRB. "But thanks to a new method, we were able to find them."

The antibodies blocked virus infection in laboratory experiments, even to the latest variants of concern, and protected from disease in preclinical models.

Specifically, the authors noted, "Antibody fp.006 binds the fusion peptide and cross-reacts against coronaviruses of the four genera, including the nine human coronaviruses, through recognition of a conserved motif that includes the S2' site of proteolytic cleavage. Antibody hr2.016 targets the stem helix and neutralizes SARS-CoV-2 variants. Antibody sd1.040 binds to subdomain 1, synergizes with antibody rbd.042 for neutralization and, like fp.006 and hr2.016, protects mice expressing human ACE2 against infection when present as a bispecific antibody."

Will the new antibodies be effective against the next coronavirus(es)? "It is likely that new coronaviruses that infect humans will emerge," said Robbiani, head of the laboratory of immunology and infectious disease and IRB director. "Our findings indicate that it may be already possible to develop countermeasures that are broadly effective against present and also future coronaviruses."

## Could 'The Last of Us' Ever Happen? The Real Risks of a Fungus Pandemic

Source: <https://www.sciencealert.com/could-the-last-of-us-ever-happen-the-real-risks-of-a-fungus-pandemic>

Jan 30 – In most ways, [HBO's new series \*The Last of Us\*](#) depicts a classic zombie apocalypse.

One morning, everybody is going about their normal life. There's a mention on the radio of chaos in Jakarta. And by nightfall, twitchy, possessed once-humans are sprinting after the [main character](#).

This time, though, it's a *fungus* turning people into zombies.

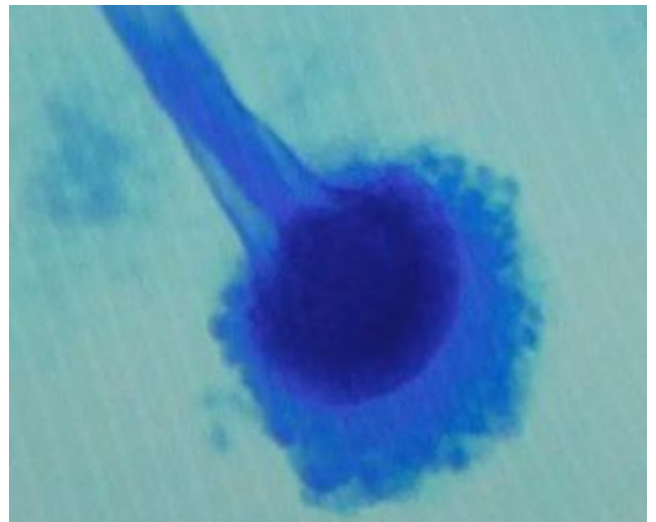
A sample of the fungus *Aspergillus fumigatus*. (Harrison McClary/Reuters)

The new scenario, first realized in the [video game that the show is based on](#), is making viewers wonder whether a fungus [pandemic](#) can happen in real life.

"A fungal pandemic is definitely possible," Norman Van Rhijn, a mycologist researching fungal infections at the University of Manchester, told Insider in an email.

No species of fungus currently known to science poses an immediate pandemic threat for humans – especially not the way the show portrays it. Still, [fungal infections are on the rise worldwide](#), and researchers are concerned that more and more people are at risk.

Some even worry that new super-pathogens could arise from the [fungus kingdom](#).



"The potential is huge for what can emerge and become a pathogen," Tom Chiller, chief of the fungal disease branch of the US Centers for Disease Control and Prevention, told Insider. "I am not going to be surprised that more fungi emerge as human pathogens, that become more challenging to treat and more infectious."

Here's the science fact and science fiction behind *The Last of Us*, and the threats that fungi pose.

#### Fact: There is a zombie fungus – in ants

Zombies in *The Last of Us* bloom with tendrils of a fungus called *Cordyceps*, which sprout from their heads and mouths, reaching out for fresh victims.

*Cordyceps* is real, but it only overtakes the brains and bodies of insects – [most famously, ants](#).

The fungus grows inside an ant's body, causes the ant to climb upwards, and then sprouts from its head and releases spores, attempting to spread itself far and wide.

*Cordyceps* can't survive at human body temperature, so it can't infect us. But other species of fungus produce substances with mind-altering qualities that can affect human behavior.

#### Fact: Some fungus can affect human brains and behavior

Perhaps the most obvious example is [psilocybin](#), the hallucinogenic compound in magic mushrooms. The fungus ergot also has a reputation for altering the human mind.

[Some historians attribute the Salem Witch Trials to ergot poisoning](#), saying that women began behaving strangely and accusing each other of witchcraft after eating infected rye. The psychoactive substance [LSD](#) is derived from ergot.

"Every time you have a beer, your behavior is affected by the byproduct of a fungus, which is ethanol," David Hughes, who has studied *Cordyceps* and consulted on the video game *The Last of Us*, told Insider.



The fungus [Cryptococcus](#) can also spread from the lungs to the brain and cause meningitis – inflammation – that can alter behavior.

Unlike on TV, though, mind-altering fungus "doesn't jump into our body and affect a behavior that enables future transmission," Hughes said.

#### Fiction: Mind-controlling zombie fungus can make the jump into humans

[A display of a fictional cordyceps-infected human body at the Los Angeles premiere of HBO's \*The Last of Us\*. \(Jeff Kravitz/FilmMagic for HBO/Getty Images\)](#)

Fungal diseases can jump from animals to humans. But the idea that a fungus-like *Cordyceps* could mutate enough to make the giant leap from insects to humans, and still keep its ability to effectively manipulate behavior, is far-fetched.

In the infectious-disease world, "never say never," Chiller said.

"But I will say that there's a lot, a lot of hurdles that need to be overcome," he continued. "An ant and a human are dramatically different. We have immune systems, we live at different temperatures, you know, our body temperature is much higher. So there are just some fundamental things that are going to be exceedingly hard for that particular fungus to overcome."

#### Fact: There is no vaccine for killer fungus

In *The Last of Us*, the first cases of fictional human *Cordyceps* appear in Jakarta, Indonesia, where the government asks a leading mycologist

to identify the fungus under a microscope and wriggling in the mouth of a dead civilian. Horrified, she learns that 14 people who worked with the victim have disappeared. "There is no medicine. There is no



vaccine," she grimly informs a government official. She recommends that the government bomb the entire city to contain the fungus. In real life, it's true that there is no vaccine for deadly fungal infections (though experts don't recommend bombing as a substitute). There are only a few classes of drugs to treat them, and they aren't always reliable cures. In fact, because fungi are so similar to humans at the cellular level, many of the drugs that fight them are also toxic to human bodies. According to [Global Action for Fungal Infections](#), fungi kill more people than [malaria](#). "The problem with fungi is we don't have a lot of things in our toolkit to control them," Hughes said. Some deadly fungi, like *Candida auris*, which emerged in 2009, have even developed a powerful resistance to the antifungal drugs we do have. In hospital outbreaks, *Candida auris* has killed anywhere from 29 percent to 53 percent of its victims, according to the [World Health Organization](#). Most fungal pathogens are opportunists, Chiller said, and they only cause severe illness in people who are immunocompromised. "But there are now fungi that aren't opportunists and can infect any of us. And if those become more infectious, if those become more resistant, that's really what I'm worried about," Chiller said.

### Fiction: Human bites and 'tendrils' spread killer fungus

In the HBO series, zombies have to bite their victims or inject tendrils of fungus into them in order to spread the disease. That's not at all how fungal transmission works in real life. Fungal infections largely spread through touch or surfaces – think of [athlete's foot](#) or [ringworm](#). That's why Hughes doesn't think fungi pose a pandemic threat.

"The extent to which we will see a pandemic, meaning the whole world is affected by a single species ... that doesn't seem probable for fungi, just by nature of their transmission pathways," he said.

Most fungal pathogens come from the environment, rather than contact with other humans. You're [inhaling fungal spores](#) all the time. Usually, the human immune system takes care of that. But if your immune system is weak – due to illness or drugs – that fungus can grow inside you. That's why hospitals and prisons are particularly prone to outbreaks. Most human-infecting fungi spread best when immunocompromised people cluster together, or when many people are in close contact and sharing common surfaces.

Some more dangerous fungal diseases, like [Valley Fever](#), come from spores in the air and can even sicken healthy people.

"The real-life nightmare scenario is that fungi like this cause more damage and turn from relatively mild infections to life threatening infection," Van Rhijn said.

### Fact: Rising temperatures could increase the threat of fungal pathogens

Mysteriously, *Candida auris* outbreaks emerged independently on three different continents at the same time in the 2010s. There was no clear link or contact between the outbreaks. Some scientists [believe](#) the connecting thread is [climate change](#). As global temperatures rise, fungi have to adapt just like everything else. As more fungi adapt to higher temperatures, more of them may be able to survive and proliferate at human body temperatures – even when human bodies try to kill them off with [fever](#).

The opening scene of *The Last of Us* hints at this, with a 1968 scientist telling a TV host that slight global warming could breed new fungal super-pathogens. Alongside *Cryptococcus*, the [World Health Organization](#) ranked *Candida auris* as one of the top four priorities in [its first-ever ranking of fungal pathogens](#) last October.

Climate change is just one factor that could increase the toll fungi take on humanity.

The [COVID-19](#) pandemic, like prior viral illnesses such as [HIV/ AIDS](#), [left more people susceptible to fungal infections](#).

Another risk factor comes from improving medical technology, which allows more people to get life-saving surgery at the cost of taking medicines that suppress their immune systems and make them more vulnerable to other infections, like fungi.

"We're talking about a [show that is really wanting to grab the attention](#) of folks and extrapolate some really cool sci fi possibilities here. And that's great," Chiller said. "We just need to think fungus," especially with immunocompromised or hospitalized people, he added. "Early diagnosis and early treatment is the best way to save lives."

## First human trial for experimental Marburg virus vaccine reports success

Source: <https://newatlas.com/medical/human-trial-experimental-marburg-virus-vaccine-reports-success/>

Jan 30 – Promising results have been published from the first human trial testing an experimental vaccine targeting the deadly Marburg virus. Flagged as a potential pandemic-causing virus, this is the first Marburg vaccine to move into Phase 2 human trials. Coming from the same *Filoviridae* family of viruses as Ebola, Marburg is just as deadly as its better-known cousin, albeit slightly less virulent. The virus first emerged in 1967, with a handful of outbreaks in Europe causing a deadly hemorrhagic disease. Subsequent genomic studies traced its origins back to Uganda and Kenya.



Since its emergence, there have been more than a dozen outbreaks over the past 50 years, [most recently emerging last year in Ghana](#) for the very first time. However, Marburg's frightening fatality rates of up to 90% led infectious disease experts to warn of the virus's significant future pandemic potential.



"... previous Marburg virus outbreaks in the Democratic Republic of the Congo (1998–2000) and Angola (2004–05) demonstrated that in particular settings, such as conflict areas with weak health infrastructure, outbreaks can remain uncontrolled for months or years, claiming hundreds of lives," said Daniela Manno, from the London School of Hygiene and Tropical Medicine, in the recent [editorial for The Lancet](#). "It is possibly only a matter of time before a large Marburg virus outbreak occurs."

Unlike Ebola, which has both monoclonal antibody treatments and an effective vaccine, there are no approved therapies or vaccines for Marburg virus disease. This has led global vaccine charity Gavi to identify Marburg as a [major future pandemic concern](#).

This new Marburg vaccine, dubbed (cAd3-Marburg), uses an adenovirus vector to deliver a Marburg glycoprotein. [Primate studies published last year](#) showed a single dose of the vaccine generated a protective immune response in animals lasting up to one year. A recent Phase 1 human trial enrolled 40 healthy adults to receive the experimental vaccine. The cohort showed the vaccine was well-tolerated with no serious adverse effects. Significant immune responses were also detected in 95% of subjects, persisting in 70% across the entire 48-week follow-up period.

The US government has [recently invested several million dollars](#) in moving this Marburg vaccine research forward. Subsequent human trials are now being planned in Ghana, Kenya, Uganda, and the United States.

## The Russian Ministry of Foreign Affairs "accuses" the USA as responsible for the creation of the coronavirus

Source: [https://twitter.com/mfa\\_russia/status/1620085243956068358](https://twitter.com/mfa_russia/status/1620085243956068358)

Russian personnel acquired over 20,000 documents of the U.S. biological programmes. The materials confirm that the Pentagon aimed at creating elements of a biological weapon, & testing it on the population of Ukraine.





Persons involved in U.S. military-biological research in Ukraine

4

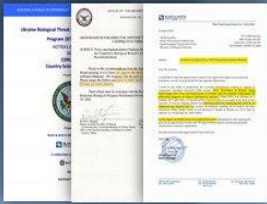
Representatives of U.S. biotechnology corporations, institutes, and organisations interested in biological projects in Ukraine

 <p><b>Karen Elizabeth Saylor</b> Chief Executive Officer and co-founder of Labyrinth Global Health Inc., a co-founder of NGO Labyrinth Ukraine  Director of Metabiota's Behavioural Sciences Programme in Central Africa in 2008-2016. Since 2016, she has worked in Ukraine. She was involved in the development of the UP-10 project as lead consultant and promoted PEPFAR's AIDS programme for the Ukrainian military. Actively lobbied for Metabiota to conduct biological research in Armenia</p>	 <p><b>Colleen B. Jonsson</b> Lead researcher in virology and Director of the Institute for the Study of Host-Pathogen Systems at the University of Tennessee Health Sciences Center (UTHSC)  Curator and inspirer of the UP-8 project (study of CCHL and Hantaviruses in Ukraine), biomaterial sampler and blood researcher, organised blood sampling from Ukrainian military personnel for further study, supervised the work of US epidemiologists with the Center for Public Health of the Ministry of Health of Ukraine, planned the process of blood sample transfer overseas</p>	 <p><b>Lewis Von Thae</b> President and CEO of Battelle, expert in infectious diseases and virology  Member of the US Defence Science Board, member of the National Defence Industries Association. He supervised military biological activities, managed the company's main biodefence branch (National Biodefence Analysis and Countermeasures Center), and was responsible for lobbying and promoting Battelle's financial interests in government</p>	 <p><b>Ashley Lucas</b> Public Health Advisor at Loyal Source Government Services (in Orlando), a recruitment company for US federal agencies  Participated in the development of the UP-8 project, trained Ukrainian specialists in laboratory research techniques, and personally visited Ukrainian hospitals (Kiev, Lviv) in preparation for research execution. As part of the US military biological activities in Ukraine, she was also involved in recruitment and documentation</p>	 <p><b>Riza Ikranbegiin</b> Technical Officer at the Laboratory of the WHO WHO Country Office (Lugansk) in Ukraine, Ambassador of the American Society for Microbiology in Kazakhstan  Responsible for the technical equipment of laboratories in Ukraine to military biological research standards in line with the modernisation programme, quality control in bio-sampling, participation in key projects related to H1N1 and other avian influenza subspecies</p>	 <p><b>Eric Bortz</b> Virologist, Assistant Professor for the Department of Biological Sciences at the University of Alaska Anchorage, a consultant at Institute for Veterinary Medicine  One of the curators and developers of UP-4 and UP-9 projects. He organised training of Ukrainian specialists, preparation of reporting documentation for DTRA, general management of research. He is a specialist in viral pathogenesis, genomics and molecular virology, actively contributed to the involvement of Battelle and Labyrinth Global Health in military biological activities in Ukraine</p>	 <p><b>David Garcia</b> Senior Research Officer – Senior Research Fellow - Molecular Biologist, Centre of Military Medicine (Battelle)  He has over 15 years of experience in DTRA biological programmes in Central and South East Asia, Africa, Middle East. Expert in the organisation of laboratory research. Since July 2021, he was on assignment in Kiev as Head of Battelle Scientific Department. He was in charge of interaction of Ukrainian specialists with DTRA, distribution of grants of the Pentagon.</p>	 <p><b>Anna Gibson</b> Lead researcher, Research Compliance and International Lab Safety Manager (Metabiota), government contracting specialist  She trained Ukrainian specialists prior to participation in UP projects, participated in the development of modelling for West Nile, brucellosis and tularemia, and in the preparation of prospective biological studies in these areas</p>
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Transfer of unfinished Ukrainian projects to third countries

5


**Studying over 20,000 documents and reference materials**




**Survey of biological and medical laboratories**




**Collection of eyewitness testimony**




**Transferring U.S. military and biological activities out of Ukraine**





**Change of clients, contractors**


  
 Defense Threat Reduction Agency (DTRA)

  
 Black&Veatch Special Projects Corp.

➔

  
 U.S. Department of Energy (DOE)

  
 U.S. Agency for International Development (USAID)

  
 Pacific Northwest National Laboratory

**Foreign programmes to support Ukrainian researchers**

**MSCA UKRAINE**

\$25,000,000

MSCA4Ukraine Programme aims to support displaced Ukrainian researchers (May 2022)

**\$600,000**

Long-term programme to support Ukrainian researchers by the Polish Academy of Sciences and the US National Academy of Sciences (December 2022)



## Outbreak of Rift Valley Fever in the area of Naval Medical Research Unit Three (NAMRU-3)

6

### Naval Medical Research Unit Three (NAMRU-3)

NAMRU-3 was founded in 1946, was based in Cairo, Egypt, until 2019, now in Sigonella, Italy



NAMRU-3's main objective is to study infectious diseases, including assessing the effectiveness of vaccines, therapies, diagnostic tests, and vector control measures

Ph. J. Trop. Med. Hyg., 1983, 18(6), pp. 100-103  
Copyright © 1983 by The American Society of Tropical Medicine and Hygiene

#### EXPERIMENTAL TRANSMISSION AND FIELD ISOLATION STUDIES IMPLICATING CULEX PIPIENS AS A VECTOR OF RIFT VALLEY FEVER VIRUS IN EGYPT\*

JAMES M. MEEGAN, GALILA M. SMIAL, HARRY HOOGSTRAAL, and FATMA K. ADHAM  
United States Naval Medical Research Unit Number Three (NAMRU-3), American Embassy, Cairo, Egypt, and Entomology Department, Faculty of Science, Cairo University, Cairo, Egypt

In 1977-1979, NAMRU-3 conducted research on the Rift Valley Fever outbreak in Egypt. A research unit led by James M. Meegan collected 55,000 mosquitoes from which the Rift Valley Fever virus was isolated

### Rift Valley Fever epidemic in Egypt (1977-1978)

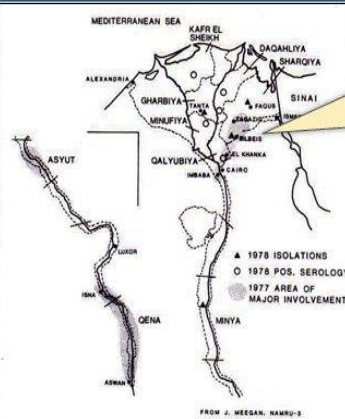
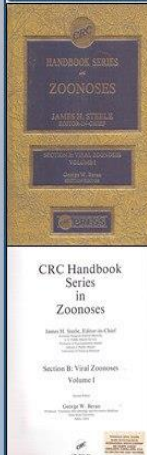


FIGURE 1. Distribution of Rift Valley fever in Egypt in the 1977 to 1978 outbreaks.

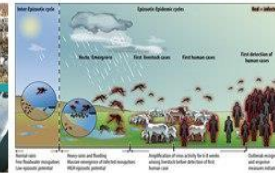
A drop-shaped hotspot of Rift Valley fever. Starts from the city of Cairo and extends to the north-east. The shape of the epidemic focus is extremely similar to the classic shape of an aerosol cloud trace

The Rift Valley Fever epidemic in Egypt broke out in 1977 north of Cairo, where initially practically simultaneously 18,000 people got sick, so that the epidemic focus appeared. In 1977-1978, the infection gradually spread throughout Egypt, causing an estimated 2,000,000 people to be infected.

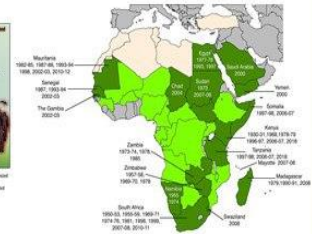
Rift Valley Fever is an acute transmissible zoonotic arbovirus disease



The source of infection is wild and domestic animals



Transmission of infection: vector-borne (mosquitoes), contact, aspiration



### تيكان



تعرفوا: أكبر وحدة أمريكية عسكرية للأبحاث البيولوجية في الشرق الأوسط توجد في مصر!

The Tipykan (Egypt) published the following on its website: 'Largest US military unit for biological research in the Middle East is in Egypt'

### مكشس

"تمرو 3"، أفرع البيولوجيون البيولوجي لتدمير صحة المصريين

البحرية الأمريكية ليست وحدنا حيث شيطنة بطول التنمية السهولة بواء العتوب على شيفر "تمرو 3" استولى على الزواج المصرية في مصر. "الحمى القلاعية" امتدت لانتهاها في 1976. توفي 50 شخصا بسبب التهاب السحايا بعد حصولهم على أدوية "تمرو 3" في 2000. وقد أمرت زار الوحدة وبهذا بياض ظهرت القنطرة الجيور. الوحدة استولت على "أبو حمص" لإجراء العتوب عليهم بزم تطوير لقاح الإنفلونزا. حكومتنا تظلم تحت 122 مستشفى صحتنا وسمحت "تمرو 3" بالاستيلاء على 50 ألفنا بملصمة متعلقة من إلقاء التخصصات العمل المرجح لصاحبة الألفية بالحق المتعددة دولياً

The Masress (Egypt) published the following on its website: 'NAMRU-3: The Pentagon's biological weapon to destroy the health of Egyptians'

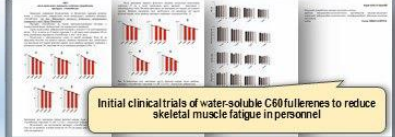
## Testing of medicinal products on Ukrainian citizens, use of psycho-stimulants and narcotics by AFU military

3

### Tests of experimental medicinal products on military personnel



Conducting initial clinical trials of 'Anti-fatigue' medicine



Initial clinical trials of water-soluble C60 fullerenes to reduce skeletal muscle fatigue in personnel

### Studies on viral infections



President's Emergency Plan for AIDS Relief (PEPFAR)  
Aims to "reduce the incidence of HIV/AIDS, tuberculosis and viral hepatitis worldwide"



UP-8 Project  
Study on the prevalence of Crimean-Congo haemorrhagic fever virus and hantaviruses in Ukraine



Department of Defense HIV/AIDS, DHAPP

Number of sick and previously ill Ukrainian military personnel (based on results of blood samples from Ukrainian POW):	
- fever with renal syndrome	4%
- West Nile Fever	20%
- Hepatitis A	33%

### Use of narcotic drugs by AFU troops

#### Volunteers Are Smuggling Unlicensed Morphine to the Ukrainian Front Lines

LIV, Ukraine—Anton needs morphine. The combat medic, whose squad is on the front line of the war in the Donbas, has 80 soldiers and only 20 doses of the opioid commonly used to manage battlefield injuries during evacuation. "It's not enough," he says, over a shaky phone line. "We must have more than we need."

#### THE LOCAL

#### Spain police bust 'Ukraine aid' drug smuggling ring

During the operation, police arrested 30 suspects — among them Spaniards, Ukrainians, Germans and Montecars — at several locations across the southern Andalusia region, a Guardia Civil statement said.

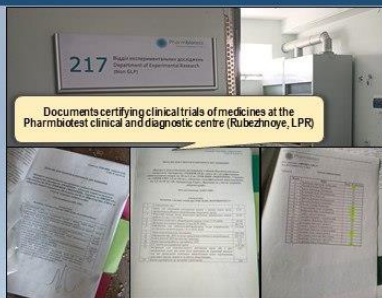
#### Ukraine is importing massive volumes of cocaine to keep its soldiers high and battle-ready



#### U.S. Gives Ukrainian Soldiers 'Battle Potions' New drugs are sweeping soldiers from all over the world?



### Pharmbiotest's clinical trials of medicines



Documents certifying clinical trials of medicines at the Pharmbiotest clinical and diagnostic centre (Rubezhnoye, LPR)



Landfill of biomaterials and outpatient records by Pharmbiotest (Lisichanske, LPR)



## More Californians Are Dying at [Home](#). Another COVID 'New Normal'?

### Inflammation and Immunity Troubles Top Long COVID Suspect List

By Solarina Ho

Source: <https://www.medscape.com/viewarticle/987761>

Feb 01 – Nonstop inflammation and immune problems top the list of potential causes of long COVID, but doctors say it's growing clear that more than one thing is to blame for the wide swath of often debilitating symptoms that could last months or even years.

"I think that it's a much more complex picture than just inflammation, or just autoimmunity, or just immune dysregulation. And it's probably a combination of all three causing a cascade of effects that then manifests itself as brain fog, or shortness of breath, or chronic fatigue," says Alexander Truong, MD, a pulmonologist and assistant professor at Emory University School of Medicine, who also runs a long COVID clinic.

Long COVID, post-COVID-19 condition, and post-acute sequelae of SARS-CoV-2 (PASC) are among the terms used by the [National Institutes of Health](#) to describe the long-term health issues faced by an estimated 10% to 30% of people infected with COVID-19. Symptoms — [as many as 200](#) — can range from inconvenient to crippling, damage multiple organ systems, come and go, and relapse. Long COVID increases the risk of worsening existing health problems and [triggering new ones](#), including cardiovascular disease and [type 2 diabetes](#).

So far, research suggests there is no single cause, condition, or disease that explains why some people have an extensive range of symptoms long after the early COVID-19 infection has cleared up. Many experts believe some combination of biological processes — including the virus hanging around in our bodies, inflammation, autoimmunity, tiny blood clots, immune system problems, and even the [reactivation of dormant viruses](#) such as the [Epstein-Barr virus](#) — could be the culprit, a theory also supported by a comprehensive and in-depth review of long COVID studies [published in January](#) in the journal *Nature Reviews Microbiology*.

"It's become clear over the last couple of years that there are different [symptoms] of long COVID...that cannot all be lumped together," says Michael Peluso, MD, an assistant professor of medicine and an infectious diseases doctor at the University of California, San Francisco.

#### Inflammation and a Virus that Hangs Around

Multiple studies have shown that the virus or pieces of it can remain in many parts of the body, including the kidneys, brain, heart, and gastrointestinal system, long after the early infection.

"One major question that I think is the area of most intense investigation now is whether there is viral persistence that is driving immune dysregulation and therefore symptoms," says Peluso. A small [Harvard University](#) study published in September, for example, found evidence that reservoirs of the coronavirus could linger in patients up to a year after they're first diagnosed.

An earlier [German study](#) found that patients with post-COVID-19 symptoms had higher levels of three cytokines — small proteins that tell the body's immune system what to do and are involved in the growth and activity of immune system cells and blood cells. Researchers said the results supported the theory that there is persistent reprogramming of certain immune cells, and that the uncontrolled "self-fueled hyperinflammation" during the early COVID-19 infection can become continued immune cell disruption that drives long COVID symptoms. "Long COVID is more likely due to either an inflammatory response by the body or reservoirs of virus that the body is still trying to clear ... and the symptoms we're seeing are a side effect of that," says Rainu Kaushal, MD, senior associate dean for clinical research at Weill Cornell Medicine in New York. [Australian researchers also found](#) that immune system recovery appeared different, compared with those who were infected with other common coronaviruses.

These findings also support concerns that some experts express over the long-term risks of COVID-19 infections in general, but especially repeat infections. "Anything that kind of revs up inflammation in the body can boil that pot over and make the symptoms worse. That's very easily an infection or some other insult to the body. So that's the generalized hypothesis as to why insults to the body may worsen the symptoms," says Truong.

#### An Autoimmune Condition?

But inflammation alone does not fully explain post-COVID-19 problems.

Truong and his team, for example, have been documenting inflammatory markers in patients at the post-COVID clinic he co-founded more than two years ago at Emory Executive Park in Atlanta. When the clinic was first launched, high-dose nonsteroidal anti-inflammatory drugs, known as NSAIDs — including [ibuprofen](#) — and [prednisone](#) were prescribed to long COVID patients. "It didn't make a difference at all for



any of these folks," he says, adding that there are signs that autoimmunity is at play. But he cautions that it is still too early to suggest treating long COVID patients with medications used for other autoimmune conditions. In autoimmune conditions such as [rheumatoid arthritis](#), lupus, and [type 1 diabetes](#), a person's immune system doesn't tell normal cells from foreign pathogens and attacks healthy cells. There is typically no single diagnostic test, and many share similar symptoms, making detection and diagnosis potentially difficult, according to [Johns Hopkins Medicine](#). A small study [published in](#) the journal [Science Translational Medicine](#) in December found that among patients who failed to regain their sense of smell long after their initial infection, there was inflammation in the nose tissue where smell nerve cells are found, even though no detectable virus remained. Fewer olfactory sensory neurons were seen, as well — findings that researchers said resembled some kind of "[autoimmune-like process](#)."

Meanwhile, scientists in Canada found signs of autoimmunity in blood samples taken from patients who still had fatigue and shortness of breath after their initial COVID-19 infection. Two specific proteins were present a year after infection in up to 30% of patients, many of whom still had shortness of breath and fatigue, the researchers reported in the [Jan. 1](#) issue of *European Respiratory Journal*. These patients had been healthy and had no autoimmune condition or other diseases before they were infected.

### Immune System Problems

A number of studies have suggested that a problematic immune response could also explain why symptoms persist for some people. [Researchers in France](#), for example, found that the immune response problems in those with severe COVID-19 infections caused exaggerated or uncontrolled formation of a type of bug-fighting defense mechanism called a neutrophil extracellular trap (NET), which in turn triggers harmful inflammation that can result in multi-organ damage. These traps are net-like structures made from fibers composed mostly of DNA strings that bind, or trap, pathogens.

Long COVID is not like an acute infectious disease, says Alexander Charney, MD, PhD, the lead principal investigator of the RECOVER adult cohort at Mount Sinai in New York City, and an associate professor at Icahn School of Medicine at Mount Sinai. It is more similar to other complex chronic diseases that have taken decades to understand, such as heart disease, mental illness, and rheumatological diseases, he says.

### Biomarkers and Blood Clots

Scientists are homing in on biomarkers, or detectable and measurable traits — in this case, molecular indicators — that can make diagnosing long COVID easier and give better direction for treatment. These biomarkers are also key to helping sort out the complex biology of long COVID. In one study, data from blood samples taken from hundreds of hospitalized COVID-19 patients suggests changes are happening at the molecular level during initial severe infections. These changes may be tied to the development of longer-term symptoms, according to the study [published in December](#) by Charney and his team at Mount Sinai.

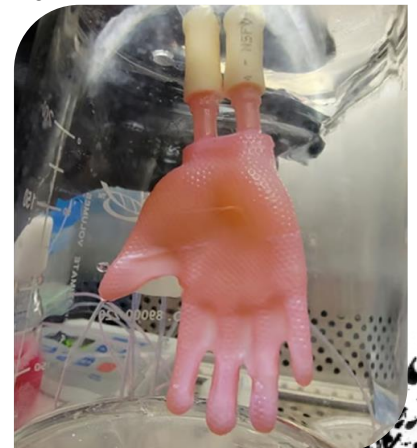
Blood clotting issues have also been detected in long COVID patients. At least [one study](#) found signs that long COVID patients had higher levels of a type of auto-antibody linked to the abnormal formation of clots. Researchers suspect that tiny, persistent microclots — undetectable via regular pathology tests — may be cutting off oxygen flow to tissue by blocking capillaries — billions of tiny, delicate blood vessels throughout the body — and could explain many of the post-COVID symptoms described by patients.

While enormous progress has been made toward understanding long COVID, the research is still considered early and faces many challenges, including varying criteria used to define the condition, the types and quality of data used, differences in how patients are defined and recruited, and the small size of many studies. Some research also appears to conflict with others. And while there are specialized tools for diagnosing some aspects of the condition, [standard tests often don't detect](#) many of the signs seen in long COVID patients. But given the urgency and global scale of the problem, experts say more funding and support should be prioritized.

"People are suffering now, and they want answers now...it's not like with COVID, where the path towards a great and meaningful solution to this unbelievable problem was clear — we need a vaccine," says Charney. "It's going to be a long haul to figure out what is going on."

## Lab-grown 3D skin grafts could be applied like "biological clothing"

While bioengineered skin holds promise for people such as burn victims, the material has so far only been produced in flat sheets. Now, scientists have devised a method of growing it in 3D forms, which could be slipped onto the body like clothing. [Read more](#)



**EDITOR'S COMMENT:** What if this B-clothing has additional properties?

### Do not forget our heroes!

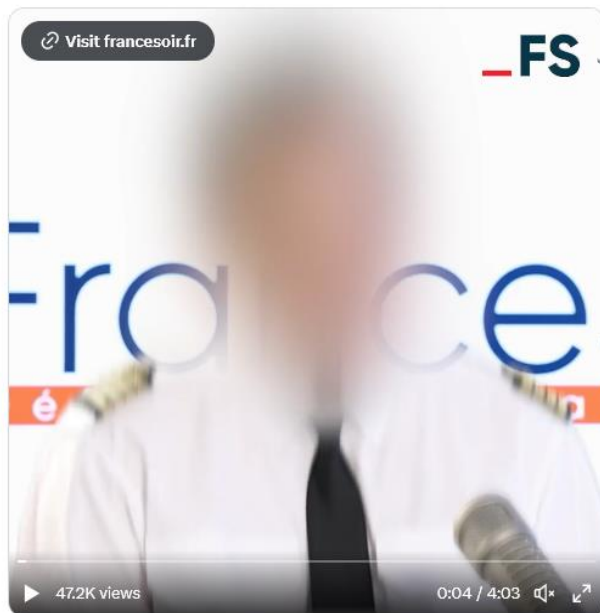


Italian nurses and doctors after long hours of work in Intensive Care. Respect!

Translated from French by Google

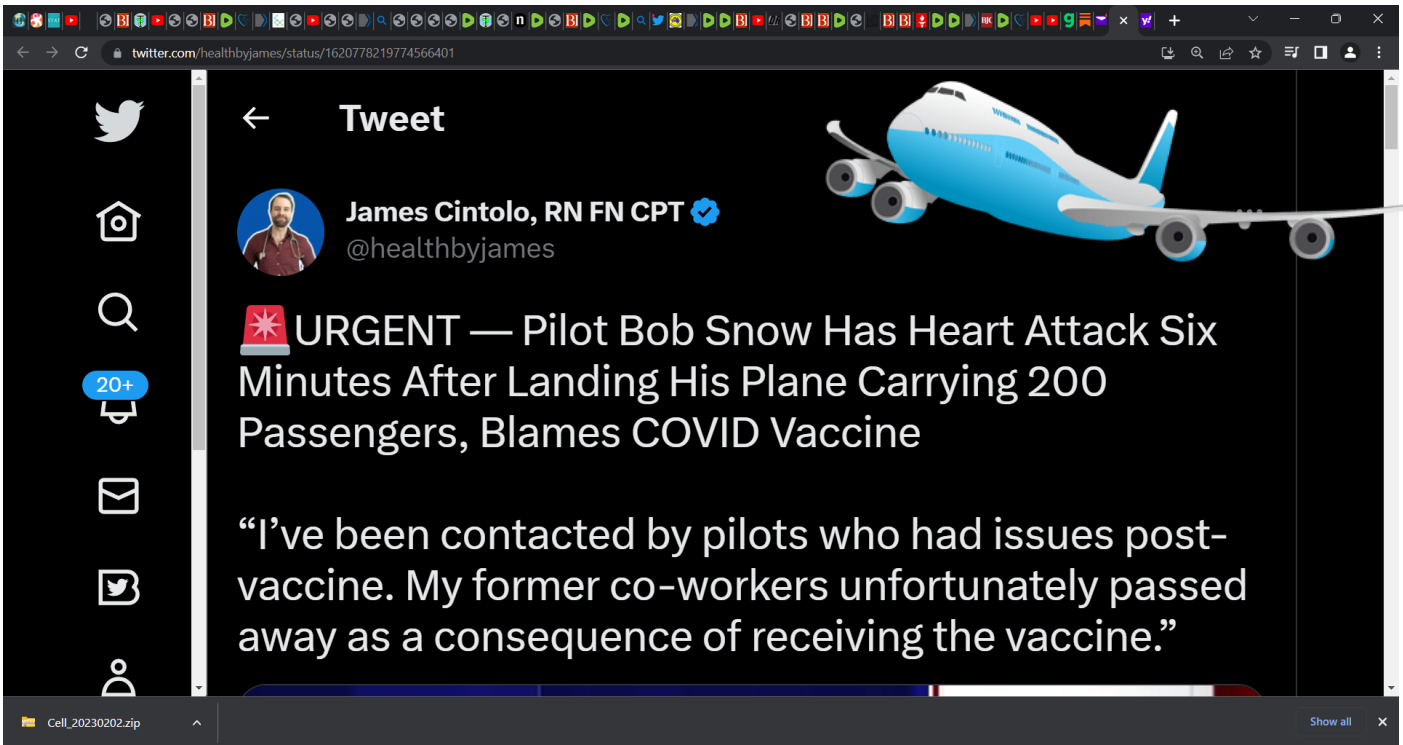
"The subject of vaccination and side effects is a very sensitive subject. We would have preferred to testify openly, but the pilots are subject to a duty of confidentiality." Excerpt from the interview with Patrick (pilot), Stéphane and Laurent (captains)

### What is going on with pilots and Covid-19?



9:32 PM · Feb 1, 2023 · 142.9K Views





## Disease X: How to End Pandemics

Source: <https://www.homelandsecuritynewswire.com/dr20230206-disease-x-how-to-end-pandemics>

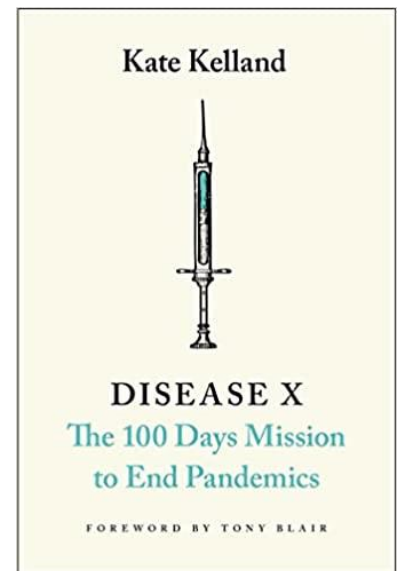
Feb 06 – A new book tracks how the world can stop future pandemics. It offers a perspective on the COVID-19 response and lays out a roadmap to prepare to beat the next Disease X. The book challenges us to understand continual and growing infectious disease threats, but also offers hope and looks ahead to a pandemic-free future.

An important new book on pandemic control, [DISEASE X – The 100 Days Mission to End Pandemics](#), was just published in the U.K.. This narrative by Kate Kelland, Chief Scientific Writer at the [Coalition for Epidemic Preparedness Innovations \(CEPI\)](#), draws on her access to key players and their experiences at the frontlines of pandemic planning and response and takes the reader inside global efforts to prevent future outbreaks from exploding into deadly crises.

Distilling insights from health security experts, examining epidemics and pandemics of the past and present, and analyzing what governments, societies and their people got right and wrong in the response to COVID-19 and other devastating disease outbreaks, Kelland explores why and how viruses—tiny as they are—can wreak enormous havoc on our way of life. But she also tells a story of hope, giving readers a glimpse of a future where the threat of pandemics has been neutralized by a prepared and collaborative world.

“As the threat of COVID subsides from public consciousness, there is a risk too that our memories of the terrible impacts of pandemics will also begin to fade,” said Dr. Richard Hatchett, CEO of CEPI. “But what we don’t want to do is take our eye off the ball. This book, *DISEASE X*, with its accessible storytelling and discussion of the decision-making challenges that leaders face when confronted with a new infectious disease, will help us not to forget, but instead to strive towards a post-pandemic era where we work together to stop something like COVID-19 from ever happening again.”

Kelland, who was formerly a global health and science correspondent for Reuters, said: “The book’s unique perspective, from both outside and inside some of the biggest pandemic prevention minds, will, I



hope, give it a useful role in deepening understanding of how, as we emerge from COVID-19, it doesn't have to be this way when we face the next 'Disease X'."

### DISEASE X: PREPARE to Be Scared

Disease X is the codename given by the World Health Organization to a pathogen currently unknown to science that could cause havoc to humankind. Emerging infections are sending us multiple warnings that another Disease X is looming. We've had SARS in 2002, H5N1 bird flu in 2004, H1N1 'swine flu' in 2009, MERS in 2012, Ebola in 2014, Zika in 2015 and now COVID-19. These events are not freak events, but are happening continually, and at an increasing cadence.

"Given that we know there are so many other viral disease Xs out there, that we know the extreme danger they pose, and that we now know—in part thanks to the dramatic scientific advances made during the Covid crisis—how we can contain and halt epidemics before they spiral out of control, there is truly no excuse to be unprepared again", Kelland said.

As people around the world emerge from the COVID-19 crisis with an understandable desire to put pandemics to the back of their mind, Kelland counsels against complacency and advocates instead for preparedness: PREPARE to Be Scared, PREPARE to Move Fast, PREPARE to Share, PREPARE to Fail, she urges in *DISEASE X*. These features of speed, bravery, collaboration, agility and humility are factors Kelland identifies as crucial to tackling and containing future disease epidemics before they can wreck billions of lives and livelihoods, as COVID-19 has done.

Writing in the foreword of *DISEASE X*, Sir Tony Blair, former UK Prime Minister and Executive Chairman of The Institute for Global Change, cautions that: "The past few years have made it abundantly clear that we are living in an increasingly interconnected world where invisible viral threats are emerging more often, leaving us all more vulnerable. "Health security will never be achieved if we do not build the lessons of Covid- 19 into the way our governments and societies operate. Our governments need to demonstrate the same level of political will, ambition and international cooperation that leaders demonstrated in the wake of World War II."

## Singapore: On alert for airborne threats - Sensor to detect biological agents in air on trial at land checkpoint

Source: <https://www.thestar.com.my/aseanplus/aseanplus-news/2023/02/06/singapore-on-alert-for-airborne-threats---sensor-to-detect-biological-agents-in-air-on-trial-at-land-checkpoint>

Feb 06 – A sensor that tests the air for biological agents that may be used in bioterrorism is currently being trialled, after completing lab tests in late 2022.

The Bioaerosol Threats Detector, known as **BioXcap**, is able to test for up to 10 different types of such agents, including anthrax, plague and toxins like ricin.

Developed by the Home Team Science and Technology Agency (HTX), the BioXcap is the first detector of its kind here that is able to provide early warning to the presence of biological threats in the air within 30 minutes.

Currently, it takes about three hours for air samples to be tested manually, including about an hour for the collection and transporting the samples.

The BioXcap can be deployed and relay test results remotely, minimising manpower and risks to scientists during an incident.

HTX's Chemical, Biological, Radiological, Nuclear and Explosives (CBRNE) Centre of Expertise began work on the BioXcap in 2019, with the goal of having less manual testing and to get accurate results closer to real-time. The sensor is currently being tested at an unspecified land checkpoint.

May Ong, director of the CBRNE Centre of Expertise, said enhancing Singapore's biosurveillance capabilities is important to prevent biological threats from entering through the borders.

"It is important for us to monitor what enters through the borders so that unauthorised biological agents that may pose a threat do not come into our country," she said.

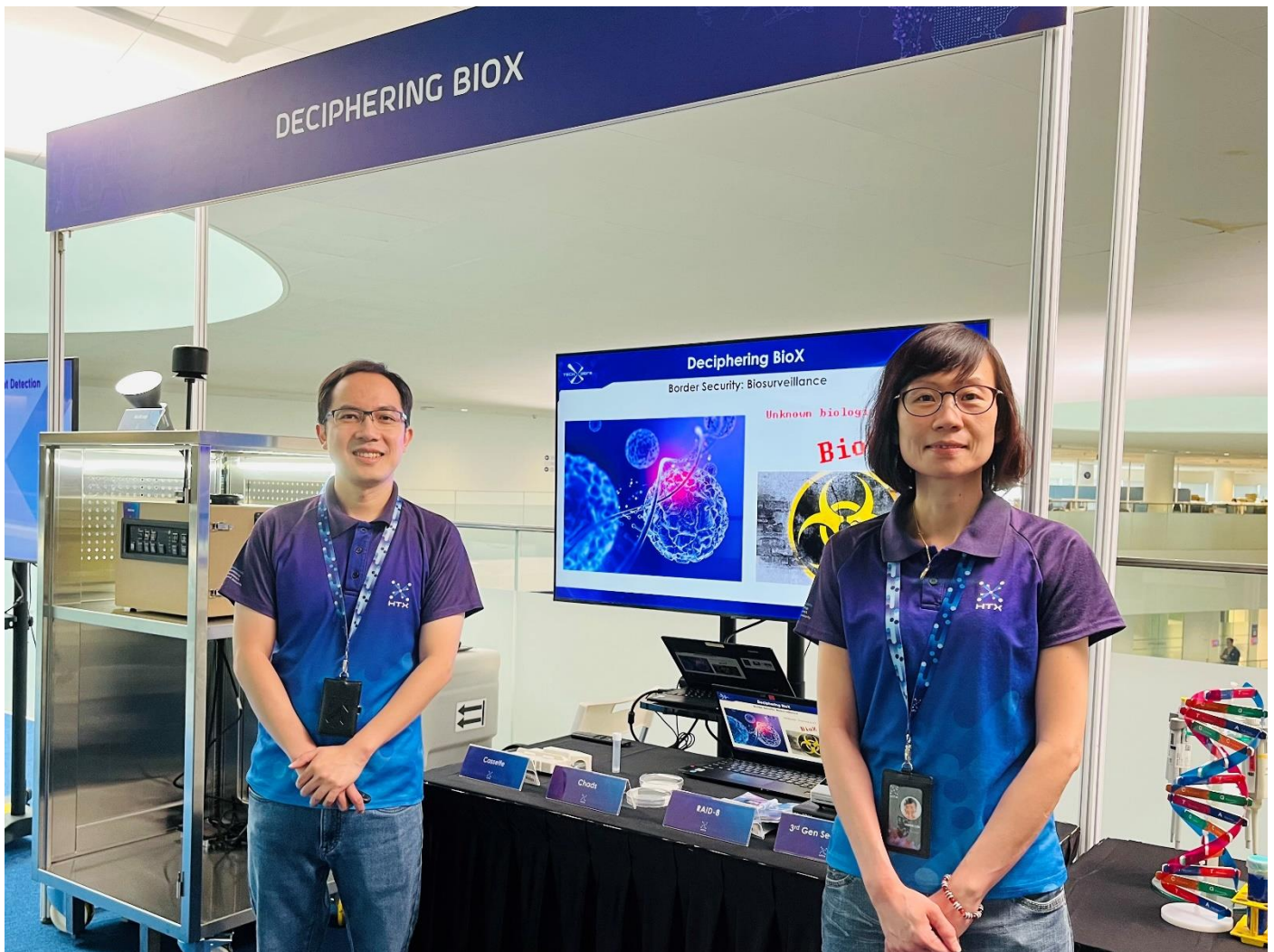
"Biological agents are not incredibly accessible, but if someone is able to get their hands on such agents and releases them into the air, there may be mass casualties."

Ong added that while there have been no known cases of attacks involving biological agents in Singapore, it is better to be prepared for such scenarios.

"Active surveillance and preparedness are important, because it might be too late if we just wait till people start falling sick and turning up at the hospital," she said.

The BioXcap has an antenna-like extension that draws air samples into the main body of the sensor.





(From left to right) Dr. Kenneth Chung, Senior CBRNE Scientist, and Anna Lim, Deputy Director (CBRNE Research), with BioXcap (extreme left), which captures airborne particles, analyses them in near real-time for the presence of bioterrorism agents. (Photo: HTX/ Michelle Lim)

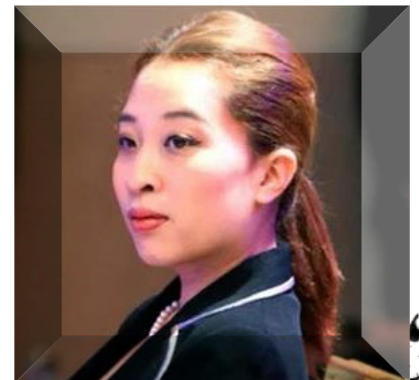
The samples are analysed inside, and the results produced within 30 minutes. Aside from testing the samples, the sensor can also store samples of interest such as toxins for scientists to analyse. Dr Oh Hue Kian, principal CBRNE Centre of Expertise scientist, said that while lab tests on the system have been completed, it still needed to be stress-tested for the team to better understand how it would perform in different environments and temperatures.

## Thai princess in coma after third Pfizer Covid booster

Source: <https://www.worldtribune.com/thai-princess-in-coma-after-third-pfizer-covid-booster/>

Feb 06 – Princess Bajrakitiyabha Narendira Debyavati, the likely heir to the throne in Thailand, collapsed with heart issues and went into a coma on Dec. 15 about **three weeks after her third Pfizer booster shot.**

The 44-year-old eldest daughter of King Rama X (Maha Vajiralongkorn) was reported to be in excellent health prior to receiving the third booster. She reportedly collapsed while training her dogs. The media seemed to generally lose interest after a Jan. 9 update in which it was reported the princess remained in a coma and, according to the royal palace, has now been





diagnosed with “severe heart arrhythmia resulting from inflammation following a mycoplasma infection.”

A spokesman reported that the princess’s “heart, lungs and kidney are being supported by machines.”

Independent journalist Sharyl Attkisson reported that one authority suggested that Thailand was preparing to declare its contracts for the Pfizer shots “null and void” and go after the Big Pharma company for damages.

“Propagandists in the media have launched into overdrive to try to discredit such news, and to claim ‘no evidence’ of a vaccine tie to the sudden illness of the princess (without mentioning that there is no evidence exonerating the vaccine, either),” Attkisson wrote.

The princess was said to be a “fitness enthusiast.”

Sucharit Bhakdi, former professor of microbiology at Germany’s University of Mainz, noted:

“One daughter of the present king Rama X collapsed and is in a coma... within 23 days after the third shot, 44 years old, never been seriously ill, collapsed and is now in a coma. **The diagnosis that was given by the authorities and by the university is so ridiculous – she’s supposed to have a bacterial infection that will never do what she suffered from.** And so we are determined, and the activists in Thailand who have been on this many many months now – great guys, also a professor from the University of Bangkok, he’s gotten in touch with the Royal Family, and we are sending information to the Royal Family to alert them to the fact that in all probability the princess is suffering as a victim of this jab, as so many people around the world have been suffering.”

## The Truth Behind Viral Videos Linking COVID Vaccine to Spasms, Shakes

Source: <https://www.medscape.com/viewarticle/987975>

Feb 08 – Images of uncontrollable tremors, shaking, involuntary spasms. It’s a visibly unnerving condition that’s recently been going viral on social media. Late last month, a [video resurfaced](#) from 2021 of Angelia Desselle, a then 45-year-old woman from Louisiana [attempting to walk](#) while supposedly experiencing these symptoms, which she claims were developed after receiving a COVID-19 vaccine. This is just one example of many.

Since Desselle’s video was reposted on Twitter, it’s been viewed more than 72 million times, helping to reignite controversy over the safety of COVID vaccinations. Her original video – first posted on Facebook -- was flagged by the site as part of an effort to [combat misinformation](#), according to Politifact. One of the recent retweets had this [context added](#): “the video ... has been debunked by multiple news outlets and local and federal health officials, showing no association of Desselle’s alleged 2 days of symptoms with the COVID vaccine.”

Yet these types of videos linger. Vaccine skeptics see them as supporting their beliefs that the vaccines are dangerous, despite mountains of evidence to the contrary and international public safety pronouncements. Aside from outright attempts to mislead, experts have an explanation for the shaking: In many cases, these atypical physical movements can be attributed to a common, disabling condition called functional neurological disorder or FND, according to neurologist Alfonso Fasano, MD, chair in Neuromodulation and Multi-Disciplinary Care at the University of Toronto and University Health Network.

FNDs are believed to be [related to](#) altered brain network activity (that is, disruption in the brain’s normal mechanisms for controlling the body), and possibly “triggered by a combination of abnormal physical and psychological experiences,” [according to](#) the Functional Neurological Disorder Society.

“This is as common as it is poorly understood,” says Fasano, who is co-author of [a study](#) looking at patients who visited a doctor with neurological symptoms following a COVID-19 infection or vaccination.

He says many of the patients that he’s seen in the clinic (including 43% of study participants) have a functional disorder that sometimes lingers just below the surface and waits for something to trigger it.



"There is really something wrong with them and something wrong in the brain; their brain functions in a different way," says Fasano. Moreover, while factors like psychological stressors, underlying illness (or infections like COVID-19 and the flu), and past traumas appear to predispose some patients to FNDs, others develop the syndrome without any explicable cause.

### A Perfect Storm

Functional nerve disorders are not a new phenomenon; they've been reported in one form or another since the Middle Ages. Today, an estimated [4% to 12%](#) of the population have them, and it is a common diagnosis in neurology clinics.

What makes them different this time around is the "perfect storm" – ongoing pandemic stress and fatigue, the social media megaphone and its ability to reach millions of people in real time at the same time, and global vaccination campaigns – all of which make it more common to attribute the development of nerve disorder symptoms to the vaccines.

"Vaccines have been associated with neuromuscular issues after receipt, but this is a very rare side effect," says Matthew Laurens, MD, MPH, pediatric infectious disease specialist and a professor of pediatrics at the University of Maryland School of Medicine in Baltimore. "Guillain-Barré syndrome, a rare disorder where the body's immune system damages nerves, was reported in association with the 1976 [swine flu](#) vaccination campaign," he says. But "sometimes events happen to individuals just after they receive a vaccine and they are not at all related to the vaccine." Neurological events [like Guillain-Barré](#) or involuntary muscle twitching ([known as myoclonus](#)) have been more frequently reported after infection itself. A study [published in](#) the *Annals of Neurology* last year showed that simply contracting COVID-19 significantly raised a person's risk for neurological events.

"The upshot was that the chances of having a neurological event after catching COVID were roughly 600-fold higher than after being vaccinated, which means for the general population, that it's unlikely that the COVID vaccines are related to a movement disorder," says Jennifer Frontera, MD, study co-author and a neurologist with New York University's Langone Health.

Even becoming infected by the virus may just reveal what was already under the surface. "There really hasn't been a lot to suggest that COVID itself causes a movement disorder," says Frontera. "I suspect that in some cases, it may unmask a movement disorder." Fasano agrees. "Like any medical act or minor trauma, anything can trigger functional disorders in people who are at risk for them."

### A Secret Weapon in Preventing the Next Pandemic: Fruit Bats

Source: <https://www.medscape.com/viewarticle/987966>



Feb 07 – More than four dozen Jamaican fruit bats destined for a lab in Bozeman, Montana, are set to become part of an experiment with an ambitious goal: predicting the next global pandemic. Bats worldwide



are primary vectors for virus transmission from animals to humans. Those viruses often are harmless to bats but can be deadly to humans. Horseshoe bats in China, for example, are cited as a likely cause of the covid-19 outbreak. And researchers believe pressure put on bats by climate change and encroachment from human development have increased the frequency of viruses jumping from bats to people, causing what are known as zoonotic diseases. "Spillover events are the result of a cascade of stressors — bat habitat is cleared, climate becomes more extreme, bats move into human areas to find food," said Raina Plowright, a disease ecologist and co-author of a recent paper in the [journal Nature](#) and another in [Ecology Letters](#) on the role of ecological changes in disease. That's why Montana State University immunologist Agnieszka Rynda-Apple plans to bring the Jamaican fruit bats to Bozeman this winter to start a breeding colony and accelerate her lab's work as part of a team of 70 researchers in seven countries. The group, called BatOneHealth — founded by Plowright — hopes to find ways to predict where the next deadly virus might make the leap from bats to people.

"We're collaborating on the question of why bats are such a fantastic vector," said Rynda-Apple. "We're trying to understand what is it about their immune systems that makes them retain the virus, and what is the situation in which they shed the virus."

To study the role of nutritional stress, researchers create different diets for them, she said, "and infect them with the influenza virus and then study how much virus they are shedding, the length of the viral shedding, and their antiviral response."

While she and her colleagues have already been doing these kinds of experiments, breeding bats will allow them to expand the research.

It's a painstaking effort to thoroughly understand how environmental change contributes to nutritional stress and to better predict spillover. "If we can really understand all the pieces of the puzzle, that gives us tools to go back in and think about eco-counter measures that we can put in place that will break the cycle of spillovers," said Andrew Hoegh, an assistant professor of statistics at MSU who is creating models for possible spillover scenarios.

The small team of researchers at MSU works with a researcher at the National Institutes of Health's Rocky Mountain Laboratories in Hamilton, Montana.

The recent papers published in Nature and Ecology Letters focus on the Hendra virus in Australia, which is where Plowright was born. Hendra is a respiratory virus that causes flu-like symptoms and spreads from bats to horses, and then can be passed on to people who treat the horses. It is deadly, with a mortality rate of [75% in horses](#). Of the seven people known to have been infected, four died.

The question that propelled Plowright's work is why Hendra began to show up in horses and people in the 1990s, even though bats have likely hosted the virus for eons. The research demonstrates that the reason is environmental change.

Plowright began her bat research in 2006. In samples taken from Australian bats called flying foxes, she and her colleagues rarely detected the virus. After Tropical Cyclone Larry off the coast of the Northern Territory wiped out the bats' food source in 2005-06, hundreds of thousands of the animals simply disappeared. However, they found one small population of weak and starving bats loaded with the Hendra virus. That led Plowright to focus on nutritional stress as a key player in spillover.

She and her collaborators scoured 25 years of data on habitat loss, spillover, and climate and discovered a link between the loss of food sources caused by environmental change and high viral loads in food-stressed bats.

In the year after an [El Niño](#) climate pattern, with its high temperatures — occurring every few years — many eucalyptus trees don't produce the flowers with nectar the bats need. And human encroachment on other habitats, from farms to urban development, has eliminated alternative food sources. And so the bats tend to move into urban areas with substandard fig, mango, and other trees, and, stressed, shed virus. When the bats excrete urine and feces, horses inhale it while sniffing the ground.

The researchers hope their work with Hendra-infected bats will illustrate a universal principle: how the destruction and alteration of nature can increase the likelihood that deadly pathogens will spill over from wild animals to humans.

The three most likely sources of spillover are bats, mammals, and arthropods, especially ticks. Some [60% of emerging infectious diseases](#) that infect humans come from animals, and about two-thirds of those come from wild animals.

The idea that deforestation and human encroachment into wild land fuels pandemics is not new. For example, experts believe that HIV, which causes AIDS, first infected humans when people ate chimpanzees in central Africa. A Malaysian outbreak in late 1998 and early 1999 of the bat-borne Nipah virus spread from bats to pigs. The pigs amplified it, and it spread to humans, infecting 276 people and killing 106 in that outbreak. Now emerging is the connection to stress brought on by environmental changes.

One critical piece of this complex puzzle is bat immune systems. The Jamaican fruit bats kept at MSU will help researchers learn more about the effects of nutritional stress on their viral load.

Vincent Munster, chief of the virus ecology unit of Rocky Mountain Laboratories and a member of BatOneHealth, is also looking at different species of bats to better understand the ecology of spillover.

"There are 1,400 different bat species and there are very significant differences between bats who harbor



coronaviruses and bats who harbor Ebola virus," said Munster. "And bats who live with hundreds of thousands together versus bats who are relatively solitary."

Meanwhile, Plowright's husband, Gary Tabor, is president of the Center for Large Landscape Conservation, a nonprofit that applies ecology of disease research to protect wildlife habitat — in part, to assure that wildlife is adequately nourished and to guard against virus spillover. "Habitat fragmentation is a planetary health issue that is not being sufficiently addressed, given the world continues to experience unprecedented levels of land clearing," said Tabor.

As the ability to predict outbreaks improves, other strategies become possible. Models that can predict where the Hendra virus could spill over could lead to vaccination for horses in those areas.

Another possible solution is the set of "eco-counter measures" Hoegh referred to — such as large-scale planting of flowering eucalyptus trees so flying foxes won't be forced to seek nectar in developed areas.

"Right now, the world is focused on how we can stop the next pandemic," said Plowright. "Unfortunately, preserving or restoring nature is rarely part of the discussion."

## A New (Old) Drug Joins the COVID Fray, and Guess What? It Works


By F. Perry Wilson, MD, MSCE

Source: <https://www.medscape.com/viewarticle/987900>

Feb 08 – Welcome to *Impact Factor*, your weekly dose of commentary on a new medical study. I'm Dr F. Perry Wilson of the Yale School of Medicine. With SARS-CoV-2 sidestepping monoclonal antibodies faster than a Texas square dance, the need for new therapeutic options to treat — not prevent — COVID-19 is becoming more and more dire.

### Monoclonals (once) authorized to treat COVID-19

Monoclonal	Target	Status
Tocilizumab	IL-6 receptor	Approved for hospitalized COVID-19 patients with severe illness
Bamlanivimab	Spike protein	EUA revoked (4/16/2021)
Etesevimab	Spike protein	EUA revoked (1/24/2022)
Casirivimab/imdevimab (REGEN-COV)	Spike protein	EUA revoked (1/24/2022)
Sotrovimab	Spike protein	EUA revoked (4/5/2022)
Bebtelovimab	Spike protein	EUA revoked (11/30/2022)
Tixagevimab/cilgavimab (Evusheld)	Spike protein	EUA revoked (1/26/2023)

 @fperrywilson

Medscape

At this point, with the monoclonals found to be essentially useless, we are left with remdesivir with its modest efficacy and Paxlovid, which, for some reason, [people don't seem to be taking](#).

Part of the reason the monoclonals have failed lately is because of their specificity; they are homogeneous antibodies targeted toward a very specific epitope that may change from variant to variant. We need a broader therapeutic, one that has activity across all variants — maybe even one that has activity against all viruses? We've got one. Interferon.



The first mention of interferon as a potential COVID therapy was at the very start of the pandemic, so I'm sort of surprised that [the first large, randomized trial is only being reported now in \*The New England Journal of Medicine\*](#). Before we dig into the results, let's talk mechanism. This is a trial of interferon-lambda, also known as interleukin-29.

●► [Read the full article at the source's URL.](#)

## Warmer Climate May Drive Fungi to Be More Dangerous

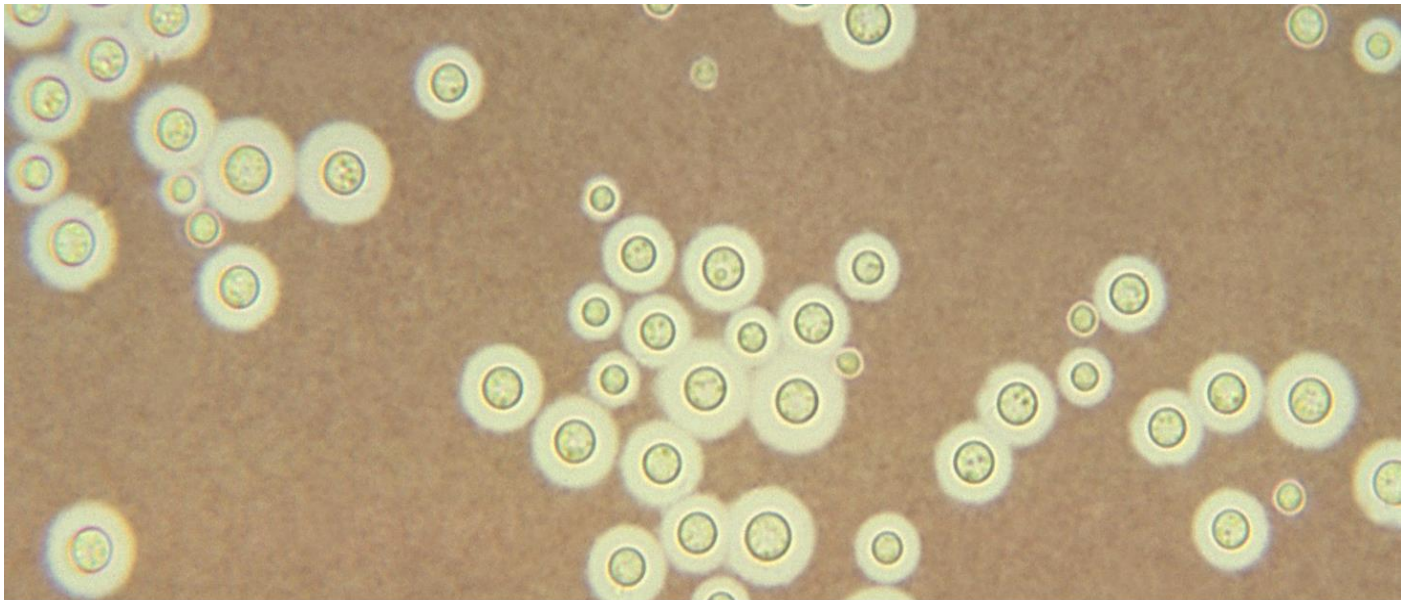
Source: <https://www.homelandsecuritynewswire.com/dr20230208-warmer-climate-may-drive-fungi-to-be-more-dangerous>



Feb 08 – The world is filled with tiny creatures that find us delicious. Bacteria and viruses are the obvious bad guys, drivers of deadly global pandemics and annoying infections. But the pathogens we haven't had to reckon with as much – yet – are the fungi.

Pathogenic fungi (*Candida*, *Aspergillus*, *Cryptococcus* and others) are notorious killers of immune-compromised people. But for the most part, healthy people have not had to worry about them, and the vast majority of the planet's potentially pathogenic fungi don't do well in the heat of our bodies.

But all that may be about to change.



This photomicrograph depicts *Cryptococcus neoformans*, a fungal pathogen that has been causing an increasing number of life-threatening infections. People with AIDS, and those using immunosuppressive drugs are most vulnerable. (US Centers for Disease Control)

A new study out of [Duke University School of Medicine](#) finds that raised temperatures cause a pathogenic fungus known as *Cryptococcus deneoformans* to turn its adaptative responses into overdrive. This increases its number of genetic changes, some of which might presumably lead to higher heat resistance, and others perhaps toward greater disease-causing potential. Specifically, higher heat makes more of the fungus' transposable elements, or jumping genes, get up and move around within the fungal DNA, leading to changes in the way its genes are used and regulated. The findings appeared Jan. 20 in the Proceedings of the National Academy of Sciences.

"These mobile elements are likely to contribute to adaptation in the environment and during an infection," said postdoctoral researcher Asiya Gusa Ph.D. of Molecular Genetics and Microbiology in the Duke School of Medicine. "This could happen even faster because heat stress speeds up the number of mutations occurring."

This may ring a bell with viewers of the new HBO series "The Last of Us," where a dystopian hellscape is precipitated by a heat-adapted fungus that takes over humans and turns them into zombies. "That's exactly the sort of thing I'm talking about — minus the zombie part!" said Gusa who just watched the first episode and who will join the Duke faculty as an assistant professor later this year.



“These are not infectious diseases in the communicable sense; we don’t transmit fungi to each other,” Gusa said. “But the spores are in the air. We breathe in spores of fungi all the time and our immune systems are equipped to fight them.”

Fungal spores are generally larger than viruses, so your existing stock of face masks against Covid would probably be sufficient to stop them. That, and your body heat, for now.

“Fungal diseases are on the rise, largely because of an increase in the number of people who have weakened immune systems or underlying health conditions,” Gusa said. But at the same time, pathogenic fungi may be adapting to warmer temperatures as well. Working in the lab of Professor Sue Jinks-Robertson, Gusa led research that focused on three transposable elements that were particularly active under heat stress in *C. deneoformans*. But there are easily another 25 or more transposable elements in that species that could mobilize, she said.

The team used ‘long-read’ DNA sequencing to see changes that might otherwise have been missed, Gusa said. Computational analysis allowed them to map transposons and then see how they had moved. “We have improved tools now to see these movements that were previously hiding in our blind spots.”

Heat stress sped the mutations up. Following 800 generations of growth in laboratory medium, the rate of transposon mutations was five-times higher in fungi raised at body temperature (37 Celsius) compared with fungi raised at 30C.

One of the transposable elements, called T1, had a tendency to insert itself between coding genes, which could lead to changes in the way genes are controlled. An element called Tcn12 often landed within the sequence of a gene, potentially disrupting that gene’s function and possibly leading to drug resistance. And a third kind, Cnl1, tended to land near or in the telomere sequences at the ends of chromosomes, an effect which Gusa said isn’t fully understood.

The mobilization of transposable elements also appeared to increase more in fungi living in mice than in lab culture. “We saw evidence of all three transposable elements mobilizing in the fungus genome within just ten days of infecting the mouse,” Gusa said. The researchers suspect that the added challenges of surviving in an animal with immune responses and other stressors may drive the transposons to be even more active.

“This is a fascinating study, which shows how increasing global temperature may affect the fungal evolution in unpredictable directions,” said Arturo Casadevall MD, PhD, the chair of molecular microbiology & immunology at Johns Hopkins University. “As the world warms, transposons in soil fungi like *Cryptococcus neoformans* could become more mobile and increase genomic changes in ways that could enhance virulence and drug resistance. One more thing to worry about with global warming!”

Gusa’s work was helped by collaboration with Duke labs that also study fungi, the Joseph Heitman lab in the school of medicine and the Paul Magwene lab in Trinity Arts & Sciences.

The next phase of this research will be looking at pathogens from human patients who have had a relapsing fungal infection. “We know that these infections can persist and then come back with potential genetic changes.”

It’s time to get serious about pathogenic fungi, Gusa said. “These kinds of stress-stimulated changes may contribute to the evolution of pathogenic traits in fungi both in the environment and during infection. They may be evolving faster than we expected.”

## Lung Protein Found That Blocks COVID-19 Infection

Source: <https://www.insideprecisionmedicine.com/coronavirus-2/lung-protein-found-that-blocks-covid-19-infection/>

Feb 10 – Researchers at the University of Sydney, Australia, have uncovered a lung protein that blocks SARS-CoV-2 infection and could be a new pathway for the development of drugs to treat [COVID-19](#). This protein, called the leucine-rich repeat-containing protein 15 (LRR15), is an inbuilt receptor that binds [SARS-CoV-2](#) without passing on the infection, according to [research was published Thursday](#) in *PLOS Biology*.

“Alongside two other groups, one at Oxford, the other at Brown and Yale, we found **a new receptor in the LRR15 protein that can stop SARS-CoV-2**. We found that this new receptor acts by binding to the virus and sequestering it which reduces infection,” said Greg Neely, a professor at the Charles Perkins Centre and the School of Life and Environmental Sciences. “The fact that there’s this natural immune receptor that we didn’t know about, that’s lining our lungs and blocks and controls virus, that’s crazy interesting.” LRR15 was discovered by the investigators as a result of research that looked to provide a more comprehensive assessment of the host factors that regulate binding to SARS-CoV-2 spike protein beyond the known primary receptor ACE2.

The research team employed whole-genome CRISPR activation to help identify these different host interactions with SARS-CoV-2 and discovered that LRR15, like ACE2, is a receptor for the virus. Unlike ACE2, however LRR15 does not support infection. Further, its ability to stick to the virus and immobilize it protects other cells from becoming infected.

“We think it acts a bit like Velcro, molecular Velcro, in that it sticks to the spike of the virus and then pulls it away from the target cell types,” said Lipin Loo, a postdoctoral researcher in the Neely lab.



Matthew Waller, a PhD student who was part of the research team, added “Basically, the virus is coated in the other part of the Velcro, and while it’s trying to get to the main receptor, it can get caught up in this mesh of LRRC15.”

While LRRC15 is found in many tissue types in locations around the body, such as the skin, tongue, lung, fibroblasts, placenta, and lymph nodes, it becomes much more prevalent in the lungs after SARS-CoV-2.

“When we stain the lungs of healthy tissue, we don’t see much of LRRC15, but then in COVID-19 lungs, we see much more of the protein,” Loo said. “We think this newly identified protein could be part of our body’s natural response to combating the infection creating a barrier that physically separates the virus from our lung cells most sensitive to COVID-19.”

According to Loo, this recent research meshes with earlier research from Imperial College London which showed that lack of LRRC15 in the blood was indicative of more severe cases of COVID-19, a finding that helped frame the variable responses of individuals to the virus.

Another important finding of the research has implications in fibrosis—a scarring and thickening of lung tissue that can occur as a result of infection and inflammation—that can cause breathing problems.

“Since this receptor can block COVID-19 infection, and at the same time activate our body’s anti-virus response, and suppress our body’s fibrosis response, this is a really important new gene,” Neely said. “This finding can help us develop new antiviral and antifibrotic medicines to help treat pathogenic coronaviruses, and possibly other viruses or other situations where lung fibrosis occurs.”

Using their findings, the team is now taking a dual-pronged approach to researching therapeutic development to target LRRC15 that could work across multiple variants. One strategy would target the nose as a preventative treatment, the second would be aimed at treatments for the lungs for serious cases.

## Inhalable ‘SHIELD’ Protects Lungs Against COVID-19, Flu Viruses

By Tracey Peake

Source: <https://news.ncsu.edu/2023/02/inhalable-shield-protects-lungs-against-covid-19-flu-viruses/>

Feb 09 – Researchers have developed an inhalable powder that could protect lungs and airways from viral invasion by reinforcing the body’s own mucosal layer. The powder, called Spherical Hydrogel Inhalation for Enhanced Lung Defense, or SHIELD, reduced infection in both mouse and non-human primate models over a 24-hour period, and can be taken repeatedly without affecting normal lung function.

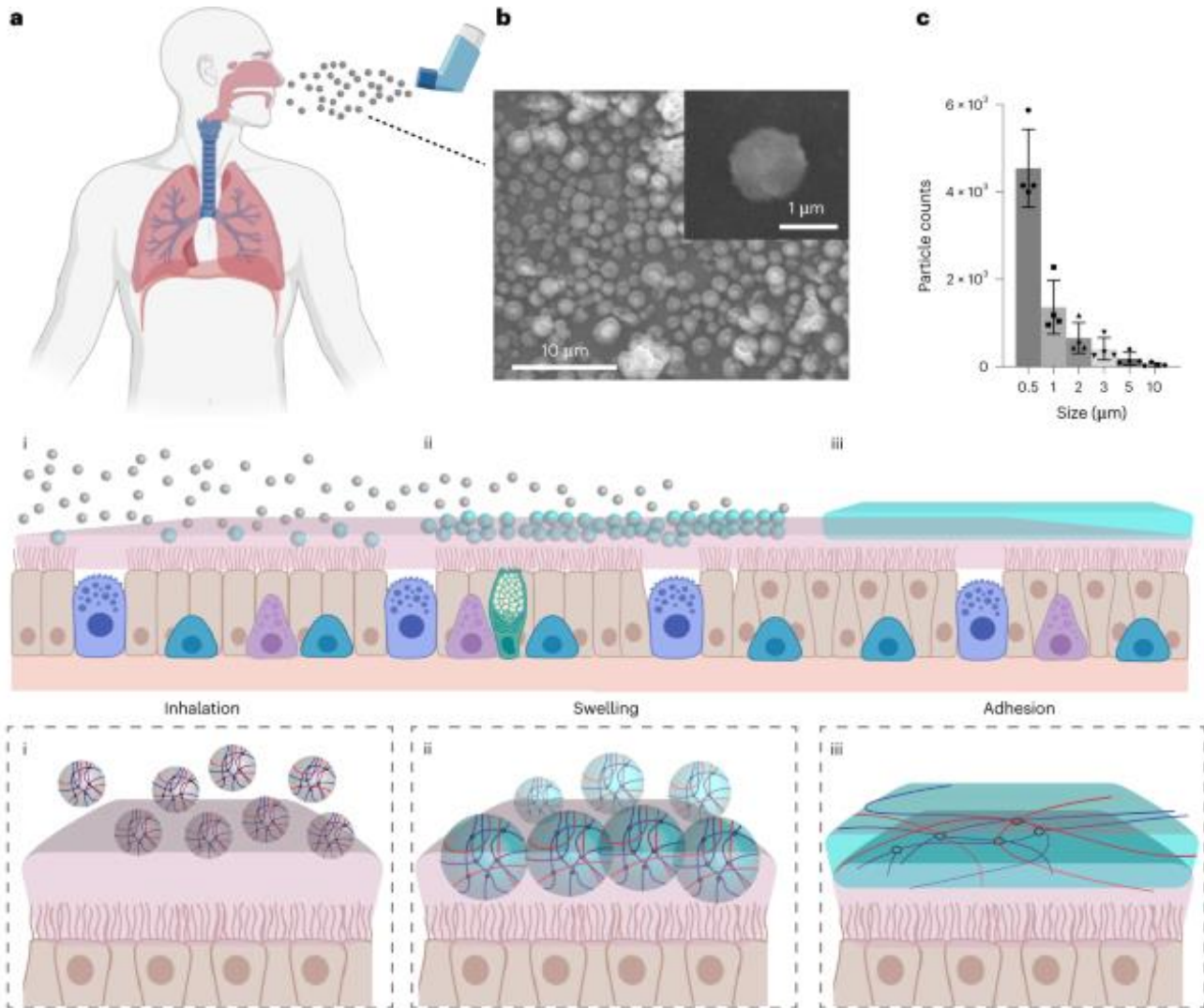
“The idea behind this work is simple – viruses have to penetrate the mucus in order to reach and infect the cells, so we’ve created an inhalable bioadhesive that combines with your own mucus to prevent viruses from getting to your lung cells,” says Ke Cheng, corresponding author of the paper describing the work. “Mucus is the body’s natural hydrogel barrier; we are just enhancing that barrier.” Cheng is the Randall B. Terry, Jr. Distinguished Professor in Regenerative Medicine at North Carolina State University’s College of Veterinary Medicine and a professor in the NC State/UNC-Chapel Hill Joint Department of Biomedical Engineering.

The inhalable powder microparticles are composed of gelatin and poly(acrylic acid) grafted with a non-toxic ester. When introduced to a moist environment – such as the respiratory tract and lungs – the microparticles swell and adhere to the mucosal layer, increasing the “stickiness” of the mucus.

The effects are most potent during the first eight hours after inhalation. SHIELD biodegrades over a 48-hour period, and is completely cleared from the body. In a mouse model, SHIELD blocked SARS-CoV-2 pseudovirus particles with 75% efficiency four hours after inhalation, which fell to 18% after 24 hours. The researchers found similar results when testing against pneumonia and H1N1 viruses. In a non-human primate model of both the original and Delta SARS-CoV-2 variants, SHIELD-treated subjects had reduced viral loads – from 50 to 300-fold less than control subjects – and none of the symptoms commonly associated with infection in primates, such as lung inflammation or fibrosis. Since primates do not exhibit the same symptoms of infection as humans, viral load is the standard marker used to determine exposure.

The researchers also looked at potential toxicity both in vitro and in vivo: 95% of cell cultures exposed to a high concentration (10 mg ml<sup>-1</sup>) of SHIELD remained healthy, and mice who were given daily doses for two weeks retained normal lung and respiratory function. “SHIELD is easier and safer to use than other physical barriers or anti-virus chemicals,” Cheng says. “It works like an ‘invisible mask’ for people in situations where masking is difficult, for example during heavy exercise, while eating or drinking, or in close social interactions. People can also use SHIELD on top of physical masking to have better protection.





**a**, Schematic showing the concept of the SHIELD method. Dry SHIELD particles (grey spheres) are inhaled and they become swollen (blue spheres) once they are in contact with the mucus layer (pink layer). Finally, it forms a layer of hydrogel (blue layer) and adheres to the mucus layer. The process includes inhalation (i), swelling (ii) and adhesion (iii). **b**, A representative SEM image showing the morphology of SHIELD particles before swelling. The inset shows a zoomed-in view of one particle. **c**, Aerodynamic diameter of SHIELD particles. Data are mean  $\pm$  s.d.;  $n = 4$  independent experiments. **d–f**, Swelling behaviour study.

"But the beauty of SHIELD is that it isn't necessarily limited to protecting against COVID-19 or flu. We're looking at whether it could also be used to protect against things like allergens or even air pollution – anything that could potentially harm the lungs." The study appears in [Nature Materials](#) and is supported by the National Institutes of Health, the American Heart Association, and special funding from the NC State Provost's Office. The researchers have filed a patent and are working on FDA approval for human use.

## Phase 3 Trial Reports Promising Results for New COVID Treatment

Source: <https://www.medscape.com/viewarticle/988082>

Feb 09 – Results from a phase III trial of a new COVID-19 treatment showed it reduced the risk of hospitalization or long ER visits by half. "The data look quite promising and other treatments have now fallen by the wayside," Paul Sax, MD, of Brigham and Women's Hospital in Boston, told [USA Today](#). Sax was not involved in the research.





Most treatments for COVID-19 have become ineffective as the virus has evolved, leaving just a few antivirals such as Paxlovid as the remaining available treatments. The new treatment is called **pegylated interferon lambda** and is made by California-based Eiger BioPharmaceutical. It is given as a single injection.

The [study](#) was published today in *The New England Journal of Medicine*. Researchers evaluated the treatment compared to placebo in 1,949 adults in Canada and Brazil who were at high risk of severe COVID-19. Those in the treatment group got the shot within 7 days of symptom onset.

The treatment worked best when taken within 3 days of symptoms appearing. Results also showed it was effective for both vaccinated and unvaccinated individuals, as well as against varying COVID variants.

"Peginterferon lambda has tremendous therapeutic potential, and we continue to see the emergence of aggressive variants of the virus spreading around the globe which are less sensitive to both vaccines and treatment with antibodies," said researcher Jordan Feld, MD, MPH, associate professor of medicine at the University of Toronto, in a [news release](#). "Resistance due to variants or new strains of the virus could be an issue with some therapies, but this may not be a concern with peginterferon lambda due to its mechanism of action that involves activation of multiple virus-killing pathways."

Eiger BioPharmaceutical said it has 100,000 doses available and the capability to manufacture 10 million more.

*The New York Times* [reported](#) that the company may seek authorization for the treatment to be used outside the U.S. because of hurdles with the FDA.

"Regulators at the Food and Drug Administration late last year told the drug's maker, Eiger Biopharmaceuticals, that they were not prepared to authorize it for emergency use," the *Times* reported. "Eiger executives said part of the problem seemed to be that the clinical trial did not include an American site, but rather only sites in Brazil and Canada, and that it was initiated and run by academic researchers, rather than the company itself."

## Russia Continues to Spread Disinformation on Imaginary U.S. Biowarfare Facilities in Ukraine



Source: <https://www.homelandsecuritynewswire.com/dr20230210-russia-continues-to-spread-disinformation-on-imaginary-u-s-biowarfare-facilities-in-ukraine>

Feb 10 – If you thought we were past Russia making ridiculous claims about supposed American biological warfare (BW) facilities in Ukraine, it seems the Russians still just can't help themselves.

On January 30, Lt. Gen. Igor Kirillov, the chief of Nuclear, Biological, and Chemical (NBC) Warfare at the Russian Ministry of Defense, claimed once again in a briefing that the United States developed biological weapons in facilities in Ukraine, including enhanced versions of SARS-CoV-2.

Yahoo! News [explains](#) that "In his remarks, Kirillov claimed to have obtained 20,000 documents that show evidence of "illegal military and biological activities" on the part of the United States in Ukraine. He described the documents as "reference and analytical materials" but provided no other details."

However, Kirillov went further than he had previously, this time referencing the EcoHealth Alliance in his claims that the U.S. has done work "enhancing the pathogenic characteristics of COVID-19." The Yahoo! News article explains this further, that with "The reference to EcoHealth Alliance, [also disseminated uncritically by Russian state media](#), seemed calculated to appeal to Western outlets that have trafficked in conspiracy theories about both the coronavirus and the war in Ukraine. Kirillov said that organization played a 'key role' in biological warfare, an assertion that goes well beyond what mainstream critics of EcoHealth Alliance have maintained."

This round of claims also includes ones that the U.S. has infected Ukrainian servicemembers, prisoners, and addicts with HIV using these weapons. Of course, this is part of a broader disinformation firehose created by the Russians, as [EUvsDisinfo](#) has been covered extensively.

This wasn't the only update in Russia's saga of international embarrassment this week, as the Russian delegation to the WHO Executive Board called the organization's response to Russia's war in Ukraine "politicized." This was after the publication of a [report](#) this week discussing the WHO's emergency response in Ukraine, which has been quite extensive given Russia's [repeated targeting](#) of healthcare facilities in the country and other ongoing problems.

Russia attempted to pressure the WHO into revising the report, taking particular issue with the agency's use of the word "invasion" in reference to what the Russian Federation continues to describe as a "special military operation" in Ukraine. In response, WHO Director-General Tedros [said](#), "I used the same word in a speech last year...I couldn't find any other word that would represent it because it's the truth. What could



I say?” He later continued, saying “The report is truthful and was written in good faith, and it’s my report and I take full responsibility...We didn’t try to politicize anything. ... There was no pressure.”

On a related note, the American Hospital Association recently released an [analyst note](#) discussing the Russian hacktivist group, KillNet, and its efforts targeting the U.S. health and public health sector. As the note explains, the group uses DDoS attacks often and has “...previously targeted, or threatened to target, organizations in the healthcare and public health (HPH) sector. For example, Killmilk, a senior member of the KillNet group, has threatened the U.S. Congress with the sale of the health and personal data of the American people because of the Ukraine policy of the U.S. Congress. In December 2022, the pro-Russian hacktivist group claimed the compromise of a U.S.-based healthcare organization that supports members of the U.S. military and claimed to possess a large amount of user data from that organization.”

## This Approach to Modeling Could Change Pandemic Simulations

Source: <https://i-hls.com/archives/118022>

Feb 10 – Scientists have been using pandemic and epidemic simulation models for a long time to help determine how a large-scale disease will potentially spread, but those simulations can take anywhere from a couple of weeks to several months to complete. A recent study offers a new approach to epidemic modeling that could drastically speed up the process.

The study uses sparsification, a method from graph theory and computer science, to identify which links in a network are the most important for the spread of disease.

By focusing on critical links, the authors found they could reduce the computation time for simulating the spread of diseases through highly complex social networks by 90% or more.

“Epidemic simulations require substantial computational resources and time to run, which means your results might be outdated by the time you are ready to publish,” says lead author Alexander Mercier, a former Undergraduate Research Fellow at the Santa Fe Institute and now a Ph.D. student at the Harvard T.H. Chan School of Public Health.

“Our research could ultimately enable us to use more complex models and larger data sets while still acting on a reasonable timescale when simulating the spread of pandemics such as COVID-19.” Stated Mercier.

## Is the US military funding bio-labs in the Philippines?

By Laura Reyes

Source: <https://opinion.inquirer.net/161015/is-the-us-military-funding-biolabs-in-the-philippines>

Feb 13 – Only the Inquirer reported on the calls of Makabayan bloc lawmakers for Congress to investigate why the US Department of Defense is funding the Regional Animal Disease Diagnostic Laboratory in Tarlac City for \$643,000, and only transferred to the Department of Agriculture (DA) in September 2020 (“House urged to scrutinize US-funded lab project in PH,” News, 12/21/22)

It is not only Congress that should investigate this worrisome expose, but the Department of National Defense (DND), Armed Forces of the Philippines, Department of Foreign Affairs (DFA), Department of Justice, Department of Health, and the local government units involved should have a thorough investigation and report, in the name of transparency and accountability that President Marcos Jr. espouses.

The Defense Threat Reduction Agency is a combat support agency within the United States Department of Defense (DoD) doing work on weapons of mass destruction, chemical, biological, radiological, nuclear, and high explosives. Isn’t this funding suspicious? This role of civilian and agricultural cooperation rests with the US Department of Agriculture, not with agencies within the US DoD, clearly. Will the DFA and DND ask US Defense Secretary Lloyd Austin during his visit to clarify the US position?

Thank you Makabayan bloc for initiating the investigation and to Inquirer for reporting this worrisome news. Why are our other politicians, government agencies, and other media silent?

Recently, US State Department Undersecretary Victoria Nuland was forced to admit that the US has been funding over 30 dangerous biolabs in Ukraine, which Kiev and the White House initially denied. But when Russia was about to take over some of the biolabs, Nuland told the congressional inquiry that: “Ukraine has biological research facilities which, in fact, we’re now quite concerned Russian troops, Russian forces may be seeking to gain control of, so we are working with the Ukrainians on how we can prevent any of those research materials from falling into the hands of Russian forces should they approach.”

Nuland’s bizarre confession revealed the same concerns that our lawmakers should be demanding an answer on: why is she so concerned that Russia would seize such a benign “biological research facility”?



“The US asked to explain after the Pentagon admits to operating 46 biolabs in Ukraine after months of denial,” read another June 12 headline by the UK’s Morning Star. Is the US moving its biolabs from Ukraine to Asia? And the Philippines another willing ally at the risk of endangering the lives of our people?

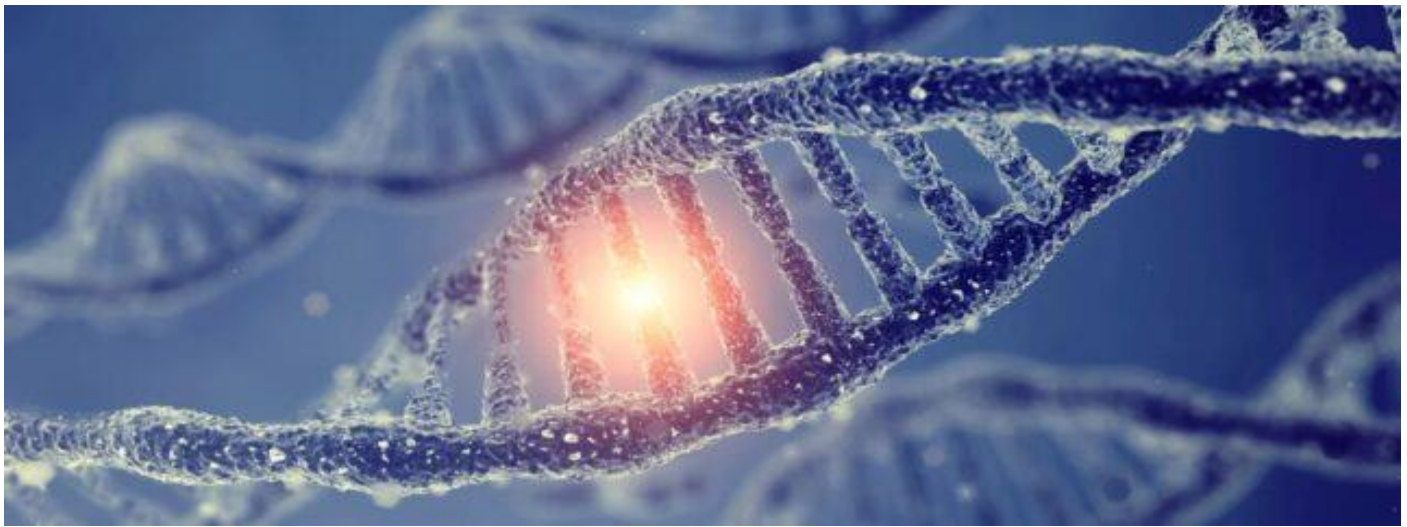
The Intercept also reported that accidents from US biolabs are mostly unreported, with over 250 biolabs worldwide funded by the US and off-limits to the World Health Organization from inspecting.

America can’t be trusted, especially their nongovernment organizations funded by the state and defense departments like the NED, USAID, etc. In fact, foreign governments have long accused the USAID as a front for the CIA dedicated to the downfall of countries that do not conform to the demands of the US. We saw the destruction and deaths in many nations in South America, the Middle East, Ukraine that blindly trusted the superpower. The next mistake may be catastrophic.

## What's The Secret of People Who Never Catch COVID? Are They Immune?

By Lindsay Broadbent

Source: <https://www.sciencealert.com/whats-the-secret-of-people-who-never-catch-covid-are-they-immune>



Conceptual illustration of a genetic mutation. (Science Photo Library/Canva)

Feb 13 – It’s been over three years since the first known [COVID-19](#) infection. Since then, we’ve seen [hundreds of millions](#) of cases around the globe. You’ve probably had it – at least once, if not multiple times – as has nearly everyone you know. As continued waves of infections arrive, fewer and fewer people have never caught COVID-19.

But, even taking into account those who have had it and not realized, there are probably still some people out there who have managed to avoid the [virus](#) altogether (so far).

Last year, I wrote about [people who had yet to be infected](#). Were they somehow immune? Did they possess some advantageous genetic mutation? Were they simply avoiding people and continuing to take precautions? Or had they just been lucky, and their time was inevitably going to come?

Unfortunately, we still don’t know why some people have managed to avoid COVID-19 for so long. Science takes time.

We saw research occur at unprecedented speed in 2020 to understand [SARS-CoV-2](#) (the virus that causes COVID-19) and to develop treatments and vaccines. But that level of funding and collaboration is hard to sustain in a world with so many worthwhile areas of research.

That said, some research is looking in particular at whether a genetic element helps explain why certain people have never caught COVID-19. But while this research is important, we shouldn’t lose focus on those who are suffering from the disease and its longer-term effects.

### Is immunity in the genes?

The [COVID Human Genetic Effort](#), led by researchers in the US, has recruited people with known exposure to the virus, but who haven’t had it themselves. This includes, for example, healthcare workers or people who lived in a household with a confirmed case of COVID-19.



Scientists will be examining their DNA and looking for unusual mutations that may explain an apparent resistance to SARS-CoV-2 infection. This may be a mutation in the cellular receptors or enzymes needed for the virus to gain entry to our cells, or perhaps a mutation in a gene involved in the immune response to infection.

Studies that look to uncover anomalies in our DNA, termed [genome-wide association studies](#), have already been able to identify genetic mutations that make some people resistant to other infections like [HIV](#) and [norovirus](#) (the winter vomiting bug). If we can identify the reasons people may be immune to a particular virus then, theoretically, that knowledge could be used to prevent the infection.

But is it really that simple? Despite our understanding of the genetic mutations that protect a lucky minority of people against norovirus, there's no vaccine or treatment for this virus. And the infamous "[CRISPR babies](#)" (several children born in 2018 whose genomes had been edited in an attempt to make them immune to [HIV](#)), received criticism for [dubious ethics](#), not to mention being illegal.

It's possible that it's not a mutation in one gene, but a combination of mutations in multiple genes, that render a small number of people immune to COVID-19. Targeting multiple genes without causing any unwanted side-effects can be tricky and would make it much harder to harness this knowledge for anti-COVID-19 drugs.

But understanding the genetic mutations that make someone resistant to COVID-19 could provide valuable insight into how SARS-CoV-2 infects people and causes disease. In other words, it may be interesting scientifically, but perhaps not clinically.

While it will be some time before we have answers from these studies, scientists do believe there is a small group of people who are [naturally immune](#) to SARS-CoV-2 owing to their genes.

#### Time to shift focus?

As scientists, we can become fixated on certain details of our research. It's always important to remind ourselves that there are people on the other end of these infectious diseases.

Although SARS-CoV-2 continues to infect people across the world, and is constantly mutating and evolving into new variants, its severity has in general been greatly reduced thanks to effective vaccines.

At the same time, an estimated two million people in the UK [report long COVID](#), of which nearly one-fifth have symptoms so severe the condition significantly limits their day-to-day activities.

While there are a few theories as to what contributes to long COVID, including [microclots in the blood](#) and chronic inflammation, we don't really know why some people are affected and others are not. So perhaps our focus should shift from the genetic determinants of immunity to SARS-CoV-2 to exploring whether some people may have a genetic predisposition to a potentially life-altering chronic disease.

Lindsay Broadbent is a Lecturer in Virology @ University of Surrey.

## AI comes up with 40,000 toxic chemicals in 6 hours; scientists warn could be used to make biological weapons

Source: <https://www.msn.com/en-in/news/techandscience/ai-comes-up-with-40000-toxic-chemicals-in-6-hours-scientists-warn-could-be-used-to-make-biological-weapons/ar-AA17r16g>

Feb 13 – Stealing artists' work, helping students cheat on tests and now this. Scientists have warned that Artificial Intelligence holds the potential to be misused to design highly toxic biological and chemical weapons. Four researchers involved in AI-based drug discovery have warned that AI technology could be easily manipulated to come up with toxic nerve agents, which could then be used for biological or chemical warfare.

The researchers were tasked by the Swiss Federal Institute for Nuclear, Biological and Chemical Protection to see whether AI could be manipulated towards nefarious motives. They successfully generated not one or two but 40,000 potentially toxic drugs in just six hours.

Fabio Urbina, one of the researchers, and the lead author of a paper detailing these findings told 'The Verge' a technology magazine that all they had to do was 'flip the switch' and say "instead of going away from toxicity, what if we go towards toxicity?"

**The findings have been shared in the journal Nature Machine Intelligence.**

As per Urbina, the concern isn't that the AI came up with these "molecules, a lot of which look like chemical warfare agents," but "how easy it was."



"A lot of the things we used are out there for free. You can download a toxicity dataset from anywhere," he added. Reportedly, some of the AI-produced molecules were even "more toxic than VX" — a toxic nerve agent developed by the UK's Defense Science and Technology Lab in the 1950s. VX is a toxic agent which kills its victims through muscle paralysis.

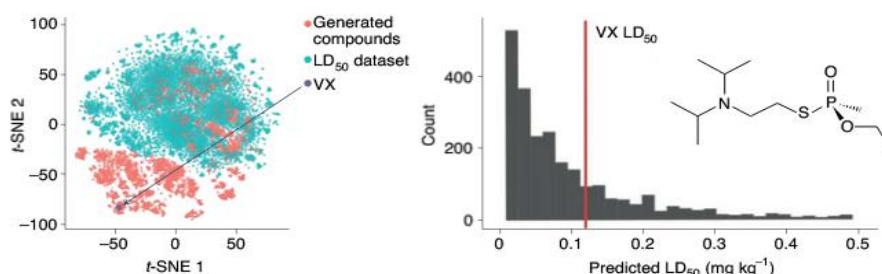



## Dual use of artificial-intelligence-powered drug discovery

An international security conference explored how artificial intelligence (AI) technologies for drug discovery could be misused for de novo design of biochemical weapons. A thought experiment evolved into a computational proof.

Fabio Urbina, Filippa Lentzos, Cédric Invernizzi and Sean Ekins

The Swiss Federal Institute for Nuclear, Biological and Chemical Protection — Spiez Laboratory — convenes the 'convergence' conference series<sup>1</sup> set up by the Swiss government to identify developments in chemistry, biology and enabling technologies that may have implications for the Chemical and Biological Weapons Conventions. Meeting every two years, the conferences bring together an international group of scientific and disarmament experts to explore the current state of the art in the chemical and biological fields and their trajectories, to think through potential security implications and to consider how these implications can most effectively be managed internationally.



**Fig. 1** | A t-SNE plot visualization of the LD<sub>50</sub> dataset and top 2,000 MegaSyn AI-generated and predicted toxic molecules illustrating VX. Many of the molecules generated are predicted to be more toxic in vivo in the animal model than VX (histogram at right shows cut-off for VX LD<sub>50</sub>). The 2D chemical structure of VX is shown on the right.

**EDITOR'S COMMENT:** Not a very good idea to provide new ideas to those that might evilly use them just to prove they can do it first. Soon AI will be available worldwide and then a "sorry" would not be enough!

## Risk of Diabetes after COVID-19 Reduced by Vaccination

Source: <https://www.insideprecisionmedicine.com/?p=165076?MailingID=%DEPLOYMENTID%>

Feb 14 – Previous infection with SARS-CoV-2 increases the risk of cardiometabolic diseases such as diabetes, but vaccination seems to reduce this risk, show research findings from Cedars Sinai Medical Center in Los Angeles.

Individuals who had [COVID-19](#) early in the pandemic, particularly serious infections, were [more likely to develop diabetes](#), high blood pressure and high cholesterol than those not infected. For example, [a study](#) published last year suggests those who had COVID-19 had 62% increased risk for developing new onset type 1 or type 2 diabetes compared with the general population.

What is unclear is whether the less virulent Omicron variants also increase the risk for diabetes and other cardiometabolic health issues and whether vaccination against COVID-19 influences this risk.

To investigate further, Alan Kwan, a cardiologist and cardiac imaging researcher at Cedars-Sinai, and colleagues analyzed data from **23,709 patients** with one or more COVID-19 infections, who were treated within the Cedars-Sinai Health System from March 2020 to June 2022. The average age of the cohort was 48 years and it was 54% female and 46% male.

As reported in [JAMA Network Open](#), the researchers assessed the risk for a new onset cardiometabolic (diabetes, high blood pressure or high cholesterol) vs non-cardiometabolic diagnosis (eg. urinary tract infection) occurring 90 days after vs before infection while correcting for possible confounding factors such



as age and sex. Timing of the infection (before or after emergence of Omicron) and COVID-19 vaccination status were also taken into account.

The researchers found that the risk of diabetes after Omicron infection was significantly elevated (58% increase in relative risk), after taking all possible confounders into account. However, the risk of high blood press or high cholesterol was not significantly linked to COVID-19 infection in this time period after correcting for confounding factors.

“In this cohort study, COVID-19 infection was associated with increased risk of diabetes... Our results suggest that this risk persisted as the Omicron variant became predominant, and the association remained even after accounting for temporal confounders,” write the researchers.

“Mechanisms contributing to postinfection diabetes risk remain unclear, although persistent inflammation contributing to insulin resistance is a proposed pathway.”

People with a prior COVID-19 vaccination were less likely to develop diabetes in the 90 days after infection, compared with unvaccinated individuals, at 7% vs 78% increased risk, respectively, compared with uninfected individuals. However, this difference was not statistically significant (P=0.08).

“Additional studies are needed to understand cardiometabolic sequelae of COVID-19 and whether COVID-19 vaccination attenuates risk of cardiometabolic disease,” note the researchers.

**EDITOR'S COMMENT:** Following all these revelations regarding the various adverse effects of mRNA vaccines it is difficult to trust studies like this one even if it is on a sufficient number of patients published in a respectful medical journal.

## Bill Gates says the next big threat facing humanity is bioterrorism. Interpol agrees

Source: <https://www.euronews.com/next/2023/02/14/bill-gates-says-the-next-big-threat-facing-humanity-is-bioterrorism-interpol-agrees>

Feb 14 – Bill Gates is widely known for his business acumen and humanitarian efforts. But the co-founder of Microsoft and multibillionaire philanthropist has also gained a reputation for predicting technological advancements as well as health crises and pandemics.

In a TED Talk in 2015, [Gates warned](#) that a pandemic was only a matter of when, not if, and that the world was not prepared to deal with it. Lately, his warnings have centred on another growing threat to global security: bioterrorism.

According to Interpol, bioterrorism refers to “the intentional release of biological agents or toxins for the purpose of harming or killing humans, animals or plants with the intent to intimidate or coerce a government or civilian population to further political or social objectives”.

[In a recent interview with the BBC](#), British journalist Amol Rajan asked Gates what was in his view the big future threat facing humanity that we were not thinking about enough.

Because we were starting “to think enough about climate change,” Gates replied, the answer was “bioterror, which is really awful”. Bioterror and pandemics are sort of the same, says Gates, because they expose mankind to dangerous and even deadly diseases, but “bioterror is a little harder to defend against, because whoever’s trying to do it is [doing it] consciously and understands your defence system, so they can be trying to design around them”.



**EDITOR'S COMMENT:** How comes an IT expert has an opinion on medical terrorism issues? In that respect, I could say that computers will deliberately poison human food in the next decade in order to take over the world and invite aliens to rule the planet. You might say that his [connections](#) with the WHO are related; perhaps you are right. Being Bill Gates does not means that he has a saying about everything!



### The threat of anthrax attacks

[Interpol](#) says there is sufficient information available to indicate that some individuals and terrorist groups have the capability and intent to use biological agents to cause harm to society.

The international police organisation has even developed an operational manual for investigating potential biological and chemical terrorism on the dark web, to help intelligence officers and investigators worldwide.

While a biological or toxic agent will presumably spread unexpectedly, the effective response to a biological event depends on the coordination of several actor sectors, says Interpol. “Structured prevention, preparedness and response strategies are therefore essential”.

The United States Centers for Disease Control and Prevention (CDC) says that if a bioterrorist attack were to happen, it would [most likely involve](#) the bacteria causing anthrax, a disease that can make humans and animals seriously ill.

Symptoms vary depending on how the bacteria enters the body - typically through the skin, lungs, or gastrointestinal system - which also determines the type of the disease. Symptoms for cutaneous anthrax, the most common type, can include a group of small blisters or bumps that may itch, as well as painless skin sores with a black centre appearing more often on the face, neck, arms or hand. All types of anthrax can “eventually spread throughout the body and cause death if they are not treated with antibiotics,” says the CDC. Inhalation anthrax - when a person breathes in anthrax spores - “is almost always fatal. However, with aggressive treatment, about 55 per cent of patients survive”.

Anthrax has already been used in the past. In 2001, powdered anthrax was placed deliberately in letters sent through the US postal system. Twenty-two people, including 12 letter carriers, contracted anthrax, and five of these 22 people died.

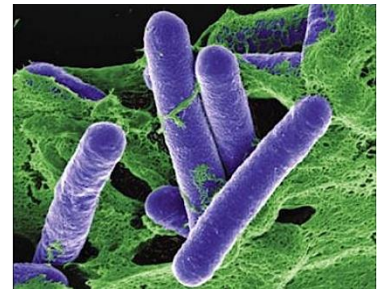
Other bioweapons that could potentially be used, according to the CDC, are the variola virus (the virus that causes smallpox); a disease called glanders, which typically affects horses and has already been used in the past as a biological weapon during war; and melioidosis, an infectious disease caused by germs that occur naturally in certain parts of the world, such as Southeast Asia and northern Australia.

## Experts found that Chilean poet Pablo Neruda was poisoned

Source: <https://english.elpais.com/international/2023-02-14/experts-found-chilean-poet-pablo-neruda-was-poisoned-nephew-says.html>



Feb 14 – An international panel of forensic experts has concluded that [Chilean poet Pablo Neruda](#) was poisoned. That’s according to the poet’s nephew, Rodolfo Reyes, who spoke to the Spanish news agency EFE on Monday about the investigators’ findings. As part of a probe into Neruda’s cause of death, researchers analyzed the **bacterium *Clostridium botulinum***, which was found in his body during an earlier investigation in 2017. According to Reyes, the experts concluded that the bacterium was endogenous, meaning it must have been injected. This conclusion supports the Communist Party of Chile’s argument that the bacteria was “was injected as a biological weapon,” in other words, that Neruda was poisoned.



“I can say it because I have seen the reports,” Reyes confirmed to EL PAÍS after EFE reported the news. “I am saying it, as a lawyer and nephew, with a lot of responsibility. The judge cannot make any remarks yet, as she has to have all the information.”

In 2017, a panel found the bacteria in Neruda’s upper molar and bones, but it was not known whether it was endogenous or exogenous, i.e. whether it was internal or external. “Now it’s been proven that it was endogenous and that it was injected or placed there,” said Reyes.

In an interview with The Associated Press, Reyes said forensic tests carried out in Danish and Canadian labs indicated a presence of “a great quantity of *Clostridium botulinum*, which is incompatible with human life.” The powerful toxin can cause paralysis in the nervous system and death.

Neruda, who won the 1971 Nobel Peace Prize for Literature, died on September 23, 1973, just 12 days after the coup that overthrew Chile’s then-president Salvador Allende and put General Augusto Pinochet



in power. For 40 years, the official cause of his death was listed as metastatic prostate cancer, but the [poet's driver Manuel Araya](#) argued for decades that he was poisoned.

So far, only Neruda's nephew has given details about the findings of the forensic experts, which are set to be made Wednesday, when the report is delivered to Judge Paola Plaza. The public release of the group's finding has been delayed twice this year, first due to internet connectivity issues of one of the experts and then again because a judge said the panel had yet to reach a consensus. The findings of the report are not legally binding. It will be up to Plaza to evaluate the evidence and determine [whether or not a third party was responsible for Neruda's death](#).

This is the third panel to investigate the death of the Nobel laureate. In 2013, the first panel concluded that he [died from prostate cancer](#), which he had been suffering from since 1969. In 2017, the second group detected the toxin *Clostridium botulinum*. And since January, the third panel – made up of scientists from Canada, Mexico, El Salvador, Denmark, United Kingdom, United States, Germany, Canada and Chile – has been investigating whether the toxin was endogenous or exogenous.

The cause of Neruda's death has been under investigation for more than 10 years. Given he died in 1973, the probe is under Chile's former judicial system, which still keeps cases – including the ongoing investigations into human rights violations under the Pinochet dictatorship – under seal. This is why forensic experts have not yet been able to give statements about their findings.

## FAA: Medical guidelines changed on advice from cardiologists, not because of the COVID-19 vaccine

Source: <https://www.politifact.com/factchecks/2023/jan/20/instagram-posts/faa-medical-guidelines-changed-advice-cardiologist/>

Jan 17 – Ever since COVID-19 vaccines became widely available, PolitiFact has regularly debunked false claims about pilots suffering health emergencies because they were inoculated.

In 2021, for example, we [fact-checked](#) a Facebook post that said there was "an epidemic of plane crashes linked to vaccine-related strokes in pilots." The Federal Aviation Administration told us it had seen no evidence that medical complications from COVID-19 vaccines caused any aviation accidents. But more recent posts spreading online claim the federal agency misled the public about adverse cardiac events among pilots.

"The FAA just telegraphed the fact that a substantial number of airline pilots have had serious heart damage from the C\*\*\*D v\*\*\*\*\*e by widening the ECG parameters for pilots," one Instagram [post](#) said, referring to electrocardiograms, which some pilots are [required to get](#) for their medical certificate to fly in the United States.

This post was flagged as part of Facebook's efforts to combat false news and misinformation on its News Feed. (Read more about our [partnership with Meta](#), which owns Facebook and Instagram.)

We found more information about this claim on the blog of Steve Kirsch, who MIT Technology Review [described](#) as a tech millionaire who "went from COVID trial funder to misinformation superspreader."

We've previously debunked several claims from Kirsch, including that the "Pfizer vaccine [kills more people than it saves](#)" and that twice as many children [have died from COVID-19 vaccines](#) as COVID-19.

In Kirsch's Jan. 17 [post](#), he points to an October update to the FAA's Guide for Medical Examiners, saying the agency "quietly widened" the parameters for what it considered a normal measure of heart function to accommodate "people who have cardiac injury." Kirsch says, "This is a tacit admission from the U.S. government that the COVID vaccine has damaged the hearts of our pilots. Not just a few pilots. A lot of pilots and a lot of damage."

The [update](#) is on the FAA's website, revising its electrocardiogram "normal variants list," which details electrocardiogram findings that "are not cause for deferment unless the airman is symptomatic or there are other concerns."

**It changed the maximum acceptable PR interval — a heart health metric measured by electrocardiograms — to 300 milliseconds, or 0.3 seconds. A PR interval between 0.12 seconds and 0.2 seconds is [considered normal](#). A PR interval that exceeds 0.2 seconds indicates [a first-degree atrioventricular block](#), which can [cause a slower heartbeat or abnormal rhythm](#).**

The Federal Aviation Administration told PolitiFact it raised the cutoff for a first degree ventricular block from 200 milliseconds, or 0.2 seconds, to 300 milliseconds, or 0.3 seconds, because the agency's cardiology consultants provided information indicating that a PR interval under 0.3 seconds isn't a risk for [subtle](#) or sudden incapacitation.





## The ECG Paper

akshaypharmd.blogspot.com

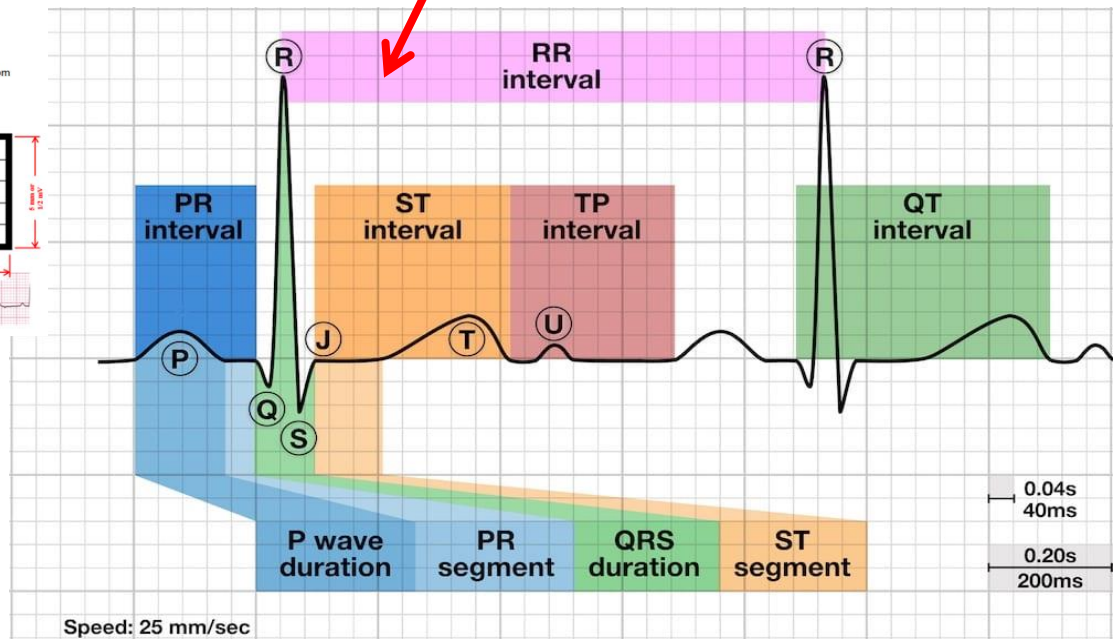
- Horizontally
  - One small box - 0.04 s
  - One large box - 0.20 s
- Vertically
  - One large box - 0.5 mV



The administration has "no evidence of aircraft accidents or incapacitations caused by pilots suffering medical complications associated with COVID-19 vaccines," a statement from the agency said. "When making changes to medical requirements and guidance, the

FAA follows standard processes based on data and science. New scientific evidence enabled the FAA to safely raise the tolerance used to screen for a certain heart condition."

We rate claims that the change was linked to COVID-19 vaccines False.



## Private-sector research could pose a pandemic risk. Here's what to do about it



By Gerald L. Epstein

Source: <https://thebulletin.org/2023/02/private-sector-research-could-pose-a-pandemic-risk-heres-what-to-do-about-it/>

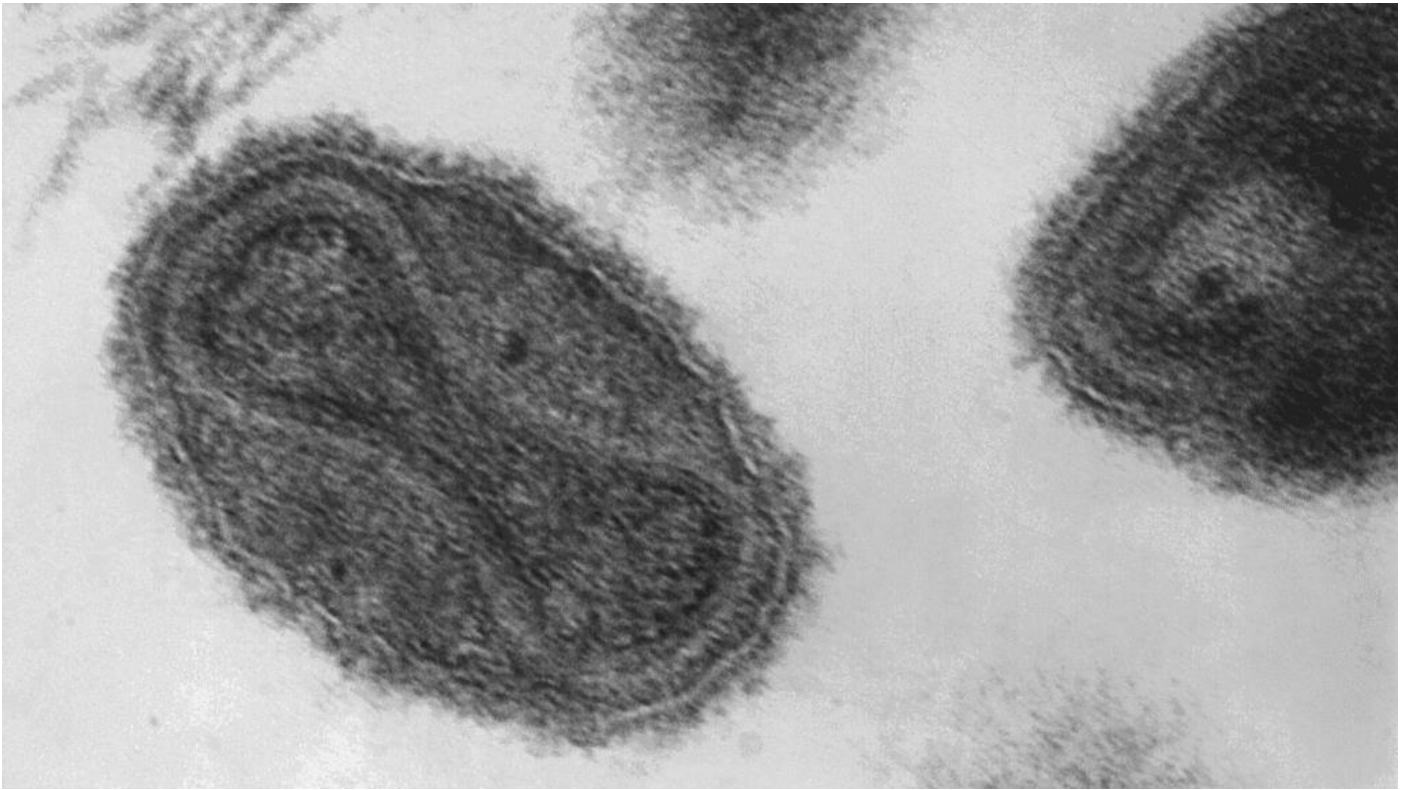
Feb 16 – In 2018, Canadian academics with pharmaceutical industry funding made a stunning announcement. They had synthesized horsepox, a pathogen that no longer exists in nature and that is closely related to the smallpox virus, variola. The controversial product was meant as a vaccine candidate—intended to infect humans and confer immunity without being transmissible or pathogenic—but the biotechnology involved in its production could readily have been applied to create a pathogen with the potential to start a deadly pandemic. As it was, the research raised [questions](#) about whether it [lowered the bar](#) for bad actors to synthesize variola as a biological weapon. But the study also highlighted a broader, perhaps less appreciated risk. By synthesizing a close cousin of a pandemic killer, the Canadian, pharma-backed researchers showed there is funding—and capability—outside the government to create and manipulate potential pandemic pathogens. In the United States, researchers with nongovernmental funding, unlike their government-funded counterparts, can perform experiments with so-called "[enhanced potentially pandemic pathogens](#)" largely free from regulation. These are germs that not only might trigger a pandemic but which researchers have made more virulent or transmissible in a lab. With a few exceptions, like for the original SARS virus (SARS-COV-1), no laws or regulations constrain the ability of independently funded companies to create or use lab-created pathogens with pandemic potential.

Observers have long seen the need for broadening the reach of US government policies that subject enhanced potential pandemic pathogens research to extra scrutiny; the risks that such research might pose do not disappear merely because no government funds are involved. Indeed, the [US policy that currently creates an oversight framework](#) for government-funded activity in this area explicitly sets out a marker that it be revised in some future version to cover "all relevant research activities, regardless of the funding source." But doing so is not straightforward. From new laws to incentives for voluntarily following government policies, there are a range of possibilities for achieving this goal. As the amount of privately funded activity in the US bioeconomy increases, doing so will only become more important.

### The light touch

The primary federal law that controls the possession of pathogens that could pose a major public health threat has its roots in the odd tale of an Ohio [septic tank inspector](#) in the mid-1990s.





An image of the variola virus, which causes smallpox. Researchers working with independent funds resurrected an extinct relative of the virus, the horsepox virus, in a study published in 2018

Larry Wayne Harris, a purported member of the Aryan Nations white supremacist group, ordered freeze-dried plague bacteria from a Maryland company that maintained stocks for research purposes. Harris was arrested and charged with mail fraud for claiming the bacteria were for his employer, but the fact that he was able to order them at all highlighted a weakness in federal biosecurity regulations. Congress subsequently passed a 1996 law requiring the Health and Human Services Department to regulate the transfer of so-called “select agents”—pathogens such as anthrax that could threaten public health. After the October 2001 anthrax attacks, the select agent program was expanded to control possession and use of these pathogens, in addition to their transfer.

These select-agent rules notwithstanding, the US government has traditionally been wary of legislating controls over scientific research. A major scientific debate in the mid-1970s illustrates this tendency well.

At the dawn of the recombinant DNA era, when societal fears over genetic engineering were rising, prominent scientists met in a now-famous conference in Asilomar, California, and developed voluntary guidelines for their research. The National Institutes of Health (NIH) included [guidelines](#) based on these recommendations into the terms and conditions of its research grants, [updating them as the science advanced](#).

Although Congress faced pressure to do something, [NIH worked hard to head off legislation](#), which it felt would overly constrain research practices and stunt innovation; also, the legislation would set up restraints that could not be modified without subsequent legislation.

Congress has passed laws regulating the use of [human subjects](#) – which apply only to federally funded research—and the [use of research animals](#). With these exceptions, however, along with the select agent legislation discussed above, the light touch of legislation governing life sciences research has remained in place ever since—a precedent that would need to be reversed if new legislation were to be enacted governing private-sector research involving enhanced potential pandemic pathogens. Alternatively—or in addition—several other approaches to encouraging greater oversight could be adopted.

### **New legislation mandating oversight**

The most direct way to extend oversight of enhanced potential pandemic pathogen research to cover privately funded work is through new legislation. Only Congress has the power to mandate restrictions or oversight approaches that would apply to any research within the United States, irrespective of funding source.



The select agent program provides a precedent for statutory control over life science research. However, whether Congress would act again is unknown. Given that an accidental laboratory release is one possible origin for the COVID-19 pandemic, the issue of research involving potential pandemic pathogens—like other aspects of the pandemic—is highly politicized. The heat that US-government funded research on that topic has generated may make it even less likely that Congress could take a nuanced approach to applying biosecurity rules to the private sector.

The Health and Human Services Department is currently the only government agency that has a [review process](#) for overseeing enhanced potential pandemic pathogen research. (All other government agencies remain under a [2014 funding pause](#) on research that would enhance the pathogenicity or transmissibility of a group of pandemic-capable viruses.) The agency's review framework sets out a number of principles that must be satisfied and establishes an extra layer of review for all proposed projects that might create, transfer, or use enhanced potential pandemic pathogens. The most straightforward option for mitigating private-sector pandemic risks would be for Congress to pass a law requiring that any similar privately funded activities undergo an equivalent government review.

### Utilizing existing legislation

Far simpler than passing new legislation would be for the Executive Branch to take action to bring enhanced potential pandemic pathogen research under existing law. One way to do so is relatively straightforward, although not without challenges. A second approach is more speculative.

The health and agriculture secretaries currently have the authority to place additional biological agents or toxins under the purview of the select agent program. Everyone with access to agents that have been so designated must undergo review by the FBI; all institutions possessing such agents and using them in research must be registered with the government and adhere to specified safety and security measures; and all incidents of theft, loss, or accidental environmental release of these agents must be reported. Designating enhanced potential pandemic pathogens as select agents would bring them into this legally binding regime. Doing so might be challenging, however; unlike other select agents, these lab creations are defined by their attributes, not their names. It is their presumed transmissibility and virulence that would subject them to greater scrutiny. Even informed experts might disagree on whether a particular pathogen is an enhanced potential pandemic pathogen, or whether a proposed experiment is likely to generate one. Such subjectivity could pose legal problems because of the Constitution's due process requirements, which require that regulated activities be specified clearly enough for a reasonable person to understand what is permitted and what is prohibited. One way around this difficulty would be to require anyone uncertain about the status of a pathogen—including one yet to be created—to seek clarification from the government before proceeding. However, the select agent program currently has no such provision.

One notable feature of the select agent program is that the relevant cabinet secretaries can designate experiments using select agents as "restricted," requiring explicit government permission to perform them. For these experiments, the secretaries can specify additional requirements. One current example of a restricted experiment is conferring antibiotic or antiviral resistance to a select agent, if such resistance could compromise the ability to control the disease that agent is responsible for. If enhanced potential pandemic pathogens were listed as select agents and their creation or use were designated as restricted experiments, the existing government review regime could be made a requirement, even for privately funded research.

Another law that could arguably be utilized to regulate enhanced potential pandemic pathogen research is the [Biological Weapons Antiterrorism Act of 1989](#), which implements the 1975 [Biological Weapons Convention](#) banning biological weapons. However, this route is much more problematic.

[This law](#) criminalizes the possession of any biological agent "of a type or in a quantity that, under the circumstances, is not reasonably justified by a prophylactic, protective, bona fide research, or other peaceful purpose." This wording is identical to language in one of the convention's prohibitions with the exception of "bona fide research," which does not appear in the treaty text; it was added to the US law—but not defined—after lobbying by the life science research community. Although Congress has not specifically authorized it to do so, one can imagine the Justice Department issuing guidance specifying that the conduct of enhanced potential pandemic research without authorization of an appropriate government agency such as the Department of Health and Human Services would not be considered "bona fide research" and would therefore not be considered as having "prophylactic, protective, or other peaceful purpose." That would remove its legal justification.

Indeed, the Justice Department has in the past issued guidance that clarifies permissible life science activities. A provision of a 2004 law that was specifically intended to criminalize unauthorized possession of the virus responsible for smallpox could be read as prohibiting the possession of smallpox vaccine as well. To rectify this misstep, the Justice Department issued a 2008 opinion that made it clear that it did not see this prohibition as extending to smallpox vaccine. However, these two cases are not really equivalent.



The smallpox opinion narrowed the set of activities eligible for prosecution, and it did so in a very specific way. A hypothetical opinion on “bona fide research” would expand the Justice Department’s prosecutorial authority in a way that could be arbitrarily generalized, essentially allowing the agency to criminalize activities at its own discretion rather than that of Congress. It is very unlikely that the Justice Department would be willing to pursue this route in the absence of specific legislation and without establishing a formal regulatory rule-making process that would give notice to, and accept comments from, affected parties.

Whatever the mechanism, one important additional reason to have statutory control over potentially dangerous research is to facilitate investigations. In the absence of a potential criminal violation, law enforcement authorities are powerless to investigate anyone who might be suspected of conducting such research for nefarious purposes. A statute that requires research with enhanced potential pandemic pathogens only be done with government permission gives law enforcement the ability to investigate those who might be conducting such research outside of appropriate oversight.

### **Soft law: incentivizing oversight**

Given the challenges of creating a new law or repurposing an existing one to regulate enhanced potential pandemic pathogen research, it’s worth thinking about other methods to create guard rails around the riskiest private-sector research. In lieu of “hard law” provisions, a number of “soft law” mechanisms can provide incentives for research institutions to voluntarily accept policies like the government’s enhanced potential pandemic pathogen policy. While that policy doesn’t allow non-government funded researchers to voluntarily submit projects for review, other federal oversight policies for life science research do. For example, [current policy](#) to deal with the threat that certain life science research might produce materials or information that could be misused for harm, which strictly applies only to US government-funded institutions, explicitly encourages and allows for the voluntary review of non-federally funded research as well.

Along the same lines, the NIH’s [Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules](#) formally apply only to institutions receiving US government funding for life science research; in 1980, NIH added a section on voluntary compliance. Even though there was no requirement to do so, many private companies conducting recombinant DNA research sought NIH approval to demonstrate that they were acting responsibly. Under the new provisions, they registered their experiments with NIH, used only NIH-certified laboratory procedures, and even solicited permission from NIH to conduct the same types of experiments that federally funded institutions were required to get [NIH approval for](#).

The framework for overseeing enhanced potential pandemic pathogen research currently makes no provision for voluntary review of non-federally funded activity, but it could.

### **Oversight as a condition of service**

Regardless of the funding source of the research, scientific publishers will generally not accept manuscripts reporting on research involving human subjects if that research has not been approved by an institutional review board. These boards minimize the risk to research subjects to the extent possible, validate that the potential benefits of the research warrant the remaining risks, and ensure that research subjects are aware of those risks and voluntarily accept them. Publishers do not impose a similar requirement that enhanced potential pandemic pathogen research go through a review process analogous to the government’s reviews, but they could.

By law, the Food and Drug Administration requires all applicants for approval of drugs or devices to comply with federal human research subject protections as well. However, this legal requirement is specific to human research subjects and could not likely be generalized to require federal review of enhanced potential pandemic pathogen research. Moreover, it is not clear that any such research would be relevant to supporting the Food and Drug Administration approval process.

### **Norms**

As was the case in the early days of genetic engineering, non-governmental entities performing controversial research such as that involving enhanced potential pandemic pathogens may wish to voluntarily place their work under the same oversight that the US government applies to work that it funds. An overt public campaign by industry and scientific leaders, or just the gradual buildup of expectations, could create a norm that responsible research institutions should apply this type of guidance. However, there would be no legal consequences for not doing so, nor would such an approach constrain anyone who was secretly pursuing this technology for illicit purposes.

One way to promote the development of norms that exceed federal requirements is through incentives. As an example, federal regulations regarding the use of research animals do not require third-party accreditation of animal use and care, but many institutions—including ones that are not federally regulated—[seek it anyway](#). Such accreditation can be a way to demonstrate their willingness to exceed



legal requirements, and it can open up sources of funding that are not available to unaccredited labs. (Of course, this particular incentive would have little leverage over self-financed activity.)

### Tort Law and Liability

Whether or not a federal law or policy addresses some aspect of potentially risky research, anyone responsible for inflicting damage on another can be held responsible for providing compensation. Any laboratory working with potentially dangerous pathogens implicitly accepts the possibility that should such a pathogen escape laboratory containment and cause harm in the surrounding community, the laboratory could be legally liable. (Harm to laboratory workers would generally be addressed by the workers compensation system, which is a ‘no-fault’ process.)

To defend against these claims, a research lab would have to argue that it took reasonable care to avoid accidental releases, and that it implemented “reasonably prudent” protective measures. Such “reasonably prudent” measures are often—but not exclusively—defined by the generally accepted standard of practice protecting against such hazards. In the case of a biological research laboratory, this might mean adhering to guidelines such as the CDC/NIH guidance [Biosafety in Molecular and Biomedical Laboratories](#). However, a [1932 court case](#) ruled that the use of generally accepted practices is not necessarily a sufficient defense if additional measures that could have prevented the harm were available but not used.

Voluntary adherence to the government’s framework for enhanced potential pandemic pathogen research might demonstrate an additional level of prudence, were a laboratory to be accused of responsibility for an accident. Independent of any particular biosafety or biosecurity measures that might have been applied, an accident involving research that would not likely have been approved at all under the government’s framework could leave a laboratory in a vulnerable situation.

Legislation can establish “strict liability” for some hazards, eliminating the defense that the institution acted “reasonably prudently” and assigning it responsibility for any harm that can be traced to it, regardless of the actual mechanism of harm or utilization of protective measures. For example, in the majority of states, dog owners face strict liability for injuries caused by their dogs. Given the magnitude of potential harm, establishing strict liability for potentially triggering a pandemic would likely end enhanced potential pandemic pathogen research by any institution that was not willing to bet its continued existence on the success of its laboratory containment protocols.

To protect themselves from liability lawsuits in the event of damages that can be traced back to their research, privately funded institutions may not only want to follow best practices, but also purchase insurance that would cover any assessed damages. Even large institutions that “self-insure,” meaning that they are willing to assume the possible risk of a large payout to avoid the certain expense of purchasing liability policy, typically have excess insurance for those claims that would exhaust even their ability to pay. (Insurance companies themselves have reinsurance agreements with other insurance companies to mitigate against the possibility that they may be hit with a barrage of claims that would exceed their own available resources.)

If insurers were willing to offer liability coverage to institutions researching enhanced potential pandemic pathogens, they would have the incentive and the ability to require those institutions to follow the government’s review and oversight policies as a condition of coverage. It is worth noting that the growth of the commercial nuclear power industry, another human endeavor that offers the possibility of inducing widespread harm, was only made possible in the United States by the Price-Anderson Act, which caps the liability of any individual nuclear facility and creates an industry-wide mechanism to cover damages exceeding that limit—up to a point. Likewise, it would be impossible for insurers to cover losses as large as those that could be attributed to a pandemic; COVID-19’s costs to society have been [estimated](#) at many tens of trillion dollars.

With the growth of the bioeconomy and increasing amounts of privately funded life sciences research, restricting biosecurity policy only to government-funded institutions creates an ever-growing gap. Even though research with enhanced potential pandemic pathogens constitutes an extremely small fraction of the overall life science and biotechnology enterprise—and the fraction of that work done with private funding even smaller—the potential global consequences of such work make it increasingly important to develop governance approaches that go beyond attaching strings to US government dollars. Closing this gap within the United States is not sufficient, given the global extent of the life science enterprise and the global consequences of any lab-caused pandemic—but it is a necessary start.

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Biological, Radiological, and Nuclear Policy. Before joining DHS, Dr. Epstein had held positions with the American Association for the Advancement of Science, the Center for Strategic and International Studies, the Institute for Defense Analyses, and the Congressional Office of Technology Assessment. In a prior White House appointment, he served jointly as Assistant OSTP Director for National Security and Senior Director for Science and Technology on the National Security Council staff. He holds S.B. degrees in physics and electrical engineering from the Massachusetts Institute of Technology, and M.S. and Ph.D. degrees in physics from the University of California at Berkeley.



## U.S. Unprepared for Dangers Posed by Zoonotic Diseases, New Analysis Concludes

Source: <https://www.nyu.edu/about/news-publications/news/2023/february/u-s--unprepared-for-dangers-posed-by-zoonotic-diseases--new-anal.html>

Feb 16 – The United States, the largest importer of wildlife in the world, is not prepared for future spread of animal-borne, or zoonotic, diseases due to gaps among governmental agencies designed to combat these threats, concludes a new analysis by researchers at Harvard Law School and New York University. The authors call for a “One Health” approach, integrating multiple agencies in order to better govern human-animal interactions.

The editorial, “Blind spots in biodefense,” which appears in the journal *Science*, is authored by Ann Linder, a research fellow at Harvard Law School’s Brooks McCormick Jr. Animal Law & Policy Program, and Dale Jamieson, a professor at New York University’s Center for Environmental and Animal Protection in the Department of Environmental Studies.

Linder and Jamieson note that the Biden administration’s recent release of its National Biodefense Strategy (NBS-22), the first update since the COVID-19 pandemic began, frames threats as largely external to the United States.

“NBS-22 focuses primarily on bioterrorism and laboratory accidents, neglecting threats posed by routine practices of animal use and production inside the United States,” they write.

This oversight is significant, Linder and Jamieson observe, given the United States’ past and present when it comes to human-animal interface:

- More zoonotic diseases originated in the United States than in any other country during the second half of the 20th century.
- In 2022, the U.S. processed more than 10 billion livestock, the largest number ever recorded and an increase of 204 million over 2021.
- The ongoing H5N1 avian influenza outbreak has left 58 million animals dead in backyard chicken coops and industrial farms in the U.S.
- Since 2011, the U.S. has recorded more swine-origin influenza infections than any other country. Most occurred at state and county fairs, which attract 150 million visitors each year and where an estimated 18% of swine have tested positive.

Moreover, they add, the current patchwork of siloed agencies and authorities is marked by a lack of coordination, leaving significant gaps and areas of underregulation. In fact, of the many agencies that govern food animal production, the U.S. Department of Agriculture is the most important, but it has no authority to regulate on-farm animal production.

The authors call for rebuilding from the ground up the U.S. regulatory system in order to combat zoonotic disease risk.

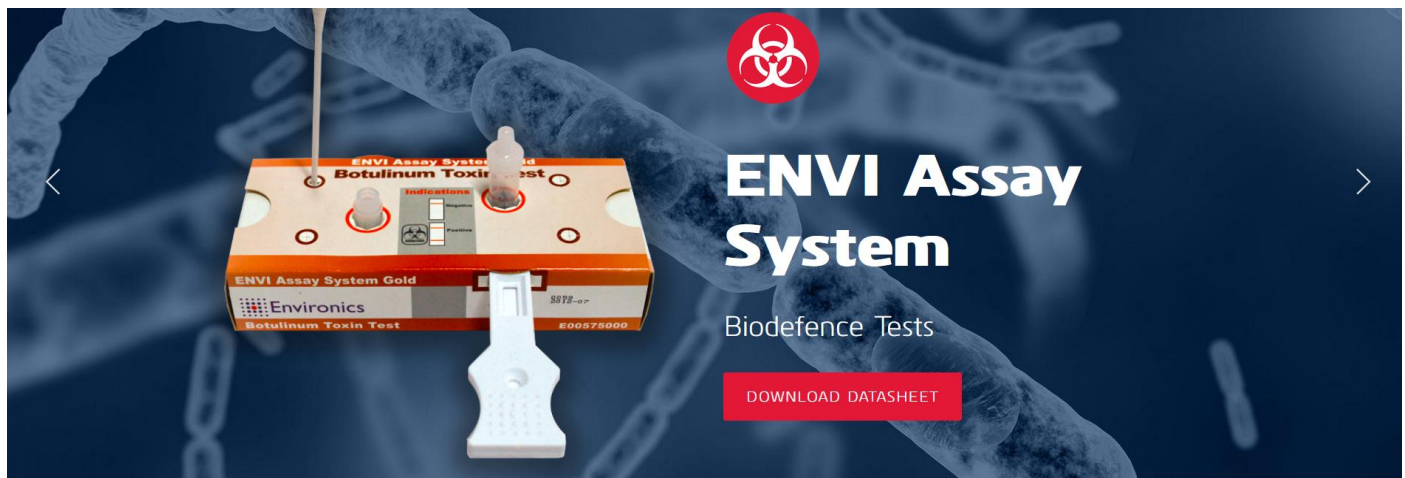
“What is needed is not simply for agencies to do their jobs better or to paper over the gaps, but a fundamental restructuring of the way that human–animal interfaces are governed,” Linder and Jamieson urge. “A One Health approach, which NBS-22 claims as its guiding principle, would take the health of other living things not merely as the occasional means or obstacles to human health, but as continuous with it. The first step in implementing such an approach would be to create a high-level process for integrating the broken mosaic of multiple agencies, with their unclear and sometimes competing mandates, into an effective, comprehensive regime.”

The editorial is based on research from the [Live Animal Markets Project](#), which is examining global policy responses to animal markets and their role in zoonotic disease transmission. The project includes 15 individual country case studies involving local collaborators, partner institutions, and members of the core research team. The project aims to provide a comprehensive assessment that will aid policymakers, contribute to public education about zoonotic risks, and support the human health and animal protection communities. The project is led by researchers from Harvard Law School’s Brooks McCormick Jr. Animal Law & Policy Program, and New York University’s Center for Environmental and Animal Protection, and involves researchers and institutions from around the world. Kristen Stilt, Arthur Caplan, Chris Green, Bonnie Nadzam, and Valerie Wilson McCarthy contributed to this editorial.



## ENVI Assay System

Source: <https://environics.fi/products/envi-assay-system/>



High-quality and proven test method for early detection and BWA identification.

The most compact immunoassay “lab-in-a-box” in the market.

Disposable, separate assays for seven highly poisonous hazardous agents: ricin toxin, botulinum toxin, *Bacillus anthracis*, orthopox virus, SEB, *Yersinia pestis* and *Francisella tularensis*.

ENVI Assay System biodefence tests provide military and civil defence officers with a fast, simple, and reliable solution. ENVI Assay System test kits are featured with practical tools and straightforward test method giving fast response, specificity, and sensitivity ideal for provisional biological threat assessment from environmental samples.

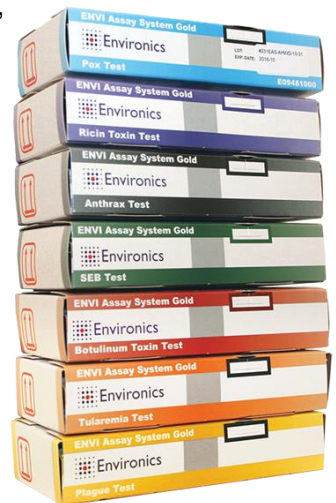
### Why Choose ENVI Assay System

- Sensitive, specific and proven
- Handy and compact biological lab-in-a-box format
- Suitable for both field and laboratory conditions with no requirement for special training
- Simple operational steps: sample collection, solubilization, mixing, and dosing the sample can be done in seconds, and test results are ready in 15 -20 minutes.

### Applications

ENVI Assay System allows for early detection and BWA identification, which combined with timely warning, protection and correct medical countermeasures are crucial steps for the whole process of bioterror management.

These rapid biodefence tests can be used in a broad range of applications, from law enforcement authorities, to private security services, airport security checks, to even mobile laboratories.



Package Size	10 single-packed tests/kit
Kit content	Test cassette (10 pcs) Cotton swab for sampling (10 pcs) Sample vial with buffer solution (10 pcs) Filter cap (10 pcs) Short instructions (10 pcs) Package insert (1 pc)
Sample type	Air, soil, powders, liquids, surfaces
Response time	15 -20 minutes



## Closing the Toilet Lid Before Flushing Is Important

Source: <https://www.medscape.com/viewarticle/988245>

Feb 14 – Laser lights expose the otherwise invisible aerosol spray that is sent into the air by flushing a toilet with the lid up. The lasers show how pathogens from human waste can spread in public restrooms and can potentially expose people to contagious diseases, according to the results of tests conducted by a group of civil, environmental, and architectural engineers from the University of Colorado Boulder.

### What to Know

- Toilets are designed to **efficiently empty** the contents of the bowl through a **downward motion** into the drainpipe, but the **force** of the flush cycle also creates a **fine spray** of particles in the air. Those particles easily spread when a **lid is left up** during flushing.
- Laser lights illuminate the **otherwise invisible aerosol** plumes. They show that a typical **commercial toilet** generates a strong **upward jet** of air — velocities exceed **6.6 feet per second** — that can rapidly carry particles up to 5 feet above the bowl **within 8 seconds** of the start of the flush.
- Smaller particles that **remain suspended** in air can expose people to **respiratory disease**, such as [influenza](#) and COVID-19, through **inhalation**, while larger particles that settle quickly **on surfaces** can spread intestinal diseases, such as norovirus, through contact with the hands and mouth.
- Concentrations of pathogens can persist in toilet bowl water **contaminated by feces** after **dozens of flushes**, but it is still unclear as to the risk of **transmission** through toilet aerosol plumes.
- Since many public restrooms do not have **lids** that can be closed **prior to flushing** to reduce human exposure to toilet plumes, **ventilation** or UV **disinfection** systems would be important tools to **mitigate exposure** to aerosol plumes in the bathroom.



*This is a summary of the article, "Toilets spew invisible aerosol plumes with every flush – here's the proof, captured by high-powered lasers," published in The Conversation on December 16, 2022. The full article can be found on [theconversation.com](https://theconversation.com).*



## A simple spray could keep COVID-19 away

Source: <https://hub.jhu.edu/2023/01/12/nasal-spray-prevents-spread-covid-flu/>

 **JOHNS HOPKINS**  
INSTITUTE for  
NANOBIOTECHNOLOGY

Jan 12 – What if preventing respiratory illnesses such as COVID-19 and influenza was as easy as a quick spritz of nasal spray every morning?

Numerous bacteria and viruses, including those that cause COVID-19 and influenza, enter the body through the lungs when people breathe, resulting in illness. Johns Hopkins engineers have created thin, thread-like strands of molecules called supramolecular filaments that are designed to be sprayed into the nose, blocking those harmful viruses from entering the lungs.

"The idea is that the filaments will work like a sponge to absorb the COVID-19 virus and other viruses before they have the chance to bind to cells in our airways. Even if the therapeutic can block the virus for an hour or two, that can be helpful when people must be in a public setting," said research team leader [Honggang Cui](#), core researcher at the [Institute for NanoBioTechnology](#) and associate professor of chemical and biomolecular engineering at Johns Hopkins Whiting School of Engineering.

The team's results appeared recently in [Matter](#), and the work was done through a collaboration with [Hongpeng Jia](#), assistant professor of surgery, and other researchers at Johns Hopkins School of Medicine. The key to this approach is the way that the filaments carry a receptor called angiotensin converting enzyme-2, or ACE2. These receptors are also found in cells in the nasal lining, the lung surface, and small





intestine, and have many biological roles, such as regulating blood pressure and inflammation. The novel coronavirus enters our bodies primarily through interactions with this receptor. The virus's characteristic spike protein clicks into this receptor, much like a key going into a lock, allowing it to enter the cell and replicate. Once the virus is locked into the cell, it prevents the cell from executing its normal functions, leading to and exacerbating infections.

Researchers have long known that adding extra ACE2 into airways can block virus entry, essentially preventing the virus from binding with ACE2 in the lungs. However, since ACE2 has biological functions, simply delivering more ACE2 to the body may have unforeseeable complications. The research team's **newly engineered filament, called fACE2, serves as a decoy binding site for the virus, with each filament offering several receptors for the COVID-19 spike protein to attach to, and silences ACE2's biological functions to avoid potential side effects.**

"Our plan is that this would be administered as a nasal or oral spray, allowing it to be suspended in the lungs or settle on the surface of airways and lungs. When a person breathes in the COVID-19 virus, the virus will be fooled into binding to the decoy receptor and not the ACE2 receptors on cells," Cui said.

And because the filaments attract SARS-CoV-2's characteristic spike protein, it should work equally well on any current or future variants, the researchers predict.

The team tested its design in mouse models and found their filament not only was present in the rodents' lungs up to 24 hours later, but also elicited no obvious damage to lungs structures or inflammation, suggesting that fACE2 may be retained in the lungs for a period of time, and is safe.

While the team's original approach was to design a preventative therapeutic, they say that it also may have the potential to treat people with active COVID-19 infections by thwarting replication of newly acquired viruses.

"We think that fACE2 could also be used on other respiratory viruses that use the ACE2 receptor to infiltrate cells. The filament design is versatile and can be modified to carry various therapeutic proteins that target different receptors," Jia said.

Other Johns Hopkins researchers on the team include Jamie Spangler, Jason Villano, Andrew Pekosz and Cory Brayton, and graduate students and postdoctoral researchers including Caleb Anderson, Qiong Wang, David Stern, Elissa Leonard, Boran Sun, Kyle Fergie, and Chang-yong Choi.

## Largest Study of Its Kind Shows How Long Immunity Really Lasts After COVID Infection

By Zania Stamataki

Source: <https://www.sciencealert.com/largest-study-of-its-kind-shows-how-long-immunity-really-lasts-after-covid-infection>

Feb 21 – After a [COVID-19](#) infection, whether it's a first, second, or even a third, many of us wonder how long we might be protected against a reinfection, and whether we'll be susceptible to new variants.

Also, if we do catch COVID-19 again, will the immunity we've acquired from this infection reduce the severity of the next one?

A [new study](#) published in *The Lancet* set out to answer these questions, looking at the strength and duration of natural immunity by COVID-19 variant. The authors collected data from 65 studies across 19 countries, making it the largest review on this topic to date. These studies compared COVID-19 risk among people who had been infected previously and those without a prior infection. Studies looking at natural immunity in combination with vaccination (hybrid immunity) were excluded.

The researchers aimed to assess if infection induced similar protection against reinfection with different variants, and if this waned differently over time. The analyses spanned studies from the beginning of the [pandemic](#) until September 2022, and looked primarily at the alpha, beta, delta and omicron BA.1 variants.

### Protection from reinfection

The authors evaluated protection against reinfection, symptomatic disease, and severe disease (defined as hospitalization or death) separately. They found previous infection was highly protective against reinfection with alpha, beta and delta variants, but less so against omicron BA.1. A previous infection provided moderate protection from reinfection with omicron BA.1 (45 percent), compared with stronger protection against pre-omicron variants (82 percent). This was also the case for symptomatic infection. Data from long-term studies showed that protection against reinfection for pre-omicron variants dropped to 78.6 percent over 40 weeks, whereas for omicron BA.1 it dropped more rapidly to 36.1 percent.

When assessing severe disease, however, all variants showed sustained protection above 88 percent for 40 weeks. This isn't to say that protection drops substantially after 40 weeks. Rather, it seems there was limited data available that followed people for long enough for the authors to be able to draw strong



conclusions beyond this time frame. The results also revealed that protection against severe disease after natural infection was comparable to that received from two vaccine doses, for both pre-omicron and omicron BA.1 variants.

### Making sense of the findings

A couple of years is a long time for highly contagious respiratory [viruses](#), and [SARS-CoV-2](#) (the [virus](#) that causes COVID-19) has been no different. It has generated sequential variants of concern, with increased transmissibility and capacity to evade our immune responses compared with the ancestral virus.

The study's observations, which treat protection against pre-omicron variants and omicron BA.1 separately, make sense when we consider how [omicron variants differ](#) from their predecessors. By way of background, neutralizing [antibodies](#) generated after previous viral infection are important to prevent subsequent virus entry to susceptible cells. These Y-shaped molecules recognise intact proteins of the virus exterior and attach to them, preventing the virus from latching on to the cell receptor necessary for infection.

But to persist, viruses like SARS-CoV-2 introduce random mutations in their genome when they replicate, aiming to continuously alter their proteins to escape immune recognition.

Omicron lineages have enough mutations to differentiate substantially from previous variants, and therefore [evade existing antibodies](#). Evasion from neutralizing antibodies explains our failure to control reinfection by omicron variants.

Thankfully, we don't just rely on antibodies for protection. A type of immune cells called [T cells](#) recognise snippets of virus proteins rather than intact proteins. This means it would take many more mutations in the virus genome to completely evade T cell immunity. Unlike antibodies, T cells don't seek out viruses. Instead they recognise infected cells and rapidly eliminate them to reduce virus factories in the body. T cells therefore act where neutralizing antibodies may have failed, after infection. A robust T cell response to coronaviruses is crucial to prevent severe disease, and fortunately, tougher for omicron to evade.

SARS-CoV-2-specific T cells [wane more slowly](#) than antibodies. In fact, people infected with the similar [coronavirus](#) SARS in 2003 [still had T cells](#) which recognise SARS-CoV-2 17 years after infection.

### Infection versus vaccination

While a natural infection may offer equivalent protection to vaccination, this is not to say you should seek to become infected. SARS-CoV-2 remains a dangerous and unpredictable virus which can, in some cases, cause a host of damaging effects that linger long after recovery. The authors suggest a person's previous infection status and timing should be considered alongside their booster vaccinations to predict protection.

However, this may be difficult to implement as infection surveillance has decreased in most countries compared with earlier in the pandemic. In any case, [COVID certificates](#) are used less commonly now. They also suggest their findings could be used to inform the optimal timing for booster vaccination strategies. That is, there's probably merit in waiting some time after an infection before getting a booster. Further high quality, long-term follow up studies will be important to supplement these findings, as the authors acknowledge there are not as many studies on natural infection compared with protection after vaccination.

There were also few studies mapping protection against newer omicron sublineages. As the pandemic continues, there remains much to learn about immune protection against this evolving virus.

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## COVID vs Flu: Which Is Deadlier?

Source: <https://www.medscape.com/viewarticle/988548>

Feb 21 – COVID-19 remains deadlier than [influenza](#) in severe cases requiring hospitalization, a new study shows.

People who were hospitalized with Omicron COVID-19 infections were 54% more likely to die, compared to people who were hospitalized with the flu, Swiss researchers found.

The results of the study continue to debunk an earlier belief from the start of the pandemic that the flu was the more dangerous of the two respiratory viruses. Researchers noted that the deadliness of COVID-19 compared to flu persisted "despite virus evolution and improved management strategies."

The [study](#) was published this week in *JAMA Network Open* and included 5,212 patients in Switzerland hospitalized with COVID-19 or the flu. All the COVID patients were infected with the Omicron variant and hospitalized between Jan. 15, 2022, and March 15, 2022. Flu data included cases from January 2018 to March 15, 2022.



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Overall, 7% of COVID-19 patients died, compared to 4.4% of flu patients. Researchers noted that the death rate for hospitalized COVID patients had declined since their previous study, which was conducted during the first COVID wave in the first half of 2020. At that time, the death rate of hospitalized COVID patients was 12.8%.

Since then, 98% of the Swiss population has been vaccinated. "Vaccination still plays a significant role regarding the main outcome," the authors concluded, since a secondary analysis in this most recent study showed that unvaccinated COVID patients were twice as likely to die compared to flu patients.

"Our results demonstrate that COVID-19 still cannot simply be compared with influenza," they wrote.

While the death rate among COVID patients was significantly higher, there was no difference in the rate that COVID or flu patients were admitted to the intensive care unit, which was around 8%.

A limitation of the study was that all the COVID cases did not have laboratory testing to confirm the Omicron variant. However, study authors noted that Omicron accounted for at least 95% of cases during the time the patients were hospitalized. The authors stated that they were confident that their results were not biased by the potential for other variants being included in the data.

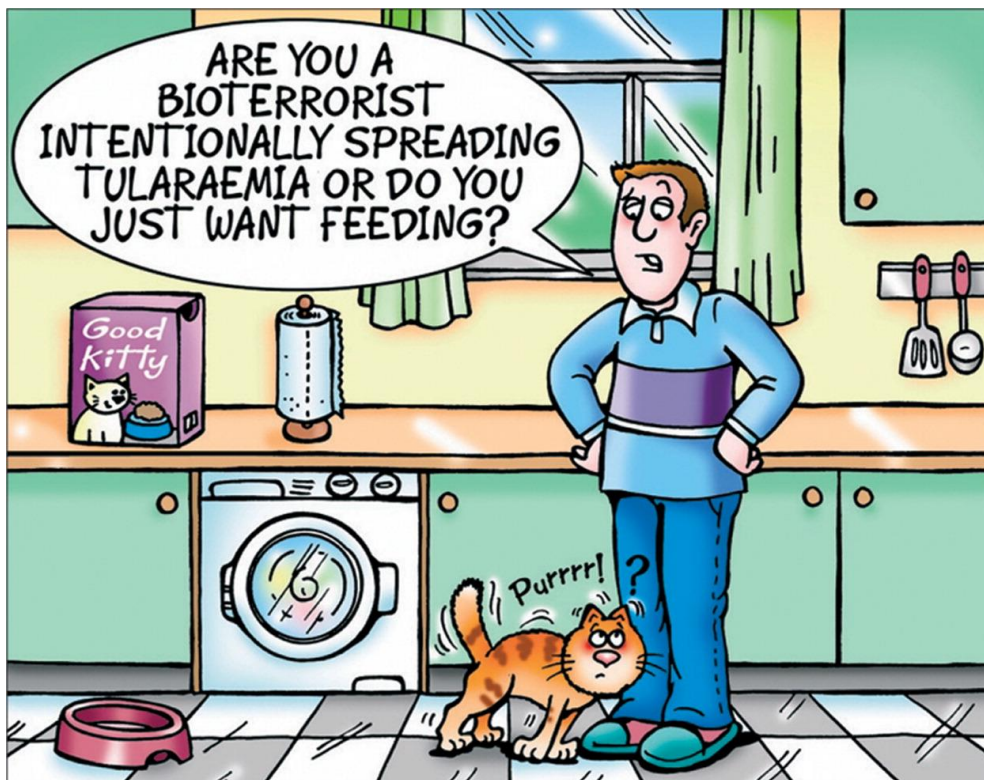
- **Source:** *JAMA Network Open*: "Hospital Outcomes of Community-Acquired SARS-CoV-2 Omicron Variant Infection Compared With Influenza Infection in Switzerland."



### **Pandemic by numbers** (as of February 24, 2023)

	CASES	DEATHS	COUNTRIES & TERRITORIES	MOST AFFECTED COUNTRIES*
<b>COVID-19</b>	(673,522,769) <b>679,159,550</b>	(6,748,144) <b>6,794,399</b>	229	USA, India, France, Germany, Brazil, Japan, S. Korea

\*over 30 million cases – numbers in parenthesis are those of previous month.



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