



Combating the Threat of Bio-Terrorism after the Covid-19 Pandemic

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Introduction

The dangers of biological war have long seemed remote. Although many countries created large arsenals of biological weapons in the Twentieth Century, none ever were used. Biological warfare was tried, most extraordinarily in Japanese medical experiments using Chinese prisoners in the 1940s, but no allegation of battlefield use ever has been substantiated. A basic problem is no one has developed a plausible way to use these weapons on a battlefield, where inflection takes too long to affect immediate military action. Biological weapons could be more effective against civilians.



Center of the storm: here a World Health Organization (WHO) team investigating the origins

of the COVID-19 coronavirus arrive at the Wuhan Institute of Virology on 3 February 2020. Getty Images.

In 1972 the Soviet Union and United States led creation of the Biological Weapons Convention (BWC), giving up the right to create or sue biological weapons. In the 1980s, it later was discovered, the Soviet Union continued large programs to develop biological weapons—stressing military use of Anthrax—which was possible because the 1972 treaty had no verification mechanisms. Instead, it relied only on the good faith of its signatures, and the threat of reciprocity (if you violate it, I can too). Efforts to renegotiate the BWC, to add an intrusive inspection and verification system, have not succeeded.

The issue got a burst of new attention in 2020, with the sudden coronavirus epidemic. Since early 2020, there have been allegations that the mutant virus was created in a Chinese medical research laboratory, possibly the result of an experimental development designed to create antibodies and vaccines that could be used against future pandemics.¹ There are no serious allegations that the disease was released deliberately. Even the lesser allegations are highly political—stressed as part of larger attacks on Chinese authoritarianism—and remain unproven to this day.²

¹ Wade, Nicholas, 2021. 'The origin of COVID: Did people or nature open Pandora's box at Wuhan?' *Bulletin of the Atomic Scientists*, 5 May 2021, <https://thebulletin.org/2021/05/the-origin-of-covid-did-people-or-nature-open-pandoras-box-at-wuhan/>

² Jing-Bao, Nie, 2020. 'In the shadow of biological warfare: conspiracy theories on the origins of

COVID-19 and enhancing global governance of biosafety as a matter of urgency', *National Center for Biotechnology Information*, August 2020, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7445685/>; Joshi, Anshu, 2021. 'Is Covid-19 a biological weapon?' *Sunday Guardian*, 19 June 2021, <https://www.sundayguardianlive.com/news/covid-19->

The extraordinary of the coronavirus epidemic gives a hint of how a serious a biological attack could be. It raised fear that an epidemic could be created by rogue states, institutions or terrorists.³ Demands for international action never has been grater.⁴ But how to deal with the problem remains an extremely controversial problem.

Biological terrorism is a threat that is hard to comprehend, let alone prepare to defend against. During the Twentieth Century, many countries maintained biological warfare (BW) programs. Most of these were eliminated after the 1972 Biological Weapons Convention (the BWC), although a few continued, including the Soviet Union. A few other countries including the Democratic People's Republic of Korea (North Korea) are suspected of maintaining programs today.

The risks of Non-State Armed Groups (NSAGs) acquiring BW are not high but sufficiently alarming to warrant strong international action. A few NSAGs tried to acquire BW in the 1990s and early 2000s, and some tried to utilize them in terror attacks. While no successes have been reported thus far, the prospect has galvanized global attention. Although claims of massive risks are often repeated, the actual danger is not

clearly understood. Many observers refuse to categorize BW as a weapon of mass destruction (WMD), noting that with BW, mass casualties probably require massive quantities.



US President Gerald Ford signs the US instrument of ratification of the BWC on 22 January 1975.
(Photo credit: Ford Presidential Library)

A successful BW attack is technically difficult, but could kill hundreds and endanger thousands. The United States Centers for Disease Control and Prevention (CDC) defines bioterrorism as a deliberate release of an agent (virus or bacteria)

[biological-weapon](#) ; Kortepeter, Mark. 2020. 'A defense expert explores whether the Covid-19 coronavirus makes a good bioweapon', *Forbes*, 21 August 2020, <https://www.forbes.com/sites/coronavirusfrontlines/2020/08/21/a-defense-expert-explores-whether-the-covid-19-coronavirus-makes-a-good-bioweapon/?sh=77c0bf297ece> ; Udell Gabrielle, 2021. 'Is Covid-19 a biological weapon?' *Global Affairs Review*, March 2021, https://wp.nyu.edu/schoolofprofessionalstudies-ga_review/is-covid-19-a-biological-weapon/

³ Economist, 2020. 'Spore wars: The havoc wrought by covid-19 will spark new concern over bio-weapons', *The Economist*, 25 April 2020, <https://www.economist.com/united-states/2020/04/23/the-havoc-wrought-by-covid-19-will-spark-new-concern-over-bio-weapons>

⁴ Finaud, Marc, 2020. 'How does COVID-19 relate to biological weapons?' *GCSP*, 29 May 2020, <https://www.gcsp.ch/global-insights/how-does-covid-19-relate-biological-weapons> ; Hooda, D.S., 2021. 'COVID-19's origins remain cloudy, but pandemic shows it's past time to strengthen Biological Weapons Convention', *First Post*, 14 June 2021, <https://www.firstpost.com/india/covid-19s-origins-remain-cloudy-but-pandemic-shows-its-past-time-to-strengthen-biological-weapons-convention-9715971.html> ; Trezza, Carlo, 2020. 'COVID-19 shows that the Biological Weapons Convention must be strengthened', *European Leadership Network*, 27 April 2020, <https://www.europeanleadershipnetwork.org/commentary/covid-19-shows-that-the-biological-weapons-convention-must-be-strengthened/>



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used to cause illness or death⁵. Agents are found naturally, such as smallpox, but can be manipulated by terrorists in order to strengthen the potency of an agent. A biological attack is especially dangerous because, unlike a bomb or other weapon, biological agents are miniscule; and can be transferred through water, food, a handshake, or any other small form of contact. Due to the imminent and extreme danger any biological attack can cause to large amounts of people, bioterrorism has maintained a constant presence in international peace and defense discussions. The United Nations' First Committee, Disarmament and Security, is no different.

History of Bioterrorism

Research on biological warfare (BW) as we know it today began around World War I, with anthrax and smallpox being the first and most commonly used agents. Research has led to extraordinary advances, but actual use has been very limited. Small scale use, often by individuals, are more common. The only large-scale use came during World War II, when the Japanese Army experimented and used biological agents on Chinese prisoners and cities.

After World War II, the Soviet Union (USSR) and the United States had competing biological weapons programs during the Cold War. While research produced extremely lethal agents, weaponization—especially effective dispersal from artillery or aerial dispensers—and progress on militarily useful effects were difficult. With their armed forces ambivalent or opposed, and strong public dismay at the prospect of BW warfare, in 1972 the Cold War superpowers

completed a treaty to prohibit most possession and use of BW, the *Convention of the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction* (also known as the BWC).

While the BWC transformed the threats of biological warfare, it did not eliminate them. The Soviet Union—suspicious of American secrecy on these issues—continued its research and expanded its weaponization of BW agents. It never used them, but did experience major accidental exposure, such as the 1979 Sverdlovsk incident which caused several dozen deaths. Other countries are widely believed to have devolved BW capabilities, especially North Korea⁶, but these allegations are hard to prove⁷.

Iraq and Libya—suspected by the American intelligence of community of developing BW—were shown to have none, after the 2003 American-led invasion of Iraq and Libya's decision that year to end all its work on weapons of mass destruction (WMD).

Today, most concern about BW focuses on terrorist acquisition and use. This is technically difficult. Easy methods of for non-experts are suspect. Terrorists have tried chemical weapons (CW), which are easier to make and handle, but generally been unsuccessful. Using BW is harder. Releasing BW into water supplies cannot work in regions that practice chlorination, for example.

But the risks of BW attack are sufficiently dangerous they require international attention. The most successful attack probably was the work of an American military BW expert. Shortly after 11 September 2001, letters were sent to news agencies and politicians in the

⁵ CDC, 'Video: The History of Bioterrorism', 2018 <https://emergency.cdc.gov/training/historyofbt/index.asp>

⁶ Nuclear Threat Initiative, 'North Korea', 21 October 2021, <https://www.nti.org/learn/countries/north-korea/>

⁷ Nuclear Threat Initiative, 'Russia', n.d., <https://www.nti.org/learn/countries/russia/biological/>

United States that contained anthrax over a five-week period. Five people died and dozens were infected, as no one recognized the dangerous substance until it was often too late.

To this day, the actual perpetrator, supplier, and other vital questions remain questionable, although it is widely believed the attack was undertaken by Dr. Bruce Ivins, American military anthrax expert at the United States Army Medical Research Institute of Infectious Diseases in Fort Detrick, Maryland. Ivins committed suicide in 2008, shortly before he could be arrested by the FBI. The attack widely associated with Ivins remains the most deadly terrorist use of BW.

COVID-19

In December 2019, the first known case of the coronavirus (COVID-19) was reported in the Wuhan, China. The virus is an airborne contagion which causes severe acute respiratory syndrome (SARS-CoV-2). At least a third of the populace who have contracted COVID-19, do not develop noticeable symptoms. According to the World Health Organization, over 2 million Americans have died due to COVID. Reuters has reported over 1 million deaths in Europe as well.

We highlight these two areas, because they have the greatest access to the COVID vaccine and yet mass misinformation has caused the citizens of these countries to remain unvaccinated.

According to the Kaiser Family Foundation, 3 in 10 American adults remain unvaccinated. Meaning, they have not received at least one of the COVID Vaccine shots. The reasons according to the survey varies, but the fact remain that there are numerous vaccines just waiting for people to utilize. This surplus of

vaccines caused a new kind of tourism: Covid Shot Tourism. In numerous parts of Latin America, travel agencies advertise the need for the vaccine as a reason to travel to the US just to get inoculated. These agencies arrange stay, flight and vaccine appointments. Their reasoning is the distrust within their own country's health care system, so vaccine vacationing seems like the best course of action for them.

The misinformation campaign with COVID has gotten so bad, tech giants have removed campaigns, ads have been removed; videos taken down and so much more. We are still currently in the midst of this global pandemic, however the effect of mass media; human hysteria and the fear of the unknown has caused citizens to remain unvaccinated and thus the virus continues to rage on⁸.



Shi Zhengli, a prominent Chinese virologist, who led research on coronavirus virus samples at the Wuhan laboratory. Chinatopix/ AP.

Role of the United Nations

The UN recognizes adequate health care as a fundamental human right for all. In this spirit, Secretary General Antonio Guterres launched the UN Comprehensive Response to COVID-19

⁸ U.S. Internal Revenue Service, 'Americares', 10 December 2021,

<https://www.americares.org/emergency-program/coronavirus-global-health-emergency/>

in order to save lives, protect societies and recover adequately. The Secretary General constantly sent briefs to various governments on how to better address the pandemic in their respective countries. There were several reports on the handling of COVID for women and children; elderly persons and made COVID-19 responses his top priority since 2019. The World Health Organization has worked closely with experts, governments and like-minded partners to enhance scientific knowledge of the virus, tracking its spread and the severity of the virus.

The United Nations remains on the forefront of the fight against COVID-19 passing resolutions and calling on states to do more to ensure their citizens are inoculated with the vaccines. They are major advocates world vaccinations to end this global health emergency. There is a massive disparity between high-income states who have received the vaccines and states who are unable to purchase the vaccines for their populations.

In 2020 the General Assembly passed a major resolution on biological weapons (A/RES/75/85), urging its 193 Member States to fully implement the 1972 Biological Weapons Convention.⁹ It also asks the member States to do everything possible to keep biological weapons and designated precursors away from non-state actors, but there are limits to what it can ask, since too much regulation will inhibit legitimate medical research. But the General Assembly has been slower to agree on demands that Member States improve the treaty.

Country and Bloc Positions

From the **Asian continent and the Middle East**, only Myanmar and Nepal have not ratified the BW treaty. Neither is suspected of having

offensive biological weapon facilities.

According to the US Congress Office of Technology Assessment, China, North Korea, and Taiwan are all suspected to have undeclared biological weapons in 2008. Even though China has never violated the BWC, there is some evidence that the country may have some dual-use (both defensive and offensive) biological weapons currently.

The Middle East is one of the biggest areas of concern, especially with the great amount of governmental unrest. Presently, with the looming Civil War, Syria is of top concern with biological weapons. As recently as 2008, reports state Syria possesses offensive biological weapons. The concern is so high that Western Powers have publicly discussed and warned the Syrian government against the use of biological weapons. Israel has not signed the BWC, and it is believed that they have developed offensive biological warfare capability, though their actual stockpile is completely unknown. Along with Israel, Iran and Iraq were considered to have biological weapons in their possession in 1995; however, Iraq's program was abandoned before the 2003 invasion.

The Asian and Middle Eastern region reports a million new infections every week on average according to Reuters. The Delta Variant is the most common strain of the Coronavirus within the region and continues to cause high infection rates within the area. Also see the NAM, below.

Africa has a large number of non-signatories and countries that haven't ratified the Biological Weapons Convention. Whether this is because of outright opposition, or lack of urgency, is hard to tell. African nations that have not signed the BWC include Andorra, Angola, Cameroon, Chad, Djibouti, Eritrea and South Sudan. Also see the NAM, below.

⁹ UN, 2020. 'Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction', A/RES/75/85, New York:

United Nations, 7 December 2020, <https://www.un.org/press/en/2020/ga12296.doc.htm>



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South Africa had an extensive program in the 80s and 90s, but has since claimed they have no offensive weapons. Larger African countries like Nigeria and South Africa have their own pharmaceutical industries, which they are promoting. Generally they support international agreements that will increase trust in their own industries and research, and help them promote export sales.

China prefers that action on biological threats be addressed mostly by each UN Member State individually. In its diplomacy, China has worked aggressively to deflect criticism of its efforts to control the coronavirus epidemic, refuting allegation that the disease started in a Chinese lab, or that China had been late or remis in efforts to contain the problem. It's diplomats always start their speeches by refuting foreign criticism, and typically try to show responsibility for international biological problems belongs with Western countries, especially the United States.¹⁰

While Chinese leaders always praise international law, they are especially determined that implementation and enforcement remain the sole responsibility of each member States itself. China is determined to insulate its domestic activities from the influence of others. China will favor UN action that facilitates its efforts to expand influence through its own industry, including merger and acquisition of foreign pharmaceutical firms, expanding Chinese influence in international institutions like the World Health Organization, and helps China keep foreign firms and international institutions out of its domestic affairs.

European Union: the 27 Member States of the EU usually are strong supporters of international law and treaties. They will tend to favor new international agreements design to promote the

welfare of the entire international community. EU Member States generally are tolerant of intrusive inspects and other measures based on international law. The EU usually also is willing to do more than most to pay for implementation of new agreements. But expect the EU Member States refuse to act until they are sure other states will pay a fair share.

Latin American countries generally are supportive of efforts to strengthen the BWC. Most accept the need for a treaty protocol on verification and inspection that will have authority over their biological research and pharmaceutical industries. The largest countries in the region—Argentina, Brazil, Colombia and Mexico—all are supportive. A few other Latin American governments are suspicious of treaty inspection systems that might open their domestic affairs to foreign eyes, notably Cuba, Nicaragua and Venezuela. They have criticized efforts to strengthen the BWC as a neo-colonial plot to weaken their governments and undermine national unity. They will prefer to maintain or strengthen the status quo. Also see the NAM, below.

Non-Aligned Movement (NAM): For the 137 member States of the UN's largest voting bloc, including virtually all countries of Africa, Asia, Latin America and the Middle East, the most important problem of responding to coronavirus epidemic or biological weapons treaty strengthening is money. They cannot afford enough vaccines or treaty implementation. They might be willing to support in more restrictive schemes, but will require massive financial assistance to do so.

The United States tends to waiver on issues of international cooperation to deal with biological weapons. Under President Donald Trump it showed no interest in international action, preferring a go-it-alone strategy and

¹⁰ 'Fighting COVID-19', *Embassy of the People's Republic of China in the United States of America*, <http://www.china-embassy.org/eng/zt/COVID19/>



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strengthening America's border, keeping people from suspect countries out of the United States, criticizing international institutions such as the World Health Organization and blaming other countries—especially China—for all biological problems. The US turned to the UN primarily to focus blame on other Member States. In the words of President Trump UN Ambassador Nikki Haley, speaking in a different context, 'At the UN... the US will be taking names.'¹¹

Under President Joe Biden, the United States continues its criticism of China and maintains steep barriers to entry of foreigners onto its territory, although in a less publicly assertive way. But it also is highly supportive of international action, preferring to work with the international community and international institutions such as the WHO. President Joe Biden and his chief ambassador to the UN, Linda Thomas Green, have emphasized the need for more international cooperation to defeat the coronavirus epidemic and strengthen international barriers against militarization of biological research.¹²

Some possible proposals for action

Create a verification system for the 1972 *Biological Weapons Convention* (BWC), including surprise on-site inspection of laboratories. The 1972 treaty lacks a verification system, a system of inspections comparable to the intrusive scheme that is an essential part of the 1993 Chemical Weapons Convention (the CWC). States party to the treaty would be required to provide information on all

laboratories for relevant biological research. Periodic routine inspection and surprise challenge inspections would be required to ensure these facilities are not used for forbidden—military—research and that they maintain high safety standards

Because biological research facilities are numerous, and many dual-use facilities require inspection too, the inspection system will have to be large and well-funded. It will require a major new bureaucracy to organize its work and send thousands of inspectors around the world. It also will be criteria for determining what constitutes a violation or an alarm, and criteria for how treaty signatories should react.

A major problem for verification is how to permit legitimate medical research, possibly including defensive military research on antidotes. Which often requires access to actual BW agent. Verification seems to be the key.

Forbid research involving creation of potentially dangerous new forms of infectious bacteria and viruses. Although this will create difficulties for anti-microbe research, it also reduces the risk that new microbes, created in laboratories for research purposes like creating new vaccines, can unwittingly become the source of dangerous microbes. Verifying compliance is a problem that would have to be addressed. Alternatively the domestic practices of states party could be accepted, if only because the alternatives are politically impossible to negotiate.

Respect state sovereignty and pass a resolution confirming that states—not international

¹¹ Jennifer Hansler, 'Nikki Haley: The US is 'taking names' on Jerusalem resolution', *CNN*, 20 December 2017,

<https://www.cnn.com/2017/12/20/politics/nikki-haley-taking-names-on-jerusalem/index.html>

¹² 'Remarks by Ambassador Linda Thomas-Greenfield at the Virtual Global COVID-19 Summit

Hosted by President Joseph R. Biden, Jr., ' Washington, D.C., 22 September 2021, <https://usun.usmission.gov/remarks-by-ambassador-linda-thomas-greenfield-at-the-virtual-global-covid-19-summit-hosted-by-president-joseph-r-biden-jr/>



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organizations—have ultimate authority over all activity within their own borders. Confirm that states alone can regulate, supervise and monitor activity within their borders.

Rather than raise international restrictions on states, states could agree to give themselves

greater control over their own affairs. Nationalists will especially like this option. This will be especially popular with nationalists and states trying to protect and promote their commercial pharmaceutical industries, and those seeking to hide military biological programs.



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