

<u>General Assembly First Committee Topic Background Guide</u> Topic 1: Strengthening and Enforcing the Convention on Biological Weapons¹

14 September 2012

Biological weapons deliver living organisms, such as bacteria and viruses, to inflict disease and incapacitate or kill target populations.² Most biological agents work through direct exposure to the agent itself. For example, spores from the anthrax bacteria found in cows and other herd animals sicken only those who ingest, inhale, or touch the spores. Biological toxins such as botulism and ricin also work in this way. Other biological agents such as smallpox and the influenza virus are contagious and can spread from one person to another. Because they are contagious, efforts to weaponize (deliberately spread) these agents is worrisome. Their potential effects are illustrated by the 1918-1919 Spanish flu pandemic, which killed 20-50 million people worldwide.³

Today, there are drugs to build immunity to many biological agents and counter their effects once a person has been infected. But because viruses can mutate -- and be deliberately altered through biotechnology – it is conceivable that biological attacks could kill or incapacitate large numbers of people. These attacks could be conducted either by states or by non-state actors such as terrorists.

The most recent use of biological agents as weapons occurred in the US in 2001, when a tablespoon of anthrax spores was sent through the US mail to journalists and members of the US Congress with notes reading, "Death to America! Death to Israel!" Because the first anthrax letters were mailed within a week of the al Qaeda attacks in New York and Washington, D.C., it was initially assumed that the attack was the work of al Qaeda. Seven years later, the US Federal Bureau of Investigation concluded that the attack had been carried out by an emotionally unstable US Army scientist who had developed an anthrax vaccine.⁴

The anthrax attack illustrated three important facts about the use of biological and toxin agents as weapons. First, even when the agents are not contagious, many people can be affected. For example,

Two women far afield from the centers of power that were the attacker's targets were the fourth and fifth to die, one in the Bronx and one in Connecticut. Authorities determined that a letter delivered to a neighbor of the Connecticut victim had been processed within 15 seconds of the contaminated letters sent to the two senators. The discovery that powder sticking to the envelopes could cross-contaminate other materials so widely led to the shutting of mail processing centers, sometimes for months.⁵

¹ This background guide was written by Karen Ruth Adams, MMUN faculty advisor, and Kedra Hildebrand, research assistant. Copyright 2012 by Karen Ruth Adams.

² Federation of American Scientists, "Introduction to Biological Weapons," <u>http://www.fas.org/programs/ssp/bio/resource/introtobw.html</u>

³ Federation of American Scientists, "Biosecurity: Fact Sheets List," <u>http://www.fas.org/programs/bio/factsheets/index.html</u>

⁴ Scott Shane, "Portrait Emerges of Anthrax Suspect's Troubled Life," *New York Times*, January 3, 2009, http://www.nytimes.com/2009/01/04/us/04anthrax.html

⁵ "Times Topics: Anthrax," *New York Times*, available at <u>http://topics.nytimes.com/top/reference/timestopics/subjects/a/anthrax/index.html?scp=1-spot&sq</u>

Second, the existence of effective vaccine and antibiotics is insufficient to protect target populations. Vulnerable populations must be vaccinated prior to attacks. Moreover, once people have been infected, antibiotics must be properly administered. In 2001, because only military personnel were given the vaccine prior to the attacks and because antibiotics were not always properly administered, the anthrax attack resulted in "a 45% fatality rate (5 deaths of 11 infected)."⁶

Third, biological attacks result in individual and national efforts to stockpile vaccines and antibiotics. Had the anthrax attack been more widespread, this would have made it difficult to get the remedies to those who needed them. Thus states need to prepare for attacks by producing and storing vaccines, antibiotics, and antivirals. But during an attack, they need to release their stockpiles only when warranted. Because bacteria become resistant to antibiotics, the use of an antibiotic such as Cipro, "a drug of last resort against powerful infections," during an anthrax scare by people not exposed to anthrax spores could reduce the ability of the drug to respond to salmonella and other bacterial outbreaks later on.⁷

To date, the most comprehensive attempt to limit the development and use of biological weapons is the 1972 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction. This treaty, also known as the Biological Weapons Convention (BWC) or the Biological and Toxin Weapons Convention (BTWC), entered into force in 1975 for the states that had ratified it. State parties to the BTWC promise "never in any circumstance to develop, produce, stockpile or otherwise acquire or retain:"

--Microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes;

--Weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.⁸

At present, the convention has been ratified by 165 of the UN's 193 member states.⁹ But the large number of participants should not be interpreted as representing high levels of compliance. In 2011, just 69 (42%) of the 165 state parties submitted their mandatory annual declarations.¹⁰ Moreover, states that are party to the treaty have never been able to agree to hold mandatory inspections of biological facilities. In addition, a number of states that are thought to have offensive biological weapons programs (including Israel and Syria) have never ratified the treaty. What can the GA-1 to do improve compliance with the BWTC and expand its membership?

⁶ Federation of American Scientists, "Anthrax Fact Sheet," <u>http://www.fas.org/programs/ssp/bio/factsheets/anthraxfactsheet.html</u>, accessed 8 November 2009.

⁷ "Resistance Builds to Cipro, Study Says," *New York Times*, February 7, 2002, http://www.nytimes.com/2002/02/07/world/resistance-builds-to-cipro-study-says.html

⁸ The text of the treaty and information about its history and status is available at UN Office of Disarmament Affairs (UNODA), "Biological Weapons," <u>http://www.un.org/disarmament/WMD/Bio/index.shtml</u>

⁹ UN Office at Geneva (UNODG), "Membership of the Biological Weapons Convention," <u>http://www.unog.ch/80256EE600585943/(httpPages)/7BE6CBBEA0477B52C12571860035FD5C?OpenDocument</u>

¹⁰ UNODG, "The Biological Weapons Convention: Confidence-Building Measures: CBM returns," <u>http://www.unog.ch/80256EE600585943/(httpPages)/4FA4DA37A55C7966C12575780055D9E8?OpenDocument</u>, accessed 22 August 2012. If a country appears on this list, it submitted the annual declaration. If the country's name is in hypertext, the country agreed to make its declaration public.

History and Current Events

Biological weapons have been used for centuries. According to the Greek historian, Thucydides, when a devastating epidemic broke out during the Peloponnesian War (431 B.C. to 404 B.C.) and killed thousands of Athenians, it was rumored that Sparta had poisoned a well. In the 14th Century, the Tartar army catapulted bodies of plague victims over city walls to start an epidemic. During the French and Indian Wars (1754-1767), British forces distributed blankets infected with smallpox to Native Americans.¹¹

During World War I, Germany infected animals and animal feed. Between the wars, Japan established an experimental program known as Unit 731, which deliberately infected prisoners with cholera and plague and is estimated to have killed 10,000 people. Nazi Germany conducted similar experiments. During World War II, Japan attacked 11 Chinese cities with biological agents. The attacks were carried out on water and food supplies and from aircraft. The 1941 attack on Changteh resulted in 10,000 cholera cases.¹²

The US started an offensive germ warfare program in 1942, after learning about Unit 731. During World War II, the US produced 5,000 anthrax bombs¹³ During the Cold War, the US and USSR had large biological weapons programs. The biological agents they weaponized included anthrax, smallpox, plague, and tularaemia.¹⁴ These programs benefited from knowledge gained from Japanese scientists involved in Unit 731, who were granted immunity in exchange for divulging their secrets. Through the 1960s, the US secretly exposed US civilians to biological agents to assess their effects. In 1979, 64 people were killed in the city of Sverdlovsk (now Ekaterinburg) Russia when anthrax was unintentionally released from a Soviet military installation.¹⁵

Biological weapons are known as "unconventional weapons" because, instead of targeting other weapons, they target entire populations or geographic areas. Biological weapons may also be "weapons of mass destruction" (WMD). In other words, their destructive effects may occur so quickly and so extensively that it may not be possible to protect people by warning them not to drink infected water, providing antibiotic or antiviral drugs, or evacuating people to uncontaminated areas.¹⁶

It is often said that nuclear, biological, chemical, and radiological weapons are WMD. In fact, however, only nuclear and biological weapons are likely to have mass effects. We know that nuclear weapons are WMD. According to physicists, a one kiloton (kt) nuclear device exploded at ground-level in Manhattan would kill approximately 210,000 people. About 30,000 would die immediately from the blast or burns, and the remainder would die from radiation in a week or so. Contemporary US and Russian strategic nuclear weapons are approximately 150 kt. The uranium bomb exploded by the US over the Japanese city of Hiroshima in 1945 was 13 kt. According to the US Strategic Bombing Survey, that bomb killed 30 percent of the city's population of 245,000 and seriously injured another 30 percent.¹⁷

¹¹ Thomas J. Johnson, "A History of Biological Warfare from 300 B.C.E. to the Present," *American Association of Respiratory Care*, (2000), http://www.aarc.org/resources/biological/history.asp

¹² Johnson, "A History of Biological Warfare from 300 B.C.E. to the Present."

¹³ Johnson, "A History of Biological Warfare from 300 B.C.E. to the Present."

¹⁴ WMD Commission, *Weapons of Terror: Freeing the World of Nuclear, Biological, and Chemical Arms* (Stockholm: EO Grafiska, 2006), pp. 112-114, <u>http://www.wmdcommission.org/</u>

¹⁵ Johnson, "A History of Biological Warfare from 300 B.C.E. to the Present."

¹⁶ Karen Ruth Adams, "Weapons of Mass Destruction," *International Encyclopedia of Political Science* (New York: CQ Press, 2010).

¹⁷ Adams, "Weapons of Mass Destruction."

Biological weapons are less reliable than nuclear weapons. Because they use living organisms such as bacteria and viruses, which must be kept alive to kill or incapacitate people, it is hard to control their potency and distribution. Moreover, because many biological agents work only upon direct contact and because many biological agents can be countered by vaccines and drugs, it is possible to protect people from exposure. But if contagious biological agents for which were are no vaccines, such as glanders (*Burkholderia mallei*), could be kept alive in great numbers, dispersed widely, and allowed to incubate in unsuspecting populations, they could have mass effects. Unlike nuclear weapons, they would not have immediate effects. Yet if a contagious disease gained momentum, it could concentrate destruction in ways that would be difficult to contain and mitigate.¹⁸

As a result of the unconventional nature of biological weapons and their potentially mass effects, there have been several attempts to limit their use. The first occurred in Geneva in 1925 and resulted in a treaty called the "Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases and the Bacteriological Methods of Warfare." This treaty outlawed only the use of biological weapons – not their development, production or stockpiling. Although many countries ratified this protocol, they did so with the stipulation that the treaty "would cease to be binding on them if their enemies, or allies of their enemies, failed to respect the prohibitions of the protocol."¹⁹

The second attempt occurred in 1972 and resulted in the Biological and Toxin Weapons Convention (BTWC), which 165 states have ratified. Each state party to the BTWC promises "to destroy, or to divert to peaceful purposes … all agents, toxins, weapons, equipment and means of delivery" (Article II). In addition, states agree not to transfer agents or delivery vehicles "to any recipient whatsoever, directly or indirectly, and not in any way to assist, encourage, or induce any State, group of States or international organizations to manufacture or otherwise acquire any of the agents" (Article III). Finally, states pledge to take "any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition or retention of the agents, toxins, weapons, equipment and means of delivery … within the territory of such State, under its jurisdiction or under its control anywhere" (Article IV).²⁰

State parties to the BTWC further agree that if they find other states to be violating the Convention, they can notify the UN Security Council, which is authorized by the UN Charter to investigate situations that may endanger international peace and security (Article VI). In addition, they agree to share information about peaceful uses of biological agents, such as advances in disease prevention (Article X).

Since 1980, the BTWC has held review conferences every five years to increase compliance with these stipulations. The primary challenges have been increasing transparency and verifying compliance. In recent years, attention has also turned to preventing the development and use of biological weapons by terrorist organizations.

Increasing Transparency

The first challenge facing the BTWC is increasing "transparency," that is, convincing states to inform other states about their efforts to comply with Articles I-IV of the Convention. The logic is that, if states knew that other states had no biological weapons, they would have confidence that they would not be attacked and would therefore not feel the need to develop biological weapons programs. But when it was adopted in 1972, the BTWC did not demand national disclosures or inspections. Instead, state parties simply promised never to develop or stockpile biological weapons, to destroy any they once had, never to transfer them to others, and never to allow actors within their territory to develop and use them.

Thus a recurring theme at BTWC review conferences has been developing measures to enhance transparency. In 1980, this consisted simply of urging states to make voluntary declarations. In 1986, states pledged to exchange data on outbreaks of infectious disease and laboratories that met high safety standards. In

¹⁸ Karen Ruth Adams, "Weapons of Mass Destruction."

¹⁹ "Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous, or Other Gases, and of Bacteriological Methods of Warfare" (Geneva Protocol), 1925, available at <u>http://www.nti.org/e_research/official_docs/inventory/pdfs/genev.pdf</u>

²⁰ BTWC, Articles II-IV.

1991, states agreed to mandatory annual disclosures (called confidence-building measures or CBMs) "to prevent or reduce the occurrence of ambiguities, doubts and suspicions, and in order to improve international cooperation in the field of peaceful bacteriological (biological) activities." In addition to the information promised in 1986, states agreed to report annually whether they had anything new to declare under the Convention, whether they were engaged in biological research for defensive purposes (such as developing vaccines), what national legislation they have implemented to prevent the development and use of biological weapons, what their past activities in offensive and defensive biological weapons have been, and what vaccine production facilities they have.²¹

According to official website for the BTWC, from 1987 to 2006, "over half of the States Parties ... made one or more CBM declarations."²² This is not encouraging. Under the 1991 agreement, each state party must report every year. This is important both to track the development of biological weapons by states and to ensure that biological agents have not already been used.

If states do not report their biological activities, it is very hard to determine whether they are involved in research, development, production, trade, or use of biological weapons. In 2008, the Center for Nonproliferation Studies, a non-governmental think tank affiliated with the Monterey Institute of International Studies and Middlebury College, compiled information on the 29 countries that had known, probable, possible, or former chemical and biological programs. These included all five permanent members of the UN Security Council (China, France, Russia, UK, and US). There were no "known" biological programs in 2008. States with "probable" offensive biological weapons programs (states that were trying to develop or maintain biological agents to attack others) were China, Egypt, and Iran. States with research programs and "possible" production of biological agents (to develop and maintain vaccines and drugs for use in the event of an attack).²³ With the exception of Israel and Syria, all of the states with "probable" and "possible" offensive bioweapons programs have ratified the BWTC and thus promised never to weaponize biological agents.

The CBM known as "Measure B" requires the "exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins that seem to deviate from the normal pattern."²⁴ For example, in 2005, Malaysia disclosed that it had 391 cases of Foot and Mouth Disease.²⁵ This helps states monitor outbreaks of infectious diseases, which could be caused by biological attacks.

Despite committing to annual reporting, less than half of the states that have ratified the BWTC submit their annual declaration. Moreover, states that do submit declarations do not always provide full and accurate information. For example, in 1992, former Russian president Boris Yeltsin acknowledged that "the Soviet Union grossly violated the terms of the BWC by actively weaponizing several human pathogens as part of a clandestine biological weapons program." Similarly, Iraq "hid a secret biological weapons program under the guise of legitimate pharmaceutical research. This was not discovered by the rest of the world until inspectors entered Iraq

²¹ UN Office at Geneva (UNOG), "Biological Weapons Convention: Confidence-Building Measures," http://www.unog.ch/80256EE600585943/(httpPages)/CEC2E2D361ADFEE7C12572BC0032F058?OpenDocument

²² "Existing BTWC Confidence Building Measures," BTWC website, available at <u>http://www.opbw.org/</u>, accessed 8 November 2009.

²³ James Martin Center for Nonproliferation Studies, "Chemical and Biological Weapons: Possession and Programs Past and Present," March 2008, <u>http://cns.miis.edu/cbw/possess.htm</u>

²⁴ "Final Declaration of the Third Review Conference," BWC/CONF.III/23, 1991, http://www.un.org/disarmament/WMD/Bio/pdf/3rd Review Conference Declaration.pdf

²⁵ Malaysia, "Declaration form on Nothing to Declare or Nothing New to Declare for use in the information exchange," Strengthening the BTWC: Annual CBM Declarations, BTWC website, 2005, p. 6, <u>http://www.opbw.org/</u>

after the Persian Gulf War in 1991.²⁶ In 2002, two academic researchers claimed that the US was secretly engaged in research on "biological cluster bombs, anthrax and non-lethal weapons for use against hostile crowds.²⁷

Verifying Compliance

As mentioned, the BTWC lays out a process for informing the Security Council if state parties have failed to fulfill their agreements under the Convention. Because so few states submit the mandatory annual declaration and because states that do submit declarations may not reveal the true extent of their programs, BTWC review conferences have addressed ways to improve verification. To date, the most concerted effort in this regard was to assemble a group of verification experts (known as VEREX or the Ad Hoc Group of Governmental Experts) to consider scientific and technical ways to verify compliance. VEREX met four times from March 1992 to September 1993 and concluded that a combination of on-site and off-site measures was necessary. These included satellite surveillance, surveillance of national legislation, and onsite inspections.²⁸

In 1994, state parties to the BTWC established the Ad Hoc Group of the States Parties to build on VEREX's work and negotiate mandatory verification procedures for all state parties. The group was asked to conclude its negotiations and present a draft protocol before the Fifth Review Conference in 2001. But disagreement among the state parties made it unable to do so, and no further progress has been made on this front.²⁹

US opposition to mandatory inspections was the primary reason these negotiations failed. According to the Bush administration, inspections would grant "too much access to American installations and companies." Instead, the US pushed for other proposals, such as making it a crime for individuals to buy, build, or acquire biological weapons. When other states refused to abandon their call for mandatory inspections, the US withdrew from talks, and the negotiations collapsed.³⁰

In the absence of mandatory inspections akin to those of nuclear sites under the Nuclear Non-Proliferation Treaty,³¹ the only way to compel states to allow biological weapons inspectors onto their territory is for the UN Security Council to order them to do so, as it did in Iraq from 1991 to 2003. If that fails, the Security Council can authorize states to "take all necessary measures" to insure compliance. If the Security Council does not issue such a resolution, individual states can take matters into their own hands, as the US and UK did in the 2003 invasion of Iraq. But under the UN Charter, such action is illegal. According to Articles 2 and 51, unless authorized by the Security Council, states can use force only in self-defense.³²

²⁸ Ad Hoc Group of Governmental Experts, "Summary Report," BWC/CONF.III/VEREX/8, BTWC website, 24 September 1993, <u>http://www.opbw.org/verex/docs/final_dec/verex%20final%20declaration.pdf</u>

²⁹ UNODA, "Biological Weapons Convention," <u>http://www.un.org/disarmament/WMD/Bio/Bio/SecondPageBWC.shtml</u>

²⁶ Phillip M. McCauley and Rodger A. Payne, "The Illogic of the Biological Weapons Taboo," *Strategic Studies Quarterly*, Spring 2010, p. 16, <u>http://www.au.af.mil/au/ssq/2010/spring/mccauleypayne.pdf</u>

²⁷ Julian Borger, "US weapons secrets exposed," *The Guardian*, 28 October 2002, <u>http://www.guardian.co.uk/world/2002/oct/29/usa.julianborger</u>. Mark Wheelis and Malcolm Dando, "Back to Bioweapons," *Bulletin of the Atomic Scientists* 59, January 2003, pp. 40-46.

³⁰ Judith Miller, "A Nation Challenged: Bioterror Treaty; U.S. Seeks Changes in Germ War Pact," *New York Times*, November 1, 2001, <u>http://www.nytimes.com/2001/11/01/world/a-nation-challenged-bioterror-treaty-us-seeks-changes-in-germ-war-pact.html?sec=health&spon=&&scp=7&sq= See also McCauley and Payne, "The Illogic of the Biological Weapons Taboo," p. 16.</u>

³¹ "Nuclear Non-Proliferation Treaty," 1968, <u>http://www.un.org/disarmament/WMD/Nuclear/NPTtext.shtml</u>

³² Charter of the United Nations, 1945, <u>http://www.un.org/en/documents/charter/index.shtml</u> On the legality of the 2003 invasion of Iraq, see Michael J. Glennon, "Why the Security Council Failed," *Foreign Affairs*, May/June 2003.

From 1975 to 1990, Iraq developed and tested a wide variety of biological agents and weapons. According to Iraq, it destroyed the agents and ended the program in 1991. But Iraq was unwilling to provide UN inspectors with unlimited access to Iraqi sites to verify that this was true.³³ Instead, Iraq eliminated the program but tried to create the sense that it was continuing to deter Iran and other hostile states from attacking Iraq.³⁴ Concern that Iraq had not ended its biological weapons program was part of the reason the US and UK invaded Iraq in 2003. No evidence of biological weapons was found.³⁵

These case studies provide evidence of the role of powerful states in making and enforcing the rules of the BTWC. When the Security Council or individual great powers such as the US and UK wish to enforce the Convention against weaker states, they can do so. But it is very hard to make strong states comply.

In 1992, before the creation of VEREX, this problem was illustrated by Russian efforts to increase confidence in its compliance by admitting to previous Soviet efforts to weaponize biological agents, outlawing the program, and agreeing to mutual inspections by the US and UK. But the three-way inspections "lost momentum" before the four main Russian facilities were examined.³⁶

During and after the VEREX negotiations in 2001 and 2002, the US accused Iraq, North Korea, and Cuba of violating the BTWC and raised concerns about Iran, Libya, and Syria. At the same time, the US faced its own accusations about whether some of the activities it was calling bio-defense were permitted under the BTWC.³⁷ According to some observers, this is part of a pattern in which "the United States and other states have embraced a double standard" in which "[a]lleged WMD activity is described as illegal, illegitimate, and inhumane, but only when pursued by certain kinds of regimes."³⁸

Use by Terrorist Groups

From the beginning, the BTWC was concerned with the potential for biological terrorism. That is why each state party promised not to transfer biological agents to any group or to allow any group within its territory to develop biological weapons. This concern was heightened by the 1995 use of chemical weapons by the Aum Shinrikyo religious sect in Japan and by the 2001 anthrax attack in the US.

Chemical weapons disperse substances such as mustard gas (a blister agent), phosgene (a choking agent), and sarin (a nerve agent) to kill or incapacitate soldiers and civilians. Unlike bacteria and viruses, chemicals are not alive and cannot be spread through contagion. In addition, it is hard to disperse chemical weapons in a way that concentrates exposure but escapes detection. The Aum attack on the Tokyo subway confirmed these challenges of chemical weapons. As Jonathan B. Tucker explains, the attack "caused mass disruption but limited fatalities: twelve people died, fewer than would have been killed by an explosive device."³⁹

³³ Federation of American Scientists, "Iraqi Biological Weapons," http://www.fas.org/nuke/guide/iraq/bw/index.html; accessed 8 November 2009.

³⁴ Scott Shane, "Documents Show Iraqi Dictator's Fears," *New York Times*, July 2, 2009, http://www.nytimes.com/2009/07/03/world/middleeast/03saddam.html

³⁵ "Bush confident of finding banned Iraqi weapons," CNN.com, June 18, 2003, http://www.cnn.com/2003/ALLPOLITICS/06/17/bush.iraq/

³⁶ Henry L. Stimson Center, "House of Cards: The Pivotal Importance of a Technology Sound BWC Monitoring Protocol," Report 37, May 2001, pp. 16-17 <u>http://www.stimson.org/images/uploads/research-pdfs/Houseofcards_complete.pdf</u>

³⁷ Daryl Kimball and Oliver Meier, "The Biological Weapons Convention (BWC) at a Glance," Arms Control Association, July 2008, <u>http://www.armscontrol.org/factsheets/bwc</u>

³⁸ McCauley and Payne, "The Illogic of the Biological Weapons Taboo," pp. 26-27.

³⁹ Jonathan B. Tucker, *Toxic Terror* (Cambridge, MA: Belfer Center for Science & International Affairs, 2000), p. 6.

Nevertheless, the audacity of the attack -- and the fact that Aum had also carried out a several smaller biological attacks – increased concern about biological terrorism.⁴⁰ In 1998, experts agreed that a biological attack could "injure or kill thousands if not millions, but disagree[d] on the exact dimensions of the threat."⁴¹

The 2001 anthrax attack in the US (discussed above) added to these concerns. But concerns about bioterrorism have had mixed effects on the strength of the BTWC. On the one hand, the attacks increased US opposition to mandatory inspections due to fears that terrorists could gain access to biological information and agents. On the other hand, the attacks increased international interest in exchanging information on diseases to defend against a possible attack. Since 2001, more states have completed their annual disclosure forms. In 2000, just 40 states submitted declarations; in 2012, 69 states did so.⁴²

In addition, some states have exceeded the requirements of the BTWC by implementing national export control regulations and joining international export control groups to try to limit terrorist access to biological agents and delivery vehicles.⁴³

Previous Committee Work on This Topic

In 2004, the Security Council passed Resolution 1540, which requires all states to "adopt and enforce appropriate effective laws which prohibit any non-state actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons or their means of delivery." Because Security Council resolutions are binding, this means all UN member states must comply with Article IV of the BTWC, whether or not they have ratified the treaty.⁴⁴ The Security Council has not taken similar action with regard to the pledges made in other parts of the BTWC.

In 2006, an international panel of governmental experts called the WMD Commission released a report making the following recommendations to states:

- 1. Achieve universal ratification of the BTWC by the Seventh Review Conference in 2011.
- 2. Help states adopt national legislation to implement the BTWC.
- 3. Make the required annual declarations, and make them public.
- 4. Amend the BTWC to enable the UN Secretary-General to appoint World Health Organization experts to monitor disease outbreaks and allegations of offensive biological programs and report possible violations to the Security Council. This could be modeled on the UN Monitoring, Verification and Inspection Commission (UNMOVIC) that operated in Iraq from 1999 to 2007.
- 5. Amend the BTWC to establish a secretariat to handle organizational and administrative matters related to the treaty, such as Review Conferences and expert meetings.
- 6. Agree to international biosecurity standards for monitoring public health and responding to disease outbreaks. These standards should strengthen domestic cooperation between national health and security authorities and international cooperation among all states. The International Health Regulations of the World Health Organization provide a place to start.

⁴⁰ William Broad, "Sowing Death: A Special Report; How Japan Germ Terror Alerted the World," *New York Times*, May 26, 1998, 1, <u>http://www.nytimes.com/1998/05/26/world/sowing-death-a-special-report-how-japan-germ-terror-alerted-world.html?sec=&spon=&&scp=3&sq</u>

⁴¹ Judith Miller and William Broad, "New York Girding for Grim Fear: Deadly Germ Attack by Terrorists," *New York Times*, June 19, 1998, <u>http://www.nytimes.com/1998/06/19/nyregion/new-york-girding-for-grim-fear-deadly-germ-attack-by-terrorists.html?sec=health&spon=&&scp=4&sq</u>

⁴² UNOG, "Biological Weapons: Confidence-Building Measures: CBM Returns,"

⁴³ UNODA, "Export Controls and Other Control Measures," http://www.un.org/disarmament/WMD/Export Controls/index.shtml

⁴⁴ WMD Commission, Weapons of Terror, p. 115.

7. Meet more often than every six years to assess the implications of scientific and technological developments, and reaffirm that "all developments in the life sciences fall within the scope of the Convention and that all developments in the life sciences for hostile purposes are prohibited by the Convention."⁴⁵

These recommendations were issued before the 2006 Review Conference. At the conference, some progress was made on all but the fourth and sixth recommendations. For example, in response to recommendations 2, 3, and 5, an Implementation Support Unit (ISU) was established at the UN Office in Geneva (UNOG) to help states with annual declarations and national legislation. But in contradiction to the second recommendation, states agreed that declarations would be confidential unless individual states explicitly agreed they could be published.⁴⁶ In response to the first recommendation, the ISU was also charged with "obtaining universality" – that is, with increasing the number of state parties.⁴⁷ In addition, in response to the seventh recommendation, more frequent workshops, expert meetings, and meetings of state parties have been held to discuss ways to attain universality, improve verification, and coordinate biosecurity rules. The most recent review conference, held in December 2011, accomplished little beyond updating the CBM forms and improving data sharing.⁴⁸

In December 2011, the General Assembly passed Resolution A/RES/66/65 welcoming two new states to the BWTC and urging states to cooperate at the then-upcoming review conference.⁴⁹

Conclusion

What can and should the GA-1 do to improve compliance with the BWTC and expand its membership? In researching and writing your country's position on this issue, consider the following questions:

- -- Has your state ever had a biological weapons program? What is its current status?
- -- Has your state ratified the BTWC? If so, when? If not, why not?
- -- If your state is a party to the BTWC, does it submit annual declarations?
- -- What is your state's position on mandatory inspections of its biological facilities?
- -- Would your state support amending the BTWC to enhance the ability of the UN Secretary General to monitor disease outbreaks and biological weapons programs? Why or why not?
- -- Is it acceptable for individual states to take matters into their own hands when the Security Council fails to act on tips about biological weapons programs?
- -- Which is more important: increasing universality, increasing compliance, or preparing to respond to attacks? Why? What are the trade-offs?
- -- What could the GA-1 do to encourage states that have not ratified the Convention to do so?
- -- How could the GA-1 encourage state parties to the BTWC to improve transparency and compliance?
- -- How could the GA-1 help to prevent the use of biological weapons (both in general and in particular in the conflict in Syria) and to ensure that states have the ability to respond to biological attacks?

⁴⁷ UNOG, "BWC Implementation Support Unit," http://www.unog.ch/80256EE600585943/(httpPages)/16C37624830EDAE5C12572BC0044DFC1?OpenDocument



http://www.unog.ch/unog/website/news_media.nsf/(httpNewsByYear_en)/925929F5F28485EAC125796E0064AD8 2?OpenDocument

⁴⁹ UN General Assembly, "Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction," Resolution A/RES/66/65, 13 December 2011, <u>http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N11/462/72/PDF/N1146272.pdf?OpenElement</u>

⁴⁵ WMD Commission, Weapons of Terror, pp. 111-123.

⁴⁶ UNODA, "Biological Weapons Convention."

Recommended Reading

Federation of American Scientists. "Biological and Chemical Weapons Main Page." Available at <u>http://www.fas.org/programs/ssp/bio/</u>

The Federation of American Scientists (FAS) is a non-governmental organization that monitors and provides information about biological weapons. From this page, you can access fact sheets on different biological agents, as well as FAS recommendations for improving biosecurity.

James Martin Center for Nonproliferation Studies, "Chemical and Biological Weapons: Possession and Programs Past and Present," March 2008, available at <u>http://cns.miis.edu/cbw/possess.htm</u>

This non-governmental think tank offers the most up-to-date and best documented public list of historical and contemporary biological weapons programs. It is the best place to find out if your country has had a biological weapons program.

Kimball, Daryl and Oliver Meier. "The Biological Weapons Convention (BWC) At a Glance." Arms Control Association. October 2010. Available at <u>http://www.armscontrol.org/factsheets/bwc</u>

The Arms Control Association is a non-governmental organization that promotes the spread of arms control agreements. This site provides a good history of the BTWC and its challenges. Other parts of the site provide information on the weapons and policies of particular states.

McCauley, Phillip M. and Rodger A. Payne. "The Illogic of the Biological Weapons Taboo." *Strategic Studies Quarterly*. Spring 2010. Available at <u>http://www.au.af.mil/au/ssq/2010/spring/mccauleypayne.pdf</u>

This article reviews the history of the BWTC and discusses the challenge posed by "dual-use" biotechnology, in which commercial or defensive biological research could quickly be weaponized. The authors also discuss two possibilities for improving verification.

United Nations Department of Public Information. "General Assembly, Gravely Concerned about Status of UN Disarmament Machinery, Especially in Conference on Disarmament, Invites States to Explore Options." Press Release GA/11182. 2 December 2011. Available at http://www.un.org/News/Press/docs//2011/ga11182.doc.htm

This press release summarizes the most recent GA debate on the BTWC. It provides insight into the various arguments and suggestions offered by member states.

United Nations Office at Geneva (UNOG). "Disarmament: The Biological Weapons Convention." Available at http://www.unog.ch/80256EE600585943/(httpPages)/04FBBDD6315AC720C1257180004B1B2F?OpenDocument

This is the website of the BTWC Implementation Unit. It provides information on the Convention, review conferences, and state parties, including dates of ratification and annual declarations. See footnotes 10 and 11 for links to country information and footnote 49 for a link to the 2011 conference outcome document, which includes statements by individual countries.