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Combating the threat of bio-terrorism by non-state actors

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Introduction

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 risk of Non-State Armed Groups (NSAGs) acquiring BW is 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 sue them in terror attacks. While no successes have been reported so 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 requires massive quantities. A successful BW attack is technically difficult, but could kill hundreds of people and endanger the health of thousands.

The United States Centers for Disease Control and Prevention (CDC) defines bioterrorism as a deliberate release of an agent (virus or bacteria) used to cause

illness or death. Agents are found naturally, such as small pox, 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. Because of 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' Disarmament and Security Committee is no different.

History of Bioterrorism

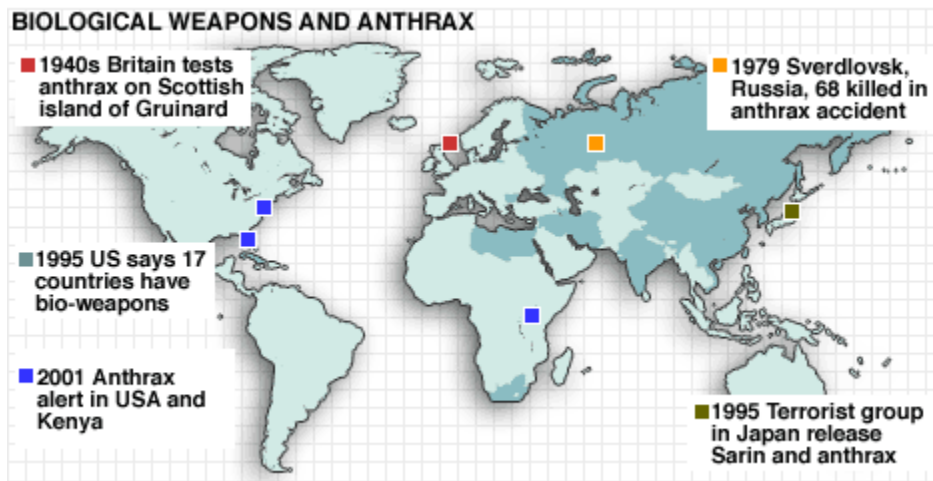
Research on biological warfare (BW) as we know it today began around World War I, with anthrax and smallpox being the first and most common agents. Research has led to extraordinary advances, but actual use has been very limited. Small scale use, often by individuals, is most common. The only large scale use came during World War II, when the Japanese Army experimented and used biological agent on Chinese prisoners and cities. After World War II, the Soviet Union (USSR) and the United States and USSR had competing biological weapons programs during the Cold War. While research produced extremely lethal agents, weaponization—especially effective dispersal from artillery or aerial

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dispensers—and progress on militarily useful effects was 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

possessions 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 in 1972 (also known as the BWC).

Figure 1. BW milestones



Source: BBC News

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 Korea, but these allegations are hard to prove. 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

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expert. Shortly after 11 September 2001, letters were sent to news agencies and politicians in the 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 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.

Ebola

Since the February 2014, the deadly Ebola virus has ravaged much of West Africa. After a thorough investigation, the source of the latest outbreak can be traced back to a two-year-old child from Guinea. As of September, there have been more than 2,800 deaths and 5,800 confirmed cases of Ebola within Liberia and Sierra Leone. According to the Centers for Disease Control and Prevention, the projected estimates for January 2015 could be anywhere from 550,000 to 1.4 million if there are no “additional interventions or changes in community behavior.” Another factor that has been taken into more consideration is the ability for the disease to spread. As of October 2014, the United States has increased its effort to screen passengers on incoming planes from West Africa, or have been to the region in the past few months, in order to limit the spread of the Ebola virus. Also, as of

October 2014, the Ebola virus has been seen in Germany, which was the only other country besides the United States at that to have the Ebola virus patients outside of West Africa.

Ebola is one of the many bio-chemical agents that do not have a proven vaccine that can combat the virus. With this in mind, it is crucial to note two important thoughts. If an organization, or organizations, were to weaponize the Ebola strain, or any other strain of virus without a cure, it would be detrimental to human society. The very risk or thought of this coming into a reality is one that all countries and nations cannot prepare for, but is also one that is not totally impossible. If this were to happen, would country policy break in the sense that governments would negotiate with terrorist cells? Another train of thought is also this: what happens if a virus is weaponized and is released into an already unstable country? What would the United Nations do in this situation versus what the host country would do? Realizing that the country might already be unstable due to a lack of infrastructure, lack of definite government or leader, or is a war-torn and poverty stricken country, it might be difficult to send aid and relief if a virus were to break out. One last thought that should be kept in mind is the fact that there are many different ideologies when it comes to how a virus should be approached. It is less so about the traditional vaccination and humanistic beliefs as much as it is about the lack of education most persons receive when it comes to the symptoms of certain diseases (yellow eyes, clamminess, vomiting, etc.) as well as protection, quarantine and sterilization procedures if one person is infected. One case that was highly

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publicized was that many West African children were playing with diseased corpses of people that had died of Ebola.

Figure 2. Major BW agents

Table 2-9. Types and Characteristics of Some Biological Agents

TYPE OF AGENT	STABILITY	INCUBATION TIME	ENTRANCE	
			AEROSOL	NONAEROSOL
Anthrax	High	1 to 6 days	Inhalation	Skin, Mouth
Botulinum toxin	High	24 to 36 hours	Inhalation	Mouth, Wound
Brucellosis	High in wet environment	1 to 4 weeks	Inhalation	Mouth, Skin, Eyes
Cholera	Moderate	Hours to 5 days		Mouth
Plague (Pneumonic)	Low	2 to 3 weeks	Inhalation	
Plague (Bubonic)	Moderate	2 to 10 days		Bite of Vector
Ricin	High	<36 hours	Inhalation	Mouth
Staphylococcal Enterotoxin B	High	1 to 6 hours	Inhalation	Mouth
Trichothecene Mycotoxin	High	Minutes to hours	Inhalation	Mouth, Skin
Tularemia	Low	2 to 10 days	Inhalation	Mouth, Skin

Source: GlobalSecurity.com

In 2012, scientists admitted to have made a virus that could kill millions if it was released in sufficient quantities. The World Health Organization immediately disallowed the publication of more research on the subject, but deadly weapons could be available for terrorists if they could somehow retrieve it. These two events further suggest that more must be done by the international community to stop the possibility of mass murder through biological terrorism.

What has the UN done already?

In 1972, the Convention of the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (BWC) was completed. In the United States, President Richard Nixon made an executive order destroying all

biological weapons and ending further creation of them prior to this agreement.

The BWC lacks mandatory verification; it relies on self-interest and reciprocity among signatories for enforcement. Efforts to create a verification regime have been blocked by states suspicious it will be misused for espionage, especially the United States. Since the first conference, there have been seven official Review Conferences and an Ad Hoc Group that came together over a dozen times since the 1980s, primarily to develop an acceptable mandatory verification system, with the latest meeting occurring in 2011.

While this agreement focuses on keeping State-level biological proliferation at bay, the threat of individual or small group biological terrorism can't be prevented as easily. In the United States in 1984, followers of a spiritual leader wanted to ensure he won a local election, taking

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political power in the town of Antler, Oregon. To do this, they sprinkled Salmonella on salad bars in local restaurants, hoping to make local citizens too sick to vote. They caused a reported 751 individuals to get sick, but no deaths, and they lost the election. The weaknesses in their attack were lack of access to deadly bacteria strains and lack of an effective delivery mechanism.

The United Nations has been at the forefront of international efforts to fight all forms of WMD terrorism, passing a series of resolutions calling on states to sign relevant treaties, to accelerate negotiations to strengthen those treaties, and prevent trade in relevant materials. Member states are generally agreed on the importance of stopping on-state actors from developing BW capabilities. But many states refuse to support strong limits on their own freedom of action, and oppose measures to penalize particular states they consider friends or allies.

Although the United Nations have banned the use of chemical and biological weapons as well as the ability to store them within any one nation, two distinct cases of this rule being broken are prevalent in the United States as well as Russia. Both of these countries have samples of smallpox and other assorted bio-chemical agents. Some United Nations resolutions to combat the storage and production of other countries chemical weapons has been the Security Council Resolution 2118, which proposed the removal and destruction of Syria's stockpile of illegal chemical agents (CW). Two other groundbreaking resolutions that were passed by the Security Council were resolutions 1540 and 2118. One notable idea is that, in both of these resolutions, they recognize that

biological and chemical agents can, and are, used as weapons of mass destruction and could be used to coerce leaders of other nation as well as deliver a threat to international peace and security." All of these resolutions oblige to the *inter alia* rule, stating that these resolutions support by any means non-State actors (an individual or organization that has significant political influence but is not allied to any particular country or state) from "developing, acquiring, manufacturing, possessing, transporting, transferring or using nuclear, chemical or biological agents and their delivery systems."

Others are concerned about the dilemma of how to balance the need to control BW, versus the need to support legitimate research to combat infectious disease. Measures that would combat BW research and weaponization to completely also can stop necessary research on defensive measures, such as prevention, inoculation and treatment. Research on virulent disease, such as H1N1 bird flu, is accepted as essential, but such research also can be turned to destructive purposes. Balancing the demands of medical research and counterterrorism is a difficult job for the international community

Role of the United Nations Today

Presently, the United Nations is being criticized by many for pushing bioterrorism, which many believe is one of the gravest dangers in the world today, to the backburner. One unresolved issue is ensuring all parties are compliant. A possible addition to the agreement that would create annual Confidence Building Measures used to verify the compliance was proposed for a decade. However,

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powerful countries like the United States did not favor tactics that would involve intrusion by outside verifiers. At the present time, the closest thing to this idea is the Australia Group, a voluntary forum with the goal of uniting countries in ensuring biological weapons are removed or not created in the first place, under the efforts provided by the BTWC. Without the backing of the United Nations, this voluntary group only has less than 50 participants, as opposed to the 165 signees of the BTWC.

The former Secretary-General of the U.N., Kofi Annan, stated "Bioterrorism is especially under-addressed and in acute need of new thinking" in 2006. Many new initiatives were proposed in his '06 report "Uniting Against Terrorism." This report shifted the focus away from concerns of state-funded biological and chemical attacks and towards rogue groups and elements. So far, none have been seriously enacted.

Country Positions

China, the European Union and Former Soviet republics led by Russia have taken the lead on international action, demanding reform starting with improvements to the 1972 BWC. They maintain that effective international action requires cooperation through the UN. Above all, they agree the BWC requires the addition of an effective verification regime, including on-sight inspections of research facilities and facilities that can be used for biological research.

The United States maintains their strong position against bioterrorism. However, the anthrax attacks in 2001 were traced to

domestic sources, leading some to question whether or not the U.S. actually does still have some stockpile of biological weapons. American leaders have divided on the value of international agreements, which a substantial group in the American Congress insisting the treaties will hurt America's sovereign freedom and not slow its enemies. Other American leaders stress the need for international cooperation, since the country cannot defend itself alone. The U.S. maintains BW inventories, which it says are exclusively for research, not weaponization. Some American leaders also are suspicious of changes to the BWC that could require verification and inspection, possibly endangering military secrets.

From the Asian continent, only Myanmar and Nepal have not ratified the 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.

India has strong biological defense operations, but it can safely be said that they have no biological weapons for offensive purposes. Pakistan has very similar infrastructure. Many states formerly controlled by the Soviet Union have biological weapon facilities left over from that time, with Kazakhstan including some of the longest lasting ones. They have been somewhat cooperative with outside

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countries in ensuring no proliferation of offensive biological weapons.

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 in regards to 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.

Africa has a large number of non-signatories and countries that haven't ratified the treaty. African nations that have not signed the BWC include Andorra, Angola, Cameroon, Chad, Djibouti, Eritrea

and South Sudan. The continued unrest in much of the region makes it one of the most dangerous in terms of possible availability and use of biological warfare against innocent victims. South Africa had an extensive program in the 80s and 90s, but has since claimed they have no offensive weapons.

Latin American countries generally are very supportive of efforts to strengthen the BWC. While nearly every country has ratified the agreement to disarm bioterrorism, there are still many countries that (unwillingly) house terrorist groups. If these groups can get close enough to the main cities around Central and South America, and even the United States and Canada, with a biological weapon such as anthrax, they could cause scores of fatalities. Some countries in the region—such as Brazil, Cuba, Equator, Nicaragua and Venezuela—are suspicious of changes in the treaty that could be used to force inspections in sensitive national security areas.

Bibliography:

<http://www.bt.cdc.gov/bioterrorism/overview.asp>

<http://www.nytimes.com/2011/10/30/magazine/how-ready-are-we-for-bioterrorism.html?pagewanted=all>

<http://en.wikipedia.org/wiki/Bioterrorism>

<http://www.opbw.org/convention/conv.html>

<http://www.guardian.co.uk/world/2001/oct/31/qanda.september11>

<http://www.acronym.org.uk/dd/dd84/84bhr.htm>

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<http://jonasmartinsson.blogspot.com/2009/07/un-stagnating-initiatives-against.html>

http://en.wikipedia.org/wiki/Biological_Weapons_Convention#Verification_and_compliance_issues

[http://www.unog.ch/80256EE600585943/\(httpPages\)/F1CD974A1FDE4794C125731A0037D96D?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/F1CD974A1FDE4794C125731A0037D96D?OpenDocument)

<http://www.acronym.org.uk/31bwc.htm>

<http://now.msn.com/living/0219-superbug.aspx>

<http://www.thebulletin.org/web-edition/features/helping-the-united-nations-combat-bioterrorism>

<http://www.freerepublic.com/focus/news/651650/posts>