



Committee: GA1 Disarmament and International Security Committee
Issue: Establishing Responses To Bioterrorism Preparedness
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Introduction to the Issue

Throughout history, wars have been breaking points for humans. For centuries, weapons such as guns, bombs, and tanks have been used to overthrow the adversary. However, besides these armaments, other techniques have been used all throughout history. Toxins, fungi, viruses and other biochemical substances are used to destroy colossal crowds. The abuse of these biochemical substances is called bioterrorism. Bioterrorism has been an issue since 6 B.C. however, the conflict has started increasing rapidly after the second half of the 20th century. Terrorist incidents in the world involving bacterial pathogens, nerve gases, and lethal plant toxins, have shown that the world is defenseless to biological and chemical threats as well as explosives. Nowadays, nations have easy access to recipes for preparing biological agents that are immensely threatening to the public. Additionally, governments reporting military bioweapons raise the possibility of terrorists having access to these biological weapons which are built to maltreat a great number of people at once. An example of a widely known agent is; the variola virus, the causative agent of smallpox, which is highly infectious and often deadly. Being exposed to the large-scale outbreaks caused by these agents will require the rapid mobilization of public health workers, emergency responders, and private health-care providers. Large-scale outbreaks will also require rapid procurement and distribution of large quantities of drugs and vaccines, which must be used as quickly as possible.

Involved Countries & Organizations

North Korea

In addition to its nuclear capabilities, North Korea has the ability to douse thousands of people with lethal doses of anthrax, smallpox and viral hemorrhagic fever. Kim Jong-un's regime is thought to have the



third-largest chemical weapons supply in the world, and its arsenal includes at least 13 types of biological weapons. This shows that North Korea is ready for any kind of attack and has a strong defense mechanism for a bioterrorism attack.

Iraq

Iraq's biological weapons program encompasses a wide range of agents and munitions. Agents under Iraq's biological weapons program include lethal products, such as; anthrax, botulinum toxin, ricin, and damaging agents, such as; aflatoxin, mycotoxins, hemorrhagic conjunctivitis virus, and rotavirus. Since the country has this much of munitions and resources it is understood that they are prepared and equitable for a bioterrorism attack.

INTERPOL

Interpol's Bioterrorism Prevention Unit works in sync with law enforcement, health, and academics in order to tackle the hazardous issue. They facilitate projects on how to prepare, prevent and respond to biochemical attacks. Also, Interpol plays an active role as an observer at the Meeting of States Parties of Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction.

World Health Organization (WHO)

UN's World Health Organization advises the Member States on how to fortify against attacks and preclude any possible ones. WHO continues to maintain its reserve stock of vaccine for use as an emergency supply in the case of an outbreak, and works with countries to promote investment in public health preparedness and response for disease outbreaks and public health emergencies. Such investment provides a clear and sustainable public health benefit whether outbreaks are naturally or deliberately caused.

Infectious Diseases Society of America (IDSA)

Each day, infectious diseases physicians and scientists serve on the front lines in protecting people from such threats. IDSA advances US's preparedness and response to initiatives by promoting appropriate



action by health care providers, research efforts and development of life-saving countermeasures (vaccines, drugs, and diagnostics). Also, it advises in, implementation of appropriate non-control measures and strengthened public health,

Centers for Disease Control and Prevention (CDC)

CDC is the United State's health protection agency, working to protect the world from health and safety threats, both foreign and domestic. CDC also increases the health security of the U.S against biological attacks across the nation. Furthermore, they publish reports and documents to raise awareness.

Detailed Analysis of the Issue

Bioterrorism is the use of infectious agents or other harmful biological or biochemical substances as weapons of terrorism. Terrorists may find biological agents to be an attractive alternative to conventional weapons because of their relatively low costs, their accessibility, and the easiness in which they could be produced and delivered. Additionally, these substances traces could easily avoid detection. Their use is potentially capable of producing widespread social disruption.

There are mainly three types of bioterrorism agents. The first category is Category A. Category A consists of the agents that are considered to have the highest risk, and much of the biodefense research effort is directed towards these agents. Such as; Anthrax, Ebola, Plague, Smallpox, Botulism and, Tularemia. The sarin gas attack that happened in Tokyo on March 20, 1995, is an example of a Category A attack. The second category is Category B. Category B agents are the ones that could conceivably threaten water and food safety. For example; Caliciviruses, Cholera, E.coli, Ricin toxin, Salmonella, Typhus fever, and Viral encephalitis. The last category is Category C. Category C includes pathogens that are considered emerging infectious disease threats and which could be engineered for mass dissemination. Like; Yellow fever, SARS, Nipah virus, Influenza, Hantavirus, and Chikungunya.

Terrorist incidents in the world involving bacterial pathogens, nerve gas, and a lethal plant toxin, have confirmed that most of the world is vulnerable to biological and chemical threats as well as explosives.



Detection, diagnosis, and reduction of illness and injury caused by biological and chemical terrorism is a complex process that involves numerous partners and activities. Facing this challenge will require special emergency preparedness in all cities and states. CDC can provide public health guidelines and support, while also giving technical assistance to local and state public health agencies as they develop coordinated preparedness plans and response protocols. CDC will also contribute to self-assessment tools for terrorism preparedness, including performance standards, attack simulations, and other exercises. In addition, CDC will encourage and support applied research to develop innovative tools and strategies to prevent or mitigate illness and injury caused by biological and chemical terrorism.

Different agencies should prepare all member in order to ensure the required state of alertness. This stage should include the evaluation of laboratory facilities and all of the hospitals in case of an immediate attack. Additionally, training should be conducted for the health professionals, Rapid Response Team (RRT) and Quick Response Medical Team (QRMT). Also, the public should be kept aware of imminent attacks. It is important to carry out a review of the situation based on current information of threat perception.

Warning the citizens play an important role in any kind of an attack. The early warning in the surveillance system includes activities like case definitions, notification, compilation and interpretation of epidemiological data. Early detection and rapid investigation by public health epidemiologist are critical in determining the scope and magnitude of the attack and to implement effective interventions. It is mandatory to report any unusual syndrome or usual syndromes in unusual numbers to appropriate authorities. The activities in this phase include rapid epidemiological investigations, quick laboratory support for confirmation of diagnosis, quarantine, isolation, keeping health care facilities geared for impending casualty management and evolving public health facilities for control.

In conclusion, bioterrorism remains a legitimate threat both from domestic and international terrorist groups. From a public health perspective, timely surveillance, awareness of syndromes resulting from bioterrorism, epidemiologic investigation capacity, laboratory diagnostic capacity and the ability to rapidly communicate critical information through the media is vital. Ensuring adequate supply of drugs, laboratory reagents, antitoxins and vaccines are essential. Formulating and putting into practice drills at



all levels of health care will go a long way in minimizing mortality and morbidity in case of a bioterrorist attack.

List of Important Events

Date (Day/Month/Year)	Event
Sixth Century B.C.	Assyrians poisoned their enemies' wells with rye ergot, a fungus that causes convulsions if ingested.
1155	Emperor Barbarossa poisoned water wells with human bodies in Italy, Toronto.
1346	Plague broke out in the Tartar army during its siege of Kaffa. Attackers hurled the corpses of plague victims over the city walls, causing an epidemic that forces the city to surrender.
1495	Spain mixed wine with the blood of leprosy patients to sell to their French foes in Naples, Italy.
1710	Russian troops catapulted human bodies of plague victims into Swedish cities.
1754	During the French and Indian wars, the British forced distribute blankets of smallpox patients to native American Indians who were loyal to the French.
1797	Napoleon flooded the plains around Mantua, Italy, to enhance the spread of malaria.
1863	Confederates sold clothing from yellow fever and smallpox patients to Union troops during the US Civil War



<p>1915</p>	<p>The 20th-century's first bioweapon, glanders was used by German undercover agents to infect the livestock of Allied countries with the highly contagious <i>Burkholderia mallei</i> agent.</p>
<p>1937</p>	<p>Japan used plague, anthrax, and other diseases. Also, they developed biological weapons program as known as Unit 731.</p>
<p>1940</p>	<p>A plague epidemic in China and Manchuria followed reported overflights by Japanese planes dropping plague-infected fleas.</p>
<p>1942</p>	<p>The U.S. began an offensive biological program at Camp Detrick, Md. Five thousand bombs filled with <i>Bacillus anthracis</i> have been produced.</p>
<p>1942</p>	<p>The U.S. began developing countermeasures such as vaccines, to protect troops from biological warfare.</p>
<p>1990</p>	<p>Iraq used mustard gas, sarin, and tabun against Iran and ethnic groups inside Iraq during the Persian Gulf War</p>
<p>20/03/1995</p>	<p>The Aum Shinrikyo cult released the nerve agent sarin in the Tokyo subways, killing 12 and injuring thousands. The group attempted on at least 10 occasions to release biological warfare agents in aerosol form.</p>
<p>2001</p>	<p>Letters containing anthrax spores were mailed to NBC News and the offices of Senator Tom Daschle at the U.S. Capitol. One person died after contracting anthrax. Anthrax spores are found at New York Governor George Pataki's offices in New York City.</p>



Past Resolutions and Important Documents

- Non-proliferation of Weapons of Mass Destruction, 28 April 2004 (Resolution 1540)

[https://undocs.org/S/RES/1540\(2004\)](https://undocs.org/S/RES/1540(2004))

This resolution shows us that the UN is aware of the possible destructions bioterrorism can cause. The Member States are not yet prepared for bioterrorism attacks and this resolution aims to prepare all of the states in case of an attack. It consists of measures, rules, and regulations towards the issue.

- The Biological Weapons Convention, 10 April 1972

[https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/6D16C7B1933F0937C125815D00349763/\\$file/BWS%20brochure.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/6D16C7B1933F0937C125815D00349763/$file/BWS%20brochure.pdf)

The Biological Weapons Convention, the first multilateral disarmament treaty banning the development, production and stockpiling of an entire category of biological weapons was opened for signature on 10 April 1972.

- Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, 4 December 1971 (Resolution 72/71)

<https://undocs.org/A/RES/72/71>

Emphasizes the importance that hazardous materials can cause and finds solutions in order to prevent any more attacks through biological weapons. Also encourages other states to join and cooperate.

Past Attempts to Solve the Issue

Project BioSecure (Bioterrorism Risks and Controls)

Biosecurity protects against the inadvertent, inappropriate, or intentional use of potentially dangerous biological agents or biotechnology, as well as outbreaks of newly developing and epidemic diseases.

Biosecurity encompasses much more than physical controls and requires the cooperation of scientists,



technicians, policy makers, and law enforcement officials. Biosecurity is an area that has evolved in recent years to become a focus for many law enforcement agencies and continues to build momentum and importance in our global community, as they are faced with new challenges and vulnerabilities because of organized crime and terrorism, to use biological weapons to cause harm.

Project Oleander

The recent international response to the largest Ebola outbreak on record has highlighted many areas of vulnerability, including the role of law enforcement and the need for collaboration among law enforcement agencies, government, and non-government organizations, as well as the healthcare sector. This project aims to release a biological agent, through a simulated exercise, to highlight the challenges and vulnerabilities in the preparation, planning, and response to a biological incident, including bioterrorism. As a result, nations can see what they are good at, prepared for and what they are lacking.

Project RHINO

Natural outbreaks draw attention to the roles and responsibilities of law enforcement during an outbreak and identify national and regional gaps in response to this and dealing with future biological incidents. In addition, criminal activity surrounding an outbreak highlights vulnerabilities in biosecurity and the potential threat of bioterrorism. Project RHINO reflects the ongoing commitment to enhance the following skills for law enforcement:

Response capability

Hazard Assessment

Infection control

National coordination

Organizational change

Possible Solutions

The General Assembly should focus on three major points in order to resolve the issue.



First of all, all countries which are not aware of the seriousness of bioterrorism should be informed and prepared for a bioterrorism attack. So in order to make sure all member states are on the same page, there should be an organization that makes a presentation to every state and get their opinions on the issue. According to the data that has been collected, a treaty could be signed between the nations.

Secondly, there should be a facility in every country that is directly connected to the UN. This facility may include vaccines, scientists and everything that can be needed during a biological attack. The facility is going to be built by the UN. However, nations can make any financial contributions to the project. In case of an attack, these facilities will run most of the procedures so it will be done by the experts of the issue. By doing this the harm caused can be taken down to the minimum level.

Lastly, experts may be hired in order to monitor and keep in control any future biological attacks. The experts which can be hired by nations can monitor the borders, checkpoints, airports and public points such as these locations. The experts will receive special training in this area specifically to avoid possible attacks.



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