



Background Paper

Committee: The Peace and Security Department

Topic A: The Health and Security Threat of Biological Weapons **Chairs:** Victoria Nevarez Karam and Fernanda Galindo Ortiz

The unending threat of biological weapons will continue to terrorize the world... for it is an undying truth, that whereas we can fight against soldiers... we cannot fight against sickness... cannot fight something we cannot see. And if we do not address the threat science poses to humankind, we will all be at risk, and there will be nothing to do about it...

Following World War I, the worldwide community prohibited the utilization of both biological and chemical weapons, which was strengthened by confining the creation, manufacture, stockpiling, and exchange of these weapons. Progress in cell science and bioengineering, together with changes within the threat landscape, have raised concerns that long-standing prohibitions on the utilization of chemical and biological weapons may be neglected or undermined.

The World Health Organization defines the term biological weapon as a microorganism produced and released deliberately to cause disease and death in humans, animals, or plants. Just like chemical, radiological, and nuclear weapons, it is classified as a "weapon of mass destruction." The term, however, does not fulfill the definition of biological weapons since, while it is capable of effecting mass assassination, it lacks the ability to destroy infrastructure, buildings, or equipment. Nonetheless, a biological weapon is still considered a threat to global security due to the risk of causing broad pandemics, the difficulty of regulating illness consequences, and the anxiety they instill... That being said, it is an incredibly small amount of information that we have access to... which makes biological weapons that much more dangerous.

Biological weapons delivery systems can take a variety of forms, and they can become impossible to track... adding to the fact that biological weapons might be created by any nation, later mechanical progress seems to increase the probability of these armaments being obtained or created by actors other than the government, taking into account people and terrorist confederations. It would be unattainable to recognize whether a suspicious illness was caused by nature, a mishap, disrupt, or an act of biological conflict or menace. In consequence, the response to a biological incident, regardless of natural, inadvertent, or deliberate, would require coordination from numerous segments who hold the potential to uncover the cause and track it to a particular provenance. Similarly, multi-sectoral collaboration should be used to plan for and avoid such an incident.

Because of the broad range of possible biological hazards, risk management activities should be multidisciplinary, multi-sectoral, and, most importantly, coordinated. Such techniques ensure that resources are used effectively to benefit the majority of people. Fabricating capabilities covering regions to examine illness, strengthen the capability to recognize and acknowledge a biological assault but also grants the proficiency to track and diminish existing infections, which considerably upgrades public healthcare globally.

Prevention, protection, detection, treatment, and decontamination are the five categories biological defense can be divided into. Prevention can come in a variety of forms... Universal disarmament and assessment administrations may discourage the creation and transmission of biological warfare operators. Intelligence assets can alert you to prospective risks and allow you to take preemptive measures. There is only so much that can be done to protect against biological warfare agents. For brief periods of time, protective suits, clothes, gas masks, and filters may give negligible security. In any case, due to the determination of biological operators, such assurances are only advantageous to military staff and first responders. Vaccination might provide some sort of security that will allow critical resistance against occurring infections, however, vaccinations regularly give small or no protection against genetically modified variations outlined to sidestep such immunizations. As for detection, it might take somewhere between hours to several days to identify exposure to a biological weapon. However, improvements in biotechnology will aid in the development of better and faster detectors. SMART (Sensitive Membrane Antigen Rapid Test), JBPDS (Joint Biological Point Detection System), BIDS (Biological Integrated Detection System), and IBAD (Interim Biological Agent Detector) are samples of existing detectors. The treatment options accessible after infection are subordinate to whether or not the disease has been detected. If the cause is not determined, huge doses of antibiotics may be administered in the hope that anything could work. The treatment of biological warfare victims is heavily reliant on the construction and preservation of solid healthcare systems. Unlike chemical weapons, which dissolve over time, biological toxins have the potential to replicate and spread. However, it is believed that decontamination involving chemicals, heat, or UV radiation is somewhat effective.

The primary focus should be on biological warfare and the threat it poses to both international health and security. Delegates may discuss possible battling strategies when addressing what an active biochemical attack would mean to the world or their independent nations. Whereas the main recommendation is to think about possible ways to battle a hypothetically active biological weapon... themes among the general idea could branch the following subtopics: bioterrorism, the risk existing biological weapons pose to humanity, the risk of infection, arguing whether existing viruses could have a biological engineering origin, and the reinforcement of existing policies against chemically altered weapons... Please do keep in mind that multiple subjects could arise from the debate at any given time. Be aware that "Reliable scientific knowledge is value-free and has no moral or ethical value. Science tells us how the world is ... Dangers and ethical issues arise only when science is applied as technology." (Lewis Wolpert).

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