MODEL UNITED NATIONS

DMUN XII

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Disarmament and International Security Committee

BACKGROUND GUIDE

Chair: Jonathan Henkin
Moderator: Jacob Buller

Biological Warfare

Dalton Model United Nations XII

DISARMAMENT AND INTERNATIONAL SECURITY COMMITTEE

MODEL UNITED NATIONS

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Letter from the Chair

Hi all,

My name is Jonathan Henkin, and I will be your chair for DISEC at DMUN XII! I am a senior at Dalton and serve as one of the Secretaries-General of our Model United Nations team. Besides MUN, I am the head of Dalton's Jewish Cultures Club and Classics Club, and am very interested in math and medical research... which is why I chose biological warfare as our topic. Whether this is your first or fifteenth committee, I hope DISEC gives you a chance to challenge yourself, learn something new, make unexpected friendships, and have some fun along the way.

Our moderator for this committee will be Jacob Buller, a fellow senior and part-time member of Dalton's team. Jacob's life outside of MUN, takes a bit of a dive—literally. He comes from a long line of record-holding free-dive spear fishermen, and he will be taking a gap year to see if he can stretch the family record a little further (or at least avoid getting shown up by his cousins). If you ever want to talk about ocean currents, breath-holding techniques, or the best way to dodge a sea urchin, he is your guy.

Committee-wise, Jacob and I are veterans of the activity, so we can tell who has spent time researching and preparing. Remember that diplomacy, creativity, and confidence are at the core of Model UN—that is what we will be looking out for.

On a more sentimental note, I am very pleased to have the opportunity to see out my MUN career chairing this committee for all of you. If you have any questions, feel free to reach out to me (c25jh@dalton.org). I can't wait to see all of you in May!

Best,
Jonathan

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Overview

Biological weapons form a subset of a larger class of weapons sometimes referred to as unconventional weapons or weapons of mass destruction, which also includes chemical, nuclear, and radiological weapons. Biological Weapons and toxin weapons are comprised of toxic substances produced by living organisms or microorganisms such as viruses, bacteria, or fungi that are deliberately released to cause disease and death in humans, animals, or plants. Biological agents like botulinum toxin and anthrax can cause large numbers of deaths in a short amount of time, posing serious health concerns. Biological agents that are capable of secondary transmission can lead to epidemics, which may mimic a natural event and complicate and threaten the public health assessment and response. The use of biological agents is a serious concern among nations around the world, and the risk of using these agents in a terrorist attack is thought to be increasing.

Science of Bioweapons

In addition to tactical military applications, biological weapons can be used for political assassinations, the infection of agricultural produce or livestock to cause food shortages and economic loss, the creation of environmental catastrophes, and the creation of widespread fear, illness, and mistrust among the public. Biological Weapons generally consist of two parts – a weaponized agent and a delivery mechanism.

Weaponized Agent: Almost any disease-causing organism, such as bacteria or viruses can be used in biological weapons. Historically, bioweapons have sought to cause illnesses including foot-and-mouth disease, glanders, plague, Q fever, rice blast, Rocky Mountain spotted fever, smallpox, and tularaemia, among others.

Delivery Mechanism: Biological weapon delivery systems take various forms. Missiles, bombs, hand grenades, and rockets have been constructed to deliver biological weapons. Some programmes also designed spray-tanks that could be fitted to aircraft, trucks, cars, and boats. There have also been documented efforts to develop delivery devices for sabotage operations or assasinations, including a variety of sprays, brushes, and injection systems as well as means for contaminating food and clothing.

Preventing the use and development of bioweapons

By maintaining international norm and improving surveillance systems, countries can deter potential adversaries by demonstrating a strong and diplomatic response. This could include the development of better forensic analysis, generating better intelligence, and implementing sensible security practices for legitimate scientists.

The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, commonly known as the Biological Weapons Convention (BWC), is the primary biological weapon proliferation organization. The BWC is the first agreement among nations that declared an entire category of weapons to be off limits. The moral force of the treaty has not prevented all of its signatories from developing biological weapons. The Soviet Union, a signatory to the convention, established an enormous secret bioweapons program during the Cold War, and there are current signatories that are highly likely to have offensive biological weapons programs. However, no country has openly defied the international norm to display an offensive biological weapons capability.

Case studies

In the modern world, national-level instances of biowarfare have, for the most part, vastly declined in regards to both impact and volume relative to the early and mid-20th century.

This being said, there are still a few notable examples of biowarfare post-1980 that we hope inform your discussions, both in regards to the application of these weapons, but also the nature of the perpetrators.

Time	Event
600 BC	Solon uses the purgative herb hellebore during the siege of Krissa
1155	Emperor Barbarossa poisons water wells with human bodies in Tortona, Italy
1346	Tartar forces catapult bodies of plague victims over the city walls of Caffa, Crimean Peninsula (now Feodosia, Ukraine)
1495	Spanish mix wine with blood of leprosy patients to sell to their French foes in Naples, Italy
1675	German and French forces agree to not use "poisones bullets"
1710	Russian troops catapult human bodies of plague victims into Swedish cities
1763	British distribute blankets from smallpox patients to Native Americans
1797	Napoleon floods the plains around Mantua, Italy, to enhance the spread of malaria
1863	Confederates sell clothing from yellow fever and smallpox patients to Union troops during the US Civil War
World War I	German and French agents use glanders and anthrax
World War II	Japan uses plague, anthrax, and other diseases; several other countries experiment with and develop biological weapons programs
1980–1988	Iraq uses mustard gas, sarin, and tabun against Iran and ethnic groups inside Iraq during the Persian Gulf War
1995	Aum Shinrikyo uses sarin gas in the Tokyo subway system

Rajneeshee Bioterror Attack
Year: 1984
Country: United States of America

In 1984 the small town, Dalles Oregon, experienced a mass wave of intentional food poisoning. This was the effect of a bioterrorism plot, orchestrated by a local cult known as the followers of Rajneesh, led by a man named Ma Anand Sheela in an attempt to manipulate voting poll results. This attack was in response to an upcoming election in which the Rajneeshee had the potential to consolidate large amounts of political power in the local Wasco county. With Dalles being the largest population center in this county, it became their natural target. They used salmonella enterica, a strain of the salmonella virus, and spread it across numerous local restaurants. Due to the rather poor sanitation standards of the time, it was quickly able to take root and infect over 750 citizens. This disease was disguised as part of a salad dressing, which was intermixed with the actual dressings at local salad bars. By incapacitating a large number

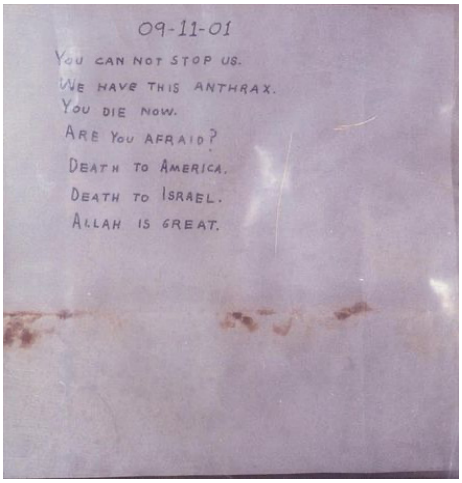
of voters, the Rajneeshee believed that they could win the election. In planning the attack, they took control over a local ranch and converted it into a laboratory and base of operations; a strain of the exact virus used in the attack was later found there. This goes to show that even a rather small extremist group, like the Rajneeshee, had the potential to formulate biological weapons and cause serious harm.

Tokyo Subway Attacks
Year: 1995
Country: Japan

In contrast to the Rajneeshee, the Aum Shinrikyo, a death cult responsible for the Tokyo subway attacks of 1995 were both more organized, and more lethal. They worshipped the apocalypse, and believed that humans were intrinsically sinful, and that only their cult members, who underwent numerous methods of physical and psychological evaluation were pure. This was widely due to their indoctrination at the hands of their leader, a man named Shoko Asahara. He was a naturally charismatic character and was able to convince his once small yoga studio to become devout followers. By acting as a prophet who would cleanse their souls, he quickly expanded his movement to thousands of members. This being said, the true indoctrination would only occur among his inner followers. Asahara forced them to undergo days of starvation and hallucinogens, promising to unlock innate magical powers through the process of cleansing their souls. He deceived them into believing that the souls could be cleansed by the physical labor of oneself and used this concept to turn them into radical followers. After these followers had been secured, he introduced a second concept. The fact that other humans were naturally impure, and that the only way to be purified was through death at the hands of a cult member. This gave his followers a so-called, righteous purpose, resulting in the mindset that they must purify, and thus kill the world, in an event known

as apocalypse. Asahara was also very intentional when expanding his cult. He not only forced cult members to surrender all of their earthly possessions to him and the cult, giving them a massive pool of resources, but also cut off connection to their families, giving the cult full control. He also made sure to target intellectuals: engineers, and scientists. These intellectuals made it possible for Asahara to begin carrying out his ultimate vision. With numerous devout followers and a frightening amount of resources Asahara started testing, and designing, numerous kinds of bioweapons, even constructing entire bioweapon development laboratories. He was drawn to them due to their immense lethality and undetectability. Initially, he experimented with other weapons such as ebola, testing them on animals on the tokyo rooftop, before finally settling on sarin gas, a nerve agent. Sarin is an extremely toxic, colorless, odorless liquid that emits an equally toxic gas. The issue with gas based bioweapons however, is diffusion. Regardless of the potency of a weapon, if it is released into an open space, it will quickly over diffuse and be rendered useless. To compensate for this shortcoming, Asahara instructed for it to be released inside the tokyo subway system at rush hour. He sent five cult members, with punctured packages, to leave them inside the cars. Before long the gas was released and the subways were shut down, resulting in 14 deaths with over 1000 people injured by the strong nerve agent. This made the subway attacks the most deadly in modern Japanese history. Overall, the subway attacks serve as a testament to the true destructive capability of nerve agents, as well as issues with restrictions for the acquisition of bioweapons. While the Aum Shinrikyo was a massive, well connected, cult. It was still a cult nevertheless, which makes their ability to obtain such a deadly weapon, like sarin, all the more disappointing.

2001 Anthrax Attacks
Year: 2001
Country: United States of America



Just a week after the September 11th attacks, unmarked letters began showing up at the houses of senators and journalists. Little did they know, these letters were laced with anthrax spores, a deadly strain of bacteria. Anthrax is typically transmitted through contact with the skin, making these letters a perfect vehicle for infection. It also does not spread quickly through people, meaning that once the targets were infected, they were most likely the only ones who would die, making it likely that the perpetrator was sending a message. The Aum Shinrikyo also originally contemplated using anthrax for their attacks, but these shortcomings, along with the fact that it needed to be directly transmitted, made it an unlikely choice. It is for this reason that the anthrax attacks were much less deadly than the subway attacks. They resulted in only 17 injured with zero dead. The intention behind these attacks, however, is unknown. It is possible that they were capitalizing on a time of extreme political unrest to make a statement about any issue, with the forerunner being reopening discussions about an anthrax core. This being said, it could also have been simply the result of mental illness, or an anarchist simply trying to wreak havoc on the United states. While the anthrax attacks were not as deadly as others, they still captivated the nation, highlighting the ability of bioweapons to cause mass hysteria to send any number of messages.

Assassination of Kim Jong-Nam
Year: 2017
Country: North Korea

The assassination of Kim Jong-Nam is a unique case, especially when compared to the others on this list. This is because it was a precise attempt, targeting only one individual, Kim Jong-Nam, eldest son of the North Korean Kim Jong II. He was originally regarded as the heir to heir to his father's empire before reportedly falling out

of grace due to his love of Disney and other theme parks. This made him appear as a soft character, and in the eyes of his father and the rest of the regime, an unfit leader. This issue culminated when he attempted to visit Disneyland in Malaysia with a fake passport and failed, bringing embarrassment upon his country and family. As a result, he was exiled in 2003 with his brother, Kim Jong-Un being named heir in 2010. After exile he occasionally criticized the regime, further worsening his standing with his former kingdom. It is also reported that Kim Jong-nam became a CIA informant during these years. All of these actions against the regime, culminated in his brother, Kim Jong-Un ordering him to be assassinated. In 2017, Kim Jong-Nam, traveling through Kuala Lumpur International Airport, was exposed to a VX nerve agent, quickly killing him. Four suspects were concurrently at the airport, but they fled back to North Korea before they could be identified. The way in which the nerve agent was delivered, is quite notable as well. Allegedly, a Vietnamese woman was convinced that she was taking part in a prank, just covering a random man's face with a liquid that was given to her by strangers. Unbeknownst to her this liquid, a VX nerve agent, was one of the most potent and deadly nerve agents on Earth. VX, standing for venomous agent X is a synthetic chemical agent, developed for military use. It is considered much more potent than sarin, and can be transmitted through inhalation, and absorption through skin, both of which likely happened to Kim Jong-Nam. It does not diffuse through air, making it potentially linger potently, classifying it as both a weapon of mass destruction, as well as an area denial weapon. The assassination of Kim Jong-Nam is arguably the most dangerous example of an utilized bioweapon in the modern day, as well as being the only state sanctioned attack in recent years. Overall this highlights the increased regulation both on non-state actors, but also sovereign entities that is required for the development and distribution of bioweapons and their components.

Essential Questions

1. How can nations proactively ensure safety against biowarfare and biological attacks on both the national and international levels?
2. How can the development of biological weapons be deterred?'
3. What elements of the history of biowarfare can shape the way we seek to prevent future biowarfare?

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