

NORCAL MUN III

DISEC

Nonproliferation of
Biological and Chemical
Weapons

1970

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Chair Introductions

Head Chair: Nikhil Krishnan

Hi everyone! My name is Nikhil and I'm very excited to be your head chair of DISEC for NorCal! I'm a current junior at Foothill and this is my 3rd year in MUN. Outside of MUN I love doomscrolling, listening to music, and being nonchalant ig. When being a MUN chair, I prefer when delegates stick to their country policy and have really entertaining, but also informative/useful, speeches. **PLEASE do your research on time** (I promise it will help you a lot even if you aren't going for a research award) and if you have any questions email me at nikhilkrishna032013@gmail.com! By the way, I don't do autographs, sorry.

Vice Chair: Shashank Vedula

Hi DISEC Delegates! My name is Shashank, and I will be one of your vice chairs for DISEC at Norcal MUN 2025. This is my third year doing MUN and my first time chairing! Unlike Nikhil, I'm actually tuff, and my favorite artists are Laufey, Clairo, Fishmans, and Frank Ocean. I love reading in cafés, particularly the kind that serves matcha. I'm a diehard supporter of feminism and women's rights in all forms, and I enjoy reading feminist and philosophical literature. I'm also 6'3" and built like Hercules, but I'm choosing to work on myself rather than chase a relationship (sorry). Outside of being incredibly tuff, I like movies by Quentin Tarantino and Akira Kurosawa (watch Reservoir Dogs and Throne of Blood). I'm also an Earth & Space Science enthusiast (my favorite planet is Venus, and my favorite mineral is pitchblende). I play a lot of video games, perhaps too many (Favorite right now is the entire Ace Attorney series, but all-time has to be Elden Ring or Breath of the Wild).

P.S. I love when people do crazy stuff in committee, so be creative! (Hint: props)
My email for literally any questions you have - shashank.vedula747@gmail.com

Vice Chair: Vivan Vaidya

Hello Delegates! My name is Vivan Vaidya, and I am excited to serve as your Vice Chair for this committee. I am currently a sophomore with a strong passion for economics, policy, and community leadership. Over the years, I've been involved in a wide range of civic initiatives from working with local government officials to leading student advocacy efforts which have strengthened my appreciation for the importance of diplomacy and teamwork. I love hiking, watching movies, listening to music (my top 5 last month were Drake, Playboi Carti, Clairo, Travis Scott, and Frank Ocean), running, playing tennis and just getting to know people. An interesting fact about me is that I've hiked to the top of the tallest peak in the contiguous US, Mount Whitney (14,505ft) and Mount Rainier (14'409ft). I've also been to 20 national parks, needless to say I love nature. I'm looking forward to being your vice chair and if you have ANY questions email me @ vivanvaidya@icloud.com

Tech Policy & Some Notes From the Chairs

This committee will be an **UNMOD TECH** committee. This means that any form of technology (Laptops, tablets, phones) will only be permitted during **unmoderated caucuses**. Technology must only be used for purposes related to the committee. Any unauthorized use of technology will result in consequences. This applies to the use of generative AI, even if you are using it for purposes relevant to the committee. **Any use of ChatGPT or other similar forms of generative AI to write position papers, speeches, or other such uses will result in consequences.**

Finally, some pointers. We believe that MUN should be serious, but a little goofy at the same time. Therefore, we strongly encourage all delegates to make an effort to be creative, inventive, funny, and a little silly. Even if you don't think you can be funny, or you've never tried to incorporate something like this in your speeches before, we still encourage you to try and break free from your comfort zone. (Because let's be honest, the real U.N. can be very boring at times, and we really don't want our committee to be)

P.S.: When making jokes or using hooks, please consider the following

1. Read the room: If everyone is talking in a very serious manner about a certain topic, do not make any stupid jokes. That is essentially a surefire way to violate the sensitivity policy.
2. Use your judgment: If you think everyone is being serious for no reason, and a joke wouldn't hurt, think to yourself, "If I make this joke, could someone be hurt?" Based on your answer to that question, choose to tell the joke or not.
3. Feel free to ask us if you have any concerns at all; we don't bite. Well, Vivan might.

P.P.S: Make the committee fun FOR EVERYONE! Don't be rude, don't be insensitive, and most importantly, don't ruin the committee for others. We're all here to have a good time and have some good debate, so let's do that with as few problems as possible.

SO WITHOUT FURTHER ADO, WE PRESENT TO YOU, THE TOPIC GUIDE!

I. Topic Background

After the horrific bombing of Hiroshima and Nagasaki, nuclear weapons became a serious debate between the world's powers. In fact, international bodies were so focused on controlling them that they turned a blind eye to a possibly deadlier class of weapons: biological

agents. A “silent killer” in the most literal sense of the term, biological weapons are nearly impossible to detect until they have begun to infect. Therefore, enforcing the manufacturing, development, and most importantly, the use of biological weapons, is paramount to international safety.

Though the impacts of biological warfare have only been significantly discussed in recent times, its usage predates the Middle Ages. Hittites, a group of ancient Indo-Europeans, recorded their use of individuals infected with a form of the plague to attack enemy lands. Similarly, the Mongols threw plague-infected corpses over enemy walls to infect troops and citizens. In both cases, the contagious nature of the plague was leveraged to quickly spread the disease and weaken enemy forces. Interestingly, there is debate on whether this use was the cause of the Black Death.

Biological warfare remained relatively unsophisticated until the onset of the 20th century, right before World War 1 in 1914. Advances in microbiology and related technologies helped accelerate the development of biological agents exponentially. One such agent, anthrax, gained infamy due to its contagiousness and characteristic black sores. Germany pioneered the use of such agents in modern warfare by infecting horses with anthrax and glanders, another similar infectious agent. They chose to infect horses and animals to adhere to the 1907 Hague Convention, which prohibited attacking enemy soldiers directly, as was done by the Hittites. While this method was still rudimentary, it revealed a flaw in international law: biological weapons were severely overlooked.

Efforts were made in 1925 to combat biological weapons, but since they only went into effect during wartime, they were unsuccessful, as countries continued to use biological weapons. In fact, research in biological weaponry was becoming increasingly popular with the start of

World War 2. The UK was the first to do so, under Churchill. Then, most notoriously, Japan began research, using a secret research team known as Unit 731. This team conducted extremely unethical and fatal experiments on human test subjects, which was not in violation of any international agreements, demonstrating yet another flaw: research into biological weaponry and stockpiling of biological agents were both still permitted. While Japan did use these weapons, mainly in China, that was their only violation of international law, even though the experiments they were conducting ended upwards of 10,000 lives.

Biological weaponry is a terrifying concept, and even more terrifying in execution, but enforcing the nonproliferation of it is only one part of the problem. This is because a similar, and perhaps even deadlier class of weapons exists: chemical weapons. To preface this, a clear distinction must be made. Chemical weapons utilize toxic chemicals that cause direct effects on the victim, while biological weapons use living organisms that infect the victim and weaken their bodily functions.

Chemical weapons were developed similarly to biological weapons, albeit far later. The first modern chemical agents were developed during the Industrial Age, namely during the 19th century. Various countries were interested in the prospect of using them in war, and their first opportunity came with World War 1. Chlorine gas was widely used during the war, and mainly affected the respiratory system, and in higher doses, it caused severe lung damage and conditions like pulmonary edema. Soon after, mustard gas was developed and quickly put to use by the Germans, who used it in attacks against British and Canadian troops.

With the advent of WW2, the world's powers began research in a new, even more deadly form of chemical warfare: nerve agents. In contrast to previously popular chemical agents, nerve agents attack the nervous system by blocking the enzyme acetylcholinesterase, which catalyzes

acetylcholine. Acetylcholine is a neurotransmitter that controls muscle contraction and organ function. An excess of acetylcholine quickly leads to organ failure and death (within minutes), making nerve agents exponentially deadlier.

There are two main classes of nerve agents: G-series and V-series. G-series agents, named after their German creators, are known for evaporating quickly and not being long-lasting. All G-series agents were developed during or before WW2 by parties involved in the Holocaust. The first G-series agent, Tabun, was developed in 1936. Arguably the most well-known of the series, Sarin, was developed shortly after in 1939. Sarin is known for its extremely high lethality and ease of production, and is the most dangerous compound of the G-series.

In contrast to the non-persistence of G-series agents, V-series agents are liquids at room temperature and remain in the place they are deployed for long periods of time, usually rendering the area uninhabitable. This means that the primary hazard is skin contact. The most well-known V-series agent, VX, is an oily liquid and is incredibly deadly, due to its aforementioned persistence, as well as its odorless and colorless nature. Another cause of VX's notoriety is its use in the assassination of Kim Jong-Nam, Kim Jong-Un's older brother. After his visit to Langkawi, a resort island, he was sprayed with VX by two women at the Kuala Lumpur International Airport. He died 15-20 minutes later due to the effectiveness of the poison.

As the dangers of chemical and biological weaponry have now been discussed, the question remains: how crucial is the nonproliferation of biological and chemical weapons, and how should it be done?

II. Past International Action

The United Nations has created a significant amount of impact towards the prevention of biological and chemical warfare before 1990, and although these actions have proved useful, they were not enough to stop the issue at its core. The biggest example of this comes from a convention that occurred long before this issue had a significant impact, being the 1925 Geneva Protocol. Although the Geneva Protocol was before its time, it has still been the most impactful in stopping this issue, as part of the convention calls for the prohibition of the use of poisonous gases, biological weaponry, and other silent agents when it comes to acts of warfare. The League of Nations created the Geneva Protocol to specifically take care of this issue at hand; however, it didn't fully halt biological and chemical warfare because it didn't include enough enforcement of its specifics. This mainly includes how the convention did not ban the producing, developing, or stockpiling of these harmful agents, meaning that they could happen fully under the radar. Additionally, the usage of biological and chemical warfare was regularly used in retaliation attempts from multiple nations, which was a concept that was never properly imposed by the Geneva Protocol, leading to this issue mainly just being banned as a first use, and afterwards being allowed.

Following the Second World War, the UN had called for the removal of the main weapons of mass destruction (nuclear weaponry) as well as biological weapons. However, as nuclear weapons were clearly the forefront issue, biological weapons sneakily started to rise back into multiple conflicts, which ultimately caused the joining of the 1960s UN Committee on Disarmament. There, they drafted multiple conventions in stopping the development of biological weapons, therefore completing part of what the Geneva Protocol was supposed to do. Alongside this, the World Health Organization (WHO) published an essential study on the

consequential threats of biological warfare, mainly emphasizing their destruction of humanitarian expectations. Although these actions by the UN gained a lot of traction, especially through awareness, for the situation, it still wasn't enough, mainly due to the lack of legal binding for the nations involved. Because of this, many massive programs from even more massive countries did not come to a stop, eventually going on to cause all sorts of breaches for national security.

The main international activity that slowed this problem was the League of Nations' efforts for arms control in general. Throughout the 1920s-1930s, post-war drama had caused a multitude of discussions regarding the limitations of chemical warfare and weapons, alongside other dangerous forms of battery. Although these actions were not completely legally binding, they created a basis for which future negotiations among the topic of chemical warfare were based off of. The main reason for these actions not restricting anything physically was due to the overall lack of trust within the post-WW1 environment. Another crucial piece of action to lessen the detrimental impact of these weapons was the UN's General Assembly Resolutions in the 1960s. These resolutions strengthened the legal impact established by the norms of the Geneva Protocol, focusing on increasing the pressure on threatening nations. These resolutions, specifically resolutions 2162 and 2603, assisted in the international following of the Geneva Protocol, which is why it eventually had a lot of influence. However, while this solution increased the respect gained for the protocol, a complete lack of enforcement made it unable to remove chemical warfare as a significant problem.

III. Current Events - 1970

During this devastating period between 1960 and 1970, the initiatives that warranted the usage of biological and chemical warfare were mostly caused by multiple events during this time, and some of these events had to do with the creation of these weapons.

The main events that fostered bioweapons tended to be specific national programs, which is why a multitude of past actions, including the Geneva Protocol, focused on stopping them specifically. The main offender comes from the United States, where, between 1950 and 1969, the nation furthered its exploration into aggressive field testing as well as research experience. This may not seem detrimental at first, but these biological weapons and agents were being stockpiled, which means they could have been a massive potential issue. The US has multiple forts which foster open-air testing as well, which unexpectedly harmed civilians in 1950 when bacteria was dispersed over Virginia and San Francisco. Another offender of these national programs comes from the United Kingdom, which weaponized biological agents such as the plague in order to have a backup against potential threats. Tests and laboratory research are also relevant in the UK. Finally, the Soviet Union had a secret weaponization program for agents such as Anthrax in the 1950s, and it only came to the public eye around a decade later. Many of these programs were also related to the stockpiling of chemical weapons, and this would co-exist with the massive arms race at the time. A major example comes from British chemical weapons testing, where they tested a multitude of explosive experiments, not only causing multiple unwarranted deaths, but also giving the UK the power to generate even more arms.

Another massive event that caused the creation of both chemical and biological weapons was the Cold War. Due to the conflicts between the US and the Soviet Union, both sides invested heaps of money into the arms race, which included offensive chemical/biological agents. For

example, the US increased its production and field testing of biological warfare when the Soviet Union started to research potentially harmful agents. Both nations built massive facilities while creating extremely advanced nerve weapons to hinder their opposition. Multiple proxy wars that were caused by the Cold War also tended to see the brutal usage of chemical weapons, the main example coming from Egypt in the North Yemen Civil War in order to not lose their advantage.

IV. Case Studies

While biological and chemical warfare are often thought of as fairly new threats, their use predates the modern era and has, over time, repeatedly tested the boundaries of law. Before strong arms control treaties were established, sovereign states around the globe experimented with these weapons, often targeting marginalized groups with inhumane and unjust torture. The following three historical case studies, Japan's use of biological warfare during World War II, Germany's introduction of chlorine gas at the Second Battle of Ypres in WW1, and Italy's mustard gas campaign during the invasion of Ethiopia, highlight not only the horrifying human costs of these weapons but also the consistent failure of the international community to adequately prevent or punish their use.

Case Study #1

One of the most disturbing cases of biological warfare in human history is found in the operations of Unit 731, a unit of the Imperial Japanese Army operating until WW2. Established in the mid-1930s in Manchuria and led by General Shiro Ishii, Unit 731 presided over a program of human experimentation and biological weapons development. The victims were prisoners, Chinese civilians, Soviet POWs, and Korean forced laborers, who were deliberately infected

with diseases like typhoid, anthrax, the bubonic plague, and cholera, often through vivisection and forced exposure. Japanese forces also dropped bombs made of ceramic filled with plague-infested insects over Chinese cities and poisoned water sources to simulate outbreaks.

Case Study #2

Prior to Unit 731, during World War I, the world witnessed the first large-scale use of chemical weapons in a modern battlefield at the Second Battle of Ypres in 1915. Looking to break the stalemate of trench warfare, the Imperial German army released over 150 tons of chlorine gas across a 4-mile stretch. The gas, denser than air, sank into the Allied forces' trenches, causing thousands of soldiers to suffocate, choke, or suffer long-term respiratory damage. The attack caused chaos and compelled a temporary retreat, but more importantly, it marked the beginning of a new and terrifying era in human warfare.

Although international dialogue, i.e., the 1899 and 1907 Hague Conventions, explicitly prohibited the use of “asphyxiating gases,” The German Government argued that releasing gas from cylinders, as opposed to using “gas-filled projectiles”, did not *technically* violate these treaties. This loophole had massive consequences- once the Germans normalized gas use, other global powers quickly followed suit, and chemical warfare became routine for the remainder of the war. By the time of the Armistice, over 1.3 million men had suffered gas-related injuries. The Second Battle of Ypres serves as a reminder that stands the test of time of how easily agreements can be overlooked when language is vague and when enforcement mechanisms are inefficient or non-existent.

Case Study #3

An equally horrific (if not worse) case occurred two decades later, during the 2nd Italo-Ethiopian War (1935–1936). Itching to expand his colonial holdings in Africa, Mussolini's fascist Italy invaded Ethiopia, one of the very few independent African states at the time. Facing unexpected strong resistance from Ethiopian forces, Italian troops, with Mussolini's approval, resorted to the use of mustard gas, a chemical weapon banned under the 1925 Geneva Protocol, to which Italy was a signatory. Unlike the battlefield use of gas in World War I, Italy's chemical strikes in Ethiopia directly and intentionally targeted civilians and public infrastructure.

Mustard gas was released from the air, deployed through artillery, and even used to contaminate water sources and food supplies, which would eventually prove to be fatal. Hospitals and aid stations were also struck, in clear violation of the rules of war. Estimates suggest that 15,000 Ethiopians were killed by chemical attacks, with tens of thousands more permanently disabled or disfigured. Negus (Emperor) Haile Selassie of Ethiopia took the issue to the League of Nations, delivering a plea for justice that captured attention across the world. Despite condemning Italy's actions, the body only issued minute sanctions and failed to even enforce them. Major European powers such as Britain and France were wary of antagonizing Mussolini and pushing him closer to Hitler, so they refused to act decisively. This resulted not only in the continued use of chemical weapons but also in a deep erosion of trust in international institutions.

Together, these three cases, Unit 731, the Second Battle of Ypres during WW1, and the Italian invasion of Ethiopia, demonstrate the repetitive failure of the international system over time to effectively prohibit and punish the use of biological and chemical weapons. Each case involved clear violations of morality and, in some instances, preexisting treaties. Yet in each case, enforcement was either nonexistent or undermined by political calculations. These failures

are not just historical footnotes; they form the foundation of today's global insecurity surrounding these weapons of mass destruction.

V. Questions to Consider

1. Should the development of biological/chemical weapons be allowed purely for research purposes?
2. How strict should the enforcement of these weapons be?
3. Is there a benefit to allowing countries to produce these weapons and/or technologies?
4. How can the international community enforce global disarmament with ongoing conflicts and tensions (Cold War, Vietnam, etc)
5. How must the international community respond to terrorist groups using/stockpiling/developing biological and chemical weapons?

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