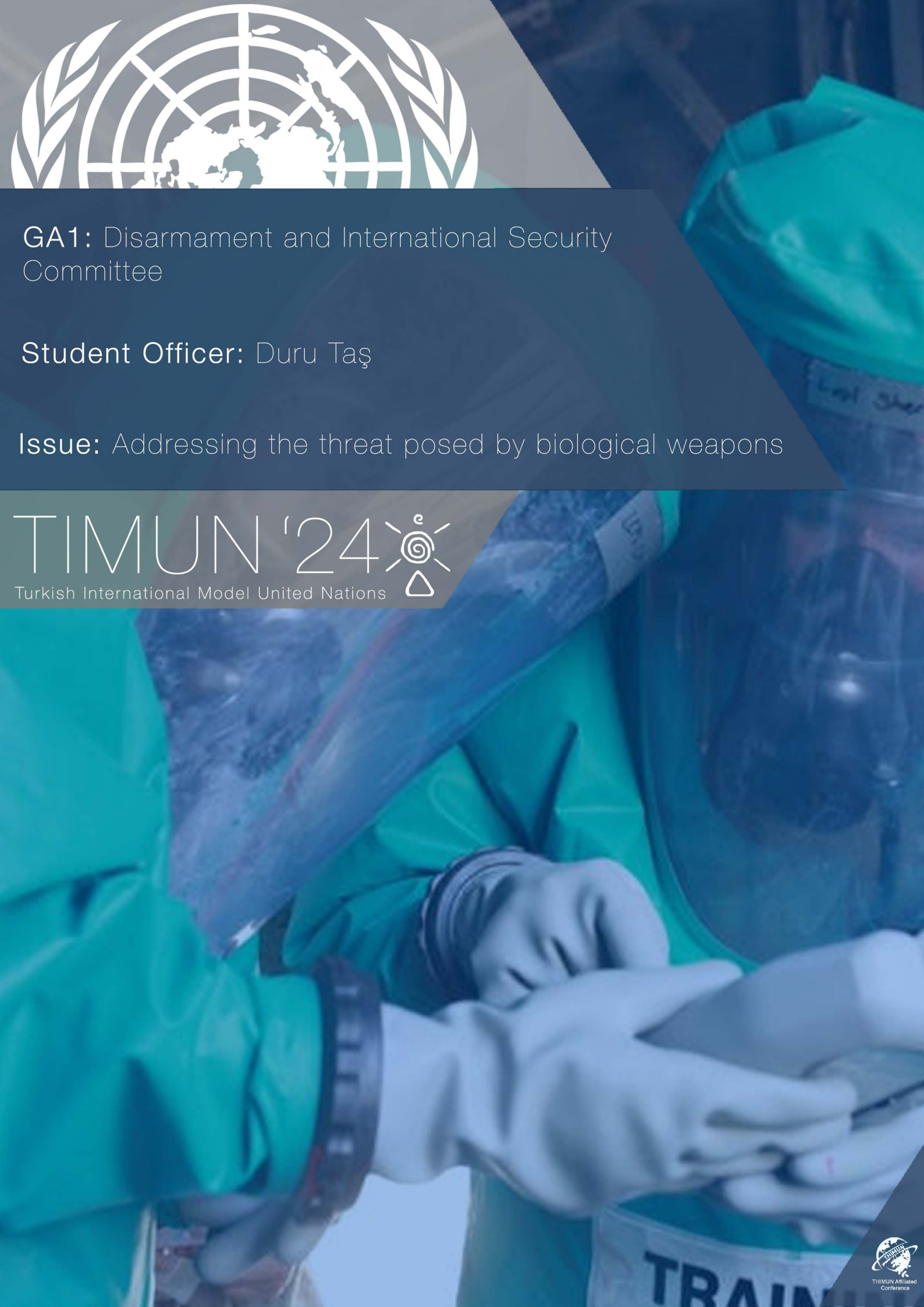

GA1: Disarmament and International Security Committee

Student Officer: Duru Taş

Issue: Addressing the threat posed by biological weapons

TIMUN '24

Turkish International Model United Nations

THIMUN Affiliated Conference

Committee: Disarmament and International Security Committee

Issue: Addressing the threat posed by biological weapons

Student Officer: Duru Taş – President Chair

I. Introduction

Biological and toxin weapons are either microorganisms like viruses, bacteria or fungi, or toxic substances produced by living organisms that are produced and released deliberately to cause disease and death in humans, animals or plants (World Health Organization). A category of weapons of mass destruction (WMD), biological weapons have the potential to cause significant harm and loss of life, as they can spread quite quickly and easily with neither detection nor control. The Biological Weapons Convention (BWC) which was established in 1972 aims to prohibit biological weapons with its 183 States Parties. However, there have been instances where these weapons have been used or attempted to be used, and the threat posed by biological weapons remains a pressing global security issue; especially with advancements in biotechnology. The potential misuse of biological agents has increased, making it critical to address the risks of bioterrorism and state-level biological warfare.

II. Involved Countries and Organizations

WHO (World Health Organization)

The World Health Organization is a specialized agency of the United Nations responsible for international public health. WHO provides assistance on public health responses to biological and chemical weapons. This assistance includes preparing national health systems to detect, verify, and respond to releases of biological agents. Additionally, WHO leads the the Global Outbreak Alert and Response Network (GOARN), which is a network of organizations working together to respond to disease outbreaks, including those caused by biological weapons. WHO also helps countries strengthen their public health surveillance and response systems. This includes improving national surveillance, biosafety and biosecurity measures, and communication among sectors.

NATO (North Atlantic Treaty Organization)

North Atlantic Treaty Organization (NATO) is an intergovernmental military alliance of North American and European countries. Banning biological weapons is a major issue for NATO, and the organization is highly involved in preventing their spread. NATO's measures are primarily focused on the prevention of the purchase of biological weapons by both states and non-state actors, the detection and disruption of any

illegal activities, and the protection of NATO member states against attacks. NATO member states are parties to the major treaties that ban or limit the usage of biological weapons, such as the Biological Weapons Convention (BWC). NATO also specializes in a number of initiatives, such as the Partnership for Peace (PfP) and the Mediterranean Dialogue which focus on cooperating with non-NATO countries on security and defense issues.

EU (European Union)

The European Union (EU) has 27 member states that are located primarily in Europe, and the organization is a political and economic union that aims to promote peace and security. The EU is a home to many of the more economically developed countries (MEDCs) such as Germany, France, Italy and Spain. The parties of the union have taken plenty of measures to prevent the spread of biological weapons with legal, diplomatic and other measures. The EU supports international agreements and initiatives, such as the Biological Weapons Convention (BWC). In order to support the treaties in practice, the EU has provided both financial and technical assistance to help nations meet the criteria of this treaty. In addition, the organization itself has established a number of centers, such as the European Union Non-Proliferation Consortium and the European Union Chemical, Biological, Radiological, and Nuclear Risk Mitigation Centres of Excellence.

USA (United States of America)

The United States, the largest economy in the world, is one of the few countries that possesses all types of weapons of mass destruction (WMDs), including biological weapons. The United States still possesses a chemical weapons stockpile that has been maintained over the years even after some measures that the country has taken to reduce, and eventually eliminate its stockpile. The United States has been a party to the Biological Weapons Convention (BWC) since 1975, which prohibits biological weapons. Yet, the United States still possesses a number of biological weapons contrary to the steps taken to prevent their use and reduce their numbers. The country faces criticism for maintaining a significant nuclear arsenal and being involved in conflicts based on weapons of mass destruction such as the Iraq War.

Russian Federation

Similar to the United States, Russia possesses all types of weapons of mass destruction, including biological weapons. Even though Russia is a signatory of various major international arms control treaties related to chemical and biological weapons, its actions have been a source of international concern. The country has been seen as a threat to global security as it has been accused of violating several arms control treaties, especially with the ongoing war in Ukraine. As a result, several countries have imposed economic sanctions on the country. In addition, Russia's role in the conflict in Syria has also raised concerns about its

use of chemical weapons as it has been accused of providing the Syrian government with chemical weapons that were then used against civilians. In 2020, it was confirmed that Russia used a chemical nerve agent to poison an opposition figure, Alexei Navalny, by the Organization for the Prohibition of Chemical Weapons (OPCW). In the end, it has been detected that Russia has currently used chemical and biological weapons.

China

China has an active biological weapons program, although the specifics of the program are not widely known. China is a signatory to the Chemical Weapons Convention (CWC) and the Biological Weapons Convention (BWC). Despite its commitments to disarmament, China's actions in recent years have raised concerns about its commitment. The country has been accused of providing support to other countries with questionable human rights records and of using its growing economic and military power to exert power in the region.

III. Focused Overview of the Issue

Even though one might tend to see the development of biological weapons as a recent technological advancement, their presence in human society has a long history, dating back to ancient times. However, as more modern versions have been developed over the past century, their effects and the extent of the damage they can cause have increased significantly. Nowadays, weapons that were used to harm small and specific groups in the past are now at a level that can lead to the destruction of cities and even states. Not only has the scope of the destruction caused by bioweapons increased, but their development has become easier for non-state bodies, causing bioterrorism to be one of the large risks associated with biological weapons to this day. Despite the signing of the Biological Weapons Convention in 1972, which prohibited the development, production, and stockpiling of biological weapons, concerns remain about the potential for their use by non-state actors or in bioterrorism attacks. Efforts to prevent the proliferation and use of biological weapons have been ongoing for many years and have included diplomatic initiatives, arms control agreements, and other measures aimed at promoting non-proliferation and disarmament.

1. History of the Usage of Biological Weapons

The history of biological weapons' use is as old as it is tragic. Some notable examples from the Middle Ages are "the Mongols catapulting bodies of plague victims over the city walls of Caffa, the Spanish mixing wine with the blood of leprosy patients to sell to the French and the British distributing blankets from smallpox patients to Native Americans" (https://pmc.ncbi.nlm.nih.gov/articles/PMC1326439/). As time passed and research on branches of biology such as medicine, toxicology and immunology expanded

humanity's knowledge on the spread of diseases, the invention of more severe biological weapons was just a matter of time.

The modern development of biological weapons began in the 20th century. During World War II, the Japanese were proven to have used biological weapons against the Chinese claiming many lives. In addition to this, the Japanese experimented and developed their biological warfare agents on thousands of captured Chinese, military and civilians. This development and others prompted the Allies to develop biological weapons of their own, although there is no other documented evidence of their use other than the Japanese. Despite this, during the war, the US' biological warfare program is known to have produced biological agents that could cause serious illnesses such as botulism and anthrax. Once again, during the Cold War biological weapons were developed and utilized by both blocs (see the Korean War if interested). Although allegations of biological weapons usage that did not turn out to be true and only increased public and political paranoia are more common than the actual usage of biological weapons during this time. One famous example is yellow rain, with the US alleging that the Soviet supported Vietcong used T-2 Mycotoxin which reportedly killed tens of thousands. In the end, scientific studies (Zhang, Zhongying; Chen Yu-Ming; Chow Shu; Li Min (1977). "A Study of the Origin and the Pollen Analysis of 'Yellow Rain" in Northern Jiangsu) concluded that the supposed "yellow rain" had occurred due to increased deposition of bee feces, consisting mainly of harmless pollen. However, perhaps the best example is the US' 2003 invasion of Iraq on the grounds that Iraq possessed weapons of mass destruction such as chemical, nuclear and biological weapons. Extensive inspection by UN personnel after the WarWar, proved that Iraq ran no illicit biological warfare program at the time of the invasion. Examples like this one show how the damage caused to international peace and diplomacy, the UN's core tenets, by biological weapons goes beyond their actual usage, development, proliferation or trade. It is thus important for the delegates to ensure unbiased and clear documentation of biological weapons' usage, development, proliferation and trade while establishing clear protocols and ensuring accountability for these acts.

One of the biggest events in the history of biological weapons came in 1969,when US President Nixon unilaterally declared an end to the US' biological weapons program.This accelerated movements towards biological weapons' nonproliferation culminating in the Biological Weapons Convention. With the convention, the development, production, and stockpiling of biological weapons were strictly prohibited internationally. Although at first the Western Bloc seemed to be obeying the treaty, the Soviets led clandestine research programs towards biological weapons' development after the treaty was signed. One proof of a breach of the treaty is the Sverdlovsk anthrax, an accidental leak of Bacillus anthracis, which caused around 70 people to be infected with anthrax and perish, although the exact figures are unknown. The US's complicated involvement in Iraq, however, showed that unfortunately none of the sides had obeyed their treaty obligations, as the US exported anthrax and botulism between 1985 and 1989 to Iraq.

A prominent example of another threat of biological weapons, bioterrorism, is the 1984 Rajneeshee attack, which was a plot to incapacitate voters. The attack proceeded when Rajneeshee's followers, poured contaminated glasses of water onto salad bars across some restaurants, which ended up causing 751 people to get Salmonella. Although no one died in the attacks, this occurrence is one of many demonstrating the ease and danger of bioterrorism. In order to eliminate the risk caused by bioterrorism, delegates need to focus on effective response mechanisms to biological attacks as well as on implementing robust measures at the state level to prevent non-state actors from possessing biological warfare agents.

2. Potential Threats

The threat posed by biological weapons has multiple sides. First of all, pathogen release, such as viruses and bacteria, can potentially reach out to populations great in size, infecting them with fatal illnesses. For instance, pox viruses can be used upon populations to disrupt the welfare of a nation. With the increasing trends in global travel, the spread of biological weapons has become much easier. Moreover, biological agents targeted towards a certain region have a high potential of spreading outside of the targeted region, increasing the devastation they can cause. Non-state actors, such as terrorist groups, might utilize biological weapons to damage crops and cause economic damage, or even eliminate a rival group.

3. Non-proliferation of Biological Weapons

Acknowledging the potential threats posed by biological weapons both governments and international organizations have been making efforts to eliminate biological agents. The World Health Organization has been working towards improving its surveillance systems in terms of detecting the production and smuggling of biological agents. In addition, the organization investigates areas where new infectious agents appear, analyzing whether there is a potential link to biological warfare. Governments launch biodefense programs with the purpose of both developing new treatment methods -possible protective methods such as vaccines and antidotes- and developing rapid response capabilities to disease outbreaks. Although international entities such as the WHO assist nations to this end, many Member States still do not have the capacity to deal with targeted and planned bio-attacks. Thus, it is crucial that delegates ensure capacity-building efforts and cooperation in the international community to enable less capable states to be prepared against biological terrorism. The utilization of international entities for this effort is very important. Another important factor is preventing non-state actors from owning such weapons in the first place. Although it is strictly prohibited by international law, the arming of dangerous state or non-state actors with chemical and biological weapons still occurs. Exercising a greater degree of control and surveillance to prevent more entities from possessing biological weapons is a much needed measure to reduce the threat posed by biological weapons.

Internationally recognized legislative measures, such as the Biological Weapons Convention already prohibit the development, production, acquisition, transfer, stockpiling and use of biological weapons. However, ever since its inception, many parties have been known to keep their operations running, albeit clandestinely. This has a few effects. Since biological weapons programs themselves are already illegal and very confidential, the use of their products for illegal ends, such as arming other nations or insurgencies, is made easier, as there exist no controls that apply to an illegal operation anyway. If we look at history, even false speculation of states owning or using biological weapons has been used as a precedent for war (see the 2003 Iraq War) and has caused great disruption to international peace and diplomacy. It is thus significant that trust between States is increased by ensuring greater transparency and cooperation for the elimination of biological weapons. Additionally, legislation at the state level, such as the U.S. Biological Weapons Anti-Terrorism Act criminalizes the usage of biological warfare. State-level legislation has the effect of increasing compliance with the BWC, and is usually welcomed as it signifies a commitment by the State in a way that the UN cannot enforce.

IV. Key Vocabulary

Biological Weapons: Biological weapons are microorganisms like viruses, bacteria or fungi, or toxic substances produced by living organisms that are produced and released deliberately to cause disease and death in humans, animals or plants. Biological weapons have the potential to cause significant harm and loss of life, as they can spread quite quickly and easily with neither detection nor control. The Biological Weapons Convention (BWC) which was established in 1972 aims to prohibit biological weapons with its 183 States Parties. However, there have been instances where these weapons have been used or attempted to be used after the convention. Preventive measures against the proliferation of biological weapons include the strengthening of international partnerships to detect and respond to any use of biological weapons, monitoring of research and development activities, and the implementation of export controls.

Weapons of Mass Destruction (WMDs): Weapons of Mass Destruction (WMDs) are biological, chemical and nuclear weapons. WMDs are all vital, and have the potential to injure or kill a large portion of a population. Moreover, WMDs seriously harm nature and the biosphere. The meaning of the phrase has changed over time, as the types of weapons it included has changed; and it's currently often used in politics. The term was first used to describe airborne chemical bombing during World War II, but it has since come to mean large-scale weapons for any form of warfare.

Bioterrorism: Bioterrorism is the deliberate use of biological agents, such as microorganisms, with the purpose of mass harm in living organisms. Although bioterrorism can be done by state actors, the main fear that stems from the use of biological weapons for terrorism is the potential for non-state actors to use it. Disrupting societies and damaging economies, bioterrorism poses a great risk. Being harder to detect due

to the natural possibility of emerging infections and diseases, they can be difficult to control and contain, increasing their fatality. Establishing accountability is even more difficult, as bioterrorism gives people with ill intent the ability to cause a lot of damage very swiftly and clandestinely.

Arms Race: An Arms race refers to the competition between states in developing and possessing advanced military technologies. Many different factors can drive an arms race, such as fears of aggression due to geopolitical tensions. The mere possession of WMDs can lead to an arms race since countries' aim in possessing these weapons can be interpreted as both for security and offensive purposes. Efforts to prevent WMDs relate to arms race as nations use them as a tool along the process.

V. Important Events & Chronology

Date (Day/Month/Year)	Event
1347	One of the first uses of biological weapons: Mongol forces catapult plague-infected bodies into Feodosiya, spreading Black Death across Europe.
1763	The British contaminate Native American tribes with smallpox-contaminated blankets.
1914-1918	During WWI, biological agents such as anthrax get researched by nations.
1925	The Geneva Protocol gets adopted, banning the use of biological weapons in warfare.
1939-1945	During WW2, Allied and Axis powers research potential biological agents.
1947-1991	During the Cold War, both Russia and the USA develops biological weapons programs and stockpiles agents.
1972	The Biological Weapons Convention is established, banning the production, storage, and transfer of biological weapons multilaterally.
1991	The production of biological agents in Iraq is detected by the UN.
2001	The 2001 Anthrax Attacks in the USA take place.

VI. Past Resolutions and Treaties

Geneva Protocol

The 1925 Geneva Protocol is a treaty that prohibits the use of chemical and biological weapons in international armed conflicts. It was signed on June 17, 1925, and came into effect on February 8, 19281. The protocol was established under the auspices of the League of Nations and was a response to the widespread use of chemical weapons during World War I. It bans the use of asphyxiating, poisonous gases, and bacteriological methods of warfare. The protocol applies to international armed conflicts between state parties. It does not address the production, storage, or transfer of chemical and biological weapons; these aspects were covered by later treaties like the 1972 Biological Weapons Convention and the 1993 Chemical Weapons Convention

Biological Weapons Convention

The BWC is a multilateral disarmament treaty that effectively prohibits the development, production, acquisition, transfer, stockpiling, and use of biological and toxin weapons. It was the first treaty to ban an entire category of weapons of mass destruction (WMD). The BWC prohibits the development, production, acquisition, transfer, stockpiling, and use of biological and toxin weapons. Signatory states must destroy or divert to peaceful purposes any existing stocks of biological agents and toxins, as well as any weapons or equipment designed to deliver them. Ilt bans the transfer of biological weapons to other states and prohibits assisting, encouraging, or inducing others to engage in activities prohibited by the Convention.

VII. Failed Solution Attempts

After the two World Wars, there were many attempts to reduce or eliminate the threat posed by biological weapons. Some were destroyed in order to prevent potential usage in future such as by the US after the 1969 Declaration by Nixon. In America's case it can be said that these efforts failed to eliminate the danger biological weapons caused to international peace because America continued storing and trading such weapons after these schemes.

The Geneva Protocol can be deemed as the first international treaty on biological weapons. The international community, alarmed by the use of weapons of mass destruction throughout World War One set out to the protocol, served as an effort to ban the use of both chemical and biological weapons.

However, it had excluded the production of them. The Biological Weapons Convention (BWC), signed after World War II, is the main convention that is still used among nations. It can be considered to have failed in its goals as many nations party to it have since been documented to stockpile, trade or produce biological weapons. There are UN resolutions that ban the usage of weapons of mass destruction, such as UN Security Council's Resolution 1540, asking Member States to refrain from supporting any actors and organizations that are not related to the government which maintain biological and chemical weapons. As a consequence, the United Nations Security Council is responsible for putting diplomatic sanctions on countries that violate non-proliferation agreements.

VIII. Possible Solutions

First and foremost, preventing the use of biological weapons requires international cooperation. Many parties such as but not limited to governments, non-governmental organizations, and civil society should all be involved in the process of disarmament. Especially in MEDCs where the civil society often does not experience the devastation of war, citizens should be informed on the stockpile of their country, and the possible effects of the usage of those weapons on other nations. Any treaties and agreements that are already in use, such as the Biological Weapons Convention (BWC) should be taken as a base-point and strengthened as they provide a frame point for the development of other possible treaties. Measures to insure compliance with the BWC should be explored. Weapons that can be detected should be secured and then eliminated by secure methods that are approved by UNSC's resolutions. Moving on, biological weapons' trade between nations should be strictly monitored by out-of-state organizations by means of detection. In addition, The World Health Organization (WHO) can provide support to mitigate the damage caused by biological weapons by means such as providing healthcare services, or providing emergency healthcare services in instances they're used.

IX. Useful Links

Biological Weapons, WHO

What are Biological Weapons?, UNODA

Use of Chemical, Biological Weapons Unacceptable in Any Context, Delegates Stress, as First Committee Continues General Debate, UN Press

The History of Biological Warfare, PubMed

Prevention of the Development or Use of Biological Weapons, PubMed

X. Works Cited

Annual WMD Report: How the EU Made the World Safer From Nuclear, Chemical, and Biological Weapons in 2020 | EEAS Website.

www.eeas.europa.eu/eeas/annual-wmd-report-how-eu-made-world-safer-nuclear-chemical-and-biological-weapons-2020_en.

Arms Control and Proliferation Profile: Israel | Arms Control Association. www.armscontrol.org/factsheets/israelprofile.

Biological Weapons. 4 Dec. 2019, www.who.int/health-topics/biological-weapons.

Biological Weapons Convention – UNODA. www.un.org/disarmament/biological-weapons.

"China and Proliferation of Weapons of Mass Destruction and Missiles: Policy Issues." *CRS Reports*, 5 Jan. 2015, www.everycrsreport.com/reports/RL31555.html.

"The Long History of Weapons of Mass Destruction." *openDemocracy*, www.opendemocracy.net/en/article_964jsp.

"Nations in Possession of Weapons of Mass Destruction as of 2016." *Wikipedia*, 2016, https://commons.wikimedia.org/wiki/File:Weapons_of_Mass_Destruction_by_Country_as_of_2016.png.

Nato. "Weapons of Mass Destruction." *NATO*, www.nato.int/cps/en/natohq/topics_50325.htm.

Nuclear Weapons – UNODA. www.un.org/disarmament/wmd/nuclear.

Treaty on the Non-Proliferation of Nuclear Weapons (NPT) – UNODA. www.un.org/disarmament/wmd/nuclear/npt.

Weapons of Mass Destruction | Homeland Security. www.dhs.gov/topics/weapons-mass-destruction.

Wikipedia contributors. "Weapon of Mass Destruction." *Wikipedia*, 12 Nov. 2024, https://en.wikipedia.org/wiki/Weapon_of_mass_destruction

"Graphic on Biological and Chemical Weapons." *CRP*, https://bioweaponsbrendanlam.weebly.com/crp.html Accessed 12 Nov. 2024.

"United Kingdom." *NTI*, www.nti.org/countries/united-kingdom/#:~:text=It%20currently%20possesses%20four%20ballistic,weapons%20programs%20in%20the%201950's . Accessed 12 Nov. 2024.

"United States biological weapons program." *Wikipedia*, https://en.wikipedia.org/wiki/United_States_biological_weapons_program#:~:text=When%20the%2

0U.S.%20biological%20warfare.equine%20encephalitis%20virus%2C%20and%20botulism

Accessed 12 Nov. 2024.