

World Health Organization (WHO)

Thomas Jefferson Model United Nations Conference

TechMUN XXXII



Middle School General Assembly

Co-Chairs: Neha Shetwal and Emily Toth

Thomas Jefferson High School for Science and Technology

April 11th - 12th, 2025

Dear Delegates,

Welcome to TechMUN XXXII and the World Health Organization! Our names are Neha Shetwal and Emily Toth, and we are excited to be your chairs for this committee! Whether you are a longtime MUN competitor or just starting out, we hope that this weekend will strengthen your collaboration and research skills, and give you insight into issues impacting our world. TechMUN XXXII will be on April 11-12, 2025. Throughout this conference, we will be debating the following topics: “Addressing the Impact of Bioterrorism and Biological Warfare” and “Regulating the Role of Private Corporations in Global Health Policy”. 1 overview. 2 overview. No matter the topic chosen, we hope you will have engaging discussions and debates to come to a solution that addresses multiple sides of these complex issues.

This weekend, we are looking for delegates who engage in diplomatic discussions and collaboration, present creative solutions, and demonstrate strong speaking skills. While this committee is a place for debate, it is of utmost importance to show respect and consideration towards other delegates. While participating, we hope that all of you are able to step out of your comfort zones and try something new. Try your best throughout the duration of this committee - we understand that conferences can be nerve-wracking, but we encourage you to put forth a good effort, and most importantly to have fun. Since these topics are quite complex and impactful, we suggest that you research them well in advance and come to committee ready to share what you’ve learned and realistic solutions for your fellow delegates to consider in their resolutions. If you have any questions on the topics, committee, flow, or MUN preceding, don’t hesitate to email us at whotechmun2025@gmail.com. We are excited to see you in April!

Neha Shetwal & Emily Toth

Co-Chairs, World Health Organization

Topic A: Addressing the Impact of Bioterrorism and Biological Warfare

Introduction:

Bioterrorism and biological warfare pose significant threats to global security, public health, and economic stability. Biological agents—such as bacteria, viruses, or toxins—can be weaponized to cause mass casualties, disrupt societies, and instill fear. Unlike conventional weapons, biological weapons have the potential to spread uncontrollably, making containment difficult. The history of biowarfare dates back centuries, from the use of infected corpses in medieval sieges to the 20th-century development of biological weapons programs by various nations. Today, with advancements in biotechnology, the threat of bioterrorism has evolved. The increasing accessibility of gene-editing technologies, such as CRISPR, has raised concerns that both state and non-state actors could develop biological agents with enhanced virulence or resistance to medical treatments.

The potential consequences of a bioterrorism attack are severe. In addition to causing widespread illness and death, such an attack could overwhelm healthcare systems, destabilize economies, and create lasting political tensions. The COVID-19 pandemic demonstrated how a biological event—though naturally occurring—can cripple global supply chains, strain public health infrastructure, and result in significant loss of life. It also exposed weaknesses in international preparedness and response strategies. The deliberate release of a biological agent would likely exacerbate these challenges, requiring swift and coordinated action to mitigate its impact. Despite international agreements such as the Biological Weapons Convention (BWC), gaps in enforcement and monitoring raise concerns about compliance. Given the increasing risks, the global community must assess how to strengthen preventive measures, response strategies, and cooperation to address the evolving threat of bioterrorism and biological warfare.

Current Situation:

With the rise of synthetic biology and gene-editing technologies, the ability to engineer more potent biological agents has increased. Additionally, global instability, terrorism, and political conflicts raise concerns about the use of biological weapons. The COVID-19 pandemic highlighted the devastating effects of uncontrolled biological agents on public health systems and economies. While COVID-19 was not a bioterrorism event, it underscored the vulnerabilities of healthcare infrastructures worldwide and emphasized the importance of preparedness. The World Bank estimated that the pandemic led to a 3.4% contraction in global GDP in 2020, demonstrating the economic toll a biological event can have.

Despite international agreements such as the Biological Weapons Convention (BWC), which prohibits the development, production, and stockpiling of biological weapons, enforcement remains a challenge. As of 2024, 185 nations have ratified the BWC, but compliance monitoring is limited. In regions with political instability, there is concern that bioweapons could be developed in violation of these agreements. Furthermore, a report from the Global Health Security Index found that 73% of countries remain inadequately prepared for biological threats. Many developing nations lack the necessary surveillance and response mechanisms, making them more vulnerable to biological attacks. Misinformation and fear surrounding biological threats can also exacerbate public panic, complicating response efforts. The increased accessibility of biotechnologies, combined with the potential for dual-use research (scientific research that can be used for both beneficial and harmful purposes), raises ethical and security concerns about regulating advancements in the field.

Possible Solutions:

As nations work to combat the threat of bioterrorism and biological warfare, there are

several key factors to consider: One major concern is surveillance and early detection. Nations must assess how disease monitoring systems and international data-sharing can be improved to detect potential biological threats more effectively. Given the challenges in tracking biological threats, international regulations and compliance measures must be reviewed. It is important to consider whether updates or reinforcements should be made to the Biological Weapons Convention (BWC) and other international treaties to prevent the misuse of biological research.

Healthcare infrastructure and emergency preparedness are critical in responding to biological attacks. Hospitals and healthcare systems must be better equipped to handle large-scale outbreaks. Research and countermeasures, including funding for vaccine development and antimicrobial resistance research, may play a role in mitigating the effects of biological threats. Given the importance of scientific progress, nations must also evaluate how to balance biosecurity with innovation, particularly in areas such as synthetic biology.

Another pressing issue is public awareness and misinformation. Governments and organizations must explore ways to raise awareness about biological threats while preventing panic and the spread of misinformation. International cooperation and intelligence sharing are also vital, as nations must determine how to strengthen ties between intelligence agencies, health organizations, and governments to better assess and respond to bioterrorism threats. Finally, equitable access to medical resources must be addressed, as disparities in vaccine distribution and healthcare access could worsen the impact of a biological attack.

Questions to Consider:

1. How can innovation and regulation of technology be balanced to encourage new biological techniques without creating a threat to society?

2. How can both individual countries and the WHO as a whole work to prepare for a biological disaster?
3. How can private companies be used to aid with preventing bioterrorism? How could these companies be regulated to ensure they do not create further biological issues?

Helpful Links:

1. https://www.who.int/health-topics/biological-weapons#tab=tab_1
2. <https://www.dhs.gov/publication/biological-attack-fact-sheet>
3. <https://disarmament.unoda.org/biological-weapons/about/what-are-biological-weapons/>



Topic 2: Regulating the Role of Private Corporations in Global Health Policy

Introduction:

Private corporations play a significant role in global health policy, influencing healthcare access, pharmaceutical development, and disease prevention efforts. In recent decades, multinational pharmaceutical companies, biotechnology firms, and healthcare providers have expanded their influence, often operating beyond national borders. These corporations contribute to innovation in medicine, vaccines, and medical technology, yet their role raises concerns about ethics, accessibility, and the prioritization of profit over public health. With the increasing privatization of healthcare services and the reliance on private funding for global health initiatives, questions arise about accountability and equity in healthcare distribution.

Historically, private corporations have partnered with governments and international organizations to combat global health crises. During the COVID-19 pandemic, pharmaceutical companies played a crucial role in vaccine development and distribution. However, disparities in vaccine access exposed inequalities in global health governance, as wealthier nations secured doses ahead of lower-income countries. The pharmaceutical industry's patent protections and pricing strategies often place life-saving treatments out of reach for vulnerable populations. Similarly, private insurance companies shape healthcare access in many countries, determining who can afford essential services. Additionally, corporations with interests in food, tobacco, and environmental policies significantly impact global health outcomes, influencing non-communicable diseases such as diabetes and heart disease.

As the presence of private corporations in healthcare grows, governments and international bodies must assess how to regulate their role in a way that balances innovation with

ethical responsibility. The challenge lies in ensuring that corporate involvement enhances public health rather than exacerbates disparities. Examining regulatory frameworks, corporate social responsibility initiatives, and the role of international organizations in oversight will be essential in addressing these concerns.

Current Situation:

Private corporations control significant portions of global healthcare, with pharmaceutical companies alone generating over \$1.5 trillion in revenue in 2023. The World Health Organization (WHO) reports that, despite advancements in medicine, nearly 2 billion people still lack access to essential medications due to high costs and limited distribution. Patent protections on new drugs allow corporations to set high prices, often making life-saving treatments unaffordable for low-income populations. The monopolization of vaccine production and distribution by a handful of companies during the COVID-19 pandemic further highlighted the challenges in equitable access.

The privatization of healthcare services in many nations has led to disparities in healthcare quality. In the United States, private insurance determines medical access for millions, while in developing nations, public-private partnerships aim to fill gaps left by underfunded health systems. However, reliance on corporate funding can lead to conflicts of interest. The WHO estimates that 60% of healthcare research funding now comes from private sources, raising concerns about whether public health priorities align with corporate interests. Additionally, industries such as fast food, tobacco, and pollution-heavy manufacturing contribute to public health crises, yet wield considerable political influence to resist regulation.

Despite international agreements aimed at improving global health equity, such as the Doha Declaration on TRIPS and Public Health, enforcement remains inconsistent. A 2022 study found that only 43% of countries have comprehensive regulations ensuring that essential medicines remain affordable. The challenge remains in balancing corporate innovation with equitable healthcare access while preventing profit-driven models from dictating global health policies.

Possible Solutions:

As governments and international organizations examine corporate influence in global health policy, several key factors must be considered:

One critical issue is access to affordable medicine. It must be determined how to balance intellectual property protections with the need for widespread access to life-saving treatments. Should patent laws be reformed to encourage equitable distribution, or should alternative models such as compulsory licensing be expanded? Additionally, pricing transparency and cost regulations may be necessary to ensure affordability without discouraging pharmaceutical innovation.

Another challenge lies in the ethical responsibilities of private corporations. Should companies be legally required to reinvest a portion of their profits into global health initiatives? Consider whether stronger corporate social responsibility (CSR) frameworks or independent oversight bodies should be implemented to hold corporations accountable for their impact on public health.

Public-private partnerships (PPPs) play a major role in funding health initiatives. While these collaborations can be beneficial, they may also lead to conflicts of interest. How can

international organizations ensure that corporate funding supports public health priorities rather than private interests? It is important to assess potential regulatory frameworks that promote transparency and accountability in PPPs.

Additionally, the influence of corporations on health policies raises questions about governmental oversight. Should international regulations limit lobbying efforts by private healthcare and pharmaceutical companies? Should there be restrictions on corporate involvement in public health decision-making processes? The balance between industry input and unbiased policymaking must be carefully examined.

Lastly, the intersection of global trade and health policy is crucial. International agreements, such as those governing intellectual property and trade regulations, impact healthcare access worldwide. How can global institutions ensure that trade policies do not hinder efforts to combat public health crises?

Questions to Consider:

1. How can companies be encouraged to thrive amidst regulation?
2. How can consumers have equal access to reasonably-priced healthcare while corporations attempt to cut costs and increase their own margins?
3. How can innovation be encouraged to private companies while still ensuring they do not take advantage of labor or create unfair situations for consumers?
4. How can competition in private corporations be encouraged without creating monopolies?

Helpful Links:

1. <https://healthpolicy-watch.news/getting-global-health-on-the-radar-of-private-sector-investors-and-asset-managers/>
2. <https://www.nti.org/risky-business/the-private-sectors-role-in-advancing-global-health-security/>
3. <https://pmc.ncbi.nlm.nih.gov/articles/PMC3075225/>



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