Topic 1: Balancing National Security and Public Health in Countering Bioterrorism

United Nations Security Council

I. Introduction

We can define bioterrorism as the intentional use of viruses, bacteria, or other biological substances that aim to harm people, animals or crops. The United Nations Office for Disarmament Affairs describes it as the "intentional misuse of biological agents or toxins, by non-State actors, for hostile purposes". The risks of bioterrorism concern both public health and international security. This being, a deliberate outbreak would not only threaten lives but could also destabilize societies and cross borders rapidly.

After the COVID-19 pandemic, the urgency of this debate has been made clear. COVID-19 showed how a single outbreak can overwhelm health systems and disrupt or even collapse economies worldwide. Simultaneously, rapid developments in biotechnology have made research more accessible, prompting concerns that threat actors could misuse scientific progress. As former UN Secretary-General Kofi Annan once warned, "a single attack could kill as many people as a nuclear weapon."

The international community has thus established key frameworks to address these risks. The 1972 Biological Weapons Convention (BWC) declares in Article I that "each State Party undertakes never in any circumstances to develop, produce, stockpile or otherwise acquire or retain biological weapons. Additionally, UN Security Council Resolution 1540 (2004) obliges all states to adopt the required measures to prevent non-state actors from obtaining weapons of mass destruction, including biological agents. On the public health front, the World Health Organization´s International Health Regulations (2005) stresses the significance of reinforcing "global capacities to detect, assess, and respond to public health emergencies of international concern."

This topic is being addressed by the Security Council seeing as it is fundamentally about balance. Balance being a synonym of the prevention and counteraction towards bioterrorism whilst at the same time signifying the protection of scientific cooperation, human rights and public health systems. The dangers of passivity or inaction are essentially worldwide vulnerability to a biological threat as unsettling to stability as any traditional weapon of mass destruction.

II. Key Terms

Bioterrorism: This term defines itself as the intentional use of harmful biological agents such as bacteria, viruses, or toxins to cause illness, death, or panic. Bioterrorism is usually carried out by groups or individuals to spread fear and destabilize societies.

Biological Weapons: A biological Weapon goes under the description of any weapon that uses living organisms (like bacteria or viruses) or their by-products (toxins) to inflict damage. They are banned under 1972 Biological Weapons Convention, but concerns remain about their possible use by state and non-state actors.

Dual-Use Research: Scientific research that can be used for both positive and negative purposes. For example, research on viruses can help create vaccines but could also be misused to make a stronger or more dangerous pathogen. A pathogen being any microorganism or agent that can cause disease in a host organism, invading the body and disrupting normal health.

National Security: The measures a state takes to protect its people, territory, and institutions from threats. In the case of bioterrorism, this includes intelligence-sharing, border security, and emergency preparedness.

Public Health Security: The capacity of governments and health systems to detect, prevent, and respond to disease outbreaks, whether natural such as Ebola or COVID-19, or deliberate (bioterrorism).

III. Past International Actions

Biological Weapons Convention (BWC), 1972: The BWC is known as a bedrock treaty that doesn't allow the development, production, and stockpiling of biological and toxin weapons. The principal objective of the BWC is to avoid and prevent the use of biology as a weapon of mass destruction. Although broadly signed and ratified, the convention has reduced verification mechanisms, which has been an ongoing concern for global security.

UN Security Council Resolution 1540, 2004: Implemented in 2004, this resolution forces all UN member states to prevent non-state actors from acquiring weapons of mass destruction, incorporating biological weapons. It calls on countries to adopt both legal and administrative measures in order to control access to dangerous materials, strengthen border security, and enhance cooperation on intelligence and enforcement.

International Health Regulations (IHR), 2005: IHR, coordinated by the World Health Organisation, aim to reinforce a countries´ ability to detect, report, and respond to public health emergencies that could cross borders. These regulations emphasise complete transparency, instant information flow, and the development of national disease surveillance systems to avoid outbreaks, whether natural or deliberate.

UN Convention Against Transnational Organised Crime (UNTOC), 2000: Alternatively referred to as the Palermo Convention, this treaty targets organised criminal networks that could essentially participate in or enable bioterrorism. It requires member states to criminalise organised criminal activities, promote international cooperation, and provide frameworks for mutual legal assistance.

Global Health Security Agenda (GHSA), 2014: This is an international partnership with the purpose of improving countries capacities to prevent, detect, and respond to infectious disease threats, including deliberate outbreaks. It promotes countries´ development of national action plans, enhances laboratory systems, and participate in cross-border cooperation.

UN General Assembly Resolution A/RES/35, 2009: This resolution called on states to execute the BWC fully and to strengthen international cooperation to counteract bioterrorism. It underlines the importance of balancing security measures with the freedom of scientific research and public health development.

IV. Timeline of Key Events

1972	Biological Weapons Convention adopted: Prohibiting the development, production, and stockpiling of biological weapons
1984	Rajneeshee Salmonella attacks USA. One of the first modern cases of domestic bioterrorism, showing how vulnerable public health systems could be.
1995	Tokyo Subway Sarin Attack
2001	Anthrax Attacks (USA), shortly after 9/11: leading to the necessity of strengthening national and international preparedness measures.
2003	UNTOC and Palermo Protocols adopted
2004	UN Security Council Resolution 1540: focused on strengthening national laws and international cooperation
2005	International Health Regulations (IHR) revised: states are required to report certain public health events to the WHO within 24 hours of determining that an event may pose a threat to international public health

2014	Global Health Security Agenda (GHSA) launched: multilateral initiative aimed at strengthening global health security and preventing, detecting and responding to infectious disease threats
2016	West Africa Outbreak
2020	COVID-19 Outbreak

V. Current Situation

To this day, the topic of bioterrorism persists to be a complex challenge that intersects with national security and public health. Even though an attack of a larger scale is rare, the threat continues to evolve day after day due to the constant development of technology, global mobility and evidently the emergence of infectious diseases.

Trends and Modern Challenges

- Advances in Biotechnology and Synthetic Biology: New technologies such as CRISPR gene editing (revolutionary technology that allows for precise, targeted changes to the DNA of living organisms and stands for Clustered Regularly Interspaced Short Palindromatic Repeats), make it easier for scientists to study pathogens but also raise the risk of misuse. Dual-use research is becoming a growing concern for regulators and governments.

Increased Global Connectivity: The increase of international travel and trade essentially means that biological threats can quickly spread across borders, making coordinated international response more critical than ever.

- Adaption During COVID-19: The 2020 pandemic exposed many vulnerabilities in public health systems such as gaps in early warning, testing and furthermore in healthcare capacity reflected by the over occupation in healthcare institutions all around the world. Lessons learnt from COVID-19 are now being applied to reinforce proactiveness and competence against deliberate biological threats.

- Cybersecurity and Bioterrorism: Modern bioterrorism readiness increasingly involves cyber tools, seeing as critical infrastructure and biological research databases can be targeted. There has been a rising concern that cyberattacks could complement biological threats by for example disrupting healthcare responses.

Non-State Actor Risk: Whilst state-sponsored biological weapons programs are rare, extremists groups could attempt to exploit biological materials, either directly or by targeting public health systems.

Ongoing efforts and International Cooperation

- Strengthening Global Health Security: Different initiatives such as the Global Health Agenda (GHSA) continue to build capacity in disease surveillance, laboratory networks, and rapid disease response systems.
- Updating Legal and Regulatory Frameworks: Countries are now reviewing national laws to comply with the BWC and UNSCR 1540, aiming to control access to dangerous pathogens while balancing scientific research.
- Cross-Border Collaboration: Organisations such as the WHO, INTERPOL, and regional health bodies work to share information, coordinate responses, and conduct joint exercises in order to stimulate outbreaks.
- Investment in Research and Preparedness: Governments are investing in vaccine development, stockpiles of medical countermeasures, and training healthcare professionals to respond to both natural and deliberate biological events.

All in all, the situation at the time reflects a dynamic and increasingly evolving landscape. Even though the threat of large-scale bioterrorism remains low, the combination of technological development, global mobility, and ongoing gaps in readiness means that countries and international organisations must remain vigilant. The current debate in the Security Council focuses on the best way to balance national security measures with public health priorities without hiding scientific progress or civil liberties.

VI. Major Parties Involved

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United States:The U.S. is considered as both a primary target and a policy leader in countering bioterrorism. This is due to its experience of direct attacks, such as the 2001 anthrax letters , which exposed vulnerabilities in public health and national security. In response, the U.S. government has implemented comprehensive measures including the Patriot Act and the Public Health Security and Bioterrorism Preparedness and Response Act (2002). The U.S. is actively involved in shaping international norms through the BWC and UNSC resolutions and frequently pushes for stronger enforcement mechanisms. Its extensive research capabilities, border controls, and intelligence networks make it a key actor in global security. However, its policies are creating tensions in some cases with other states over sovereignty and bioethics.

United Kingdom: The UK is an active participant that plays a major role as both policy-maker and contributor to international bioterrorism prevention efforts. (It supports intelligence-sharing, global health initiatives, and the implementation of UNSC 1540 obligations). In its past, the UK has experienced minor domestic threats which have contributed to the development of its internal emergency response. This sovereign state collaborates closely with the U.S. along with other allies in research, surveillance, and crisis management. In this way, positioning itself as a separation between security-focused and health-focused approaches.

Russia: Due to its significant historical expertise in biological research, Russia is a primary policy actor with past experience. While officially it adheres to the BWC, it is careful with verification measures, citing sovereignty concerns. Russia highlights the importance of national control over sensitive biological materials and often prioritizes state-centred security measures. Its international relationships can be tense when it perceives Western-led initiatives as intrusive. Nonetheless, it participates in discussions on global health and bioterrorism through multilateral forums.

China: China is a key policy participant with constantly growing capabilities in biotechnological and public health. Currently, it has been investing heavily in disease surveillance, laboratory networks, and pandemic prevention/preparation. China advocates for WHO-led approaches and stresses multilateral cooperation over unilateral security measures. Whilst it is a supporter of UNSC efforts to prevent non-state actors from acquiring biological weapons, its international transparency has occasionally been questioned. This evidently affects diplomatic trust and information sharing during global outbreaks.

European Union: The EU functions as a regional policy maker and coordinator of bioterrorism preparation among member states. Through initiatives such as the EU CBRN Action Plan, the EU strengthens cross-border response, surveillance, and legal frameworks. The EU works with the WHO and other international organisations, promoting harmonised standards for public health and security. Its collective approach balances national sovereignty with the need for coordinated action, positioning the EU as a key actor in global health diplomacy.

Middle East / North Africa (MENA) Region

VII. Key topics to Debate

- How effective are treaties like the Biological Weapons Convention (BWC) and resolutions such as UNSCR 1540 in preventing bioterrorism?
- Should there be stronger verification mechanisms or enforcement measures?
- How can international law balance security with scientific research and public health?
- How should states prioritize security measures without compromising public health systems?
- Can emergency preparedness for bioterrorism coexist with routine disease control and health care delivery?
- What policies best prevent dual-use research from being misused without hindering scientific progress?
- How can states and international organizations prevent extremist groups from acquiring biological agents?

- Should intelligence-sharing be expanded to include regional alliances and private research institutions?
- How can international law address crimes committed by non-state actors in a globally coordinated manner?
- What role should wealthier nations play in funding preparedness and response in vulnerable regions?
- How can global inequality affect the risk and impact of bioterrorist attacks?
- Could cyber attacks on health infrastructure or research facilities amplify biological threats?

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