Topic B: Strengthening International Response to Antimicrobial Resistance

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I. INTRODUCTION

Dear delegates of the World Health Organization (WHO),

During this debate, you will discuss the current topic: **Strengthening International Response to Antimicrobial Resistance.**

Antimicrobial resistance (AMR) is one of the greatest global health challenges of the 21st century. It occurs when microorganisms evolve to resist antimicrobials —medicines used to treat bacterial and viral infections— due to their misuse or overuse. Strengthening global collaboration and investment in research is crucial to safeguarding modern medicine and global health security.

The World Health Organization seeks great outcomes from the debate and its goal is to plan a reform regarding this topic.

Welcome to the Olinca Model United Nations (OLINMUN) 2026.

Yours sincerely,

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Head of Committee of WHO

Camila Barrientos Chavero
Chair of WHO

Felipe Torres Linares
Moderator of WHO

Luis Eduardo Colocía Mascott
Deputy Chair of WHO

NOTE: We highly recommend you thoroughly read the following document and the Delegate Handbook. We expect they will provide an overview of the topics discussed and allow you to acquire crucial information about the rules of procedure.

II. OVERVIEW

A. COMMITTEE'S BACKGROUND

The World Health Organization (WHO) oversees global health matters, providing technical assistance to countries and evaluating health crises. Within its main purposes we can find preventing the propagation of infectious diseases, looking forward to having good health conditions worldwide, and finding solutions regarding health deficiencies or problems. WHO has 194 Member States, which are in 6 different regions. Members of WHO must also be part of the United Nations and must have accepted its Charter which is firmly committed to the following:

- Health is a complete state of well-being socially, physically, and mentally, not only the absence of sickness.
- Health for all people is fundamental for keeping peace and security and it depends on the cooperation of individuals and States.
- The accomplishments of any State regarding protection of health are rewarding for every individual.
- The unequal development in different countries regarding promotion of health and sickness control, especially transmissible, is a common danger.
- Children's healthy development is very important, as well as living peacefully in a place in constant change is essential for its development.
- Governments are responsible for the health of people via sanitary and social measures.

B. COMMITTEE'S ACHIEVEMENTS

Since its founding in 1948, the World Health Organization (WHO) has had various achievements with the objective of promoting health, keeping the world safe and serving the vulnerable; some of the most significant achievements WHO has had are:

- The reduction in Malaria Transmission
- The erradication of Smallpox
- The fight against Tropical Diseases
- Making Hepatitis C medication affordable
- Bringing yellow fever under control
- The management of the COVID-19 pandemic

Additionally, WHO established the first International Health Regulations which represents an agreement by WHO members to present and respond to public health issues that threaten people worldwide.

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III. STRENGTHENING INTERNATIONAL RESPONSE TO ANTIMICROBIAL RESISTANCE

Antimicrobial Resistance (AMR) has emerged as one of the most urgent and complex global health threats of the 21st century. Over recent years, the world has witnessed a significant rise in drug-resistant infections across all regions, affecting countries of every income level. AMR occurs when microorganisms—including bacteria, viruses, fungi, and parasites—develop the ability to withstand antimicrobial medicines that were previously effective in treating them. This process leads to persistent infections, increased spread of disease, long-term disability, and approximately 4.95 million deaths annually, according to recent global analyses.

Although the global health community has strengthened its response only in the past decade, AMR has existed almost since the introduction of penicillin. The *Journal of Medicine, Surgery, and Public Health* (2024) highlights that resistance began developing shortly after the discovery and widespread use of the first antibiotics. Today, the main drivers of AMR include the overuse, misuse, and inappropriate prescription of antibiotics in humans, livestock, and agriculture. These practices accelerate genetic mutations, enzyme modifications, and other mechanisms that allow pathogens to evade antimicrobial treatments.

AMR affects every region of the world, but its impacts are disproportionately severe in communities facing poverty, limited access to clean water, inadequate sanitation, and weak or unequal health systems. ScienceDirect (2024) describes the current situation as a "silent pandemic," with rising mortality rates and a growing number of common infections becoming harder—or sometimes impossible—to treat.

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According to the Global Antimicrobial Resistance and Use Surveillance System (GLASS) report (2022), resistance levels in several pathogens are already alarming. Among 76 countries reporting:

- 42% of *E. coli* samples were resistant to third-generation cephalosporins.
- 35% of *Staphylococcus aureus* samples were methicillin-resistant (MRSA).
- *Klebsiella pneumoniae*, a common cause of pneumonia and bloodstream infections, showed high resistance to multiple antibiotic classes.
- 25% of urinary tract infections caused by *E. coli* were no longer responding to widely used treatments such as cotrimoxazole and fluoroquinolones.

Even routine infections now require more complex, expensive, and prolonged treatments, placing unprecedented pressure on health systems.

The economic repercussions of AMR are equally severe. The Center for Global Development (CGD, 2024) estimates that if AMR continues to rise:

- Total global health-care costs could reach US$325 billion by 2050.
- The global economy could shrink by US$1.7 trillion due to reduced productivity and increased health expenditures.
- Current annual costs associated with AMR already surpass US$66 billion.
- Tourism and hospitality sectors may face substantial losses, particularly in countries reliant on international travel.

AMR also threatens the foundations of modern medicine. Many medical procedures—such as organ transplants, chemotherapy, cesarean sections, diabetes management, and major surgery—depend on effective antimicrobial drugs to prevent life-threatening infections. Without effective antibiotics, the safety and feasibility of these procedures would be severely compromised.

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In response, the World Health Organization launched the Global Antimicrobial Resistance and Use Surveillance System (GLASS) in 2015 to standardize international data collection, close knowledge gaps, and guide evidence-based responses. As WHO stated in 2023, “the spread of AMR does not recognize country borders,” underscoring the need for strong international coordination and surveillance.

Despite ongoing efforts, research and development of new antimicrobials remain insufficient. Very few new antibiotics are in the development pipeline, and many of those currently being tested may offer limited benefits due to rapidly evolving resistance. Strengthening innovation, ensuring equitable access to new treatments, and improving global stewardship programs are urgent priorities for the coming years.

IV. KEY POINTS FOR DEBATE

1. The rising threat of drug-resistant diseases
    a. What are the global implications of common diseases, such as gonorrhea, becoming resistant to all available antimicrobials?
2. Economic impact on patients
    a. Individuals with drug-resistant infections face significantly higher healthcare costs due to prolonged treatments, additional tests, and increased hospitalization periods.
3. Forecasted regions with highest AMR mortality
    a. Current projections indicate that by 2050, South Asia, Latin America, and the Caribbean will face the highest AMR-related mortality rates.
4. Effects on high-risk medical procedures
    a. AMR endangers the safety of procedures requiring strong infection control, including organ transplants, cesarean deliveries, chemotherapy, and major surgeries.
5. Non-antimicrobial medicines linked to AMR
    a. Research indicates that the misuse of non-prescription medications such as paracetamol and ibuprofen may contribute to increased antimicrobial resistance, highlighting a need to examine broader medication practices.

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IV. ANNEXES

A. LIST OF COUNTRIES

1. Cambodia
2. Canada
3. China
4. Djibouti
5. Egypt
6. Eritrea
7. Ethiopia

8. Honduras
9. Japan
10. Kenya
11. Philippines
12. Russian Federation
13. Saudi Arabia
14. Somalia
15. South Sudan
16. Sri Lanka
17. Sudan
18. Sweden
19. Switzerland
20. Somalia
21. Uganda
22. United Kingdom
23. United States of America
24. Yemen

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B. REFERENCES

Ahmed, S. K., Hussein, S., Qurbani, K., Ibrahim, R. H., Fareeq, A., Mahmood, K. A., & Mohamed, M. G. (2024). Antimicrobial resistance: Impacts, challenges, and future prospects. *Journal of Medicine, Surgery, and Public Health*, *2*, 100081. https://doi.org/10.1016/j.glmedi.2024.100081

Asian Development Bank. (2021). *Enhancing Regional Health Cooperation under CAREC 2030: A Scoping Study* (Afghanistan,Armenia,Azerbaijan,China, People's

Republic of,Georgia,Kazakhstan,Kyrgyz Republic,Mongolia,Pakistan,Tajikistan,Turkmenistan,Uzbekistan). Asian Development Bank. http://dx.doi.org/10.22617/TCS210237-2

McDonnell, A., Countryman, A., Laurence, T., Gulliver, S., Drake, T., Edwards, S., Kenny, C., Lamberti, O., Morton, A., Shafira, A., Smith, R., & Guzman, J. (2024). *Forecasting the Fallout from AMR: Economic Impacts of Antimicrobial Resistance in Humans*. https://www.cgdev.org/publication/forecasting-fallout-amr-economic-impacts-antimicrobial-resistance-humans

University of South Australia. (n.d.). *Common painkillers linked to antibiotic resistance*. University of South Australia. Retrieved December 8, 2025, from https://unisa.edu.au/media-centre/Releases/2025/common-painkillers-linked-to-antibiotic-resistance/

World Health Organization. (2023, November 21). *Antimicrobial resistance*. https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance

World Health Organization. (2025, November 19). *More countries report rising levels of drug-resistant gonorrhoea, warns WHO*. https://www.who.int/news/item/19-11-2025-more-countries-report-rising-levels-of-drug-resistant-gonorrhoea--warns-who

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