

WeMUN I



WORLD HEALTH
ORGANIZATION

Welcome delegates!

We are so honored to be your chairs for the inaugural WeMUN World Health Organization committee. The topics we'll debate, ranging from preventing infectious diseases in impoverished countries to the impact of the climate crisis on health, are highly relevant to the current global atmosphere and we hope they will allow for passionate, genuine, and diplomatic discussions. We understand that a virtual MUN experience differs greatly from an in-person conference, but we're confident that such a unique experience will make the committee more memorable for all delegates.

While the World Health Organization serves multiple functions, its central objective is to develop collaborative solutions to promote international public health. For its entire history, impact, and current involvement, we'll refer you directly to their website: <https://www.who.int/about>.

If you have any questions about the background guide, position papers, WHO, or MUN in general, feel free to email us at huzaiifa781@gmail.com, and we'll get back to you as soon as possible.

Looking forward to seeing you all!

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Topic I: Preventing Infectious Diseases in Impoverished Countries

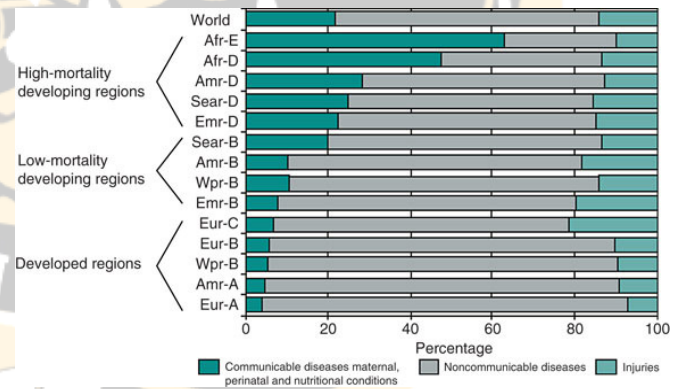
Introduction:

According to the Mayo Clinic, infectious diseases are disorders caused by organisms such as bacteria, viruses, fungi, or parasites. Many of these organisms live symbiotically within the human body, but certain environmental conditions or variations of these organisms can result in harmful infectious diseases. For example, the bacterium *Escherichia coli* can have a mutualistic as well as a parasitic relationship with humans. While most strains of *E. Coli* are naturally occurring in the intestinal tract and help break down complex polysaccharides that human digestive enzymes cannot, some excessive strains lead to diseases such as cholangitis and pneumonia. Transmission of such infectious diseases usually occurs in one of three ways: person to person, animal to person, or by eating contaminated food or water. After transmission, common symptoms of infectious diseases include fever, diarrhea, fatigue, muscle aches, and coughing, though symptoms obviously vary by disease.

Research stresses that infectious diseases disproportionately affect impoverished countries and regions of the world. According to the 2003 World Health Organization report, Africa and South-East Asia accounted for 73.8% of the world's infectious diseases, maternal and perinatal conditions, and nutritional deficiencies. Specifically, acute respiratory infections, HIV/AIDS, diarrhea,

malaria, and tuberculosis are the most dominant infectious diseases, accounting for 13 million deaths per year and predominantly in Africa. Data also demonstrate that infectious diseases are affecting people at a younger age in developing comparison to developed countries, hinting at insufficient vaccination programs. Whereas nearly 50% of the disease burden is caused by deaths under age 15 in developing countries, the figure is only 10% in developed countries.

Researching why there's a disparity of infectious diseases in impoverished countries provides a logical explanation. The 2012 Global Report for Research on Infectious Diseases of Poverty by the



European Commission and the World Health Organization suggests, “Poverty creates conditions that favor the spread of infectious diseases and prevents affected populations from obtaining adequate access to prevention and care. Ultimately, these diseases disproportionately affect people living in poor or marginalized communities. Social, economic, and biological factors interact to drive a vicious cycle of poverty and disease from which, for many people, there is no escape.” Further, citizens of many impoverished lack access to affordable healthcare and consider it a financial stress. Specific diseases, like Malaria, offer an even higher correlation to poverty: Africa, which contains over 90% of Malaria cases, consists of many malaria-prone rural regions with harsh living conditions that offer few, if any, resistance to mosquitos.

Past Actions:

In the past few decades, the World Health Organization has taken a series of initiatives that hope to reduce the spread of infectious disease. In 1995, the World Health Assembly (WHA) agreed to revise the International Health Regulations (IHR), the international legal framework outlining how WHO and its member states should respond to infectious disease outbreaks. In 2005, the IHR revisions declared that their purpose was “to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks”. Further, the IHR focuses on preventing and containing public health emergencies of international concern; thus, member states of WHO committed themselves to building core capacities in the areas of national legislation, policy and financing, coordination and National Focal Point (NFP) communications, surveillance, response, preparedness, risk communication, and human resources and laboratories by 2012. Recently, the United Nations has strived to take action addressing the LGBTQ community as well. On June 4, 2018, the United Nations called for an end to discrimination against the LGBTQ community to eliminate any barriers they may face to accessing healthcare. These initiatives will help meet the UN Sustainable Development Goal 3.3, which aims to end epidemics of AIDS, tuberculosis, malaria, hepatitis, neglected tropical diseases (NTDs), and other communicable diseases by 2030.

Current Situation:

There are many nonprofit organizations working to curb the effects of infectious diseases in impoverished countries, notably the Bill & Melinda Gates Foundation efforts on Malaria. Their strategy to combat Malaria currently consists of six measures: working to make data-driven decisions in high burden countries; strengthening partnerships with PMI, Global Fund, and other leading donors; scaling genetic epidemiology; optimizing coverage of chemoprevention; testing models that can scale access to care and medicines across the public and private sector; and accelerating the pace of R&D. While Bill & Melinda Gates Foundation's and other organizations' efforts have helped, the COVID-19 pandemic has once again exposed the disproportionate impact of infectious diseases on impoverished countries. Unfortunately, even data cannot accurately describe the impact of COVID-19 on such countries, as COVID data relies on the nation's testing capacities, which are significantly lower in impoverished nations. With already struggling economies, many nations in Africa and South-East Asia have not been able to sustain lockdowns without risking a complete economic collapse. Countries in those regions that have been able to lock down for short periods of time, like Pakistan and India, have faced arguably greater threats of starvation. Consequently, it is up to this committee to identify concrete causes and create an effective framework to prevent the unprecedented circumstances the world is facing today from repeating.

Questions To Consider

1. How can impoverished nations prevent the spread of infectious disease? How can they enforce lockdowns without risking economic collapse?
2. What scientific, technological, or economic development is necessary to mitigate the risk of infectious disease?
3. How can the international community collaborate to prevent infectious disease from spreading beyond the border?

Topic II: Impact of Climate Crisis on Global Health

Introduction:

Air pollution is the presence of pollutants in the air such as Carbon Dioxide, Nitrogen Dioxide, Heavy metals, Benzene, Sulphur Dioxide, and particulate matter. Air pollution can be found everywhere, in homes, in office buildings, and in public spaces. Some of the causes for outdoor pollution are due to factories emitting harmful pollutants in the air, automobile exhaust, and waste disposal.

Another form of pollution that goes unnoticed is indoor pollution. Indoor pollution can be caused by smoking, cooking from wood or gas, and more. From 1980 and 2019, the CO₂ emissions increased by 15%.

It is crucial to understand what air pollution

is and how to prevent it because it severely impacts the health of our environment and the beings living in it.

At the moment our Earth is undergoing a crisis of climate change caused by the gross amount of pollution being produced and destroying the Earth. Air pollution is directly linked to climate change. Because of the emission of pollutants into the air, there have been changes to the climate since particulate matter can have a warming or cooling effect on the climate. Air quality can be negatively impacted due to changes in the climate. Since humans are constantly exposed to air, when the air quality worsens, so does human health. Air pollution emits and spreads harmful chemicals through the air which causes an increase in levels of PM₁₀ and PM_{2.5} concentration. Particulate matter is the particles found in the air, dirt, dust, smoke, and liquid droplets. Particulate matter is usually emitted from coal power plants and diesel vehicles. PM₁₀ (when the particles are less than 10 micrometers in diameter) is very dangerous to health because it can be inhaled into the respiratory system. PM_{2.5} is even more detrimental to human health because since

Air Pollution Is The Greatest Human Health Risk

Average life expectancy lost per person worldwide due to the following

If current particulate pollution levels persist, today's global population will lose a total of 12.8 billion years of life

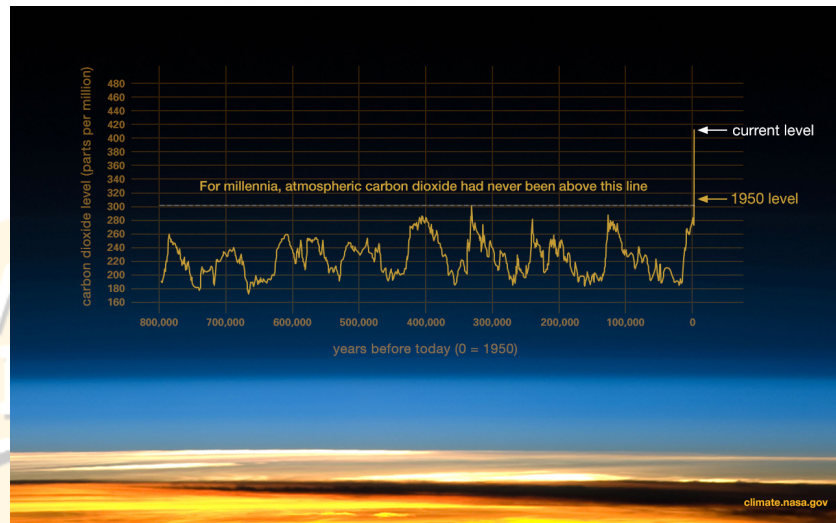


@StatistaCharts

Source: AQLI Air Quality Life Index

statista

they are less than 2.5 micrometers in diameter, they can enter and reside deep in the lungs. When humans are exposed to these air pollutants by simply just breathing air, detrimental health effects can transpire. Air pollution can cause lung cancer, asthma, respiratory/cardiovascular illnesses, and overall shortens life expectancy. In fact, air pollution has been the cause of death for 9% of the world's population. The impact of air pollution on human health poses one of the greatest health risks.



Past Actions:

Over the past few decades, there have been many international agreements founded on climate change. The first being the Montreal Protocol which was designed to protect the ozone layer by reducing the production of substances that are causing damage such as chlorofluorocarbons. Then, founded in 1992 the United Nations Framework Convention on Climate Change (UNFCCC) began to create a plan of action to reduce and stabilize the amount of greenhouse gases and their impact. In 1997, the Kyoto Protocol was adopted and entered in 2005 to reduce greenhouse gas emissions. This protocol had three market-based mechanisms, including: International Emissions Trading which aimed to reduce greenhouse gas by setting limits on emission levels and encouraging the trading of emission units from one to another. The Clean Development Mechanism, which allows a country with an emission reduction commitment to form a reduction project in developing countries to encourage sustainable development. Finally, the Joint implementation, this protocol allows a country to earn emission reduction units from a removal project in an Annex B Party. In 2015, the Paris Agreement which is considered the most significant global climate

agreement was formed with goals to keep the global temperature rise below 2 degrees Celsius (aiming for 1.5). Another long term goal was to provide plans for financial support, new technology framework and emphasis on capacity building for developing countries. The Paris Agreement has established carbon neutrality targets, enhanced low - carbon solutions for new markets and zero - carbon solutions are constituting for 25% of emissions.

Current Situation:

In 2019, the campaign of “Business Ambition for 1.5 Celsius” was launched to help aligned business leaders with their science based target initiatives. Companies are now encouraging the government to align socio-economic recovery in order to best achieve a zero-carbon economy. The Caring for Climate campaign has ties with the United Nations and provides a framework for business managers to help enhance and implement their climate change solutions. Currently over 450 companies from 65 countries are taking initiative. Within the Paris Agreement, the United Nations are working on creating a sustainable environment from food and job security to renewable energy. In 2019, at the Climate Action Summit they discussed taking initiatives among the government and businesses from private and public sectors, in the areas of reducing greenhouse gas emissions by 45 percent over the next decade, strengthening resilience and adapting climate related impacts such as integrating climate change into national policies.

Questions To Consider:

1. What type of environmental protection laws/regulations must be enforced in order to reduce the concentration of air pollutants?
2. What is the most effective way to decrease air pollution, and what role does your country play in improving air quality?
3. What resources/funding will be needed in order to successfully decrease the concentration of air pollutants and to improve human health globally?
4. What methods/laws/regulations from previous attempts to reduce the rates of air pollution can be implemented in new solutions?

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