



2024

# World Health Organization



RMUN

## **Letter from the chair**

Welcome to RMUN! My name is Nithya, I am a senior and cofounder of Rice Model UN. I have been doing Model UN since high school and am super excited to put on a committee about one of my favorite topics, world health. I study Economics with a minor in Financial Computations and Modeling. I work with Rice's think tank, the Baker institute, heading our student forum. I also help with the Rice Undergraduate Investment Fund. In my free time, I like to read, listen to contemporary string music, and explore nature. I can't believe that I get to share my last RMUN with all of you, and I can't wait to see passionate advocacy and have a fantastic weekend!

Best,  
Nithya Shenoy

## **WHO Mission**

The World Health Organization was founded in 1948 and is a United Nations agency. Since its inception, the WHO has been responsible for connecting different countries and groups in order to promote health initiatives in order to help everyone achieve a higher level of health.

Experience with epidemics and other health-related threats has led WHO to reform over the years. This is a concerted effort to improve its ability to fight future epidemics (which may become more frequent) and to also boost the health of individuals living in poverty.

WHO's primary activities include creating and fostering partnerships with other health initiatives, conducting research, technical support, and monitoring global trends. The scope of work in the recent years has ranged from combating tuberculosis, sanitation, and nutrition.

The agency also published a new strategy in 2019 that focuses on three main pillars:

- Providing health coverage to one billion more people
- Protecting one billion more people from health emergencies such as epidemics
- Ensuring another one billion people enjoy better health and well-being, including protection from non-infectious diseases like cancer

These aims have a basis in the UN's Sustainable Development Goals or SDGs. The SDGs are composed of seventeen objectives that, overall, aim to end poverty by 2030. Among the SDGs

that are directly relevant to WHO are ‘good health and well-being’ and ‘clean water and sanitation’.

## **Introduction and Background**

Climate change, a long-term shift in temperatures and weather patterns, can have natural causes. Changes in the sun’s activity or volcanic eruptions are examples of the more organic shifts. However, for the last two centuries it is human activity that has led to an acceleration in climate change. Activities like burning fossil fuels have only increased greenhouse gas emissions which serve to raise temperatures.

Starting in the 1990s, countries around the world started to push climate change to the forefront of the agenda. Several essential accords were produced as a result of these discussions, including the Kyoto Protocol and the Paris Agreement. The Kyoto Protocol, for instance, was adopted in 1997 and called for both industrialized countries and countries with transitioning economies to reduce greenhouse gasses emissions as per certain targets. Meanwhile, the Paris Agreement was adopted in 2015 and gained recognition being the first-ever legally binding climate change agreement. The primary goal of the Paris Agreement was to limit global warming to below 2°C and limit it to 1.5°C.

Despite these efforts, the issue of climate change is becoming increasingly severe. The 10 warmest years in history have all occurred since 2010. Already, the world is witnessing the devastating impacts of climate change on human health.

Climate change is proving to affect people’s health in two ways. One, it changes the severity and/or the frequency of existing health issues. Two, it creates new health problems that were previously not a concern.

Obviously, physical health is one part of the issue. Extreme heat events pose a threat to everyone’s health. New storm patterns also change the spread of diseases as it directly impacts vectors like mosquitos and ticks.

There is also a mental health aspect that deserves more attention. For example, forced displacement due to climate change can be stressful for people. It can also have a negative effect on development, especially for vulnerable populations like young children.

Finally, there are certain groups or demographics that are especially vulnerable and will require special attention in order to ameliorate the impacts of climate change. Low-income populations, for instance, are more exposed to climate change threats due to socioeconomic factors.

Occupational groups, like construction workers, are more exposed to the outdoors and, therefore, additional climate change threats.

Some progress has been made on the climate change front but it is not enough. This is evidenced by the extreme heat waves and peculiar weather patterns that have become more common. Clearly, further action is needed to curb the effects of this new threat and prevent it from devastating the human population.

### **Climate Change and Mental Health**

There is a vast array of mental health causes that are exacerbated by climate change threats. They range from mild stress to high-risk coping behavior and need to be treated seriously given the significant long-term effects.

The Intergovernmental Panel on Climate Change (IPCC) published a report in February of 2022 that revealed the following: “rapidly increasing climate change poses a rising threat to mental health a psychosocial well-being; from emotional distress to anxiety, depression, grief, and suicidal behavior”. Part of this relates to eco-anxiety, a newly coined term that describes increased concern about the current climate emergency.

Another study found that increasing temperature was likely to “increase rates of aggression and violent suicides.” This is probable as increases in crime and aggression have been observed more during the summer than any other season.

Similarly, climate induced disasters can have an extremely negative effect on an individual’s mental health. Events like hurricanes, floods, and fires can increase a person’s risk of developing posttraumatic stress disorder. PTSD is known to reduce quality of life and add more stressors.

### **Environmental Changes and Health**

Climate change has the potential to disrupt multiple determinants of health, including clean air, safe water, food, and proper shelter. In fact, climate change is expected to cause approximately 250,000 additional deaths per year, from malnutrition, malaria, diarrhea, and heat stress between 2030 and 2050. According to the WHO, improved health is possible if GHG emissions are significantly reduced.

The effects of climate change will include widespread disease. As temperatures rise, mosquitoes will travel beyond their current habitats. According to a study conducted by a Stanford biologist, “if the climate is becoming more optimal for transmission, it’s going to be harder and harder to

do mosquito control.” This is crucial since mosquitoes are responsible for transmitting many deadly diseases. This includes diseases like West Nile virus, malaria, and dengue fever. The threat of disease would become even more real as rising temperature means mosquitoes can spend a longer amount of time in regions they previously could not reside in.

Climate change is also closely tied to water scarcity and quality. Shifts in weather patterns means that water is either more polluted, more predictable, or more scarce. Rising sea levels are a prime example. This can lead to contamination of water resources by fecal matter or saltwater. As per UN research, the number of people who live in potential water-scarce areas will increase from 2.7 billion to 3.2 billion people in 2050.

Even more concerning, is the rapid disappearance of glaciers and ice caps. The water from these meltings is actually responsible for many river systems. Disappearing glaciers means that freshwater resources will be extremely unpredictable. This will place a strain on communities that depend on consistency of river systems.

### **Vulnerable Populations**

As is the case with many other issues, some groups are disproportionately affected compared to others. One EPA report noted disproportionate impacts of climate change on socially vulnerable populations in the United States. This includes “underserved communities who are least able to prepare for, and recover from, heat waves, poor air quality, flooding, and other impacts.”

The EPA report examined impacts on the basis of income, educational attainment, race and ethnicity, and age. One key finding was that Black and African American individuals are projected to experience higher impacts of climate change. For example, 34% are “more likely to currently live in areas with the highest projected increases in childhood asthma diagnosis”.

There are many other populations of concern; those with low income, various communities of color, immigrant groups, children, older adults, and people with preexisting medical conditions are included.

Ensuring that vulnerable populations are well-positioned to deal with these changes involves understanding the determinants of vulnerability. First is occupation. Some occupations, such as those that involve outdoor work, are at risk. Time spent in risk-prone locations is another determinant. This refers to where a person lives, works, or spends the rest of their time. For example, areas that are commonly affected by wildfire are risk-prone locations. Third is responses to extreme events. A person’s ability to respond to threats plays a huge role in how vulnerable they are. For instance, an individual who is able to shelter-in-place safely in response to a hurricane is less likely to be adversely affected. The last determinant is socioeconomic

status. People who live in poverty have a higher chance of being constantly exposed to air pollution and high temperatures.

### **Bloc Positions:**

Developed Countries - Economic powerhouses face far different threats from climate change, as they often have developed healthcare systems and resources to face natural disasters. Regardless, climate change develops environmental changes that create passive health crises. Many issues, such as asthma, are dangerous, diagnosable, but lack a clear source. These countries seek to find policies which protect their populations from climate degradation in economically feasible ways. Often, this includes identifying latent sources of health issues, categorizing understood health issues as climate driven, and organizing multinational health provisions to alleviate symptoms.

Undeveloped Countries - Existing health crises in countries without robust health infrastructure are often exacerbated by climate. In this case, the difficulty often lies in a lack of health resources, though the problems may be well understood. Issues like the accessibility of water, disease prevention, and malnutrition may all cause healthcare issues, and many countries appeal to the UN for support in providing basic health necessities to their citizens. This can often extend beyond typical medical equipment or consumables, as infrastructure plays a big part in healthcare industries.

### **Questions to Consider:**

What new health issues does climate change introduce? How can we provide health solutions, assuming climate change continues at its current pace?

What dialogue can we build on these new health crises? Is the international community aptly informed of these health issues?

What current health crises will be driven by climate factors? Do we have appropriate classifications for these issues?

## Sources

<https://www.cfr.org/backgrounder/what-does-world-health-organization-do>

<https://sdgs.un.org/goals>

<https://www.un.org/en/climatechange/what-is-climate-change#:~:text=But%20since%20the%201800s%2C%20human,sun's%20heat%20and%20raising%20temperatures>

[https://climate.ec.europa.eu/eu-action/international-action-climate-change/climate-negotiations/paris-agreement\\_en#:~:text=The%20Paris%20Agreement%20sets%20out,support%20them%20in%20their%20efforts](https://climate.ec.europa.eu/eu-action/international-action-climate-change/climate-negotiations/paris-agreement_en#:~:text=The%20Paris%20Agreement%20sets%20out,support%20them%20in%20their%20efforts)

[https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature#:~:text=The%202022%20surface%20temperature%20was,period%20\(1880%2D1900\)](https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature#:~:text=The%202022%20surface%20temperature%20was,period%20(1880%2D1900))

<https://www.epa.gov/climateimpacts/climate-change-and-human-health#:~:text=The%20health%20effects%20of%20climate,and%20overall%20poor%20mental%20health>

<https://www.epa.gov/climateimpacts/climate-change-and-human-health#:~:text=The%20health%20effects%20of%20climate,and%20overall%20poor%20mental%20health>

<https://www.epa.gov/climate-indicators/understanding-connections-between-climate-change-and-human-health>

<https://www.who.int/news/item/03-06-2022-why-mental-health-is-a-priority-for-action-on-climate-change>

<https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

<https://www.unwater.org/water-facts/water-and-climate-change#:~:text=Flooding%20and%20rising%20sea%20levels,snow%20fields%20are%20rapidly%20disappearing>

<https://www.epa.gov/newsreleases/epa-report-shows-disproportionate-impacts-climate-change-socially-vulnerable>