

Fighting Communicable Diseases

Subcommittee Topic Briefing

Topic Overview

Communicable diseases, sometimes referred to as infectious diseases, represent one of the greatest challenges to modern medicine and to promoting the good health and well-being of everyone around the world. Communicable diseases are infectious diseases that can spread from human to human, or from animal or insect to human, and can lead directly to mild or severe health outcomes. Communicable diseases can be passed through unsanitary or unclean drinking water, or through poorly disposed wastewater. There are a multitude of communicable diseases that exist throughout the world, from the generally mild cases associated with the seasonal flu, to more deadly diseases such as Ebola or smallpox. Other communicable diseases that pose a major threat to the good health and well-being of communities include malaria, HIV/AIDS, tuberculosis and hepatitis.

The United Nations (UN) and World Health Organization (WHO) have been working for decades with governments, partner organizations, and the private sector to fight the spread of communicable diseases. For example, the global malaria **incidence rate** has fallen by 37% between 2000 and 2015 due to UN and WHO efforts. Malaria is a disease, **eradicated** from much of the world, that is passed from mosquito to human. The WHO and UN have spent considerable time, energy and financial resources to provide malaria medication and preventative supplies, like mosquito nets, to the populations most affected by the disease.¹

The recent COVID-19 pandemic has proved to be an extreme example of how quickly and dangerously a communicable disease can become for the good health and well-being of the world. The pandemic has shown that the negative effect on human health caused by communicable disease can also damage the global economy, quality education, global cooperation, and sustainable development. The fight against communicable diseases is now more important than ever.

Target 3.3 - Fighting Communicable Diseases

SDG Target 3.3 sets the goal to end the **epidemics** of tuberculosis, malaria, hepatitis, water-borne diseases, and other communicable diseases by 2030. These diseases are responsible for 4 million deaths each year,² and like most issues related to good health and well-being, women, children, and those living in poverty are disproportionately affected by communicable diseases. Communicable diseases can be **airborne**, **waterborne**, can spread when humans come in contact with certain animals, or spread through various forms of human contact. The spread of communicable diseases is directly related to access to adequate, affordable healthcare, access to vaccines and medicines, clean water and nutritious foods, and sanitation. For these reasons, communicable diseases are also related to social inequalities and the level of a community or country's economic development.

¹ HIV/AIDS - World Health Organization <u>https://www.who.int/news-room/fact-sheets/detail/hiv-aids</u>

² Communicable Diseases - World Health Organizations <u>https://www.who.int/about/structure/organigram/htm/en/</u>



Furthermore, developing countries that are disproportionately affected by high infection rates of communicable diseases due to social and economic factors, are also the countries that face issues related to the spread of illness due to climate factors. Generally, many communicable diseases thrive in hotter, wetter climates. Many developing countries often have the kind of warm climates that are favorable to numerous deadly diseases, such as malaria and other **Neglected Tropical Diseases (NTDs)**. These countries have faced increased rates of infections as climate change creates increasingly unpredictable weather patterns and hotter climates that can contribute to these diseases. Finally, developing countries also lack the proper health systems and public health infrastructure needed to swiftly deal with outbreaks of diseases. A glaring example of this issue can be found in the Ebola outbreak in West Africa from 2014 to 2016.



One of the primary methods for dealing with communicable diseases is the isolation of infected patients and the use of personal protective equipment (PPE) to help protect doctors and healthcare workers. Developing nations and areas with poorer health systems often lack the materials and funds necessary to adequately fight communicable diseases.

Various departments at the UN, through the World Health Organization, are involved in the work to achieve SDG 3 and fight communicable diseases around the world. For example, the Department of Control of Neglected Tropical Diseases (NTDs) is working throughout the world to support and



implement policies that will both improve access to treatments for NTDs, as well as to create strategies to help prevent and control their spread.³ Additionally, the WHO Global Malaria Programme (GMP) is helping countries adopt WHO standards for malaria control and assisting countries as they form malaria prevention plans and create malaria surveillance systems⁴. Because of their work, between 2000 and 2015 and 6.2 million malaria deaths have been avoided (primarily in children under the age of five and in sub-Saharan Africa)⁵.

Although progress has been made in fighting communicable diseases, much work remains. The COVID-19 pandemic has launched a new communicable disease, threatening people around the world. Global efforts to fight these diseases have to be both preventative, meaning that governments and international organizations must prioritize both limiting the spread of communicable diseases and promoting the use of vaccinations, and reactive, adequately treating those who have already been affected through affordable medicines and healthcare. The United Nations and the World Health Organization have proven their ability to fight communicable diseases, however, greater attention and financial resources are necessary for the continued battle against communicable diseases.

Quick Facts

Find at least three quick facts on fighting communicable diseases from this briefing paper. Quick facts should be about one sentence long and provide useful information on the subcommittee topic. A good example of a quick fact is a statistic related to the topic.

- 1. Quick Fact:
- 2. Quick Fact:
- 3. Quick Fact:

Questions to Consider

Use the information provided in the briefing paper above, as well as your own research on your assigned country, to answer the questions below.

- 1. What makes communicable diseases so dangerous and threatening to Ensuring Good Health and Promoting Well-Being for All?
- 2. What are some reasons as to why certain populations, such as those living in developing countries, are more vulnerable to communicable diseases?
- 3. What is your assigned country's relationship with (non-COVID) communicable diseases? What communicable diseases are most common? Are they deadly? Are infection rates high in

³ Neglected Tropical Diseases - World Health Organization <u>https://www.who.int/neglected_diseases/about/en/</u>

⁴ Global Malaria Programme - World Health Organization <u>https://www.who.int/teams/global-malaria-programme/about</u>

⁵ Health - United Nations Sustainable Development Goals <u>https://www.un.org/sustainabledevelopment/health/</u>



proportion to your assigned country's population? What are the contributing factors to these infection rates?

4. What is your assigned country's relationship with COVID-19? Are infection rates high? How is your country's government working to protect people?

Term	Description
Airborne illnesses	Airborne illnesses can be transmitted from person-to-person, generally through coughing, sneezing or close-breathing.
Antiretroviral	A type of drug used to treat HIV.
Epidemic	An outbreak of disease that spreads quickly and affects many individuals at the same time.
Eradicated	An eradicated disease is one that no longer exists and threatens human health and well being. Smallpox was eradicated from Earth through the use of vaccines.
Incidence rate	Number of new cases of a disease during a specified time interval.
Waterborne illnesses	Waterborne illness is caused by recreational or drinking water contaminated by disease-causing microbes or pathogens. Many waterborne pathogens can also be acquired by consuming contaminated food or beverages, from contact with animals or their environment, or through person-to-person spread.
Neglected Tropical Diseases (NTDs)	Neglected tropical diseases (NTDs) include several parasitic, viral, and bacterial diseases that cause substantial illness for more than one billion people globally. Affecting the world's poorest people, NTDs impair physical and cognitive development, contribute to mother and child illness and death, make it difficult to farm or earn a living, and limit productivity in the workplace. As a result, NTDs trap the poor in a cycle of poverty and disease. ⁶

<u>Glossary</u>

⁶ Neglected Tropical Diseases - Center for Disease Control and Prevention <u>https://www.cdc.gov/globalhealth/ntd/index.html</u>