Florida High Schools Model United Nations

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WORLD HEALTH ORGANIZATION (WHO)

INTERNATIONAL ACCESS TO VACCINES DURING CRISIS

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Introduction to Vaccines

The World Health Organization (WHO) groups deaths and disabilities into three major categories: Injuries, noncommunicable diseases, and communicable diseases.[1] The third category, communicable diseases, includes mortalities caused by infectious diseases. In the year 2021 alone, an infectious disease caused by the SARS-CoV-2 Virus, was directly responsible for 8.7 million deaths.[2] This virus is most commonly known as the coronavirus or Covid-19 and the recorded mortalities exemplify the toll that inaccessible vaccinations and treatments have on the international community. Following Covid-19 in the world's deadly communicable diseases, lower respiratory infections are ranked 5th in leading causes of death in 2021. Communicable diseases have a variety of treatment options depending on the germ that causes the illness- including antibiotics for illness with a bacterial origin, anti-virals for diseases that stem from a virus, anti-fungal medication for fungal infections, and anti-parasitics.[3] However these treatment options are only mechanized after an individual has contracted an infection that needs to be fought.

Preventatively, vaccines and immunizations are the tools designed by modern scientists and utilized by providers to precede infection. Vaccines are manufactured to work by introducing live, killed, or weakened versions of the germ to an individual's immune system- eliciting the body's natural defenses to build a resistance to the infection, ideally allowing the body to easily recognize and fight the virus in the future.[4] Infectious disease prevention via vaccinations is not an option for all individuals. For example, administering vaccinations, especially live vaccines, to individuals experiencing immunocompromise may be contraindicated based on the degree of said compromise.[5] This ties to the concept of herd immunity, also known as community immunity, which suggests that in populations where a large number of individuals are vaccinated, it is harder for the disease to spread. This would ideally protect those who have not or cannot be vaccinated.[6] When considering the role of community vaccination on reducing the spread of infectious diseases, it is relevant to note the social and political barriers that place barriers on vaccination rates.

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[1] "Leading Causes of Death." World Health Organization. Accessed November 4, 2025. https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/ghe-leading-causes-of-death.
[2] "Coronavirus." World Health Organization. Accessed November 4, 2025. https://www.who.int/health-topics/coronavirus#tab=tab_1.
[3] "Infectious Diseases." Mayo Clinic. Accessed November 4, 2025. https://www.mayoclinic.org/diseases-conditions/infectious-diseases/diagnosis-treatment/drc-20351179.
[4] "Vaccines and Immunization: What Is Vaccination?" World Health Organization. Accessed November 4, 2025. https://www.who.int/news-room/questions-and-answers/item/vaccines-and-immunization-what-is-vaccination.
[5] "Vaccination for People Who Are Immunocompromised." The Australian Immunisation Handbook, October 24, 2025. https://immunisationhandbook.health.gov.au/contents/vaccination-for-special-risk-groups/vaccination-for-people-who-are-immunocompromised.
[6] "NCI Dictionary of Cancer Terms." Comprehensive Cancer Information - NCI. Accessed November 4, 2025. https://www.cancer.gov/publications/dictionaries/cancer-terms/def/herd-immunity.

Politicization of Vaccines

A notable example would be the politicization of the Covid-19 vaccine in the United States of America. Given that the Coronavirus pandemic surrounded the 2020 U.S. Presidential elections, health-related topics related to the virus- like vaccination- were addressed and interpreted by political figures and news outlets. As a result, the line between political opinion and scientific evidence became obscured to many. Wearing masks, getting vaccinated, and treatment options became a political controversy throughout the nation. Media coverage also played a large role in skepticism surrounding vaccines. Terms like "hoax," "political weapon," and "normal flu" filled broadcasts related to the virus and its vaccine, both underplaying the severity of the pandemic by comparing it to an endemic and raising hesitancy regarding the intentions of government-mandated vaccinations.[7] National representatives may find it valuable to explore checkpoints and mechanisms that limit health-related misinformation which have the potential to cause harm to the public.

Economic Barriers to Vaccine Equality

At its root, vaccines rely on funding and funding always ties back to economics. From development to distribution, every step of getting a vaccine into people's arms costs money. According to the International Monetary Fund, research and development alone can require hundreds of millions of dollars per successful vaccine, with manufacturing scale-up often adding another $500 million to $1.5 billion in some cases.[8] During the COVID-19 pandemic, the term *"vaccine nationalism"* emerged to describe how wealthy nations prioritized vaccinating their own populations before others. Countries like the U.S. and U.K. bought up hundreds of millions of doses even before trials were finished, leaving lower-income nations dependent on limited global programs like COVAX. This unequal distribution showed how economic power directly shaped who got access to life-saving vaccines first, deepening global vaccine inequality.[9] In addition to that, a country's economic power often ends up deciding how quickly it can protect its population during a health crisis. Wealthier nations are positioned to invest early in vaccine development, sign large advance-market commitments, and secure substantial contracts, giving them priority access.[10] Meanwhile, lower-income countries often must wait for donations or rely on multilateral initiatives such as COVAX Facility[11]; the vaccine-sharing mechanism co-led by

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[7] Bolsen, Toby, and Risa Palm. "Politicization and COVID-19 Vaccine Resistance in the U.S." Progress in molecular biology and translational science, 2022. https://pmc.ncbi.nlm.nih.gov/articles/PMC8577882/.

[8] DAVID E. BLOOM is a professor of economics and demography at Harvard University's T.H. Chan School of Public Health., et al. "Vaccine Finance and Epidemic Risk – IMF F&D." IMF, 2 Sept. 2020, www.imf.org/en/Publications/fandd/issues/2020/09/vaccine-finance-epidemics-and-prevention-bloom.

[9] Khan, Dr Amir. "What Is 'Vaccine Nationalism' and Why Is It so Harmful?" Al Jazeera, Al Jazeera, 8 Feb. 2021, www.aljazeera.com/features/2021/2/7/what-is-vaccine-nationalism-and-why-is-it-so-harmful.

[10] Wang, Daoping, et al. "Supply Chains Create Global Benefits from Improved Vaccine Accessibility." Nature Communications, U.S. National Library of Medicine, 21 Mar. 2023, pmc.ncbi.nlm.nih.gov/articles/PMC10030081/.

[11] "COVAX." World Health Organization, World Health Organization, www.who.int/initiatives/act-accelerator/covax.

the World Health Organization (WHO), Gavi, or the Vaccine Alliance and Coalition for Epidemic Preparedness Innovations (CEPI)[12]. The WHO has long held that vaccines should be treated as a global public good and shared fairly, not treated purely as a product for profit or national advantage[13]. This connection between money and access makes clear that vaccine equality isn't just a health issue it's an economic one. Wealth allows one country to move to the front of the queue, secure logistics, and establish dominance in supply chains, while others remain stuck at the back. To begin fixing these inequalities, we must understand how global economic structures shape who gets vaccinated first and who gets left behind. The relationship between vaccines and economics has always reflected global inequality. In health emergencies, a country's ability to access vaccines often depends less on who needs them most and more on who can afford them. High-income nations frequently make early deals, stockpile doses, and exert control over supply chains. Meanwhile, low and middle-income countries are often left waiting; even though their populations may shoulder greater health risks. Studies show that when wealthy economies are fully vaccinated but lower-income ones remain far behind, the global economy suffers overall losses in the trillions of dollars[14]. Understanding these economic dynamics is essential. Without a shift in how we fund, produce and distribute vaccines globally, the gap between high-income and low-income countries won't just persist, it will deepen. Through that deepening, more harm is done globally, propagating an issue that can be worked upon.

Economic Power and Vaccine Inequality: From COVID-19 to Polio

The COVID-19 pandemic made visible the extent to which global health outcomes are shaped by economic power. From the moment vaccines became available, wealthy nations used their financial strength to secure priority access through advance-purchase agreements with major pharmaceutical companies. By mid-2021, high-income countries representing only about 19% of the world's adult population had purchased over half of all available vaccine doses[15]. Some, like Canada and the United Kingdom, had ordered enough doses to vaccinate their populations multiple times over. Meanwhile, low- and middle-income nations were left waiting for shipments through the COVAX Facility; The vaccine-sharing initiative co-led by the World Health Organization (WHO), Gavi, and CEPI–which struggled to compete financially with the early contracts made by richer countries. This imbalance had major consequences. By the end of 2021, over 70% of populations in high-income countries had received at least one vaccine dose,

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[12] Cepi. "Research and Development." CEPI, cepi.net/research-and-development.
[13] "Vaccines and Immunization." *World Health Organization*, World Health Organization, www.who.int/health-topics/vaccines-and-immunization#tab=tab_1.
[14] Dawn. "Study Shows Vaccine Nationalism Could Cost Rich Countries US$4.5 Trillion." *ICC*, 23 Oct. 2025,iccwbo.org/news-publications/news/study-shows-vaccine-nationalism-could-cost-rich-countries-us4-5-trillion/.
[15] *Unequal Access to Covid-19 Vaccines Leaves Less-Wealthy Countries More Vulnerable, Poses Threat to Global Immunity*, jamanetwork.com/journals/jama-health-forum/fullarticle/2777924.

while many low-income countries, particularly in Africa, had vaccinated fewer than 10% of their people.[16]These gaps prolonged the pandemic globally, allowing new variants to emerge and slowing economic recovery across all regions. The WHO repeatedly warned that "vaccine nationalism" would extend the crisis, calling for equitable access as both a moral and practical necessity. Yet even with global appeals, funding shortfalls and export restrictions continued to favor those with wealth and manufacturing capacity. A similar pattern of inequality can be traced back to the global effort to eradicate polio. The polio vaccine, developed in the 1950s, became one of the most effective public health tools in history but access and implementation have always depended on external funding and infrastructure. The Global Polio Eradication Initiative (GPEI) has vaccinated millions, yet low-income countries still face underfunding, unreliable cold-chain systems, and dependence on international donors. According to WHO research, these countries receive around 85% of eradication's benefits but shoulder the highest delivery costs and operational barriers.[17]

The Problems of Vaccine Equity

While vaccines continue to be proficient in immunizing millions from a plethora of diseases, inequity in the access to these medical tools display vast disparities. This lack of distribution is not strictly an affordability issue, but heavily tied alongside production, distribution, and allocation. For instance, considering the COVID-19 vaccines accepted to be globally distributed by the WHO, prices for the vaccines themselves can range from US$4.00 to US$40.00.[18] This does not account for the country's conversion rates, healthcare costs, modes of transportation of the vaccines, and many other factors which inhibit its distribution. Furthermore, when Developing Countries are crippled by the effects of outbreaks, they cannot simply recover at the rates which Developed Countries do. Ease of vaccine accessibility guarantees a nation's ability to quickly recuperate economically. In the absence of this, however, nations are forced to either stay on economic lockdown and deal with the consequences or return to the workplace and risk further spreading of disease.[19] This further impairs the nation's healthcare systems as an overflow of newly infected patients enter hospitals and the need for a vaccine becomes increasingly pressing. These nations rely on the generosity of Developed Countries during these times of hardship to provide them with the tools or vaccines necessary. Despite this, developed countries tend to only give when there is going to be something returned. So, while they claim to

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[16] Nabaggala, Maria Sarah, et al. "The Global Inequity in COVID-19 Vaccination Coverage among Health and Care Workers." *International Journal for Equity in Health*, U.S. National Library of Medicine, 13 Oct. 2022, pmc.ncbi.nlm.nih.gov/articles/PMC9615614/.

[17] Duintjer Tebbens RJ;Pallansch MA;Cochi SL;Wassilak SG;Linkins J;Sutter RW;Aylward RB;Thompson KM; "Economic Analysis of the Global Polio Eradication Initiative." *Vaccine*, U.S. National Library of Medicine, pubmed.ncbi.nlm.nih.gov/21029809/.

[18] Who.int. "Item," 2025. https://www.who.int/publications/m/item/2025-mi4a-public-vaccine-purchase-dataset.

[19] Deb, Pragyan, Davide Furceri, Daniel Jimenez, Siddharth Kothari, Jonathan D. Ostry, and Nour Tawk. "The Effects of COVID-19 Vaccines on Economic Activity." Swiss Journal of Economics and Statistics 158, no. 1 (January 12, 2022). https://doi.org/10.1186/s41937-021-00082-0.

be helping the cause, these nations are truly hiding behind a facade of extortion through desperation. This explains why it is difficult to find evidence behind the transactional records between these nations. A lack of this data makes it difficult to hold developed nations accountable and convince them to openly share their surplus of vaccines.[20] Therefore, the Director General at the World Health Organization is technically correct, "Vaccine inequity is bad for business."[21] But it is only bad for the nations unlucky enough to be coerced into economic disparities to provide adequate healthcare for their citizens. The vaccine industry has become an economic powerhouse in which it starkly benefits Developed Countries and their manufacturers. In a study accomplished by the WHO, across 194 countries and manufacturers, 76% of the net income for vaccines went to either Developed Countries or the manufacturers behind them.[22] Vaccine equity is an uphill battle which requires multilateral transparency and the deconstruction of monopolies on medical capacities. Nevertheless, it is achievable to create a space in which countries work towards the mitigation of outbreaks through persistence and global cooperation.

COVID-19 and Ebola Comparative Analysis

The brevity of the WHO's response to COVID-19 was widely praised by the global community. The organization's multilateral approach towards creating a set plan of goals and consistently assessing the situation aided in global socio-economic restoration. By July of 2022, 12 billion doses of COVID-19 vaccines had been administered, with WHO member states reporting an average vaccinated population of 60%.[23] Acknowledging this achievement, the WHO's inaction on previous pressing outbreaks cannot go unaddressed. One of these outbreaks was in late 2013 in West Africa, where a large number of infections of the Ebola virus began spreading. This epidemic crippled the healthcare systems of these countries. For instance, by September 2014, Liberia's capital needed 1,000 beds when only 240 were available.[24] By the end of the outbreak in June 2016, 28,600 people had been infected and 11,325 people had died. It was not until November 2019 when an ebola vaccine was supported by the WHO for

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[20] Blake, Paul. "'Absolutely Unacceptable' Vaccination Rates in Developing Countries." World Bank, August 3, 2021.https://www.worldbank.org/en/news/podcast/2021/07/30/-absolutely-unacceptable-vaccination-rates-in-developing-countries-the-development-podcast.

[21] Adhanom, Tedros. "LinkedIn." Linkedin.com, 2025. https://www.linkedin.com/pulse/vaccine-inequity-bad-business-tedros-https://www.linkedin.com/pulse/vaccine-inequity-bad-business-tedros-adhanom-ghebreyesus/adhanom-ghebreyesus/.

[22] Who.int. "Launch: 2024 Special Issue of Vaccines on 'Inequality in Immunization,'" 2024. https://www.who.int/news-room/events/detail/2024/09/24/default-calendar/launch--2024-special-issue-of-vaccines-on--inequality-in-immunization.

[23] WHO. "Global COVID-19 Vaccination Strategy in a Changing World: July 2022 Update." www.who.int, July 22, 2022. https://www.who.int/publications/m/item/global-covid-19-vaccination-strategy-in-a-changing-world--july-2022-update.

[24] ———. "Liberia: A Country and Its Capital Are Overwhelmed." www.who.int, January 2015. https://www.who.int/news-room/spotlight/one-year-into-the-ebola-epidemic/liberia-a-country-and-its-capital-are-overwhelmed-with-ebola-cases.

distribution, four years after the crisis had completed.[25] The WHO's response to the ebola virus outbreak has been criticized for its failure to properly administer communication on the dangers of the crisis as well as its aptness. Furthermore, this was the sixth time the virus had been considered an outbreak within the region. This situation, among many similar ones, is a circumstance which calls into question how large of a disturbance an outbreak can become before the world must take action.

Data Transparency and Vaccine Allocation

The WHO has increasingly emphasized the importance of data transparency and real-time allocation systems as foundational components of global vaccine equity. These mechanisms are designed to ensure that vaccines are distributed efficiently and fairly, particularly during health emergencies. WHO relies on timely, accurate, and verifiable data from member states and partners to assess immunization coverage, forecast demand, and coordinate vaccine deployment. Digital platforms such as the WHO Immunization Data Portal, the Vaccine Delivery Partnership dashboards, and the Joint Reporting Form (JRF) serve as critical tools in this process.[26] These systems enable WHO to monitor vaccine stocks, cold chain logistics, and population-level coverage in near real time, allowing for the identification of underserved regions and the redirection of doses to areas with the greatest need. This data-driven approach is essential to preventing both vaccine shortages and wastage.[27]

COVID-19 Early Response and China's Data

Despite these advancements, the COVID-19 pandemic revealed significant vulnerabilities in WHO's data-sharing framework. In the initial stages of the outbreak, WHO's public communications were shaped by information provided by Chinese authorities, who reported limited evidence of human-to-human transmission. WHO echoed these assessments, which led many countries to underestimate the urgency of the situation. Subsequent investigations indicated that Chinese officials had access to more detailed epidemiological data than was initially shared with international bodies. This lack of early transparency delayed WHO's activation of emergency protocols and hindered its ability to coordinate vaccine research, mobilize funding, and establish equitable distribution strategies. The consequences of this data gap were profound: global preparedness lagged, vaccine developers faced uncertainty, and public

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[25] World Health Organization. "Ebola Virus Disease: Vaccines." www.who.int, January 11, 2020. https://www.who.int/news-room/questions-and-answers/item/ebola-vaccines.
[26] "Swine Flu (H1N1): What Is It, Causes, Treatments & Prevention." Cleveland Clinic, June 2, 2025. https://my.clevelandclinic.org/health/diseases/23928-swine-flu-h1n1.
[27] "H1N1 Flu (Swine Flu)." Mayo Clinic, March 23, 2023. https://www.mayoclinic.org/diseases-conditions/swine-flu/symptoms-causes/syc-20378103.

trust in international health institutions was strained.[28] In response to these challenges, WHO has reinforced its commitment to transparency and invested in interoperable digital tools that support real-time reporting and cross-border data exchange. Innovations such as geospatial mapping, mobile data collection, and automated alerts have enhanced WHO's capacity to monitor vaccine needs and respond swiftly to emerging threats. These technologies not only improve operational efficiency but also strengthen accountability and trust in global health governance.[29] By prioritizing transparent data-sharing and real-time allocation, WHO aims to ensure that future vaccine rollouts are guided by accurate information and equitable principles, thereby improving outcomes for vulnerable populations worldwide.

Looking into the Future (A Vaccine for All)

The global pursuit of vaccine equity is not merely a matter of scientific innovation or logistical coordination, it is a test of international solidarity, economic justice, and political will. As demonstrated by the disparities exposed during the COVID-19 pandemic and echoed in earlier crises like Ebola and polio, access to life-saving immunizations remains deeply influenced by wealth, infrastructure, and geopolitical dynamics.[30] While the WHO has made strides in promoting transparency, data-driven allocation, and multilateral cooperation, persistent gaps in funding, production capacity, and equitable distribution continue to hinder progress. To ensure that future health emergencies do not replicate the inequities of the past, the international community must commit to systemic reforms that prioritize global health as a shared responsibility. Only through sustained collaboration, accountability, and inclusive policy-making can vaccines fulfill their promise as tools of prevention for all—not just the privileged few.

Guiding Questions for Research

1. What lessons can be learned from the WHO's response to Ebola compared to COVID-19?
2. What strategies can be implemented to combat health-related misinformation during pandemics?
3. How can digital tools enhance accountability and equity in global vaccine distribution?
4. How does real-time data sharing improve vaccine allocation during global health emergencies?

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[28] "Swine Flu I Who Emergency Situation Overview." World Health Organization. Accessed November 3, 2025. https://www.who.int/emergencies/situations/influenza-a-%28h1n1%29-outbreak.
[29] 2322-5939 journal HOMEPAGE: HTTPS://WWW.IJHPM. Accessed November 3, 2025. https://pdfs.semanticscholar.org/89a9/9aa6099303dd412b0a00efd182205fde557e.pdf.
[30] Ledford, Heidi. "COVID Vaccine Hoarding Might Have Cost More than a Million Lives." Nature News, November 2, 2022. https://www.nature.com/articles/d41586-022-03529-3.

Guiding Questions for Debate

1. How has the politicization of vaccines impacted public trust and vaccination rates globally?
2. What are the long-term economic consequences of vaccine inequality for low- and middle-income countries?
3. How can global funding mechanisms be restructured to support equitable vaccine development and distribution?
4. How do political narratives shape national responses to vaccine distribution and public health measures?