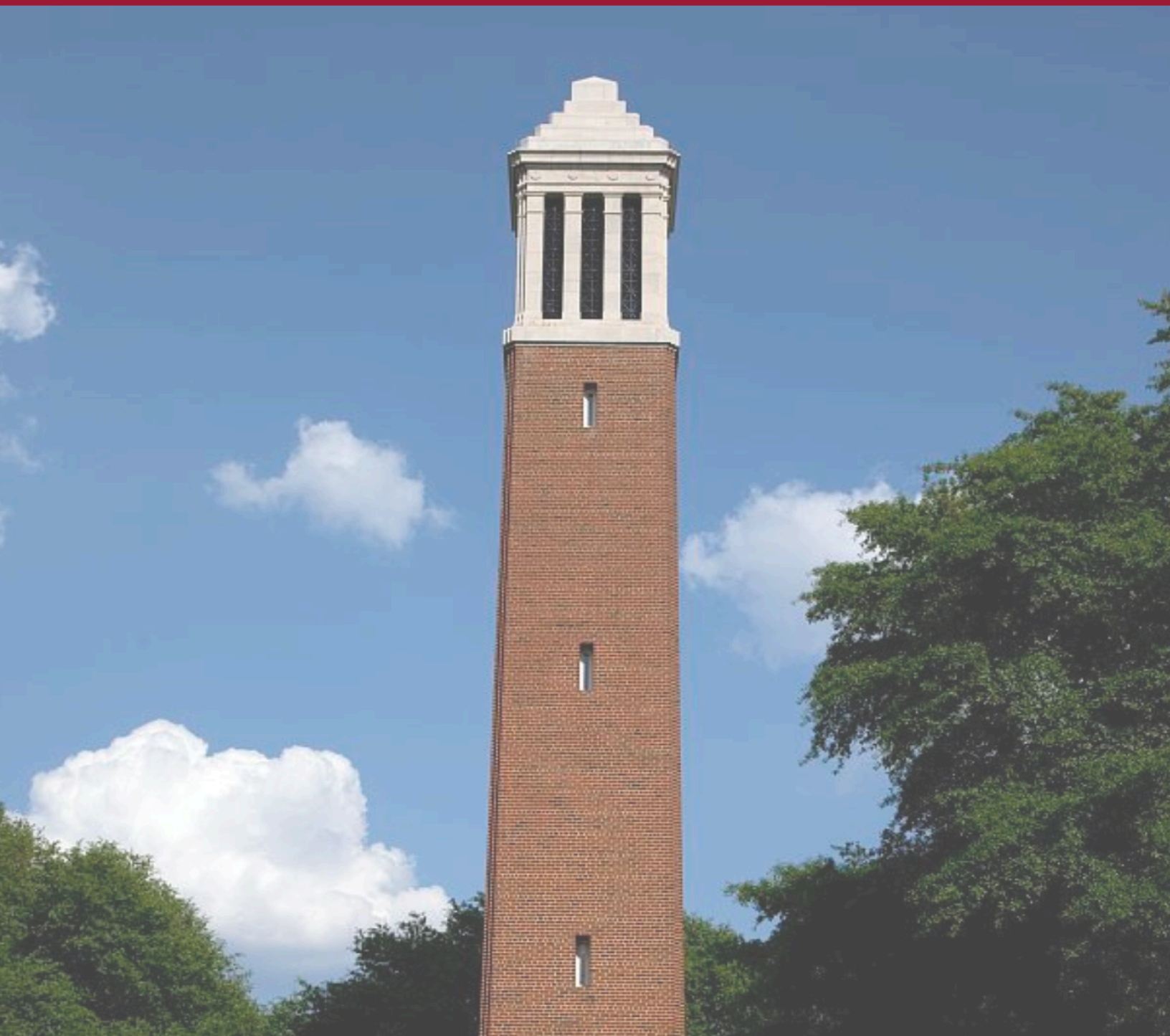


SIXTEENTH ANNUAL ALABAMA MODEL UNITED NATIONS



WORLD HEALTH ORGANIZATION

WHO BACKGROUND GUIDE

ALMUN XVI: WHO BACKGROUND GUIDE



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Letter From The Chair

Hello Delegates! My name is Kate Munson and I am so excited to serve as the Chair for this committee. This is my second time working on ALMUN and my first time as a Chair. I am a Junior majoring in International Studies and Biology, meaning the public health goals of the WHO represent a major intersection of my interests. I am involved with the German and Rural Health Clubs on campus, and I also work in a lab focused on improving maternal and infant health in Alabama. I am so happy to be able to facilitate discussion on the health issues facing the international committee and I cannot wait for ALMUN.

As chair, I hope to help our committee reach resolutions on both topics before the end of debate. I also hope to see research that focuses on both the political aspects of solving these crises as well as scientific innovations that can make care more accessible. Please have your school representative reach out to me at ktmunson@crimson.ua.edu if you have any further questions or concerns.

Letter From The Co-Chair

Hello Delegates. My name is Sean Dawson and this is my first time chairing ALMUN. I am a junior majoring in Math, Finance, and Economics and I am active with the Alabama Finance Association. I am so excited to explore solutions to pressing healthcare issues with this committee and see your innovative answers.

Committee Introduction

The World Health Organization was created in 1948 in order to coordinate for and solve the most pressing health issues facing the world. This organization has had incredible results, including the elimination of smallpox in 1980, and many other victories. With the spread of Covid-19 the world has been reminded that health is a global issue, emphasizing the need for a global approach to medicine. Through this lens this committee will address the rising rates of vaccine hesitancy, which threaten the huge strides made against childhood mortality, and find solutions to building and providing healthcare and infrastructure to conflict torn regions. Through these discussions this committee hopes to enhance understanding and focus on health issues facing the world.

History of the World Health Organization

The World Health Organization is the specialized public health agency of the United Nations, founded in 1948, combining the League of Nations Health Organization and the Office International d'Hygiene Publique. The first international conference on public health was in 1851, when the International Sanitary Conferences convened, focusing largely on preventing cholera. While these conferences shared knowledge, they had no power to enforce healthcare codes or coordinate responses to disease outbreaks. It was not until 1892 that the Venice Conference reached an international agreement to regulate ships in the Suez canal to prevent the spread of cholera from ships. A similar ordinance was signed in 1897 regarding bubonic plague, and in 1907 the Office International d'Hygiene Publique was founded, which would merge with the League of Nations apparatus to create the WHO. ¹ In 1950 the WHO organized a vaccine drive against tuberculosis, and by 1955 began a program aimed at eradicating malaria. In 1958 a resolution was adopted to eliminate smallpox, a goal that was achieved in 1980 after a huge increase in funding². The WHO is also critical in responding to emerging healthcare crisis, including the HIV/AIDS epidemic, The SARS epidemic in 2002/3, Ebola, and the ongoing Covid-19 pandemic. The WHO also works to end childhood diseases such as measles and polio, and to fund research on chronic and non-infectious diseases including diabetes and cancer.

¹ https://en.wikipedia.org/wiki/World_Health_Organization

²

<https://www.cdc.gov/smallpox/index.html#:~:text=Smallpox%20Virus&text=Thanks%20to%20the%20success%20of.occuring%20smallpox%20have%20happened%20since.>

The World Health Organization is governed by the World Health Assembly (WHA), which has 194 member states. The WHA is responsible for electing a board of 34 health specialists, and the director general (currently Tedros Adhanom Ghebreyesus³), setting goals, and approving budgets. The WHO is funded by member-state contributions as well as private donations, and its 2022-2023 budget is roughly \$6.2 billion.

According to the WHO their current goal is to “work worldwide to promote health, keep the world safe, and serve the vulnerable. Our goal is to ensure that a billion more people have universal health coverage, to protect a billion more people from health emergencies, and provide a further billion people with better health and well-being.”⁴

With these goals in mind, this committee will address the pressing issues of vaccine hesitancy and supporting health access in conflict-torn regions, aiming to maintain the progress of the WHO and support those most in need of healthcare.

³ https://en.wikipedia.org/wiki/Tedros_Adhanom_Ghebreyesus

⁴

<https://www.who.int/about#:~:text=We%20champion%20health%20and%20a.to%20live%20a%20healthy%20life.>

TOPIC A:

Vaccine Hesitancy

Introduction

Vaccine rates have slowed across the globe, facing delays due to Covid-19 and the difficulties of administering vaccines in rural areas, and vaccine hesitancy, which has been on the rise across the globe, with parents fearing life-threatening effects due to misinformation.

History of the Issue

Vaccine Access Barriers

Vaccines often require freezing cold temperatures or access to a constant supply of clean, sterile needles, as well as trained professionals to administer them. In remote and underserved areas these challenges can make it incredibly difficult to administer life-saving vaccines to populations who will most benefit. For example, the IPV (inactivated polio vaccine) is safer than OPV (oral polio vaccine), but it requires intramuscular injection, making it difficult to administer where there are shortages of needles. Because it is killed, IPV cannot mutate, a major challenge with OPV, which can mutate into vaccine-derived polio, which is difficult to treat, but it also creates a much weaker immune response because it does not activate cell-mediated immunity (cytotoxic T cells), which means it provides shorter-term, weaker protection, which is less favorable in areas where polio is endemic⁵ (Alfaro-Murillo, et. al, 2020) . In the past these challenges have been circumvented with well-coordinated public health efforts and innovations, but this requires research, funding, and a well-coordinated health system, barriers this committee must seek solutions to overcome.

Ultimately, every type of vaccine has strengths and weaknesses. Attenuated vaccines, such as the smallpox and MMR vaccines provide lifelong, humoral and cell-mediated protection⁶ with only 1 to a few doses administered in childhood. Other vaccines are unable to be fully attenuated, so killed viruses or pieces of the virus (ie a

⁵ Alfaro-Murillo, et. al (2020)

⁶

<https://www.technologynetworks.com/immunology/articles/humoral-vs-cell-mediated-immunity-344829#:~:text=Humoral%20immunity%20produces%20antigen%2Dspecific,in%20response%20to%20an%20antigen.>

spike protein) are used to stimulate a response, but effects are less immunogenic (stimulate a weaker immune response). DNA and mRNA vaccines are also in development, such as the Covid-19 vaccine, which uses the mRNA of the virus to “teach: the bodies B and T cells to respond without using an attenuated virus that could mutate. They also generally have fewer negative effects compared to killed vaccines because they are less “bulky” meaning there is less material for the body to react to, mitigating anaphylaxis.

Access is also hindered by the fact that some of the most necessary vaccines are prohibitively expensive for less wealthy countries, such as HIV antiretroviral treatment called PrEP or PEP which acts as a temporary vaccine for HIV⁷. Because some treatments, such as PrEP for HIV, need either regular injections or only provide immunity for a few years⁸ stable public health infrastructure is crucial to reducing infections. Funding is also needed for vaccines which are still in development or beginning roll-out, including Dengue Fever⁹, malaria¹⁰, and Ebola¹¹.

Vaccine Hesitancy

⁷ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10126665/>

⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4900687/>

⁹ <https://www.cdc.gov/vaccines/vpd/dengue/index.html>

¹⁰

<https://www.who.int/news/item/02-10-2023-who-recommends-r21-matrix-m-vaccine-for-malaria-prevention-in-updated-advice-on-immunization>

¹¹ <https://www.cdc.gov/vhf/ebola/clinicians/vaccine/index.html>

Vaccine resistance is as old as the vaccine, with parents in England opposing the Vaccination Act of 1853, which made smallpox vaccines mandatory for children¹². In the 1970s, allegations of injury from the DTP vaccine caused controversy across the globe; however, increased refusal of the vaccine is believed to have led to several whooping cough outbreaks.

Recent hesitation has centered around Andrew Wakefield, a British doctor (whose license has been revoked) who claimed in 1998 that the MMR vaccine caused autism. His license was revoked for falsifying data, but his claims gained mass popularity, especially in alt-right communities¹³. This theory has been expanded to various vaccines, including the HPV vaccine¹⁴, and, in some cases, all forms of vaccines. Since the outbreak of the Covid-19 pandemic, Wakefield's theory has seen a huge boost in support, like due to skepticism about the Covid-19 vaccine, and has seen a huge surge in followers following the Covid-19 pandemic¹⁵.

Covid-19 has been a breeding ground for all kinds of conspiracy theories, but concerns about vaccinations have been especially pernicious, often catching young, worried parents and apolitical citizens who are simply worried for the health of their family and friends. While the anti-vaccination movement is often associated with the far-right and fundamentalist groups throughout the world, often serving as a gateway to

¹²

<https://historyofvaccines.org/vaccines-101/misconceptions-about-vaccines/history-anti-vaccination-movements>

¹³ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3136032/>

¹⁴

<https://www.hopkinsmedicine.org/news/newsroom/news-releases/2018/10/the-hpv-vaccine-why-parents-regularly-choose-to-refuse>

¹⁵ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9981160/>

more extreme beliefs, many of those involved are not strongly political, but instead are distrustful of the medical establishment, especially after the mishandling of Covid-19 by many governments and health associations.

Using the United States as an example, the Center for Disease Control (CDC) originally advised against using test kits from Germany to test for Covid-19, slowing detection during the crucial period in which the spread throughout the nation could have been prevented¹⁶, or at least slowed greatly. The CDC instead made their own tests kits, which were found to be inaccurate, and then prevented hospitals and universities from validating their own, in-house tests until they were approved by the FDA. Unfortunately, the process for approval was very slow, taking weeks and 100s of documents at a time when preventing an outbreak would have required testing huge populations in a matter of days¹⁷.

The government as a whole was also very disorganized in its response, with the federal executive branch under Donald Trump clashing very publicly with the CDC, Congressional Representatives, and state officials¹⁸. Besides political infighting, both federal and state offices were incredibly underprepared, lacking training, contingency plans, and adequately stocked emergency supplies to respond to the outbreak quickly¹⁹.

¹⁶ <https://www.washingtonpost.com/business/2020/03/16/cdc-who-coronavirus-tests/>

¹⁷

<https://www.science.org/content/article/united-states-badly-bungled-coronavirus-testing-things-may-soon-improve>

¹⁸ <https://www.politico.com/news/2020/10/13/trump-anthony-fauci-campaign-ad-feud-429148>

¹⁹

<https://www.acpjournals.org/doi/full/10.7326/M23-0768#:~:text=The%20onset%20of%20the%20COVID,a n%20under%20resourced%20national%20stockpile.>

The poor response to the pandemic as well as the politicization of certain containment measures such as social distancing and masking served to undermine faith in critical healthcare institutions which would then come to a head in the backlash and distrust of vaccines that became available in December 2020 in the United States. These vaccines relied on hundreds of years of previous vaccine research, as well as recent strides in genomics and viral research which allowed the rapid sequencing of the virus and thousands of tests and trials to find an effective vaccine as quickly as possible²⁰. Many different pharmaceutical companies and research institutions were involved in these efforts across the world, with the US contributing over 30 billion dollars to create and distribute the vaccine, and other countries such as Germany, China, India and many others also contributing massively to efforts to create and distribute these vaccines. There are certainly incredible examples in this vaccine development of global health cooperation that the World Health Organization strives for, but there were also several missteps that contributed to distrust.

Many Americans were still distrustful of the CDC and FDA after they had bungled the initial Covid-19 response and turned to untested and dangerous methods for cures such as the anti-malaria medication Hydroxychloroquine, with some using versions made for animals such as horses when pharmacies started restricting it to prevent dangerous usage after there were reports it might treat Covid-19 (which have since been disproven)²¹. On top of this distrust, pharmaceutical companies have recently been

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<https://covid19.nih.gov/nih-strategic-response-covid-19/decades-making-mrna-covid-19-vaccines#:~:text=Two%20U.S.%20Food%20and%20Drug,virus%20that%20causes%20COVID%2D19.>

21

<https://www.mayoclinic.org/diseases-conditions/coronavirus/in-depth/hydroxychloroquine-treatment-covid-19/art-20555331>

under fire in American media for their role in the opioid crisis²² and price-fixing life saving drugs such as insulin²³.

Vaccine History

This hesitancy begs the question, are vaccines really safe?

The evidence is clear that vaccines are safe. The main risk is allergic reactions, which are very rare, but can be life-threatening. Because of this, doctors are trained to ask about a history of allergic reactions, and most hospitals and clinics have epinephrine on hand, as anaphylaxis can occur as a reaction to any vaccine or medication. These reactions are still incredibly rare, with around 1.3 reactions per million vaccines administered and slightly higher rates for Covid-19 vaccines. Some vaccines no longer in use have also had some cases of serious reactions, with the smallpox vaccine sometimes causing true infection in patients with eczema, and yellow fever vaccines sometimes causing other adverse reactions. These events were rare, and these vaccines are no longer in use. It is also important to note that these vaccines were still far safer than the disease itself, which was virtually guaranteed to infect every person (depending on geographic region for vector-borne diseases like yellow fever), so a few adverse effects, while incredibly scary, were still preferable to the incredibly high death rates of these diseases.

The other main concerns today are seizures and autism. While seizures can occasionally occur as a side effect. This reaction is not a reaction to the vaccine

²²

<https://www.justice.gov/opa/pr/justice-department-announces-global-resolution-criminal-and-civil-investigations-opioid>

²³ [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)02402-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)02402-8/fulltext)

ingredients, but an overreaction of the body to foreign intruders. This is very similar to anaphylaxis, where histamines are overstimulated by vaccine ingredients, but in this case it is the immune system itself causing the reaction. The purpose of the vaccine is to stimulate the immune system, but occasionally the reaction is so severe that it causes high fevers and febrile seizures. It is important to note that this reaction likely would have resulted to any foreign invader, meaning a child would have gotten just as sick had they contracted the non-attenuated virus naturally, and would have also had to contend with an actual infection as well²⁴.

Dangers of Leaving Children Unvaccinated

Children who are left unvaccinated are at increased risk for contracting life threatening diseases. It also opens the door for outbreaks, which are generally protected against via herd immunity²⁵. In every population there will be people who cannot be vaccinated or whom vaccines do not work for. This can be because of existing health conditions that compromise their immune system (ie HIV/AIDS, transplant and cancer patients on immunosuppressants), those who have severe allergies to vaccines, and those too young to be vaccinated (generally babies under 1). High vaccination rates make it very difficult for viruses to find hosts to spread to, essentially stopping transmission before any other non-immunized person can acquire the virus. However, when vaccination rates start to dip below 90-95% (rates depend on how easily diseases are transmitted) there are enough non-immunized individuals to sustain an outbreak, which not only puts those

²⁴

<https://www.cdc.gov/flu/prevent/febrile.htm#:~:text=Vaccines%20can%20cause%20fevers%2C%20but,an d%20febrile%20seizures%20in%20children.>

²⁵ <https://www.webmd.com/covid/what-is-herd-immunity>

who choose not to immunize at risk, but also the most vulnerable who have no choice in the matter²⁶.

Case Studies

Polio is essentially eradicated in the United States, but across the world it is still endemic. Eradication efforts have been complicated by the fact that, when oral vaccines (the most common type), are not given uniformly, resistance strains of polio can be created, and then spread to unvaccinated populations²⁷. Cases of Vaccine-Derived Polio have been found in Malawi, Mozambique, Israel, The United Kingdoms, and the United States within the past 2 years. There are warnings that these instances will quickly grow if low vaccination rates are not addressed expediently. This is not only a problem of vaccine hesitancy but also lack of resources and accessibility, an issue addressed in Topic B²⁸.

²⁶ <https://jamanetwork.com/journals/jama/fullarticle/2772168>

²⁷ <https://www.cdc.gov/vaccines/vpd/polio/hcp/vaccine-derived-poliovirus-faq.html>

²⁸ [https://www.thelancet.com/journals/lancet/article/PIIS1473-3099\(22\)00548-5/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS1473-3099(22)00548-5/fulltext)

Questions to Consider

- What is the stance of the country you are representing on vaccines? Do medical establishments in the country agree with the opinions of elected officials? In their consensus among elected officials. Which position will you represent as the delegate?
- What is the best way to solve this issue? Should your country invest in education to aid other countries or does the country you represent need to reestablish trust in its own systems? Is it both?
- What measures can be taken to restore faith in vaccines? Do those who promote false research need to be prosecuted or have their licensing revoked? Do corrupt companies or officials need to be disciplined? Do social media sites need to take measures to combat misinformation? What can doctors do?

TOPIC B:

Conflict and Health

Introduction

Healthcare is critical in war-torn areas, but it is often incredibly difficult to access. Aid has difficulty getting through blockades and fighting, which often fail to create humanitarian corridors, making medical care nearly impossible. It is also difficult because war means an increase in civilian injuries and an increased risk of starvation and unsanitary conditions, further increasing the health risks of living in a conflict zone²⁹.

²⁹ [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(22\)00479-2/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)00479-2/fulltext)

History of the Issue

History of Health and War

Healthcare has made major improvements during times of war, with Florence Nightingale improving nursing care during the Crimean War³⁰, and Barton's Red Cross³¹ that formed to aid soldiers during the US Civil War but now aids civilians across the world during times of conflict and natural disaster. War introduces extra barriers to care, including a lack of sanitation and equipment, making life-saving surgeries more dangerous, an increase in casualties which require robust healthcare infrastructure, and often a lack of food and clean water, increasing malnutrition and contributing to a rapid spread of disease.

Interventions

This is not a comprehensive overview of the kinds of interventions that can aid conflict torn regions, but they are commonly deployed on the front lines to most effectively distribute aid. It is also important to remember that aid organizations are often critiqued for inadequate or poorly considered aid responses, and new strategies are needed to ensure that the correct aid is administered as efficiently as possible.

Nutrition is often one of the first necessities to go in conflict, because it can become

Nutrition

Nutrition is often one of the first necessities to go in conflict, because it can become difficult for deliveries to pass through active conflict zones. Conflict can also

³⁰ <https://www.nationalarchives.gov.uk/education/resources/florence-nightingale/>

³¹ <https://www.womenshistory.org/education-resources/biographies/clara-barton>

make harvest impossible, meaning malnutrition can spread to regions that were previously unaffected, such as the war in Ukraine, “the breadbasket of Europe”. So far disaster has been avoided, but in less wealthy nations, this inability to harvest could quickly lead to famine³². Malnutrition also makes diseases spread quicker, weakening the immune system and making normally harmless diseases far more fatal.

Sanitation

Clean water and adequate toilet facilities are critical to maintain health during conflict. Cholera, diarrheal diseases such as rotavirus³³, Hepatitis A, typhoid, and Polio³⁴. These diseases can be easily eradicated with a mix of vaccination and clean water, but water infrastructure is fragile and is easily damaged by bombing, and difficult to set up in cases of displacement, due to the crowded conditions and rapid building of these camps.

Healthcare Professionals

Sending healthcare professionals to conflict zones is a common way to provide access in war-torn areas. They can set up temporary hospitable or fortify the numbers of existing doctors and nurses in an area when there is an increase in casualties. This often puts these professionals at risk, however, and sometimes these organizations have to pull out of conflicts when they cannot keep their doctors and nurses safe³⁵.

³² <https://www.politico.com/news/magazine/2023/07/21/ukraine-grain-harvest-00107212>

³³ <https://www.cdc.gov/rotavirus/vaccination.html>

³⁴ <https://www.who.int/news-room/fact-sheets/detail/drinking-water#:~:text=Contaminated%20water%20and%20poor%20sanitation,individuals%20to%20preventable%20health%20risks.>

³⁵ <https://www.voanews.com/a/msf-suspends-work-in-haiti-hospital-after-armed-gang-executes-patient-/7399055.html>

Questions to Consider

- What is the stance of the country you are representing on the conflicts that have been covered in this background guide? Are there other ongoing conflicts that your country has a vested interest in giving (or denying) aid to?
- What kind of funding does your country have to distribute?
- What novel solutions can your country offer to provide aid in war torn areas? Does your country have a wealth of doctors? Is there unemployment in your country? Could nurses be trained to serve in other regions?
- How will aiding (or asking for aid) serve your country?

Country Details

Yemen

Yemen has been embroiled in civil and proxy wars for decades, destabilizing the country. This fighting, combined with drought, has made administering aid incredibly difficult, and is furthered worsened by the fact that famine relief, in the form of food, is often stolen by corrupt officials.

Yemen has struggled with outbreaks of cholera due to dirty water, vector-borne diseases from mosquitos, and diphtheria, a bacteria that produces toxins that can be easily treated with antitoxin vaccines³⁶³⁷. Mosquito-borne diseases can be significantly reduce with vaccination, treatment, and safety measures like mosquito nets, but access to these interventions is severely limited.

Palestine

Gaza, one of the territories under Palestinian jurisdiction inside Israel, was under Israeli occupation for years, before Israel pulled out in 2006. Despite the end of occupation Gaza is completely blockaded, both by Israel and Egypt, who have a treaty with Israel to blockade Palestine. While aid and some materials are allowed through it is heavily restricted by the Israeli government. The Israeli government also controls access to water in Gaza, and over 97% of Gazans lack regular access to clean water, relying on aid packages instead, and being forbidden from drinking rain water. Palestinians crops are often sprayed with herbicide along the border, furthering the reliance on aid. In October

³⁶ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8063071/>

³⁷ <https://www.cdc.gov/vaccines/vpd/diphtheria/index.html>

2023, after an attack by Hamas, the current government of Gaza, on Israel, Israel strengthened the blockade, making it virtually impossible for any type of aid to reach Gaza. This has caused mass starvation and dehydration, and caused doctors, who must operate on the mass casualties caused by constant bombing to perform amputations and surgery with no anesthesia and no sanitation. On top of this, the lack of running water has caused disease to spread, and raised fears of cholera and other communicable disease outbreaks.

Democratic Republic of Congo

In the DRC ongoing civil war has caused starvation and forced millions into deeply unsafe working conditions. Ebola outbreaks have plagued the country, and while WHO management has helped,³⁸ greater aid is necessary. Nearly 1 in 6 people in Congo live in extreme poverty according to the World Bank, further contributing to the lack of medical infrastructure and the difficulty of administering medical care³⁹. Adequate nutrition and clean water drastically improve quality of life and continued access to these basic needs is desperately needed in the DRC.

Afghanistan

After decades of war Afghanistan is facing a lack of infrastructure. Women's rights have been systemically stripped away by the Taliban, meaning female doctors cannot practice, making it nearly impossible for women to access care. Girls are also not allowed to go to school higher

³⁸ <https://www.who.int/emergencies/situations/Ebola-2019-drc->

³⁹ <https://www.worldbank.org/en/country/drc/overview>

than primary school, hindering one of the major junctures of aid distribution, and the Taliban make it incredibly difficult to deliver aid at all, while healthcare is seriously underfunded⁴⁰.

Much of the countries assets were also frozen when the Taliban took over⁴¹, which, while preventing the funding of terrorists, also makes it nearly impossible for any improvements to be made. Afghanistan also struggles with many vaccine preventable illnesses including Hepatitis A and B, Typhoid, tuberculosis, among others⁴².

Haiti

Haiti has faced public health issues since it was a French sugar colony, with enslaved workers dying in the thousands every year due to disease, overwork, abuse, and the incredibly dangerous working conditions of harvesting and processing sugar⁴³. Today, centuries of debt and exclusion have created untenable financial situations that give rise to gangs and violence. After the earthquake conflict has gotten so bad that aid is nearly impossible to deliver and Haiti is facing possible cholera outbreak and record hunger due to armed conflicts⁴⁴.

United States

The US is a large provider of international aid but also has allied themselves with countries causing medical disasters, such as Israel, which is currently bombarding the Gaza Strip,

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<https://www.who.int/news/item/18-08-2023-afghanistan-s-health-system-suffers-critical-underfunding--calls-for-donor-support>

⁴¹

<https://www.usip.org/publications/2022/09/us-move-afghanistans-frozen-central-bank-reserves-new-swiss-fund>

⁴² <https://wwwnc.cdc.gov/travel/destinations/traveler/none/afghanistan>

⁴³ <https://www.ncronline.org/news/history-created-haiti>

⁴⁴ <https://www.cdc.gov/cholera/haiti/index.html>

and whose withdrawal from Afghanistan allowed the Taliban to take power⁴⁵. The US is also facing a major anti-vaccine movement⁴⁶, fueled by anti-establishment conspiracy theories and distrust in governmental health institutions.

Saudi Arabia

Saudi Arabia is very wealthy and has significantly improved its healthcare system in the past few decades, offering full healthcare coverage to all citizens⁴⁷. While communicable diseases are a minor risk due to extensive vaccination, migrant workers do not benefit from the same healthcare coverage and are often forced to work outside in extreme heat, causing many health issues and death⁴⁸.

Saudi Arabia is also a major player in the Gulf Region and Middle East, coming under fire for its hand in the Yemeni civil war, which has destabilized the entire country and made access to healthcare difficult⁴⁹.

Germany

Germany has also seen significant resistance to vaccine mandates following the outbreak of Covid-19, with naturalist groups rallying along with alt-right groups (such as the Alternative for Germany (AfD) party) forming unlikely coalitions⁵⁰. As of January

⁴⁵ <https://www.cfr.org/timeline/us-war-afghanistan>

⁴⁶ <https://www.politico.com/news/2023/09/20/biden-anti-vax-movement-00116516>

⁴⁷ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10250784/>

⁴⁸ <https://www.hrw.org/news/2023/05/31/gulf-states-migrant-workers-serious-risk-dangerous-heat>

⁴⁹ <https://www.cfr.org/global-conflict-tracker/conflict/war-yemen>

⁵⁰ <https://www.nytimes.com/2022/01/24/world/europe/germany-vaccine-mandate-antivax-movement.html>

2022 Germany's vaccination rate was 69%, meaning it had the lowest share of unvaccinated people compared to any other European country. Germany also provides funding to Israel, and has been opposed to peace processes that could end the war in Gaza and has withdrawn previous aid to Palestine.

India

India has major manufacturing capabilities for vaccines and other critical medical equipment, as well as a large, densely packed population to keep healthy. India has also made incredible strides in recent years to eradicate or drastically decrease the rates of vaccine preventable diseases such as polio⁵¹. These gains are incredible, and every effort should be made to maintain this progress. Possible points of weakness include neighboring Pakistan, where polio is still endemic⁵². India and Pakistan also continue periodic conflicts over the contested region of Kashmir, where healthcare workers struggle to maintain high standards of care when conflict flares. The poverty rate is also much higher compared to many regions of India, with many academics blaming policies that keep Kashmiris from attaining education and jobs, and thus increase the risks of hunger and disease outbreaks⁵³.

China

As the source of the Covid-19 pandemic, China has faced economic lockdown and travel bans from many other parts of the world. The state also faced international criticism over its lack of transparency in reporting and investigating the cause of the

⁵¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4799645/>

⁵² <https://www.unicef.org/pakistan/polio>

⁵³ <https://borgenproject.org/about-poverty-in-kashmir/>

virus as well as strict lockdown policies that some see as unnecessarily repressive and ineffective. These controversies have strengthened conspiracy theories around the globe that feed into anti-vaccine sentiments. China is also, however, home to world-class labs, and was able to quickly sequence the virus and begin work on a vaccine.

Across the country China has an incredibly strong vaccination and public health program, which should be continued to avoid the loss of herd immunity. China also has a vested interest in regaining the trust of the global health community, so that its healthcare research and industry can be shared with the world.

While China is not currently embroiled in any specific humanitarian conflicts abroad, its treatment of the Ugyhur people, a largely Muslim minority group, has drawn criticism and accusations of ethnic cleansing. Ugyhur people are often forced from their homes into schools, factories, or reeducation camps, and face persecution. While there is little threat of this spiraling into regional conflict, the treatment of the Ugyhur is against human rights laws and could also breed hunger and disease.

Mexico

While Mexico's healthcare system is somewhat fragmented its public health infrastructure is fairly strong and vaccination rates are very high⁵⁴. Mexico is highly interconnected to America, and is cognizant that health issues facing America, such as decreasing vaccination rates could also harm their own citizens. Mexico is not a conflict zone, but it does suffer from regular cartel violence. This violence does not rise to the levels seen in Guatemala⁵⁵ and other South and Latin American countries, where cartel

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<https://www.publichealth.columbia.edu/research/others/comparative-health-policy-library/mexico-summary#:~:text=The%20major%20health%20concern%20in,of%20the%20population%20having%20diabetes.>

⁵⁵ <https://scholarscompass.vcu.edu/uresposters/135/>

violence has metastasized into ongoing country wide conflict, but Mexico has a vested interest in curbing cartel activity and stabilizing active conflict zones throughout the region, as most migrants and refugees fleeing violence from cartels and gangs end up in Mexico.

Egypt

Egypt's government has been somewhat destabilized especially since Arab Spring, with the authoritarian Abdel Fattah al-Sissi gaining power in its aftermath. Egypt directly borders Sudan, an active conflict zone currently embroiled in civil war, as well as the Gaza Strip, controlling the only border crossings into the area besides Israel.

Egypt's vaccination rates have grown substantially in recent years, with vaccination rates for most routine vaccinations reaching over 95% and polio being eliminated in 2006⁵⁶. These gains are incredibly important, and need to be maintained with support from the Egyptian government and other health authorities. Egypt is also surrounded by conflict zones, and is a critical point of entry for aid. Egypt is also unable and unwilling to receive many refugees, as its economy is very unstable, and, should conflict worsen, will need incredible international support to aid refugees.

France

⁵⁶ <https://www.statista.com/statistics/1276252/vaccination-coverage-of-children-in-egypt/>

Much like Germany and the US France has also seen significant opposition to Covid-19 vaccines and lockdowns, with fears of conspiracy theories strengthening the alt-right movement in the country⁵⁷.

France supplies large amounts of aid money to international efforts to supply food and medical aid in conflict and is the home of Medicin sans Frontieres (Doctors without Borders), a major organization who aids in underfunded and conflict regions⁵⁸.

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⁵⁸ https://en.wikipedia.org/wiki/M%C3%A9decins_Sans_Fronti%C3%A8res

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