

FRAMEWORK OF VACCINE DISTRIBUTION GLOBAL INFECTIOUS DISEASE OUTBREAK



ASIA | PACIFIC | OCEANIA | AMERICAS

Note from the Director

Hello delegates! My name is Hazel Heo, and I will be your head chair for the World Health Organization (WHO). I am currently a senior at Cerritos High School, and I am more than pleased to be a part of the Model United Nations program. MUN has not only shaped me into a confident speaker but also has helped me form new relationships with people through mutual interactions. As of school, I am taking advanced STEM related courses to achieve my passion for math and physics(which is why I love space related committees), while I love sharing my knowledge and ideas to my peers through interactive teaching. Outside of school, I am partaking as a tutor for young youth having the opportunity to make an impact on different individuals, while I have some interesting hobbies as an owner of a study YouTube channel and a Rubix Cube Nationals competition winner. Also, I'm a big fan of strawberry hibiscus flavored boba, and green tea macarons, as a person who loves visiting dessert cafes with friends and family. For this conference, I really hope everyone can freely share their ideas and leave with an unforgettable memory of brimful joy. We are the ones making this experience, and shaping the conference, so I hope it can be a momentous time for new chances and challenges for every delegate. I can't wait to see you guys!

Committee Introduction

The World Health Organization (WHO) was originally created on April 7, 1948 (World Health Day) in order to direct and coordinate international health relations through collaborative measures. Currently working with 194 member states, the World Health Organization acts as the overseer for the international and worldwide public health to promote better health systems and create alert response strategies for non-communicable and communicable diseases, while working in support of healthcare frameworks through multilateral conjunction between the public health figures. WHO originally set up the headquarters in Geneva and Switzerland, however has recently expanded to six regional offices with more than 7000 people working in each country offices located in more than 150 member countries.

WHO has shown remarkable progress as the leading global healthcare organization in response to global novel viruses including COVID-19 series pandemic. As COVID-19 struck every corner of the world starting in 2020 with more than 45 million reported as of October 31st (WHO), WHO increased their sectional global immunization coverage in order for the infectious disease outbreak to be completely eradicated. WHO has been working on prevention, containment, surveillance, treatment and coordination of healthcare agendas and its implication on its member states. Even though these marks haven't subsided the possibility of future crisis, the World Health Organization is constantly on the run of evolving and collaborating with the international community in order to better the healthcare system and the global health agenda worldwide.

Topic A: Framework for Vaccine Distribution

Background

Since January 2020, 1,300,696 confirmed cases of COVID-19 had been recorded in the US, causing grocery store shelves to be emptied out of panic while doctors and nurses struggle to find new masks, ventilators, and beds to accommodate for each new case. Mayor Bill de Blasio of New York, which accounts for almost half of all coronavirus cases in the US, stated that the city is still in need of 3.3 million N95 masks, 2.1 million surgical masks, and 100,000 isolation gowns

for medical personnel and patients. As a result of a lack of resources and preparedness, New York alone saw 14,636 deaths and an average of 350 new cases per day. Since the World Health Organization (WHO) declared COVID-19 as a pandemic on March 11th, there was a scarcity of resources as well as an immediate need of vaccines on an international scale, making it difficult to receive supplementary support from other affected nations. A similar situation can be seen in 2009 when the novel influenza virus (H1N1) became resistant to existing flu vaccines and was declared a pandemic that year. From 2009 to 2010, 213 countries reported shortages of testing kits, a lack of emergency staff, and an overwhelming influx of patients each day. According to the Center for Disease Control and Prevention (CDC), H1N1 killed around 575,000 people until a vaccine was distributed in 2010. Due to the sporadic nature of pandemics, the rapid increase in sickness around the world quickly overburdens medical facilities and depletes needed secure vaccine distribution framework.

Following the spread of numerous novel viruses, the international community has always strived to find the vaccines as well as the most efficient way to distribute them under the circumstantial framework in each country. Ever since the research upon the vaccines and its development became an impending topic in most parts of the world, the coverage of vaccine laboratories led to an increase in vaccine innovation and discoveries from the polio vaccine in 2000 to COVID-19 vaccine in 2020. Along with the development of these vaccines, the distribution of the vaccines in developing countries and third world countries had risen as the important issue on hand. The efficient vaccine distribution framework can be seen in 2009 when nine countries pledged to share the H1N1 vaccine distribution network with developing nations in order to protect the limited vaccines that can be distributed in countries from contracting the virus. These nine countries include the US, Australia, Brazil, France, Italy, New Zealand, Britain, and Norway, where their donations contributed to the 120 million vaccines that were already pledged to the World Health Organization earlier that year. As a result of distributing the vaccines internationally, the WHO declared an end to the H1N1 influenza pandemic in August of 2010. Although it was not considered a pandemic, Ebola also saw the collaboration of multiple countries and healthcare workers to fight the virus terrorizing West Africa in 2014. According to the WHO, 80 nations contributed to the training of 8,000 healthcare workers in the Ebola-affected countries to effectively distribute the vaccines to different parts of the nation. Through the knowledge shared by trainees, Guinea, Liberia, and Sierra Leone were able to expand their laboratory capacity, with 24 laboratories able to test for Ebola in 2015. The distribution of vaccines and its importance has been recently highlighted due to the rapid spread of COVID-19 disease and its exigent effect on the lives of the international community. With a lack of ventilators in the US, specifically New York, the Chinese government donated 1,000 ventilators to the city on April 6th 2020, and in February of 2020, the US sent around 1.5 tons of ventilator masks to Germany in order to help prevent the further spread of COVID-19. In March of 2020, China sent a group of 300 intensivecare doctors with vaccine distribution hotlines, 30 ventilators, 3,000 protective suits, 300,000 medical masks, and 20,000 N95 masks to Italy. Vaccine distribution directly relates back to the medical consequences and the effectiveness of the vaccination framework which is why the international community's attention upon the vaccine distribution is needed in order to reduce the spread of viruses and limit the amount of uncertainty that pandemics present.

United Nations Involvement

UN involvement upon vaccine distribution began in 1995 when the World Health Assembly (WHA) revised the International Health Regulations (IHR) in order to accommodate for

the international spread of new or existing diseases. The IHR revisions were later adopted into the 2005 WHA Resolution 58.3 as a way to provide a universal public health response to the widespread influence of diseases among the member States. In addition to focusing on the prevention of diseases and the framework for distributing vaccines through pandemic preparedness plans, the resolution encourages the building of relationships on a national and international level. In 2013, the Director-General of the WHO, Margaret Chan, stated that the foundation for the IHR core framework is to prevent any gaps in the healthcare system on a national level as that can eventually cause problems for the health security of all nations. The resolution also highly encourages member States to share and fill the existing gaps in national vaccine distribution systems. This new knowledge allows fellow nations to prepare and communicate with their domestic hospitals so they will be better equipped for a potential influx of patients. This resolution also allows developing nations to receive assistance with the mobilization of financial resources and technical equipment upon request. Resolution 58.3 had a total of 195 signatories and addressed pandemics as being a threat to security and health on an international level. One example is in South and East Asia after the SARS pandemic in 2002, which revealed flaws in the management of outbreaks. As a result of the resolution, South and East Asia implemented the Asia Pacific Strategy for Emerging Diseases to create a collective strategy to prevent new outbreaks.

Further UN action for sharing resources was seen as a part of the 2030 Sustainable Development Goals (SDG). In particular SDG 3 was made to improve the well-being and health of millions of people, including the prevention of infectious diseases and building the fundamental framework upon vaccine distribution. As a part of SDG 3, the WHO implemented the Global Action Plan for Healthy Lives and Well-being for All to strengthen the collaboration between countries and to achieve progress towards the SDG health related targets. More specifically, the Action Plan works on the allocation of resources towards healthcare initiatives to prevent the spread of infectious disease. Through the Action Plan's seven accelerator themes, the Plan does not provide or seek additional resources but rather builds on existing resources in order to increase the proficiency of prevention and treatment tools. The Action Plan also focuses on the sharing of knowledge to ensure that current vaccination frameworks are managed closely together with the 12 multilateral agencies involved. The impact of the Global Action Plan has not yet been documented considering it was implemented in 2019 and member States have not gathered sufficient information to report on.

Bloc Positions

Western Bloc:

Western bloc has been the leading actor upon the vaccination framework considering the immense amount of research and the development of healthcare systems they have experienced since their first discovery of the vaccine in the 1900s. Western countries are constantly evolving in terms of providing adequate vaccination processes as well as providing information upon the systematic responses to the developing countries. The United States, the one of the most advanced countries in the western bloc in terms of capital strength and infrastructural vaccination has successfully managed to implement the systematic response alerts upon the spread of novel viruses, seen in the example of Pfizer, which is currently certified as the most reliable multinational vaccine producers. Moreover, the United States government is working in close coordination with other nations to integrate state officials for successful vaccine distribution in different parts of the nations and to secure the protection of the vaccination process.

Middle Eastern Bloc:

Vaccine distribution in the Middle Eastern Bloc has faced afflictions since the potential closures of border crossing between the Middle Eastern countries, which limited the access of international aid agencies to reach the need of vaccination under the situation of pandemic. For example, a December 2020 report by the United Nations Organization, Physicians for Human Rights on vaccine distribution in the Syrian region of Darra noted that the countries in the Middle Eastern region are experiencing disputes in distributing COVID-19 vaccines for their own ends. Even though Israel has been the fastest to vaccinate its population, the COVID-19 doses that it has sent to the Israeli settlements in the West bank has been refused, where it was evidently shown that it lacked a secure vaccination framework to persuade the former government to take action upon the distribution of COVID-19 vaccines.

Latin America and Caribbean Bloc:

Latin America and Caribbean Bloc take up roughly 15% of the world's reported COVID-19 cases, however less than 3% of the global vaccine doses are administered for South America so far. Latin America and Caribbean bloc governments have set up openings for "vaccine diplomacy" plan to receive help upon vaccine distribution as well as support in reaching vaccines and medical supplies needed to process the vaccination to the citizens in need. Establishing the Chinese-Latin America relations, Latin America has reached out to China and Russia with massive vaccination production capability, including the Coronavac made by the Chinese company Sinovac, which is already the part of large-scale distribution in Brazil.

African Bloc:

African Bloc has been left behind in obtaining COVID-19 vaccines compared to the developed countries with enough capital and funds. However, in February 2021, South Africa took the vaccine delivery of its first million doses of the Oxford and AstraZeneca COVID-19 vaccines, with more than 500,000 doses following the month after. It has successfully inoculated health workers to be dispositioned during the vaccination process and started the mark as the first country in Africa to receive large doses of COVID-19 vaccines. Serum Institute has requested for more purchase of Oxford/AstraZeneca COVID-19 vaccines, and African countries were reportedly set to pay \$3 per dose, promised 270 million doses of Oxford/AstraZeneca, Pfizer/BioNTech and Johnson & Johnson vaccines.

Asian-Pacific Bloc:

Asian Pacific Bloc mostly is equipped with extensive manufacturing capabilities to serve the successful vaccination process recommended by the United Nations healthcare programs, including the vaccine production hubs and the local regulators. Serum Institute of India or the SII had been manufacturing Oxford/AstraZeneca vaccines, while the Bharat Biotech of Indian Council has recently opened the medical research upon the Covexin vaccines that are manufactured locally. Oxford-AstraZeneca vaccines produced in the Asian Pacific region have released its interim phase 3 trial data, which showed the vaccination efficacy of 70.4%, while this currently takes up more than 60% of all vaccines sold around the world. China, also one of the leading vaccine developers in Asian Pacific bloc has approved its vaccine distribution manufactured by state-owned pharmaceutical sinopharm, with 79.34% efficacy based on the interim analysis of phase 3 medical trials.

Basic Solutions

Following the impending threat of the evolving novel viruses, cross-border threats are nowadays defined as the 'pandemic'. In the last 20 years, SARS, Ebola, MERS, Swine flu, and COVID-19 has crucially affected the international community, which is why the vaccine distribution should focus on the cause and effect of the viruses and its effect on the global healthcare systems, consequently upon the political and economic aspect of the crisis. First of all, the delegates should focus on the need of a co-comprehensive alliance that will establish a secure network between the developed countries and the Least Developed Countries (LDCs), considering the widening gap of vaccination chances as well as protected vaccine distribution process. Look for multifaceted funding frameworks that will allow a broader view upon vaccination information exchange and dissemination, while the delegates should also take a closer look at the surveillance precautions needed during the process of distributing vaccines. For example, the South American Infectious Disease Initiative (SAIDI) has shown a great improvement in increasing its multisectoral strategy specifically in Bolivia, Paraguay, and Peru, collaborating with the countries in developing effective strategies to counteract the deficiencies in vaccine distribution with its emphasis on the efficacy of the process with guaranteed quality. This increased the vaccine distributary efficiency with capacity-building on how to develop interventions to contain the emergence and spread of the novel viruses. Delegates should focus on specific funding systems and programs that can successfully support the allocation of vaccine distributions in LDCs and how this will be coordinated between the developing and developed countries.

Moreover, delegates need to consider the prioritization system in distributing the vaccines, based on the universal equitable distribution of funds and the vaccine doses and how the international community will schedule each vaccination phase. Take the vaccination phase listed under the Committee on Immunization Practices (ACIP) into consideration when discussing the vaccination of health care personnel as well as facility residents, while the medical conditions of the essential workers in the field should also be brought upon the table. Transportation and the storage of vaccines as well as the medical supplies should also be considered when planning for a protective vaccine distributing process, especially acknowledging the fact that the disbursement of vaccines are highly dependent on the temperature of the surrounding environment. Delegates should mention how their solutions will be implemented specifically in third world countries and how the basic infrastructural facilities will be established to provide a regulatory environment for vaccine distribution.

Questions to Consider

- 1. How has your country dealt with a lack of medical infrastructure during a pandemic in the past?
- 2. Has your country ever allocated vaccine doses to other countries in need when experiencing an outbreak or pandemic?
- 3. Should existing healthcare systems be constantly stocked with supplies in preparation for emerging infectious diseases and how would your country provide those resources?
- 4. Would your country consider the closure of all businesses and factories, halting resource output, when experiencing an outbreak?
- 5. Does your country consider the mobilization of physical resources, medical supplies, or knowledge to be more important during a pandemic?

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Topic B: Global Infectious Disease Outbreak

Background

With the rapid growing interconnectedness of the international community, a single disease outbreak in a region has a great potential to possibly spread faster than ever before, defined as a pandemic. These disease outbreaks cause global pandemics, taking an immense amount of lives throughout the process. In order to limit the spread of the global infectious disease outbreak, it is crucial to understand the nature of these diseases and the danger it can bring to the international community. According to the United Nations report in 2002, a global pandemic can be defined as a "worldwide spread of a new disease." Pandemics differ from simple epidemics that usually end up residing in a bounded region as it can affect a wide range of populations worldwide. Without secure regulations, simple outbreaks can quickly turn into pandemic outbreaks and spread unstoppably across the globe. Usually, the pandemics originate from commonly associated animals that become the first carrier of the animal influenza virus. Normally, these animals do not contain viruses that are harmful to humans, however considering that the viruses are constantly evolving, it often finds a host especially in a vulnerable human body. These human bodies soon act as a cellular factory that produces more viruses that quickly replicates to find another human host. In most cases, viruses and bacteria easily spread to other hosts following the symptoms of the patients that often include coughing and sneezing. Once this phase begins, the spread of virus grows at an exponential rate in the absence of immediate response or closure, which easily leads to the global infectious disease outbreak or a global pandemic.

The impending threat of global infectious disease outbreak has been dealt since long ago, when the first historically written pandemic was found. From 1346 to 1353, the Black Death, commonly referred to as the Bubonic Plague pandemic, has immensely affected the lives of European populations. Found in small mammals and its fleas, the Yersinia pestis bacteria soon took its root on rats that were commonly found in Europe, which soon carried the virus across continents to create one of the deadliest pandemic of all time. Just during the 14th century, Black Death itself caused more than 50 million deaths in Europe wiping out the population at an unstoppable speed. Even though in the present day, Black Death is considered a minimal infectious disease that could be easily treated with antibiotics, the example of the Black Death outbreak evidently showed the lack of standard preventative framework to limit the escalation of the new disease outbreaks.

Another contagious virus that has been labeled as a global pandemic is the Ebola hemorrhagic fever, or the Ebola virus disease. Ebola, the virus originated from animals spread through human hosts, specifically through the transfer of body fluids. Even though the virus itself was discovered in 1976, Ebola virus had multiple outbreaks, each time coming back with antibiotic resistant structure, most recently affecting West Africa from 2014 to 2016. This most recent outbreak for about two years led to more casualties than all of the past Ebola driven outbreaks, rapidly spreading across the country broader and to the globe. With the fatality rate of 50%, Ebola virus still does not have an approved vaccine that can perfectly clear the symptoms. However, in efforts to lower the death toll due to the Ebola virus, the United Nations has called upon the Security Council to support the governments in need and to open borders for professional medical aid and medical evacuation. Through these international community's efforts, the cases have decreased drastically through the preventive measures that aimed to control the contagious virus before it spreads out of the limited region. With multiple experiences dealing with infectious disease outbreaks, the international community's response to the situation has greatly improved,

followed by a protective vaccination process as well as a response method, however the threat of infectious disease and its outcome still remains as a problem. Specifically, the COVID-19 pandemic had clearly pointed out the limited capabilities of each nation to control the pandemic situation and the strain of new disease immediately. Acknowledging that the host of COVID-19 would spread through the respiratory droplets produced during symptoms such as coughing or sneezing, the international community faced a difficulty immediately responding to the Bimal infection. With more than 18.7 million confirmed cases and 705,000 deaths reported, the number of deaths as well as infectants are growing without proper control, while the deadly threat of the diseases has and will continue to affect the international community. Even though it is difficult to predict and provide preventive measures to the future pandemics, the international community must continue to improve the contagion process as well as healthcare regulations in order to deal with future outbreaks that might appear. In our current world of global interconnectedness, a small disease outbreak on any part of the globe and soon be a jeopardy of every nation.

United Nations Involvement

The World Health Organization (WHO) as part of the United Nations (UN) branch has taken the responsibility to respond and control the global infectious disease outbreaks through managing medical appliances as well as medical aid to its member states. In order to respond to the outbreaks, the World Health Organization has focused on the World Health Assembly's (WHA) adoption of International Health Regulations in 2005 through the WHA Resolution 58.3. This revised International Health Regulations framework listed eight areas for member states to consider upon medical improvement: building core capacities in the areas of national legislation, policy and financing, coordination and communications, surveillance, response, preparedness, risk communication, and human resources and laboratories. The World Health Organization made clear that their purpose and goal is to provide adequate healthcare systems as well as immediate response systems in case of pandemic, however the United Nations also expressed concern upon the safety regulations during the situation of pandemic. Rise of concern upon the safety regulations led to the communication between the other United Nations organs and host countries in order to provide safety and financial funds. For instance, in Democratic Republic of Congo during the Ebola outbreak, the United Nations Security Council adopted resolution 2439 (2018) to support the World Health Organization's effort to control the contagious outbreak. This resolution guided the government of the Democratic Republic of Congo to provide humanitarian and medical essential personnel to the region in need, which showed the direct result of WHO's first risk assessment upon third world countries in order to improve the safety and the security of medical responses. The World Health Organization also adopted the prediction tools that used to limit the expansion of viruses to Uganda, Rwanda, South Sudan and Burundi, which led the United Nations Security Council to include different sectional regions in the agenda.

Moreover, numerous Non-Governmental Organizations or NGOs are persistently acting as the assistant for underdeveloped countries specifically when these countries are confronting hardships during the global infectious disease outbreak. For example, during the COVID-19 pandemic, American Red Cross supported more than 53,000 people to recover from the loss of shelters and homes due to widespread fire. Recognizing the importance of sanctuary and proper sanitation and how it leaves the people under the vulnerability of being more susceptible to gaining disease, American Red Cross along with other global NGOs structured a plan to support all those who economically and socially lost during the pandemic. Often, the roles that NGOs play are underestimated; however the example of Avian Influenza truly shows the endless capability of the NGO groups during the pandemic. Avian Influenza, often referred to as 'bird flu' has spread throughout Indonesia since 2003, leading to \$470 USD economic loss and disruption of more than 10 million people's lives. Recognizing the capabilities that NGOs hold, the Indonesian government made a government and non-government alliance to lead the control of the potential outbreak, where the National Committee for Avian Influenza Control and Pandemic Influenza Preparedness were established. Specifically, a NGO named Muhammadiyah extended the resource network between the government policies and the communities as well as the local villages and rural communities, which allowed better assessment of medical needs that gave direct information to the government with less cost.

Case Study: Zika Virus Disease

In 2015 to 2016, within a year period of time Zika virus dominated the population across Columbia, only leaving devastation and loss of lives on its path. The symptoms of Zika virus or the ZVD are mild compared to other contagious diseases and last only about a week, however it causes birth defects when contacted with pregnant females with a fatality rate of 8.3%. Seeing the Zika virus outbreak in May 2015 in Brazil, Columbia began to monitor the number of cases within the borders, and in August 2015, the Colombian Istituto Nacional de Salud (INS) began its national surveillance upon the ZVD as well. In early October of 2015, the first 9 cases were confirmed as Zika virus and the contagious outbreak of Zika virus was declared within the Columbian border. In July 2016, the Colombian government declared the end to the Zika epidemic, while the reports of ZVD symptoms were hanging up to more than 100,000 patients nationwide. Colombia had second highest number of reported cases, among the 50 countries with autochthonous transmission during the first or the second trimester of pregnancy in 2016. When data was collected to analyze women's pregnancy and its connection to the ZVD infections, it suggested that the adverse outcomes was likely among the ones who were infected early in their pregnancy.

Colombia did have two national medical surveillance systems before the epidemic: one to capture symptomatic ZVD, and second to capture birth defects. These allowed the monitorization of Zika virus at the national level when the spread of virus started. Of the 5673 pregnancies that were reported with laboratory-confirmed ZVD, 93 infants or fetuses (2%) had brain or eye defects. These incidence of brain or eye defects was higher among pregnancies in which the mother had an onset of ZVD symptoms in the first trimester than in those with an onset during the second or third trimester by 2%. A total of 172 of 5673 pregnancies (3%) resulted in pregnancy loss; after the exclusion of pregnancies affected by birth defects, 409 of 5426 (8%) resulted in preterm birth and 333 of 5426 (6%) in low birth weight. The existence of brain or eye defects during the Zika virus outbreak was 13 per 10,000 live births, compared to 8 per 10,000 live births before the outbreak. Zika virus immensely affected the lives of the children, leaving a devastating mark on many mothers who contracted the virus during pregnancy.

Bloc Positions

Western Bloc:

Compared to other blocs, western bloc relatively has more developed and advanced medical response systems as well as systematic developments upon managing global infectious disease outbreaks. Western block is consistently evolving in terms of pandemic preparedness frameworks, while the protection of humanitarian and healthcare workers are brought up as the foremost importance in keeping medical systems under control. The main concerns that arise specifically in the western bloc is more upon the immediate response programs and the tactics rather than the

medical resource itself, as most of the countries in the Western bloc do not necessarily lack funds or financial resources. Western bloc has successfully aided the diagnosis of infectious disease including hepatitis C (HCV), HIV, Lyme disease, and syphilis as well as autoimmune disorders such as paraneoplastic disease and myositis conditions. Recently, western bloc has been working towards developing more sensitive and specific diagnostic essays to prevent future crises upon the spread of infectious disease including the Coronavirus series and its effect on the global health agenda.

Latin America and Caribbean Bloc:

Latin America and Caribbean bloc relatively lack protection upon secure healthcare services as well as response systems in case of an infectious disease outbreak. With weak social protection, increasing unemployment rate, and fragmented health systems, it is difficult for Latin America and Caribbean bloc to combat a disease outbreak with their economic state, weak democracy, and struggle to safeguard human rights. During 1995, the infectious disease outbreak specifically in Latin America and Caribbean bloc was highlighted to increase awareness where these were followed by extensive reports upon the hemorrhagic fever, Equine Encephalitis, and Leptospirosis. However, Latin America and Caribbean bloc still lacks the medical response personnel and support to catch up on the rise of the threat of infectious disease outbreak.

African Bloc:

African bloc consists of weak healthcare systems as well as infectious disease response units, even though they are the one that are most vulnerable to infectious disease outbreaks. Moreover, a large poverty rate upon the African bloc population makes the citizens more susceptible to infectious diseases. With the estimates of economic impact of COVID-19 on African bloc range from 2% to 5% decline of GDP by the end of 2020, it can be undeniably seen that this bloc lacks the economic preparedness and response guidelines for immediate alert upon infectious disease outbreaks. For the countries in African bloc, it is imperative to reinforce the past actions or precautionary measures that they have taken during the pandemic or epidemic and to prepare solutions for future outbreaks in case of a pandemic.

Asian-Pacific Bloc:

Asian-Pacific bloc mostly has health and maximized healthcare response systems for infectious disease outbreaks, while it has one of the most stable health facilities and infrastructure to support the medical personnel and the local community members. Despite their advanced public healthcare systems and infrastructure, infectious disease outbreaks still pose an immense threat in most of the countries in the Asian-Pacific bloc. Influenza, dengue, Japanese encephalitis, tuberculosis, and pneumonia and many other infectious diseases have evidently pointed out the insufficiency of prevention and mitigation of disease outbreaks in certain cases, which is why the Asian-Pacific bloc needs to use their ability to use electronic communication, infectious disease epidemiology, and laboratory techniques to the furthest extent.

Basic Solutions

When addressing the importance of response alert systems as well as the systematic tactic to prevent the global infectious outbreak, it is important to take different implications into consideration. Throughout history, the world has continued their effort to better their responses to the global spread of diseases in order to lessen the negative impact, however, the efforts varied based on the country capabilities, medical infrastructure, government enforcement, as well as financial resources. First of all, all delegates should ensure that the lack of protocol and the infrastructure still exist in most parts of the globe, specifically in LDCs and developing countries. The protocols or any regulations implemented in certain countries should be based upon the environment of these nation's capabilities, and once the regulations are implemented, the delegates must focus on how to shift the supporting healthcare facilities and the personnel to the host country's medical program. Physical and legal protection of the medical and humanitarian workers must be ensured with proper sanitation, stable healthcare facility without an influx of uncontainable patients. During the transfer process, there also must be a research process that will focus on subduing the symptoms and limiting the spread of virus. Delegates should find a secure funding system that will successfully establish a co-interactive medical resource alliance which will provide adequate funding for the underdeveloped nations. Moreover, further consider any kind of partnership between different countries that share similar ideals, while the private and the public partnership should also be established in order to maintain the medical resources as well as the vaccination doses in case of an infectious disease outbreak.

Furthermore, the delegates must find a way to provide enough necessities and healthcare personnel to the countries that are unable to do so, specifically through governmental actions or lockdown procedures. Delegates must remember that in case of a global infectious disease, the first phase containment of the diseases is the key to stop the spread. To do this, research upon the forceful actions that had to be taken in case of emergency including protective ware, lockdown responses, and home orders, but those that do not infringe upon the individual rights of the citizens. Delegates must be realistic in understanding the situation and providing a response system upon it, while the delegates also have to take the economic status quo of their country into consideration. Solutions should be intricate, reliable, and most importantly realistic. Successful solutions must include a route to tackle contagious disease outbreaks through immediate response regulations with respect to capabilities of each nation.

Questions to Consider

- 1. What is your country's capability in responding to global infectious disease outbreaks, and can their response system be improved?
- 2. In what way has past viral infections affected your country, and has your country taken measures to prevent repetition of those challenges?
- 3. Has your country's response to the COVID-19 Pandemic been successful, and what has your country done to achieve that success or failure?
- 4. What other challenges do many countries face, such as lack of economic stability and healthcare infrastructure, that prevent them from having effective emergency responses to disease outbreaks?
- 5. How can emergency responses to disease outbreaks occur without putting essential workers and healthcare professionals at risk?

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