

Forum: United Nations Development Programme (UNDP)

Issue #19-01: Addressing the lack of access to COVID-19 vaccines worldwide

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Introduction

The development of Covid-19 vaccines have progressed rapidly, although the rate at which they are being highly demanded continues to surpass their limited supply, especially when high-income countries are given greater distribution than the ones in most need. Even though vaccines have been authorised for human use as of 2021, reaching global control of the Covid-19 virus depends on other key factors such as global allocation, affordability and production rate, in order for vaccines to be available where they are most needed. This pandemic has led to a surfeit of deaths and economies have faced deep recessions. The spread of the virus could be prevented by practicing social distancing, wearing face masks, cleaning hands, etc, but Covid-19 still continues to interfere with social and economic life, in addition to the high risk of possible outbreaks, until vaccines are distributed in large quantities throughout the world to prevent further infections and hospitalisations, and much sooner arrive at immunity to the virus.

Various producers have established vaccines in a matter of 12 months, which is seen as a great accomplishment given that effective vaccines historically have taken a decade or more to develop. Reaching global vaccine immunity means that a high scale of production in Covid-19 doses needs to be the world's

preeminent goal. In early February of 2021, 66 vaccines were in separate phases of clinical testing and only 5 out of the 66 vaccines were authorised for use by regulatory authorities, these vaccines include: AstraZeneca, Gamaleya, Pfizer, Sinopharm and Moderna. The majority of these authorised vaccines have proven to reduce hospitalisation rates and prevent deaths due to the Covid-19 virus. The extreme need of vaccine distribution and supply has inspired new methods of production and research activities.

Definition of Key Terms

Covid-19 Vaccines

A substance that stimulates the immune system of a person, to grant the body with antibodies and protection towards the Coronavirus.

Global Allocation

Ensuring accessibility to vaccines globally, with the necessary amount of doses in each country.

Affordability

The ability for Covid-19 vaccines to have a price that low-income and high-income countries can afford; 85% of our worldwide population might not have enough funds to buy sufficient amounts of vaccines.

Deployment

The act of successfully preparing and qualifying for the procedure in which health representatives execute Covid-19 vaccinations.

Antibody

A blood protein that fights off pathogens and protects your overall immune system.

Antigen

Molecules that are found close to pathogens which have the ability to stimulate an immune response and in effect produce antibodies.

Pathogens

The germs that are directly related to diseases and are found as bacteria; either as a fungus, virus or parasite.

Endemic

The sustained prevalence or presence of a disease found in the population of a geographical area. Endemic diseases, such as the flu or chickenpox, are habitual around the world.

Epidemic vs Pandemic

Epidemic refers to the increase of disease cases beyond anticipated, in the population of a geographical area.

Pandemic refers to an epidemic that has rapidly spread to many countries and continents throughout the world, affecting thousands of people.

Immunisation

The process by which an individual receives a vaccine and becomes immune to the specific disease.

Outbreak

The number of cases belonging to a particular disease increases unexpectedly, usually in a minor area.

General Overview

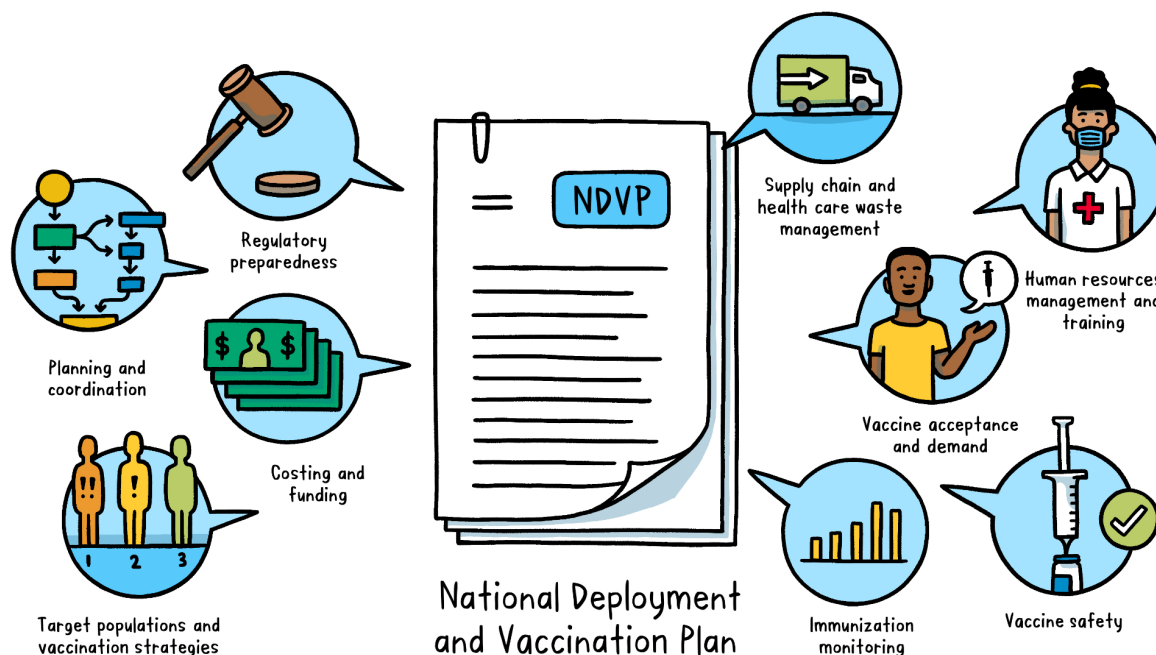
Ensuring global allocation of vaccines worldwide

One of the main conflicts that arise with vaccinations around the world is that some countries lack the right amount of doses to meet all of their population's needs. The demand for vaccines is exceeding all of the current and estimated measures of output, therefore the decisions for vaccine allocations are being determined by their restricted supply. The substantial amounts of pre-orders and scarcity of vaccines requested by the wealthier countries is what is conflicting with providing universal access to all. Numerous countries could potentially have no access to vaccines by the end of 2021, which would lead to a lengthened pandemic and creates time for further mutations to arise, possibly impairing the effectiveness of prevailing vaccines.

The World Health Organization (WHO) announced in April of 2020 the establishment of a global vaccine allocation mechanism, better known as the COVID-19 Vaccine Global Access (COVAX) Facility. COVAX strives to assure that prices would be affordable for all countries and has a goal of offering a variety of vaccine choices through 2021. Wealthier countries can purchase vaccines from COVAX at a price of \$11, whereas low-middle income countries have the option of buying at \$6 per dose. In order to achieve global allocation, COVAX has prioritized adults, healthcare staff, and individuals at high risk to receive the first vaccination doses in a particular country. Their framework for global equality is that no country should be vaccinating 20% more of their population, until all countries around the world have vaccinated 20% of their population.

Importance of deployment of vaccines

Because of the expeditious rate of development and production of vaccines, health officials have had a very brief time to prepare and train for COVID-19 vaccinations. The United States has taken vaccine deployment very seriously and organizations have adapted their facilities to meet the needs of more vaccine doses, a faster development process, and high-speed technology. Manufacturers, regulators, and suppliers have come together to fasten vaccine production. All of the volumes that have and continue to be distributed have to follow the safety regulations. While time has been short for training, health administrators and transporters of vaccines have to be instructed properly on how to handle the certain features of each manufacturer's unique vaccine.



Affordability and price constraints

Vaccines are benefiting humans only if the most in need are presented with doses at the right time. This signifies the need for affordable and accessible vaccines for vulnerable countries to acquire, without any economic obstacles.

Means to guarantee viable financing and affordability of COVID-19 vaccines in low to middle income countries that make up 85% of our global population, are of extreme significance. In order to obtain efficient funding of COVID-19 vaccination programmes and vaccines, a clear record of the costs of its administration, distribution, surveillance, and record-keeping is needed.

Some companies have been lowering their prices to offer affordability to all countries, while others still sell a considerable more amount for the wealthier consumers. Vaccines such as the Johnson & Johnson and AstraZeneca were being sold at low prices and have been profiting profoundly off of the public-sector investments. The variation in prices are affected by various factors such as the manufacturing and development costs, access to advanced technological equipment, how much money the public wanted to fund developers, and more. The Covid-19 vaccine prices are very important in response to their intensified demand. Even though vaccines could be sold at low prices, some governments might have difficulty with affording the right amount of vaccines to administer through the whole population.

Limiting production rates

Every time a new vaccine arises, the manufacturers have a difficult time with scaling up their production. With this pandemic including billions of people, carrying out a large number of production at a quick pace has been a big obstacle. The majority of companies who have created the most efficient vaccines have reached the point where they can manufacture hundreds of doses, but as demand continues to increase on such short notice, the supply stays behind. The global population is in need of vaccinations to end severe-cases, hospitalisations and deaths, therefore the speed of production is highly important. Scientists are forced to produce vaccines that would effectively work towards immunity in a small time frame. The global vaccine

manufacturing capacity can limit the large-scale demand for vaccine production. A small number of countries, especially high-income countries, are the only ones that have a domestic capacity to produce vaccines. Manufacturing of vaccines has been so delayed because of the sole reason that they are new scientific discoveries and their quick development in a short period of time is a delicate matter.

To expedite the rate of COVID-19 vaccine production, collaboration between countries across the world is vital. There needs to be collaboration in both scientific testing sites and supply partners, in various countries. The WHO has been helping to connect vaccine manufacturers and producers in order to speed up production. The importance of sharing information and scientific data amongst producers is crucial when an upscaled vaccine production is being demanded by the global market. The lack of transparency between organizations can lead to disadvantages such as increased work endeavours, restricted innovation and a prolonged time of data analysis.

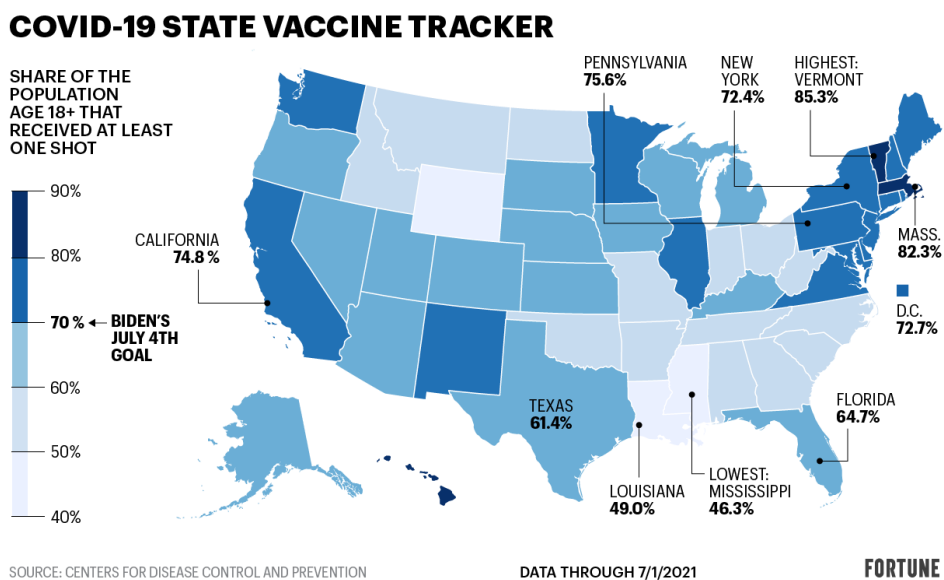


Major Parties Involved and Their Views

United States

Due to how the United States government responded against the pandemic, their Covid-19 cases grew at alarming rates, causing thousands of deaths and infections. The U.S was able to vaccinate their inhabitants quicker than the European Union. The United States decided to buy millions of vaccines before they were even tested, disregarding their cost. They weren't focused on finding out any of the side effects or whether they would actually be effective. After the FDA approved the vaccines, the U.S manufacturers have been promptly keeping up with demand. As of August 2021, the United States has been able to vaccinate roughly 200 million inhabitants, belonging to 61.2% of all America's population. In addition to the milestones regarding the month of August, Biden announced that they have been able to donate and ship more than 110 million

vaccine doses to 60+ countries all over the world. The United States is at the top of the list for greatest contributor of COVID-19 vaccine donations.



The United Kingdom

In contrast to most countries, the United Kingdom believes a single dose of either of their trusted vaccines, the Astrazeneca or Pfizer, is enough to protect against the Coronavirus disease. The U.K government has had long-term investments towards improving the manufacture and development of vaccines, therefore dealing with Covid-19 vaccinations, they were able to move at a sharp pace. The United Kingdom's vaccine task force, involving experts in science and economy, played a major role in how they advanced successfully. As of August 2021, at least 47 million people have received the first dose of the vaccine, which makes up 71.4% of their population. The UK has donated 3 million doses of COVID-19 vaccines to 11 countries of Africa, involving Kenya, Ethiopia and Uganda, as they are in critical need of humanitarian support. The United Kingdom has been acclaimed as one of the most helpful supporters and

advocates of COVAX.

South Africa

As one of the countries affected the most by the pandemic, South Africa was hit by a variant called B.1. 35. The health authorities have suspended utilizing the AstraZeneca vaccine as it demonstrated evidence of ineffectiveness against this new variant. South Africa opted to use the Johnson & Johnson's vaccine, but new health implications found in people with this vaccine led medical workers to slow down their vaccine programs. As it is a known fact that South Africa struggles with scarce resources, they do not have any access to other vaccines, rather than Johnson & Johnson. The country of South Africa has been able to vaccinate almost 8 million people, which is only 13.6% of their population. The United States donated 5.7 million Pfizer vaccine doses to South Africa, seen as the largest bilateral vaccine donation to present day. This global effort to battle the pandemic will protect two and a half million Africans from the Coronavirus.

China

One of the countries with the biggest human population is China, with over 1.41 billion people, and their rapid vaccination process has determined them to achieve immunity by the end of 2021. As China has been a predominant manufacturer of vaccines, their doses have been proven to be effective and safe against the new delta variants. As of August 2021, China has provided 1.8 billion COVID-19 vaccine doses to their population, an unremarkable achievement. China was looking forward to donating 2 billion vaccine doses worldwide through 2021, and supplying COVAX with \$100 million to aid with vaccine provision. The Chinese are expecting to collaborate with foreign producers in order to reach an overseas production of China-manufactured vaccines.



India

As far as vaccination numbers are concerned, India isn't doing too well. India has been able to provide 448 million first doses of COVID-19 vaccines, which means 38.2% of their population has been vaccinated. Only 128 million people, 9.4% of the population, have received the two full doses. India was the second-worst affected country throughout the COVID-19 pandemic as it faced 32 million cases and reached more than 400,000 deaths. The government has been making efforts to be able to vaccinate all Indians by the end of 2021, but conflicts with shortages of doses and vaccine hesitancy has been an impediment. India is likely to be presented with a third wave of infections, as the country has reopened completely and new variants are spreading quickly. As of March 2021, India was able to donate 60.4 million vaccine doses to at least 76 countries with the help of the WHO. As vaccine inequity and supply has been accentuated by COVAX, India is making the most efforts possible to aid in 'vaccine nationalism.'

Timeline of Events

Date	Description of event
April 2020	At least 19 facilities and 80 countries decided to begin research on developing a Covid-19 vaccine.
May 21, 2021	The AstraZeneca and Trump administration have formed a collaboration with the aim of expediting the development of the AZD1222 vaccine.
July 2020	The first vaccines to be established, known as the Moderna and Pfizer vaccines, surged based on a new mRNA technology approach.
December 2, 2020	The United Kingdom's healthcare agency partially approved the Pfizer vaccine, making the U.K the first country to authorize this vaccine.
December 21, 2020	Many countries, including the European Union, have given approval towards the Pfizer vaccines as of this date.
January 1, 2021	The United States faces challenges with distributing vaccines, as they do not reach their objective of giving an initial dose to at least 20 million people by December 31.
January 2021	The B.1.351 variant is spreading which originated in South Africa, and countries prioritize speeding up vaccinations to diminish this

spread.

February 2021

Vaccines do not meet the high demand, therefore the Biden administration is willing to incorporate the Johnson & Johnson option to increase the availability of vaccines.

April 2021

The United States' biomedical authority declared investments reaching 1 billion USD, to help with the development of Covid-19 vaccines.

May 25, 2021

½ of the population of adults in the US are successfully vaccinated.

June 2021

President Joe Biden announces that the US will donate 500 million vaccine doses to poverty-stricken countries.

UN involvement, Relevant Resolutions, Treaties and Events

The United Nations Development Programme recognizes the conflict that lesser developed nations face regarding their access to Covid-19 vaccines. This clearly highlights the urgent need for sufficient and affordable vaccines. The United Nations has been able to progress on this matter by working together persistently with those countries who are struggling and taking action to create resolutions.

- On February 26th of 2021, The United Nations Security Council adopted the **resolution 2565 (2021)**. This resolution enforces global collaboration to expedite development and distribution of Covid-19 vaccines, in countries at conflict. More importantly, this emphasizes the unity and collaboration that people all around the world need to partake in, especially when the

world is facing a war with the ongoing pandemic. The goal is to facilitate access to safe, quality, affordable and efficacious vaccines, in addition to technology and equipment in response to the COVID-19 virus. The World Health Organization (WHO) accentuates the importance of sharing new information and exchanging scientific discoveries, because of the variants that have been arising in recent months. The resolution highlights how essential access to affordable, efficacious and safe vaccines are to terminate the pandemic.

- The UN office of the High Commissioner for Human Rights, UNESCO, WHO, the UN Educational, and CERN partnered to bring attention to **Open Science**. This is a resource that acknowledges the importance of scientific evidence helping to diminish the inequalities in vaccine distributions and conflicts with COVID-19. The Open Science movement makes scientific collaboration and the dispersion of information more accessible to people around the world. It is needed now as the COVID-19 pandemic does not regard the divisions that geographic and political borders present, therefore the collaboration of scientific information is highly required. Thanks to the sharing of knowledge in the scientific community, the understanding of all the components and effects of the coronavirus have improved ever since Open Science came about. Various types of treatments, testing, and vaccines have been developed. UNESCO has been making great efforts to build a global consensus on principles and values for the Open Science movement, through which any kind of person or scientist can benefit from.
- On August 18, 2020, the director-general of the WHO encouraged nations to take part in the **COVAX Global Vaccines Facility**. This operation has the objective of promoting equal access to vaccines in all countries, in order to prevent discrimination towards countries with financial criseses.



Past action

On February 20, 2021, the WHO set in motion its **Strategic Preparedness and Response Plan (SPRP)** for the year 2021. This plan is focused on even-handedly distributing Covid-19 vaccines and advocates to support the most vulnerable countries in need of vaccines. It additionally tackles conflicts that may arise regarding advanced variants or mutations, and continues to advance off of the accomplishments reached in this pandemic.

On June 2, 2021, UNICEF signed an agreement with Moderna for a long-term supply of its COVID-19 vaccine as a representative of the COVAX facility. This supply agreement allows UNICEF, the PanAmerican Health Organization (PAHO), and additional partnerships, to be supplied with 34 million vaccine doses that would reach an estimate of 92 countries and regions across the world

throughout 2021. The packages of vaccines ready to be delivered will be available in the last quarter of 2021 with the countries COVAX has determined to be the most in need of equitable vaccine access.

Possible Solutions

The lack of access to Covid-19 vaccines is an issue various countries are encountering, after the financial crisis and economic downfall this pandemic has presented. Availability and accessibility of vaccines are vital to prevent deaths and disease spread, therefore cannot be disparaged. As a variety of vaccines have been developed, solutions to improve this conflict include:

- Abidance from all countries to guarantee citizens with the access to Covid-19 vaccines and medications.
- Active encouragement of the use of technology, informative data, and educational resources on Covid-19 vaccine deployment and distribution, to ensure all medical professionals are well-instructed for vaccinations.
- Cooperation from all countries to participate in distributing and helping conflicted countries reach access to adequate amounts of vaccines.

Sustainable Development Goal (SDG)

Sustainable Development Goal #3: **“Ensure healthy lives and promote well-being for all at all ages.”** This SDG ties into the issue at hand as the lack of access to vaccines is a major setback with reaching full immunization of the COVID-19 virus. The only way for an individual to ensure its health is through vaccinations, which have produced the necessary antibodies to fight off the virus. The COVID-19 vaccines had been long-awaited all throughout quarantine, and now that they are available to the world, they are being promoted as an essential health asset of today’s society. Most countries want to be able to

vaccinate all of their population by the end of 2021, but it has been difficult to do so with external factors. All ages are allowed to get vaccinated and have access to this type of healthcare, especially older adults and high-risk patients. Once the global population is able to get fully vaccinated, the Coronavirus pandemic will come to a halt and the world will reach a historical accomplishment.



Appendix

- I. Detailed article with video included by The Vaccine Alliance explaining the COVAX and its importance
 - A. <https://www.gavi.org/vaccineswork/covax-explained>

- II. Article published by the World Health Organization (WHO) on the safety of COVID-19 vaccines
 - A. <https://www.who.int/news-room/feature-stories/detail/safety-of-cov>

[id-19-vaccines](#)

III. Article published by the United Nations Department emphasizing the importance of COVID-19 vaccine equality

A. <https://news.un.org/en/story/2021/08/1097202>

IV. A catalog with resources including multiple videos, articles, stories and news all about COVID-19 vaccines **(highly recommended)**.

A. <https://www.afro.who.int/health-topics/coronavirus-covid-19/vaccines>

Bibliography

“Access to Covid-19 Vaccines: Global Approaches in a Global Crisis.” *OECD*, 18 Mar. 2021,
www.oecd.org/coronavirus/policy-responses/access-to-covid-19-vaccines-global-approaches-in-a-global-crisis-c6a18370/.

Wouters, Oliver J. “Challenges in Ensuring Global Access to COVID-19 Vaccines: Production, Affordability, Allocation, and Deployment.” *The Lancet*, 21 Feb. 2021,
[www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)00306-8/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00306-8/fulltext).

Khazan, Olga. “The One Area Where the U.S. COVID-19 Strategy Seems to Be Working.” *The Atlantic*, Atlantic Media Company, 23 Feb. 2021,
www.theatlantic.com/politics/archive/2021/02/america-vaccination-speed-europe-better/618094/.

Mackay, Kath. "Why Is the U.k. Doing so Well at the Vaccine Roll out?" *Forbes*, Forbes Magazine, 16 Feb. 2021, www.forbes.com/sites/drkathmackay/2021/02/16/why-is-the-uk-doing-so-well-at-the-vaccine-roll-out/?sh=6fbd528c35fc.

"Security Council Calls for Increased Global Cooperation to Facilitate Covid-19 VACCINE Access in Conflict Areas, Unanimously ADOPTING Resolution 2565 (2021) | Meetings Coverage and Press Releases." *United Nations*, United Nations, www.un.org/press/en/2021/sc14454.doc.htm.

"Statement by UN Human Rights Experts Universal Access to Vaccines Is Essential for Prevention and Containment of Covid-19 around the World*." *OHCHR*, www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=26484&LangID=E.

"UN Security Council DEMANDS COVID-19 Vaccine CEASEFIRES; Who Pushes for More Action to Speed up INOCULATIONS | | UN NEWS." *United Nations*, United Nations, news.un.org/en/story/2021/02/1085942.

Inserro, Allison. "Senator, Health Care Executives Discuss What's next in Payment, Access Issues." *AJMC*, AJMC, 24 June 2021, www.ajmc.com/view/senator-health-care-executives-discuss-what-s-next-in-payment-access-issues.

Eby, Kate. "Coronavirus Timeline: Tracking Major Moments of COVID-19 Pandemic in San Francisco Bay Area." *ABC7 San Francisco*, KGO-TV, 21 Aug. 2021, abc7news.com/timeline-of-coronavirus-us-covid-19-bay-area-sf/6047519/.

"An a to z of Vaccine Vocabulary." *UNICEF Australia - Donate to United Nations Children's Fund Today*,

www.unicef.org.au/blog/resources/vaccine-glossary.

“The Risks and Challenges of the Global COVID-19-Vaccine Rollout.” *McKinsey & Company*, McKinsey & Company, 23 Feb. 2021, www.mckinsey.com/business-functions/risk-and-resilience/our-insights/the-risks-and-challenges-of-the-global-covid-19-vaccine-rollout.

“Vaccine Production: Navigating Scale-up Challenges.” *Biopharma from Technology Networks*, www.technologynetworks.com/biopharma/articles/vaccine-production-navigating-scale-up-challenges-348412.

“President Biden ANNOUNCES Major Milestone In Administration's GLOBAL Vaccination EFFORTS: More than 100 Million U.S. Covid-19 Vaccine Doses Donated and Shipped Abroad.” *The White House*, The United States Government, 3 Aug. 2021, www.whitehouse.gov/briefing-room/statements-releases/2021/08/03/fact-sheet-president-biden-announces-major-milestone-in-administrations-global-vaccination-efforts-more-than-100-million-u-s-covid-19-vaccine-doses-donated-and-shipped-abroad/.

“UK-Donated COVID-19 Vaccine Doses Reach African Countries.” *Gavi, the Vaccine Alliance*, www.gavi.org/news/media-room/uk-donated-covid-19-vaccine-doses-reach-african-countries.

“United States Donates 5.7 Million COVID-19 Doses to South Africa.” *U.S. Embassy & Consulates in South Africa*, U.S Mission South Africa, 28 July 2021, za.usembassy.gov/united-states-donates-5-7-million-covid-19-doses-to-south-africa/

“China Administers 1.7 Bln COVID-19 Vaccine Doses.” *China Global Television*

Network, 4 Aug. 2021,
news.cgtn.com/news/2021-08-04/China-administers-1-7-blN-COVID-19-vaccine-doses-12s1HCLVsWs/index.html.

Times, Global. "China to Provide 2 Billion Doses of Vaccine to World This Year." *Global Times*, www.globaltimes.cn/page/202108/1230714.shtml.

Ritchie, Hannah, et al. "Coronavirus (Covid-19) VACCINATIONS - Statistics and Research." *Our World in Data*, 5 Mar. 2020,
ourworldindata.org/covid-vaccinations?country=IND.

"India Vaccination Drive Picks up Pace amid Fears of Third Wave." *BBC News*, BBC, 19 Aug. 2021, www.bbc.com/news/world-asia-india-56345591.

Surie, Mandakini D., et al. "India's Vaccine Diplomacy: Made in India, Shared with the World." *Devpolicy Blog from the Development Policy Centre*, 28 Mar. 2021,
devpolicy.org/indias-vaccine-diplomacy-made-in-india-shared-with-the-world-20210329/.

"Goal 3 | Department of Economic and Social Affairs." *United Nations*, United Nations, sdgs.un.org/goals/goal3.