

ODUMUNC 2022 Issue Brief for the



United Nations Special Session on Global Recovery from the Covid 19 Pandemic

Combating Unequal Vaccine Distribution between Member States

by Ian Birdwell
ODU Graduate Program in International Studies

Introduction

The COVID-19 Pandemic has heightened concerns of the development of countries throughout the global system. As of this writing, 1 October 2021, a total 233,00,000 people had been infected. 4.8 million had died. The global economy has declined about 4.5 percent, and global supply chains have been interrupted everywhere.

Vaccines are essential for global health and recovery. The wealthiest countries in the world have developed, manufactured, and distributed millions of doses of vaccines to their populations throughout the last year.² While Europe, East Asia, and North America have struggled with the Delta Variant of COVID-19, the rest of the world has been dealing with similar upswings in viral transmission without the high levels of vaccine distribution of wealthy countries.

Resolving coronavirus vaccine distribution issues is vital not only for the survival of hundreds of thousands or even millions of potential victims. It also is essential to full opening of the economies which sustain them. It is essential to fully reopening the global supply systems which furthering the raw and semi-

manufactured feed stocks essential to the global economy. There is wide agreement that everyone in eth world needs everyone vaccinated. But how to achieve that? Who is responsible? Who pays?



Manufacturing Sputnik V vaccine near St. Petersburg, Russia. © Olga Maltseva/AFP via Getty Images

Not only does the unequal distribution of vaccines lead to varying levels of control on viral trends, but it opens the door for new variants of the virus to emerge and challenge existing tools to control the COVID-19 pandemic.³ Beyond these considerations which directly affect the health of people throughout the world, global inequality has continued to rise due to the economic disruptions related to measures used to control the virus without access to vaccines throughout the world has led

Tracking development assistance for health and for covid-19: a review of development assistance, government, out of pocket, and other private spending on health for 204 countries and territories, 1990-2050. *The Lancet*.

https://www.thelancet.com/journals/lancet/article/PII S0140-6736(21)01258-7/fulltext

¹ Coronavirus Death Toll, https://www.worldometers.info/coronavirus/coronavirus-death-toll/

² Bloomberg. (2021, September 25). *More than 6.1 billion shots given: COVID-19 Tracker*. Bloomberg: https://www.bloomberg.com/graphics/covid-vaccinetracker-global-distribution/

³ Global Burden of Disease 2020 Health Financing Collaborator Network. (2021, September 22).







to significant declines in economic growth and contributed to rising inequality globally. For all of these reasons there have been growing concerns over the current distribution networks for the vaccines developed in the wealthiest countries in the world.

Though UN programs like COVAX and independent donations have proven effective in getting shots in arms across the world, the current level of distribution will not be able to vaccinate enough of the global population to make a difference anytime soon.



UN Secretary-General Antonio Guterres got the coronavirus vaccine on 29 January 2021, early due to his age. (Photo: Twitter / @antonioguterres)

UN Secretary-General Antonio Guterres has says it is time for wealthy countries to increase their support for UN-run vaccine distribution programs in the hopes that they will be able to vaccinate enough people from middle and lower income countries to make a difference for their economies and to give them additional tools to fight the pandemic.⁵

The unequal distribution of vaccines remains a prescient issue for the United Nations to address.

The long-term issue for the UN is planning for next pandemic. Diseases like the Covid-19 coronavirus will emerge again. Global preparedness requires preparations that extend to all 7.8 billion people, regardless of where they live, the nature of their government, or their wealth.

COVID-19 and Vaccine Development

The COVID-19 pandemic took the global community by storm, and quickly led to the enactment of classic pandemic control actions typified by lockdowns, quarantines, and masking in order to prevent hospitals from being overwhelmed. The invention, approval, and distribution of vaccinations marked a watershed moment for the fight against the COVID-19 pandemic, yet there emerged significant inequalities related to the development of vaccines and rapidly emerging problems of distribution.



Headquarters in Pune of The Serum Institute of India, the world's largest manufacturer of vaccines.

<u>healthcare-more-sustainable-covid-19-pandemic-</u> mental-health-disease-vaccination-equity/

⁵ Bucharme, J. (2021, September 9). COVAX was a great idea, but is now 500 million doses short of its vaccine distribution goals. What exactly went wrong? Time: https://time.com/6096172/covax-vaccines-what-went-wrong/

⁴ Sault, S. (2021, September 16). *SDIS21: Healthy Futures - what are the challenges in making healthcare more sustainable?* World Economic Forum:

https://www.weforum.org/agenda/2021/09/healthy-futures-what-are-the-challenges-in-making-







The development of the vaccines for COVID-19 in the wealthiest countries in the world was not surprising. However, what has been shocking is the development of the vaccines and their reliance on specific technology limited within the developing world. While some vaccines like the Johnson & Johnson, Oxford-AstraZeneca, and Covovax have been developed without the need for extreme deep-freezing, the most effective vaccines utilizing mRNA technology within the Pfizer-Biotech and Moderna.6 Accessing these freezers even within wealthy countries has proven problematic, but it remains important to note those vaccines noted as being the most efficacious are those with strict requirements where disruptions in temperature can render the vaccines impotent.

This only scratches the surface of problems facing vaccine distribution throughout the world. Issues in distribution, purchasing, and appropriation of vaccines and other necessary supplies are causes for major concern for lower and middle income countries throughout the world, as production can only produce certain amounts of needed goods over time.⁷ Related issues include access to healthcare resources, vaccine hesitancy, and vaccine hoarding in the developed world leaves a substantial gap to be met within the developing world.

Beyond these considerations, issues in vaccine efficacy, normal international politicking, and the emergence of variants have led to an increasingly complex global vaccination campaign. Together these hurdles create a pervasive problem of distribution.

The more recent debate over allocation of booster shots, when most people have not received their first, adds to the controversy. The emergence of variants has complicated the discussion of vaccine inequality. Declining effectiveness of the most effective vaccines has led to debates revolving around booster shots, third doses for the Pfizer-Biotech and Moderna vaccines.⁸ While there is well-placed anxiety over the potential for the rise of a vaccineresistant variant of COVID-19 to emerge, pervasive problems in distributing current vaccines highlight that the potential for third doses in wealthy countries may only exacerbate fears of variants as the virus is allowed to spread unimpeded throughout the international system.⁹ The spread of COVID in the developing world opens the door for increasing amounts of variants to spread into the rest of the world and further complicate global responses to the pandemic as a whole.

Role of the United Nations

The UN has mandated the World Health Organization to act when disease holds the potential to rise to the level of an epidemic or pandemic. Principally, the WHO coordinates among the national health systems in its member States. It works for a coherent and planned global response to any pandemic outbreak. These efforts to coordinate pandemic response have been dominated by assessments and research supporting global vaccination efforts for major diseases.

ahead of covid summit. Retrieved from the Independent:

https://www.independent.co.uk/news/health/covidvaccine-summit-biden-latest-b1924245.html

⁶ Linde, P. (2021, September 24). Managing covid-19 vaccines at a time of oversupply: what Spain's regions are doing to avoid wasting doses. El Pais: https://english.elpais.com/society/2021-09-24/managing-covid-19-vaccines-at-a-time-ofoversupply-what-spains-regions-are-doing-to-avoidwasting-doses.html

⁷ Lovett, S. (2021, September 21). Fix 'grotesque' vaccine inequity, campaigners tell world leaders

⁸ Mackintosh, E. (2021, September 22). Vaccine inequality laid bare at UN General Assembly. CNN: https://www.cnn.com/2021/09/22/world/coronavirusnewsletter-intl-22-09-21/index.html ⁹ Ibid.





The work of the WHO on disseminating research on COVID-19 has been vital for national and regional health officials. But this process has not been without controversy. Issues in national control and coordination over the origins of COVID-19 have revealed the precarious balance for the WHO between carrying out effective, honest assessments for health policy responses and national interests in allowing such research to occur. 10 This balance harmed the reputation of the organization, especially when it comes to garnering the funding from Member States it depends on to keep the organization funded and its credibility as an organization in advising health officials to pursue certain policy directives.¹¹ Both of these conditions are vital for the WHO to function as an organization that is capable of coordinating effort in response to pandemics and facilitating international support for endangered regions.

These considerations become especially important when examining the second major effort of the WHO in orchestrating major vaccination campaigns. The WHO has achieved major successes in vaccination campaigns to eliminate smallpox and polio, and once vaccines were successfully created similar efforts to establish an international vaccination program for COVID-19 vaccines began to take shape in the form of WHO's COVAX program.

¹⁰ Ruger, J. P., & Yach, D. (2009). The Global Role of the World Health Organization. *Global Health Governance*, 1-11.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3981564/

https://blogs.lse.ac.uk/usappblog/2020/05/23/why-public-trust-in-the-who-matters/

Traditionally, these programs have been funded by the member-states of the WHO and provided vital equipment like the vaccinations themselves through similar donation procedures, as was the case with the polio vaccination campaign. Unfortunately though, the process of vaccine distribution through this campaign became incredibly politicized and complex over time. ¹² International competition between China, Russia, and the West has led to jockeying for credit for donating vital supplies to needy countries, with the West financing deliveries by Chinese or Russian suppliers. ¹³

The WHO has been prominent throughout the COVID-19 pandemic, though it has not escaped controversy. It pays an essential role, but often suffers from negative perceptions of its role.

Previous Action

The WHO has a history of successful vaccination campaigns and public health programs to fall back on as a model for operations in the midst of the COVID-19 pandemic. These programs have had significant success in getting hundreds of thousands vaccinated around the world, but the level of

politicize COVID vaccines. Deutsche Welle: https://www.dw.com/en/jordanian-foreign-minister-dont-politicize-covid-vaccines/a-56832038; Gupta, D. (2021, March 18). The emergence of vaccine diplomacy: Indian & Chinese politicization of the pandemic. Brown Political Review: https://brownpoliticalreview.org/2021/03/the-emergence-of-vaccine-diplomacy-indian-chinese-politicization-of-the-pandemic/

¹³ Cheng, M., & Hinnant, L. (2021, August 14). 'Rich Nations Dip Into COVAX Supply while poor wait for shots'. Associated Press: https://apnews.com/article/joe-biden-middle-east-africa-europe-coronavirus-pandemic-5e57879c6cb22d96b942cbc973b9296c

¹¹ Singh, R. (2020, May 23). Why public trust in the WHO matters. London School of Economics Phelan US Centre:

¹² Adesnik, D. (2021, May 5). Authoritarian countries will try to use coronavirus vaccines as an internal cudgel. Washington Post: https://www.washingtonpost.com/outlook/2021/05/05/covid-authoritarian-covax-who/; Deutsche Welle. (2021, March 10). Jordanian Foreign minister: don't





disparity in vaccination still persists around the world as these programs need to be massively expanded and funded to meet the needs of preventing a worsening pandemic.

The WHO's COVAX program has acted as a vital accelerator for countries to access needed and necessary vaccinations against COVID-19. Currently responsible for distributing over 300 million vaccines to 140 nations, COVAX represents an important step to getting millions the necessary vaccines. COVAX suffers from constraints in funding, vaccine supply, general medical supplies, vaccine distribution supplies, and the personnel to administer the vaccines. ¹⁴ Though these are major limitations, COVAX remains the gold standard for distribution of resources necessary to fight COVID-19.

The eradication of smallpox through the Intensified Smallpox Eradication Programme represents a crowning achievement for the efforts of the international community. These efforts to eliminate smallpox were linked to an expansive and robust immunization program that pushed towards vaccinating over 85% of the global population of children to eliminate the ability for the virus to sweep through communities. ¹⁵ This was made possible through funding efforts from developed countries through long-term negotiations to establish directives for future work through iterative negotiations across agencies, polities, and nations. ¹⁶

smallpox, the campaign the end polio across the world through the Polio Global Eradication Initiative has been resoundingly successful. With a near hundred percent reduction of cases globally since 1988, types of polio remain common largely in extremely rural and underdeveloped communities and polio is only endemic in two countries globally. This success is built on a foundation of international cooperation, funding, and donations of supplies all coordinated by the UN and WHO initiatives in cooperation with other non-governmental organizations like the Bill & Melinda Gates Foundation. But the Polio Global Eradication across the world in the policy of policy and policy and policy in the policy of policy and policy across the world in the policy of policy and policy across the world in the policy of policy and policy across the policy of policy across the policy of policy and policy across the policy of policy and policy across the policy of policy of policy across the policy of policy of policy across the policy of policy of

While not as successful as the eradication of

Country and Bloc Positions

China has a strong interest in addressing vaccination disparities within the international system, part of its foreign policy goal of maximizing its global influence. As the major producer of protective personal equipment of medical applications, a producer of a COVID-19 vaccine, and the origin location of COVID-19 China needs to address negative commentary and enhance its global reputation.

Beijing stresses distribution of aid to cooperative countries as part of the COVAX program, though it has not escaped controversy in potentially rolling out vaccinations and equipment of dubious quality to improve their

https://www.who.int/news/item/24-09-2021-what-needs-to-change-to-enhance-covid-19-vaccine-access

¹⁴ Independent Allocation of Vaccines Group of COVAX. (2021, September 24). *What needs to change to enhance Covid-19 vaccine access*. World Health Organization:

¹⁵ Lindmeier, C. (2020, May 8). *Commemorating smallpox eradication - a legacy of hope, for COVID-19 and other diseases*. World Health Organization: https://www.who.int/news/item/08-05-2020-commemorating-smallpox-eradication-a-legacy-of-hope-for-covid-19-and-other-diseases

¹⁶ Bhattacharya, S. (2008). *The World Health Organization and global smallpox eradication*. Journal of Epidemiology & Community Health. https://jech.bmj.com/content/62/10/909

¹⁷ UNICEF. (n.d.). *Eradicating Polio: we are closer than ever to ending polio*. UNICEF: https://www.unicef.org/immunization/polio#

¹⁸ World Health Organization. (2021). *Poliomyelitis*. World Health Organization: https://www.who.int/health-topics/poliomyelitis#tab=tab 1







image.¹⁹ China has begun large-scale export of CoronaVac, made by the Beijing-based biopharmaceutical company Sinovac. These exports are mostly commercial, and there are doubts about effectiveness, which appears to be less than Western and Russian vaccines.

The European Union has become a vital actor in addressing issues of vaccine access within Europe. Home to some of the most robust international economies and medical companies, the European Union has been instrumental in providing aid to countries around the world as the largest exporter of COVID-19 vaccinations globally.²⁰

Though there have been major successes in both donations to support WHO efforts and vaccines to the needy around the world, the EU's rollout was not without issue.²¹ Despite early EU pledges to donate 200 million doses to the developing world, by midsummer only small percentage had been donated. Most efforts remained focused on vaccinating European citizens.

As its internal vaccination rates rise, to some of the highest in the world, the EU can be expected to pivot, to extend vaccine sharing under wits well-funded and morally committed foreign aid programs. 22

India is a major producer of vaccines and as second largest country by population; India has a complex health system to distribute vaccinations to their populace.²³ One Indian company, The Serum Institute, controls much of the world's vaccine production, producing ZyCoV-D, Covishield, Covaxin and Sputnik V vaccines, all under license from their foreign creators.

India is pulled in two simultaneous directions, a need to protect their own population and to contribute to COVAX efforts to vaccine the rest of the world.²⁴ This conundrum lies at the heart of Indian policy and has been a major strain domestically as COVID-19 remains a major threat. As a NAM Member State, India supports pressure on foreign manufacturers and governments to share equitably. But the Hindinationalist Modi government has to balance those expectations with domestic pressure to vaccinate Indian first.

The Non-Aligned Movement (NAM), the largest UN voting bloc with 120 Member States has been unanimous in its criticism of wealthy countries for hording vaccine doses and refuses to extend financial muscle to its support for

¹⁹ Gupta, D. (2021, March 18). The emergence of vaccine diplomacy: Indian & Chinese politicization of the pandemic. Brown Political Review: https://brownpoliticalreview.org/2021/03/the-emergence-of-vaccine-diplomacy-indian-chinese-politicization-of-the-pandemic/

²⁰ European Council. (2021). *EU's international Solidarity during the COVID-19 pandemic*. European Council: Council of the European Union: https://www.consilium.europa.eu/en/policies/coronavirus/global-solidarity/

²¹ EU/UNICEF. (2021, March 12). First shipment of European Union-funded COVID-19 vaccines from COVAX facility arrived in Jordan. UNICEF: https://www.unicef.org/mena/press-releases/first-shipment-european-union-funded-covid-19-vaccines-covax-facility-arrived-jordan

²² Guarasclo, F. (2021, July 22). *EU has shipped tiny percentage of planned COVID-19 shot donations - document.* Reuters:

https://www.reuters.com/business/healthcare-pharmaceuticals/eu-has-shipped-tiny-percentage-planned-covid-19-shot-donations-document-2021-07-22/

²³ Menon, S. (2021, August 3). *India vaccination:* does it have enough doses for all adults? BBC News: https://www.bbc.com/news/world-asia-india-55571793

²⁴ Arora, N., & Das, K. N. (2021, September 20). *India to restart COVID vaccine exports to COVAX, neighbors.* Reuters:

https://www.reuters.com/world/india/india-resume-covid-vaccine-exports-next-quarter-2021-09-20/





wider distribution. The NAM uses the UN to apply maximum diplomatic pressure for free or subsidized distribution of billions of doses. The NAM is especially critical of domestic polices in wealthy countries that privilege second or even third doses for their own people, while ignoring the needs of people elsewhere.

Russia was an early leader in pointing out issues in vaccine access within their own state and across the world, rolling out their Sputnik Vaccine internationally prior to a full review of its effectiveness. ²⁵ Unfortunately for the countries looking to Russia to serve as a partner through the pandemic, the dubious quality of their assistance leaves much to be desired from the P5 nation. Russia's initial generosity with Sputnik declined in the of its domestic needs, and free distribution gave way to market prices. Russia may become more generous as its own needs are met.

The United States maintains a strong commitment to eradicating the COVID-19 pandemic, but it remains focused on addressing domestic COVID-19 and competing with strategic rivals. The US has recently pledged to donate 500 million more vaccine doses to the global battle against COVID-19, increasing the total number of vaccinations donated to a billion alongside billions of dollars in funding for WHO efforts. ²⁶ Still, issues remain with only 110 million doses were distributed from the US by October 2021, and the White House is dipping into stocks set to be donated to bolster domestic administration alongside calls for additional

boosters to protect Americans at the expense of the developing world.²⁷

Some Proposals for Action

Equitable distribution of vaccines and increasing access throughout the developing world remains a major concern, and there are potential avenues for the UN and the WHO to act.

Mandate funding for COVAX and its associated programs. The difficulty is finding the money. It is easy for the UN to ask Member States to donate the required funding, but difficult for Member States to find the money.

One possibility is a global tax on corporate profits, but this would be resisted by many Member States, especially those of the NAM. Another possibility is a tax on wealthy country health agencies or pharmaceutical companies, to subsidize exports to poorer countries. Defining a threshold for recipient poor countries—who benefits and who pays—also would have to be negotiated.

Mandate the WHO to establish global priorities for COVID-19 vaccine distribution. The WHO, through its Secretariate and its Assembly of Member States has the capacity to establish global distribution priorities. So far, it lacks the political authority, a mandate. Many Member States would resist such a step. It could force them into awkward or embarrassing

²⁵ Kier, G., & Stronski, P. (2021, August 3). *Russia's Vaccine Diplomacy is Mostly Smoke and Mirrors*. Retrieved from Carnegie Endowment for International Peace:

https://carnegieendowment.org/2021/08/03/russia-s-vaccine-diplomacy-is-mostly-smoke-and-mirrors-pub-85074

²⁶ BBC. (2021, September 23). COVAX: how many covid vaccines have the US and the other G7 countries pledged? BBC News:

https://www.bbc.com/news/world-55795297; Share America. (2021, August 26). *U.S. sends COVID-19 vaccines worldwide [August 2021]*. Share America: https://share.america.gov/us-sends-covid-19-vaccines-worldwide-august-2021/

²⁷ Cheng, M., & Hinnant, L. (2021, August 14). Rich Nations Dip into COVAX Supply while poor wait for shots.





diplomatic situation, forced to choose between the priority of domestic versus global needs. Others might welcome a global program.

This could be similar to the Sustainable Development Goals, (SDGs), the global program coordinating global economic development. Because the UNSS and the WHO cannot force Member States to act, but only request their cooperation, targets would be voluntary, but they might have considerable moral pressure, setting a global standard Member States are expected to meet.

Create an international partnership to send medical professionals to at-risk areas to distribute vaccines to rural communities in the developing world. Cultivate international understanding on the benefits of vaccinations. Already, many Non-Governmental Organizations (NGOs) already specialize in international medical care, most famously Médecins Sans Frontières (Doctors Without Borders), International Medical Corps and Mercy Corps.

Much could be done, if the Special Session finds ways to give these organizations the funds and resources they need. NGOs also need the cooperation of host-country governments, which is not always forthcoming. Some governments—especially in highly nationalist Member States like Algeria, Belarus, India or Myanmar—may resist cooperation with foreign NGOs.

Distribute facemasks to all citizens of the world. Even for a UN Special Session, small actions can have dramatic rewards. instability related to climate change will limit the ability to distribute vaccinations for any disease while masking can be effective for all diseases. There will be support from manufacturing centers, especially in China, so long as funding is assured. There may be resistance from other Member States, unless they are enabled to join in the production and distribution.

Create an investigatory commission to determine how and why the campaigns to eliminate smallpox and polio have been so successful. UN repots can be decisive shifting the views of UN Member States to support specific policies. The resolution would have to specify how the commission is organized and run. Is it run by the UN Secretary-General and staffed by experts selected by the Secretary-General (a Group of Experts report, GoE)? Or is it organized by the General Assembly and staffed by government officials chosen by the Member States (a Group of Government Experts report, GGE)?

The first will result in a more independent and hard-hitting report. But Member States may resist or even ignore its conclusions. The Member States may prefer to pick their own commission members, to ensure a consensus-driven report, with weaker recommendations, but more acceptable to more Member States.

Doing nothing is a serious option for many UN Member States. The Special Session does not have to agree on action. Its Member States may decide the easiest path is the least demanding, allowing Member States to find their own solutions. In essence, this means international competition between China, Russia, the United States and maybe Europe and India. The result would be a kind of vaccination Cold War against COVID-19. Whoever vaccinates the most people wins.

This option may be preferred by populist and national leaders, skeptical of interional cooperation. Examples might include American's former President Donald Trump, Brazilian President Jair Bolsonaro, Hungary's Victor Orban and maybe acceptable to Chinese premier Xi Jinping,







Bibliography

- Adesnik, D. (2021, May 5). *Authoritarian countries will try to use coronavirus vaccines as an internal cudgel*. Retrieved from The Washington Post: https://www.washingtonpost.com/outlook/2021/05/05/covid-authoritarian-covax-who/
- Arora, N., & Das, K. N. (2021, September 20). *India to restart COVID vaccine exports to COVAX*, *neighbors*. Retrieved from Reuters: https://www.reuters.com/world/india/india-resume-covid-vaccine-exports-next-quarter-2021-09-20/
- BBC. (2021, September 23). *COVAX: how many covid vaccines have the US and the other G7 countries pledged?* Retrieved from BBC News: https://www.bbc.com/news/world-55795297
- Bhattacharya, S. (2008). *The World Health Organization and global smallpox eradication*. Journal of Epidemiology & Community Health. Retrieved from https://jech.bmj.com/content/62/10/909
- Bloomberg. (2021, September 25). *More than 6.1 billion shots given: COVID-19 Tracker*. Retrieved from Bloomberg: https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/
- Bucharme, J. (2021, September 9). *COVAX was a great idea, but is now 500 million doses short of its vaccine distribution goals. What exactly went wrong?* Retrieved from Time: https://time.com/6096172/covax-vaccines-what-went-wrong/
- Cheng, M., & Hinnant, L. (2021, August 14). *Rich Nations Dip Into COVAX Supply while poor wait for shots*. Retrieved from Associated Press: https://apnews.com/article/joe-biden-middle-east-africa-europe-coronavirus-pandemic-5e57879c6cb22d96b942cbc973b9296c
- Deutsche Welle. (2021, March 10). *Jordanian Foreign minister: don't politicize COVID vaccines*. Retrieved from Deutsche Welle: https://www.dw.com/en/jordanian-foreign-minister-dont-politicize-covid-vaccines/a-56832038
- EU/UNICEF. (2021, March 12). First shipment of European Union-funded COVID-19 vaccines from COVAX facility arrived in Jordan. Retrieved from UNICEF: https://www.unicef.org/mena/press-releases/first-shipment-european-union-funded-covid-19-vaccines-covax-facility-arrived-jordan
- European Council. (2021). *EU's international Solidarity during the COVID-19 pandemic*. Retrieved from European Council: Council of the European Union: https://www.consilium.europa.eu/en/policies/coronavirus/global-solidarity/
- Global Burden of Disease 2020 Health Financing Collaborator Network. (2021, September 22). Tracking development assistance for health and for covid-19: a review of development assistance, government, out of pocket, and other private spending on health for 204 countries and territories, 1990-2050. *The Lancet*. doi:https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01258-7/fulltext
- Guarasclo, F. (2021, July 22). *EU has shipped tiny percentage of planned COVID-19 shot donations document*. Retrieved from Reuters: https://www.reuters.com/business/healthcare-pharmaceuticals/eu-has-shipped-tiny-percentage-planned-covid-19-shot-donations-document-2021-07-22/





- Gupta, D. (2021, March 18). *The emergence of vaccine diplomacy: Indian & Chinese politicization of the pandemic*. Retrieved from Brown Political Review: https://brownpoliticalreview.org/2021/03/the-emergence-of-vaccine-diplomacy-indian-chinese-politicization-of-the-pandemic/
- Independent Allocation of Vaccines Group of COVAX. (2021, September 24). What needs to change to enhance Covid-19 vaccine access. Retrieved from World Health Organization: https://www.who.int/news/item/24-09-2021-what-needs-to-change-to-enhance-covid-19-vaccine-access
- Kier, G., & Stronski, P. (2021, August 3). *Russia's Vaccine Diplomacy is Mostly Smoke and Mirrors*. Retrieved from Carnegie Endowment for International Peace: https://carnegieendowment.org/2021/08/03/russia-s-vaccine-diplomacy-is-mostly-smoke-and-mirrors-pub-85074
- Linde, P. (2021, September 24). *Managing covid-19 vaccines at a time of oversupply: what Spain's regions are doing to avoid wasting doses*. Retrieved from El Pais: https://english.elpais.com/society/2021-09-24/managing-covid-19-vaccines-at-a-time-of-oversupply-what-spains-regions-are-doing-to-avoid-wasting-doses.html
- Lindmeier, C. (2020, May 8). Commemorating smallpox eradication a legacy of hope, for COVID-19 and other diseases. Retrieved from World Health Organization: https://www.who.int/news/item/08-05-2020-commemorating-smallpox-eradication-a-legacy-of-hope-for-covid-19-and-other-diseases
- Lovett, S. (2021, September 21). *Fix 'grotesque' vaccine inequity, campaigners tell world leaders ahead of covid summit.* Retrieved from the Independent: https://www.independent.co.uk/news/health/covid-vaccine-summit-biden-latest-b1924245.html
- Mackintosh, E. (2021, September 22). *Vaccine inequality laid bare at UN General Assembly*. Retrieved from CNN: https://www.cnn.com/2021/09/22/world/coronavirus-newsletter-intl-22-09-21/index.html
- Menon, S. (2021, August 3). *India vaccination: does it have enough doses for all adults?* Retrieved from BBC News: https://www.bbc.com/news/world-asia-india-55571793
- Ruger, J. P., & Yach, D. (2009). The Global Role of the World Health Organization. *Global Health Governance*, 1-11. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3981564/
- Sault, S. (2021, September 16). *SDIS21: Healthy Futures what are the challenges in making healthcare more sustainable?* Retrieved from World Economic Forum: https://www.weforum.org/agenda/2021/09/healthy-futures-what-are-the-challenges-in-making-healthcare-more-sustainable-covid-19-pandemic-mental-health-disease-vaccination-equity/
- Share America. (2021, August 26). *U.S. sends COVID-19 vaccines worldwide [August 2021]*. Retrieved from Share America: https://share.america.gov/us-sends-covid-19-vaccines-worldwide-august-2021/
- Singh, R. (2020, May 23). Why public trust in the WHO matters. Retrieved from London School of Economics Phelan US Centre: https://blogs.lse.ac.uk/usappblog/2020/05/23/why-public-trust-in-the-who-matters/
- UNICEF. (n.d.). *Eradicating Polio: we are closer than ever to ending polio*. Retrieved from UNICEF: https://www.unicef.org/immunization/polio#







World Health Organization. (2021). *Poliomyelitis*. Retrieved from World Health Organization: https://www.who.int/health-topics/poliomyelitis#tab=tab_1