Global COVID-19 Vaccine Distribution

Background
The COVID-19 pandemic has led to severe health and economic consequences across the globe, as governments work to contain spread of the virus and its variants. Officials have instituted a range of physical lockdowns and quarantine measures. In late 2020, researchers identified several new COVID-19 variants, which present challenges to pandemic control. For example, parts of Brazil, South Africa and the United Kingdom are experiencing surges in COVID-19 cases, believed to be caused in part by variants that have emerged in those countries. Vaccines and other countermeasures are playing a growing role in COVID-19 control. Researchers continue to study the safety and effectiveness of various COVID-19 vaccine candidates.

Congress has appropriated approximately $15 billion through supplemental appropriations (P.L. 116-123, P.L. 116-136, P.L. 116-260, and P.L. 117-2) for a range of global COVID-19 responses. Congress authorized the U.S. Agency for International Development (USAID) to use $4 billion of those funds in support of multilateral COVID-19 vaccine efforts. Actions by the Biden Administration to deepen U.S. multilateral engagement, such as joining the COVID-19 Vaccines Global Access Facility (COVAX), may lead to additional U.S. government support for global COVID-19 control.

Global COVID-19 Vaccine Distribution
In April 2020, the World Health Organization (WHO) and partners launched the Access to COVID-19 Tools Accelerator (ACT-A) to accelerate the development, production, and distribution of COVID-19 diagnostics, therapeutics, and vaccines. To date, several countries and WHO have approved four COVID-19 vaccines for emergency use, while vaccines produced in China and Russia that have not been authorized for emergency use are in use in many countries. More than 80 other COVID-19 vaccine candidates are in human clinical trials and numerous COVID-19 therapeutics are in development. Some observers estimate that COVID-19 vaccines will not be widely available in low- and middle-income countries (LMICs) until at least 2022. COVAX, the vaccine arm of the ACT-A—co-led by WHO, the Coalition for Epidemic Preparedness Innovations (CEPI), and Gavi, the Vaccine Alliance—aims to donate two billion doses of COVID-19 vaccines for use in LMICs by the end of 2021. High-income countries may also purchase COVID-19 vaccines through COVAX to access economies of scale and likely receive more affordable prices.

Advances. Nearly 200 countries have joined COVAX. The United States is the largest donor to COVAX, having pledged $2.5 billion in 2021. Other key donors include: Germany ($110 million), the European Commission ($490 million), Japan and Canada ($200 million each), Saudi Arabia, ($150 million), the Gates Foundation ($160 million), France ($120 million), and Italy ($100 million). On February 24, 2021, WHO announced the inaugural shipment of COVID-19 vaccines through COVAX, with the delivery of 600,000 doses to Ghana. COVAX plans to send 600 million doses to Africa by December 2021. As of March 17, 2021, COVAX had shipped 30 million COVID-19 vaccines to 50 countries worldwide.

Challenges. In 2021, COVAX aims to procure enough COVID-19 doses to cover 20% of the populations in 92 LMICs. Health experts estimate that to reach herd immunity, 60-80% of a given population should be vaccinated, raising questions about how LMICs might procure additional doses outside of COVAX. Moreover, as of March 4, 2021, COVAX had a $2.4 billion funding gap. Availability of COVID-19 vaccines in LMICs might also be affected by safety questions and resulting vaccine hesitancy. Several countries temporarily suspended use of the AstraZeneca-produced vaccine after individuals who received the vaccine reportedly developed blood clots. On March 18, the European Medicines Agency (EMA) concluded that the vaccines are not associated with an overall increase in blood clots and “the benefits of the AstraZeneca vaccine outweigh its risks.” After receiving incomplete trial data from the company, U.S. regulators also have raised questions over the vaccine’s efficacy. Though use of the AstraZeneca vaccine has resumed, many countries are reporting higher rates of vaccine hesitancy in the wake of these developments. COVAX has purchased 170 million doses of the AstraZeneca vaccine.

Global Vaccine Access
Insufficient vaccine supply coupled with uneven capacity to pay for the vaccines have led to global vaccine access gaps. Whereas manufacturers have produced only a fraction of the eight billion doses they have been paid to produce, some countries have purchased enough doses to vaccinate their populations several times over. For example, Canada pre-ordered an average of 11 doses per citizen, reportedly because the country does not have capacity to manufacture vaccines and must rely on imported doses. Unequal vaccine distribution has stirred controversy in the international community.

Since December 2020, over 400 million COVID-19 vaccine doses have been administered worldwide; of those doses, less than 10% have gone to LMICs.

Some Non-Governmental Organizations, WHO, and several world leaders, have lamented these inequities. In February 2021, French president Emmanuel Macron urged G7 countries to send 5% of their vaccine doses to Africa.

Vaccine Diplomacy
China and Russia appear to be using vaccine sales and donations to bolster their international standing. Many
LMICs facing manufacturing delays and financial constraints are purchasing vaccine candidates produced by China and Russia. WHO is expected to decide whether to issue an emergency use authorization for two vaccines produced by China (Sinopharm and Sinovac) in April 2021 but has reported that there is insufficient data to estimate a decision on Russia's Sputnik V vaccine candidate.

China announced in March 2021 that it would donate 300,000 doses of its vaccines to U.N. peacekeepers, particularly in Africa. U.N. officials have not yet indicated whether they would accept the donations. Chinese officials have promoted this donation and the international sale of COVID-19 vaccines as part of an effort to demonstrate its support for multilateralism. Several LMICs have reportedly ordered more than 400 million doses from China.

Russia has reportedly reached agreements to supply 1.2 billion doses of Sputnik V across 50 LMICs. India is set to be one of the biggest producers of the vaccine, with an agreement to manufacture 300 million doses. The vaccine’s lower cost and higher storage temperature make it attractive to LMICs despite the lack of WHO approval. Questions remain regarding Russia’s ability to produce enough of the vaccine to fulfill promised orders and domestic needs. Thus far, Russia has not met domestic production quotas.

U.S. Government Role

Bilateral Efforts. U.S. government global COVID-19 control efforts are led primarily by USAID and the U.S. Centers for Disease Control and Prevention (CDC). Both agencies are leveraging long-standing disease outbreak control programs for global COVID-19 response.

Since the pandemic started, USAID and the State Department have committed more than $1.6 billion in health, humanitarian, economic, and development assistance for global COVID-19 control.

CDC has committed at least $800 million for related efforts. The agencies are working jointly to support implementation of National Deployment and Vaccination Plans, required by WHO for countries receiving vaccines through COVAX. COVAX members are considering whether to allow donors to direct donations of COVID-19 vaccines to their country of choice. Given the limited supply of vaccines for domestic use, and the inability to earmark vaccine donations, the United States has opted not to donate large quantities of vaccines to COVAX to date. In March 2021, the Biden Administration pledged to jointly manufacture and deliver 1 billion COVID-19 vaccines to Southeast Asia by the end of 2022, through “the Quad,” the coalition between Australia, India, Japan and the United States, and announced that it would donate 4 million doses of the AstraZeneca vaccine directly to Canada and Mexico, in part to mitigate manufacturing delays of doses those countries have ordered, and the slow pace of vaccine campaigns.

Multilateral Efforts. U.S. diplomatic engagement in multilateral COVID-19 control, particularly with respect to vaccine deployment, appears to be relatively limited. U.S. reticence to participate in such efforts has been driven, in part, by a desire to ensure sufficient domestic COVID-19 vaccine supply, and by the Trump Administration’s dissatisfaction with WHO’s early response to the COVID-19 pandemic; which resulted in a decision to withdraw the United States from WHO in July 2020. The Biden Administration is working to restore U.S. involvement in WHO. Thus far, the Administration has retracted the July 2020 decision, resumed regular engagement with WHO, ended plans to draw down U.S. staff seconded to WHO, and formally joined COVAX.

Outlook and Issues for Congress

Since the beginning of the pandemic, many Members of Congress have demonstrated strong interest in COVID-19 control, including in vaccine development and distribution. Members have also debated how to balance international and domestic responses to the pandemic. During the 117th Congress, Members may consider a variety of issues related to COVID-19 vaccines including:

- **U.S. engagement with WHO.** Although the Biden Administration has announced a resumption of normalized relations with WHO and joined COVAX, some Members of Congress remain concerned about China’s influence in WHO and in related vaccine efforts. Several bills have been introduced in the 117th Congress that aim to place conditions on U.S. contributions to WHO. One bill, for example, would prohibit any U.S. contributions to WHO as long as China remains a member of the organization. No legislation has been introduced in the 117th Congress in support of WHO, though several Members of Congress rejected plans by the Trump Administration to withdraw from WHO in the 116th Congress.

- **COVID-19 “vaccine passports.”** In January 2021, President Biden issued Executive Order 13998 to study whether the U.S. government should issue “vaccine passports” or some other document that indicates whether one has been vaccinated or recovered from COVID-19. The Biden Administration has not determined whether to endorse the idea, but has indicated that the government shall not store associated data. In March 2021, the European Commission published its proposal for a Digital Green Certificate that would enable vaccinated certificate holders to move freely in the Eurozone. WHO opposes the idea of vaccine passports, stating “there are still critical unknowns regarding the efficacy of vaccination in reducing transmission.” WHO and other critics also raised concerns about how inequitable access to the vaccine might impact underserved populations. No Members of Congress have introduced legislation in support of or opposition to the concept, though some bills cite key concerns. H.R. 906, for example, would prohibit the Secretary of Transportation from requiring an individual to test negative for COVID-19 to travel by air. Similarly, S. 82 calls for a joint task force, comprising the Secretaries of Transportation, Homeland Security, and Health and Human Services, to make recommendations for addressing privacy and civil liberty issues that may arise from such monitoring the health of air travelers.

Sara M. Tharakan, Coordinator. Analyst in Global Health and International Development

Tiaji Salaam-Blyther, Specialist in Global Health
Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS’s institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.