



# Strategy to Achieve Global Covid-19 Vaccination by mid-2022



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### Purpose

This strategy brief outlines the urgent actions required by the global community to vaccinate 70% of the world's population against COVID-19 by mid-2022. The goal is to substantially increase population immunity globally to protect people everywhere from disease, protect the health system, fully restart economies, restore the health of society, and lower the risk of new variants. With interim targets of 10% full vaccination population coverage in all countries by the end-September 2021, and 40% in all countries by end-2021, the strategy aims to first protect health workers, older populations, and high-risk individuals with important co-morbidities, advancing next to all adults, followed by adolescents.

The global goal, targets and strategy will be updated as new knowledge evolves, including on the risks and benefits of vaccinating children.

### Introduction

Every country has been affected by COVID-19, with nearly a quarter of a billion cases and almost 5 million deaths reported globally as of end of September 2021. Despite the stunning speed with which highly effective and safe vaccines have been developed, new waves of disease are still pushing health systems to the breaking point, increasingly transmissible variants are emerging, some survivors are suffering serious long-term sequelae, and the International Monetary Fund estimates that global economic losses could exceed US\$5.3 trillion by 2026, if COVID-19 becomes endemic.

Although over 6 billion doses of COVID-19 vaccine have already been administered, and global production is now reaching 1.5 billion doses per month, the world is not positioned to end the pandemic. In areas of high vaccine coverage, there have been massive reductions in serious disease, hospitalization and death but, globally, vaccine access is highly inequitable with coverage ranging from 1% to over 70%, depending largely on a country's wealth. Consequently, SARS CoV-2 variants continue to emerge, causing surges of disease and slowing or even reversing the reopening of societies and economies.

# The Global COVID-19 Vaccination Strategy

### **Goal and Targets**

The **immediate goal** of the global COVID-19 vaccination strategy is to minimize deaths, severe disease and overall disease burden; curtail the health system impact; fully resume socio-economic activity; and reduce the risk of new variants.

In the face of an evolving and increasingly transmissible virus, high population immunity is essential to achieve this goal, which means vaccinating broadly. Based on current knowledge, this requires fully vaccinating at least 70% of the world's population, accounting for most adults and adolescents and for the vast majority of those at risk of serious disease.

Figure 1.

Health and socio-economic goals drive the global COVID-19 vaccination strategy



Given ongoing vaccine supply constraints, for greatest impact and equity it is crucial to vaccinate in a stepwise, internationally coordinated manner with **time-bound coverage targets**:

- by end September 2021
- by end December 2021
- by end June 2022

10% coverage in all countries40% coverage in all countries70% coverage in all countries<sup>1</sup>

The **70% coverage target by mid-2022** is driven by the health and economic imperatives of stopping the pandemic as rapidly as possible, supported by technical analyses on disease epidemiology and vaccine attributes, and a feasibility assessment that include requirements on global vaccine production and national absorption capacities.<sup>2</sup> **The interim coverage targets** are needed to ensure an equitable pace of vaccine rollout globally and appropriate prioritization of vaccine for those at highest risk. The **10% coverage target** by end September 2021 was **not met by 56 countries**, representing 20% of the global population. As of the end of September, 70 countries had already met the 40% coverage target. This makes ever more urgent the critical actions needed to assure that the remaining countries, and especially those that are still below 10% coverage, are on a trajectory to achieve the **40% coverage by end December 2021**.

The promise of COVID-19 vaccines in ending the pandemic can only be realized if all countries act together with urgency, optimizing the strategic use of the limited but growing vaccine supply.





<sup>1</sup> National targets may need to be adjusted based on age demographics, policy developments and programme reach.

<sup>2</sup> The 70% coverage target by mid-2022 is also consistent with the downside risk scenario envisioned in the original IMF proposal released in May 2021 and endorsed by the Multilateral Leaders Taskforce (MLT).



#### **Principles**

The global COVID-19 vaccination goal and targets are anchored in following principles:

- **Equity:** all individuals, populations and countries should have equitable vaccine access without incurring financial hardship;
- **Quality:** the vaccines used should meet international standards through WHO authorization;
- **Integrated:** vaccines should be deployed with tests, treatments and public health & social measures;
- **Inclusivity:** vaccination must include marginalized, vulnerable, displaced, and imprisoned populations.

#### Rationale for broad coverage

Changing the pandemic's trajectory, and achieving the fastest and fullest recovery possible, requires addressing SARS CoV-2 transmission, as well as COVID-19 disease. This necessitates a broad scope of vaccination, beginning with at-risk populations, then all adults, and as a next step adolescents.<sup>3</sup>

This broad vaccination scope is underpinned by a thorough technical and feasibility assessment<sup>4</sup> that analyzed: (i) COVID-19 disease and infection epidemiology, (ii) evolving science on COVID-19 vaccines and SARS CoV-2 virus evolution, (iii) required vaccine doses and projected global supply, (iv) vaccine and delivery costs, (v) expected health and economic returns on investment, and (vi) political will, financing, supply and programmatic resources. This assessment concluded:

- Immunization of all adults with COVID-19 vaccines will provide substantial and important health returns on investment, is feasible to achieve in all countries with the right investments, is grounded in evidence and is being actively pursued already in many countries;
- Vaccination of adolescents would further reduce disease burden and provide other important benefits towards resuming socio-economic activity, even as its impact on reducing transmission is fully investigated;

<sup>3</sup> The potential need to vaccinate younger children in future will depend on the evolving epidemiology, and evidence on vaccine safety and performance in that age group.

<sup>4</sup> Global COVID-19 Vaccination – Strategic Vision for 2022, Technical Document – <u>https://www.who.int/news-room/events/detail/2021/10/04/default-calendar/</u> sage\_meeting\_october\_2021.

- At-risk investments are needed to assure rapid deployment of vaccines to broader groups and schedules while scientific knowledge advances, because building the necessary financial infrastructure, supply capacity and delivery services takes time;
- The global COVID-19 vaccination effort can be leveraged to strengthen primary health-care systems and other immunization activities.

# The need for a stepwise and coordinated approach

To achieve the greatest gains from this expanded vaccination goal, the rollout across age groups should be stepwise and advanced similarly across countries as follows:

- Step 1: targeted vaccination of all older adults, health workers, and high-risk groups of all ages, in every country to reduce severe disease and death, while protecting health systems globally.
- Step 2: extensive vaccination of the full adult age group in every country to secure additional health-related benefits and allow greater normalization of societies and economic activity.
- Step 3: extensive vaccination of adolescents<sup>5</sup> to further reduce disease burden and the risk of new variant emergence, potentially by reducing viral transmission.

Importantly, vaccination targets must be globally aligned and coordinated. Countries need to move together through these coverage targets to achieve greatest impact. This requires a commitment to equity between countries, and actions to achieve that commitment. Rapid and equitable expansion of vaccination across all countries will slow the emergence of Variants of Concern (VOCs) and accelerate growth in the interconnected global economy. The Delta variant has demonstrated that the emergence of new VOCs can lead to new waves of disease and require the reinstating of movement restrictions, even in countries with high vaccination coverage.

Without a coordinated approach, advances in any one country cannot be sustained over time.

<sup>&</sup>lt;sup>5</sup> Vaccine recommendations for younger children, to maximize disease reduction in the population, will depend on improved understanding of virus transmission and the impact of vaccines, vaccine authorization for children, and evidence that benefits outweigh risks.

#### **Resource requirements**

Fully vaccinating 70% of the global population requires **at least 11 billion doses of COVID-19 vaccines**.<sup>6</sup> **By end-September 2021, almost 6.3 billion doses had already been administered worldwide and contracts were in place for most of the remaining 4.7 billion doses. With global production at nearly 1.5 billion doses per month**<sup>7</sup>, from a supply perspective there will be sufficient doses to achieve the global vaccination targets if there is equitable distribution. It is critical at this point to sequence the global supply by accelerating shipments to underserved countries, by prioritizing COVAX and AVAT<sup>8</sup> contracts and donations, while identifying and addressing any residual contracting gaps for specific countries.

The total financing required to vaccinate 70% of the population in low and low-middle income countries (LICs, LMICs) worldwide is estimated to be in the range of US\$ 55 billion, based on a combined procurement and programmatic delivery cost of US\$ 10 per dose. The majority of the vaccine doses needed by these countries have been secured by the significant financing already invested through COVAX, AVAT and bilateral contracts. Particularly urgent is the mobilization and application of additional domestic, grant and concessional financing to close the remaining funding gap for in-country programme delivery of these doses, estimated to be at least US\$8 billion.<sup>9</sup>

### Risks to the Global COVID-19 Vaccination Targets

Achieving the global COVID-19 vaccination targets requires anticipating and addressing key challenges:

**Guaranteeing equitable access to COVID-19 vaccines by all countries, across income groups:** Of just over 6 billion doses of COVID-19 vaccines administered globally by the end of September 2021, 75% had been used in high- and upper-middle income countries (which constitute 50% of the global population), and 25% in lowand low-middle income countries (which constitute the other 50%). Alarmingly, most manufacturers supplying COVAX have repeatedly downgraded the timelines for delivering their projected volumes to the COVAX Facility. Addressing this ongoing risk requires action

<sup>6</sup> Additional doses would be required to subsequently implement booster strategies, or extend vaccination coverage further.

<sup>7</sup> IFPMA press release - https://www.ifpma.org/resource-centre/momentum-of-covid-19-vaccine-manufacturing-production-scale-up-is-now-sufficient-for-stepchange-in-distribution-and-opens-way-for-urgent-political-leadership-and-country-preparedness.

<sup>8</sup> African Vaccine Acquisition Trust (AVAT).

<sup>9</sup> Excluding India which has been financing the COVID-19 vaccination delivery with domestic resources.

across manufacturers, vaccine-producing countries, countries with high coverage, and international procurement mechanisms that serve low- and low-middle income countries, especially COVAX and the African Vaccine Acquisition Trust (AVAT).

**Ensuring countries access sufficient financial and programmatic resources for procurement and delivery:** Rolling out COVID-19 vaccination at scale requires unprecedented surge capacity in the health workforce and immunization systems, which can pose a risk to other essential health services. Early and intentional planning of COVID-19 investments is essential to both deliver vaccines and strengthen the underlying health systems. Additional national and international financing must be mobilized for critical delivery costs, such as ensuring the necessary vaccine campaign workforce, logistics, mobilization of population demand, and additional cold chain capacity and data systems. This requires improving the costing of in-country programmatic delivery activities and more effectively leveraging available financing, including through multilateral development banks.

#### Producing an adequate global supply of COVID-19 vaccines:

Approximately 12 billion doses of COVID-19 vaccines are expected to be produced in 2021, with potential to double production in 2022.<sup>10</sup> This is sufficient to cover the world's needs for the global COVID-19 vaccination targets. Ensuring this scale of production requires clear visibility on the dose requirements of countries, early contracting, and the active management of key uncertainties, particularly in the areas of: technical and regulatory success of new vaccines, timing of regulatory approval and production, availability of raw materials and inputs, manufacturing yields and scale, manufacturing risks, technology transfer and sharing know-how, and manufacturer strategies, including in response to new variants.

#### Managing risks associated with the emergence of new variants

of SARS-CoV-2: to date, all WHO-authorized COVID-19 vaccines have shown impressive effectiveness against hospitalization, severe disease and death across a range of variants, including Delta. Hence, the single most effective strategy for reducing the risk posed by new variants is to boost population immunity as high as possible, by achieving the global COVID-19 vaccination targets as rapidly as possible. In parallel, monitoring of new variants, tracking of vaccine performance, and research on the impact of additional doses, dosing regimens, and new vaccine products must continue.

While substantive, these risks and challenges can be addressed through the collective, concerted and coordinated action of the global community.

<sup>10</sup> IFPMA press release. Even under more conservative estimates, global supply is deemed sufficient to cover needs.

### **Priority Actions to Achieve the Global COVID-19 Vaccination Targets**

Achieving the global COVID-19 vaccination targets is feasible, but requires urgent action across national, local and multilateral players to improve the supply of COVID-19 vaccines to underserved countries, ensure adequate financing for procurement and in-country programmatic delivery in low and low-middle income countries, and prepare delivery systems everywhere. Priority actions include:

### All Countries

- Establish updated national COVID-19 vaccine targets and plans defining: i) dose requirements to guide manufacturing investment and vaccine redistribution and ii) financial and programmatic resource needs to guide internal planning and external support.
- **Monitor vaccine demand and uptake** carefully to rapidly adapt immunization services and ensure continuity of vaccine supplies.
- **Commit to equitable distribution of vaccines** in line with the WHO stepwise approach.
- Revise national vaccination strategies, policies and prioritization as needed to harness emerging evidence in order to maximize the impact of existing, modified and new vaccines.





# Countries with High COVID-19 Vaccine Coverage

- **Swap vaccine delivery schedules** with COVAX and AVAT to enhance coverage in countries in need.
- Fulfill and accelerate vaccine dose-sharing and donation commitments to COVAX in the near-term, for those with existing pledges.
- Establish **new dose-sharing commitments** to facilitate progress toward the 70% coverage target in every country.

#### Vaccine Producing Countries

- Allow the **free cross-border flow of finished vaccines** and raw materials.
- Enable diversified vaccine production, both geographically and technologically, including through non-exclusive, and transparent licensing and sharing of know-how to allow transfer of technology and scale up of manufacturing.

#### **COVID-19 Vaccine Manufacturers**

- Prioritize and fulfill COVAX and AVAT contracts as a matter of urgency.
- Provide full transparency on the overall monthly production of COVID-19 vaccines and clear schedules by month for supplies to COVAX, AVAT and low and low-middle income countries, to enable proper global and national-level planning and optimal use of scarce supplies.
- Actively engage and work with countries which have high coverage and that have contracted high volumes of vaccines to **allow the prioritization of COVAX and AVAT contracts**, including through delivery schedule swaps, and facilitate rapid and early dose-sharing.
- Commit to share know-how more rapidly, facilitate technology transfer and provide transparent non-exclusive voluntary licenses, to ensure that future vaccine supply is reliable, affordable, available, and deployed to every country in volumes and timing that achieves equitable access.

# Civil Society, Community Organizations, and the Private Sector

- Advocate locally, nationally and internationally for equitable access to COVID-19 vaccines, tests and treatments, calling for and monitoring the specific actions required of manufacturers, governments and multilateral actors.
- Mobilize and empower communities, including through social media and community networks, to generate strong vaccine demand and address misinformation and misperceptions that contribute to vaccine hesitancy.
- Provide support to the in-country delivery of vaccination programmes.

### Global and Regional Multilateral Development Banks and Institutions

- Continue to enable countries to more rapidly access the **capital and external support** needed for in-country programmatic vaccine delivery, prioritizing low-income settings and especially targeting support to the technical, logistics and human resources required.
- Engage even more fully with COVAX/ACT-Accelerator and AVAT, with integrated operations and real-time sharing of information to maximally support equitable access.
- Support international **procurement and allocation mechanisms** to enable all countries to equitably, efficiently and rapidly achieve the COVID-19 vaccine targets.
- Support **vaccine distribution plan**s and a campaign to convey the life-saving importance of approved COVID-19 vaccinations.



# World Health Organization, Gavi, UNICEF & CEPI

- Work in close **collaboration with World Bank**, **World Trade Organization**, **International Monetary Fund**, **Africa CDC**, **AVAT**, **and other key partners** to monitor progress, identify changes needed to resolve bottlenecks, coordinate information and prioritize actions.
- Continue to **lead and manage the COVAX Pillar** of ACT-Accelerator, providing end-to-end integrated support for the global vaccination targets.
- Support the **equitable allocation** of available vaccines, particularly to low-, low-middle income and lagging countries, taking into account all sources of vaccines.
- Directly support countries to **develop and sustain rapid**, **effective**, **high quality COVID-19 vaccine delivery programmes** that can achieve the global targets, while strengthening the essential immunization programme and other health services.
- Address key **research**, **policy**, **safety** and **regulatory issues that will optimize vaccine impact** including effective supply, dosing and vaccine schedules, mixing and matching of products, protection against variants, and other issues.
- **Monitor and report monthly on progress** towards the global COVID-19 vaccination goals.



#### Figure 3. Aligned and coordinated action to achieve the global COVID-19 vaccination targets

All Countries Establish national plans and commit to equitable vaccine distribution, including free flow of materials and vaccines; thoroughly report local data through eJRF	High Coverage Countries Take urgent actions to get vaccine doses to lower coverage countries through COVAX, AVAT and other means	<b>CSOs, Private</b> <b>Sector</b> Empower people, communities and partners locally and globally to act in support of demand and equity	WHO, Gavi, UNICEF, CEPI Ensure COVAX's success and support end-to-end impact for equitable, high coverage	MDBs and Institutions Continue to ensure sufficient delivery funding and support for procurement	<b>Manufacturers</b> Prioritize supply and transparency to ensure global equity and share know-how
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**Transparency and data as critical enablers**, including from manufacturers on 'place in the queue' and bilateral deals, and from countries on accurate and complete data reporting

