The COVID-19 pandemic initiated the fastest and most complex global vaccine rollout ever, but caused unprecedented backsliding in immunization against other life-threatening diseases. Mass COVID-19 vaccination campaigns rapidly reach targeted populations, resulting in vaccine delivery and monitoring innovations and investments that can strengthen health systems. However, in many countries, the rapid deployment of COVID-19 vaccination came at a high price: health workers and programmatic resources were diverted from other services, notably immunization programmes, resulting in increases in outbreaks of vaccine-preventable diseases. Recovering essential immunization programmes and sustainably integrating COVID-19 vaccination into primary health care (PHC) and other health services for high-risk groups is crucial.

Key messages

• The current global attention on immunization provides an opportunity to reinvigorate efforts to vaccinate zero-dose and under-immunized children, and achieve Immunization Agenda 2030 (IA2030) goals, including to:
  - Decrease large, disruptive outbreaks of measles;
  - Eradicate polio; and
  - Revitalize immunization against human papillomavirus.

• This also provides an opportunity to turn life course immunization, one of the IA2030 strategic priorities, into reality in many countries that, to date, have had sub-optimal adult vaccination programmes for:
  - Influenza;
  - COVID-19; and
  - Other maternal immunizations such as, pertussis (whooping cough) and, in the pipeline, respiratory syncytial virus and Group B streptococcus.

• For the future, we need sustainable COVID-19 vaccination programmes, involving relevant initiatives beyond immunization (noncommunicable disease programmes, PHC, maternal, newborn and child health care, etc.) to reach high-risk groups of adults.

• The “Big Catch-up” strives to catch up, recover and strengthen the immunization programme to at least pre-pandemic (2019) levels by the end of 2023 and to get back on track towards achieving the 2030 goals by 2024.

• WHO advocates engaging with the public and political leaders for intensified action to scale-up immunization through an aspirational can-do campaign.

• To achieve our collective goals, we leverage COVID-19 investments and the reprogramming of underutilized funds, political engagement, and innovations.

• Planned key advocacy dates for WHO include our call for a global New Year’s resolution, World Immunization Week, the annual United Nations General Assembly and national report card activity.

• WHO’s Expanded Programme on Immunization (EPI) celebrates its 50th anniversary in 2024. By then, we aim for the world to be back on track to reach global immunization targets.
Background and challenges

The COVID-19 pandemic caused unprecedented backsliding in immunization levels in 2020 and 2021. As a result, IA2030 and Sustainable Development Goal 3 immunization-related targets failed to be on track. In 2021 alone, 25 million children were unvaccinated (zero dose) or under vaccinated. The number of zero-dose children in any one year rose by 37% from 2019 to 2021, and the number of children unvaccinated for measles rose by 21% from 2019 to 2021 (Figure 1).

An estimated 4 million future deaths were averted by immunization in 2021, but this figure is 5.6% lower than the initial target, in one year alone. No visible progress has been made towards global and regional eradication/elimination goals, and the number of outbreaks triggering a global vaccination response are on the rise. In particular, measles and polio outbreaks are an urgent cause for concern. More than 100 outbreaks occurred during 2021-2022.1 Overall, the number of new vaccines introduced in low- and middle-income countries in 2021 (excluding COVID-19 vaccines) rose slightly from 2020, but it remains at its lowest level in more than 20 years.

As of December 2022, COVID-19 vaccination has been implemented in nearly every country in the world, with over 13 billion doses administered globally. Sixty-five per cent of the global population has completed the primary series; however, in low-income countries this figure was only 23% by the start of 2023.

The COVID-19 vaccination programme has been the fastest and the most complex global vaccine campaign in history (Figure 2). It averted an estimated 20 million deaths in 2021, and has allowed countries to resume socio-economic activities. At the time of writing, the trajectory and timing for the end of the COVID-19 pandemic are both uncertain, and WHO has laid out possible scenarios for how the pandemic could evolve.

The WHO base-case COVID-19 pandemic scenario – which uses assumptions considered most likely to occur – envisions that the virus will continue to evolve, with its severity significantly reduced over time. This base-case scenario also envisions periodic spikes in transmission and disease, which may require periodic boosting for high-risk populations (older people, people with comorbidities, the immunocompromised, pregnant women and health workers), potentially using specific vaccines targeting the variants in circulation. Since the majority of high-risk groups are adults, reaching these people means establishing or strengthening delivery strategies and platforms beyond childhood vaccination programmes.

Key actions and policy recommendations

Under the IA2030 umbrella, an essential immunization recovery plan has been designed for 2023, to promote catch up in all countries but with a special focus on 20 priority countries.2 In these countries, an estimated 50 million children missed vaccinations between 2019 and 2022; by focusing here, we have an opportunity to reach 78% of zero-dose children.

The recovery plan – known as the “Big Catch-up” – sets a path to get immunization back on track, and encompasses three key aims: to catch up, to restore and to strengthen. It works towards these aims using six levers: political leadership; advocacy and partnerships; resource mobilization; tailored country response planning and implementation; responsive, intensified technical assistance; and monitoring and learning.

At the same time, it is also important to sustain and enhance momentum for COVID-19 vaccination – in the face of a widespread perception of lower disease risk, lower public demand for COVID-19 vaccines, and emerging shifts in political priorities. Continued investments are needed for the ongoing reach of primary series and booster doses to high-priority groups. It is also important to plan a sustainable future for COVID-19 vaccination, including integration into wider immunization programmes and PHC. We therefore propose the following key actions:

Governments

- Catch-up, restore and strengthen immunization programmes (following guidance set out in the IA2030 Big Catch-up) in all countries.
- Catch up on vaccinations for the millions of children from past cohorts that missed routine vaccinations during the COVID-19 pandemic in 20 countries with most zero dose children.
- Restore vaccination coverage to at least pre-pandemic levels, returning to the trajectory towards IA2030 goals.
- Strengthen immunization programmes in order to reach zero-dose children through PHC and community systems.
- Invest in systems strengthening and innovation to accelerate progress towards IA2030 targets.

Donors

- Close any funding gap for this campaign and leverage COVID-19 investments towards strengthening health systems and PHC.
- Work with health and development agencies to mobilize public support and demand.

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1. Data reported by Member States through WHO’s Event Management System.
2. India, Nigeria, Indonesia, Ethiopia, the Philippines, the Democratic Republic of the Congo, Brazil, Pakistan, Angola, Myanmar, Tanzania, Mozambique, Afghanistan, Somalia, Mexico, Madagascar, Cameroon, the Democratic People’s Republic of Korea, Chad, Vietnam.
IA2030 partners and other health and development agencies

- Work with the global Immunization Advocacy Initiative throughout 2023.
- Deploy technical, programmatic and financial capacity to support action at global, regional and country levels.
- Position progress made in 2024 towards celebrating the 50th anniversary of the WHO’s Expanded Programme on Immunization.

Figures

**Figure 1.** Global coverage of first and third dose of diphtheria, tetanus, and pertussis (DTP)-containing vaccine 2000-2021. Illustrates the increasing number of un-and under vaccinated children between 2019-2021. Children who have not received any dose of DTP are considered zero dose children.


**Figure 2.** Global coverage increase years after first available data on vaccine rollout.

Note: HPV = human papillomavirus; Hib = Haemophilus influenzae type B; HepB = hepatitis B; TB = tuberculosis; BCG = Bacillus Calmette-Guérin.

References and resources


