

Polio eradication strategy 2022-2026: delivering on a promise, extension to 2029





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The GPEI is also deeply appreciative of the invaluable contributions from the groups whose scientific and programmatic knowledge drive the operational, social, political and tactical work: the Regional and National Immunization Technical Advisory Groups, the Strategic Advisory Group of Experts on Immunization, the Emergency Committee under the International Health Regulations regarding the international spread of poliovirus, the Independent Monitoring Board and the national polio eradication emergency operations centres.

Their collective expertise, insights and dedication are critical to the GPEI's mission, and the programme is grateful for their continued partnership and collaboration in the global fight against polio.



Acronyms and abbreviations

BCU Big Catch-up

bOPV Bivalent oral polio vaccine

COVID-19 Coronavirus disease (2019)

cVDPV Circulating variant (or vaccine-derived) poliovirus

cVDPV1 Circulating variant (or vaccine-derived) poliovirus type 1

cVDPV2 Circulating variant (or vaccine-derived) poliovirus type 2

cVDPV3 Circulating variant (or vaccine-derived) poliovirus type 3

EPI Expanded Programme on Immunization

GIS Geographic information system

GMG Gender Mainstreaming Group

GPEI Global Polio Eradication Initiative

H2H House-to-house

IMB Independent Monitoring Board

IPV Inactivated polio vaccine

mOPV1 Monovalent oral polio vaccine type 1

mOPV2 Monovalent oral polio vaccine type 2

mOPV3 Monovalent oral polio vaccine type 3

NEOC National Emergency Operations Centre (Pakistan)

nOPV1 Novel oral polio vaccine type 1

nOPV2 Novel oral polio vaccine type 2

nOPV3 Novel oral polio vaccine type 3

ODK Open Data Kit

OPV Oral polio vaccine

POB Polio Oversight Board

SAGE Strategic Advisory Group of Experts on Immunization

SBCC Social and behavioural change communication

tOPV Trivalent oral polio vaccine

UNICEF United Nations Children's Fund

WHO World Health Organization

WPV1 Wild poliovirus type 1

Purpose of the document

Based on today's epidemiology and after critical analysis and expert consultations, the Strategy Committee and Polio Oversight Board (POB) of the Global Polio Eradication Initiative (GPEI) have decided to extend the timeline for certifying the eradication of wild poliovirus type 1 (WPV1) to the end of 2027 and certifying the elimination of circulating type 2 variant poliovirus (cVDPV2) – also known as vaccine-derived poliovirus – to the end of 2029. This document complements the original Polio Eradication Strategy 2022–2026 by outlining the obstacles that have hindered progress towards these goals since the start of the strategic period (2022) and defining adjustments that will be made in the extension period (from now to the end of 2029) to overcome them. It summarizes key tactical shifts that will enable more effective implementation and accountability, the rationale for continued investment in the promise of a polio-free world and the plan to sustain eradication once it is achieved.

Expert insights for critical programme evaluation

The priority actions outlined to achieve eradication are informed by a whole-of-partnership lens on addressing underperformance and mitigating risks, as well as by the recommendations of independent bodies, including:

WHO Member State oversight groups

- World Health Assembly and WHO Executive Board;
- · WHO regional committees; and
- the Eastern Mediterranean Regional Subcommittee for Polio Eradication and Outbreaks.

Policy and advisory groups

- the Strategic Advisory Group of Experts on Immunization (SAGE) and the SAGE Polio Working Group;
- the Emergency Committee under the International Health Regulations regarding the international spread of poliovirus;*
- the Independent Monitoring Board (IMB);
- the Technical Advisory Group for endemic countries; and
- the Global Commission for the Certification of the Eradication of Poliomyelitis.

^{*}The Emergency Committee regarding ongoing events and the context involving the transmission and international spread of poliovirus is a body of independent experts convened by the WHO Director-General under the International Health Regulations (2005) to advise the Director-General on whether the mentioned events constitute, or continue to constitute, a Public Health Emergency of International Concern and on temporary recommendations to address the emergency.

Executive summary

Thanks to the power of vaccines and decades of global collaboration, wild poliovirus has been nearly wiped out. But the virus – exploiting factors like insecurity, humanitarian crises, persistently underserved communities and inconsistent access to populations on the move – has proved to be a tenacious opponent, still paralysing children today in some of the most fragile settings on the planet.

Since 1988, when the Global Polio Eradication Initiative (GPEI) was formed, the number of children paralysed by polio has been reduced by 99.9%. Through collaboration and commitment from health workers, governments and partners around the world, over 3 billion children have been immunized against polio and 20 million people are walking today who otherwise would have been paralysed (1).

Today, polio persists in some of the world's most challenging environments for the delivery of health care and other basic services — from humanitarian crises in Afghanistan, the Democratic Republic of the Congo, the Gaza Strip, Somalia, Sudan and Yemen to persistent insecurity in parts of Nigeria and remote and underserved communities in Pakistan. In this landscape, the GPEI continues to protect millions of children each year from paralysis and to work towards the promise of a polio-free world. Yet the reality of eradicating any disease is that the closer the world gets to zero, the harder the effort becomes.

To end polio in the face of these challenges, the GPEI is refining tactics and deploying innovative tools to reach every child in every community with polio vaccines and other life-saving care.

In pursuit of its mission, the GPEI is extending the timeline needed for eradication from 2026 to 2029 and revising its programmatic budget to implement a mix of new and time-tested tactics to consistently reach every child.

While the *Polio Eradication Strategy 2022–2026* is robust and eradication tactics have adapted nimbly to

shifting ground realities, it is clear that the GPEI must strengthen implementation and improve performance to reach more children more consistently. To end wild poliovirus in Afghanistan and Pakistan, the programme will intensify cross-border coordination to reach mobile populations and those living along the border; deliver polio vaccines alongside broader health interventions by coordinating with new development partners; refine and intensify postcampaign monitoring to identify missed children, employing immediate corrective measures and informing planning for subsequent rounds; tailor activities according to local gender norms; and increase support for women vaccinators, planners and supervisors. The programme will also intensify advocacy for increased community and national ownership of the eradication effort and adapt contextspecific social and behavioural change communication strategies to address vaccine hesitancy.

To stop outbreaks of type 2 variant poliovirus for good, the programme will enhance its focus on improving immunization coverage in four consequential geographies, that is in subnational areas where children are at the highest risk of encountering and spreading the virus: eastern Democratic Republic of the Congo, northern Nigeria, south-central Somalia and northern Yemen. At the same time, in any country with new detections of the virus, the GPEI will implement faster, bigger and better vaccination campaigns that reach every child with the next-generation vaccine, novel oral polio vaccine type 2 (nOPV2). In countries with persistent circulation, it will also implement targeted regional action plans to reach children with vaccines and other life-saving care in the hardest-to-access areas. In all situations, the GPEI is integrating with and supporting essential immunization programmes in a more strategic and systematic manner. This work will set the stage to stop the remaining types of variant poliovirus - types 1 and 3 - by building population immunity and strengthening immunization systems before withdrawal of the oral vaccine.

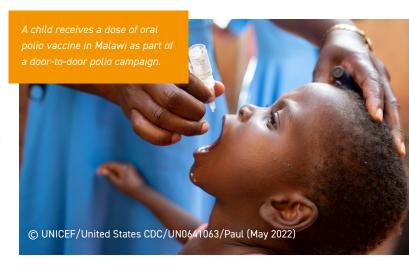
Dedicated, skilled and gender-balanced teams are already driving forward new approaches, from using geospatial technology to consistently reach remote communities along the Congo River in eastern Democratic Republic of the Congo to forging new partnerships that deliver essential health services to high-risk communities in Somalia. A robust risk and performance monitoring framework now regularly guides the programme, covering all aspects from financing and vaccine procurement to campaign planning and implementation.

With strengthened implementation, additional resources and renewed focus from polio-affected country governments, donors and global advocates, the GPEI can protect the world's most vulnerable children, fulfil its historic promise and end polio for good.

The world still has a window of opportunity to end this devastating disease. Wild poliovirus transmission remains historically low compared to just five years ago and cVDPV transmission has been substantially reduced in the last two years. Governments and health workers, with support from the GPEI, have the creative tools and strategies needed to reach every child. But political instability, conflict and misinformation are mounting, and essential immunization programmes and polio vaccination campaigns are struggling to keep up.

If high vaccination rates against polio are not achieved and maintained, the risk of outbreaks will rise. This risk has started to become a reality as places long polio-free, like the United States of America and the United Kingdom, recently detected transmission of the virus for the first time in decades. The window is closing fast as too many children are left unprotected.

Vaccination is one of public health's most powerful and cost-effective tools to prevent disease, disability and death. Polio eradication could save the world an estimated US\$ 33.1 billion in direct costs by 2100 compared to the cost of controlling the virus and responding continuously to outbreaks (2, 3). If the world does not keep striving for eradication,



outbreaks will spread, and many thousands of children would be paralysed every year within a decade. The cost to families of caring for a child paralysed by polio is also high, especially paired with the risk of that child missing out on education and work. Not completing the mission of eradication now is costly – both in human and financial terms.

Amid today's landscape, the GPEI's role has never been more critical. In addition to its main goal of stopping polio, the GPEI, in coordination with other global health initiatives, also acts as a lifeline to essential health services for communities left behind. House-to-house polio vaccination campaigns are often the most frequent and, sometimes, only point of contact between these communities and the formal health system. The programme also operates one of the largest disease surveillance systems in the world. Polio staff, and these vaccination and surveillance systems, have helped fight other health emergencies like measles, Ebola, coronavirus disease and, most recently, mpox. Investing in polio eradication is therefore an investment in these critical underlying services and in collective global health security.

Governments and partners have already committed a generous US\$ 4.5 billion to the GPEI's current strategy. Providing the programme with the remaining US\$ 2.4 billion needed through 2029 is essential to capitalize on the incredible progress that has been made and prevent an exponential rebound of polio around the globe. The world must act now.

Rationale for extending the *Polio Eradication*Strategy 2022–2026: Delivering on a promise

The first two and a half years of the programme's 2022–2026 strategy have been marked by moments of inspiring success, such as ending a type 2 variant poliovirus outbreak in Ukraine amid war; reaching millions of previously missed children in Afghanistan following the resumption of nationwide vaccination campaigns in late 2021; and guickly stopping an importation of wild poliovirus in Malawi and Mozambique from spreading further. However, this progress was made in the context of worrying global developments, such as historic backsliding in coverage of routine vaccines due to the coronavirus disease (COVID-19) pandemic and delays in regaining lost ground; rising conflict and political instability around the world; and increasing climate-related disasters in the places at highest risk of polio. These challenges have been compounded by programmatic hurdles, including larger-than-anticipated outbreaks of type 2 variant poliovirus following the global switch from the trivalent oral polio vaccine (tOPV) to bivalent oral polio vaccine (bOPV) in 2016, periodic disruptions to vaccine supply and inconsistent campaign quality.

The original timeline for interrupting and certifying the eradication of wild poliovirus type 1 (WPV1, Strategy Goal One) and certifying the elimination of type 2 variant poliovirus (cVDPV2, Strategy Goal Two) is therefore off track. Based on the virus patterns seen today, and after critical analysis and expert consultations, the Global Polio Eradication Initiative (GPEI) Strategy Committee and Polio Oversight Board (POB) have decided to extend the timeline for certifying the eradication of wild poliovirus to the end of 2027 and certifying the elimination of type 2 variant poliovirus to the end of 2029 (see **Fig. 1**).

While the 2022–2026 strategy is robust, it is only as good as its operationalization. Clear improvements to implementation and accountability are required to interrupt and eradicate all forms of polio. This document, Extended Polio Eradication Strategy 2022–2029, aims to complement the original strategy, outline obstacles that have hindered progress towards each goal and define adjustments that will be made to overcome them.

Interruption Certify the Goal One of WPV1 eradication of WPV1 2022 2023 2024 2025 2026 2029 2030+ Interruption of cVDPV2 **Goal Two** of cVDPV2 transmission Certify the elimination Original strategic goal Revised strategic goal

Fig. 1: Extended Polio Eradication Strategy 2022-2029 revised timeline

Goal One:

Interrupt and eradicate WPV1 in the final endemic countries

Setting the stage:

In 1988, wild poliovirus was endemic in 125 countries.

In 2024, wild poliovirus is endemic in 2 countries.

Two of the three types of wild poliovirus – types 2 and 3 – have been eradicated.

One type of wild poliovirus
- type 1 - remains.

Thanks to health workers, national authorities and global partners, between February 2021 and April 2022, the two remaining polio-endemic countries of Afghanistan and Pakistan experienced the lowest levels of virus transmission in history. In this 15-month period, just three cases of wild poliovirus were reported, detections in wastewater were extremely low and endemic transmission was stopped in areas where the virus historically circulated in Pakistan (historic reservoirs).

The world was on the brink of ending wild poliovirus at the start of the current strategic period but ongoing contextual challenges amid a complex political and operational environment, both in Afghanistan and Pakistan, allowed the virus to spread in the last pockets.

By the end of 2022, 22 children had been paralysed in the two countries. This number declined to 12 in 2023 but has risen again to 68 so far in 2024. The virus was detected in more provinces and districts in the first six months of 2024 than in all of 2023. The risk of reestablishing transmission in the historic reservoirs of both countries is now high. The virus's resurgence is an unwelcome reminder of what can happen if any trace of polio is left to circulate.

Promisingly, genetic diversity of the virus remains low across Afghanistan and Pakistan in 2024, with just two clusters circulating this year (down from 12 in 2020). With the leaders' renewed focus in both country programmes and lessons learned from the 15-month period of historically low transmission, the GPEI is confident that both countries can achieve interruption.

Keeping wild poliovirus out of Africa

To achieve and sustain the eradication of wild poliovirus, all countries must maintain high population immunity levels and strong disease surveillance systems. In Africa, where many countries are under-resourced and facing multiple competing health priorities, this task may sound daunting. But, having just celebrated four years of being wild-polio free, the continent has shown what is possible through sustained commitment.

In 2022, this readiness was put to the test after

an importation of wild poliovirus from Pakistan to Malawi and Mozambique paralysed nine children. Following a swift, high-quality coordinated response in five countries in southern Africa, the virus was quickly stopped before it could regain a foothold.

More than 50 million children were vaccinated against polio and 15 new wastewater surveillance sites were set up in the affected countries. The outbreak was officially closed in May 2024. This achievement highlights the risk that wild poliovirus anywhere continues to pose to people everywhere, the continued vigilance needed by all countries, even those that have not seen the virus for many years, and the expectation that the programme can succeed in stopping the virus even wherever it remains.

¹ Data as of 4 November 2024 at https://polioeradication.org/wild-poliovirus-count/.

Goal One: Challenges

In recent years, the GPEI has struggled to operate amid a perfect storm of conditions in Afghanistan and Pakistan. Some of these challenges are within the programme's control and will be addressed directly to improve performance (i.e. **programmatic**), and others are outside of the programme's control but must be accounted for in activities (i.e. **contextual**).

The programmatic challenges include:

- inconsistent vaccination of mobile and hardto-reach populations, leading to the virus's progressive geographic expansion;
- weak cross-border coordination, impacting the ability to accurately identify and vaccinate all children and monitor the quality of vaccination campaigns in the highest-risk areas; and
- community boycotts of polio campaigns due to a lack of broader services.

The contextual challenges include:

- the inconsistent ability to implement all campaigns using the most effective modality of house-to-house (H2H) delivery in Afghanistan;
- rising vaccine hesitancy due to the spread of mis- and disinformation, especially among male caregivers;
- ongoing insecurity and conflict, limiting access to certain areas, especially for female health workers;
- climate-related disasters, including extreme heat and historic flooding;
- economic collapse and a complex humanitarian situation in Afghanistan;
- political instability in Pakistan, leading to periods of gaps in country programme leadership and coordination;
- weak health and essential immunization systems;
- and conservative gender norms, roles and responsibilities, significantly restricting the ability of vaccination teams to reach and vaccinate all children.

Repatriation of Afghan refugees

Over the past four decades, millions of Afghans have fled their country due to persistent conflict, violence and poverty, many of whom crossed the border into Pakistan. In September 2023, the Pakistani government declared that all undocumented migrants must leave the country within a month or face deportation. This decision not only increased population movement of this high-risk group but also stoked fear in many communities, making them sceptical of H2H polio campaigns. Their forced return also fuelled the already serious humanitarian crisis in Afghanistan.

Between September 2023 and May 2024, over 600 000 Afghan refugees returned to Afghanistan from Pakistan, almost 20% of whom were children aged under 5 years. In response, the programme partnered with humanitarian actors to surge support at the international border to vaccinate returnees. **As of May 2024, over 75 000 returnees have been vaccinated against polio.** The programme also collaborated with the Expanded Programme on Immunization (EPI) to help deliver the pentavalent vaccine, a five-in-one vaccine that protects against diphtheria, pertussis (whooping cough), tetanus, hepatitis B and Haemophilus influenza type B, as well as vaccines that protect against bacterial pneumonia, rotavirus, as well as tetanus and diphtheria alone.

Goal One: Tactical Shifts

In both Afghanistan and Pakistan, the programme will focus adjustments in several key areas to drive progress. A major focus will be to redefine, remap and vaccinate mobile and migrant populations and ensure vaccination campaigns better align with local gender norms.

Both countries' programmes continue to grapple with consistently reaching populations on the move whose migration patterns have become increasingly unpredictable. To reach these children, the programme will strengthen its specialty vaccination teams and ensure their gender composition (number and roles of men and women) is culturally appropriate, including in those that vaccinate along the border and serve nomadic groups.

More specifically, the programme will:

 improve microplanning to reach border communities: these efforts are particularly important between the southern region of Afghanistan and the Killa Abdullah and Chaman districts of the Quetta block in Pakistan, which account for substantial cross-border transmission.

An independent audit of the programme in eastern Afghanistan, recommended by the Independent Monitoring Board (IMB), was conducted in April and May 2024. The programme has begun applying the recommendations of this audit to better map missed children who have previously been unrecorded and to account for

migrant children. Additional plans for microplan improvement will leverage social and behavioural change communication (SBCC), specifically to address vaccine hesitancy and better understand the gender norms, roles and responsibilities that affect campaign quality and to tailor activities accordingly. Pakistan's programme is planning to conduct similar border district reviews in late 2024 or early 2025; and

essential immunization programmes: by better aligning activities, as recommended by the IMB, both countries can fast-track the Big Catchup (BCU) campaign through multi-antigen initiatives to reach children who have received no vaccines of any kind (i.e. unvaccinated or zero-dose children) and those who have not received all required doses for full protection (i.e. under-immunized children). The planning and coordination that will be required for codelivery will strengthen the GPEI's integration efforts and support sustainability while moving beyond business as usual (see the Big Catch-up campaign box).

Above all, progress in both Afghanistan and Pakistan will depend on strengthening teamwork and effectively navigating political changes. Increased advocacy for an all-of-government approach will be essential to build collective ownership and accountability, especially in Pakistan where security agencies are key to the programme's success.



In Afghanistan, the programme will also:

advocate for the resumption of H2H campaigns: due to a six-year ban on the most effective modality to reach all children (H2H campaigns) in the southern region, the programme missed more than 500 000 children during each campaign. As a result, an explosive outbreak began in late 2023. Promisingly, in May 2024, authorities lifted this ban, still barring Kandahar City, and the programme revived H2H campaigns. However, these campaigns were halted again in September 2024 and surveillance data suggest that every fifth child aged under 5 years in the southern region is now under-immunized for polio. The programme is carrying out extensive regional and national advocacy to reverse this decision and ensure full H2H access across the country.

In the meantime, the programme must still deliver vaccines at fixed sites. These places are often too far from families or located where it is culturally or religiously inappropriate for children and women to visit (like mosques). To incentivize families to bring their children to vaccination sites, the programme will offer "pluses", such as diapers, baby blankets and hygiene kits. These efforts build on Rotary International's PolioPlus campaign (4). The programme is also actively building alliances with broader humanitarian partners to expand vaccination opportunities; and

 improve the quality of campaign data: post-campaign monitoring and lot quality assurance sampling will be strengthened to provide sex-disaggregated data of missed children and inform microplanning targets for future activities. To do this, the programme will hold more regular refresher trainings with a genderbalanced monitoring staff.

In Pakistan, the programme will also:

address gaps in surveillance to reduce incidences
of missed transmission: under the recommendation
of the Prime Minister's Focal Person on Polio
Eradication, a new task team, the Surveillance
for Eradication Task Team, has been established
in the National Emergency Operations Centre

(NEOC) to coordinate partners' input and to refocus on strengthening clinical and community-based surveillance. The timeline for this plan falls under the 2-4-6 Strategy: two months for a reset (July and August 2024), four months to implement new initiatives (September to December 2024) and six months to end polio in the low season (January to June 2025). The NEOC surveillance task team will continue to closely monitor the clinical surveillance system and implement an environmental surveillance optimization plan focusing on areas where clinical surveillance may miss transmission, such as central Pakistan and districts bordering Afghanistan;

- reporting of children missed, refusals or fake finger-marking: the programme will establish a more rigorous monitoring system using mobile technology to provide supervisors with real-time data updates and the opportunity to quickly correct any issues or inconsistencies. Regular independent audits will also be carried out in areas with suboptimal performance or persistent data issues, and incentives will be provided to well-performing teams. At the same time, trainings on ethical reporting will be held more frequently for health workers, and local leaders will be increasingly engaged in the reporting process so data collection is also community driven;
- tailor campaign modalities: after an over-reliance on large-scale campaigns in Pakistan, the programme will balance its approach by implementing more tailored interventions. For instance, the NEOC is exploring new modalities in hard-to-reach areas of southern Khyber Pakhtunkhwa. Integrated and alternative service delivery will be key, particularly for southern Khyber Pakhtunkhwa, Balochistan and Karachi, where health camps alongside other initiatives (maternal, newborn and child health; and water, sanitation and hygiene) have helped to vaccinate zero-dose children. Progress in strengthening essential immunization in Balochistan and Karachi will also be prioritized in Killa Abdullah and Chaman; and
- strive to more systematically apply the knowledge and guidance of the female workforce into all the tactical shifts above (see the Women-led solutions box).



Women-led solutions for a polio-free Pakistan

In 2022, the Pakistan Polio Eradication Programme and National Gender Group within the NEOC launched the Listening Project to systematically hear perspectives from Pakistan's female frontline health workers and design solutions for a polio-free world together. A total of 2 600 frontline workers from 25 districts were surveyed by phone, 14 in-person listening and training workshops were held and over 300 solutions to polio eradication barriers were identified. Many of these solutions are already being put into action, including:

- increased pay for all frontline workers to properly recompense their efforts;
- the development of new and tailored training for all frontline workers on key topics raised by families that have refused vaccines;
- anti-harassment policies at emergency operations centres to better safeguard and support frontline worker teams:
- awareness raising workshops with communities about the value of female frontline workers to foster a more enabling environment and encourage respectful behaviour towards them; and
- the engagement of female frontline workers in the identification and engagement of local influencers to combat vaccine hesitancy.

Goal Two:

Stop and prevent type 2 variant poliovirus outbreaks

Setting the stage:

Campaigns target **3x** more children now than in 2020.

Cases have steadily declined from **688** in 2022 to **196** so far in 2024.²

A total of **1.2 billion** doses of novel oral polio vaccine type 2 (nOPV2) have been administered in **42** countries.

New emergences have declined annually from **15** in 2020 to just **3** so far in 2024.

The polio programme conducts outbreak response campaigns based on three core pillars: identifying all communities to be reached by the teams, vaccinating children using community-specific strategies and verifying that no children have been missed and that cases do not persist. Ensuring that each of these pillars holds strong throughout a campaign becomes immensely difficult in fragile settings and conflict zones (places where the virus is most prevalent today). But the programme's success in areas like these, such as the closure of Ukraine's variant poliovirus outbreak amid war in 2022, prove that with commitment, resilience and adaptability, it is possible.

Today, **four consequential geographies,** or subnational areas where children are at the highest risk of encountering and spreading the virus, are the greatest engines of transmission globally: eastern Democratic Republic of the Congo, northern Nigeria, south-central Somalia and northern Yemen. In fact, in 2023, over 80% of global type 2 variant poliovirus cases came from outbreaks that originated in the Democratic Republic of the Congo and Nigeria.

Of 152 type 2 variant poliovirus outbreaks that have emerged since 2016, **100 were interrupted within the recommended 120 days** since confirmation.³

While there has been progress, the key to realizing Goal Two remains achieving the interruption of transmission in these countries, which will reduce the risk of repeated exportation.

The number of countries impacted by the variant virus has remained relatively stable with continued cross-border spread, including spread to new countries like Angola, Equatorial Guinea, Gambia, Liberia, Sierra Leone and, most recently, the Gaza Strip in the occupied Palestinian territories. The Horn of Africa also remains a concern with persistent transmission in Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda. The small number of cases in southern Africa, though, demonstrates low levels of transmission in that region and underscores the opportunity to interrupt the virus there.

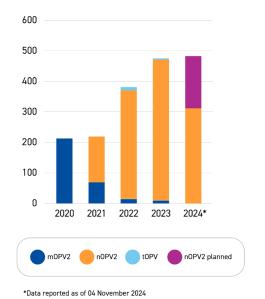
At the same time, improving immunization coverage rates across the board is critical. Since 2020, the number of children targeted during campaigns has increased threefold and global cases of type 2 variant poliovirus have declined year-over-year (see Fig. 2). The widespread use of nOPV2 has played a role in this, as it is a more genetically stable version of the oral vaccine and is therefore less likely to revert to a form that can cause paralysis in under-immunized communities. The rate that new outbreaks emerge has critically slowed over the three years of its use.

² Data as of 4 November 2024 at https://polioeradication.org/circulating-vaccine-derived-poliovirus-count/.

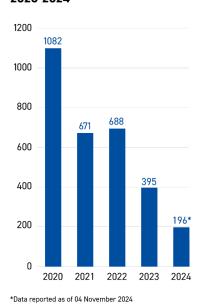
³ Internal estimate from the WHO Data team.

Fig. 2: Epidemiology trends in cVDPV2 outbreaks, 2020-2024

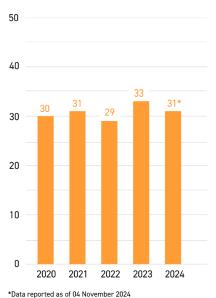
Target population of cVDPV2 campaigns (millions)



Global cVDPV2 cases, 2020-2024



Number of countries affected by cVDPV2



cVDPV2 = circulating variant poliovirus type 2; mOPV2 = monovalent oral polio vaccine type 2; nOPV2 = novel oral polio vaccine type 2; tOPV = trivalent oral polio vaccine. *Source*: WHO.

Goal Two: Challenges

As in the wild poliovirus endemic countries, variant poliovirus outbreaks occur and persist due to complex programmatic and contextual challenges that prevent the GPEI from consistently reaching every child.

The programmatic challenges include:

- poor microplanning for campaigns, limiting vaccinators' abilities to reach all children;
- delay in outbreak response due to operational constraints and difficulties quickly moving funds in countries, including vaccinator payments;
- global funding limitations, leading to difficult prioritization decisions, such as not implementing preventive campaigns with bOPV;
- difficulty coordinating the activities of multiple partners active in response to an outbreak; and
- persistent gaps and operational constraints in surveillance systems, impacting the timely detection and notification of cases.

The contextual challenges include:

- low and stagnating essential immunization coverage,⁴
 especially after the COVID-19 pandemic, creating the
 ideal conditions for new outbreaks to emerge and spread
 across borders;
- ongoing insecurity and conflict that threaten the safety of families and health workers, particularly women, disrupt health services and increase population movement;
- inconsistent political commitment, leadership and accountability at all levels in countries battling outbreaks;
- strained systems as countries battle competing health priorities and emergencies, impacting the resources and attention leaders can consistently provide to eradication efforts;
- fragile global vaccine supply systems that impact vaccine availability, like recent disruptions in nOPV2 supply that hampered outbreak response in late 2023 and early 2024; and
- vaccination refusals, especially among male caregivers due to misinformation and community fatigue, exacerbated due to the COVID-19 pandemic.

⁴ Coverage of the first dose of the inactivated polio vaccine (IPV1) at national levels is high (84%), as evidenced by data from WHO/UNICEF, but pockets of low coverage within countries allow the virus to persist (see Input to the WHO/UNICEF Estimates of National Immunization Coverage (WUENIC). Geneva: World Health Organization; 2024).

Goal Two: Tactical Shifts

Guided by national governments and regional leadership, the GPEI is now focused on the step-by-step elimination of type 2 variant poliovirus, starting in areas where children are at the greatest risk of encountering and spreading the virus (see **Fig. 3**). This approach aims to maximize the impact of investments and build momentum towards achieving Goal Two.

In countries with persistent circulation,

the GPEI will increase focus on targeted approaches that leverage new tools and opportunities for integrated delivery, including efforts to strengthen essential immunization and multi-antigen campaigns through collaborations with the BCU initiative and Gavi, the Vaccine Alliance (see the **BCU campaign box**).

The programme also supports the establishment of regional action plans, such as those recently developed by health ministers from countries in the Lake Chad Basin (Cameroon, Central African Republic, Chad, Niger and Nigeria) and the Sahel (Burkina Faso and Mali). This plan focuses on defining and operationalizing coordination mechanisms; synchronizing and optimizing campaigns; deploying

special interventions to reach border and mobile populations; and enhancing data sharing and surveillance activities to facilitate early detection and quick, effective responses to limit the risk of international spread.



Adapting tactics to stop variant poliovirus in the Democratic Republic of the Congo

In the Democratic Republic of the Congo, variant poliovirus has surged in some of the hardest-to-reach communities, from isolated river villages to more populated districts marked by ongoing violence. Today, the GPEI is using the deep knowledge of in-country health workers and global experts to build a comprehensive approach to stop virus transmission for good by:

- · mapping communities at the micro level, with every child counted, no matter how remote they live;
- employing vaccination strategies that are not one-size-fits-all but are customized to the geography and political context of each community;
- using geospatial tracking systems to ensure teams are reaching every community and to offer real-time course corrections as needed; and
- utilizing geographic information systems (GIS) to inform coverage surveys at the end of a campaign to ensure that no child was left behind.

Together, each facet of the GPEI's malleable approach will help overcome today's challenges to stopping polio in the Democratic Republic of the Congo.

In countries with new detections, the GPEI has committed to delivering faster and bigger campaigns that consistently reach every child.

This includes strengthening clinical and environmental surveillance capacities to quickly detect any trace of the virus and improving the coordination and planning of response teams to rapidly mobilize. One facet of this is updating the Global Polio Surveillance Action Plan for 2025 to 2026, taking into account the experience of the past several years. The plan aims to improve early detection of polioviruses and ultimately facilitate rapid response and operational adjustments to the evolving epidemiology of an outbreak.

For both places with persistent and new transmission, additional efforts will focus on improving the quality of campaigns by:

- microplanning with data disaggregated by sex to identify and reach consistently missed children and those who refuse vaccination;
- using rapid gender assessment tools to help identify and address gender roles, norms and responsibilities that impact a family's decision to vaccinate their child;
- implementing new, localized gender-responsive SBCC strategies to overcome vaccine hesitancy in high-risk populations;
- improving the quality of independent monitoring through gender-balanced monitors and unbiased methodologies;
- expanding target age groups for vaccination campaigns beyond the typical children aged under 5 years as needed, guided by epidemiology and gaps in population immunity;
- optimizing timing and intervals of vaccine administrations based on evidence-based policy recommendations regularly issued by SAGE;
- building a safer and more inspiring work environment, particularly for female staff, to maintain motivation, especially by ensuring more timely payment; and
- working to stabilize global oral polio vaccine (OPV) supply by updating the <u>Global OPV Stockpile Strategy</u> and finalizing the Vaccine Security Framework.

In addition, efforts are under way to **improve** efficiencies in surveillance by:

- addressing gaps in logistics to ensure clinical and environmental surveillance samples arrive quickly to labs;
- enhancing the reporting of suspected paralysis cases within communities by its members (i.e. community-based surveillance), particularly in areas where surveillance gaps persist and undetected transmission may occur; and
- expanding capacity in national and regional laboratories to sequence surveillance samples and reduce delays in confirming the presence of polio.

Above all, as for Goal One, the programme is intensifying advocacy to garner renewed commitment from affected-country leaders. This is at the core of the new Africa Regional Polio Eradication Action Plan 2024–2025, which includes arrangements to set up regular interministerial meetings to evaluate challenges, progress and bottlenecks for polio eradication and essential immunization, as well as mechanisms for the multicounty coordination of cross-border

activities. The leadership and support of national

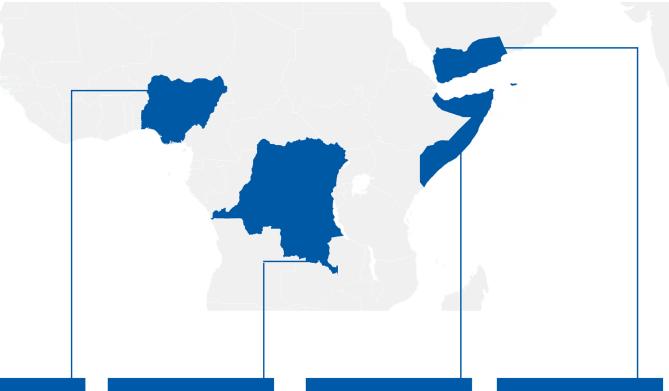
quality campaigns and successful improvements

governments are critical to ensure rapid, high-

in disease surveillance.

A health worker enrols fellow polio vaccinators in the mobile money payment system in the Democratic Republic of the Congo.

Fig. 3: Consequential geography snapshots



Northern Nigeria

Key challenges

Longstanding insecurity; Complex operating environment; Competing public health priorities in a constrained financial context

Key actions

- Conduct an aggressive schedule of genderresponsive outbreak response campaigns
- Co-develop a single plan for all actors in the four highest-risk states; incorporate accountability frameworks at all levels
- Complete a northwestern settlement mapping exercise to ensure they are reached multiple times
- Conduct high-quality field surveillance reviews; implement recommendations and training
- Oversee efforts to improve leadership, better coordinate in-between round activities, and ensure more timely pay for staff

Eastern DRC

Key challenges

Political unrest; Complex and vast geographic terrain; Vaccine hesitancy

Key actions

- Conduct an aggressive schedule of gender-responsive campaigns to stop both cVDPV1 and cVDPV2
- Resolve operational issues with vaccine logistics, surge recruitment of staff and payment mechanisms
- Improve microplanning and population mapping, especially along the major rivers

South-central Somalia

Key challenges

Persistent inaccessibility due to insecurity; Unstable political environment; Lack of broader health infrastructure

Key actions

- Conduct synchronized vaccination campaigns with neighbouring countries
- Increase social mobilization efforts in inaccessible areas
- Fast-track a surveillance enhancement action plan
- Enhance essential immunization coverage and integrate vaccination with other health and humanitarian programmes
- Adjust the campaign timing and delivery mode according to local gender norms

Northern Yemen

Key challenges

An almost decade-long conflict; Acute humanitarian crisis; Restrictions on vaccines

Key actions

- Integrate polio vaccine delivery into broader health and humanitarian efforts for children
- Continue vaccination campaigns in the southern governates as they remain at risk
- Adjust the campaign timing and delivery mode according to local gender norms
- Implement SBCC activities to address vaccine mis- and disinformation, especially among male caregivers

11

Building synergies with the Big Catch-up campaign

What is the Big Catch-up (BCU) campaign?

Following the COVID-19 pandemic and related disruptions to health services, essential immunization levels decreased in over 100 countries, leading to a rise in outbreaks of polio, measles, diphtheria and yellow fever. The BCU campaign is a targeted global effort to boost vaccination among children to at least pre-pandemic levels and beyond. It is led by WHO, United Nations Children's Fund (UNICEF), Gavi, the Vaccine Alliance and the Bill & Melinda Gates Foundation, along with Immunization Agenda 2030 and other global and national health partners.

How are the GPEI and BCU campaign working together now?

The BCU initiative initially did not include the provision of bOPV, because bOPV is not a Gavi-supported vaccine but is funded by domestic resources. The GPEI has been working with Gavi and the other BCU partners to add bOPV to their activities. As of September 2024, the GPEI agreed to fund US\$ 7.8 million of bOPV for BCU campaigns in 23 countries. The programme will continue to look for opportunities to work with BCU partners and add bOPV in future campaigns.

How will these synergies evolve?

In addition to expanding the provision of bOPV to BCU countries, aligning with targets for other antigens, the GPEI is exploring opportunities to enhance collaboration with the partners to strengthen essential immunization performance, including:

before BCU immunization activities:

- use sex-disaggregated polio campaign data to support the **identification of missed children** (for example, during H2H canvassing, enumeration and microplanning, map zero-dose children and identify high-risk districts to inform where intensification is needed); and
- · employ in-country polio technical staff expertise in microplanning;

during BCU immunization activities:

- coordinate service delivery to refer children from GPEI campaigns for BCU immunization (for
 example, match polio mobile teams with communities identified as having a large population of
 missed children; have polio H2H teams ask about the vaccination status of older children in the
 household and refer; have polio monitoring teams include the essential immunization status and any
 challenges in survey questions); and
- **use polio social mobilizers** to increase awareness of vaccinating older children through BCU and essential immunization; and

after BCU immunization activities:

 leverage post-polio campaign monitoring data (i.e. lot quality assurance sampling/Independent Monitoring) to assess baseline performance and monitor BCU and essential immunization implementation achievements

Innovating to cross the finish line

In both endemic and outbreak countries, the GPEI is using several new tools and technologies to make critical gains against the virus. The purpose of each innovation, the status of its use to date and its future use are outlined in **Fig. 4.** The programme will continue to invest in and deploy the latest relevant scientific innovations to stop polio for good.

Fig. 4: Innovations to combat poliovirus

Innovation	Problem it addresses	Status of use	Future of use	
Novel oral polio vaccine type 2 (nOPV2)	 n0PV2 is a next-generation version of the monovalent oral polio vaccine type 2 (m0PV2). n0PV2 is as safe and effective at stopping outbreaks as m0PV2, but it is much more genetically stable and therefore less likely to seed new type 2 variant poliovirus outbreaks. 	 Since rollout began in March 2021, over 1.2 billion doses have been administered in 42 countries. Data show it is 80% less likely to seed new type 2 variant poliovirus outbreaks than if mOPV2 were used. Two manufacturers have now received prequalification for nOPV2, supporting the stability of supply. 	 nOPV2 is now the vaccine of choice for responding to type 2 variant poliovirus outbreaks and it will continue to be an important part of the GPEI's strategy. The success of nOPV2, like any polio vaccine, depends on the ability to rapidly implement high-quality immunization campaigns that reach every child. 	
Novel oral polio vaccines types 1 and 3 (nOPV1 and nOPV3)	 Like nOPV2, nOPV1 and nOPV3 are expected to be more genetically stable versions of the previous vaccine viruses to sustainably stop type 1 and type 3 variant poliovirus. These types of variant poliovirus are much less prevalent than type 2 today, but any form of polio threatens children everywhere. 	nOPV1 and nOPV3 are in development.	 If clinical trials prove successful, n0PV1 and n0PV3 are expected to be ready for use in 2028, assuming the Emergency Use Listing procedure is a feasible regulatory pathway. If not, access may be delayed to 2029. Post-elimination they will also be kept in stockpiles in case of future type 1 and 3 variant poliovirus outbreaks. 	
Mobile money payment system	 Delays and challenges to cash payments for polio staff have affected campaign quality. Digital payments ensure that health workers receive their money faster and more reliably, further motivating them to continue strengthening the health of their communities. 	 Since it was established in 2020, WHO's Digital Finance Team has designed and implemented digital payment solutions in nearly every country experiencing a polio outbreak, including, last year, in Benin, Botswana, Madagascar, Rwanda, Togo and Zimbabwe. 	These systems will continue to be expanded, and technical improvements will be made as needed to increase efficiency.	
Direct detection laboratory methods for detecting polioviruses	 Direct detection methods can help skip the time-consuming step of virus isolation from clinical stool samples. They therefore can speed up the laboratory testing process for surveillance samples, so authorities can more rapidly be alerted of polio's presence, respond to the detection and minimize its impact. 	Two methods are being reviewed and validated by the WHO Global Polio Laboratory Network.	 Once validated, direct detection will be rolled out across the Global Polio Laboratory Network, prioritizing high-risk places for polio first. Future research will focus on developing direct detection methods for environmental samples. 	
Open Data Kit (ODK)	 ODK is a simple mobile application that provides software and standards for electronic field data collection. It is helping to accelerate surveillance alerts and facilitate rapid responses to potential polio cases. 	ODK technology has been expanded since the start of the strategic period and it is now the standard for all campaigns.	ODK will continue to be used for all campaigns, and operational improvements will be made as needed.	
Geographic information system (GIS) data	Campaigns are struggling to reach every child because of insufficient microplanning and poor operational accountability. GIS data are helping to more accurately map hard-to-reach communities to inform planning and track vaccination teams to course correct as needed in real time. Surveillance gaps are also difficult to identify.	The GPEI has used GIS data extensively in recent years to improve microplanning, especially in the river and lake areas of the Democratic Republic of the Congo, Nigeria and Somalia. Active clinical surveillance visits and wastewater surveillance sites are being mapped to help the programme identify areas where transmission may be going undetected.	 GIS tools, especially to strengthen campaign quality and address surveillance gaps, will be thoughtfully expanded into additional high-risk areas. Data sharing with essential immunization programmes will be strengthened. 	

All GIS data are being shared with

Enabling environment

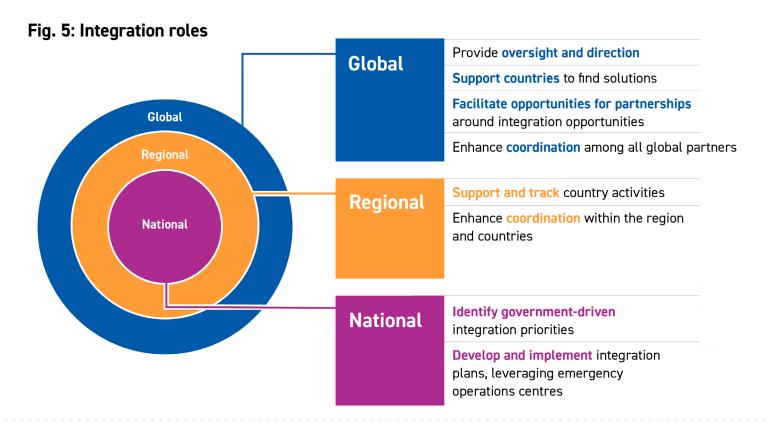
While eradicating polio rests on two deceptively simple actions – knowing where the virus is (surveillance) and vaccinating enough children so that the virus has nowhere left to circulate (vaccination) – this work is not possible without several key cross-cutting activities. In the extension period, the GPEI will focus on all those planned in the original strategy, with a particular focus on tactical adjustments in the following areas.

Integration

The integration of polio eradication activities with broader immunization and health services will continue to be an important part of the GPEI's approach to not only stop polio transmission and build stronger, more resilient health systems but also to lay the path for a successful transition to sustain eradication once it is achieved. In July 2023, the GPEI launched a renewed effort to bolster the GPEI integration function to proactively develop and execute implementation plans and systematically track progress. This work happens at all levels of the programme (see **Fig. 5**).

To ensure effective activities, the programme will continue to foster greater alignment and awareness of the integration roles and responsibilities of all actors; clear lines of accountability through interruption and certification; and systematic processes for real-time tracking and communicating about polio and other campaigns for vaccine-preventable diseases.

⁵ See Input to the WHO/UNICEF Estimates of National Immunization Coverage (WUENIC). Geneva: World Health Organization; 2024



The GPEI has been focused on activities that improve campaign quality and efficiency, and thus the percentage of children who receive the polio vaccine. As interruption nears, the focus of the GPEI's integration efforts will increasingly shift to supporting essential immunization strengthening activities. In the most critical places to ending polio, essential immunization systems are too weak or non-existent, leaving critical gaps in coverage. High essential immunization coverage (with IPV and/or bOPV) is a cornerstone of the polio eradication strategy.

Inactivated polio vaccine (IPV) coverage rates are **17% lower** in countries with cVDPV outbreaks than in countries without these outbreaks.⁵

Approaches to strengthening essential immunization activities will be executed in collaboration with Gavi and national programmes, tailored to the country's

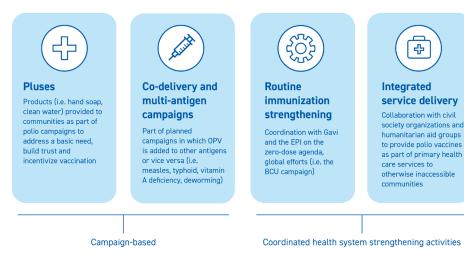
epidemiological needs and health system capacity and resources. In outbreak countries, the GPEI will work with partners to ensure better targeting of IPV and the rollout of the hexavalent vaccine (to protect against diphtheria, pertussis (whooping cough), tetanus, hepatitis B, Haemophilus influenza type B and poliomyelitis) and will continue to support efforts to identify and vaccinate under-immunized and zero-dose children.

In countries approaching interruption, the strategy to integrate with essential immunization will be tailored at the subnational level. Areas with limited or low functioning immunization systems will benefit from a combination of campaigns and health system strengthening support. For example, the scope and intensity of campaigns will be greater in areas where the essential immunization system is weaker. These activities will also complement efforts to improve surveillance system performance to the level required for certification and emergency response capacity to maintain a polio-free world. **Fig. 6.** shows the full scope of programme integration functions.

Fig. 6: GPEI integration activities

Primary Integration Activies

Immediate focus for integration function



Increasing focus as the GPEI sunsets

The following integration activities have a more indirect impact on interruption within the current timeline but are essential to sustain a polio-free world.





BCU = Big Catch-up; EPI = Expanded Programme on Immunization; OPV = oral polio vaccine. Source: WHO.

Gender

The GPEI's comprehensive Gender Equality Strategy aims to integrate a gender perspective into every aspect of the programme to reach all children. It also aims to create a more gender-equitable institutional culture by increasing the meaningful participation of women at all levels, including in management and decision-making. The programme has made great strides in this area, forming the Gender Mainstreaming Group (GMG) to enable information sharing and coordination among partners. The GMG has established critical structures and processes and it implemented its first workplan in 2023.

The programme's gender strategy will be updated to reflect recent learning and experience and will be extended to 2029 to align with the new eradication timeline. It will focus efforts on certain key areas:

- strengthen existing country-level gender mainstreaming efforts: The GPEI's GMG will continue to support country-level work, which will be tailored to each country's local gender norms and structures. For example, in:
 - » Afghanistan: increase the number of female social mobilizers and female volunteer vaccinators to access more children and intensify efforts to mobilize male caregivers to reduce refusals;
 - » Pakistan: tighten accountability for implementing gender-responsive campaigns; conduct an intersectional gender analysis of endemic and outbreak districts; and facilitate more listening workshops (see the Women-led solutions box for information on the Listening Project) to better understand the needs of female frontline workers and implement co-designed solutions;
 - » Democratic Republic of the Congo: conduct trainings with emergency operations centre staff to mainstream gender into all polio operations; introduce localized, gender-responsive SBCC interventions to increase the demand for vaccines; analyse data on missed children and those who

- refuse vaccination based on sex to better understand and address barriers; and systematically track and improve the maleto-female ratio of staff at various levels, especially in management;
- » Nigeria: improve payment systems and security to increase the motivation of female frontline workers; increase engagement with male caregivers as well as traditional and religious leaders to support children receiving the polio vaccine; and conduct trainings with staff on the importance of operationalizing the Gender Equality Strategy; and
- Yemen: conduct a mapping of male and female community leaders in the south and engage with female religious leaders (murshidat) to promote immunization among female caregivers; raise awareness of the importance of vaccination through community-based gender-responsive SBCC activities, coordinating with local womenled organizations; and disseminate gendersensitive messages through traditional and digital media to counter misinformation, especially among male caregivers;
- expand gender mainstreaming support to new countries: The programme will expand its genderspecific work in other outbreak countries, like Egypt, Madagascar and Sierra Leone; and
- programme: The GMG will continue to intensify its engagement with GPEI leadership by providing input during decision-making meetings, participating in outbreak response teams and overseeing external audit and monitoring exercises. Additionally, the GMG will conduct critical analyses (i.e. using gender assessment tools) to help identify gender-related barriers to vaccination, support frontline health workers and improve collaboration with other technical groups to incorporate a gender perspective into strategic decisions and materials.



Building a climate-resilient polio-free world

In 2023, the GPEI developed a <u>technical brief</u> on the intersection of polio eradication and the climate crisis, serving as a starting point to explore how the programme can both deliver a polio-free world and ensure a climate-resilient future. From supporting the response to historic floods in Pakistan in 2022 to reducing carbon emissions through the expanded use of solar-powered vaccine refrigerators, the programme has been implementing critical activities. But the world is only getting hotter, and extreme weather events are more frequent. The GPEI and its partners are exploring other priority areas to further reduce its carbon footprint (mitigation) and protect polio staff, activities and communities from the effects of a hotter world (adaption).

Though actions needed to mitigate and adapt to the climate crisis are much broader than the polio eradication effort, the GPEI recognizes the urgent need to take stock of its role and responsibility to help address this planetary emergency.

Resourcing the extended strategy

The true costs of failure

Thanks to the efforts of the GPEI, 20 million people are walking today who would otherwise have been paralysed by polio. If the world steps back from its mission to achieve polio eradication, many thousands of children will again be at risk of paralysis by polio each year, including in countries that have long been polio-free, ultimately denying future generations a polio-free world.

Without an extension to the GPEI strategy and a fully funded revised multiyear budget of US\$ 6.9 billion, progress against polio would backslide. Relying on essential immunization systems, which are weak in many parts of the world, would mean that instead of ending the disease for good, the world would be forced to manage outbreaks indefinitely, requiring costly measures like vaccines, stockpiles and constant surveillance.

Analyses from 2021 and 2020 suggest that achieving the GPEI's eradication strategy will result in sizeable cost-savings when compared to a control programme. One study projected an overall savings of US\$ 33.1 billion and a savings of US\$ 1 billion annually through 2042 and US\$ 500 million annually through 2066 (2,

In endemic countries, the GPEI proposes maintaining the current level of investment until wild poliovirus interruption and then beginning a year-on-year reduction until wild poliovirus eradication is certified, as the need for eradication-related activities reduces. In the two years after certifying the eradication of wild poliovirus, the GPEI would sustain funding at a lower level to maintain essential functions and mitigate posteradication risks.

The elimination of type 2 variant poliovirus requires investments in a range of activities, including outbreak response campaigns, surveillance, vaccines and human resources. Other investments will be required in this period, such as outbreak response to close out the remaining cVDPV1 outbreaks and general immunity boosting activities, like campaigns using bOPV. After interruption, some of these investments can be reduced, while investments in containment, research and gender continue.

These investments (see **Fig. 7**) are the only way to protect the vast progress made to stop all forms of

poliovirus in the parts of the world where they persist. Together with sustainable and coordinated financing for immunization systems through the variety of complementary actors, this is the only way to ensure true equity that only eradication of a disease can deliver.



Fig. 7: Resourcing the path from interruption to certification and beyond, 2024–2029

Now until interruption

through end-2025

- Conduct aggressive vaccination campaign schedule in endemic countries (largest cost driver)
- Ensure sensitive clinical and environmental surveillance
- Maintain a strong, motivated workforce
- Tailor interventions for the highest-risk areas
- Strengthen local, regional and global partnerships to deliver essential immunizations and other health services

Interruption to certification

end-2025 to end-2027

- Sustain a preventive vaccination campaign schedule in endemic countries
- Maintain clinical and environmental surveillance sensitivity at the highest level
- Extend the reach of routine immunization systems in coordination with Gavi and the EPI

Post-certification period

end-2027 to end-2029

- Maintain reduced investments with the EPI and other health partners to sustain population immunity, surveillance and outbreak response capacity
- Transition to national ownership with support from agencies and key partners
- Use the multiyear budget 2022–2029 to fund activities during this period

2024 > 2025 > 2026 > 2027 > 2028 > 2029

Goal One: WPV1

Goal Two: cVDPV2

Now until interruption

through end-2026

- Maintain a prioritized schedule of high-quality large-scale vaccination campaigns (largest cost driver)
- Invest in human resources and technical assistance to support the design and implementation of tailored interventions in key areas
- Bolster and maintain high-quality clinical and environmental surveillance systems

Interruption to certification

end-2026 to end-2029

- Conduct rapid responses to any final detections
- Support activities to build population immunity to cVDPV1 and cVDPV3, including working with Gavi to target IPV and hexavalent vaccine investments
- Continue investment in clinical and environmental surveillance

cVDPV1 = circulating variant poliovirus type 1; cVDPV2 = circulating variant poliovirus type 2; cVDPV3 = circulating variant poliovirus type 3; EPI = Expanded Programme on Immunization; IPV = inactivated polio vaccine; WPV1 = wild poliovirus type 1. *Source*: WHO.

Planning for a lasting polio-free world

Activities under post-certification planning:

- Stockpiles for nOPV2, mOPV1/mOPV3, nOPV1/nOPV3
- Pre-bOPV-cessation campaigns

During the strategy extension period, the GPEI will continue to build the foundation to sustain a polio-free world once it is achieved. In addition to activities with partners to strengthen essential immunization, certain critical functions will need to be maintained by national authorities with support from key agencies and partners.

Following the interruption of wild poliovirus and type 2 variant poliovirus transmission, investments will be needed to procure and build vaccine stockpiles (i.e. nOPV2, mOPV1 and mOPV3, and nOPV1 and nOPV3 as available) for outbreak response post-bOPV cessation and to conduct bOPV campaigns to build population immunity prior to bOPV cessation. A thorough review of the tOPV to bOPV switch in 2016 and lessons learned will continue to inform planning for the eventual cessation of bOPV to mitigate risks.

After certifying the elimination of type 2 variant poliovirus, core functions such as surveillance,

outbreak response, immunization and containment will be transitioned to new national, regional and global "owners". The infrastructure – the people, knowledge and systems – established by the GPEI that has long underpinned health systems will need to be sustainably transitioned to national governments (5), as has been done in nearly all countries in the five regions already certified free of wild poliovirus. Ensuring resilience through this transition will be critical to keeping the world polio-free.

The technical and financial requirements for essential functions that are needed to keep the world polio-free, including options for future governance and accountability, will be outlined in the revised Polio Post-Certification Strategy, to be presented to the POB later and ultimately considered for adoption by Member States at the World Health Assembly, targeted for 2026.

Ultimately, if every person and institution involved – public health leaders and donors, caregivers, scientists and health workers – keeps up the dedication and drive that have led to the vast progress so far, the world can achieve and sustain a polio-free world.



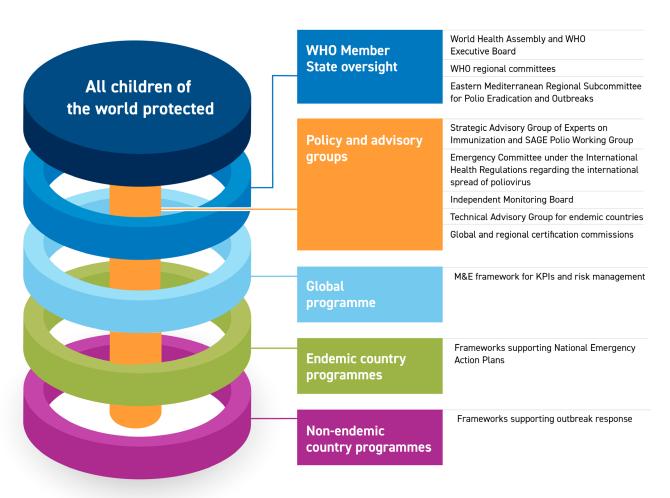
Accountability

The GPEI continues to highlight the value and function of accountability as a pillar for programme success. Under this framework, independent bodies provide critical support that upholds accountability at the national, regional and global levels. The strategy emphasizes that the polio eradication effort is ultimately accountable to the world's children to ensure they are protected from every form of polio.

This pillar of accountability is sustained by inviting the critical evaluation of advisory bodies, such as the IMB, to review the challenges and progress towards strategy goals and, where applicable, to propose recommendations for course correction.

In its <u>twenty-second report</u>, the IMB assessed progress towards Goals One and Two. The report identified a series of risks for GPEI consideration, alongside 15 recommended actions (6). The GPEI drew upon these risks and recommendations, along with critical self-evaluation and consultations with other expert groups, to identify the tactical shifts to implement during the extension period. The programme will continue to engage with the IMB as it issues its annual reports and, with input from groups at all levels (see **Fig. 8**), adjust tactics as appropriate. The <u>twenty-third report</u> of the IMB was published as this document was being finalized (7) and, while an official response is forthcoming, several of its recommendations are captured in this extension.

Fig. 8: Pillar of accountability for the GPEI



KPI = key performance indicator; M&E = monitoring and evaluation; SAGE = Strategic Advisory Group of Experts on Immunization. *Source:* WHO.

References

- 1. Poliomyelitis. Geneva: World Health Organization; 2023 (https://www.who.int/news-room/questions-and-answers/item/poliomyelitis, accessed 28 October 2024).
- 2. Thompson KM, Kalkowska DA. An Updated Economic Analysis of the Global Polio Eradication Initiative. Risk Anal. 2021;41(2):393–406 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7894996, accessed 29 October 2024).
- 3. Zimmermann M, Hagedorn B, Lyons H. Projection of Costs of Polio Eradication Compared to Permanent Control. J Infect Dis. 2020;221(4):561–5 (https://pubmed.ncbi.nlm.nih.gov/31565733, accessed 28 October 2024).
- 4. The plus in PolioPlus. Rotary International; 2019 (https://www.rotary.org/en/plus-polioplus, accessed 30 October 2024).
- 5. Global Vision to use polio investments to build strong, resilient and equitable health systems. Version 0.2. Geneva: World Health Organization; 2024 (https://www.who.int/publications/m/item/global-vision--to-use-polio-investments-to-build--strong--resilient-and-equitable--health-systems, accessed 31 October 2024).
- 6. Closing in on zero: adapting to complexity and risk on the path to end polio. Independent Monitoring Board, Global Polio Eradication Initiative, Twenty-second report; September 2023 (https://polioeradication.org/wp-content/uploads/2023/09/22nd-Report-of-The-Independent-Monitoring-Board-IMB.pdf, accessed 1 November 2024).
- 7. The long goodbye: poliovirus continues to resist extinction. Independent Monitoring Board, Global Polio Eradication Initiative, Twenty-third report; September 2024 (https://polioeradication.org/wp-content/uploads/2024/09/23rd-IMB-Report-20240922.pdf, accessed 1 November 2024).