

# Polio Endgame Strategy 2019–2023

Eradication, integration,  
certification and containment



# EXECUTIVE SUMMARY

The world is on the brink of a historic achievement: the eradication of wild poliovirus (WPV).

In 1988, when the World Health Assembly declared its commitment to eradication and the Global Polio Eradication Initiative (GPEI) was formed in pursuit of this goal, there were 350 000 annual cases of WPV in 125 countries. By the end 2018, only 33 cases were identified – all from two neighbouring countries (Afghanistan and Pakistan).

The GPEI's achievements are evident not just in the retreat of WPV to geographic corners of the world, but also in the successive elimination of WPV types. In 2015, WPV type 2 was declared eradicated; WPV type 3 has not been seen since 2012; and while WPV1 has yet to be interrupted, its incidence has been reduced by over 90% since 2014 (see **Annex A**).

## The promise of a polio-free world

In a joint statement, the chairs of independent advisory bodies that provide expert recommendations and oversight to the GPEI put forward a bold claim: “There is no reason why polio should persist anywhere in the world.”<sup>1</sup> This statement echoes the singular ambition of the GPEI, grounded in a vision of global health equity where no country and no child would be endangered by poliomyelitis. The statement also reflects the inherently simple principle beneath eradication – that of delivering life-saving vaccines to every last child. This principle works, as more than 200 countries and territories have eliminated the virus.

## Risks to success

The greatest risks to reaching eradication are not a matter of science, biology or virology; they are instead a matter of reorienting efforts to current realities that impede the delivery of critical health interventions – and realigning so that the GPEI is fit for purpose and is poised to act with urgency, effectiveness and efficacy in order to achieve this historic goal.

The primary underlying challenge in the last mile to WPV eradication is missing children in the delivery of polio vaccines.

In the last two countries with reported ongoing WPV transmission, the programme has not been able to immunize every child for several reasons. Often, frontline workers find steep challenges in areas that are hard to reach due to geographical isolation. Mobility and mass migration, particularly across the borders of these two neighbouring countries, also confound the programme's ability to reach children during supplementary immunization activities (SIAs) and through house-to-house campaigns. In Afghanistan, the programme encountered bans on house-to-house campaigns in 2018, which compounded the problem of inaccessibility. In Nigeria, areas of Borno state remain totally inaccessible to vaccinators. However, even when the programme does have access, pockets of vaccine refusals are growing where, due to misinformation, mistrust, cultural beliefs, fatigue or other priorities, caregivers turn vaccinators away at the door.

The *Polio Endgame Strategy 2019–2023* addresses three key risks towards achieving global WPV eradication:

- 1. Insecurity and conflict:** The last remaining polio-affected regions are often plagued by conflict. Insecurity may motivate families to move en masse to refugee or internally displaced population (IDP) camps. Such movement can make them accessible – or pose new challenges. For those who remain, ongoing conflict makes it difficult and even dangerous to access critical health interventions. Across these geographies, the programme must safeguard health workers who are the human face of the eradication effort while working to reach all children.
- 2. Weak or fragile health systems:** Both endemic and non-endemic countries are often beset by weak or fragile health systems, where communities live in extreme poverty and families lack access to basic services. In these settings, large pockets of children are unimmunized or under-immunized, and consequently the risk is high for continued circulation and outbreaks due to the importation of poliovirus or an emergence of vaccine-derived poliovirus (VDPV). As in WPV endemic countries, VDPV outbreaks tend to affect vulnerable communities that face multiple systemic challenges and that may not prioritize polio vaccination.
- 3. Operational, management and resource risks:** The programme also faces internal risks related to ensuring that the GPEI is fit for purpose – for example, its capacity to maintain an emergency posture, provide flexibility in decision-making, sustain peak performance with clear accountability and full transparency, and achieve programme quality in all places at the same time. While the programme has benefited from commitment at the highest echelons of government, officials at all levels face multiple, competing priorities in areas at risk of poliovirus transmission. Operational risks related to securing sufficient resources – of financial backing, vaccine stocks and supplies, and human resources – remain critical to the GPEI's success.

<sup>1</sup> See *To succeed by 2023 – Extraordinary joint statement to polio eradicators*, issued by the chairs of the Strategic Advisory Group of Experts (SAGE) on Immunization, Independent Monitoring Board (IMB), Emergency Committee of the International Health Regulations (IHR) and Global Commission for the Certification of the Eradication of Poliomyelitis (GCC), on 23 January 2019 (<http://polioeradication.org/news-post/to-succeed-by-2023-extraordinary-joint-statement-to-polio-eradicators/>).

## What it will take

The *Polio Endgame Strategy 2019–2023* is not intended to supersede the *Polio Eradication & Endgame Strategic Plan* (PEESP), as the four objectives and the core strategies to achieve eradication have proven effective around the world.<sup>2</sup> Rather, the current strategy offers a review of what activities should continue, what improvements will be implemented, and what innovations will be introduced to ensure that the GPEI successfully addresses the risks to eradication (see **Table 1** and **Figure 1**).

The strategy also supports the *Strategic Action Plan on Polio Transition* and provides a bridge to the *Polio Post-Certification Strategy* (PCS).<sup>3</sup> As such, it lays the groundwork for both the transition currently under way in polio-free countries and the post-certification period of a polio-free world yet on the horizon.

**Table 1. Goals of the *Polio Endgame Strategy 2019–2023***

<b>Goal One: Eradication</b>	<ul style="list-style-type: none"> <li>• Interrupt transmission of all wild poliovirus (WPV)</li> <li>• Stop all circulating vaccine-derived poliovirus (cVDPV) outbreaks within 120 days of detection and eliminate the risk of emergence of future VDPVs</li> </ul>
<b>Goal Two: Integration</b>	<ul style="list-style-type: none"> <li>• Contribute to strengthening immunization and health systems to help achieve and sustain polio eradication</li> <li>• Ensure sensitive poliovirus surveillance through integration with comprehensive vaccine-preventable disease (VPD) and communicable disease surveillance systems</li> <li>• Prepare for and respond to future outbreaks and emergencies</li> </ul>
<b>Goal Three: Certification &amp; Containment</b>	<ul style="list-style-type: none"> <li>• Certify eradication of WPV</li> <li>• Contain all polioviruses</li> </ul>

Source: WHO

## Key elements

Figure 1 highlights the key activities the programme will carry out from 2019 to 2023 across the goals and enabling areas. The programme will continue many of the activities that have proven successful to interrupt WPV, while making necessary adjustments and implementing new innovations.

*Key innovations to focus efforts on the endemic countries and provide support to prevent and stop outbreaks in the Eastern Mediterranean and African regions include:*

- *Afghanistan–Pakistan hub:* A partnership hub is being established in the Eastern Mediterranean region to consolidate support to the Pakistan and Afghanistan National Polio Eradication Initiatives in their strategic planning and implementation of the National Emergency Action Plans (NEAPs), working in close collaboration with the national and subnational emergency operations centres (EOCs). The hub will ensure enhanced coordination across the epidemiological block and within each of the countries. The focused effort of the hub will increase technical and analytical capacity, provide flexibility for staff rotation and support real-time, data-driven action.
- *Expanded partnerships:* The programme will collaborate within and beyond the health sector through development efforts (e.g. health, nutrition, and water, sanitation and hygiene [WASH]) and civil society (nongovernmental organizations [NGOs] and civil society organization [CSOs]) to increase community demand for immunization and provide broader health benefits to endemic areas. To help sustain eradication by strengthening the Expanded Programme on Immunization (EPI), particularly in other high-risk countries and areas that are vulnerable to further spread after importation of WPV or an emergence of VDPV, the GPEI will pursue expanded partnerships with other public health actors – including Gavi, the Vaccine Alliance. Collaboration with the WHO's Health Emergencies Programme (WHE), Global Health Security Agenda and other broader emergency networks will increase the capacity and effectiveness of polio outbreak response. In non-endemic countries where the GPEI continues to have a large footprint, the GPEI infrastructure will be channelled to fully support the national EPI programme, with the immediate objective of increasing

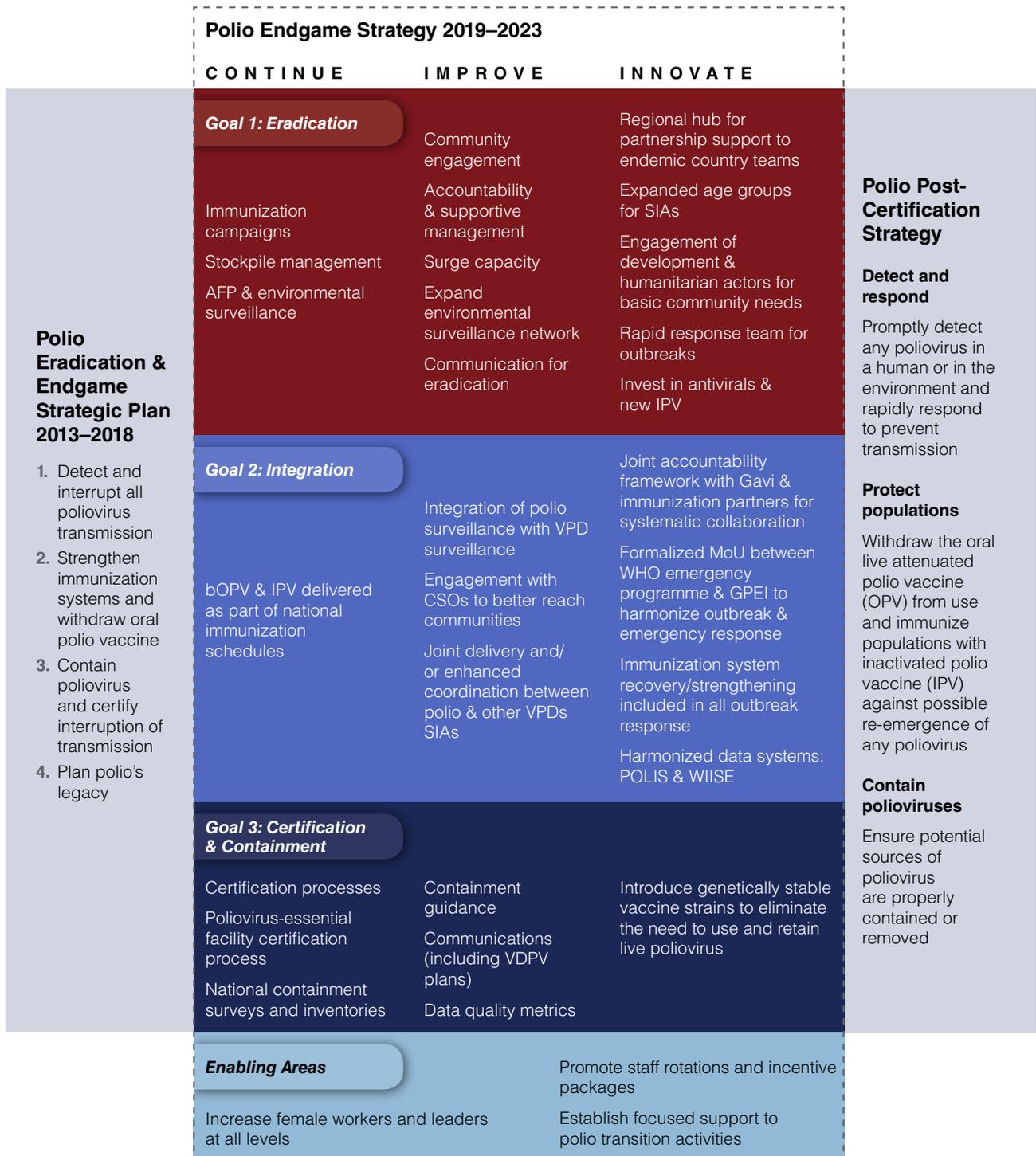
<sup>2</sup> Global Polio Eradication Initiative. *Polio Eradication & Endgame Strategic Plan 2013–2018*. Geneva: WHO; 2013 ([http://polioeradication.org/wp-content/uploads/2016/07/PEESP\\_EN\\_A4.pdf](http://polioeradication.org/wp-content/uploads/2016/07/PEESP_EN_A4.pdf)).

<sup>3</sup> *Strategic Action Plan on Polio Transition*. Geneva: WHO; 2018 (<https://www.who.int/polio-transition/strategic-action-plan-on-polio-transition-may-2018.pdf>), and *Global Polio Eradication Initiative. Polio Post-Certification Strategy*. Geneva: WHO; 2018 (<http://polioeradication.org/wp-content/uploads/2018/04/polio-post-certification-strategy-20180424-2.pdf>).

immunization coverage to minimize the risk of cVDPV outbreaks, and the long-term objective of strengthening the health system and building local capacity.

- *Rapid response teams*: To increase the speed and effectiveness of response to polio outbreaks, the GPEI has established a global outbreak response team from WHO and United Nations Children’s Fund (UNICEF) in Geneva and will set up a similar multi-agency Rapid Response Team (RRT) for Africa. RRTs will be composed of experienced GPEI staff who are dedicated to providing surge support for any polio event in the region. In addition, the GPEI will continue to identify and train a roster of experts within high-risk countries who can rapidly respond to outbreaks in their own or nearby countries. The RRTs will also help to prevent further outbreaks by supporting efforts to strengthen national immunization systems.

**Figure 1. Summary of the key strategy elements**



AFP: Acute flaccid paralysis; SIA: Supplementary immunization activity; bOPV: Bivalent oral polio vaccine; VPD: Vaccine-preventable disease; CSO: Civil society organization; MoU: Memorandum of understanding; GPEI: Global Polio Eradication Initiative; POLIS: Polio information system; WIISE: WHO immunization information system; VDPV: Vaccine-derived poliovirus.

Source: WHO.



UNICEF

Other key activities that will be modified as part of the *Polio Endgame Strategy 2019–2023* include:

- improved campaign quality;
- dedicated action plans for high-risk subnational areas;
- updated management structure and expanded membership of the GPEI Polio Oversight Board (POB) with the inclusion of Gavi, the Vaccine Alliance;
- expanded use of polio vaccinators to strengthen demand for essential immunization and other health services at the community level; and
- more contextualized strategies within NEAPS to focus proven strategies on specific local challenges.

Above all, the *Polio Endgame Strategy 2019–2023* reflects the urgency accorded to polio eradication through its declaration as a Public Health Emergency of International Concern (PHEIC) in 2014, as declared under the International Health Regulations (IHR). The confirmation of polio's status as a PHEIC signals the importance of eradication as a public health goal and a matter of global health security.

### **Budget and financial resources**

In September 2018, the POB approved a multiyear budget that defines the resource requirements of the GPEI from 2019 to 2023. The GPEI budget totals US\$ 4.2 billion and includes US\$ 3.27 billion in incremental costs (beyond what has already been secured for 2013–2019) that must be mobilized to achieve eradication and certification. Another US\$ 935 million beyond the GPEI budget will be needed, to ensure an ongoing supply of inactivated polio vaccine (IPV) through 2023 (US\$ 814 million) and to build a stockpile of oral polio vaccine (OPV) by 2023 (US\$ 121 million) for use in case of outbreaks after certification and the global withdrawal of OPV. Together, IPV, OPV and the GPEI budget bring the overall cost of the strategy to US\$ 5.1 billion. The GPEI partners have committed to advocating and raising resources for the full financing of this strategy.

**Next steps**

The *Polio Endgame Strategy 2019–2023* will be noted for the Seventy-second World Health Assembly in May 2019. The Strategy Committee will initiate implementation planning and monitor progress. As the GPEI advances towards each goal, a midterm review will be planned in 2021 to assess the strategy and ensure smooth transition planning and deliberate inroads to the post-certification period.

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