

Scientific Declaration on Polio Eradication

Polio is a highly infectious disease that can cause irreversible paralysis and death. Today, the disease mostly affects children living in some of the world's poorest and most marginalized communities. Yet we are closer than ever to a world where no child will ever again be crippled or die from this disease. At this unique moment, an international group of scientists has come together to stress the achievability of polio eradication and endorse the Eradication and Endgame Strategic Plan, a new strategy by the Global Polio Eradication Initiative (GPEI) to reach and sustain eradication by 2018. The plan was developed in consultation with a range of technical experts, governments, funding partners and stakeholders and received unanimous support from the WHO Executive Board in January 2013.

Whereas,

1. Unprecedented progress, scientific advances and new tools give us confidence that eradication is achievable.

- New cases of wild poliovirus have dropped from an estimated 350,000 cases in more than 125 countries in 1988 to fewer than 250 cases in just five countries in 2012.
- 2012 was a turning point for the remaining endemic countries. Nigeria, Afghanistan and Pakistan launched national emergency action plans that resulted in significant improvements in immunization campaign quality and the fewest new cases on record.
- India stopped wild poliovirus transmission in 2011, proving that polio can be eliminated in the most challenging circumstances.
- Two effective vaccines have protected hundreds of millions of children against the disease: oral polio vaccine (OPV) and inactivated polio vaccine (IPV). The worldwide elimination of one of the three types of wild poliovirus (type 2) more than a decade ago proves that eradication through the polio eradication strategy is feasible.
- We have successful strategies to deliver vaccines and monitor coverage, strong surveillance to quickly detect and contain the virus, and innovative technologies and approaches such as geographic information system (GIS) mapping and new vaccine formulations to ensure that children are reached and protected.

2. The new Strategic Plan provides a clear path forward that capitalizes on this historic opportunity to end polio.

- The plan is a long-term, comprehensive strategy to complete and sustain eradication. The plan's strategies are sound and, when implemented, will interrupt transmission, sustain eradication and maximize post-eradication benefits.
- The plan is a significant step forward over previous eradication strategies and offers strong solutions to challenges by including:
 - 1) Data-driven strategies to overcome operational challenges—including missed children—to ensure high quality immunization campaigns that can interrupt transmission globally; and
 - 2) Plans to eliminate both wild poliovirus and vaccine-derived poliovirus, starting with the withdrawal of type 2 from OPV and introduction of IPV in all countries to boost immunity to remaining strains.
- Insecurity in endemic countries is a serious threat to the program. To overcome this challenge, the GPEI will improve coordination between civilian and security services, increase community demand for vaccination services, enhance advocacy efforts by religious leaders and institutions, and increase vaccinations in areas bordering insecure places to reduce spread of the disease.

3. The new plan emphasizes the urgency of improving routine immunization systems and lays a foundation to protect children against other diseases.

- The plan recognizes that eradication efforts are interdependent with strengthened routine immunization. High levels of routine immunization are needed to achieve and sustain polio eradication.

At the same time, eradication efforts demonstrate that it is possible to reach nearly every child, even in the most underserved and remote areas, with vaccines and other life-saving interventions.

- The Strategic Plan calls for GPEI to use its robust infrastructure to benefit routine immunization and other health programs. It includes strategies for polio eradication staff and processes to help strengthen routine immunization, in partnership with national immunization programs and the GAVI Alliance and in alignment with the Global Vaccine Action Plan.
- Eradication would demonstrate that worldwide collaborations can successfully combat complex health threats, including in remote communities too often left behind.

4. *Scaling back efforts would have devastating consequences.*

- For polioviruses to survive, they must be transmitted from infected persons to susceptible persons in a continuous chain of human-to-human transmission. When immunity levels are high, the chains are broken. Today, there are fewer chains than ever before, creating an unprecedented opportunity to stop transmission.
- Weakening our efforts would lower immunity levels, setting the stage for a resurgence of outbreaks. Polio is highly infectious and spreads quickly. If we aim for control rather than eradication—relying only on routine immunization to vaccinate against polio and eliminating mass vaccination and other eradication strategies—we can expect up to 200,000 cases annually.

We, members of the scientific community, declare our conviction that the eradication of polio is an urgent and achievable global health priority. We endorse the Eradication and Endgame Strategic Plan and call on actors in the global community to do their part to ensure the full implementation of the plan. We urge:

- **Scientists to develop new and better tools to accelerate and sustain eradication**, including low-cost IPV options, and to continue providing technical support to endemic countries.
- **Partners, including GPEI and vaccine manufacturers, to ensure sufficient supply of and access to different types of vaccines required for eradication**, including IPV use in resource-poor countries.
- **Endemic country leaders and international program officials to stay fully committed and accountable to stop transmission.** They can build on emergency plans to increase accountability and strengthen campaign quality. They can continue to develop regional- and community-specific solutions to bottlenecks such as vaccine refusals.
- **Endemic country governments and partners to strengthen security measures and deepen engagement with community and religious leaders** to promote demand and protect vaccination teams and volunteers, in light of recent attacks on health workers across Pakistan and Nigeria.
- **International partners and national programs to strengthen linkages across polio vaccination efforts, routine immunization and other initiatives**, including measles prevention, maternal and child health and nutrition, to address the broad health needs of communities.
- **Partners, and national and global programs, to commit to strengthen routine immunization** with the same urgency, robust technical and financial support and clear measurement indicators.
- **Partners to fully fund the Strategic Plan.** Funding gaps in 2012 led to cancelled and scaled-back vaccination campaigns in 24 countries, leaving children in these areas more susceptible to polio.
- **Civil society to continue to support efforts to end polio forever.**

Polio eradication can be our generation's legacy to all future generations. Only working together can we make history and end polio.

For more information about the declaration and for a full list of signatories, please visit <http://vaccines.emory.edu/poliodeclaration/>