Ending Polio
Humanity is on the verge of one of the greatest public health achievements in history – eradicating polio. The Global Polio Eradication Initiative (GPEI) has reduced polio cases by 99.9% since 1988, bringing the world closer than ever before to ending polio for good. This means a world in which every child would be safe from the paralysis caused by the virus, and no family would ever have to bear the emotional and financial costs of polio again. With sustained political and financial commitment to protect every last child, we can seize this chance to end the virus forever.

Polio Today

Closing in on the Virus

• In 1988, there were 350,000 annual cases of wild poliovirus from 125 countries. In 2018, there were 33 cases reported in only two countries - Pakistan and Afghanistan. While this exceeds the number of cases in 2017 (22), wild polio transmission has remained at unprecedented low levels in recent years.
• Today, wild polio exists in the smallest geographic area in history. The world has not experienced any outbreaks of wild polio outside the three remaining polio-endemic countries – Afghanistan, Pakistan and Nigeria – since August 2014. In fact, Nigeria has not seen a case since 2016. If the country reaches three years without detecting the virus, the entire WHO AFRO Region could be certified wild polio-free as early as 2020.
• Only one of the three wild poliovirus strains appears to survive. Wild poliovirus type 2 (WPV2) was certified eradicated in 2015, and type 3 wild poliovirus (WPV3) has not been detected since 2012.

Programme Achievements

• Thanks to polio eradication efforts, more than 18 million people are currently walking who otherwise would have been paralyzed by the virus. Ending polio is a critical step toward improving the lives of the world’s most vulnerable children.
• In 2019, the WHO South East Asia Region marks five years since being declared polio-free following eradication of the virus in India. India was once described as the most challenging place in the world to end polio and and just over a decade ago was responsible for almost 70% of all wild polio cases globally. Stopping polio in the country is one of the most significant achievements in public health and serves as evidence for what is possible in the remaining endemic countries.
• The tools, infrastructure and knowledge developed to eradicate polio have been used to fight every vaccine-preventable childhood disease, deliver malaria prevention tools and improve disease surveillance worldwide. Polio workers have also delivered 1.3 billion doses of Vitamin A since 1988 that have saved an estimated 1.5 million children’s lives. In 2014, the polio vaccination infrastructure in Nigeria was also used to stop the Ebola outbreak in its tracks.

Protecting Gains

• If we don’t end polio now, we could see a resurgence of up to 200,000 cases annually within a decade. The world could also risk losing upwards of US$50 billion in estimated savings that eradication would generate by 2035 – with these savings primarily concentrated in developing countries.
• To protect global progress, the programme vaccinates more than 400 million children across dozens of countries every year, and conducts disease surveillance in more than 70 countries. Since 2001, there have been wild polio outbreaks in 41 countries that were previously polio-free. While each outbreak has been stopped, each one is a reminder that as long as polio exists, every country—and every child—is at risk.
• Through its ongoing surveillance, the programme investigates more than 100,000 suspected cases of polio each year using a community reporting network. It has also expanded environmental sewage testing to help vaccination campaigns target areas where the virus is circulating even before any child shows symptoms of polio.
Tackling the Remaining Risks

Pakistan, Afghanistan and Nigeria: Redoubling Efforts in Remaining Endemic Countries

- Since 2014, Pakistan has reduced wild poliovirus cases by more than 97% and greatly expanded its environmental surveillance network, now the largest of its kind in the world. Today, 95% of children in Pakistan are being reached with the polio vaccine, compared to 75% just five years ago. However, the country saw eight cases of polio in 2017 and 12 cases in 2018, and nationwide surveillance indicates that the virus continues to circulate in the environment. Vaccinators are using creative strategies to reach more children on the move, and the programme has increased the use of locally recruited social mobilisers – mostly female – to vaccinate children in the highest-risk communities.

- Afghanistan has seen an 80% drop in wild poliovirus cases since 2011, but these gains remain fragile. In 2018, the country experienced an increase in cases relative to 2017 (21 to 14), largely driven by an outbreak in Southern Afghanistan and pockets of inaccessibility in the east of the country. The programme is implementing a range of interventions to increase access in hard-to-reach areas – including immunising during brief windows of opportunity in conflict areas, collaborating with religious and community leaders, and implementing strategies in coordination with Pakistan to synchronize campaigns and better reach mobile populations.

- Nigeria has not detected any wild poliovirus since 2016. The programme is reaching more children than ever before by engaging local communities and vaccinating at strategic locations such as markets, cross-border points and camps for internally displaced people, while also investing in innovative tools that can track the spread of multiple infectious diseases across the country and region. Focus remains on improving access in the country’s insecure northeast, as well as the continued strengthening of surveillance and routine immunisation across the region. In August 2019, Nigeria could reach the required three years without detection of wild poliovirus and the entire WHO AFRO region may be eligible for certification as soon as early 2020.

Stopping Circulating Vaccine-Derived Poliovirus (cVDPV)

- In extremely rare cases, the live weakened virus originally contained in the oral polio vaccine (OPV) can mutate into a paralyzing form of the virus and spread, causing cVDPV. These outbreaks occur in under-immunised communities. Immunisation rates must remain high everywhere to protect against both wild poliovirus and cVDPV.

- In 2018, the world saw ongoing cVDPV outbreaks in the Democratic Republic of the Congo, Papua New Guinea, the Horn of Africa (Somalia and Kenya), Mozambique, Indonesia, Niger and Nigeria. The programme continues to work with regional, country and local partners to implement outbreak response activities and strengthen surveillance in affected areas.

- Programme experts have determined that the 2017 VDPV outbreak in Syria has been successfully stopped, following 18 months of intense vaccination and surveillance efforts. The GPEI’s extensive experience operating in areas of conflict and insecurity was instrumental to the response.

- The global polio programme is committed to stopping all forms of poliovirus and has already taken steps to eliminate the threat of vaccine-derived polio. In 2016, in the largest, fastest vaccine rollout in history, more than 150 countries and territories coordinated efforts to switch from trivalent oral polio vaccine to bivalent oral polio vaccine—which doesn’t carry the same risk.

- GPEI partners are supporting the development of a new and safer oral polio vaccine that provides the same level of protection as OPV but is less likely to result in cases of vaccine-derived polio. nOPV is currently undergoing clinical trials and, if successful, could be a key tool for a polio-free world.

Planning for a Polio-Free World

- While focused on eradication, the programme is also planning ahead for how to sustain a polio-free world. Wild poliovirus can be certified as eradicated three years after the last detection of transmission worldwide. This will be followed by the global cessation of OPV use and a separate, independent process to validate the absence of vaccine-derived polio. When this occurs, the GPEI will be dissolved and new actors will need to maintain certain essential activities – including vaccination, surveillance and containment of existing poliovirus samples – to ensure that the world remains polio-free and builds upon the success of polio eradication for generations to come. The GPEI outlines these core activities in the Post-Certification Strategy.

- After certification, much of the polio programme’s knowledge, tools and infrastructure can go on to benefit other health initiatives. As polio funding ramps down, countries are identifying alternative resources to maintain these assets so they can be used for routine immunisation, surveillance of vaccine-preventable diseases and the delivery of primary healthcare – the main priority areas identified in the country transition plans. The GPEI is supporting countries as they plan for this transition.

Committing to Gender Equality

- Women are at the forefront of polio eradication efforts globally. In some of Pakistan and Nigeria’s highest-risk areas for the virus, more than 90% of vaccinators are women. Female vaccinators build community trust and are crucial to ensuring that vaccines reach every child, as gender norms in some areas prevent men from entering households.

- Female polio workers help deliver positive health outcomes for women and children beyond ending the disease. This includes educating new mothers about the benefits of exclusive breastfeeding and better hygiene practices.

- Ensuring women’s equal participation at all levels of the polio programme is a key goal for the GPEI, and also contributes to progress toward achieving the Sustainable Development Goal on women’s empowerment and gender equality.