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A Ripple Effect:

How U.S. Investment in Polio Benefits Health Security

Immunizing children against life-threatening, preventable diseases remains at the heart of U.S. investment in global health. Beyond saving lives, in many countries immunization infrastructure is being leveraged to provide a broad range of health services for children. It is also the first line of defense against outbreaks of numerous infectious diseases. By preventing infections, immunization efforts have also proven to be crucial for reducing the emergence of antimicrobial resistance[1]. U.S. investment in polio eradication, including through the vital contributions of CDC and USAID, as well as crucial support from UNICEF and the WHO, has not only helped prevent the spread of polio, but has also supported critical outbreak response infrastructure to stop outbreaks at their source.

U.S. funding and technical support have helped key countries build surveillance systems that track polio and other pathogens. Many countries have also established emergency operation centers (EOCs) modeled on CDC's EOC in Atlanta, Georgia, capable of rapidly deploying teams to stop the spread of disease. These programs operate in some of the most complex humanitarian contexts in the world, where children are hardest to reach, health systems are highly fragile, and infectious disease outbreaks are likely to strike. With U.S. support, the Global Polio Eradication Initiative (GPEI), including founding partners UNICEF and WHO, continues working with countries to prepare immunization programs, surveillance systems, and emergency response capacity to outlast the eradication of polio.

A community health worker in Muembe, Mozambique. Mobile health brigades provide care in isolated communities.

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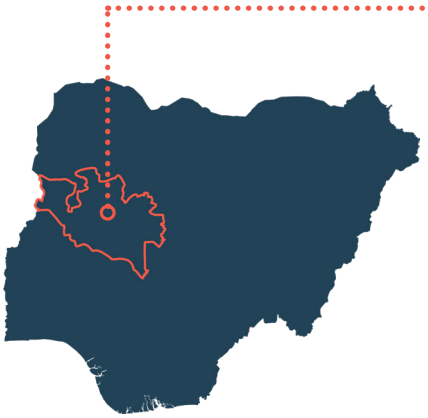
The CDC's STOP program trains and deploys highly skilled international public health consultants to assist with outbreak response, initially focusing on polio and now extending to a wide range of infectious disease threats. These consultants assist with surveillance, immunization outreach, and outbreak response to contain outbreaks before they become increasingly costly and difficult to manage[2].

USAID's polio eradication program also supports environmental surveillance by monitoring viruses in wastewater and community surveillance through engagement with families and civil society organizations that help identify a variety of diseases at local level. These programs also help countries leverage polio infrastructure for response to countless natural disasters, averting related outbreaks and other health emergencies[3].

Examples and Impact

Malawi and Mozambique

In 2021 and 2022, wild poliovirus imported from Pakistan was found in Malawi and Mozambique, paralyzing nine children. To contain the outbreak, the two countries collaborated with the GPEI, particularly UNICEF, WHO, and CDC, to mobilize a rapid response, **vaccinating more than 50 million children**. 15 new wastewater surveillance sites and enhanced Geographic Information Systems were established, helping to ramp-up overall surveillance and outbreak response efforts in the region[4]. U.S. agencies such as the CDC played a critical role in the response, training health workers, assisting with **six rounds of mass polio vaccination**, and providing technical support[5]. WHO declared this outbreak closed in May 2024.

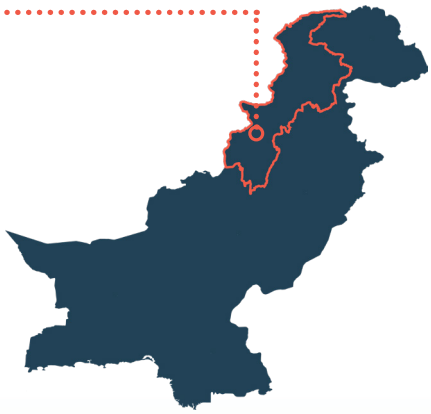


Nigeria: Niger State

In Nigeria, EOCs established by the polio program have been used to help stop outbreaks of Ebola, meningococcal meningitis, measles, and yellow fever[6]. The centers serve as coordination hubs to mobilize outbreak response at national and sub-national level. In the high-risk state of Niger, the polio program collaborated with the government on a mass vaccination campaign where **alongside polio vaccines, nearly 43,000 children who had never received any vaccine received the pentavalent vaccine** against Diphtheria, Pertussis, Tetanus, Hepatitis B and Hib. And in 2023, nearly three million children received vitamin A supplements and more than 200,000 children were checked for malnutrition across the country thanks to the polio program and its workforce[7].

Pakistan: Khyber Pakhtunkhwa

Between July and September 2023, CDC and USAID partnered with UNICEF and WHO to vaccinate nearly **27,000 children with routine immunizations** across 69 high-risk areas of southern Khyber Pakhtunkhwa. The campaign also reached **269,000 children with the polio vaccine**. Protection against other vaccine-preventable diseases also received a boost, including a 17% increase in coverage for the anti-tuberculosis BCG vaccine and a 55% increase in children with access to a second dose of the measles-rubella vaccine.



Recommendations

1 Increase investment in polio eradication through complementary CDC and USAID programs to achieve and sustain a polio-free world in collaboration with UNICEF and WHO, understanding that a polio case anywhere is a threat to children everywhere, including in the U.S.

FY25 Funding Recommendation:

- **CDC Polio: $276 million**
- **USAID Polio: $165 million**

2 Recognize that these investments are an essential tool to simultaneously advance pandemic preparedness and response, address disease outbreaks, and help reduce the burden of antimicrobial resistance. By preventing infections and strengthening the vaccine workforce, health systems, and broader disease detection capabilities, these investments stop disease spread on the frontlines and keep Americans healthy and safe.

Conclusion

Over the past three decades, U.S. investment in polio eradication, particularly through the vital contributions of CDC and USAID, has strengthened international capacity to prevent, detect, and respond to infectious disease threats, even in the most challenging and vulnerable humanitarian contexts. **The eradication of polio is estimated to save roughly $33 billion in health-related costs by 2100**[8]. But without sufficient support, hard-won gains will be lost, putting decades of progress and the health of millions of children at risk, even those living in the U.S. We must continue to invest in polio eradication and strengthen key immunization infrastructure, including surveillance systems, laboratories, health worker networks, and outbreak response capacity. **Together, we can achieve and sustain a polio-free world with lasting benefits for child health, global development, and international security**.

Sources

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2 https://www.cdc.gov/global-immunization/stop/about-stop.html

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4 https://polioeradication.org/news/timely-outbreak-response-enhanced-surveillance-halts-wild-poliovirus-transmission-in-southern-africa

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6 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10874100/

7 https://polioeradication.org/wp-content/uploads/2024/06/GPEI-Integration-factsheet-20240426.pdf

8 https://www.cdc.gov/global-polio-vaccination/why/index.html#cdcreference_4