

Integration: Polio Resources Responding to Community Needs & Strengthening Health Systems

POLIO GLOBAL ERADICATION INITIATIVE

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Overview

To help end all polio transmission and meet the broader health needs of communities now, the Global Polio Eradication Initiative (GPEI) works with a range of partners to integrate polio services with other health programs. Integration involves using polio tools, staff, expertise and other resources to deliver important health interventions alongside polio vaccines – from measles vaccines and other essential immunizations to birth registration, counselling on breastfeeding, hand soap and more. It also includes incorporating polio vaccines into other planned health interventions, delivering more services with fewer resources.

Integration continues to be an important part of the GPEI's approach, including in its current [2022-2026 Strategy](#). Integration is critical to not only stopping polio transmission and building stronger, more resilient health systems, but also to laying the path for successful [transition](#) to sustain polio eradication once it is achieved.

In most polio-affected places, the program works closely with national health authorities to increase the number of children who receive [routine vaccines](#) from health centers, including for polio, [in addition to the program's house-to-house immunization campaigns](#). In Afghanistan and Pakistan, the last two remaining endemic countries for wild poliovirus type 1 (WPV1) many of the program's integration efforts occur through integrated service delivery channels. In close collaboration with broader health partners, polio vaccines are often delivered alongside other primary health care interventions. In countries affected by variant poliovirus outbreaks, integration activities are largely campaign-based, with polio vaccines delivered alongside vaccines and products that protect against other diseases too.

As of July 2023, the GPEI has strengthened its global integration function, undertaking a renewed effort to support integration activities and better document these efforts. The program will provide enhanced program management and coordination support to regions and countries carrying out these activities, as well as greater transparency around the opportunities for integration at all levels of the GPEI.

Integration as a Path to Eradication

There is no one-size-fits-all approach to integration. Activities must be country-driven and adapted to fit the unique challenges and needs of different communities.

To date, integration efforts have often been opportunistic with a focus on improving campaign quality and efficiency, and thus the percentage of children who receive the polio vaccine. These activities occur particularly in the most difficult and critical areas to end polio – the remaining endemic countries and consequential geographies (areas within countries¹ where children are at the highest risk of encountering and spreading variant poliovirus). As interruption of the virus gets closer, this focus will shift to efforts that prepare for a transition to sustain a polio-free world, including greater surveillance system strengthening and emergency response capacity building. In the immediate term, the GPEI's Integration efforts focus on four main areas:

Campaign-based activities



Plusses: Products provided to communities as part of polio campaigns to address a basic need, build trust, and incentivize vaccination. This includes providing hand soap, clean water or insecticide-treated bed nets. Interventions are tailored based on each context and community needs.



Co-delivery & Multi-antigen Campaigns: The co-delivery of other vaccines and supplements alongside polio campaigns to protect against other diseases, and, when feasible, incorporating polio vaccines into campaigns for other health needs. This includes interventions for measles, typhoid, vitamin A deficiency, deworming and more.

Coordinated health system strengthening activities



Routine Immunization Strengthening: Activities that help ensure all children, especially those who have not received any vaccinations ([zero-dose children](#)), are reached with polio and other essential vaccines. This includes advocating for routine immunizations during polio campaigns, referring missed households to health centers and helping improve monitoring of these activities. Social and Behavior Change (SBC) activities, like deploying trained social mobilizers and engaging trusted community leaders, also help address vaccine hesitancy to strengthen uptake of all vaccines. This requires close collaboration with immunization counterparts, including global partners at Gavi and national Expanded Programmes on Immunization (EPI).



Integrated Service Delivery (ISD): Collaboration with civil society organizations and humanitarian aid groups to provide polio vaccines as part of primary healthcare services to otherwise inaccessible communities. These activities are focused on places experiencing complex humanitarian emergencies to provide much-needed services for health, while encouraging vaccine acceptance by addressing basic needs.

¹Northern Nigeria, south-central Somalia, eastern Democratic Republic of Congo, and northern Yemen.

In Pakistan, during the first two phases of the new [Reaching the Unreached \(RUR\)](#) initiative in July and September 2023, almost 27,000 children received missed routine vaccinations across 69 high-risk areas of southern Khyber Pakhtunkhwa (KP), while 269,000 children received the oral polio vaccine (OPV) at the same time. Protection against other vaccine-preventable diseases also received a boost – from a 17% increase in coverage for the anti-tuberculosis BCG vaccine to a 55% rise for the second dose of the measles-rubella vaccine. At the end of March 2024, the third phase of the initiative began and has already reached over 223,000 children with OPV, over 6,000 of whom received a vaccine for the first time. Over 12,000 were given the measles-rubella vaccine.

Source: GPEI Integration Inventory.*

In Afghanistan, as part of a strategic engagement with ten humanitarian aid groups, efforts are underway to integrate polio vaccination into their efforts. Depending on the partner, this can include delivering polio vaccines to children under five years of age while providing reproductive healthcare, screening for and treating malnutrition, and promoting good hygiene practices (e.g., hand washing). Close to 2 million polio vaccines have been delivered through this engagement between January 2023 and February 2024, and it's estimated that almost 70,000 children have been vaccinated who would have otherwise remained inaccessible to the polio program during its standard campaigns.

Source: GPEI Integration Inventory.*

In Nigeria, in August 2023, the polio program and the Government of Nigeria decided to intensify routine immunization efforts through a mass vaccination campaign in the northern state of Niger. Alongside polio vaccines, nearly 43,000 zero-dose children were reached for the first time with the [pentavalent vaccine](#), which protects children from five life-threatening diseases – Diphtheria, Pertussis, Tetanus, Hepatitis B and Hib. The program's volunteer community mobilizers also promote the importance of routine immunization and other healthcare to each household they visit.

Source: WHO AFRO news.

In Somalia, between March 2023 and March 2024, Far-Reaching Integrated Delivery (FARID) partners delivered a range of services through health camps to 20 districts. Through this effort, the program and its partners vaccinated more than 150,000 children with OPV and over 280,000 with routine immunizations, including the inactivated polio vaccine (IPV), anti-tuberculosis BCG vaccine, pentavalent vaccine, and meningitis C vaccine. Partners have also conducted more than 123,000 maternal health consultations, more than 136,000 nutrition consultations, and more than 236,000 general medicine consultations.

Source: GPEI Integration Inventory.*

Integration in Practice



Pakistan

Background In Pakistan, transmission of WPV1 has been restricted to just seven endemic districts in southern KP. There are numerous challenges in this area that erode community trust in authorities, leading to high rates of vaccine refusals and an increased risk of virus transmission. These include shifts in the political landscape, low overall rates of essential immunization, poor sanitary conditions, and persistent insecurity. To stop virus transmission in Pakistan, the program is focused on integrating polio vaccines with broader health services to reach every child.

Current & Planned Activities Integration work in Pakistan aims to address multiple health challenges and provide a comprehensive approach to healthcare based on the unique needs of communities in different areas of the country. Since 2022, Pakistan's Federal Directorate of Immunization (FDI) and national Polio Eradication Programme have established a range of synergies to work as one team.

In 2023, FDI and the Programme implemented the [Reaching the Unreached \(RUR\)](#) initiative, a three-phase campaign that aims to deliver polio vaccines to all children under five years of age and other essential immunizations to all children under two in 69 high-risk areas of southern KP. This integrated approach, with a focus on protecting zero-dose children, helps protect more children from polio, saves costs, and boosts immunity for other vaccine-preventable diseases.



A vaccinator administers measles injection to a child in Pakistan.

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The first two phases in July and September 2023 resulted in almost 27,000 children receiving their overdue or missed routine vaccines, while 269,000 children received OPV. Coverage for all antigens increased by a significant margin too, ranging from 17% for the anti-tuberculosis BCG vaccine to a 55% bump for the second dose of the measles-rubella vaccine ([source: Gavi RUR story](#)). **The third phase began at the end of March 2024, and as of 1 April, over 223,000 children have received OPV in the first seven days. Over 6,000 of those children received a vaccine for the first time and over 12,000 were given the measles-rubella vaccine.**

Across the entire country, the Programme also helps target mobile populations who are often not connected to the health system and missed by standard polio campaigns, and thus risk transmitting the virus and other diseases within Pakistan and abroad. To address this, Pakistan's Polio Eradication Programme has implemented the [Nomads Immunization Initiative](#), which deploys mobile vaccination teams to reach nomadic children with polio and other essential immunizations based on extensively studied population movements. In August 2023 alone, "special biker teams" under this initiative brought OPV to nearly 16,000 children in nomadic communities (over 1 million since January 2023) and also administered over 19,000 doses of routine vaccines to eligible children. (source: [GPEI Integration inventory*](#))



A vaccinator prepares measles injection for a child in Pakistan.

© UNICEF/Asad Zaidi

Outside of campaigns, the Programme helps deliver a broader [Integrated Service Delivery \(ISD\) initiative](#) that links polio vaccination to several other essential resources, particularly in communities that lack clean water and basic sanitation and health services. For example, in Gujro, a neighborhood of Karachi at high risk for polio, integrated services have been delivered through a Mother and Child Health Centre since 2019. This includes nutrition, family planning, antenatal services, newborn delivery and essential vaccines, like the polio vaccine. By meeting the community's broader health needs, the initiative has helped contribute to a 72% drop in the number of people who refused to have their children vaccinated against polio in the area, from 4,254 refusals in 2019 to 1,209 in 2022 (source: [UNICEF ISD story](#)).

Data as of April 2024.

was delivered to more than 223,000 children under 5 years of age, IPV was given to more than 15,000 children under 2 years of age and the measles vaccine to more than 226,000 children under 5 years of age (source: [GPEI Integration Inventory*](#)).

Over the last few years, ongoing collaboration with humanitarian organizations has also demonstrated the value of integrating polio efforts with other health needs in the country. In 2023, the program began more **strategic engagement with ten humanitarian groups** operating in 12 high-risk provinces for polio across the country. Through these collaborations, the program and its partners have mapped and supported communities that lack basic health services, which has in turn helped better identify and reach children still vulnerable to polio. **Close to 2 million polio vaccinations have been delivered through this engagement between January 2023 and February 2024. It's estimated that almost 70,000 children have been vaccinated who would have otherwise remained inaccessible to the polio program during its standard campaigns** (source: [GPEI Integration Inventory*](#)).

In 2019, the polio program collaborated with Afghanistan's National Emergency Operation Center (NEOC) to establish 100 **Basic Package of Health Services (BPHS+) health facilities** in the south region of the country (source: [GPEI Integration Inventory*](#)). This initiative helped boost coverage of essential immunizations, like polio, in the hardest-to-reach areas, while supporting communities' basic health needs such as nutrition and maternal and child health. After being established and run by the polio program and NEOC for over three years, the project was handed over to the World Bank to manage in February 2023.

These ISD initiatives and more have supported communities in Afghanistan, while protecting more children from polio. During an October 2023 campaign in southern Afghanistan, the program vaccinated 1.7 million children against polio across four provinces through these efforts. Since the beginning of 2023, the program has also helped screen more than 300,000 children for malnutrition and establish water, sanitation, and hygiene facilities in 22 schools, 9 communities, and 9 health facilities across the country (source: [GPEI Integration Inventory*](#)).

Data as of April 2024.

Afghanistan

Background In Afghanistan, endemic transmission of WPV1 has been restricted to the east region. However, remaining pockets of inaccessible, unvaccinated children amid a broader humanitarian crisis – more than two-thirds of the country's population is in serious need of food, clean water, functioning sanitation facilities and basic health services – pose significant barriers to stopping the virus for good. As of 23 April 2024, two cases were reported in the country this year – both from the Nangarhar province (source: [WHO Global Polio Update](#)). To end polio for good in Afghanistan and meet the broader needs of communities, the program is prioritizing integration efforts in the east and other high-risk parts of the country.

Current & Planned Activities Integrating polio efforts with other health services in Afghanistan has helped reach more children with polio vaccines and other lifesaving interventions despite the unprecedented humanitarian crisis and extremely fragile health system that surrounds it. In 2023, the polio program distributed over 22,000 blankets and 850,000 soaps to families during campaigns. In the first two subnational campaigns of 2024, soap, blankets, hygiene kits, and diapers were distributed, helping reach nearly 104,000 children (source: [GPEI Integration Inventory*](#)). The polio program also coordinates closely with the EPI to deliver polio vaccines during measles campaigns, and to improve routine immunization efforts by combatting vaccine hesitancy through SBC activities and enhancing supervision in remote health facilities. As part of a new 3-phase multi-antigen acceleration campaign initiative launched this year, 53 districts in the country were targeted in the first 10-day phase of the campaign in March 2024. OPV



Nigeria

Background Nigeria has experienced some of the largest outbreaks of type 2 [variant poliovirus \(cVDPV2\)](#), making up almost two-thirds of all global cVDPV2 cases in 2021 (source: [WHO Global Polio Update](#)). The northern part of the country is also the largest exporter of the virus, accounting for 27% of all global detections. However, thanks to incredible efforts from the Nigerian health authorities, supported by the GPEI, polio cases have dropped by 85% since 2021 (source: [WHO Global Polio Update](#)). Yet, insecurity in the North, parents refusing to vaccinate their children, and the more than 2.2 million children who have never received a vaccine of any kind all pose serious challenges to protecting every child from polio in Nigeria.

Current & Planned Activities In Nigeria, routine immunization services are often incorporated into the polio program's vaccination activities, and where possible, polio vaccines have been included in the country's plans to intensify its routine immunization services. For example, in August 2023, partners and the Government of Nigeria implemented a mass vaccination campaign in the northern state of Niger, where nearly 43,000 zero-dose children were reached for the first time with the pentavalent vaccine alongside polio vaccines (source: [WHO AFRO News](#)).



A volunteer community mobiliser communicates with a mother about maternal and child health, hygiene, vaccine-preventable diseases, and the effects of polio in an Internally Displaced Persons camp in Nigeria. © Rotary International



A child clutching her immunization card after a vaccination session in a nomadic settlement in Chad.

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The program's volunteer community mobilizers also promote the importance of routine immunization and other healthcare to each household they visit, including educating pregnant women about prenatal care and facilitating the registration of new births. Vaccinators also commonly deliver other lifesaving interventions during polio campaigns. **During nationwide campaigns in May and June 2023, nearly 3 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** (source: *GPEI Integration Inventory**). It is also common for polio workers in Nigeria to distribute long-lasting insecticide treated nets to families during campaigns to protect against mosquito-borne diseases like malaria.

Outside of campaigns, the program has helped the Vaccine Network for Disease Control (VNDC) pilot test **the Whole Family Approach** at multiple primary healthcare centers in the country. This approach means giving everyone in the family everything they need in one visit, from COVID-19 vaccines and chronic disease screenings to essential immunizations and nutrition check-ups. These combined services incentivize families to visit health centers and receive vaccines for diseases like polio by addressing multiple health issues at once to protect children and their caregivers.

Data as of October 2023.



A health worker administers polio vaccine (nOPV2) drops to a child in an Internally Displaced Persons camp in Somalia.
© Ismail Tixta/Getty Images

Somalia

Background Children in Somalia are at high risk of encountering and spreading the poliovirus due to longstanding security challenges and a lack of health infrastructure, particularly in the south-central part of the country. As a result, the country has historically low routine immunization levels and faces the world's longest-running outbreak of type 2 variant poliovirus.

Current & Planned Activities In October 2022, the GPEI partnered with the World Food Program Innovation Hub, Save the Children, Acasus, and World Vision's CORE group, amongst others, to launch **the Far-Reaching Integrated Delivery (FARID)** partnership. The partnership's primary goal is to stop poliovirus transmission and reduce deaths from preventable diseases and malnutrition. To do this, the polio program and its partners have established a series of health camps across 20 districts in Somalia that provide families with vaccinations for polio and other infectious diseases, maternal health services, nutrition screening and supplements, and primary health consultations (source: GPEI Integration Inventory*). These camps are tailored to address each community's specific needs and aim to re-establish sustainable health systems that will continue providing primary health services on a routine basis.

Since March 2023 through March 2024, FARID partners have visited 1,412 high-risk communities in Somalia that face significant or total barriers to healthcare, reaching over 530,000 people with primary health services. The program and its partners have vaccinated more than 150,000 children with OPV and over 280,000 with routine immunizations, including IPV, the anti-tuberculosis BCG vaccine, the pentavalent vaccine, and the meningitis C vaccine. Partners have also identified more than 150,000 children who have never received any kind of vaccine through this initiative and conducted more than

123,000 maternal health consultations, more than 136,000 nutrition consultations, and more than 236,000 general medicine consultations (source: GPEI Integration Inventory*).

As in other countries, community mobilizers in Somalia are also key to accessing children and delivering integrated health messaging to increase demand for vaccination. In 2017, UNICEF established **the Social Mobilisation Network (SOMNET)** in Somalia to train such mobilizers and build communities' trust in vaccines and health services through door-to-door visits, public announcements, community meetings, and social media campaigns. Since the initiative began, more than 6,000 community mobilisers have been trained by UNICEF, who have since been recruited and supervised by the Ministry of Health (source: GPEI Integration Inventory*). In 2023 alone, close to 4,000 SOMNET members were trained and participated in national immunization days for polio. Originally set up to promote polio vaccines to families, the program now takes an integrated approach to support responses to polio, cholera, and COVID-19.

In November and December 2022, the SOMNET was deployed to support a nationwide integrated measles campaign that offered a package of services, including polio vaccines. Almost 6,000 social mobilizers were selected, trained, and deployed for this campaign, conducting almost 9,000 community meetings and reaching nearly 17,000 nomadic settlements with house-to-house visits (source: GPEI Integration Inventory*). During this campaign, over two million children across the country received measles and polio vaccines, deworming medication and vitamin A supplements visits, while in Somaliland, an additional 800,000 children were checked for malnutrition (source: GPEI Integration Inventory*). Transportation and vaccine storage costs for the campaign were shared between the EPI and the polio program, allowing them to reach these children with less resources.

Data as of April 2024.



A child receives her birth certificate after being vaccinated in the Central African Republic.
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* Email emu@gatesfoundation.org for the latest GPEI integration inventories.