



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

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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 [2022-2029 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 (i.e., the bivalent oral polio vaccine, bOPV, and the inactivated polio vaccine, IPV), 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 better support and document integration activities. Since then, the GPEI has provided enhanced program management and coordination support to regions and countries driving integration activities, as well as greater transparency around the opportunities for integration at all levels. Prior to the establishment of the GPEI's global integration function, integration efforts were often opportunistic, with a focus on improving campaign quality and efficiency, and thus the percentage of children who receive the polio vaccine. Today, with GPEI's support, the program has worked towards more intentional integration planning and implementation in the places where children are at the highest risk of encountering and spreading the virus like Pakistan, Afghanistan, Somalia, Nigeria, and Yemen; and the places that are closing in on interrupting transmission of the virus like the Democratic Republic of Congo and Madagascar.

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.

As countries get closer to interrupting virus transmission, high essential immunization coverage is key to stopping any remaining virus and keeping it out. But in many places where polio remains, essential immunization systems are too weak or non-existent, leaving critical gaps in immunity. In fact, IPV coverage rates are 17% lower in countries with variant polio outbreaks than in countries without these outbreaks. Thus, the focus of integration activities in these settings increasingly shifts to helping strengthen essential immunization programs. Further down the line, they will be complemented by more targeted efforts to improve surveillance system performance to the level required for certification and emergency response capacity to maintain a polio-free world. 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, helping improve monitoring of these activities, and supporting the use of bOPV in the Big Catch-Up (learn more below). Social and Behavior Change (SBC) activities, like deploying trained social mobilizers and engaging trusted community leaders, 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), tailored to a country's epidemiological needs and health system capacity and resources.



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.

GPEI and the Big Catch-Up

Following the COVID-19 pandemic, essential immunization levels decreased in over 100 countries leading to a rise in outbreaks of vaccine-preventable diseases. The Big Catch-Up (BCU) is a global effort to boost essential immunization among children across the world, including for polio. As of November 2024, 35 countries have been approved to deliver 198 million doses of IPV through the BCU, funded by Gavi, the Vaccine Alliance. The polio program has been coordinating with Gavi and BCU partners to add bOPV to these activities in places where polio is still circulating. In these settings, it is recommended for a child be vaccinated with both bOPV and IPV to protect themselves and more effectively stop person-to-person transmission. As of November 2024, **the GPEI has agreed to fund 44 million doses of bOPV for the BCU in 23 countries** and efforts are ongoing to add bOPV into more BCU campaigns.

This year, the BCU has already started in some of the places critical places to end polio, including Pakistan, Madagascar, and Somalia, raising population immunity levels for polio and other life-threatening diseases. For example:

In **Pakistan**, the first BCU round was conducted in October 2024 and reached 2 million children with five different vaccines – IPV, the measles vaccine, the Pneumococcal Conjugate Vaccine (PCV), which protects against serious illnesses like pneumonia and meningitis, the rotavirus vaccine, which protects against severe diarrhea, and the typhoid vaccine. The polio program supported these efforts by sharing campaign and surveillance data to help partners better plan their activities. Over 375,000 zero-dose children in Pakistan were reached (83% of target) and registered for the very first time as a part of these efforts, and another round is planned for December 2024.

In **Madagascar**, BCU rounds were conducted in April, June and October 2024 with a particular focus on reaching children who haven't received all required doses of IPV, bOPV, the measles vaccine, PCV, and the pentavalent vaccine – a five-in-one vaccine that protects against diphtheria, pertussis (whooping cough), tetanus, hepatitis B, and haemophilus influenza type B. In the April campaign, approximately 25 million children under five years old received their first dose of IPV and approximately 33,000 children received their second IPV dose. In June, another 17,000 children received their first dose of IPV and in October another 719,000 doses were administered, with nearly 23,000 zero-dose children caught up.

The polio program is also exploring opportunities to enhance collaboration with BCU partners through data sharing, referrals, integrated social mobilization messages and coordinated monitoring. For example, more systematically sharing data from the polio program can help identify zero-dose children and high-risk areas where more intensive BCU efforts are needed.

Snapshots of Integration in Practice

The following snapshots represent a sample of integration activities happening in key high-risk countries for polio. For additional examples, please reference published accounts of integrated activities in the [prior version](#) of this factsheet and recently published web stories on efforts in [Madagascar](#) and the [Democratic Republic of the Congo](#), and a recently published photo story on an integrated campaign in [Madagascar](#). All data is from the polio program and reflected in the GPEI Integration Inventories, available upon request at emu@gatesfoundation.org.



Pakistan



Afghanistan



Nigeria



Somalia

Pakistan



Throughout 2024, Pakistan has experienced a rise in transmission of wild polio across the country. As of November 2024, there has been a 117% increase in polio cases and positive environmental samples since 2023 with 56 children paralyzed so far this year. There are numerous challenges in the country that have eroded community trust in authorities, leading to high rates of vaccine refusals and an increased risk of virus transmission. Ongoing political instability, boycotts, insecurity, and violence are also key factors contributing to polio's resurgence in Pakistan.

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 Khyber Pakhtunkhwa. 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.

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 the oral polio vaccine (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. The third phase, from March to April 2024, delivered OPV to over 233,000 children, over 6,500 of whom received a vaccine for the first time. Over 12,000 children were also given the measles-rubella vaccine and over 10,900 were given IPV. About 9,100 children received their first dose of the pentavalent vaccine and 9,300 received their final third dose to be fully protected. Pakistan's Expanded



A vaccinator administers measles injection to a child in Pakistan.
© UNICEF/Asad Zaidi

Programme on Immunization and polio eradication synergy group has recently re-engaged to renew coordination between Pakistan's FDI and the polio program to continue these essential immunization strengthening efforts.

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, polio campaign data are used to plan and implement health camps to deliver other essential health services to high-risk communities. In 2024, 962 health camps were set-up across South Khyber Pakhtunkhwa and Balochistan, reaching over 68,000 children under five with lifesaving vaccines, medicine, and medical consultations. Free medical consultations were also provided to over 280,000 patients at health camps this year. Over 400 more health camps are being planned for select high-risk communities in South Khyber Pakhtunkhwa and Balochistan.



Alongside lifesaving vaccinations, a child receives a box of oral rehydration solution and zinc supplements from a community health worker in Afghanistan.

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Afghanistan

In Afghanistan, transmission of wild polio has risen in 2024 compared to historic lows over the last few years. The country has seen a 121% increase in polio cases and environmental samples since 2023, with 25 children paralyzed by the virus as of November 2024. Remaining pockets of inaccessible, unvaccinated children amid a broader humanitarian crisis – exacerbated by the recent forced repatriation of Afghan refugees from Pakistan and the inability to implement the most effective campaign modality (house-to-house) in the entire country – pose significant barriers to stopping polio for good.

In this context, integrating polio efforts with other health services in Afghanistan has helped reach more children with polio vaccines and other lifesaving interventions. In January and February 2024, the polio program distributed over 54,000 blankets, 44,000 diapers, and 401,000 soaps to families during vaccination campaigns and in November 2024, the polio program distributed over 41,000 diapers and 221,000 soaps.

The polio program also supports routine immunization strengthening efforts through SBC activities to engage community influencers to raise awareness for vaccinations and combat vaccine hesitancy. As part of a new 3-phase multi-antigen acceleration campaign initiative launched in 2024, over 360 teams have been deployed in 78 districts to administer measles and polio vaccines to over 500,000 children. In the first 10-day phase of the campaign in March 2024, bOPV was delivered to more than 223,000 children under 5 years of age across 53 districts, 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. During the second phase of the campaign from April to July 2024, across another 11 districts, a third dose of bOPV

was delivered to 8,000 children, a second dose of IPV was given to more than 49,000 children, and more than 59,000 children received the measles vaccine. Phase 3 will take place in 2025.

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. Over 4.3 million polio vaccinations have been delivered through this engagement between January 2023 and October 2024. It's estimated that over 112,000 children have been vaccinated who would have otherwise remained inaccessible to the polio program during its standard campaigns.

After the forced return of Afghan refugees from Pakistan in late 2023 and 2024, the program also partnered with humanitarian actors in both countries to surge support at the international border. From September 2023 to November 2024, more than 770,000 Afghans returned from Pakistan to Afghanistan. Partners mobilized resources to deliver essential health services to the returnees, including primary health care, immunization, maternal health care, and psychological support. Between November 2023 and October 2024, partners provided these services to over 600,000 returnees, and from September 2023 to March 2024, approximately 417,000 returnees received OPV and approximately 15,000 returnees received the measles vaccines.



Nigeria

Nigeria has experienced some of the largest outbreaks of type 2 variant poliovirus (cVDPV2) and is continuing to backslide. As of November 2024, the country recorded 66 cVDPV2 cases in 13 states, compared to 48 cases in 2023 in 8 states – a 20% increase from last year. The northwestern part of the country continues to drive polio transmission. Fundamental weaknesses in Nigeria's health system results in continued low essential immunization coverage with more than 2.3 million zero-dose children – one of the highest in the world. Insecurity, especially in the Northwest, and parents refusing to vaccinate their children continue to pose serious challenges to protecting every child from polio in Nigeria.

To address the spread of variant poliovirus across the country, the National Emergency Operations Center (NEOC), in collaboration with partners, designed the Identify, Enumerate, & Vaccinate Strategy (IEV) aimed at identifying all eligible children in 168 priority wards, vaccinating them with essential immunizations, and linking them with additional primary health care services. High-risk populations have been mapped across 18 high-risk states, and implementation of the strategy is ongoing. Between May and September 2024, 3 million children were vaccinated with lifesaving essential immunizations, of which almost 200,000 were zero-dose.

To help reach chronically missed children and strengthen routine immunization, the NEOC also mapped and geocoded almost 90% of settlements across the northwest part of the country. Through enhanced surveillance and vaccination efforts in these insecure areas, 1.84 million children were given vaccines across 16,183 settlements (85% of those targeted).

The polio program's volunteer community mobilizers also promote the importance of essential immunizations and other primary health care services to each household they visit, including educating pregnant women about prenatal care and facilitating the registration of new births. It is also common for polio workers in Nigeria to distribute soaps and long-lasting insecticide treated nets to families during campaigns to protect against mosquito-borne diseases like malaria, delivering more lifesaving interventions with less resources.



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



Somalia

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 essential immunization levels and faces the world's longest-running outbreak of type 2 variant poliovirus.

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 diseases, maternal health services, nutrition screening and supplements, and primary health consultations. 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.

From July 2023 to September 2024, FARID partners have delivered health services through almost 11,000 health camps in 1,079 high-risk communities in Somalia that face significant or total barriers to healthcare. In total, they have reached over 869,000 people, 62% of whom are women, with primary health services and over 134,000 children have been reached with at least one routine vaccine. As teams consistently access more villages, more children are completing their vaccinations – the percent of children who received all three recommended doses of the pentavalent vaccine, for example, has increased from 18% between July and September 2023, to 31% between July and September 2024. OPV uptake has also increased since the launch of FARID, with 10% of all required OPV doses administered between July and September 2023 to 27% between July and September 2024. Also, from July 2023 to September 2024, 77,000 children received their first measles vaccine and over 27,000 received the recommended second dose to be fully protected against the disease. As a result of consistent health service delivery in these high-risk communities, the number of zero-dose children has declined drastically, dropping from 40,777 identified in the first quarter of 2024 to only 11,186 in the third quarter of 2024.

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 mobilizers have been trained by UNICEF, who have since been recruited and supervised by the Ministry of Health. In 2024 alone, over 6,200 SOMNET members were trained and participated in national and sub-national polio vaccination campaigns. They conducted close to 15,000 community meetings and reached over 38,000 nomadic settlements with house-to-house visits. 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.