DIGITAL
PAYMENTS

Polio campaign workers were previously paid in cash through third parties, causing delays, limited oversight and reports of missed payments. To address this, the WHO Regional Office for Africa introduced **Mobile Money,** a system that transfers payments directly to workers' mobile phones through Ministries of Health. This ensures faster, more secure payments while improving accountability. It also strengthens workforce management, supports worker retention and expands financial access.

HIGHLIGHTS 2020-2024

100%
visibility on payment status

Before, payments were untracked, and no proof existed if workers were paid on-time. Now, WHO and Ministries of Health know when and how much workers are paid, every time.

$80m+
disbursed to health workers

Across 91 polio campaigns in 23 countries, over US $80 million has been dispersed to health workers through digital payments.

2.3m
health workers paid

2.3 million health workers in 23 countries have been paid through mobile money for polio campaigns.

2.5m
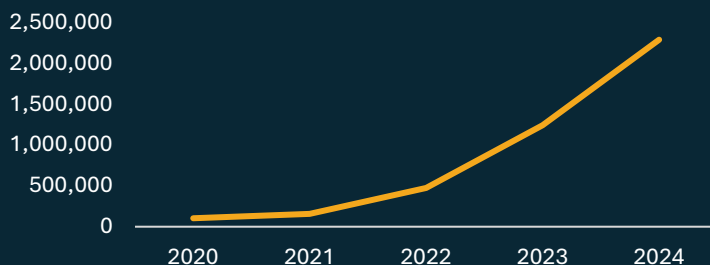**health workers registered on database**

2.5 million health workers have been registered in our database across 30 countries to receive campaign payments via mobile money.

42
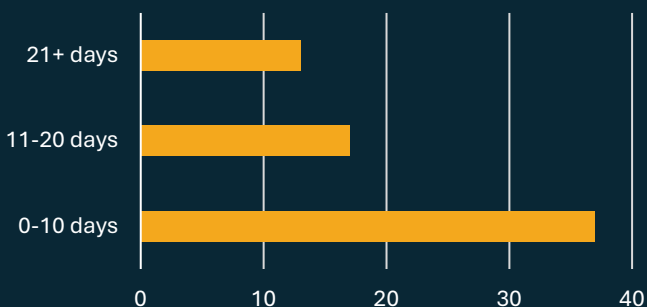**service providers partnerships**

WHO have partnered with 42 service providers to enable mobile money payment to health workers
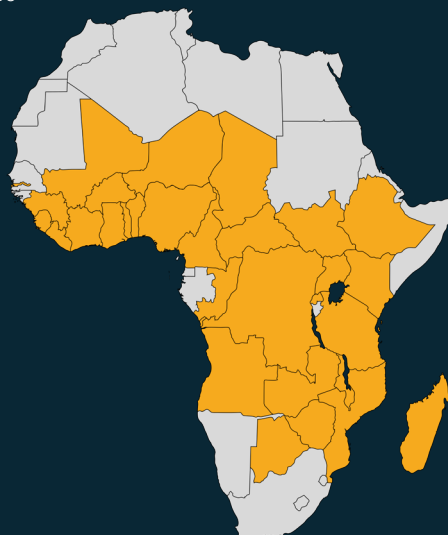
HEALTH WORKERS PAID

TIMELINESS OF PAYMENTS: 2020-2024

Total rounds: 67

COVERAGE 2020-2024

Total countries: 30

World Health
Organization

African Region

polio | global
eradication
initiative

CASE STUDY: THE DEMOCRATIC REPUBLIC OF THE CONGO

For years, polio frontline workers in the Democratic Republic of the Congo faced payment delays, fraud and inefficiencies due to cash-based disbursement. High administrative costs, security risks and lack of accountability undermined worker morale and campaign effectiveness. To address this, the WHO Digital Finance Team has partnered with the Ministry of Health to implement a digital payment system. The shift away from cash is improving speed, visibility and accountability of payments across the country. Highlights for 2024 are shown below.

400,000
frontline workers registered for digital payment

19 days
time for all workers to receive payments after each campaign

88%
provinces using digital payments for health workers

82%
health zones covered by digital payments

50%
health areas now using digital payments

43%
frontline workers receiving mobile money payments (up from 25% in 2023)

26%
National mobile money penetration rate

The WHO digital payment model for polio campaigns is expanding to non-governmental organizations like PATH and Village Reach, supporting immunization efforts in remote areas, processing over 27 800 attendance records. It also supported COVID-19 campaigns, with 15 000 workers enrolled, 10 000 of whom have had their attendance submitted.

Digitizing payments are improving efficiency, transparency, and worker satisfaction while strengthening immunization delivery. Continued investment in infrastructure and partnerships can expand this model to other health programmes, ensuring frontline workers receive secure, timely payments.

STORIES FROM THE FIELD

- Digital payments have eliminated delays and confusion from third-party cash handling.

- Ministries of Health have gained full oversight and control over workforce payments.

- In Malawi in 2022, 95% of health workers were paid on the same day of the campaign.

- In Nigeria in April 2024, 95% of 200,000 health workers were paid within the 10-day threshold.

- In Tanzania in 2022 during a nationwide campaign, 95% of health workers were paid within 10 days.

"In the first round, we did not receive our cash payment on time. But in the second round, we received our digital payment on time"

Post-campaign survey, Liberia, 2021

"I don't need to come back to collect my money. I save time and gasoline"

Pre-campaign survey, Burkina Faso, March 2022

RESPONSE
RAMP-UP

In recent years, the African Region has faced complex challenges in eradicating polio, including the need for a more adaptable, rapid and cost-effective mechanism to managing human resources. Existing systems were not designed to respond quickly enough to evolving needs. To tackle this, WHO and its partners have engaged a third-party private sector organization to use its expertise in providing fast, adaptable consultant support with market-rate mechanisms. This partnership provides rapid, safe deployment and regular monitoring of field consultants, ensuring the right people are placed in the right locations at the right time. It has been instrumental in deploying consultants to remote and insecure areas, maintaining critical operations and adapting to evolving programme needs. This is a supplementary workforce, used where needs are not fully met by the Global Polio Eradication Initiative (GPEI) human resource surge.

IMPACT 2022-2024

253 deployments
completed in 3 days or less
demonstrating fast mobilization since 2022

$1m+ saved
in a single year
In 2024, using a third-party service saved WHO $1,015,072, an 8% reduction in costs for hiring surge support.

100% visibility
on consultant deployment
through an online dashboard, providing real-time full oversight on where consultants are deployed and when

3500+
on consultant on the roster
highly-trained and experienced polio consultants ready for rapid deployment, including lab technicians, epidemiologists, social and behaviour change specialists, cold and supply chain logisticians and surveillance officers, as of January 2025.

## SCALE-UP 2023-2024

Cumulative recruitment

250	800	1000	2500	3500+
Jan 2023	Jul 2023	Jan 2024	Jul 2024	Jan 2025
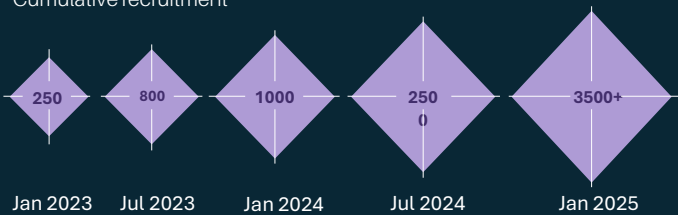
CONSULTANT ACTIVITIES 2024

- **26,000+ site visits** conducted across 22 **countries**. That's 80 daily visits. A total of **52% of visits** targeted high-risk areas. These national and district-level visits strengthen surveillance by identifying gaps, tracking cases, and mapping priority areas to improve poliovirus detection.

- **180,000 health workers** trained by consultants on acute flaccid paralysis (AFP) surveillance. Caregivers have also been sensitized on the importance of immunization.

- **96% of consultants submit weekly reports** with 96% on time, which provides visibility into their work, contributions, and challenges, helping guide future planning,

DEPLOYMENT COVERAGE 2023-2024

Total counties: 22

Lakes
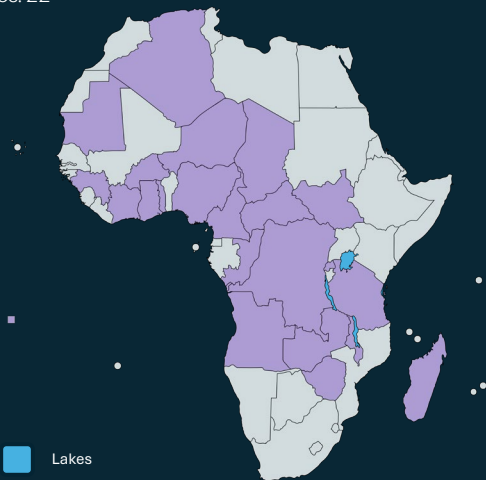
GENOMIC SEQUENCING FOR POLIO

World Health Organization
African Region

polio global eradication initiative

In the WHO African Region, genomic sequencing confirms the presence of polioviruses helps us understand how the virus is spreading and guides our response to different polio variants. Until recently, most African countries sent samples abroad for analysis, delaying results and slowing outbreak response. To fix this, the polio programme began building in-country sequencing capacity, training laboratory staff, piloting rapid methods like direct detection, expanding Sequencing and equipment access and renovating infrastructure. As a result, more countries have stronger surveillance systems that can now confirm virus spread locally, respond faster and have infrastructure and training to potentially sequence other pathogens. All polio labs have been trained on virus isolation and intratypic differentiation, including more than 100+ lab personnel in 2023 and 2024.

METHODS FOR POLIOVIRUS SEQUENCING

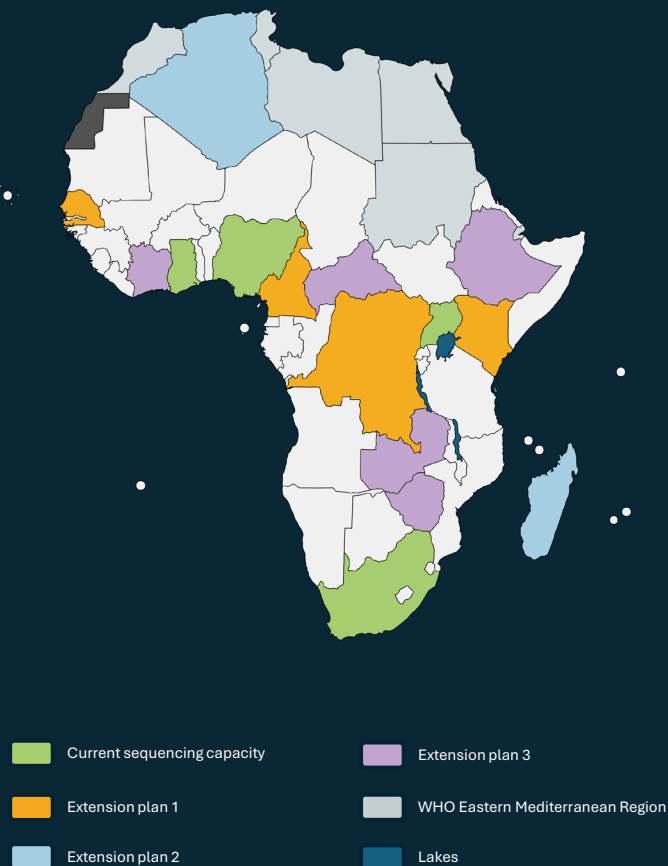| Method	What it does	Is it genomic?	Speed (from sample to result)
Intratypic differentiation	Before sequencing, laboratories use this to quickly identify the virus type, but it doesn't read the virus's genetic code.	☑ Yes	⏱ Fast (~7-10 days)
Whole genome sequencing	Considered the gold standard, it analyses the virus's genetic code to track transmission and mutations	☑ Yes	⌛ Moderate (~10-20 days)
Direct detection *(undergoing pilot testing)*	Detects and sequences poliovirus without culture, and can identify multiple poliovirus types in a single sample, such as co-infections with both type 2 and type 3	☑ Yes	⚡ Very fast (~1-2 days)

HIGHLIGHTS

>96%
of polioviruses are now sequenced in Africa

in 2025, compared to 64% (40%) in December 2024, due to expanded regional capacity

2 more
regional sequencing labs established

in Nigeria & Uganda in 2025, alongside the already established labs in Ghana and South Africa

16 countries
received infrastructure or equipment upgrades

for polio labs between 2022-2024

-65% in turnaround time

in 2024 and Q1 2025, samples processed within the African Region had an average turnaround time of 6.5 days, compared to 18.5 days for those processed outside the region, due to strengthened capacity within the Region.

REGIONAL CAPACITY

- 🟩 Current sequencing capacity
- 🟪 Extension plan 3
- 🟧 Extension plan 1
- ⬜ WHO Eastern Mediterranean Region
- 🟦 Extension plan 2
- 🟦 Lakes

ENVIRONMENTAL SURVEILLANCE
FOR POLIOVIRUS

World Health Organization
African Region

polio | global eradication initiative

Environmental surveillance, **testing sewage and wastewater for poliovirus**, provides more information on where the virus is spreading. This method is especially valuable in areas with low immunization coverage, low chances of transmission or weak surveillance systems. To strengthen early detection, the polio programme has established, expanded and improved the sensitivity of an extensive environmental surveillance network across the WHO African Region. This growing system not only improves the speed and reliability of poliovirus detection but also provides significant infrastructure that could be expanded to other pathogens, including sampling sites, trained personal, transport systems and laboratory capacity.

HIGHLIGHTS 2022-2024

62 new sites
established in 23 countries
approximately **400 million more people** now live in a province with at least one site

551 sites
now exist across 45 countries
of which 90% are fully functional and detecting viruses

90% of sites
exist in high-risk areas for polio in 2024
allowing detection of transmission where it is most likely to occur, based on risk assessments

144 sites
that were underperforming were closed
which detected no enteroviruses for 12 months or more, allowing exploration of more suitable sites

50% of detections
were identified through environmental testing *before* any polio cases had been notified in 2024

58 review missions
supported 46 countries, initiating environmental surveillance in 12 and assessing it in 34.

Multi-pathogen testing
polio's infrastructure has been used to detect mpox in the Democratic Republic of the Congo and COVID-19 in South Africa and Zambia, showing its value for other health threats

ENVIRONMENTAL SURVEILLANCE FOOTPRINT

Every country in the WHO African Region has a wastewater testing sites except Comoros

ENVIRONMENTAL SURVEILLANCE PERFORMANCE

20% **improvement in sensitivity between 2022-2024**

- non-polio enterovirus detection rates increased from **47 to 67%**

In 2024:
- **92%** of samples reached the lab within 3 days (in countries with labs)
- **71%** of samples reached the lab in 7 days (in countries without labs)
- **98%** of samples arrived the lab in good condition
- **14%** reduction in sample shipment delays since 2022
- **40%** increase in the number of sample collections supervised with an e-data tool, Open Data Kit (ODK), from 33% in 2022 to 73% in 2024

COUNTRY INSIGHTS

- **In Nigeria,** the enterovirus detection rate improved from **56% to 86%** following the closure of 32 underperforming environmental surveillance sites, and environmental sampling detected orphan viruses before cases appeared, providing valuable information to guide the response.

- **In Botswana,** four new environmental sites were established in 2022, leading to the detection of five positive poliovirus samples that had not yet been detected through case-based surveillance.

- **In Zimbabwe,** during the response to the 2021-2022 wild poliovirus type 1 outbreak, no virus or variants were detected through traditional surveillance, however, environmental surveillance identified variant poliovirus type 2, prompting an appropriate response.

ELECTRONIC SURVEILLANCE: eSURV

World Health Organization — African Region

polio global eradication initiative

Detecting and responding to disease outbreaks requires fast, reliable surveillance. In the WHO African Region, paper-based reporting was slow, incomplete and lacked accountability. Field officers were not able to easily track site visits, prioritize high-risk areas and verify whether surveillance was being conducted effectively. Many sites, including traditional medicine practitioners and informal health providers, were not included in official records, leading to missed cases and gaps in detection.

eSURV, introduced in 2017, replaces paper-based reporting with a real-time electronic tool for surveillance that is used in 45 out of 47 countries in the Region. This app enables officers to identify gaps such as unreported vaccine-preventable cases, underperforming sites and records and verifies officer presence and activities in health facilities through geo-coded data. It has resulted in a transparent, data-driven system that ensures every visit is mapped, verified and accounted for. However, the system couldn't differentiate high-priority sites from lower-risk ones and field workers also had no way to visualize coverage gaps or ensure that visits aligned with surveillance needs. To address this, the eSURV Companion app was developed, designed to introduce priority-based tracking, eliminate issues with incomplete site listings and improve how surveillance coverage is measured. The app includes real-time mapping that shows which areas need attention, which provides clearer data to guide decision-making.

IMPACT

Real-time
surveillance tracking system

that ensures every surveillance visit is mapped, verified and accounted for

2 million+
visits tracked across 46 countries

since 2017, helping surveillance officers document, verify and prioritize disease surveillance in real time

28 times
more visits to high-priority sites

verified using e-SURV in 2024 since in 2017. Every 13 days in 2024, we verify as many high-priority site visits as we did in the entire year of 2017

44% reduction
in districts with missing or unreported data

since 2020, ensuring more districts are being properly accounted for in reporting
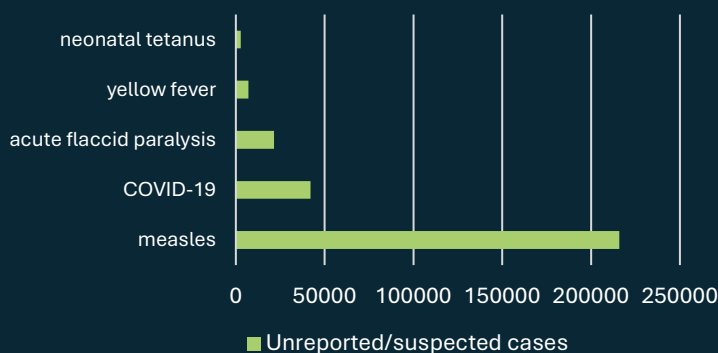
1798 silent districts
identified in 43 countries

since 2017, including non-reporting sites and areas with weak surveillance performance

UNREPORTED CASES IDENTIFIED 2017-2024

Total: 290,000 cases

Bar chart — categories: neonatal tetanus, yellow fever, acute flaccid paralysis, COVID-19, measles. X-axis: 0 to 250000 (intervals of 50000).

■ Unreported/suspected cases

ESURV COMPANION APP 2023-2025

An updated mobile application was introduced to replace eSURV, improving how field officers track, verify, and respond to disease surveillance data in real time. The app:

- replaces static lists with interactive maps
- automatically logs every visit
- generates instant reports
- provides real-time navigation

6000 field officers in 7 countries
implementing eSURV through the companion app

60,000+ health facilities validated
using geolocation data plus 4000 traditional sites

64 trained superusers
in 16 countries, trained in all aspects of eSURV companion app functionalities to ensure the complete deployment in implementing countries, at all levels.

eDATA TOOLS: ENVIRONMENTAL SURVEILLANCE

World Health Organization — African Region

polio | global eradication initiative

Polio can spread silently in communities long before cases appear, but one of the most powerful ways to detect it early is through testing wastewater for the virus. However, gaps in selecting the right sites, inconsistent monitoring and delays in reporting have weakened this early warning system, making outbreaks harder to detect and respond to in time. To fix this, the WHO African Region's Polio Programme introduced digital tools that transform how environmental surveillance is managed. These tools help teams track where and when samples are collected, ensure proper procedures are followed and provide real-time monitoring of site performance. By digitally verifying sample collections, it can help guide outbreak response and detection efforts more effectively, with potential to expand to other pathogens.

HIGHLIGHTS IN 2024

45/47
countries in the African Region

have rolled out digital tools for environmental surveillance to monitor and improve site performance

70%
of environmental sites use eData tools

526 active sites verify sample collections and other information using eData tools

1000
site supervisors registered in 12 countries

strengthening site monitoring, verification and data-sharing for more transparent and coordinated environmental surveillance

53 **review missions**

were carried out by the WHO Regional Office that used these digital tools to analyze data to set up new sites or assess the sensitivity surveillance sites in 38 countries between 2022-2024.

PICKING THE PERFECT SPOT

ES Catalogue V4.0 hosts all environmental surveillance sites and uses digital elevation models and ground-collected bluelines to define catchment area boundaries and estimate the populations they cover, helping to place sampling sites where they can generate the most useful data for detecting polioviruses. Between 2022-2024:

- **45 countries** have used it to select sites
- **250 ES** sites now have data on bluelines waterways digitization and estimated populations draining into those sites
- **315 maps**, have been generated and used this tool to select and publish suitable sites based on geospatial data
- **529 sites have been updated** in the ES Catalogue as active/inactive using the site specification form

E-DATA TOOL SUPERVISION IMPLEMENTATION 2024

- Reached target (≥80%)
- Below target (<80%)
- WHO Eastern Mediterranean Region

SAMPLE COLLECTIONS VERIFIED

73%
of sample collections digitally recorded

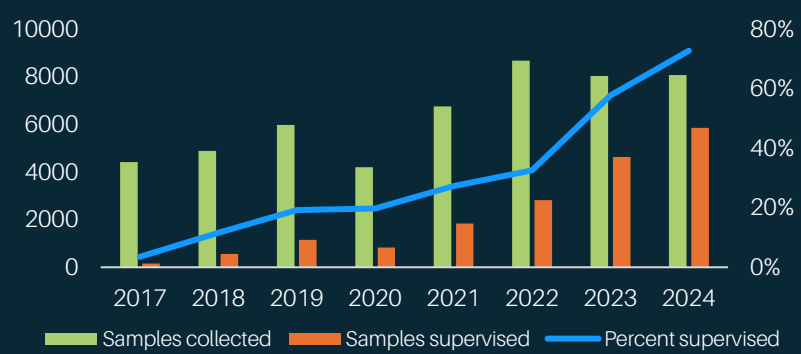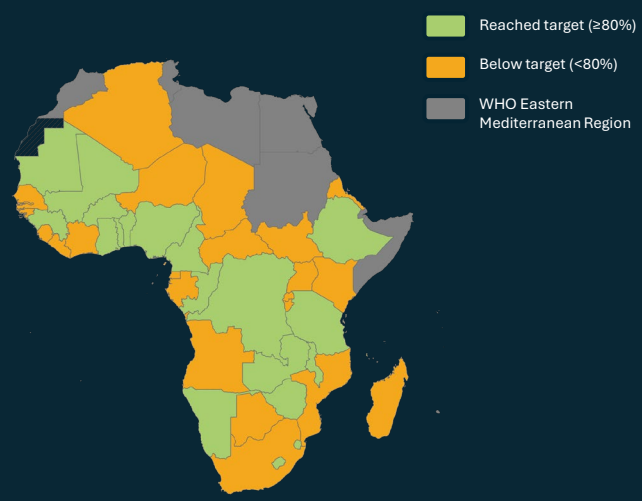up from just 4% in 2017, over 5800 sample collections were supervised and recorded using the eData tools in 2024

Samples collected — Samples supervised — Percent supervised

GEOSPACIAL TRACKING SYSTEMS

Geospatial Tracking Systems (GTS) is a technology that can help improve vaccination coverage by using real-time location data to verify geographical areas that have been covered or missed during mobile outreach and house-to-house vaccination activities. This data is displayed on printed maps or through a dashboard, allowing supervisors to quickly spot missed settlements and send teams back before the campaign ends. It also helps improve the quality of microplanning, so teams are effectively dispersed, and enhances the speed and accuracy of campaign monitoring. It works in areas with network coverage and stores data offline when there's no signal.

HIGHLIGHTS

Better accountability

GTS provides real-time, verifiable evidence of where vaccination efforts have reached and whether coverage is complete

Immediate action

After each vaccination day, missed areas are flagged each evening so teams can go back and vaccinate children the next morning. The data generated also informs mop-up activities

7 countries
implemented GTS

across 70+ sub-regions and 132,000+ vaccination teams between 2021-2024

before | after

World Health Organization
African Region

Rapid alerts helped reach nearly 2 million children in Congo
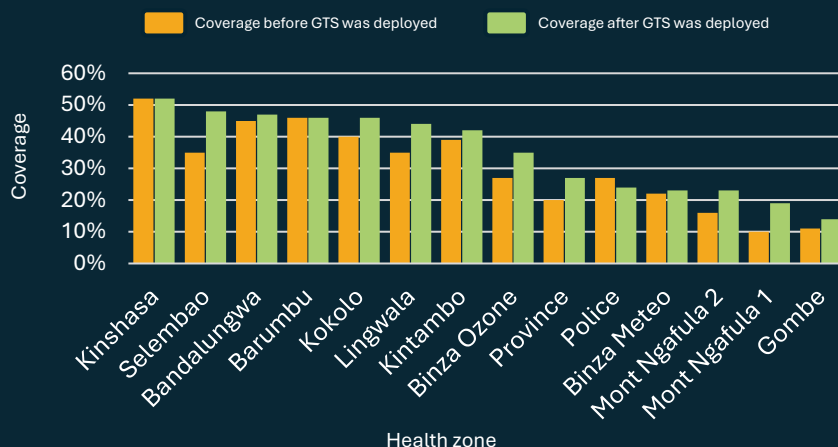
BENEFIT

- **Live verification:** At the end of each vaccination campaign day, data is compared with settlement maps to show missed areas , duplicated areas, and this information helps guide mop-up activities and also planning for future campaigns.

COUNTRY INSIGHT

- **65% to 82% geographical coverage improvement:** In the Katuba district, of Haut Katanga province, Democratic Republic of the Congo, GTS was used to map settlements and refine team plans after low geo-coverage (65%) in August 2023. By the next round, geo-coverage improved to 82%, following enumeration exercises in-between rounds, showing its impact on better planning and reaching more areas.

GTS systematically improved coverage between two immunization rounds

Democratic Republic of the Congo, comparing June and August rounds, 2024.

Legend:
- Coverage before GTS was deployed
- Coverage after GTS was deployed

Y-axis: Coverage (0% – 60%)

X-axis (Health zone): Kinshasa, Selembao, Bandalungwa, Barumbu, Kokolo, Lingwala, Kintambo, Binza Ozone, Province, Police, Binza Meteo, Mont Ngafula 2, Mont Ngafula 1, Gombe

GEOGRAPHIC INFORMATION SYSTEMS: CAPACITY BUILDING

Limited access to Geographic Information System (GIS) infrastructure and a shortage of technical and analytical expertise have made coordinating disease surveillance and vaccination efforts across Africa challenging. To bridge this gap, the WHO Regional Office for Africa established a GIS Centre in 2017 and conducted needs assessments to identify gaps, which led to the establishment of a network of GIS focal persons across 47 countries. These individuals were drawn from ministries of health and WHO country offices and trained in using geospatial tools for a faster, smarter disease response. With these skills, public health workers can identify high-risk areas, monitor vaccination team movements in real-time and detect surveillance gaps more effectively. In polio campaigns, this has assisted teams in mapping repeatedly missed communities, tracking the movements of vaccinators and improving outbreak monitoring. These same tools have strengthened responses to other health emergencies, including COVID-19 and Ebola, by providing real-time data for better decision-making.

HIGHLIGHTS 2017-2024

Enhancing knowledge

for Ministry of Health staff on GIS technologies

making countries not only users but also owners of geospatial solutions, driving local innovation in GIS applications tailored to their unique challenges, reducing reliance on WHO.

900+

trained GIS focal points

across 45 out of 47 African countries, including 150 WHO employees and 760 health ministry workers trained on GIS solutions

37 countries

supported by GIS-trained personnel who provided better population estimates and geo-boundaries

leading to more accurate denominators for quality microplanning activities and vaccination rounds, as well as improved mapping and data visualization through dashboards at their respective emergency operations centres and ministries of health

Mobile communities

mapped across Lake Chad Basin countries since 2019, allowing for better tracking and vaccination of populations on-the-move, such as nomads, refugees and populations living between two borders

SCALING CAPACITY ACROSS AFRICA

- A **train-the-trainer model** has been implemented, enabling GIS experts to pass on their skills to district teams and keep knowledge spreading
- **Smart-screen TVs** have been provided to all 47 member states, one for the Ministry of Health and one for the WHO country office, allowing teams to stream and visualize data directly from the field
- **Smartphones and laptops** have also been provided to 47 ministries of health to improve their data and information management capacity
- **Cascaded subnational trainings** of district level staff in Guinea, Malawi and Madagascar to improve the quality of data analysis and surveillance facility visit activities
- Ongoing **needs assessments** and refresher trainings ensure GIS focal points stay updated with the **latest tools and software**
- **Reducing reliance on the WHO Regional Office for Africa** by strengthening local capacity and cross-country learning in outbreak assessments and field operations

GIS TRAINING TOPICS

- **GIS mapping** using applications like ArcMap, ArcGIS pro and QGIS
- **Data visualization** and **interpretation** using Power BI
- **Data analysis** and **workflow automation** using R
- **Mobile data collection** using Open Data Kit and ArcGIS Survey123
- **Web mapping training** using ArcGIS online platform

MAP OF GIS TRAININGS 2017-2024

- Regional training participation
- In-country and regional training
- Not yet trained
- WHO Eastern Mediterranean Region

ADVOCACY
FOR POLIO

World Health Organization
African Region

polio global eradication initiative

Polio eradication in the WHO African Region is at a critical crossroads. While wild poliovirus transmission has been stopped, and the region is on track to end all active variant type 1 outbreaks by December 2024, variant type 2 outbreaks remain a major challenge. Sustaining political commitment is crucial. Governments are managing competing priorities, unrest and political changes. Effective response also depends on strong coordination across countries and the Global Polio Eradication Initiative partners to ensure clear, strategic advocacy. Without sustained engagement, outbreak response risks delays, threatening the path to eradication.

Advocacy is essential to securing the political commitment needed for rapid, high-quality outbreak response, strengthened surveillance, and improved routine immunization. Through high-level engagement, the GPEI and WHO AFRO are working with governments to ensure polio remains a national priority and to address bottlenecks that hinder effective response.

HIGHLIGHTS IN 2024

8 engagements
to advance high-level polio advocacy efforts

including:
- 2 World Health Assembly side meetings with Ministers of Health in 5 countries in Lake Chad Basin and 4 in West Africa
- 2 Regional Committee for Africa side meetings
- 2 Regional Director for WHO and UNICEF virtual meetings for 7 countries in Lake Chad Basin and Sahel and 7 in West Africa
- Polio Oversight Board and WHO Regional Director visit to Madagascar

3 meetings
with leaders from donor countries and partners

bilateral and multi-lateral discussions which agreed actions and support needed to successfully interrupt poliovirus transmission

10 missions
technical and advocacy country visits

to engage and encourage action in Ethiopia, Zimbabwe, Nigeria, Niger, Chad, Central African Republic, Benin, Côte d'Ivoire, Senegal, Guinea to enhance response to polio outbreaks

Regional mechanism
for polio advocacy established

with Gates Foundation, GAVI, Rotary International, UNICEF and WHO.

EVENTS TIMELINE

Donor Briefing
13 February 2024
donors updated on progress and challenges, and they shared their ongoing support, reinforcing collective action

African Union Summit
January-February 2024
leaders called for stronger political commitment and domestic financing to boost immunization

77th World Health Assembly
27 May-1 June 2024
meetings with Ministers to address polio resurgence in Lake Chad Basin and West Africa

Polio Oversight Board advocacy mission to Madagascar
24-28 April 2024
encouraged efforts to strengthen routine immunization and polio outbreak response

Interministerial meeting of Lake Chad Basin and Sahel countries
16 August 2024
cross-border plan endorsed by Ministers of Health and dates for synchronized responses agreed

Regional Briefing with Rotary
25 June 2024
mobilized support and created synergies in advancing advocacy activities

74th session of the WHO Regional Committee for Africa
26-30 August 2024
polio closed-door sessions for Horn of Africa & Lake Chad Basin countries to reaffirm urgency and cross-border action required for polio outbreaks

Regional Briefing with Rotary
21 October 2024
mobilized support and created synergies to advance advocacy activities for polio

World Polio Day
24 October 2024
Advocacy moment to spotlight progress and call for continued commitment. In Niger, it included a campaign launch and assessment of country advocacy needs

Meeting on polio in West Africa with WHO and UNICEF Regional Directors
4 November 2024
7 Ministers committed to stopping type 2 variant poliovirus by 2025

Advocacy retreat
5-7 November 2024
to strengthen inter-agency coordination and partnership for polio and immunization advocacy

Donor Briefing
17 December 2024
donors updated on progress and challenges, and they shared their ongoing support, reinforcing collective action