POLIO Environmental Surveillance Bulletin

Quarter 2 2025

World Health Organization
African Region

POLIO GLOBAL ERADICATION INITIATIVE

ENVIRONMENTAL SURVEILLANCE OPTIMIZATION IN THE REGION

As the Polio Eradication programme navigates a challenging period with resource constraints, the value of environmental surveillance is ever more critical to assure the absence of missed transmission in populations, especially where AFP surveillance indicators are not optimal.

Environmental Surveillance optimization is essential in ensuring the maintenance and improvement of the sensitivity of the ES network and in optimizing ES based on country context, with emphasis on high-risk areas per the Global Polio Surveillance Action Plan 2025 – 2026. Towards this direction, WHO AFRO PEP, in close collaboration with countries, embarked on various ES optimization activities that included field visits to the Democratic Republic of Congo and Mozambique.

The Democratic Republic of Congo established ES in 2017 and has detected many outbreaks through ES; however, there has been a decline in performance, with many sites in the country not meeting the target of 50% or above enterovirus detection rate for a sensitive site.

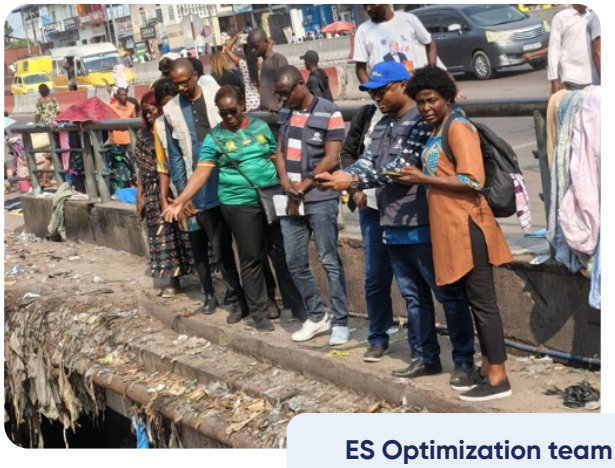
The mission's objective was to identify the reasons for this poor performance and support in optimizing the ES network for the detection of any polio virus transmission. A multisectoral team visited and assessed thirteen (13) sites in three provinces, as well as five (5) potential sites. In the end, three (3) poor-performing sites were closed, while two (2) new sites were identified to join the ES network. The review team provided recommendations to the other

sites to improve their performance and will monitor their progress in the coming months. The mission also facilitated refresher training for personnel in the field, as sixty-two (62) persons were trained on SOP for collection, supervision, and use of electronic data tools.

The Optimazation visit to Mozambique aimed to enhance the performance of the ES network, which was established in 2017 with ten (10) operational sites across five provinces. Upon assessment of sites in the country, two underperforming sites were recommended for closure, while two newly identified sites were added to the network. Modifications to ensure optimal performance were made for other existing sites in the country to be reviewed after six (6) months of operations.

Similarly, across the region, efforts to optimize ES are ongoing. For example, in Cameroon, the detection of circulating variant poliovirus type 2 at one site prompted a detailed investigation. In Ethiopia, the timely detection of poliovirus led to the establishment of new sites and a stakeholder review meeting involving key ES actors.

All these have culminated in increased sensitivity of ES sites in the region, with seven (7) of the fourteen (14) countries that have detected variant polioviruses doing that through ES alone. ES optimization activities are planned for other priority and outbreak countries in the second half of the year. in addition to other activities like the meeting of the region's ES Strategic group, a body of experts that advises the programme and the commencement of the use of autosamplers for sample collection to achieve a more representative sampling in selected poor-performing sites. This, together with regular monitoring of the performance of sites, investigation and closure of poor-performing sites, will continue for the rest of the year.



ES Optimization team Assessing sites in DRC

Investigation of cVDPV2 from RTK ES site in Cameroon

ES Review Meeting in Ethiopia

Site visits in Mozambique

ENVIRONMENTAL SURVEILLANCE MULTIPATHOGEN DETECTION

The One Health concept highlights the linkages between the health of humans, animals, and the environment. Similarly, integrated disease surveillance systems are increasingly adopting a model that complements clinical surveillance with information from wastewater and environmental surveillance (WES). It is in recognition of this that the Global Polio Surveillance Action Plan (GPSAP) 2025–2026 has the integration of polio environmental surveillance with other wastewater-detectable pathogens as one of its major activities.

The Polio Eradication Programme in the region has been collaborating with various partners to achieve this objective. In the Democratic Republic of Congo, the Mpox wastewater detection project utilised polio ES sites, personnel, and logistics systems to deliver samples to testing labs as the country managed the Mpox outbreak.

Similarly, there has been a collaboration with the United Nations Environment Programme (UNEP) on the European Commission Health Emergency Preparedness and Response Authority (EC-HERA) sponsored project which aims to develop wastewater and environmental surveillance strategies to contribute to preparedness and response, develop capacity building strategies especially for low resource settings and in strategic locations and contribute to global transparency in the exchange of data and collaboration. Regional workshops for Southern and Eastern Africa were organised in April and May 2025 to strengthen regional capacity for implementing and managing wastewater surveillance systems in African countries through knowledge sharing and to support governments and relevant stakeholders to plan to establish, strengthen and/or scale up wastewater surveillance systems for environment and public health purposes. This enabled knowledge sharing and capacity building of the major players in these regions towards increased use of WES in preparedness and response to outbreaks.

A pilot project to scope and prepare capacity-building strategies for low- and middle-resource settings identified four countries in the region for Implementation, which are the Democratic Republic of the Congo, Senegal, Uganda, and Zambia. An assessment visit to Senegal was conducted by the WHO Regional Office with support from WHO Headquarters to identify priority pathogens with the country team and conduct microplanning, including site selection and identifying and evaluating the capacities of testing laboratories. There are plans to conduct similar visits to the three other pilot countries. Related to this is the recent publication of a guideline by the WHO Water, Sanitation, Hygiene, and Health unit on the prioritisation, implementation, and integration of Wastewater and Environmental Surveillance, along with summary sheets for Poliovirus, SARS-CoV-2, Influenza, Mpox, Cholera, and Typhoid, while more pathogens are being worked on. Its purpose is to guide the dynamic development, prioritisation and integration of WES programs for one or multiple targets from the multitude of potential targets, considering both current and future threats.

UNEP Eastern (Nairobi) and Southern (Johannesburg) Africa Workshop on Wastewater and environmental Surveillance for Public Health

WHO AFRO team's Advocacy visit to WHO Representative, Senegal during the Pilot Multi-Pathogen Implementation visit

ENVIRONMENTAL SURVEILLANCE PERFORMANCE IN THE AFRICAN REGION, Q2 2025

Environmental surveillance key performance indicators according to global guidelines are monitored regularly. Four of the indicators are highlighted in the table below.

The proportion of sites with ≥ 50% enterovirus isolation rate was 65% in Q2, 2025, with 37% of countries having 80% or more of its sites achieving this target. 89% of countries have more than 80% of samples reaching the laboratory in good condition Finally, the number of countries with 80% of samples reaching the lab within three or seven days of collection improved from 47% to 64% (29/45) following the revision of the indicators according to the GPSAP 2025 - 2026, 53% (24/45) of countries have ≥ 80% of samples collected supervised with ODK.

S/N	Country	No of ES sites	No of samples received in the Lab	% of samples reaching the lab ≤3/ ≤7 days	% of samples reaching the lab in good condition	% of sites with ≥ 50% EV isolation	% of collections supervised with ODK
1	Algeria	10	60	93	95	100	-
2	Angola	11	64	6	100	64	100
3	Benin	7	42	74	100	57	100
4	Botswana	8	42	100	100	100	100
5	Burkina Faso	10	70	97	100	30	100
6	Burundi	7	35	74	100	86	52
7	Cabo Verde	2	2	100	100	50	-
8	Cameroon	17	134	99	99	82	73
9	Central African Republic	6	23	96	96	50	78
10	Chad	5	50	48	100	80	54
11	Cote d'Ivoire	25	117	81	89	92	52
12	Democratic Republic of Congo	22	141	65	97	5	94
13	Equatorial Guinea	7	35	40	100	57	63
14	Eritrea	2	2	0	0	0	-
15	Eswatini	5	22	96	100	80	91
16	Ethiopia	8	31	100	100	75	100
17	Gabon	4	20	100	65	75	5
18	Gambia	3	21	86	100	67	100
19	Ghana	14	82	98	99	71	81
20	Guinea	9	55	100	100	89	98
21	Guinea Bissau	6	24	75	100	0	58
22	Kenya	21	125	98	99	57	50
23	Lesotho	3	7	71	100	0	57
24	Liberia	2	14	86	100	100	44
25	Madagascar	30	159	94	100	73	35
26	Malawi	11	76	30	84	72	83
27	Mali	6	30	87	100	33	65
28	Mauritania	2	22	82	100	50	88
29	Mauritius	4	10	100	100	100	100
30	Mozambique	10	59	70	100	60	89
31	Namibia	8	65	83	100	100	60
32	Niger	16	126	78	100	25	69
33	Nigeria	97	598	100	100	56	91
34	Republic of Congo	5	35	100	100	0	20
35	Rwanda	6	24	100	58	50	71
36	Senegal	14	80	100	100	79	60
37	Seychelles	2	10	100	100	0	-
38	Sierra Leone	5	25	40	96	100	48
39	South Africa	24	112	84	100	54	39
40	South Sudan	7	47	62	45	57	13
41	Tanzania	20	87	85	52	90	88
42	Togo	4	32	100	100	100	94
43	Uganda	11	51	78	96	100	-
44	Zambia	18	92	99	99	94	92
45	Zimbabwe	9	19	0	94	100	100
	Total African Region	523	2973	74/88	95	65	72

The WHO Regional Office for Africa

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Africa is one of the six regional offices throughout the world, each with its own programme geared to the particular health conditions of the Member States it serves.

Member States

Algeria
Angola
Benin
Botswana
Burkina Faso
Burundi
Cabo Verde
Cameroon
Central African Republic
Chad
Comoros
Congo
Côte d'Ivoire
Democratic Republic of the Congo
Equatorial Guinea
Eritrea
Eswatini
Ethiopia
Gabon
Gambia
Ghana
Guinea
Guinea-Bissau
Kenya
Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
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Mozambique
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