ZAMBIA

Polio Outbreak Response

Situation Report No 4

27th March 2025















1.0 SITUATION OVERVIEW

- Zambia has been responding to a series of Polio outbreaks since the detection of Wild Polio Viruses type1 (WPV1) in Malawi on February 17, 2022.
- Additional WPV1 cases were detected in Mozambique that were genetically linked to the Malawi case.
- Two environmental surveillance (EVN) detections of cVDPV2 were reported from Kitwe and Mufulira districts: ENV-ZAM-CBT-MUF-KAW-24-011 (PV2, 6 nt diff) and ENV-ZAM-CBT-KTW-MIN-24-010 (PV2, 7 nt diff) with dates of collection in November 2024.
- The results were confirmed on March 19, 2025, prompting a detailed risk assessment, which is currently taking place from March 25 to March 30, 2025. As part of the response, assessment tools have been developed, and the teams have been deployed to facilitate effective implementation of mitigation measures.
- Zambia also detected cVDPV2 in October 2022 in the Copperbelt province, and in 2023 more cVDPV2
 were isolated both in Environmental samples and in an AFP case in Copperbelt, Lusaka and Northern
 Province.
- National authorities and GPEI partners have been conducting outbreak response activities for each of these outbreaks. The outbreak response implemented includes:
 - 1) Immediate declaration of the outbreak/high risk event as an emergency by the national government 2) Detailed investigation and risk assessment.
 - 3) Enhanced surveillance to increase sensitivity and confidence that any ongoing person-to-person transmission of poliovirus will be rapidly detected
 - 4) Planning for a vaccination response (SIAs): Robust coordination, planning, budgeting, community engagement, and monitoring are enabling functions central to successful response.
 - 5) Scope of vaccination. The scope of vaccination campaigns varied according to the risk assessment
- As part of the outbreak response, five (5) rounds of bOPV and four (5) rounds of nOPV2 supplementary Immunization activities (SIAs) have been conducted in the country between March 2022 July 2024.
- In addition, strengthening of routine Immunisation activities using strategies like integration of the Biannual Child Health Week (CHWk) activities with Polio outbreak response SIAs and heightened sensitization for Polio surveillance.

Polio Viruses in Zambia 2022-2025.



Figure 1: Polio Viruses in Zambia 2022-2024.

The Map provides an overview of the reported cases of circulating Vaccine-Derived Poliovirus type 2 (cVDPV2) in Zambia for the years 2022 and 2024. The map, highlights the affected districts and the status of ongoing investigations.

Reported Cases

- 1. 2022 Cases:
 - Three environmental surveillance (EVN) detections of cVDPV2 were reported from Kitwe and Mufulira districts.
- 2. 2023 Cases:
 - Mpulungu District, Northern Province: One Acute Flaccid Paralysis (AFP) case and four cVDPV2 cases were reported.
 - Mufulira District: One environmental detection (EVN) of VDPV2 case was reported.
- 3. 2023 Cases:
 - Ndola District: One environmental detection (EVN) of VDPV2 case was reported
- 4. 2024 Cases:
 - Two environmental surveillance (EVN) detections of eVDPV2 were reported from Kitwe and Mufulira districts.

Table 1: Polio Viruses in Zambia 2022-2025.

No	Date	Province	District	Virus Type	Contacts	Virus source, nt diff and link
1	17/10/2022	Copperbelt	Kitwe	cVDPV2		ENV-ZAM-CBT-KTW-MIN-22-009 linked to Botswana GAB-GLV-22-003 emergence
2	18/11/2022	Copperbelt	Kitwe	cVDPV2		ENV (15-16 nt diff) link to Botswana and RDC-MAN-5 emergence
3	18/11/2022	Copperbelt	Mufulira	cVDPV2		ENV (15-16 nt diff) link to Botswana and RDC-MAN-5 emergence
4	1/6/2023	Copperbelt	Ndola	cVDPV2		ENV (7 nt diff) link to Bujumbura and RDC-SKV-1
5	15/06/2023	Northern	Mpulungu	cVDPV2		AFP (11 nt diff) link to RDC-SKV-1
6	4/7/2023	Northern	Mpulungu	cVDPV2	4	4 AFP healthy children contacts (12-13 nt diff) link to Mpulungu AFP cVDPV2 Case
7	1/7/2023	Lusaka	Lusaka	cVDPV2		ENV (8 nt diff) link to Mpulungu AFP cVDPV2 Case
8	19/12/2023	Copperbelt	Ndola	VDPV2		ENV (6-7 nt diff) link to Ndola environmental sample collected on December 19, 2023.
9	19/03/2025	Copperbelt	Kitwe	cVDPV2		ENV-ZAM-CBT-KTW-MIN-24-010, flask 3– PV2, 7 nt diff, VDPV2
10	19/03/2025	Copperbelt	Mufulira	cVDPV2		ENV-ZAM-CBT-MUF-KAW-24-011, flask 3– PV2, 6 nt diff, VDPV2

5.0 SURVEILLANCE

Surveillance performance as at epidemiological week 12, 2025

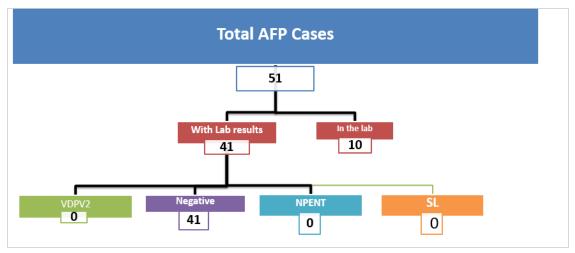


Figure 2: Total AFP cases week 12, 2025

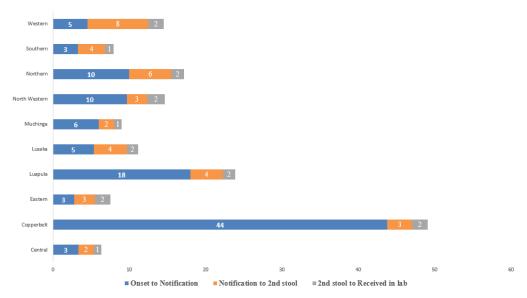


Figure 3: Timeliness of Reported AFP Cases at week 12, 2025

	Performance	e of AFP Sur	veillance, 20	25, Zambia											
	(Data submitted from provinces (week 12, 2025)														
							Cases		Stool sample						Surveillance
	2024	Annual	True	Annualized	Charl	adequacy	reported		arrived in AFP of		AFP cases (vith lab results	Non-polio		
Provinces	estimates	Expected	AFP	Non-polio	31001	auequacy	<=7 days	Investigated	2	with results	per	nding	enterovirus cases		index
	<15 рор	AFP	Cases				onset	<=48 hours	<=3 days	withresuits					
	(million)	Cases	Reported	AFP rate	#	%	of paralysis	of notification	1	l	#	%	#	%	
Central	1.2	35	7	2.6	7	100%	86%	86%	86%	6	1	14%	0	0%	2.6
Copperbelt	1.4	41	6	1.9	6	100%	33%	67%	67%	5	1	17%	0	0%	1.9
Eastern	1.2	37	10	3.5	9	90%	70%	90%	70%	7	3	30%	0	0%	3.2
Luapula	0.8	23	5	2.8	2	40%	40%	100%	100%	2	3	60%	0	0%	1.1
Lusaka	1.5	46	4	1.1	3	75%	50%	75%	100%	3	1	25%	0	0%	0.8
Muchinga	0.5	14	1	0.9	- 1	100%	100%	100%	100%	% 1		0%	0	0%	0.9
North Westerr	0.7	20	3	1.9	2	67%		100%	67%	3	0	0%	0	0%	1.3
Northern	0.8	24	3	1.6	2	67%	33%	100%	100%	2	1	33%	0	0%	1.1
Southern	1.2	36	10	3.6	9	90%	60%	80%	100%	10	0	0%	0	0%	3.2
Western	0.7	21	2	1.3	1	50%	100%		100%	2	0	0%	0	0%	0.6
Zambia	9.9	298	51	2.2	42	82%	59%	82%	86%	41	10	20%	0	0%	1.8
	Key:	1). Non - polio AFP rate - target ≥ 3per 100,000 under 15 years children													
		2). AFP cases	with stool samp	oles within 14 c	lays (st	ool adequa	cy) - target ≥ 80	%							
		3). Surveilland	e index - targel	≥ 1.5											
		4). Non-polio e	nterovirus rate	- target ≥ 10%											

Table 2: AFP Surveillance performance indicators for week 12, 2025

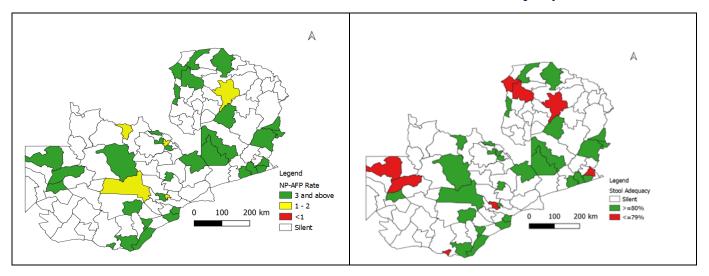


Figure 4: NPAFP Rate and Stool Adequacy Indicators week 12, 2025

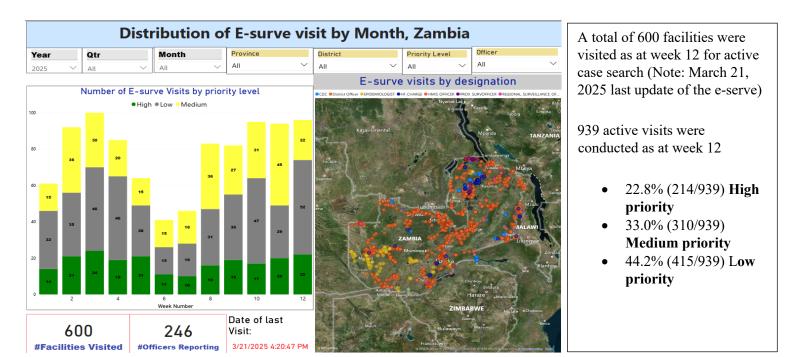


Figure 5: Zambia E-Serve Visits by Priority Level as of week 12, 2025

2) Environmental surveillance

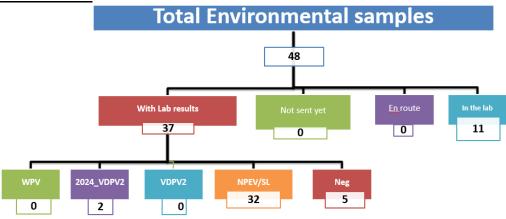


Figure 6: Total Environmental Surveillance Sample as of week 12, 2025

Province	District	Site name	No. of samples collected			No arriving <=3 days	No with results <=32 days	No with NPENTSL /SPV	% arriving in good condition	% arriving <=3 days	% with results <=32 days	% detected EV	# ODK Supervisions	% Samples Collection Supervised with ODK
LUSAKA	LUSAKA	CHELSTONE TREATMENT PLANT	3	2	3	3	2	2	100%	100%	67%	100%	2	100%
NORTHERN	KASAMA	CHIBA WASTEWATER TREATMENT PLANT	3	3	3	3	3	3	100%	100%	100%	100%	1	33%
EASTERN	CHIPATA	CHIPATA TREATMENT PLANT	2	1	2	2	1	1	100%	100%	50%	100%	1	100%
SOUTHERN	LIVINGSTONE	EUREKA STABILIZATION PONDS	3	3	3	3	3	3	100%	100%	100%	100%	3	100%
LUAPULA	MANSA	KABUTA-MANSA TREATMENT PONDS	3	3	3	3	2	1	100%	100%	67%	33%	1	33%
NORTH WESTERN	KALUMBILA	KALUMBILA PONDS	3	3	3	3	3	2	100%	100%	100%	67%	3	100%
COPPERBELT	NDOLA	KANINI TREATMENT PLANT	3	2	3	3	2	2	100%	100%	67%	100%	3	150%
LUSAKA	LUSAKA	KAUNDA SQUARE SITE	3	2	3	3	2	2	100%	100%	67%	100%	2	100%
COPPERBELT	MUFULIRA	KAWAMA WEST TREATMENT PLANT	3	2	3	3	2	2	100%	100%	67%	100%	3	150%
LUSAKA	LUSAKA	MANCHINCHI TREATMENT PLANT	3	2	3	3	2	2	100%	100%	67%	100%	0	
COPPERBELT	NDOLA	MASALA SEWER LINE	2	1	2	2	1	0	100%	100%	50%	0%	3	300%
COPPERBELT	KITWE	MINDOLO TREATMENT PLANT	2	2	2	2	2	2	100%	100%	100%	100%	2	100%
COPPERBELT	CHILILABOMBWE	MUSHILI SEWER LINE	3	2	3	3	2	2	100%	100%	67%	100%	3	150%
LUSAKA	LUSAKA	NGWERERE SITE B	3	2	3	3	2	2	100%	100%	67%	100%	2	200%
LUSAKA	CHONGWE	NGWERERE TREATMENT PLANT	3	2	3	3	2	1	100%	100%	67%	50%	0	
COPPERBELT	KITWE	NKANA EAST TREATMENT PLANT	3	2	3	3	2	2	100%	100%	67%	100%	3	150%
SOUTHERN	снома	SHAMPANDE STABILIZATION PONDS	3	3	3	3	3	3	100%	100%	100%	100%	3	100%
National			48	37	48	48	36	32	100%	100%	75%	86%	35	94.59%

Table 3: Performance of ES Surveillance Indicators week 12, 2025, Zambia

Summary AFP surveillance performance indicators as of Epi- week 12, 2025

- 51 AFP cases reported with 2.2/100,000 popn<15yrs NP-AFP rate
- 32% (37/116) of districts reported at least 1 case of AFP
- 28% (32/116) of districts had NP-AFP-rate ≥ 3
- 82% stool Adequacy Rate
- 78% (29/37) of districts had a stool adequacy rate $\ge 80\%$
- 22% (8/37) of districts had a stool adequacy rate <80%
- 68% (79/116) of silent districts

Summary Environmental surveillance performance indicators as of Epi-week 12, 2025

- Environmental samples collected from the 16 sites are 48 in total
- 37/48 (77.1%) samples have lab results and 11/48 (22.9%) are in the lab
- Negative 5/37 (13.5%),
- NPEV/SL 32/37 (86.5%)
- VDPV2 0/37 (0.0%)
- 2024 VDPV2 2/198 (1.0%)

6.0 NEXT STEPS

- Conduct and finalize the Field Investigation in Mufulira and Kitwe Districts
- Conduct and Finalize the Risk Assessment.
- Analyze findings from the assessment to determine intervention and next steps
- Strengthen surveillance and Routine Immunization activities in Kitwe and Mufulira districts.
- Improve AFP Case Detection: Strengthen surveillance in districts with NP-AFP rates ≥3 and increase community awareness for timely AFP reporting, especially in silent districts (80%).
- Enhance Stool Sample Quality: Support districts with a stool adequacy rate <80% and provide training on proper stool collection and handling.
- Address Silent Districts: Focus on silent districts by improving AFP surveillance and engaging local health authorities to boost reporting.
- Follow-up on Pending Environmental Samples: Expedite analysis of pending environmental samples and monitor NPEV/SL trends to identify potential hotspots.
- Strengthen Data Use and Reporting: Ensure timely, complete reporting and conduct regular data reviews to improve reporting accuracy and consistency.