THE REPUBLIC OF UGANDA
Ministry of Health

Uganda Polio Outbreak Response Campaign Report

Districts Covered: 49

Health Regions Covered: Jinja, Karamoja, Mbale and Soroti

Round 1: 3rd to 6th October 2024

Round 2: 7th to 10th November 2024

Compiled by: UNEPI – Ministry of Health & GPEI

December 2024

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Table of Acronyms

AEFI	Adverse Effects Following Immunization
AFP	Acute Flaccid Paralysis
CHAI	Clinton Health Access Initiative
cMYP	country Multiyear Plan
CRS	Congenital Rubella Syndrome
DHIS	District Health Information System
DHO	District Health Officer
DISO	District Internal Security Officer
DHS	Demographic and Health Survey
DRC	Democratic Republic of Congo
DVS	District Vaccine Store
EPI	Expanded Program on Immunization
EVM	Effective Vaccine management
GAVI	Global Alliance for Vaccines and Immunization
GISO	Gombolola Internal Security Officer
GoU	Government of Uganda
GPEI	Global Polio Eradication Initiative
GVAP	Global Vaccine Action Plan
HC	Health Center
HMIS	Health Management Information System
HOA	Horn of Africa
HPAC	Health Policy Advisory Committee
HPV	Human Papilloma Virus
HSD	Health Sub-District
HSS	Health System Strengthening
HSSIP	Health Sector Strategic Investment Plan
IDSR	Integrated Disease Surveillance
IEC	Information, Education and Communication
IPV	Inactivated Polio Vaccine
LC	Local Council
MMR	Measles Mumps Rubella
MR	Measles-Rubella
MOH	Ministry of Health
NCC	National Coordination Committee
NHP	National Health policy
NID	National Immunization Day
NMS	National Medical Store
NVI	New Vaccine Introduction

OPV	Oral Polio Vaccine
PCV	Pneumococcal Conjugated Vaccine
PEI	Polio Eradication Initiative
PIRI	Periodic Intensified Routine Immunization
RCM	Rapid Convenience Monitoring
REC	Reaching Every Community
RI	Routine Immunization
RRH	Regional Referral Hospital
SIA	Supplemental Immunization Activity
UBOS	Uganda Bureau of Statistics
UNEPI	Uganda National Expanded Program on Immunization
UNICEF	United Nations Children Emergency Fund
UNMHCP	Uganda National Minimum Health Care Package
UPA	Uganda Pediatric Association
USAID	United States Agency for International Development
UVRI	Uganda Virus Research Institute
VIMCB	Vaccine and Injection Material Control Book
VHT	Village Health Team
WHO	World Health Organization
WPV	Wild Polio Virus

Foreword

Uganda successfully conducted two rounds of a sub-national polio campaign in the regions of Mbale, Jinja, Soroti, and Moroto, covering a total of 49 districts. The first round took place from October 3rd to 6th, 2024, while the second round followed from November 7th to 10th, 2024. Both rounds achieved remarkable administrative coverage of over 100%, vaccinating 3,269,211 children in the first round and 3,500,521 children in the second round.

This success can be attributed to several key factors: the outstanding community mobilization efforts led by Local Council Chairpersons (LC1s) and Village Health Teams (VHTs), the unwavering commitment of frontline health workers, the positive response from communities, and the crucial financial and technical support provided by the Global Polio Eradication Initiative (GPEI) and other partners.

Prior to the campaign, Uganda developed a comprehensive Outbreak Response Plan to address the risks identified through initial investigations and risk assessments. This plan proved instrumental in achieving high vaccination coverage across all implementing districts. Independent surveys, including Independent Monitoring and Lot Quality Assurance Sampling (LQAS), further validated the strong performance of the campaign.

I extend my deepest gratitude to the Government of Uganda for their steadfast commitment to safeguarding the health of our children and to the GPEI and other partners for their vital support. A special acknowledgment goes to our frontline health workers, whose selfless dedication in the face of numerous challenges made this campaign a success. Finally, I commend parents and caregivers for their active participation and for ensuring no child was left behind in this critical endeavor.

This campaign marks a significant step forward in Uganda's journey toward eradicating polio and protecting future generations. Let us continue working together with renewed determination to achieve a polio-free world.

Thank you all.

For God and My Country

Hon. Dr. Jane Ruth Aceng

MINISTER OF HEALTH

Acknowledgement

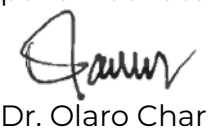
On May 27, 2024, a circulating vaccine-derived poliovirus type 2 (cVDPV2) was detected at an environmental surveillance site in Doko, Mbale City. This posed a significant public health challenge, threatening to reverse Uganda's hard-earned polio-free certification status. It highlighted critical gaps in routine immunization coverage and weaknesses in the surveillance systems.

In response, the Ministry of Health, with the support of partners, developed an Outbreak Response Plan and conducted two rounds of sub-national Polio Vaccination Campaigns across 49 districts in the regions of Mbale, Jinja, Soroti, and Moroto. These campaigns targeted children under five years of age, utilizing the novel oral polio vaccine type 2. Through the integration of lessons learned from prior campaigns, both rounds achieved remarkable success, with district-level coverage exceeding 95%. Round 1 recorded an administrative coverage of 118% (3,269,211 children vaccinated), while Round 2 reached 127% (3,500,521 children vaccinated).

On behalf of the Ministry of Health and the Government of Uganda, I extend my deepest gratitude to our Global Polio Eradication Initiative (GPEI) partners for their indispensable role in planning and executing this critical vaccination campaign. This initiative has not only likely interrupted the transmission of cVDPV2 in Uganda but also bolstered population immunity and strengthened routine immunization systems to prevent potential poliovirus importations.

Special thanks go to the World Health Organization (WHO), UNICEF, CDC, Rotary International, and other invaluable partners for their tremendous contributions to the campaign. We also recognize and deeply appreciate the dedication of health workers and vaccination teams whose tireless efforts ensured that all children, regardless of location, received the recommended vaccine.

Looking ahead, Uganda remains committed to strengthening its surveillance systems, which are critical to the eradication of all polioviruses. With the threat of wild poliovirus (WPV) on the continent and confirmed cVDPV2 outbreaks in neighboring countries, it is imperative to continue enhancing routine immunization systems to safeguard against virus importations. Together, we can protect Uganda's children and secure a polio-free future.



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Executive Summary

In response to the detection of a circulating vaccine-derived poliovirus type 2 (cVDPV2), Uganda declared a public health emergency and launched a two-round, house-to-house polio vaccination campaign in October and November 2024. This campaign, led by UNEPI under the Ministry of Health and supported by GPEI partners, aimed to interrupt virus transmission and bolster population immunity.

To support the implementation of the campaign, Uganda received USD 5,342,337 in funds and vaccines totaling 3,460,000 doses for Round 1 and 3,552,400 doses for Round 2. Coordination and monitoring were overseen by the National Coordination Committee (NCC), with active involvement of all immunization partners. Preparatory activities included activating regional Emergency Operations Centers (EOCs), supporting district microplanning, verifying cold chain inventory, and conducting preparedness assessments.

The campaign achieved remarkable results, with 3,269,211 children vaccinated in Round 1 (118% administrative coverage) and 3,500,521 children in Round 2 (127% administrative coverage). Independent monitoring showed coverage of 92% in Round 1 and 96% in Round 2, while Lot Quality Assurance Sampling (LQAS) recorded 90% in Round 1 and 95% in Round 2.

Operational efficiency improved between the two rounds, with Round 1 using 3,367,600 doses and experiencing a 2.92% wastage rate (including five missing vials), and Round 2 using 3,509,450 doses with no missing vials and a reduced wastage rate of 2.04%.

Surveillance efforts were enhanced during the campaign. District Health Teams (DHTs) and Village Health Teams (VHTs) were oriented on Acute Flaccid Paralysis (AFP) surveillance, and data were captured in real-time using the Epi-Vac online dashboard. In Round 1, 110 suspected AFP cases were reported, with 35 cases in Round 2. After verification, only confirmed cases were retained, and all were investigated, with results showing many had been previously reported. Adverse Events Following Immunization (AEFI) were minimal, with 28 cases in Round 1 and six in Round 2, all found to be non-significant.

After each round, after-action review meetings were conducted, and feedback from all regions informed the development of a surveillance improvement plan to strengthen AFP detection post-campaign. This comprehensive approach ensured the campaign's success while identifying areas for future improvement in polio eradication efforts.

1. Country background

Uganda is located in the East African Region. It is bordered by Kenya to the East, Democratic Republic of Congo to the West, South Sudan to the North, United Republic of Tanzania to the South and Rwanda in the South west. The total population of Uganda was estimated at 45million as at May 2024.

Administratively, Uganda has one Central Government which as of 2024, is divided into four Regions and 150 districts. Rural areas of districts are subdivided into 1,773 sub-counties, 10,243 parishes, and 71,090 villages. Municipal and town councils are designated in urban areas of districts. The health system in Uganda operates on a decentralized referral system. A patient's first point of contact within the health system is often through the Village Health Team (VHT), who are responsible for basic health interventions within local communities and villages.

The Uganda Expanded Program on Immunization (EPI), targeting the six childhood killer diseases established in 1980, is now providing 13 antigens. All immunization activities are coordinated by UNEPI.

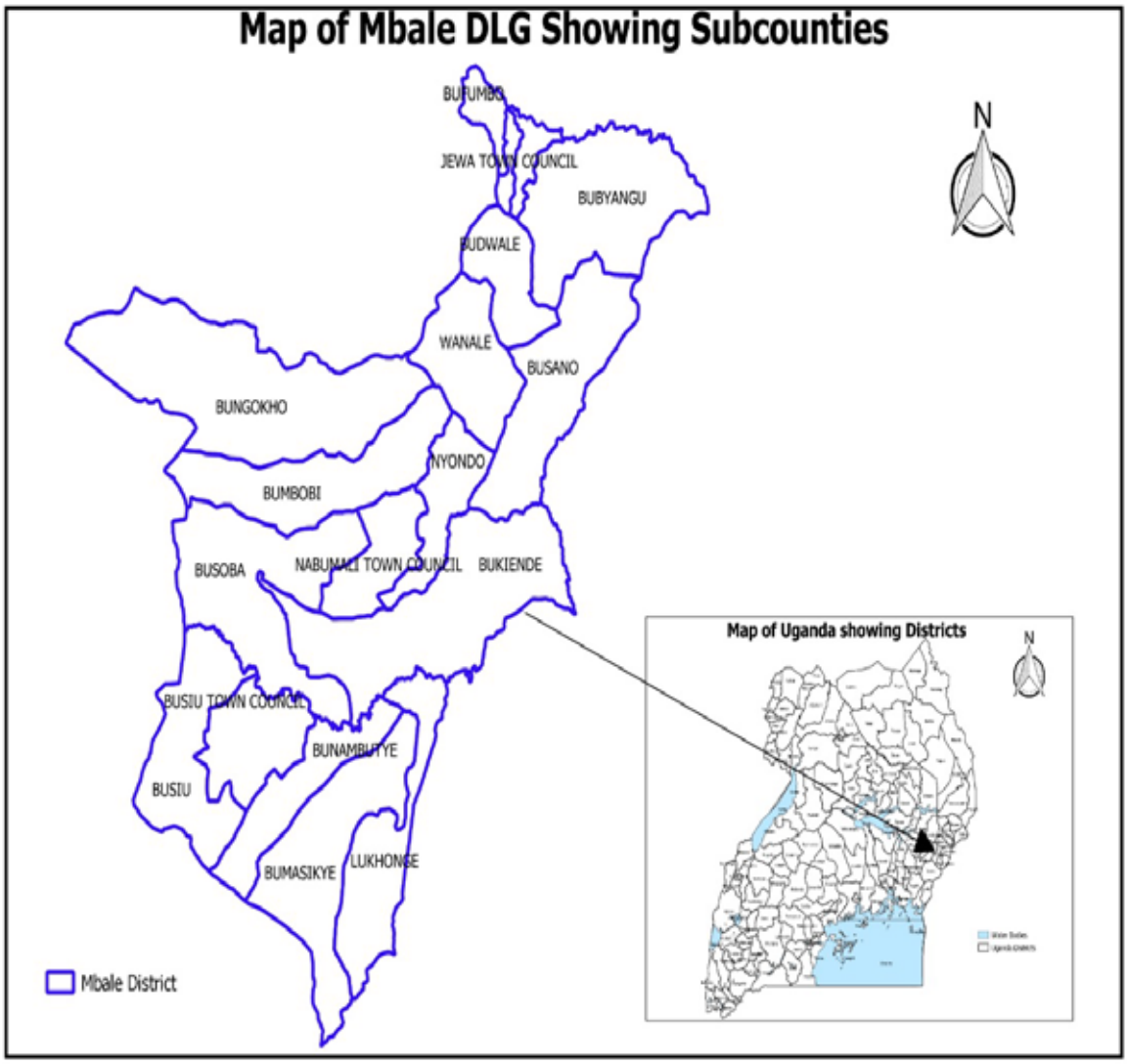
Certification Status

The African Regional Certification Commission (ARCC) for Polio certified Uganda as free of all polioviruses in 2006. However, Uganda was re-infected with WPV in 2009 with a wild polio virus importation, which was effectively controlled with the last case of this outbreak reported to have occurred in November 2010 in Mayuge District. Since then, Uganda strived to maintain an effective surveillance system and documented that the last polio infection was a vaccine-derived poliovirus type 2 (VDPV2) that had onset in Aug 2014. Following prompt response to this outbreak, Uganda remained polio free until 2021 when new cVDPV2 were detected from environmental surveillance. This was responded to with 2 round campaigns conducted in January & November 2022. However, on 27th May 2024, the lab confirmed an environmental case from Doko site in Mbale, Eastern Uganda.

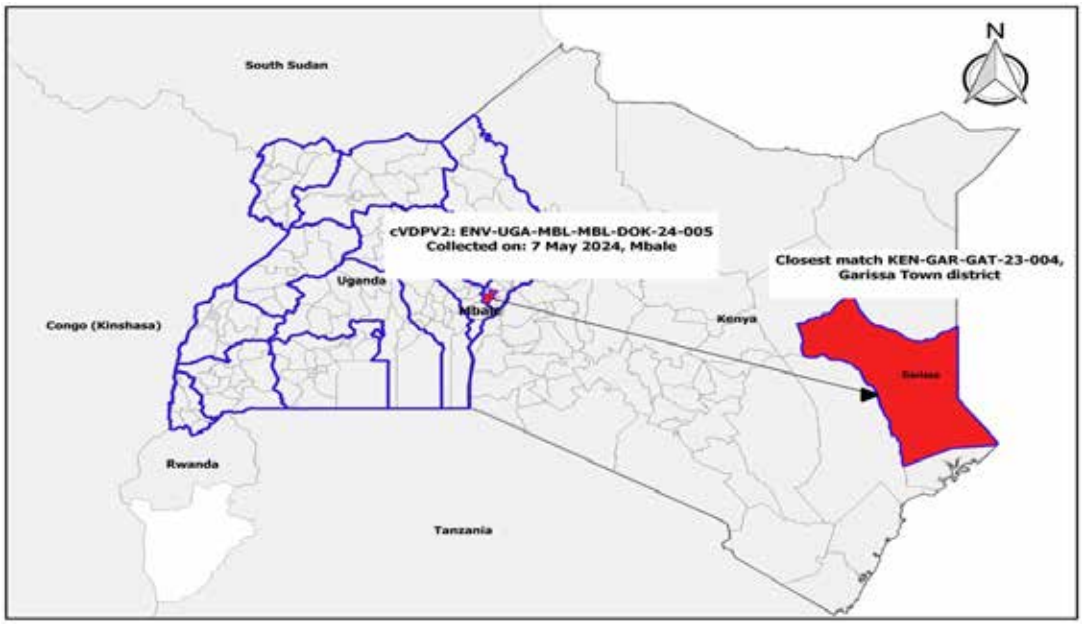
2. Detection of Circulating Vaccine Derived Polio Virus Type 2 (VDPV2) in Uganda

On 07 May 2024, cVDPV2 was isolated from the environmental surveillance site located in Doko in Mbale city. This was a major public health challenge that threatened to reverse Uganda's Polio certification status. This pointed to significant gaps in Uganda's routine immunization coverage warranting a major public intervention. Ministry of Health was notified by the Lab on 27 May 2024. There was an IHR notification on 30 May 2024 and the outbreak was declared by the DGHS on 01 June 2024.

Laboratory testing and environmental surveillance revealed the presence of a circulating vaccine-derived poliovirus type 2 (cVDPV2), confirming its transmission within the region. The test also revealed that the virus was imported from Kenya Garrisa with 98.78% similarity neighboring Uganda in the East, underscoring the persistent risk posed by cross-border movements.



Linkage with other known cVDPV2 isolates in the region



The initial investigation conducted in the outbreak area revealed the following risk factors for the outbreak;

Population movement and migration routes

Mbale city, located in the Eastern part of Uganda, thrives as a bustling part of Mbale region. It not only serves its own district but also acts as a business nexus for neighboring regions such as Teso, Moroto, Jinja and Lango. Additionally, it serves as a transit point for various bus and truck companies operating within Uganda and to neighboring countries. These companies ply routes to Kenya, South Sudan, Rwanda, and the Democratic Republic of Congo. The neighboring countries of South Sudan and Kenya are also responding to outbreaks of cVDPV2.

There are internally displaced persons from Karamoja in the industrial division of the city at Namatala cell. This area is also referred to as Karamoja, given the high numbers of Karamojong IDPs.

Community social mapping

The city boasts diverse industries, including the Industrial Park, which contributes to its economic vitality. Furthermore, Mbale hosts universities like Bugema University and the Islamic State University of East Africa. These institutions cater to both Ugandan students and foreign learners, particularly from Somalia and Kenya. The foreign student population is dynamic as they may often move in and out of Uganda.

The predominant ethnic group in Mbale city and district is the Bagisu ethnic group, renowned for their cultural practices, including the Imbalu ceremony. Alongside the Bagisu, other ethnic groups such as the Iteso, Bagwere, and Sabiny contribute to the city's rich cultural tapestry.

Most people visiting the Mbale bus and taxi parks are in transit to other areas to and from neighboring districts in Mbale and other regions or to countries such as Kenya, South Sudan, the Democratic Republic of Congo and Rwanda.

Mapping inaccessible areas and high-risk populations

The city has geographically hard to reach areas because of the hilly terrain and poor road access. These include Bungokho-Mutoto, Bukonde and Lwasa sub-counties.

There are religious sects in the city such as Injiri/666 that preach against routine vaccination interventions. These are located in Bungokho-Mutoto, Nakaloke and Namanyonyi sub-counties.

The city has a high-water table in the areas of Busamaga, Bukasakya, Namakwekwe, Kikyafu and Kimirembe. These predispose to contamination of water sources with fecal matter given that the toilet facilities are at the same level with the water table.

Mbale city also welcomes immigrants from various parts of the world. The Chinese community, concentrated in the Industrial Park, actively manages newly established

industries. Meanwhile, Somali refugees engage in business ventures or pursue education at the Islamic University of East Africa and mainly reside in the Indian quarters/Amber courts which is one of the communities served by Doko Sewage Plant. Additionally, the Indian community plays a significant role in the city's commercial landscape and usually reside in their business buildings within the city.

In Uganda refugee populations are also housed in the neighboring districts of Kampala Metropolitan Area, Mukono and Wakiso districts.

Past documented communicable disease incidence and transmission patterns

Historical records of communicable disease occurrences and transmission trends indicated recurrent outbreaks of infectious and vaccine-preventable diseases in the region of Mbale. Recently, Mbale city grappled with a Cholera outbreak in February 2024. A total of 29 cases were documented, comprising 24 suspected, 1 probable, and 4 confirmed cases. The outbreak primarily concentrated in five villages within the city: Masanda (14 cases), Kibiniko (2 cases), Nabitiri (3 cases), and Sisiyi cell (5 cases). Investigations traced the likely source to untreated sewage discharged into river Nakibiso from the industrial park, contaminated water used by residents for domestic purposes. In response, the city formulated a cholera response plan, disseminating it to relevant stakeholders. Recommendations were forwarded to the industrial park administration, urging the establishment of proper sewage treatment facilities and the appointment of an environmental health officer to oversee sanitation practices. However, adherence to these recommendations by the park administration has been lacking, despite the existence of a Water, Sanitation, and Hygiene (WASH) plan.

Additionally, water samples collected from both the industrial park and neighboring communities in Masanda village revealed contamination with coliforms across all water sources. While water guard tablets were distributed to affected communities for short-term domestic water treatment, this measure has not been sustainable.

In March 2024, both Mbale and Manafwa districts faced a measles outbreak. In Mbale district, 24 cases were identified, including 5 confirmed and 19 suspected cases, mainly from Bumasule and Malema villages. The confirmed cases were linked to zero dose vaccination against measles and residing in households affiliated with a religious group opposing routine vaccination. Mbale district swiftly developed a measles response plan, albeit hindered by financial constraints they postponed a planned mass vaccination drive. Instead, targeted vaccination initiatives were implemented in outbreak hotspots and underperforming health facilities.

Meanwhile, Manafwa district, situated adjacent to Mbale district's eastern border, declared a measles outbreak on March 21, 2024, after 4 of 6 samples collected from suspected children in Bugobero HCIV and analyzed at the UVRI were positive for the disease. Overall, a total of 62 cases (4 confirmed and 58 epidemiologically linked) were identified and these were from Bumateyo village. Risk assessment conducted in the home village of Bumateyo in Bugobero sub-county for the confirmed cases and at the

serving health facilities of Bugobero HCIV and Butiru HCIII revealed that the low-lying zone districts are often affected by cholera and malaria outbreaks. Kibuku district in the low zone continuously has a high Malaria incidence. Complications of Malaria such as blackwater fever and anemia have led to a high mortality and morbidity in Kibuku and Butaleja districts.

Multi-hazard risk assessments have identified several districts in the Mbale region, including Mbale city and district, as high-risk areas for flooding. In July and August 2022, the region experienced a devastating flood disaster that resulted in loss of life, damage to infrastructure, and displacement of communities. none of the children was fully vaccinated for the VPDs. The district developed a measles response plan but was not able to conduct mass vaccination for children under 5 years.

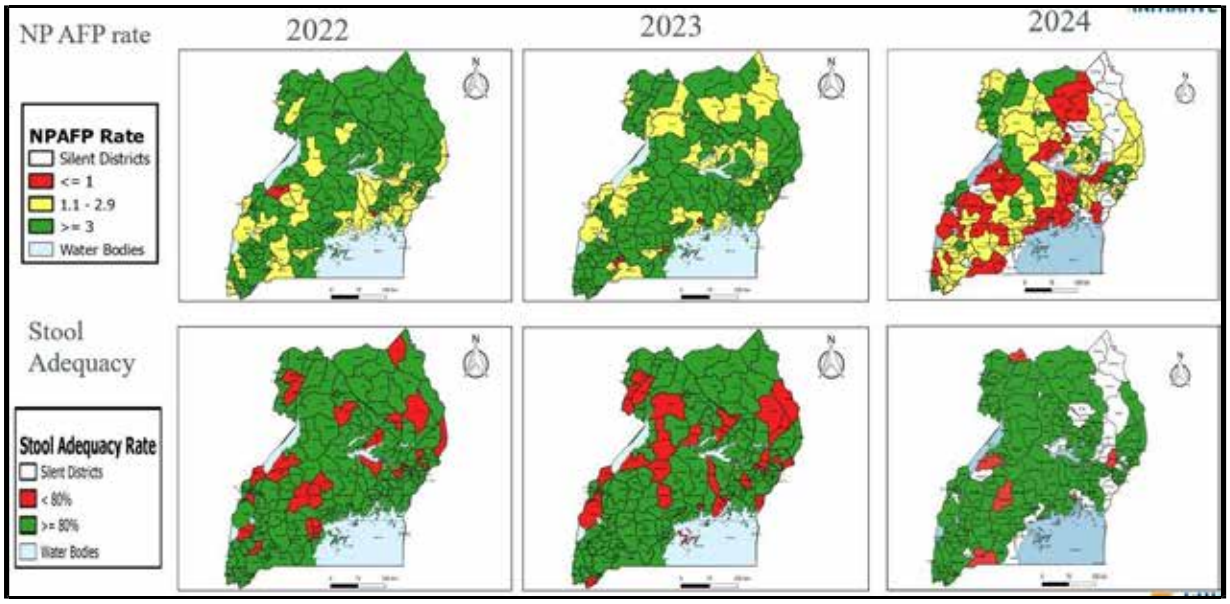
Measles outbreaks have recently been reported in a total of 19 districts in Uganda, including the two districts within the Mbale region.

The Mbale region has 3 main zones by virtue of its location around mountain Elgon. The highland zone is prone to disasters following heavy rainfall which lead to mass wasting of soils and landslides. The mid- highland zone is also at risk of falling debris, boulders, landslides, mass wasting, hailstorms, and flooding, while the low-lying zone experiences flooding which is widespread, hailstorms, siltation, and prolonged dry spells. These result in massive loss of lives, crops, destruction of infrastructure such as gravity flow schemes and water supply pipes, property and road network cut off and water-borne diseases. Subsequently, landslides have been reported in Bulambuli district, further exacerbating the challenges faced by the region

Active AFP search in Health facilities and communities in Mbale city and district

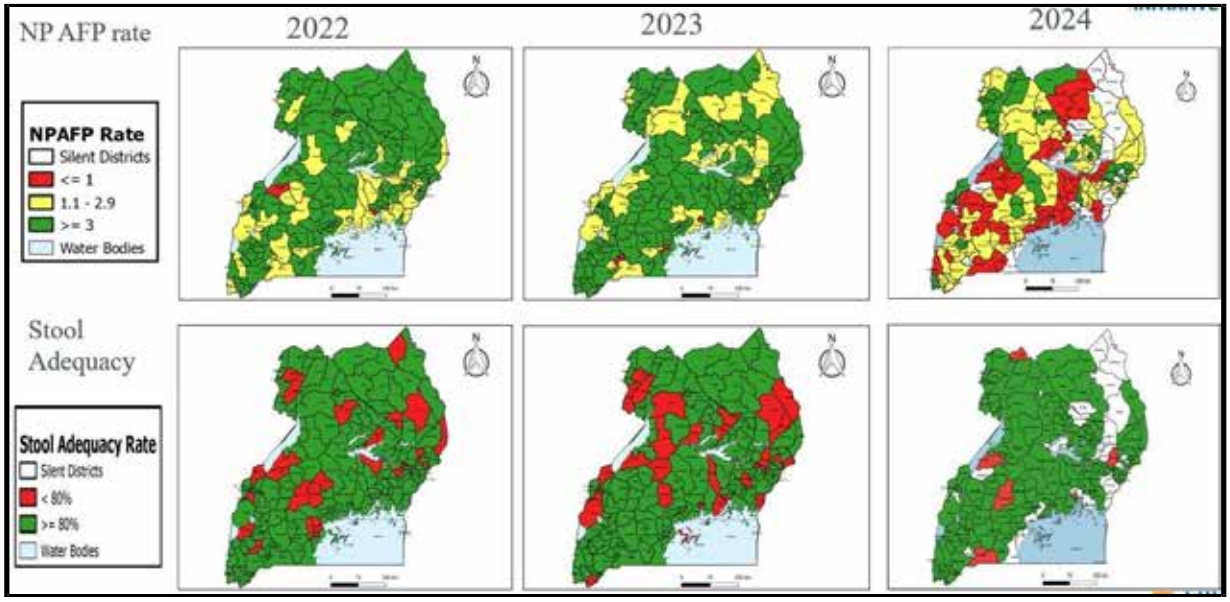
37 health facilities were mapped in Mbale city. 22 of the health facilities were private. As of 11th June 2024 a total of 20(54%) of health facilities had been visited for active search. Overall, 1 AFP late case was identified at Mbale regional referral hospital and samples were collected for assessment. The visited health facilities along the blue line included Cure children's hospital, Police HCIII, Prison's Health center II, Isamad Pioneer hospital, Maluku HCIII and Paradox clinic. Most of the Private health facilities were found not to have data collection tools or job aids. There was no documented case of AFP on active case search in the health facilities along the blue line.

AFP surveillance performance National AFP performance



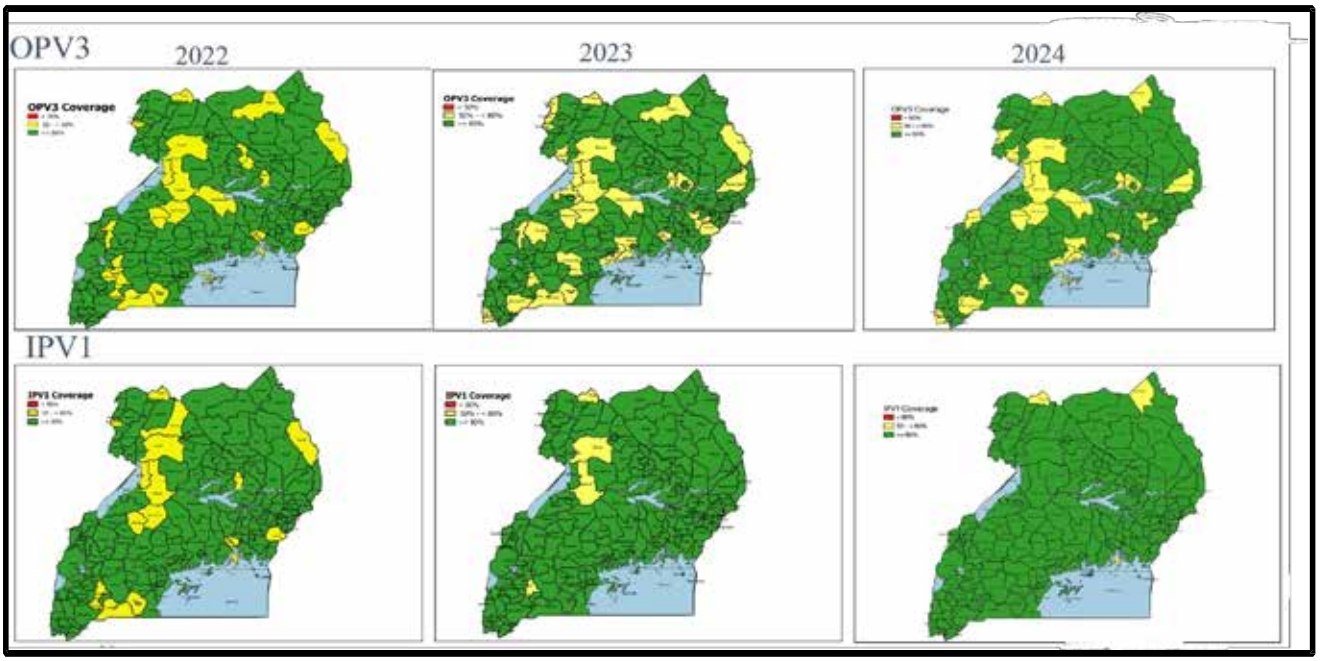
For AFP surveillance, the Non-Polio Acute Flaccid Paralysis (NPAFP) rate during an outbreak situation is targeted at 3. In 2022, a total of 38 districts fell below the recommended target, with 36 districts in 2023 and 117 districts in the first half of 2024. Regarding stool adequacy rate, in 2022, 24 districts did not meet the recommended target of 80% or above, while in 2023, 28 districts fell short, and in 2024, this number increased to 33 districts.

AFP performance for the Mbale region districts



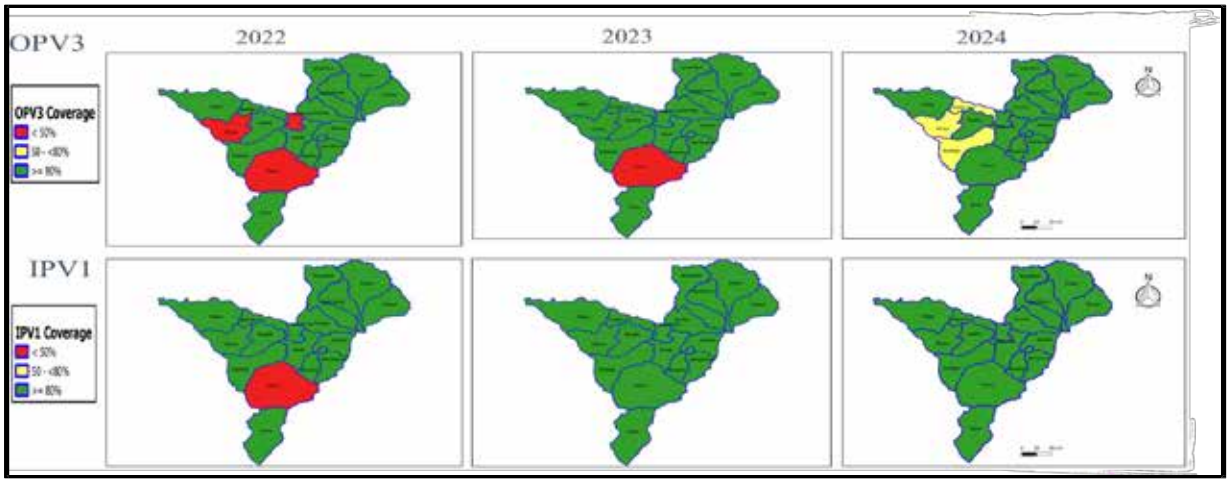
For AFP surveillance in the Mbale sub-region, the NPAFP rate in 2022 showed 8 districts (47%) below the recommended target. This number decreased to 4 districts (23.5%) in 2023 but then increased to 7 districts (41%) in the first half of 2024. Regarding the stool adequacy rate, 3 districts (17.6%) did not meet the recommended target of 80% or above in 2022. This number increased to 5 districts (29.4%) in 2023 but decreased to 2 districts (11.8%) in 2024. 5 of 17 districts (29.4%) have not reported a single case of AFP in 2024. These include Butaleja, Tororo, Busia, Sironko, and Kapchorwa districts.

Routine immunization performance at national level



For routine immunization, in 2022, 23 (16%) districts had OPV3 coverage below 80%. This number increased to 33 (23%) districts in 2023 and then decreased to 26 (19%) districts in 2024. Regarding IPV1 coverage, 17 districts were below 80% in 2022, but this number significantly improved to four districts in 2023 and further to two districts in 2024.

Routine immunization performance in Mbale region



Tororo district has consistently had both IPV1 and OPV3 coverage below 50% for both 2022 and 2023. In 2024, three districts had IPV1 and OPV3 coverage below 80%.

Supplementary immunization activities performance at the national level

Admin (R1)	Admin (R2)	LQAS (R1)	LQAS (R2)	IM (R1)	IM (R2)
111.2%	122.7%	Pass (33%) Fail (67%)	Pass (66%) Fail (84%)	93.19%	95.17%

The evaluation of immunization coverage through various assessment methods revealed key insights. Administrative data indicated exceptionally high coverage rates, with 111.2% in Round 1 (R1) and 122.7% in Round 2 (R2). However, Lot Quality Assurance Sampling (LQAS) showed a different picture, with only 33% of LQAS passing in R1 and 66% in R2, indicating significant room for improvement. Independent Monitoring (IM) provided more reliable figures, with coverage rates of 93.19% in R1 and 95.17% in R2. This highlights discrepancies between reported and actual coverage, emphasizing the need for ongoing quality assurance to ensure accurate immunization reporting and outreach.

Affected sub region: Independent Monitoring (IM) and Lot Quality Assessment Sampling (LQAS)

District/ City	Admin (R1)	Admin (R2)	LQAS (R1)	LQAS (R2)	IM (R1)	IM (R2)
Mbale DLG	131%	132%	Fail	Fail	98%	100%
Mbale City	131%	131%	Fail	Pass	98%	98%

In the Mbale District Local Government (DLG), administrative data showed high coverage rates of 131% in Round 1 (R1) and 132% in Round 2 (R2). However, Lot Quality Assurance Sampling (LQAS) results indicated failures in both rounds, highlighting potential issues in the reported data. Independent Monitoring (IM) presented a more accurate picture, with coverage rates of 98% in R1 and 100% in R2.

Similarly, in Mbale City, administrative data reported consistent coverage rates of 131% for both R1 and R2. LQAS results showed a failure in R1 but a pass in R2, indicating some improvement. IM figures were consistent at 98% for both rounds, suggesting reliable and steady coverage. These discrepancies underline the need for continuous monitoring and quality assurance to ensure accurate vaccination reporting.

Population immunity and surveillance Key Performance Indicators for Mbale and neighboring regions

Region Districts	Silent districts n/N(%)	NPAFP>3 n(%)	NPENT>10 n/N(%)	Stool adequacy >80 n(%)	AFP Zero dose n(%)	IPV1<80%	OPV3<80%	LQAS accepted
Mbale(17)								
2022	--	9/17(53%)	6/17(35%)	14/17(82.3%)	7/17(41%)	1/17(5.8%)	3/17(17.6%)	5/17(29.4%)
2023	--	13/17(76%)	7/17(41%)	12/17(50.5%)	1/17(5.8%)	--	1/17(5.8%)	
2024	5/17(29.4%)	5/12(41.6%)	4/12(33%)	12/12(100%)	1/17(5.8%)	--	2/17(11.7%)	
Teso (11)								
2022	--	8/11(73%)	4/11(36.4%)	7/11(63.6%)	--	2/11(18.2%)	3/11(27.3%)	7/11(66.8%)
2023	--	7/11(63.4%)	7/11(63.4%)	10/11(90.9%)	--	--	2/11(18.2%)	
2024	2/11(18.2%)	4/9(36.4%)	2/9(18.2%)	7/9(63.4%)	--	--	2/9(22%)	
Jinja (12)								
2022	--	5/12(50%)	4/12(33%)	11/12(91.6%)	4/12(33%)	2/12(16.7%)	2/12(16.7%)	7/12(58.3%)
2023	--	11/12(91.7%)	6/12(50%)	10/12(83%)	1/12(8.3%)	--	2/12(16.7%)	
2024	2/12(16.7%)	1/10(10%)	--	9/10 (90%)	1/12(8.3%)	--	1/12(8.35%)	
Moroto (9)								
2022	--	8/9(89%)	5/9(56%)	6/9(67%)	1/9(11%)	1/9(11%)	2/9(22%)	8/9(89%)
2023	--	7/9(77.7%)	4/9(44%)	5/9(56%)	1/9(11%)	--	2/9(22%)	
2024	4/9(44.4%)	--	1⁄5(20%)	5/5(100)	1⁄5(20%)	--	1/9(11%)	

In the Mbale region, comprising 17 districts, the surveillance and immunization coverage showed significant variation over three years. Silent districts reduced from 53% in 2022 to 35% in 2023 but increased to 41.6% in 2024. The NPAFP rate remained high, achieving 100% in 2024, while NPENT cases fluctuated, reaching 33% in 2024. Stool adequacy was consistently low, and AFP zero dose cases showed a decrease from 17.6% in 2022 to 11.7% in 2024. Both IPV1 and OPV3 coverage improved over time, with OPV3 reaching 100% in 2024.

The Teso region, with 11 districts, saw silent districts decrease from 73% in 2022 to 18.2% in 2024. The NPAFP rate improved from 36.4% in 2022 to 63.4% in 2024. NPENT cases saw an increase, and stool adequacy was slightly better in 2024 at 22%. AFP zero dose cases remained consistent, and IPV1 coverage showed improvement.

In Jinja, covering 12 districts, silent districts were highest at 91.7% in 2023 but dropped to 16.7% in 2024. The NPAFP rate improved, and NPENT cases were stable. Stool adequacy and AFP zero dose rates improved, with IPV1 coverage maintaining at 8.35% in 2024.

Lastly, the Moroto region, consisting of 9 districts, saw silent districts reduce from 89% in 2022 to 44.4% in 2024. NPAFP rates varied, and NPENT cases were highest at 100% in 2024. Stool adequacy and AFP zero dose rates showed some improvement, with IPV1 coverage at 11% in 2024.

Overall, while some regions showed improvements in surveillance and immunization coverage, challenges remain, particularly in maintaining high stool adequacy and reducing AFP zero dose cases. Continued efforts are needed to address these gaps and enhance immunization coverage.

Recommendation

Following the declaration of the outbreak in Uganda, the national Emergency Operation Centre (EOC), technical coordinating committee was activated. Rapid Risk assessment was conducted and submitted to Rapid Response Team (RRT). Due to the high virologic risk, gaps identified under the Acute Flaccid Paralysis (AFP) surveillance, low non-polio enterovirus (NPENT) rate and low IPV coverage for the 2 years following introduction, high population density in the Mbale region, and high risk of importation from the neighboring countries already infected with the cVDPV2, Uganda was declared at high risk. Three (03) scenarios were recommended and presented for consideration by the RRT/OBRG. One was to do a nation-wide campaign, the second to do a Sub national campaign covering the regions of Mbale, Karamoja, Jinja, Kampala Metropolitan Area and all Border districts with Kenya, DRC and South Sudan covering 67 districts and the third one was to conduct a sub national campaign covering the region of Mbale and its neighboring three (03) regions along the Kenya border of Soroti, Jinja, and Karamoja covering 49 districts.

Uganda's response plan was approved for the third option and allocated vaccines and funds to cover two rounds of subnational house to house polio vaccination campaigns to interrupt the transmission of the cVDPV2 virus. This covered 49 districts in the four (04) regions along the Uganda Kenya border that include; Mbale, Soroti, Karamoja and Jinja using the Novel Oral Polio Vaccine type 2 (nOPV2).

Consequently, the Ministry of Health with support from partners planned and implemented a two rounds polio vaccination campaigns from 3rd to 6th October and 7th to 10th November 2024. Final records indicated an administrative coverage of 3.269 million children (118%) and 3.5million children (127%) aged between 0 to 4.9 years for Round 1 & 2 respectively were vaccinated against Polio with the nOPV2 Vaccine.

Round 1 achieved a 92% Independent Monitoring coverage survey rate, noting the successful vaccination and finger marking of 10,012 children out of 10,841 sampled. However, we noted that 16 districts scored below 95%.

Round 1 achieved a 90% LQAS coverage survey rate, indicating a successful vaccination and finger marking of 2,649 children out of the 2,940 sampled. However, we noted that 24 districts scored below 95%.

Round 2 achieved a 96% Independent Monitoring coverage survey rate, noting the successful vaccination and finger marking of 10,512 children out of 10,942 sampled. However, we noted that 9 districts scored below 95%.

Round 2 achieved a 95% LQAS coverage survey rate, indicating a successful vaccination and finger marking of 2,791 children out of the 2,940 sampled. However, we noted that 14 districts scored below 95%.

3. Rationale & Objectives for the Polio Outbreak Response Campaign

Increasing circulation of VDPV2 in several countries and evidence of international spread led to the maintenance of polio as a Public Health Emergency of International Concern.

According to the GPEI SOPs, any country that detects any type of poliovirus outbreak or event, must respond in a timely and effective manner, with the specific objective to stop polio outbreaks within 120 days (four months).

In response to this imported outbreak and its rapid spread, the Uganda Ministry of Health, in collaboration with key partners such as the World Health Organization (WHO), UNICEF, CDC, and the entire Global Polio Eradication Initiative (GPEI), launched an urgent Polio Outbreak Response Campaign targeting 49 high-risk districts in the 4 regions of Jinja, Karamoja, Mbale and Soroti that share a border with Kenya. The campaign was conducted in two rounds to ensure maximum immunization coverage and protect every child under the age of five and to;

- Enhance Surveillance for Vaccine Preventable Diseases including AFP: Prioritize focus on the silent districts to improve case detection,
- Boost Immunization ensuring prioritization of areas with low IPV1 and OPV3 coverage for immunization drives.
- Address Zero-Dose Cases: Identify and vaccinate unimmunized children.
- Improve Stool Adequacy: Maintain high stool adequacy rates to ensure effective surveillance

General Objective of the campaign

To conduct mass polio vaccination campaign to stop the transmission of the ongoing polio outbreak

Specific Objectives of the campaign

1. To vaccinate at least 95% (by LQAS) of Under 5year old children in the 49 districts
2. Create awareness and increase demand for the polio vaccine and routine immunization by the end of the campaign
3. Provide capacity building to health workers to implement the campaign and outbreak response
4. Strengthen Routine immunization, second year of life platform and enhance AFP Surveillance

4. Campaign Strategy and Geographical Scope of the Outbreak Response

Campaign Strategy

The Polio Outbreak Response was a two round sub national nOPV2 supplemental immunization campaign (SIA) house to house campaign targeting children under 5 years of age estimated at 2,765,871 in the 49 districts and four regions of Mbale, Jinja, Soroti and Karamoja.

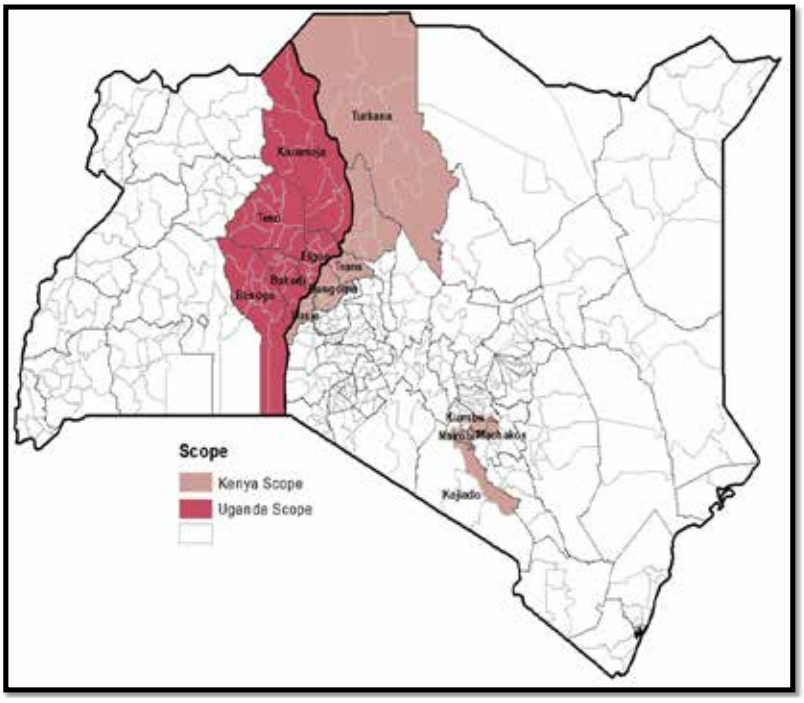
Teams were allocated by population with each team expected to vaccinate at least 125 and 250 children per day in rural and urban settings respectively. Provision of means of transportation for special team and hard to reach areas including islands was arranged.

The duration of the campaign was 4 days per round with Round 1 starting on Thursday 3rd October to Sunday 6th of October and Round 2 starting on Thursday 7th November to Sunday 10th November 2024. The campaign target was to achieve a 95% coverage by LQAS.

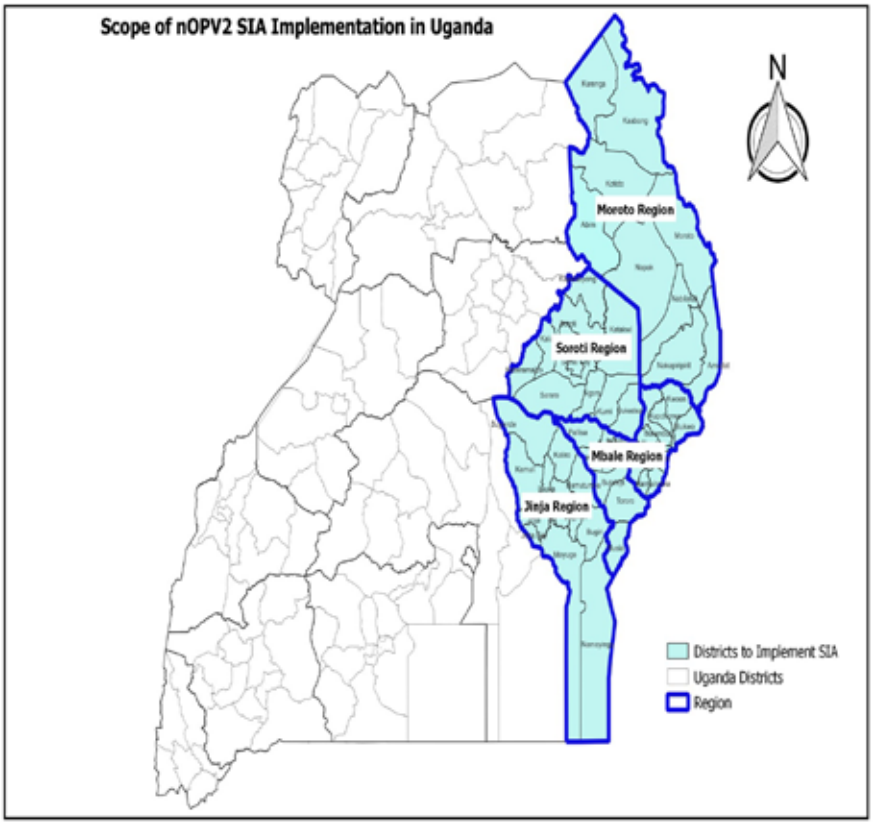
Geographical scope of the Outbreak Response

The 49 districts are strategically spread across the four (04) key regions, covering areas with historically low routine immunization coverage and evidence of poliovirus circulation. A significant number of these districts are located in border areas where cross-border movements with neighboring Kenya amplify the risk of virus transmission. Urban districts face challenges of high population density, while rural districts are marked by geographical inaccessibility and weaker health infrastructure. Visual maps have been used to highlight the geographic distribution, ensuring focused and tailored interventions across all regions.

Implementation scope by Region including Kenya Synchronization



Implementation scope by region and district in Uganda



The following areas were identified to have specific vulnerabilities, such as proximity to international borders, high population density, or mobile communities.

- 10 out of the 49 districts of implementation are border districts
- Moroto/ Karamoja region is characterized with pockets of insecurity due to nomadic behaviors of the populations there.
- The districts of Namayingo, Mayuge and Jinja are located along Lake Victoria and have islands with populations to be reached.

Demographic details and Vaccine requirements by region

The total population across the 49 districts is estimated at 13,492,000, with approximately 2,765,871 children under five years of age – the primary target group for immunization during this campaign. The population includes diverse segments such as urban dwellers, rural residents, nomadic groups, and refugees. Districts with significant population density require enhanced operational planning, while nomadic and mobile populations pose logistical challenges.

In border districts, high population mobility remains a key concern, as cross-border travel increases the likelihood of virus importation and spread. Special attention was given to identifying and immunizing these populations to mitigate risks.

Region	Total Pop.	Target Pop.	# nOPV2 Vaccine doses	nOPV doses (rounded to 50 dose vial)	# nOPV2 Vaccine Vials	# Droppers
Jinja	4,695,300	962,539	1,135,796	1,136,000	22,720	22,720
Moroto	1,325,000	271,627	320,520	320,800	6,416	6,416
Mbale	4,935,900	1,011,863	1,193,998	1,194,450	23,889	23,889
Soroti	2,535,800	519,842	613,414	613,700	12,274	12,274
National	13,492,000	2,765,871	3,263,728	3,264,950	65,299	65,299

- **Population Size:** As indicated above, the four regions targeted for this campaign had a total population of 13,492,000 with a target population of children under five of 2,765,871.
- **Population Density:** Based on the preliminary data analysis, the populations in these sub-regions is largely rural with a target population of 2,157,379 (78%) and the remaining population of 608,492 (22%) urban.
- **Key Populations:**
    1. Total Children under five years of age – 2,765,871
    2. Nomadic, refugee, or displaced populations – 1,325,000 (mainly Moroto/ Karamoja region)
    3. Communities in hard-to-reach, underserved, or conflict-affected areas;
- **Cross-Border Movement:** We have Ten (10) districts with significant cross-border movements that may contribute to virus importation or spread and they include; Kaabong, Moroto, Amudat, Bukwo, Kween, Namisindwa, Tororo, Busia, Namayingo and Manafwa

5. Preparations for the SIAs

5.1 Resource Mobilization and Financing

Resource mobilization and financial planning were critical to the campaign's success, with efforts focused on securing funding, allocating resources effectively, and addressing any budgetary shortfalls.

- **Financial Support Received and Allocated:**

  The campaign benefited from financial contributions from the GPEI Team, and funds were channeled through the main GPEI Partners, WHO, and UNICEF, as summarized below. They allocated funding for national and district operational activities and vaccine procurement, while other partners, such as CDC AFENET, provided additional financial support for NSTOP, Surveillance activities, Regional EOCs, and Top Management support supervision. At the district level, implementing partners supported the campaign in various ways such as additional transport and fuel support, logistics distribution among others.

- **Budgeting for Key Activities:**

A detailed budget was developed to cover critical components of the campaign, including:

- **Vaccines:** Procurement, cold chain management, and storage.
- **Logistics:** Transportation of supplies, mobile team deployments, and equipment maintenance.
- **Training:** Capacity building for healthcare workers, volunteers, and supervisors.
- **Advocacy, Communication, and Social Mobilization (ACSM):** Community awareness campaigns, media outreach, and engagement with local leaders.

Approved Summary Budget for both Rounds by Partner

Summary Uganda Polio OBR SIAs USD					
Items	**Government**	**WHO**	**UNICEF**	**Other**	**Total**
Round 1 (3-6 Oct 24)	$0	$1,575,889	$1,283,282	$0	$2,859,172
Round 2 (7-10 Nov 24)	$0	$1,211,679	$1,271,486	$0	$2,483,165
Grand Total	$0	$2,787,568	$2,554,768	$0	$5,342,337

Approved Summary Budget for both Rounds

Summary Both Rounds (Local Currency)							
Sr.no	**Items**	**Government**	**WHO**	**UNICEF**	**Other**	**Total (UGX)**	**Total (USD)**
1	Finger Markers/ Vaccine	-	59,119,829	-	-	59,119,829	15,978
2	Human resources and incentives	-	3,847,816,556	2,791,259,439	-	6,639,075,995	1,794,345
3	Training and Meetings	-	1,308,327,158	197,626,574	-	1,505,953,732	407,015
4	Supplies and Equipment	-	-	-	-	-	0
5	Transportation	-	4,765,255,342	2,258,856,986	-	7,024,112,329	1,898,409
6	Social mobilization and communication	-	-	2,025,061,501	-	2,025,061,501	547,314
7	Vaccine Management	-	-	2,032,149,343	-	2,032,149,343	549,230
8	Other Operational Costs	-	333,484,311	147,688,250	-	481,172,561	130,047
Total		**0**	**10,314,003,196**	**9,452,642,093**	**0**	**19,766,645,290**	**5,342,337**

This table shows the breakdown of funds by activity managed by each Partner. WHO mainly covered the facilitation for Human resource and operational costs whereas UNICEF covered the Social mobilization and vaccine management.

Approved Summary Budget for Round 1

Summary Round 1 (UGX)						
Sr.no	**Items**	**Government**	**WHO**	**UNICEF**	**Other**	**Total**
1	Finger Markers/Vaccine	-	29,559,914	-	-	29,559,914
2	Human resources and incentives	-	1,923,908,278	1,395,629,720	-	3,319,537,998
3	Training and Meetings	-	1,308,327,158	197,626,574	-	1,505,953,732
4	Supplies and Equipment	-	-	-	-	-
5	Transportation	-	2,382,627,671	1,049,474,907	-	3,432,102,578
6	Social mobilization and communication	-	-	1,012,530,751	-	1,012,530,751
7	Vaccine Management	-	-	1,016,074,671	-	1,016,074,671
8	Other Operational Costs	-	186,367,063	76,808,523	-	263,175,586
Total		**0**	**5,830,790,084**	**4,748,145,146**	**0**	**10,578,935,231**

Round 1 included a component for capacity building of Teams at all levels that were going to implement the campaign. Nonetheless, the biggest proportion of the funds was meant to cover Human resources (31%) and Transportation (32%) for supervisors and vaccination teams.

Approved Summary Budget for Round 2

Summary Round 2 (Local Currency)					
Items	**Government**	**WHO**	**UNICEF**	**Other**	**Total**
Finger Markers/Vaccine	-	29,559,914	-	-	29,559,914
Human resources and incentives	-	1,923,908,278	1,395,629,720	-	3,319,537,998
Training and Meetings	-	-	-	-	-
Supplies and Equipment	-	-	-	-	-
Transportation	-	2,382,627,671	1,209,382,079	-	3,592,009,750
Social mobilization and communication	-	-	1,012,530,751	-	1,012,530,751
Vaccine Management	-	-	1,016,074,671	-	1,016,074,671
Other Operational Costs	-	147,117,248	70,879,726	-	217,996,975
Total	**0**	**4,483,213,112**	**4,704,496,947**	**0**	**9,187,710,059**

Round 2 excluded a component for capacity building of Teams since this was covered during Round 1. The majority of the funds were still allocated towards Human resources (35%) and Transportation (39%) for supervisors and vaccination teams.

Allocations for National level activities

National level Activity description	Round 1	Round 2
Logistics	**Amounts (UGX)**	**Amounts (UGX)**
Cold chain maintenance	95,310,270	95,310,270
Procurement of District Items (Sponges, Polythene bags & Chalk)	27,534,600	27,534,600
Procurement of Cargo bags	1,191,000	1,191,000
Procurement of zip lock bags	20,396,000	20,396,000
Bold Red markers	2,382,000	2,382,000
Masking tape	2,977,500	2,977,500
National level coordination & NCC committee meetings	8,790,000	8,790,000
Training of central teams to facilitate district workshops	23,396,760	
Central Feedback meeting	20,130,880	20,130,880
Social Mobilization	343,331,515	259,403,675
Data Tools-Implementation procurement	66,989,670	66,989,670
-		
National level implementation at the district level	375,104,914	375,104,914
Delivery of Vaccines and Data Tools (1 day) and IEC material (1 day) to districts	101,584,091	101,584,091
Independent Monitoring (IM)		
Training of IM teams	16,620,000	
Implementation of IM	131,876,200	131,876,200
Implementation of LQAS survey in all districts	421,871,499	421,871,499
National Command Center	24,091,268	24,091,268
Vehicle Hire and servicing	90,000,000	90,000,000
Training of National vaccine accountability teams	23,190,880	
Deployment of National Vaccine accountability officer at District Level	375,104,914	375,104,914
EOC costs	25,650,000	25,650,000
Top management Support Supervision	28,285,029	28,285,029
Collection and destruction of nOPV2 vials	80,051,691	80,051,691
TOTAL	**2,305,860,682**	**2,158,725,202**

The bulk of funds at the National level were allocated towards Social mobilization (14% - R1 and 12% - R2), Deployment of National level supervisors (16% - R1 and 17% - R2), LQAS (18% - R1 and 19.5% - R2), and Vaccine accountability (16% - R1 and 17% - R2).

Allocations for District level activities

District level Activities	Round 1 Amount (UGX)	Round 2 Amount (UGX)
1.1 District coordination meetings	119,070,000	118,080,000
1.2 Micro Planning and training Meetings	56,451,200	-
1.3 Sub County Microplanning &Training	1,578,125,400	-
2.1 District Level Social Mobilization	2,552,679,880	2,607,768,360
3.1 DHT Monitoring of preparedness	209,220,360	144,819,120
3.2 DHO Command center	50,730,400	53,670,400
4.1 Logistics	76,847,400	77,177,400
4.2 Cold Chain Maintenance	38,494,920	38,494,920
4.3 Delivery of Vaccines and Icepacks	38,494,920	38,494,920
4.4 Withdraw of Icepacks	115,484,760	115,484,760
6.1 Implementation District Supervisors	498,447,680	498,447,680
6.2 Implementation SC Supervisors	207,680,000	207,680,000
6.3 Implementation Team Supervisors	732,780,000	732,780,000
7. Implementation Vaccination Teams - HW/VHT	1,427,720,000	1,581,720,000
7 Accountability collection - Finance	34,300,000	34,300,000
8. Implementation in Hard to Reach	135,023,648	135,023,648
Vaccine Accountability	893,428,000	678,688,000
Grand Total	**8,764,978,568**	**7,062,629,208**

The bulk of the funds at District level were allocated towards community awareness activities to build trust in the community and uptake for the campaign. District level social mobilization was allocated 29% in Round 1 and 36% in Round 2. The second area allocated more funds was actual implementation by the Teams composed of the Health workers and recorders. Implementation was allocated 16% in Round 1 and 22% in Round 2.

CDC AFENET

AFENET with support from CDC provided both technical and financial support for Round1 and Round2 nOPV SIA. The support involved;

1. Supporting MOH top Management to provide technical supervision,
2. Supporting Regional Public Health Emergency operation centres (PEOCs) namely Jinja, Mbale, Soroti and Karamoja REOCs who Supervised the districts/cities to implement the campaign in line with national guidance and timelines below, conduct daily data review and reporting to the national command center,
3. Deployment of national NSTOP team (including FETP graduates and Residents) to support Verification and investigation of AFP /AEFI cases and conduct 60-day follow up of late cases conducted in high risk districts.

	Support to the Polio R1 and R2 Polio SIAs in Eastern Uganda				
Round 1 SIAs	Item	No. of units	Unit cost	Freq	Total (UGX)
	Perdiem for MOH Senior management	13	280,000	8	29,120,000
	Perdiem for MOH management teams	36	175000	5	31,500,000
	Fuel to support MOH Management Teams (Fuel cards)	11	664,956	1	7,314,516
	Perdiem for Regional EOC Supervisors	8	175,000	10	14,000,000
	Fuel to support Regional EOC supervisors	120	5,500	10	6,600,000
	Subtotal				81,934,516
A F P - V P D surveillance training and Deployment	Item	No. of units	Unit cost	Freq	Total
	Perdiem for NSTOPers (Training)	40	175000	3	21,000,000
	Transport Refund NSTOPers (Training)	40	100000	1	4,000,000
	Perdiem for NSTOPers (Deployment)	25	175000	6	26,250,000
	Fuel support (Deployment)	13	913846.23	1	11,880,001
	Subtotal				63,130,001
Round 2 SIAs	Item	No. of units	Unit cost	Freq	Total
	Perdiem for MOH management teams	27	175000	5	23,625,000
	Fuel to support MOH Management Teams (Fuel cards)	14	598,524	1	8,379,341
	Perdiem for Regional EOC Supervisors	14	175,000	5	12,250,000
	Fuel to support Regional EOC supervisors	120	5,500	10	6,600,000
	Subtotal				44,254,341
	Grand Total UGX				**189,318,858**

Payment Modalities by Partners

Since all funds were channeled through the main partners WHO and UNICEF, all payments for the campaign were made directly by the partners for both National and District level activities.

For the National level activities such as training workshops, launches, and other meetings, all the procurements and facilitation payments were made directly by the Partners.

At the District level, service providers were identified by the Partners to provide services at the lower level. This ranged from fuel stations, stationery, and meal providers. For health workers, supervisors, mobilizers, and recorder allowances, ODK registration was undertaken during the training exercise to capture all the details of the participants, including their phone numbers and mobile money numbers. Payments were made directly to the relevant participant's mobile money phone numbers. This ensured that all risks of none and delayed payments were addressed.

5.2 Central level coordination

National coordination was led by the National Coordination Committee (NCC) chaired by the Director General Health Services (DGHS). The NCC is comprised of five subcommittees: resource mobilization, training & micro planning, advocacy communication & social mobilization, logistics & vaccine management, and data & surveillance subcommittees.

Members of the NCC were from over 35 organizations, including the UNEPI, and all immunization partners, including WHO, UNICEF, CDC, USAID, Rotary, PATH, CHAI, and NMS. A total of four NCC meetings were convened from July - October 2024.

The NCC meeting reviewed the timelines, endorsed the implementation strategy in line with the Outbreak response plan for the campaign and allowed partners to harmonize preparatory activities.

Each agency appointed selected representatives to attend the subcommittee meetings, in addition to representatives from each sub-committee attending the general NCC meetings. The NCC agreed to hold regular meetings every month and eventually increased frequency to weekly towards and during the campaign coordinated by the Polio Emergency Operation Center (EOC).

Proceedings of the NCC meetings generally included updates from the five sub-committees on the progress of the preparations, updates on district readiness from the Polio EOC, and a review of the timeline of planned activities. UNEPI teams were provided monthly, bi-weekly, and weekly updates from the districts using a WHO-AFRO-developed standard spreadsheet template provided for documentation. Subcommittees held separate meetings to plan the operational aspects of the SIAs. The resource mobilization, training & micro planning, advocacy communication & social mobilization, logistics & vaccine management, and data & surveillance subcommittees organized to hold synchronization meetings for all the subcommittees to streamline

planned activities and review relevant documents, training materials and prepare updates for the NCC.

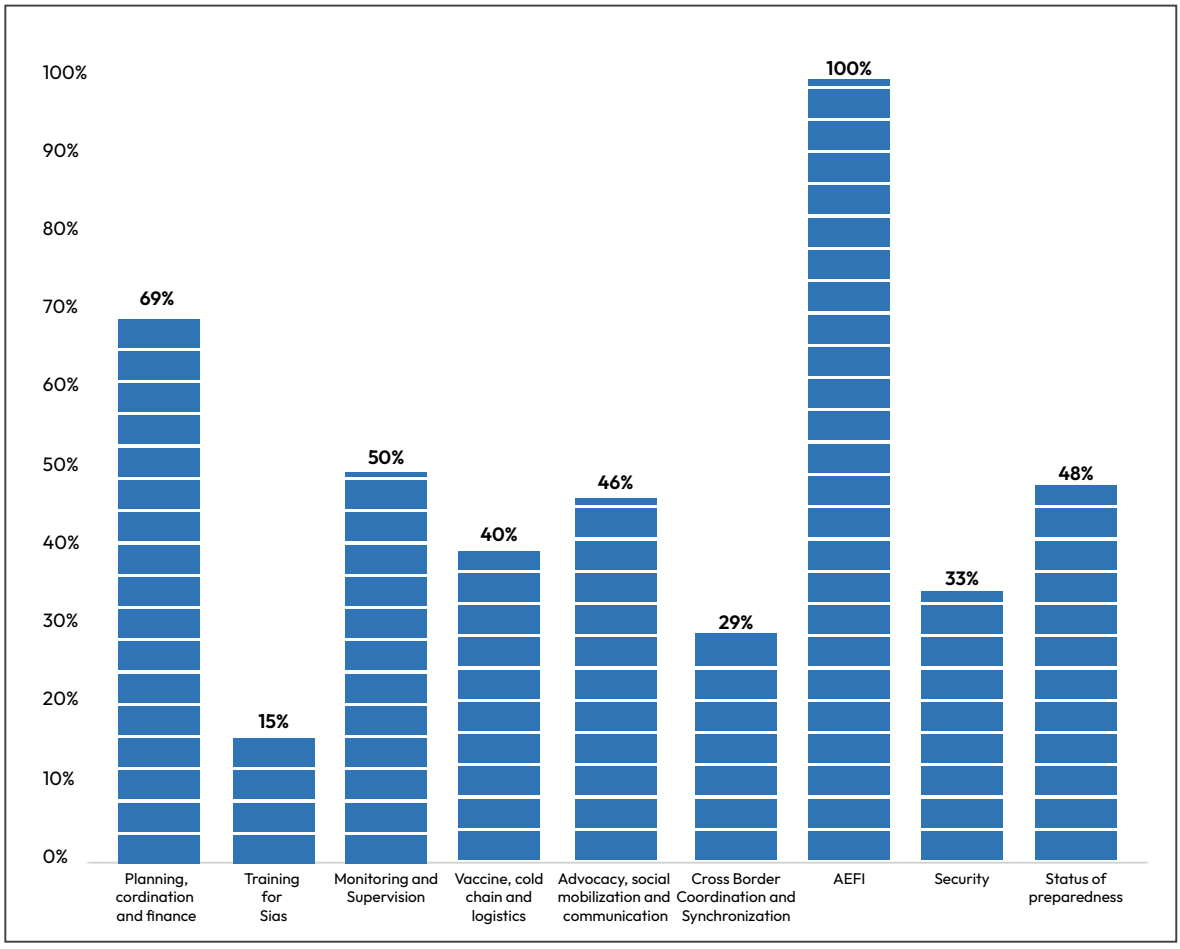
The EOC conducted weekly coordination meetings with the Regional EOCs to review the micro plans by region and readiness dashboard. In addition, with support from the GPEI Coordinator, weekly country GPEI meetings were held to review the status of preparedness to identify challenges and mitigation measures. Those who participated in the meetings were the Polio Incident Management Team, GPEI coordinator, WHO Uganda Country focal point, and UNICEF.

The country also participated in the weekly GPEI-AFRO virtual meetings where she was advised on Campaign preparation. The country presentation covered overall preparations and current status of the country for the AFP surveillance. The meeting provided technical guidance to the country and appreciated the Ugandan Team for vigilance in preparations for the SIAs.

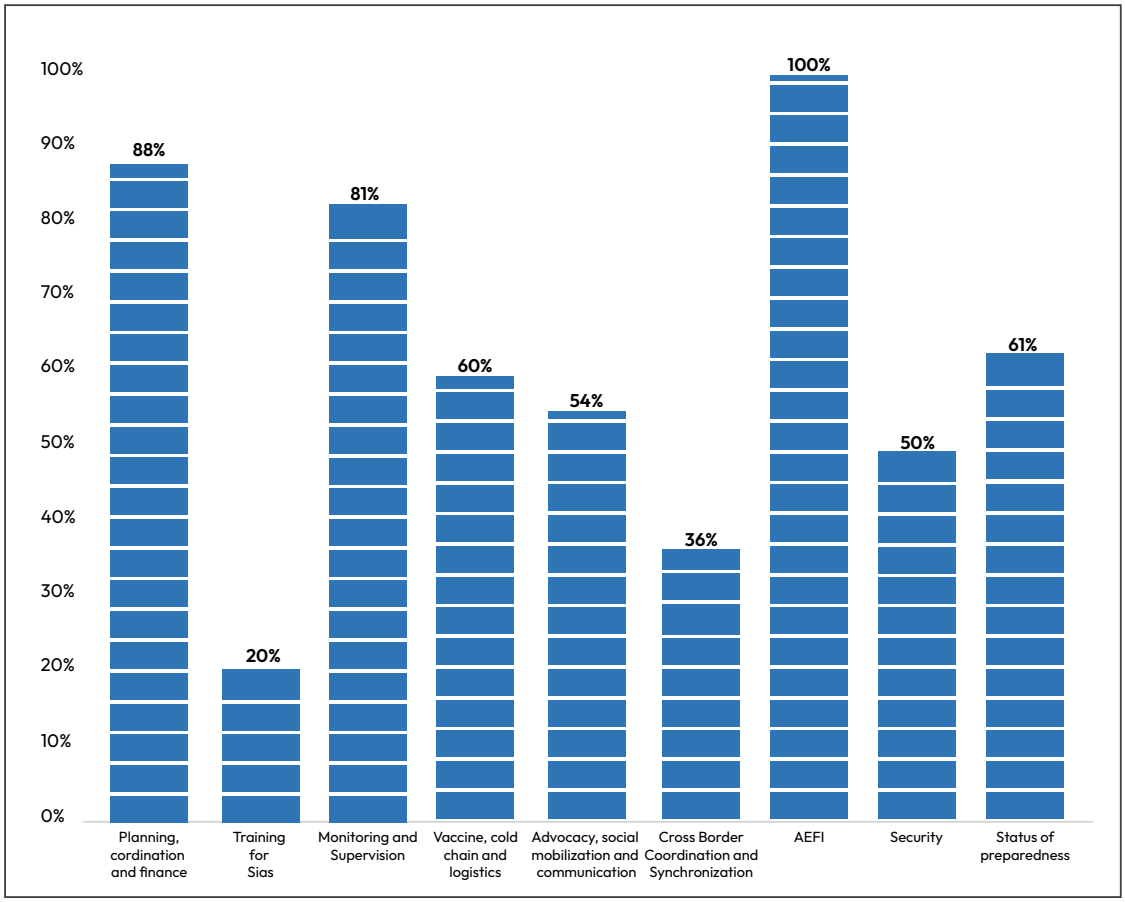
The country was advised on how to address and put in place mitigation measures for the risks identified.

The graphs below show the preparedness level prior to implementation of Round 1;

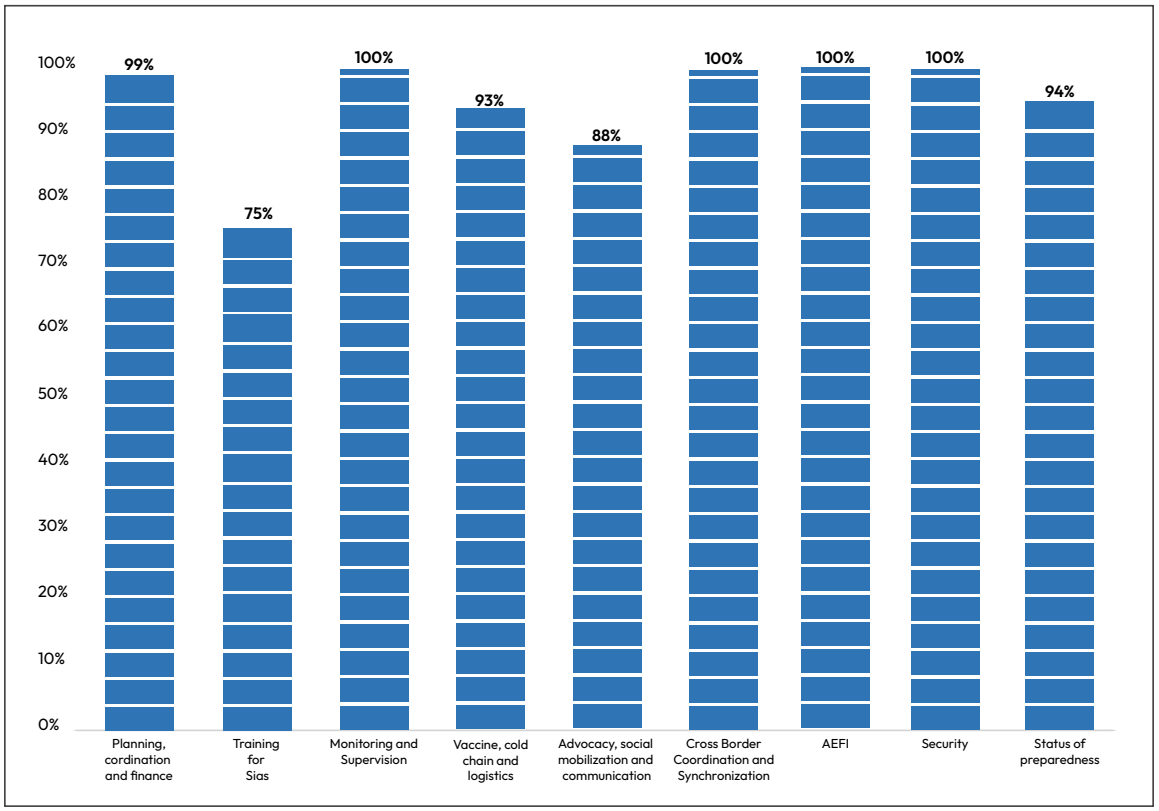
3 MONTHS TO THE CAMPAIGN



1 MONTH TO THE CAMPAIGN

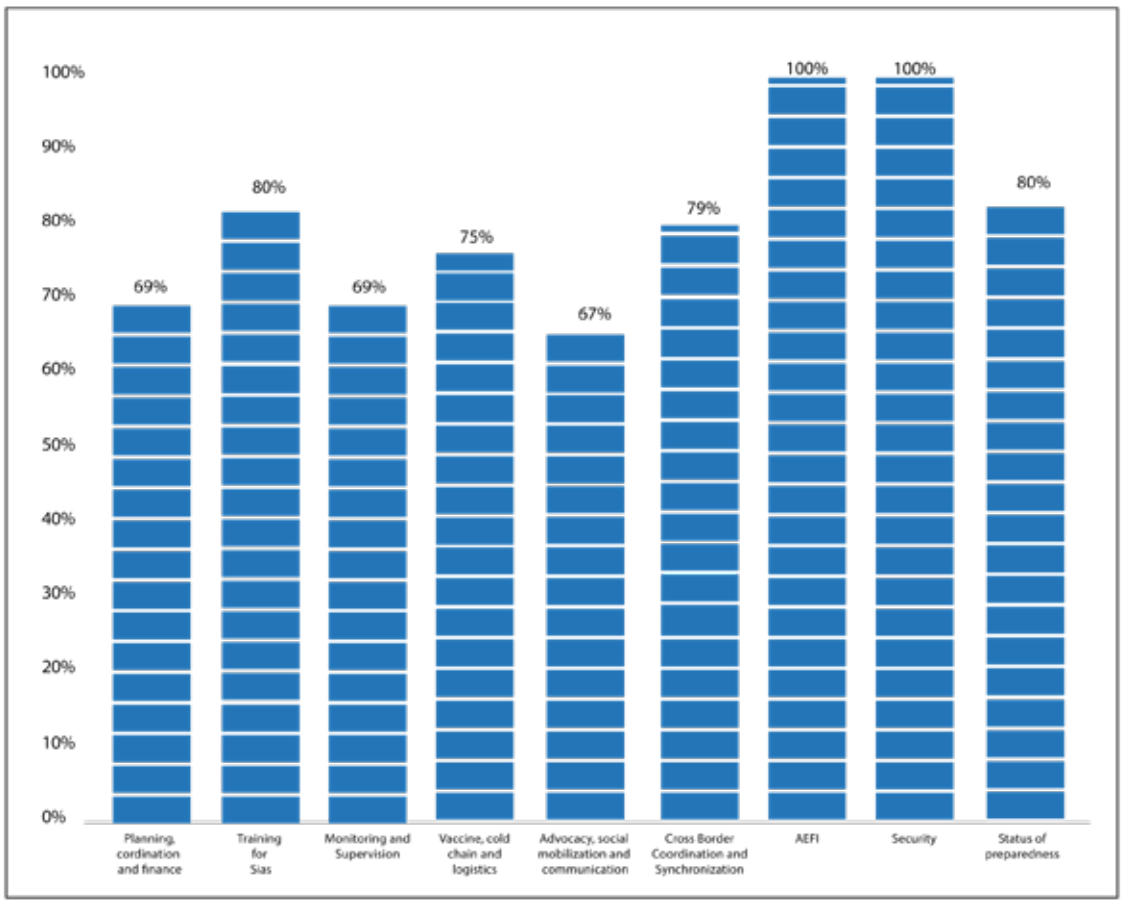


1 DAY TO THE CAMPAIGN

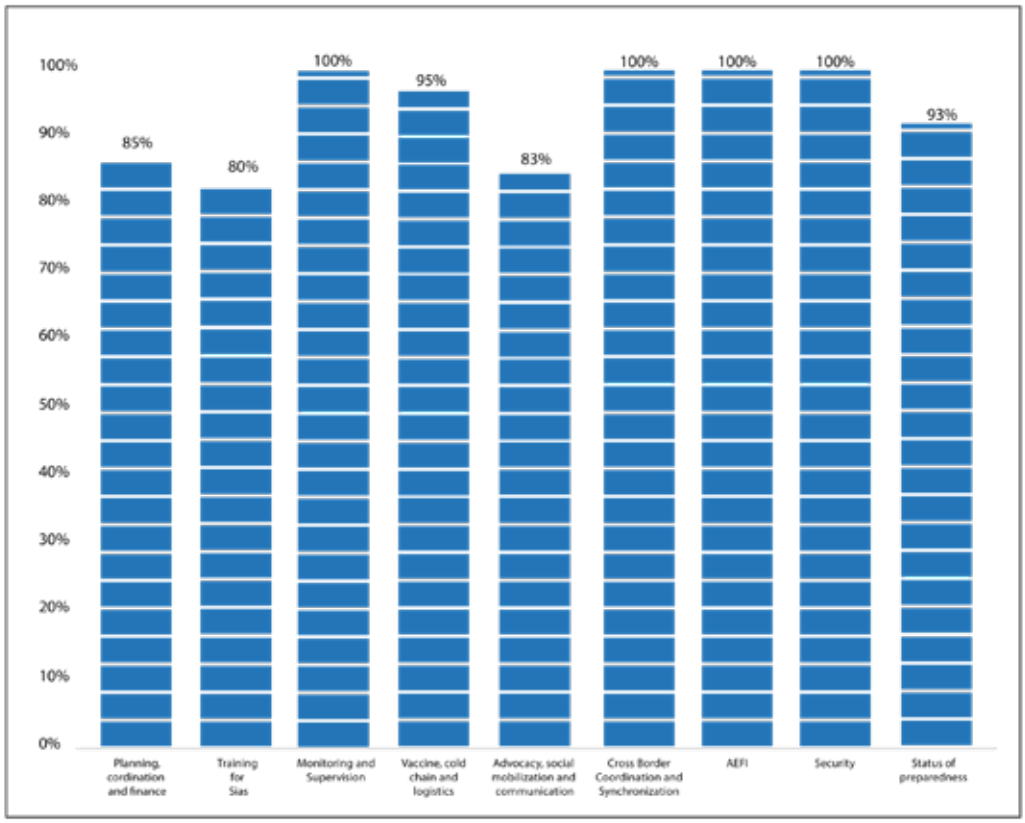


The graphs below show the preparedness level prior to implementation of Round 2;

1 MONTH TO THE CAMPAIGN



1 DAY TO THE CAMPAIGN



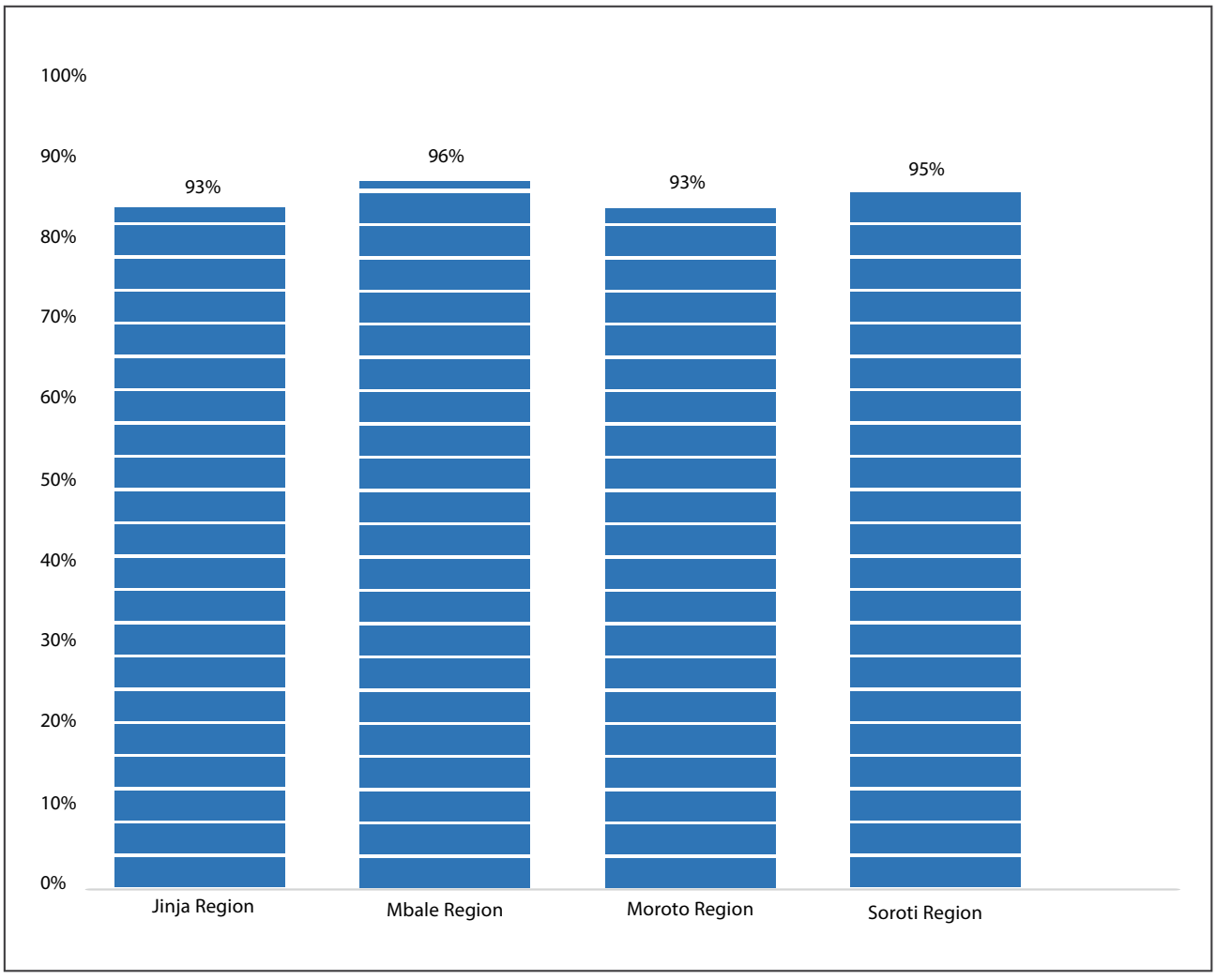
5.3 Regional Level Coordination and Preparedness

Coordination at the Regional level was led by the relevant Regional EOCs that were activated as soon as the outbreak was announced.

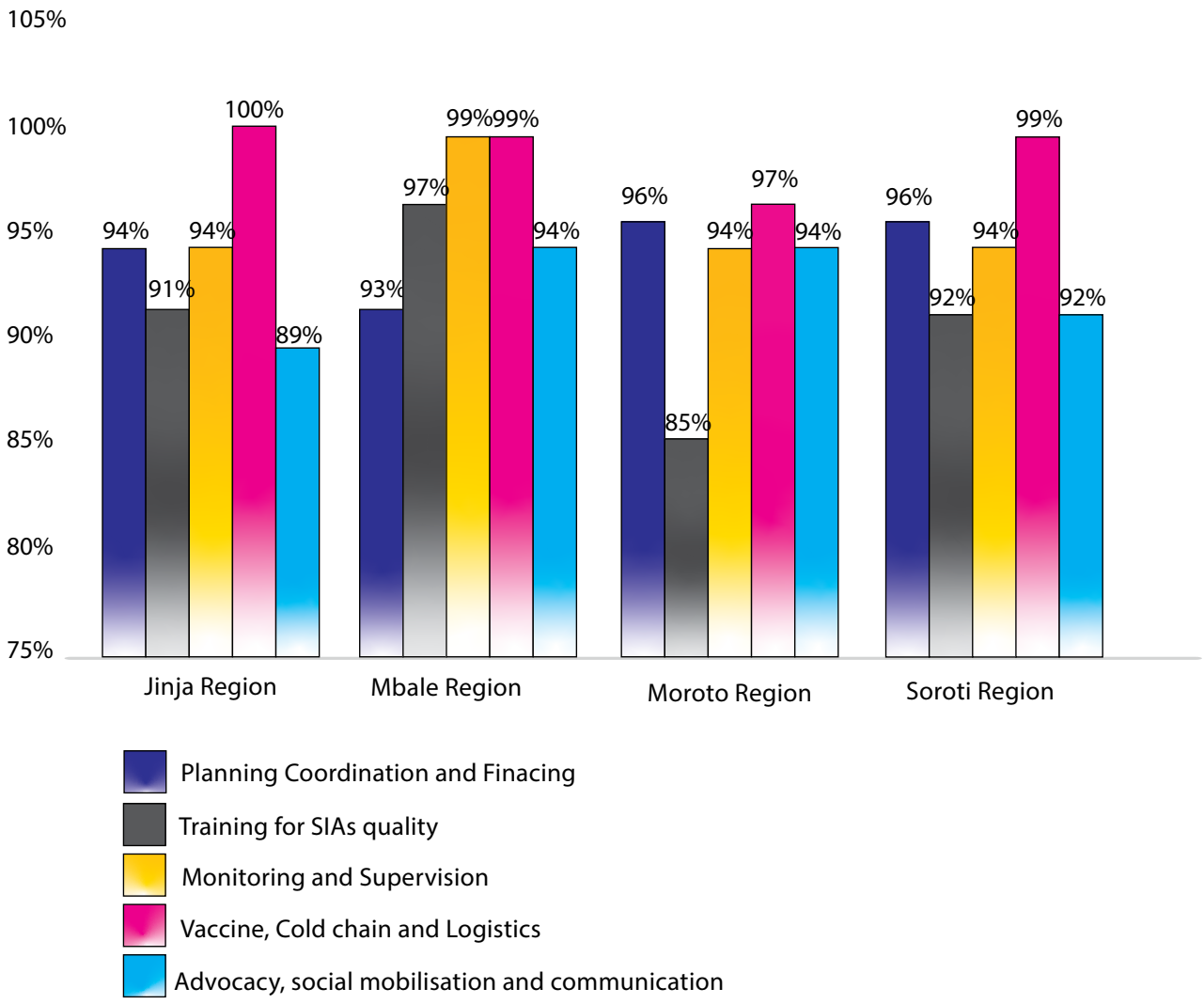
The Regional EOCs conducted regional microplanning meetings to review and align district micro plans to the budget allocations and assumptions. Detailed assessments were carried out to map target populations, including vulnerable groups such as children under five, underserved communities, and populations in hard-to-reach areas.

Regional EOCs conducted readiness assessment of districts to review the status of preparedness of districts and developed mitigation measures. The country adopted the AFRO preparedness dashboard 3 months before implementation to monitor preparedness and implement mitigation measures by region supported by the Regional HR surge.

Overall Status of Preparedness by Region



REGIONAL LEVEL PREPAREDNESS BY PARAMETER



The Country was at 93% preparedness at the National level before the implementation of the campaign, while the regional level preparedness was at 94%.

5.4 District level coordination

In order to be prepared for a high-quality campaign, MOH wrote a letter to all districts early on the threat and need for heightened preparations for the response.

The number of coordination meetings across the districts ranged between 1 and 5 meetings. Majority of the districts sampled held four coordination meetings. Two of the meetings were held before the campaign for sensitization and planning purposes; one meeting was held intra-campaign to review progress and plan for the following campaign days and the last meetings was held after the campaign to evaluate the success, challenges and share the results of the campaign.

Partners included during the coordination meetings included: World Vision, Baylor College of Medicine, TASO, Lions Club, Red Cross Society Club International, Rotary

Club international, USAID RHITES, FHI360, Malaria Consortium, Religious, Traditional, and cultural leaders among others.

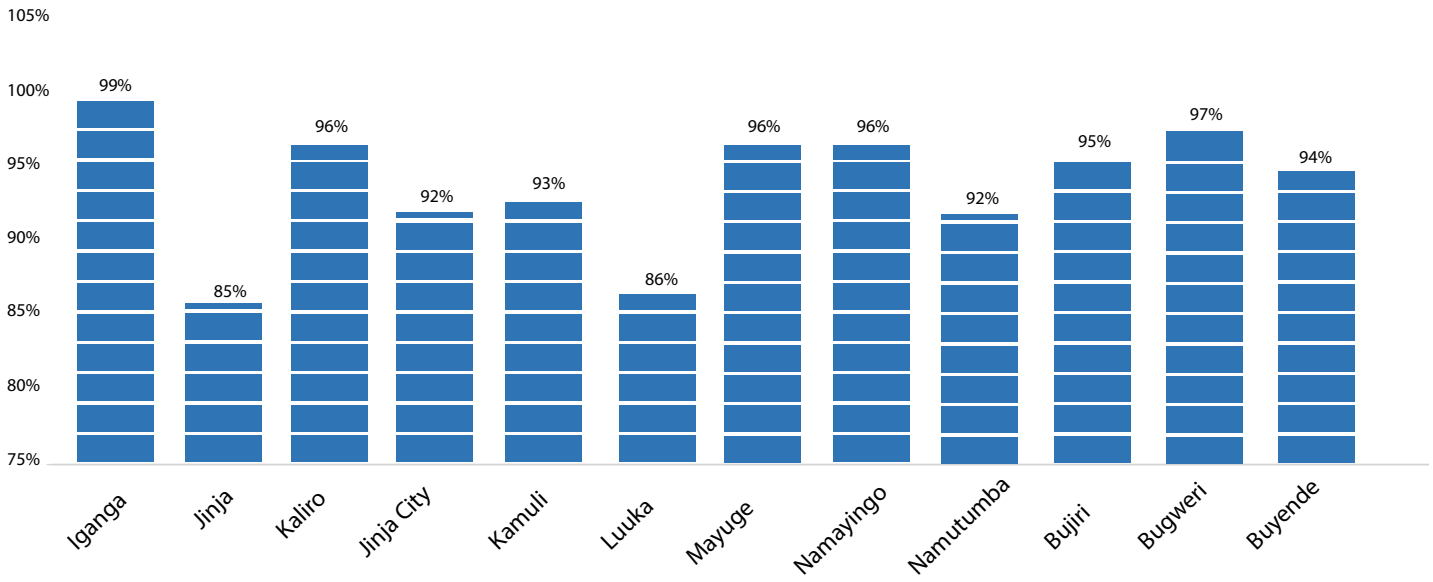
Partners accorded various support including; Technical assistance into the processes, resource mobilization, participated in ACSM activities both at National and sub-national level.

Local partners offered vehicles and motorcycles that supported transportation of logistics and supervisors during the campaign.

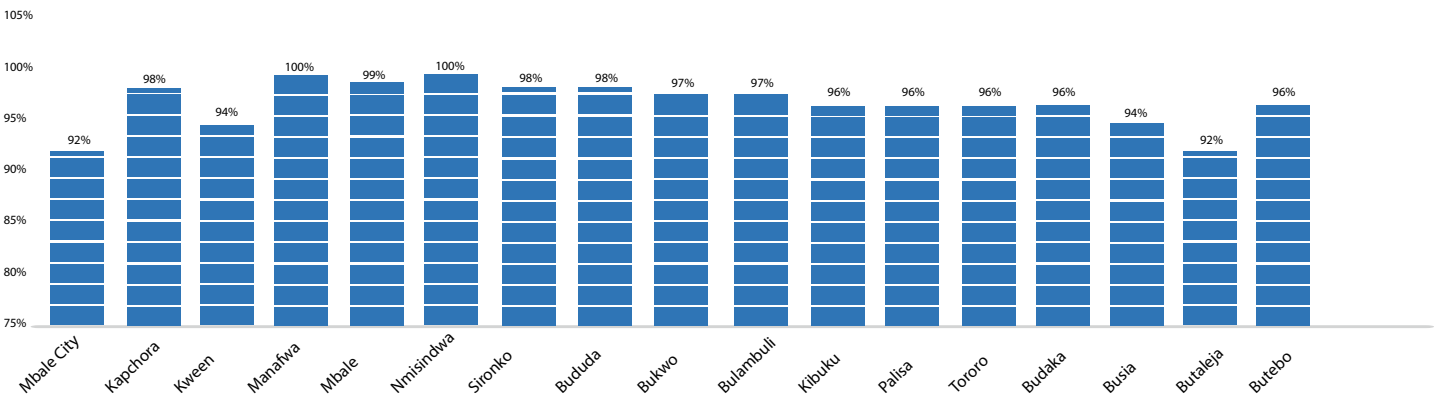
Local CBOs, and RED CROSS volunteers supported distribution of IEC materials to communities and House to House Mobilization using Hand megaphones in various districts. Rotary Clubs were involved in conducting community dialogues to increase awareness and service acceptability before the campaign.

DISTRICT PREPAREDNESS

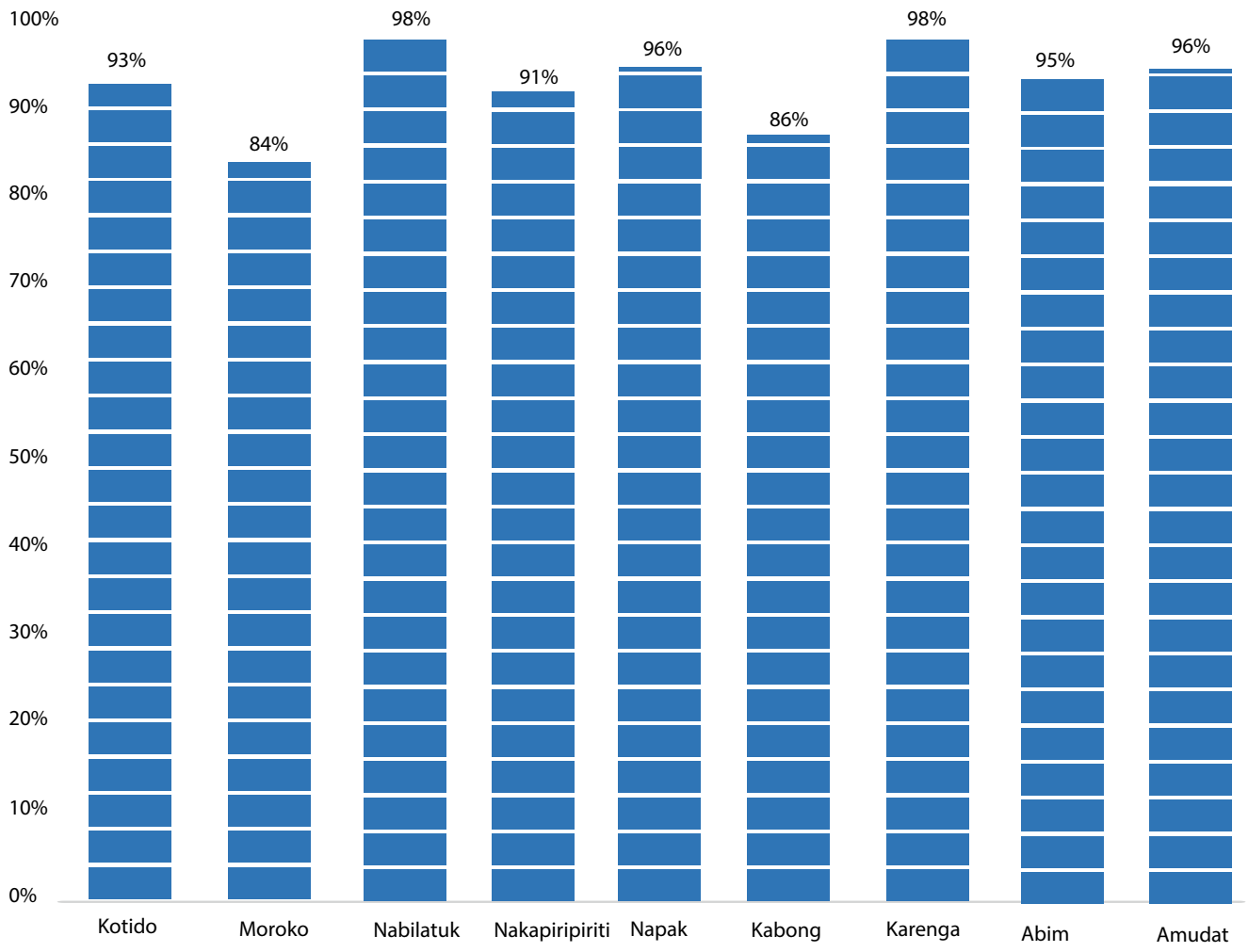
Status of Preparedness, Jinja Region

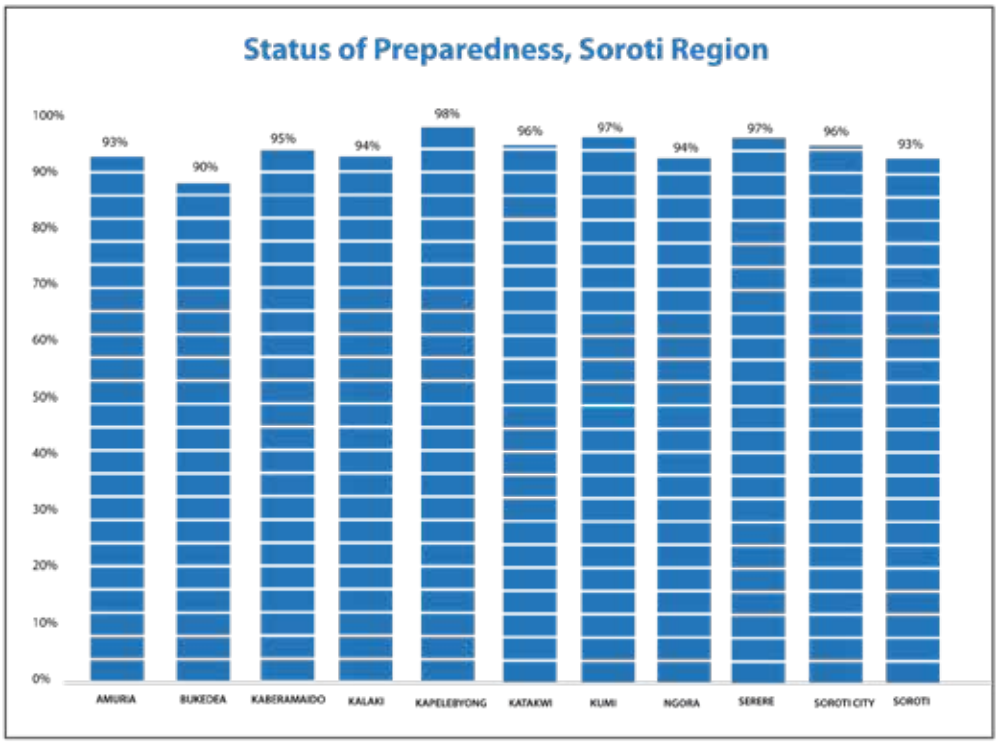


Status of Preparedness, Mbale Region



Status of Preparedness, Moroto Region





6. Planning

6.1 National-level Planning

Based on lessons learned from the prior campaigns conducted, risky areas were identified and the following interventions were put in place for both Round 1 & 2:

Several planning activities were conducted during the pre-campaign preparation. WHO, UNICEF, CDC and AFENET recruited central level consultants early in the planning process to support the coordination of the preparations for the SIAs. The micro plan template was reviewed at the national level by the program and EPI partners to align with the updated working figures based on the UBOS population estimates, Ministry of Local Government administrative units, and the country's experience from prior campaigns. Based on UBOS projections from 2014 census, the under-five population for the target area was estimated to be 2.7million children. The National Coordination Committees and the EOC were activated. Weekly technical planning committee's meetings to review status of implementation of OBR activities and updates from technical sub committees.

This plan was reviewed by the national-level coordination platforms of partners through the National Coordination Committee and its respective subcommittees. After consultation with Partners, the target population was estimated at 2,765,871. The microplanning template was developed by the logistics and cold chain subcommittee and revised by WHO. The plan included a bottom-up approach, with the use of uniform formats across the implementing regions. The District microplanning template was reviewed and approved by the NCC subcommittees prior to distribution. At the national level, the district micro plans were reviewed to check for consistency in the estimation of target populations and adherence to guidelines and collated in a database by region at the Polio EOC.

6.2 District level planning

Planning at District level was supported by the relevant Regional EOCs. These were supplemented with 3 SBC consultants, 2 National VAMS, 49 Central supervisors and 49 National level VAMs deployed to support each district among other resources deployed by UNICEF and WHO.

WHO supported the planning activities at district level, using the provided micro-planning template.

The planning process included: the review and update of the microplanning tool, as well as update of the district specific preparedness dashboard. The micro-plans included verifying the target population, number of villages, parishes, sub counties, verification of the cold chain inventory, development of logistics distribution plans, social mobilization plan including plan to cover high risk populations and hard to reach areas.

The filled-out plans were submitted to the Regional and National EOCs for review and compilation at the central-level. Development of the micro-plans provided an opportunity for capacity building of health workers, and alignment with the budget.

Key Issues under Planning:

Incomplete and delayed submission of micro plans by districts resulting in lack or delayed verification of the micro plans to align with the National budget

Shortage of vaccine carriers in some districts that led to borrowing from neighboring non-implementing districts;

Measles outbreaks response in some of the implementing districts during round 1; and preparation for the Big Catch up during Round 2 posed a threat of competition for limited resources

7.0 Training

7.1. Preparation for training

Under the leadership of the UNEPI, the service delivery sub-committee of the NCC convened several workshops to develop the training manual and tools for the campaign. Each sub-committee was tasked to review and update their respective technical sections of the content within the field guide. This was in areas of: social mobilization, supervision, monitoring and evaluation, cold chain and logistics management. The SIAs field guide used in the previous SIAs was reviewed in the depth and updated to include updated technical information from WHO and contextualize them with the Ugandan situation.

7.2 Central-level training

As part of the preparation process for both rounds, MoH, with support from partners, conducted the National training to equip supervisors with knowledge about the campaign approach; this was a one-day training held on the 24th of September 2024 at Protea Hotel Kampala.

Objectives of the training

- To ensure high quality campaign implementation at district level vaccinate at least 95% (by LQAS) of under 5 children in the 49 implementing districts.
- Create awareness and increase demand for the polio vaccine and routine immunization by the end of the campaign.
- Provide capacity building to health workers and local government stakeholders including partners to implement the campaign and outbreak response.
- Strengthen routine immunization, second year of life platform, and enhance AFP surveillance

Training Schedules and Focus Areas:

Training sessions were conducted two weeks prior to the campaign, with a strong focus on technical and operational preparedness. Topics covered included microplanning,

vaccine handling and storage, data collection and reporting, communication strategies, and monitoring and evaluation.

Participant Details:

National-level participants included 78 master trainers, program managers, regional EOCs and senior supervisors. These individuals were responsible for cascading training to district and subcounty levels. From RRHs, Partners, NSTOP, Fellows; flagged off training and topics covered

Special Focus on High-Risk Areas:

Additional emphasis was placed on training teams working in high-risk areas, including hard-to-reach districts, insecure areas, and regions with low vaccination coverage. These sessions included tailored strategies for engaging resistant communities and addressing cultural concerns.

Methodology

The training included knowledge updates on key aspects of the nOPV2 house-to-house campaign as well as a performance from prior campaigns. The trainers also elaborated in detail the concepts of quality campaigns, why the campaign is relevant, teaming and supervision of field teams, guidelines for budgeting and financial management, microplanning, and data management.

The training utilized different methods like demonstrations and case scenarios to ensure that the participants clearly understand the concepts of campaign. Power point presentations were projected for all to see, and printed task-oriented guide for health workers and polio frequently asked questions were provided to participants and used as visual aids in this training.

The training was officially flagged off by the Director Public Health who also monitored the exercise. In his opening remarks, he appreciated all partners and participants for taking time to be part of the workshop. He emphasized that the polio outbreak declared by the Ministry of Health is regional coming from our neighbors in the East Kenya and therefore a high need to be vigilant because the threat still exists. He mentioned that we need to enhance awareness so that masses can know why the intervention is necessary.

He encouraged people to put to use the resources that have been provided to combat polio, highlighting the low coverage of routine immunization for IPV which is below 40%.

The Director recommended that travel screening and vaccination be heightened especially for people travelling. And that a cross border meeting for the Horn of Africa will be held here in Kampala to host our neighbors of Kenya, Tanzania, South Sudan, Ethiopia, Somalia and other countries. He added that implementation will be done in synchronization with our neighbors Kenya to ensure a high vaccination coverage on both sides.

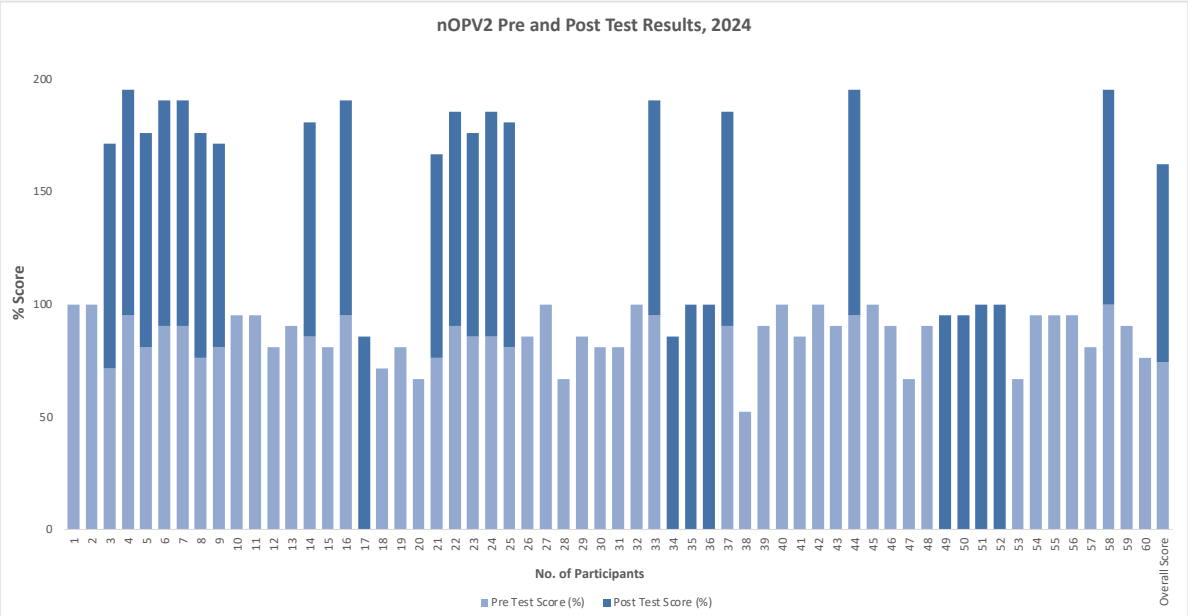
He added that National training of supervisors was a “handover ceremony” of the campaign to districts and implementers as an accomplishment and National level was now ready to divert efforts to other pressing Agenda trusting that the supervisors and districts were adequately equipped warriors to complete the mission without fear.

He finally empowered all participants by delegating the tool of authority to firmly and objectively represent the program in their various capacities to ensure quality and efficient campaign implementation.

The training covered the following topics:

- Introduction of polio outbreaks response plan and immunization and Polio outbreaks in the region
- House to House strategy of polio immunization campaign
- Budget & Financial management guidelines and payment terms
- Micro planning for polio immunization campaign
- Training and team selection
- Facts on Novel Oral Polio Vaccine
- Advocacy, communication and social mobilization for polio immunization campaign
- Data management;
- Supervision, data management & accountability
- ODK Supervision Tools and Registration tools for payment

A pre and posttest was administered to all participants. The overall scores indicated an improvement in performance between the pre and post-test. The pretest score ranged from 52-100% and the average for the group was 74%. In the post test a range score between 61-100% and the average for the group was 87%. For those facilitators who did not achieve the set posttest score of 80% additional orientation was given so that they could understand better and do the same in the district trainings.



7.3 District level training

Following the training of national supervisors, consultants, and Regional EOCs, they were deployed to all regions and districts, respectively, to facilitate and supervise the district-level training and implementation. District-level training was attended by District Health Teams (DHT), Sub-county supervisors, and Partners. It was a one-day held between 30th September – 2nd October 2024, depending on the District plans. The trainings were well facilitated with meals and participant allowances.

Following the District level training, Vaccination teams were trained at the sub-county level, facilitated by the Sub-county supervisors. A total of 933 sub-county supervisors, 1,771 parish supervisors, and a total of 20,000 VHT were targeted. The Sub-county level trainings were facilitated using one of the IEC materials: the task-oriented field guide, which focuses on the development of daily team implementation plans.

There was adequate time for mobilization for sub county trainings and this enabled full attendance of targeted participants.

The objective of the training was to;

- Sensitize leaders, health workers and stakeholders about the upcoming campaign
- Plan and prepare the districts, sub-county levels, vaccination teams and the
- community at large.
- Strengthen routine immunization

The training was facilitated by assigned district supervisors, with support from a national supervisor.

Topics discussed during the training were;

- The importance of immunization
- Key facts on polio
- Data recording and management
- AFP Surveillance
- AEFIs Surveillance
- How to deal with resistant parents /Care takers

Training of VAMs

Sam Ofori making presentation on RND1 results *Christine making her submission*

There was a National training for VAMs held with support from UNICEF. Each district was allocated one National VAM, making it a total of 49 VAMs from the central level. The trainings were held on 27th September and 2nd November 2024 for both Round 1 and 2, respectively, at Fairway Hotel Kampala. The Team was taken through the Vaccine Accountability Standard Operating Procedures and tools.

Orientation workshop for RND1 27th September 2024

Methodology

The orientation used power point presentations, practical demonstration of filling data tools and plenary QA discussions.

Session1; Workshop Objectives

Participants were taken through the main of VAM objectives summarized as "the vaccine accountability framework is to ensure that all nOPV2 vaccines are tracked, collected and either contained or destroyed in order to minimize the risk of spreading the vaccine derived virus". nOPV2 accountability after the SIA rounds means a zero balance of nOPV2 in the country.

Session2: EPI overview – Summary polio outbreak background

To appreciate the main challenges with polio eradication and concerns of why it becomes a global health threat, the participants were taken through the background and updates on global polio eradication initiatives and the status in Uganda and how the surveillance is looking out to potential risks of polio transmission including sewage in the environment.

Session3; Vaccine accountability during the last polio outbreak response in Uganda – Results and lessons learnt

The participants were taken through the VAM performance in the previous polio outbreak response highlighting the concerns of the many unaccounted-for vials, urging them to be vigilant this time round and ensure no vial is lost.

Session4; Cold chain and vaccine management for nOPV2 campaign, CCE inventory (vaccine carriers, icepacks, estimation of vaccines and supplies, Icepack freezing and distribution)

The logistics preparations that covered the CCE inventory review for vaccine and associated transportation and storage, the estimation and distribution was discussed.

Session5; Vaccine accountability monitoring tools

The participants were taken through the vaccine accountability framework and the tools/ forms that are used for recording and monitoring the vaccine distribution, utilization and reporting.

Session6; Reverse logistics (retrieval of usable and unusable vials)

The management and handling of both usable and unusable vials (opened empty,

partial, broken or closed with VVM change or expired) was discussed highlighting the monitoring of storage and return of the vials to HFs, to districts and consequently to NMS. The SOPs for vials verification and documentation including writing and submitting of incident reports in case of missing vials was discussed.

Session7; Inactivation and disposal of unusable vials

Participants were told the different methods of inactivation and disposal and that Uganda had chosen incineration at an approved incineration site in Nakasongola which process is to be managed by NMS with guidance from NTF.

Session8; Recording of field activities using ODK

As part of the monitoring and reporting, the participants were taken through the ODK, the fact that vaccine accountability forms are now available in the system.

Session9; TOR, Teaming and Administrative briefing

The participants were introduced the TOR for VAMs and HWs managing nOPV2 vials at all levels.

Preparatory meeting for RND2 02nd November 2024

- Performance of polio OBR RND1(results as by dashboard)
- Vaccine accountability monitoring Sample District presentation
- Overview of Vaccine accountability monitoring National level RND1
- Overview of Vaccine accountability monitoring tools
- Plans for RND2 (vaccine distribution, district budgets)
- Follow up UNICEF funded activities (registration and endorsement including the VHTs and LC1s, accountability)
- TOR, Teaming, Fuel cards (transport arrangements)

Performance of RND1 as by ODK Dashboard

A summary of the administrative coverage as by the Dashboard was presented by Dr. Fabrizio indication that the national coverage was 118% which a contribution of the key players. However, he noted that the vaccine accountability reporting (vials used) using ODK was not same as what was coming from the Form A reports and stressed the need for the DVAMs to ensure they reconcile information with the district Biostats. For reported shortage of Forms, more had been printed and participants were to pick and go with them.

Sub National level VAM training

VAMs at sub national level were trained by the National Supervisors and National VAMs with the Health Vaccination Teams to ensure a harmonized implementation and accountability. One VAM per district/ City, One VAM per sub-county and One VAM per HF. Emphasis was on filling to the VAM forms and the need to ensure all vials (usable, unusable or broken) are returned by the HWs.

Key Issues Under Training

- Trainings in some sub-counties lacked practical's sessions hence poor vaccination skills
- Incomplete Teaming and participation
- Late start of training activities

8.0 ADVOCACY COMMUNICATION AND SOCIAL MOBILISATION

To create awareness and generate demand for Immunisation, the ACSM Pillar spearheaded planning, implementation and capacity building to ensure access and equity of vaccination services across all districts with specific focus on hard to reach and high-risk communities by targeting messages on communities with zero dose and under-immunised children.

National Level Activities

Anthropological investigation and risk assessment after declaration

Introduction and Rationale

A Polio outbreak was declared in the Mbale and Bukedi regions following the issuance of a notification by the Uganda polio reference laboratory at the Uganda Virus Research Institute to the Uganda Ministry of Health, Immunization & Vaccines Division, and the National Public Health Emergency Operations Centre (EOC) regarding the detection of a Polio Virus Type 2/novel Oral Polio Vaccine Type 2 negative (PV2/nOPV2-ve) on May 27, 2024. Acting on this notification, while no human polio cases have been confirmed, a response was started by Ministry of Health on 7th June 2024. Highlighting a challenge of vaccine hesitancy and low vaccination coverage thanks to largely behavioral and social determinants as well as intervention design and implementation gaps drivers, the results of a Polio assessment conducted showed that out of the 113 children under 12 years assessed, only 20% had vaccination cards as evidence of vaccination (MOH 2024b).

It is against this background that an anthropologist was commissioned to conduct a qualitative behavioral and social determinates study and spearhead behavioral modeling of hesitant populations as WHO's technical support into the ongoing Polio and Measles outbreak response in the region. Methodology and exploratory study design with a participant observation (action research) approach was utilized in this intervention from July 10th to 16th 2024 in Mbale city, Mbale, Manafwa, Butebo and Kibuku districts using six key methods. These include, 36 participant observations, 26 key informant interviews, 13 ethnographic group discussions, 47 in-depth interviews, documentary reviews and photography.

Key Findings

1. Perceptions on the outbreak: There are two divergent perceptions:

(1) 6/10 people think we need everyone vaccinated to be safe. These believe:

i. vaccine hesitant populations in the region and

ii. Children that are not vaccinated are the reason we have VPDs in circulation in the region

(2) 4/10 think vaccination is not necessary. These believe:

i. The cases of measles suspected in the area are just of a simple rush that will disappear or symptoms of gonorrhea that can be treated with herbs

ii. Vaccination is against their religious belief that allows for only traditional medicine and prayers

iii. Its witchcraft causing paralysis not polio and the solution lies in prayer

iv. It's their human right not to be forced to vaccinate

v. Parents must consent before their children are vaccinated in school

vi. No one is liable if a child develops after effects from non-safe vaccines

2. Beliefs and Practices with Potential to Drive the transmission risk of VPDs and cVDP Observed:

i. The potential for the transmission risk of VPDs like the cVDP is driven by six key beliefs and practices observed, including:

ii. Poor waste disposal practices and beliefs: The three (3) mapped include (1) belief that it's not good to pour pregnant mother's and children's excreta in the latrine/toilet to safeguard them from witchcraft targeted at the latrine users. This belief can facilitate the spread diseases transmitted through the fecal oral route such as Polio

iii. Poor disposal of pharmaceutical waste at HC 2 and HC3 where a proper collection system is lacking

iv. The practice of emptying untreated domestic and industrial sewage directly into the streams where children also swim, farmers collect water for cooking, mixing agro-chemicals, crops, irrigating vegetables and washing of bikes

v. Cooking/Washing of utensils/fresh fruits with dirty stream water and eating of fruits and vegetables washed in the river

vi. Usage of TBAs and private health facilities in vaccination category two (2) and above (d) Sinking of shallow wells at the same latrine depth in schools with high water tables

vii. Usage of VHTs instead of midwives to administer polio vaccines

viii. Vaccine hesitancy in the Somali communities, private schools with international students, Indian community and among members of extremist religious sects like Njiiri 666 that to evade vaccination shift with children for a

month prior to immunization, ensure children don't go to school and are not treated in hospitals with modern medicine, cross to the neighboring country or islands during vaccination

3. Factors Affecting Vaccination Coverage Performance:

The vaccination coverage performance in the region was found poor. Mbale district in the FY 2023/24 for example, fell in EPI category 2 with a DPT 1 coverage standing at 43%, DPT 3 coverage at 42% and MR1 coverage at 64% (HMIS 2023/2024) because of three categories of factors:

(1) Catchment area and population factors: The catchment factors mapped include: (a) The catchment area is big (b) bad terrain, bad roads, bad weather make some places not motorable and make health workers arrive late for outreach. On the other hand, the population factors mapped include (a) the urban population served being highly mobile (b) MCH health seeking behavior from TBAs and lastly (c) limited knowledge on vaccination card reading.

(2) Design and Implementation Gaps: The assessment mapped out design and implementation gaps that have contributed to the poor EPI performance in the region under four areas. These include outreach implementation gaps, logistical gaps, coordination gaps and RCCE gaps.

(a) Outreach Implementation and Design Gaps: Four implementation and design gaps mapped include: (i) Data led approach to mobilization not embraced everywhere (ii) Data quality gaps with targeted number of children higher than actual number in the VHT registers (iii) Outreach sites are not evenly distributed in some areas or are placed on market days (iv) VHTs selected without following the criteria are inactive

(b) Logistical gaps: Six logistical design and implementation gaps were mapped: (i) Lack of all-weather PPE for health workers (ii) lack of EPI Vehicles/motorbikes for support supervision (iii) limited digitalization equipment and poor documentation (iii) limited facilitation for VHTs in Mbale/mobilization by VHTs with the diversion of attention under PDM to parish chiefs (iv) Stock out of vaccines and HMIS tools for FY 2024/25 and l (v) lack of EPI Vehicles/motorbikes for support supervision and (vi) lack of resources to support mass vaccination training and coordination activities.

(c) Coordination Gaps: Five coordination gaps were mapped: (a) Noncompliance with the PHA 2023 or interaction between the PHA 2023 & registration of persons Act 2015 (part X i.e., national identification register) (b) HWs in PFPFs not following vaccination guidelines (c) corruption (d) under staffing of vaccination team (e) delays in the sharing of lab results with responders

(d) RCCE Gaps: Three RCCE design and implementation gaps were mapped: (a) Inadequately targeted specialist led stakeholder engagements have been conducted with hesitant communities and institutions, even those that don't use radios leading to use of force (b) Failure to manage misinformation/Failure to fulfil the 2019 promise to respond to the concerns Njiri 666 raised to parliament and in the Mbale meeting (c) Inadequate IEC materials both in English and local languages: This is affecting all the

districts and facilities in the two regions.

(3) Vaccine hesitancy: Given the vaccine hesitancy, there

i. are attacks on vaccinators and hostilities towards VHTs
ii. is non enrolment of children in conventional schools
iii. is hiding of children in the pits dug in gardens on vaccination days
iv. deliveries at home or with a TBA
v. is crossing of borders with children to Kenya (in Bugisu) to the islands of L. Opeta (Bugwere)
vi. keeping of children away from school on vaccination days

4. Drivers of hesitancy against Vaccination: Five categories of factors were mapped as the key drivers of hesitancy in the Elgon and Bukedi regions:

i. Low awareness levels and non-targeted engagements with stakeholders
ii. past experiences (perceived, lived or heard) with (i) fraudulent and nonprofessional practices (ii) reports of fake vaccines administered (iii) reports of injuries/deaths after vaccination (iv) known child developed disability or injuries after an ordinary injection COVID-19 vaccine did not prevent infections
iii. Perceptions, beliefs, attitudes, and myths about vaccination. Some of these include the perception that (i) Africans are being vaccinated to give them terminal illnesses because white people (Bill Gates) wants to reduce their population (ii) vaccines harm/kill children instead of safeguarding them (iii) its no one's liability if a child is harmed by a vaccine (iv) vaccines for routine immunization are not in the health facilities (v) Its vaccines that caused the current AFP cases (vi) a school will only vaccinate a child if a parent has consented to it in writing
iv. Religious beliefs (Njiri 666 cult religious beliefs): Two extreme religious beliefs were mapped from the Njiri 666 cult group: (i) Child vaccination is setting pace for Satanic new world order (ii) Everything forced on people has evil intentions
v. Social media and misinformation: All the beliefs and misperceptions above are awash in the social media and creating infodemics.

Key Recommendations

The recommendations generated are presented using a pillar-based approach.

Logistics Pillar Recommendations

Address the logistical design and implementation gaps highlighted under the key pillars of the response especially, logistics for RCCE, transport for the district MCH, vaccine stock outs among other

RCCE Pillar Recommendations

- Start targeted evidence led stakeholder engagements prior and until the campaign is over
- Deploy bloggers to respond to infodemics
- Start vaccination campaigns from the families of converted vaccination ambassadors and cover the procedure with videos/photos to share with followers
- Print and distribute polio and measles IEC materials in the languages of affected districts
- Engage with all the non-compliant groups mapped including the Indian association, Somali association leaderships and other Njirri 666 leaders
- Sensitize every school on the need to file a vaccination certificate for every child and to demystify the belief that they need to obtain a written consent from parents to have their children vaccinated
- Work with the anthropologist to complete behavioral modeling of non-complaint groups in all the affected districts

Coordination Recommendations

- Address the question of staff under deployment by having a team of 2 vaccinators allocated per village in the vaccination campaign
- Work with NIRA not to issue LIN to learners not vaccinated
- Health inspectors should move to every school and make sure a vaccination certificate of every child is filed in line with act 35 of PHA 2023
- Encourage VHTs to supported mobilization is needed
- update registers to support vaccination accountability
- Engage capable people and village leaders where VHTs are all dormant, have other roles or have moved on
- Immunization should be left to midwives. It is also heat sensitive. Residue should be disposed professionally. VHTs should mobilize.

Recommendations to address practices with potential to aid FORD transmissions

- HWs should raise their AFP and missed case suspicion index to improve facility based surveillance
- Schools in high water table sites should sink deep wells or connect to NWSC
- The city council needs to build a proper water drainage channel for the tributaries of river Nabuyonga and river Nakibiso
- City council should ensure all facilities and homes along the river have latrines/

toilets with functional soak pits and septic tanks

- Schools in locations with high water tables should build appropriate stepped-up latrines and toilets with functional septic tanks and soak pits

Development of IEC materials and printing

The initial drafts of various IEC materials were prepared by the Uganda Country Office (UCO-SBC team) in line with the guidelines from the HQs communication team and guidance of the local GPEI partners. Translation of the IEC materials was done by HPE&C in 11 local languages catering for the languages spoken in the 49 districts. The use of local languages was aimed at mitigating language barriers in different communities. Following approval by the HPE&C and printing of the materials, NMS dispatched them to the districts on 24th September until implementation of the campaign. All the districts received IEC materials prior to campaign implementation. The SBC teams on polio coordinated distribution of the materials to the lower levels with the DHEs and DCCTs. Materials were distributed to the lower facilities in time and were visibly seen in communities.

Samples of Polio -IEC materials used during the campaign

Public awareness

Traditional media

UNICEF supported the HPE&C department in developing the media plan. Through media agencies, MAAD and TBH, key radio stations were engaged to initially air Polio outbreak alerts and then campaign spots across all regions of the country. Polio radio and TV spots, as well as DJ mentions, were aired until 10th October for the first round and until 15th November for the second round of polio campaign. Additionally, the DHTs also conducted interactive radio talk shows involving service providers, political and

socio-cultural stakeholders, who were guided by the MoH-approved talking points, to discuss the key points on Polio and the SIAs and offer clarifications to listeners calling in during the shows. Selected media agencies also covered the Sub-National launch event of the campaign on 3rd October 2024 in Mbale city.

Social media

The UNICEF social media and SBC teams designed a comprehensive social media plan in collaboration with the MOH PRO team that included key messages and relevant infographics on Polio and the upcoming National house-to-house Polio campaign. Messaging on social media immensely helped in amplifying awareness and publicity of the campaign among the users, as was evident from the social listening reports for the period between September to December 2024 that included the campaign days. Tweets and posts about the Ministry of Health's Sub-National house-to-house Polio campaign were posted on UNICEF Uganda's Twitter, Facebook, and Instagram pages.

Awareness raising through Public Service Announcements (PSAs)/community drives

Announcements by the VHTs using megaphones also featured among key ACSM activities planned at the sub-county and village levels for the Polio campaign. The DHTs also engaged the community audio towers (Bizindaaro) in urban areas to make announcements about the Sub-National house-to-house Polio campaign dates and timings. PAS-mounted trucks were used in all the districts to reach communities with key messages on the house-to-house Polio campaign in the sub counties, busy town centers, cities, municipalities and markets. These community drives were majorly supported by DHEs, Health Educators, Health Assistants and VHTs.

Advocacy meetings with stakeholders at national and subnational level

The MoH (HPE&C and UNEPI) with support of UNICEF conducted the following advocacy meetings:

Advocacy meetings were conducted at district level both physically and virtually with different stakeholders who were expected to cascade the dissemination of polio messages to the lower levels in each district. It was anticipated that stakeholders selected and oriented at district level would have more impact in terms of enhancing community engagement initiatives on polio campaign than targeting the stakeholders at national level.

Advocacy. with the Media: This was physically conducted on 27th September in Mbale city and brought together representatives of media houses from the 5 regions of Busoga, Bugisu, Bukedi, Teso, and Karamoja regions where the following media houses were represented: Bukedde TV, Bukedde paper online, Baba TV, Top Radio, Capital FM, UBC TV, UBC Radio, Open Gate, Elgon FM, Voice of Teso, Voice of Karamoja, NBS Radio, East FM, and Akica FM. It was facilitated by the national level Public Relations office of the MoH and the DHE of Mbale district.

The orientation aimed to sensitize key media personnel on the ongoing situation

of Polio in the country and enlist their support for the national outbreak response campaign.

Advocacy with FBOs: This activity was decentralized to be done at district level. Each district conducted orientation meeting with the FBOs and cultural leaders with support of HPE&C department (MoH) and the DHOs office through the DHE. The ACSM sub-committee with guidance from NCC decided to conduct this orientation meeting at district level because the stakeholders would have more impact at community level since they are closer to the communities through places of worship. The focus was on major FBOs in each district that extensive networks with various religious institutions at community level which have been supporting the GoU in implementation of development and health programmes, especially routine and supplemental immunization activities. The participants in each district included, among others, members of the Uganda Orthodox Church, Seventh Day Adventists, representatives of Uganda Muslim Supreme Council, representatives from Church of Uganda, the Pentecostal Church, and the Catholic church in each district.

Advocacy with Health Professionals Associations: The HPE&C department, with support from UNICEF, organized an advocacy meeting on 26th September with the health professional' associations with the aim of involving them to support the upcoming Polio campaign across the country. The meeting was attended, among others, by representatives of the Allied Medical Council of Uganda, Uganda Medical Association, Uganda Paediatric Association. The meeting brought together representatives of the health professional councils from the 5 regions and were oriented virtually by HPEC and UNEPI.

Advocacy with Rotary and Lions clubs

HPEC with support of UNICEF and UNEPI conducted an orientation meeting on polio campaign with members of Rotary and Lions clubs on 25th September 2024. The orientation meeting aimed at equipping them with knowledge on polio disease and the campaign and solicit their support for the campaign. The participants were selected from the five regions of Busoga, Bugisu, Bukedi, Teso and Karamoja and were oriented virtually by HPEC and UNEPI staff. A total of 64 participants attended the meeting and joined the DHTs in the 49 districts to mobilize communities for polio campaign.

Community Engagement

The community engagement activities were supported by the regional SBC polio consultants with support of DHEs to conduct activities focusing on the Hard-to-Reach/ Serve/Resistant Communities by strengthening linkages between service providers and the hard-to-reach/serve communities in terms of distance from the health facilities, offshore habitats, and poor road network, special populations including nomads, refugees, fishing communities, pastoralists, urban dwellers and the vaccine-hesitant/resistant groups. This entailed identification of such communities in each district through social mapping and support to the DHTs in devising mitigative ACSM plans to engage key leaders/influencers among them.

Community engagement also involved the participation of Religious Leaders from churches and mosques as well as cultural leaders to use their structures, including places of worship, and reach out to their followers with the key Polio campaign messages. As per the data available from 49 districts in the implementing districts of the country, a total of 1712 religious leaders were engaged in 49 districts through advocacy meetings before the implementation of the campaign.

The House-to-House Sensitization through the trained VHTs/LC1s was another key activity under community engagement. The VHTs and LC1s sensitized caregivers while undertaking child registration exercises in the pre-campaign period and also during the vaccination activities. To sensitize communities for the first round of the Polio campaign, 20,000 mobilisers (village health teams and LCs) were mobilized and deployed to educate the community on polio campaign. VHTs were a key channel for message dissemination and raising awareness about the campaign to the community and households using the IPC method. In most districts, they also registered all eligible children up to the age of 5 years for easy tracking during implementation and follow-up in case the children were missed.

The DHTs integrated Polio messages in the community dialogue /meetings routinely organized by key EPI implementation partners in some districts before the commencement of the campaign. These meetings facilitated dialogues on key immunization topics, including the Polio house-to-house campaign, between community leaders/members and the service providers to improve knowledge and awareness levels on Polio and the campaign in the community. This effort allayed any doubts and hesitancy to polio vaccine among community members.

Launch activities; Uganda launch

The polio campaign launch was held in Mbale City at Busamaga playground on 3rd October 2024 and aimed at officially kick starting and popularizing the sub-national house-to-house polio vaccination exercise, and to increase public awareness about the upcoming house-to-house polio campaign. The Health Promotion, Education and Communication department team was joined by the team from UNICEF to ensure that they coordinate and work with a service provider -the Events Management Company and the Mbale City team led by the RDC, CAO and CHT team to prepare for the Launch.

Specific objectives of the polio immunization campaign launch

1. Increase visibility of polio campaign efforts at national, district and community levels
2. Revitalize the focus on polio outbreak response strategies
3. Advocate for multispectral collaboration for increased and sustained implementation of routine immunization

Pre-launch activities

The pre-campaign activities were comprised of meetings held at Mbale city with city officials to discuss issues in preparation for the launch of polio campaign.

In total, four preparatory meetings were organized, three of them were at the CHOs Office at Mbale city and one of them was held at the venue of the launch (Busamaga playground) in Mbale City.

Launch of Polio Campaign

Polio Immunization Launch was successfully held at Busamaga playground in Mbale City and the Director of Public Health-MoH-Dr. Daniel Kyabayinze officiated at the function on behalf of the Minister of State for PHC. In attendance were Development Partners such as WHO Representative, UNICEF Representative, CDC Representative, CAO and RDCs from Mbale region districts. All the dignitaries gave highlights on efforts to respond to polio outbreak and pledged to support campaign efforts.

The launch was also attended by the Kenya delegation from MoH with efforts to ensure cross-border vaccination in an effort to synchronize polio campaign interventions. Earlier on the Uganda delegation had attended the Kenya launch that was conducted a day earlier on 2nd October 2024.

Dr. Daniel Kyabayinze giving polio drops to a child at Busamaga playground-Mbale city to symbolise the launch of polio campaign in 49 districts

MoH officials, Mbale officials and the general public attending the launch of polio campaign


Launch of polio campaign-Bungoma-Kenya


Launch of polio campaign in Bungoma-Kenya-2nd October 2024. The RDC-Namisindwa district was the head of the Uganda delegation

Supportive supervision

The HPEC department conducted 2 support supervision visits in each of the five regions of Busoga, Bugisu, Bukedi, Teso and Karamoja. The supervision aimed at identifying the bottlenecks affecting demand for polio campaign and support the districts to address the challenges through the DHEs, partners, religious and cultural leaders, CHEWs, VHTs and LCs.

The SBC consultants, in collaboration with the MoH Health Promotion Teams, provided extensive support to the district health teams in the planning and execution of ACSM activities. Closely working with the 'District Health Educators,' the surge staff supported the districts in updating the social mobilization component in micro-plans, planning the timely implementation of budgeted pre-campaign activities at the district and sub-district levels, organizing radio/TV talk-shows with relevant talking points for the panelists and moderators, and orienting the health promotion staff on ACSM using the MoH approved field- training guide. They also supported the regional, district, and sub-county training, especially on ACSM. Furthermore, they were instrumental

in ensuring that the districts implemented all the planned ACSM activities in line with the SIAs budgetary allocations. Reports collected on ACSM preparedness from 49 districts indicated that 80% of the districts had completed all the planned ACSM activities by the eve of the campaign.

For intra-campaign supportive supervision, UNICEF and HPE&C officials supported the house-to-house Polio campaign and monitored the extent and impact of the implemented ACSM activities. Besides checking the team's deployment, essential logistics, and availability of IEC materials, each official visited 3-5 villages and randomly sampled ≥3 households to engage with the vaccination teams and assess caregivers' level of awareness and knowledge on Polio and the campaign. The exercise indicated high acceptance of OPV among the parents and caregivers in the community, except for minimal hesitancy in a few areas. ACSM activities at the district and sub-county levels were found to be satisfactory, with IEC distribution completed in all the districts. The exercise also revealed that most of the caregivers came to know about the house-to-house Polio immunization campaign through radio and the VHTs.

Social Media Monitoring/social listening

UNICEF engaged IPSOS to provide social media monitoring/listening services to track trending public views on Polio and routine immunization in general on the internet and social media platforms, including Facebook, Twitter, Instagram, and news sites. By the end of November 2024, IPSOS had analyzed 3,000 posts and over 198 million audiences reached by potential impressions (number of times the content was viewed/seen), with 82% positive conversations,18% 'Neutral' and 2% negative sentiments around immunization, and Polio inclusive . Conversations around immunization largely remained positive. Positive engagements were mostly around the launch of The Big Catch Up campaign, polio immunization, and focusing on vaccine safety, effectiveness, and public health messaging related to various immunization programs. Negative conversations were mostly noticed around vaccine-related content .

In the week of 25th September 2024 preceding the campaign, the overall sentiments were positive at 56% compared to the previous week, with 'Negative' sentiments remaining at 38%. The subsequent week, including the campaign implementation period, recorded a significant increase in volumes and potential impressions, with the social-media influencers further raising overall sentiments and positivity.

U-Report

IPSOS-UNICEF-November 2024.

IPSOS,UNICEF, November 2024

U-Report by UNICEF partnered with Solutions for People (S4P) to strengthen routine immunization services in 10 districts during polio campaign. It had two main objectives of mobilization which include:

Boosting High-Performing Areas: In districts like Busia, Jinja, Kamuli, and Tororo, where coverage is already high, community mobilization was aimed at pushing towards near-universal coverage through polio campaign.

Reinforcing Positive Behaviors: In districts meeting the target, like Amudat and Mbale City, this strategy would reinforce existing positive behaviors and help sustain high coverage rates.

The U-Reporters worked with DHEs, VHTs and other stakeholders involved in community engagement initiatives in the 10 districts of Busia, Jinja, Jinja city, Kamuli, Tororo, Mbale city, Amudat, Mbale, Iganga, and Soroti to mobilize communities for polio campaign and routine immunization. The U-Reporters in the 10 districts were able to mobilize over 34,198 people for polio campaign and routine immunization in a period of 7 days.

District level

ACSM activities at the District level included but were not limited to the following;

- Engagement with political and civic leaders on routine immunization and supplementary immunization campaigns
- Participation in media activities through radio talk shows
- Participation in mobilization of communities through announcements in churches and mosques.
- Orientation of religious and cultural leaders,
- Orientation of VHTs
- House hold registration and mobilization
- Conducting community dialogue sessions at sub-county and community level
- Special populations, Nomads, Islands, fishing communities , insecurity
- LCVs supervised LC3 chairpersons to hold sensitization meetings for the lower councils
- The RDCs conducted sensitization meetings in the district and the same time monitored implementation of polio campaign.
- The DHEs conducted advocacy meetings with traditional & cultural leaders
- DHEs engaged resistant and refugee communities/groups in their locations
- DHEs held advocacy meetings with Sub County chiefs, GISOs & PISOs
- DHEs worked with religious leaders to run district specific announcements and DJ

mentions on polio

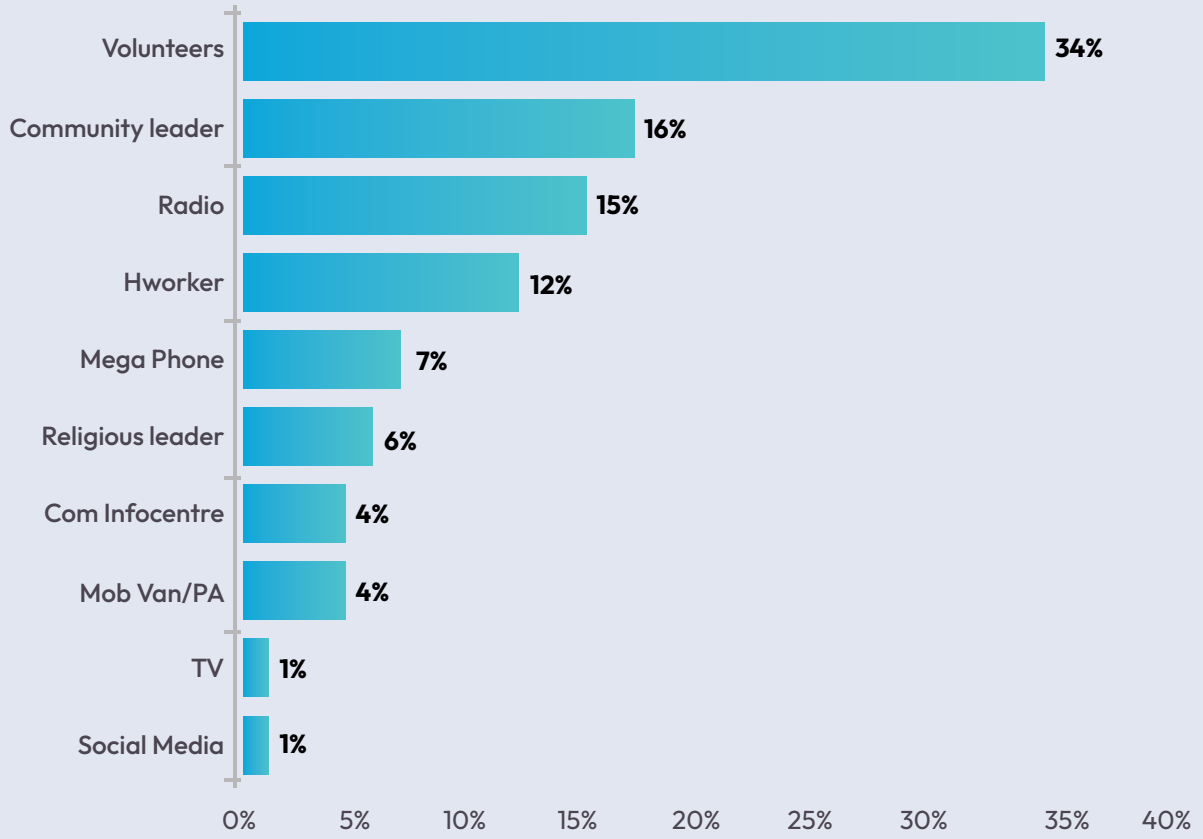
- DHEs conduct social mobilization and distributed IEC materials to lower levels.
- DHEs used mobile sound systems on pick-ups to disseminate messages on polio campaign
- DHEs held sensitization meetings with LCs & VHTs in hard to reach/ serve areas and resistant communities – Islands
- DHEs conducted sensitization meetings with LCs & VHTs in hard to reach/ serve areas and resistant communities - other hard to reach areas
- The DHEs conduct 1 day orientation of VHTs and LCs and engaged them in 3 mobilization and registration of children under 5 years
- DEOs were oriented on polio campaign and given airtime to contact school authorities to mobilize school children for vaccination and preach out to parents to allow their children for vaccination.
- Film Vans to districts for mobilization

Key results and achievements from activities implemented;

National

- The HPEC department and UNEPI with support of UNICEF Conducted a successful launch of polio campaign in Mbale city on 3rd October 2024 with good attendance by national, district and regional dignitaries from Kenya as well as members of the community. This was made possible by early involvement of city stakeholders in the planning and coordination.
- All national level activities were implemented with orientation of 34 DHEs out of 49 DHEs in the target districts.
- Radio talk shows were successfully conducted on 8 radio stations selected from each of the 5 regions and messages were aired on 8 radio stations and 1 TV station.
- Worked with the MoH Call Centre, which gathered community concerns and rumours about polio vaccine and polio campaign and provided feedback to the community. This effort together with other communication and social mobilization approaches reduced resistance to polio campaign.
- Polio campaign IEC materials for round one were delivered in time to all the 49 districts by UNICEF and were timely distributed to the community.
- The deployment of 2 SBC-Polio consultants facilitated coordination of ACSM polio campaign activities, facilitated creation of awareness and demand and raised the profile of DHEs in the polio campaign.

Overall, there was high level of awareness which was a collective effort of different sources of information as indicated in the graph below:



District

- Radio talk shows were conducted in the districts, and airtime of the RDCs contributed to the talk shows supported by MoH and UNICEF. The District Health Educators, District Health Officers and the district leadership were all availed with updated information which they disseminated to the public
- School based initiatives were increased through engaging the District Education Officers who wrote letters to head teachers and school inspectors to mobilize schools and support the program.
- The engagement of VHTs and LCs in mobilization of communities and registration of children generated high demand and acceptance of polio vaccine.

Key bottlenecks/challenges experienced during planning, preparation and implementation;

National

- The budget for film vans in each region was inadequate. This affected the number of days for mobilization with film vans in the regions. Each region was allocated a film van but was only able to cover a maximum of 4 districts in 5 days allocated for this activity.
- Inadequate funds to implement some activities like the orientation of Members of Parliament on polio campaign

District Level

- The budget for mobile vans and public address system was low compared to market prices and districts had to struggle negotiating for a fair price with the service providers.
- Districts had megaphones that consume varying numbers of batteries. The batteries supplied were not enough and could not last for more than a day of mobilization.
- Pockets of religious sects and resistant communities were registered in all the districts and these affected demand for immunization services.
- Some parents/caregivers hid children from vaccination teams by transferring them from homes to what they considered to be safe places for them and avoid vaccination.
- Misleading information circulating onWhatsApp especially from anti-vaxxers, with a focus on bad immunization experiences and the side effects of vaccination
- Vaccine hesitancy and refusals.
- The period for campaign planning and implementation was short given the compacted number of activities that were to be implemented in a short time
- ACSM preparedness data was not visible on the national dashboard because DHEs did not work with the Biostatisticians to populate the dashboard. This led to ACSM level of preparedness being rated low and yet a lot of activities had been implemented on the ground prior to the campaign.

  UCC declared Community Audio Towers illegal and this affected mobilization in the communities that use them.
- RDCs and other district leaders are engaged during campaigns and no plans for engaging them during routine immunization. This creates weakness in routine immunization and could be one of the reasons leading to many zero dose and under-immunized children.

Key lessons learned and recommendations for upcoming campaigns

National level

- Engagement of Events Management team to arrange for the polio launch made work easy and made the event colorful
- Early implementation of ACSM activities generated overwhelming demand for the service delivery team to cope with in some districts.
- Tasking the DHEs to take full charge of the ACSM activities raised their profile and confidence in planning and implementation of ACSM-polio campaign activities.

- The Ministry of Health should engage with UCC to have community audio towers reinstated because they are a good mobilization tool for ACSM at community level.

District level

- Early mobilization and timely communication about the polio campaign increased demand and uptake of polio vaccine.
- The involvement of RDCs, DISOs, GISOs and PISOs in mobilization for polio campaign, was key in reducing resistance against polio immunization campaign as some reasonable force was applied to get the children of resistant communities vaccinated
- Engagement with DHEs in discussions about the ACSM budget during orientation prior to the campaign left no room for some districts to divert ACSM budget
- Some members of the community who did not see the vaccination teams in their areas after 2 days of the campaign, started making calls to DHOs and DHEs demanding for their children to be vaccinated. This is a sign of high level of awareness and appreciation of polio campaign benefits that resulted into demand and acceptance of polio vaccination.
- The engagement of influential and supportive religious and community leaders was commended as a good practice since during mobilization they helped to reach the resistant religious sects and communities and preached using the Bible.
- Community engagement and trust building are essential for increased acceptance of polio vaccine
- Mapping the locations of resistant communities/religious sects and following – up on whether they take their children for routine immunization and complete the schedule is a sure way of ensuring that resistant communities do not only immunize their children under duress during campaigns but also during routine immunization. This is one of the ways to reduce the burden of zero dose and under-immunized children in these communities.

9.0 Logistics

Following detection of a cVDPV2 at an environmental surveillance site (Doko sewage) in Mbale city, that pose a serious public health threat, Ministry of Health (MoH), with partner support, developed a polio outbreak response plan, launching two rounds of polio mass vaccination campaigns targeting children aged 0-5 years in 49 districts in the regions around Mbale City using the novel oral polio virus type 2 vaccine - oral nOPV2 as recommended by the Global Polio Eradication Initiative (GPEI).

The use of the nOPV2 vaccine reintroduces live attenuated type 2 poliovirus into populations and the environment following the switch from tOPV to bOPV (1&3), which poses a risk of the emergence of a new Vaccine Derived Polio Virus type 2.

To mitigate this risk, strict vaccine management protocols need to be enforced, and the absence of nOPV2 after the vaccination campaign must be validated, confirming that nOPV2 is not left in the cold chain system. Notably, this process is informed by GPEI and the WHO guidance which stipulates that national public health officials and country response teams undertake the necessary steps required to validate nOPV2 removal. It also highlights Government ownership of this process.

Guided by the polio NTF the management, monitoring, removal, and disposal of nOPV2 at all vaccine storage and use levels are critical and must be confirmed and validated by external monitors who check the documentation and processes of nOPV2 strict management vigilance.

As per GPEI protocols that calls for efficient and effective containment and safe disposal of nOPV2 vials at the end of the OBR, it was recommended that countries engage vaccine accountability monitors to support the logistics management and ensure that all vials are accounted for at all levels.

The logistics pillar has a core mandate to ensure effective and efficient supply chain for vaccines and related supplies that deliver quality immunization supplies to the right places in the right quantities at the right time in line with effective vaccine management standards. The pillar is responsible for planning and coordination on procurement and delivery of vaccines and logistics to affected areas including inventory and logistics management and support. With focus on polio type 2 containment/ safe disposal, the pillar is also responsible for retrieval, inactivation and proper disposal of all the vials at the end of the OBR.

The group comprises a core committee of key immunization stakeholders, and other members that may not be permanent on the group. The Uganda National Expanded Program on Immunization (UNEPI) chairs the committee whilst the Secretary of the Committee is the in-charge of the Cold Chain Section UNEPI. Members from NMS, UNICEF, WHO, PATH, CHAI, JSI, NDA and Pharmacy division representatives constitutes the core technical members of the pillar.

Logistics Planning

The national logistics working group developed a plan that included; vaccine procurement (quantification, ordering and monitoring delivery), vaccine storage, distribution and vials retrieval, inactivation and proper disposal of all vials at the end of the OBR. Included also was assessment of cold chain capacity, recruitment and training of vaccine accountability monitoring team, procurement and distribution of VAM tools, Zip lock bags where unusable vials would be placed, support districts for procurement of fuel for freezing of icepacks in district vaccine stores, cold chain equipment maintenance, transport facilitation for supervision and monitoring by the vaccine accountability monitors VAMs.

Logistics Coordination

Pre and intra campaign coordination meetings were held both physical and online and provided updates to stakeholders. During implementation, the coordination meetings would receive reports and where gaps were identified such as;

- Districts that experienced vaccine shortages, mitigation measure to borrow from neighboring districts would be communication and acted on timely.
- Delay in activation of fuel cards, mitigation measures of engaging services providers to issue fuel while the cards were being sorted.

VAM training

The selection of the VAMs at respective levels was done by MOH and district local governments. To provide technical support for vaccine accountability monitoring, the country recruited two regional VAM consultants through UNICEF. These conducted a national TOT for the 49 National VAMs to be deployed in the 49 districts and followed up to support in the cascade training for districts and peripheral levels.

- The participants were taken through the following;
- Workshop Objectives
- EPI overview – Summary polio outbreak background
- Vaccine accountability during the previous polio outbreak response in Uganda – Results and lessons learnt
- Cold chain and vaccine management for nOPV2 campaign, CCE inventory (vaccine carriers, icepacks, estimation of vaccines and supplies, Icepack freezing and distribution)
- Vaccine accountability monitoring tools
- Reverse logistics (retrieval of usable and unusable vials)
- Inactivation and disposal of unusable vials
- Recording of field activities using ODK
- TOR, Teaming and Administrative briefing

The NVAMs proceeded to train the district and sub-county VAM supervisors who consequently trained the HF VAMs

Vaccine procurement

While all EPI vaccines in Uganda are procured through UNICEF from approved manufacturers, Oral polio type2 vaccine is no longer avialable on the market following the switch from tOPV to bOPV and is sought from the stockpile controlled by WHO as and when there is need. For any polio exercise that require Oral polio type2, a request has to be made to WHO through GPEI. The chart below show the request process.

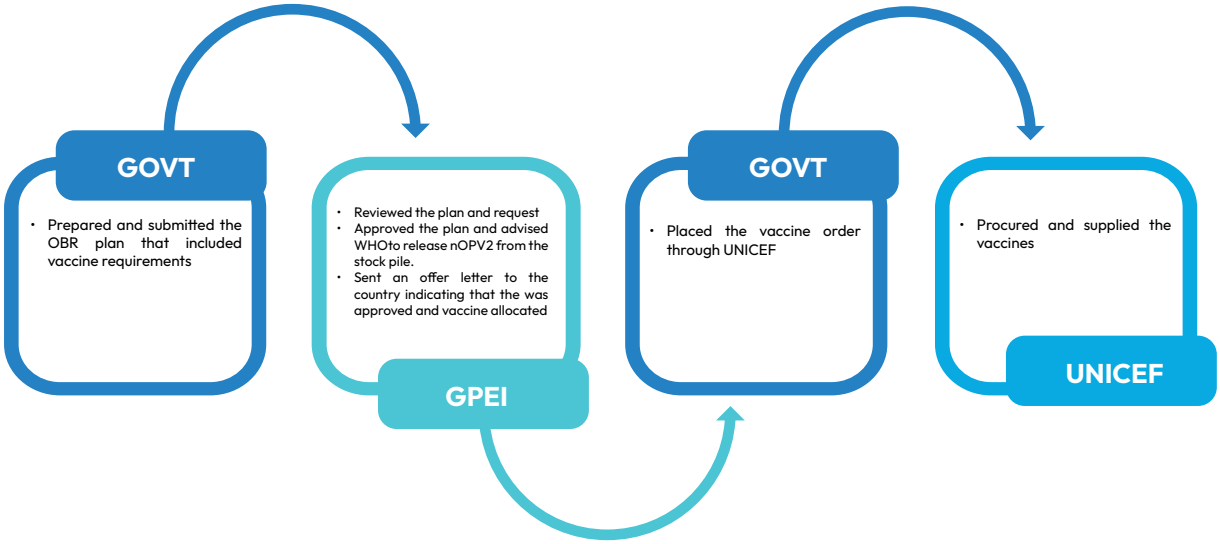


Chart showing the process for procuring the Oral polio type2

Upon approval of the polio OBR plan by GPEI, government requested 138,400 vials (6,920,000 doses) of nOPV2 for the target population of 2,765,871 for two rounds.

The vaccine was delivered to NMS. Upon inspection, the online VARs were filled, reviewed and submitted to SD. The associated supplies were procured through NMS but printing of the forms was handled through UNICEF CO.

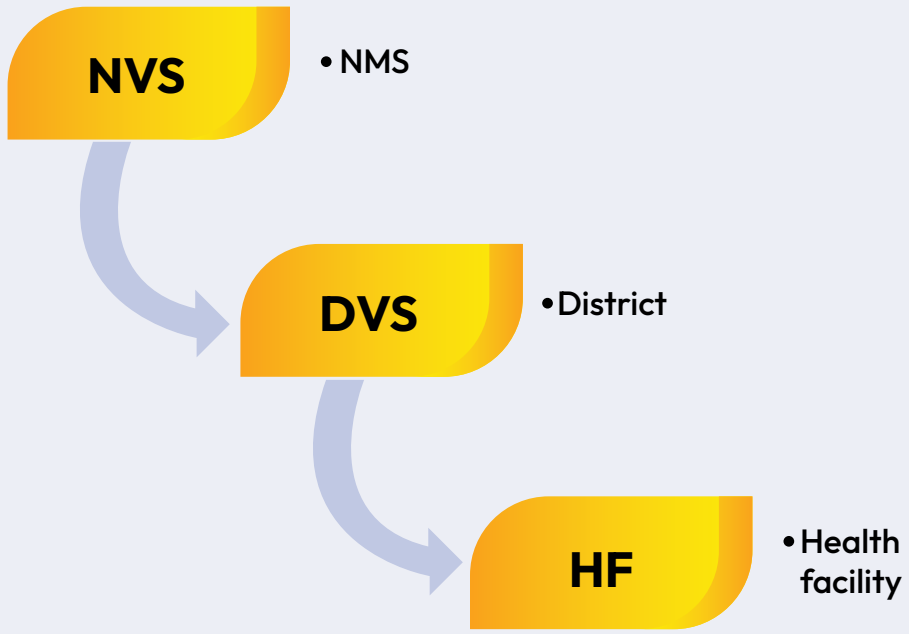
Cold Chain maintenance and assessment

In order to ensure availability of adequate and functional cold chain system for proper storage of the vaccines, the national team of cold chain technicians visited the 49 implementing districts to assess the level of preparedness regarding cold chain capacity and adequacy, they conducted repairs of malfunctioning cold chain equipment as well as carry out preventive maintenance in preparation for the campaign.

A desk review was carried out in consultation with the district teams assessing the vaccine carrier's gap and this was submitted to UNICEF that supported with additional vaccine carriers.

Vaccine distribution

Uganda has two levels of vaccine distribution. National to districts (by NMS) and districts to health facilities (by DHOs office with support from Partners). The Vaccination teams collect vaccines from HFs.



NMS use refrigerated truck to deliver vaccines to districts. A total of 138,400 vials (6,920,000 doses) was distributed for RND1&2 as summarized by region below

Region	# of districts	VialsRecieved RND1	Vials Received RND2
Jinja	12	24,077	24,350
Mbale	17	25,314	25,140
Moroto	9	6,802	6,850
Soroto	11	13,007	12,860
Total	**49**	**96,200**	**69,200**

Table showing RND1&2 vaccine distribution by region

The vaccine distribution for RND1 was based on projected target population from UBOS with additional 6% buffer bearing in mind that population dynamics does not necessarily follow the national census projections. Due to unpredictable population movements, and discrepancies in population between UBOS projections and actual people on ground, 17 districts experienced vaccine shortages and requested for replenishment from neighboring districts. At total of 733 usable vials were internally transferred to support these districts.

Notably the districts of Butebo, Kibuku, Kween, Mbale DLG and Kapelebyong requested to as high as 6% to 9% additional vials compared to the initial allocation. Vaccine distribution for RND2 was based on the utilization for RND1 factoring the usable balances from RND1. However, all districts reached more children during second round compared to first round and as a result another 11 districts experienced vaccine shortages and this resulted into another inter-district transfer/ relocation of 342 vials. This required timely coordination to identify where to source and transfer the vials needed.

ROUND 1 DISTRIBUTION LIST

Sn.	District	Total Pop.	Target Pop.	# nOPV2 Vaccine Doses	nOPV doses (rounded to 50 dose vial)	Buffer Quantities	Total Doses Allocation	# nOPV2 Vaccine Vials	# Droppers
1	Abim	193,600	39,688	46,831.84	46,850	2,800	49,650	993	993
2	Amudat	157,800	32,349	38,172	38,200	2,300	40,500	810	810
3	Amuria	256,400	52,562	62,023	62,050	3,700	65,750	1,315	1,315
4	Budaka	287,100	58,856	69,450	69,500	4,150	73,650	1,473	1,473
5	Bududa	319,800	65,559	77,360	77,400	4,600	82,000	1,640	1,640
6	Bugiri	555,800	113,939	134,448	134,450	8,050	142,500	2,850	2,850
7	Bugweri	210,300	43,112	50,872	50,900	3,050	53,950	1,079	1,079
8	Bukedea	303,100	62,136	73,320	73,350	4,400	77,750	1,555	1,555
9	Bukwo	143,600	29,438	34,737	34,750	2,100	36,850	737	737
10	Bulambuli	276,500	56,683	66,886	66,900	4,000	70,900	1,418	1,418
11	Busia	427,600	87,658	103,436	103,450	6,200	109,650	2,193	2,193
12	Butaleja	343,100	70,336	82,996	83,000	4,950	87,950	1,759	1,759
13	Butebo	127,000	26,035	30,721	30,750	1,850	32,600	652	652
14	Buyende	487,100	99,856	117,830	117,850	7,050	124,900	2,498	2,498
15	Iganga	448,300	91,902	108,444	108,450	6,500	114,950	2,299	2,299
16	Jinja	257,900	52,870	62,387	62,400	3,750	66,150	1,323	1,323
17	Jinja City	284,300	58,282	68,773	68,800	4,100	72,900	1,458	1,458
18	Kaabong	137,100	28,106	33,165	33,200	2,000	35,200	704	704
19	Kaberamaido	154,500	31,673	37,374	37,400	2,250	39,650	793	793
20	Kalaki	161,000	33,005	38,946	38,950	2,350	41,300	826	826
21	Kaliro	327,800	67,199	79,295	79,300	4,750	84,050	1,681	1,681
22	Kamuli	608,400	124,722	147,172	147,200	8,800	156,000	3,120	3,120
23	Kapchorwa	137,300	28,147	33,213	33,250	2,000	35,250	705	705
24	Kapelebyong	115,500	23,678	27,940	27,950	1,650	29,600	592	592
25	Karenga	74,800	15,334	18,094	18,100	1,150	19,250	385	385
26	Katakwi	214,600	43,993	51,912	51,950	3,100	55,050	1,101	1,101
27	Kibuku	287,700	58,979	69,595	69,600	4,150	73,750	1,475	1,475
28	Kotido	223,900	45,900	54,162	54,200	3,250	57,450	1,149	1,149
29	Kumi	317,700	65,129	76,852	76,900	4,600	81,500	1,630	1,630
30	Kween	120,800	24,764	29,222	29,250	1,750	31,000	620	620
31	Luuka	286,200	58,671	69,232	69,250	4,150	73,400	1,468	1,468
32	Manafwa	190,000	38,950	45,961	46,000	2,750	48,750	975	975
33	Mayuge	632,000	129,560	152,881	152,900	9,050	161,950	3,239	3,239
34	Mbale	299,000	61,295	72,328	72,350	4,300	76,650	1,533	1,533
35	Mbale City	358,700	73,534	86,770	86,800	5,200	92,000	1,840	1,840

Sn.	District	Total Pop.	Target Pop.	# nOPV2 Vaccine Doses	nOPV doses (rounded to 50 dose vial)	Buffer Quantities	Total Doses Allocation	# nOPV2 Vaccine Vials	# Droppers
36	Moroto	128,800	26,404	31,157	31,200	1,850	33,050	661	661
37	Nabilatuk	107,100	21,956	25,908	25,950	1,550	27,500	550	550
38	Nakapiripirit	133,200	27,306	32,221	32,250	1,950	34,200	684	684
39	Namayingo	250,600	51,373	60,620	60,650	3,600	64,250	1,285	1,285
40	Namisindwa	253,200	51,906	61,249	61,250	3,650	64,900	1,298	1,298
41	Namutumba	346,600	71,053	83,843	83,850	5,000	88,850	1,777	1,777
42	Napak	168,700	34,584	40,809	40,850	2,450	43,300	866	866
43	Ngora	182,600	37,433	44,171	44,200	2,650	46,850	937	937
44	Pallisa	415,500	85,178	100,510	100,550	5,950	106,500	2,130	2,130
45	Serere	416,500	85,383	100,752	100,800	6,000	106,800	2,136	2,136
46	Sironko	295,600	60,598	71,506	71,550	4,250	75,800	1,516	1,516
47	Soroti	334,400	68,552	80,891	80,900	4,850	85,750	1,715	1,715
48	Soroti City	79,500	16,298	19,232	19,250	1,100	20,350	407	407
49	Tororo	653,400	133,947	158,057	158,100	9,400	167,500	3,350	3,350
		13,492,000	2,765,871	3,263,728	3,264,950	195,050	3,460,000	69,200	69,200

ROUND 2 DISTRIBUTION LIST

Sn.	Region	District	nOPV Doses Allocated	# Vials	# droppers
1	Moroto	Abim	46,000	920	920
2	Moroto	Amudat	45,000	900	900
3	Soroti	Amuria	70,000	1,400	1,400
4	Mbale	Budaka	79,500	1,590	1,590
5	Mbale	Bududa	74,500	1,490	1,490
6	Jinja	Bugiri	155,000	3,100	3,100
7	Jinja	Bugweri	54,500	1,090	1,090
8	Soroti	Bukedea	67,500	1,350	1,350
9	Mbale	Bukwo	29,500	590	590
10	Mbale	Bulambuli	65,500	1,310	1,310
11	Mbale	Busia	114,000	2,280	2,280
12	Mbale	Butaleja	81,000	1,620	1,620
13	Mbale	Butebo	36,500	730	730
14	Jinja	Buyende	119,000	2,380	2,380
15	Jinja	Iganga	122,000	2,440	2,440
16	Jinja	Jinja	69,000	1,380	1,380
17	Jinja	Jinja City	79,500	1,590	1,590
18	Moroto	Kaabong	32,000	640	640
19	Soroti	Kaberamaido	40,500	810	810
20	Soroti	Kalaki	41,500	830	830
21	Jinja	Kaliro	71,500	1,430	1,430
22	Jinja	Kamuli	155,500	3,110	3,110

Sn.	Region	District	nOPV Doses Allocated	# Vials	# droppers
23	Mbale	Kapchorwa	33,000	660	660
24	Soroti	Kapelebyong	34,000	680	680
25	Moroto	Karenga	19,000	380	380
26	Soroti	Katakwi	55,000	1,100	1,100
27	Mbale	Kibuku	81,000	1,620	1,620
28	Moroto	Kotido	61,000	1,220	1,220
29	Soroti	Kumi	83,000	1,660	1,660
30	Mbale	Kween	33,500	670	670
31	Jinja	Luuka	70,000	1,400	1,400
32	Mbale	Manafwa	46,500	930	930
33	Jinja	Mayuge	163,500	3,270	3,270
34	Mbale	Mbale City	97,500	1,950	1,950
35	Mbale	Mbale DLG	82,000	1,640	1,640
36	Moroto	Moroto	31,500	630	630
37	Moroto	Nabilatuk	24,500	490	490
38	Moroto	Nakapiripirit	36,500	730	730
39	Jinja	Namayingo	70,500	1,410	1,410
40	Mbale	Namisindwa	65,000	1,300	1,300
41	Jinja	Namutumba	87,500	1,750	1,750
42	Moroto	Napak	47,000	940	940
43	Soroti	Ngora	37,000	740	740
44	Mbale	Pallisa	101,500	2,030	2,030
45	Soroti	Serere	113,500	2,270	2,270
46	Mbale	Sironko	73,500	1,470	1,470
47	Soroti	Soroti	68,500	1,370	1,370
48	Soroti	Soroti City	32,500	650	650
49	Mbale	Tororo	163,000	3,260	3,260
	Total		**3,460,000**	**69,200**	**69,200**

Vaccine storage

At NMS, nOPV2 vaccine was stored in a walk-in freezer room (WFR) at -ve 20oC. At district vaccine stores, the vaccine was stored in deep freezers at -ve 20oC. At HF level vaccine were stored in refrigerators along with other RI antigens with instructions to label them for campaign only as per GPEI SOPs. Some teams in hard-to-reach communities with limited access to the HFs used cold boxes to keep vaccines and would change frozen icepacks as needed. This called for additional vaccine accountability monitors.

Icepack freezing

Freezing of the icepacks was done at district vaccine stores. The DCCT's were facilitated to ensure that all icepacks are cleaned, refilled with clean water and frozen. They also had provision for intra campaign withdraw of icepacks for refreezing and redistribution. Fuel for generators was provided to facilitate freezing of icepacks.

Vaccine Accountability Monitoring

Based on the GPEI recommendations to ensure zero oral polio type2 (nOPV2) vials remain in the system after the campaign a team of vaccine accountability monitors were recruited through UNICEF to support the process. Two national vaccine Accountability consultants were recruited to support the training and supervision of other vaccine accountability managers that were deployed to each district to support the vaccine management and accountability process in the country. The consultants worked with the National VAM officers and district health teams to identify and train district, sub county and health facility vaccine accountability monitors in a cascaded manner.

Vaccine Accountability Monitoring Structure

VAM structure	Number	Comment
National VAM Consultants	2	Centrally recruited by UNICEF to support National vaccine accountability monitoring and reporting
National VAMs to districts	49	Each district had a VAM officer deployed from National level to support coordinating vaccine accountability process
District VAMs	49	All DCCTs were district VAMs to coordinate VAM activities in their districts.
Sub county VAMs	933	Deployed for each sub county to manage vaccine accountability and supervise health facility VAMs
Health Facility VAM	1771	Manage each health facility that was a distribution point in vaccine management and accountability

Actual vials accountability

A total of 69,200 vials (3,460,000 doses) issued to 49 districts for each round. For RND1, teams returned 67,347 unusable vials, 1,848 usable vials and 5 vials remained unaccounted for in the districts of Kamuli (3), Amuria (1), and Nabilatuk (1). The districts submitted incident reports pertaining to the missing vials.

A total of 71,048 vials (3,552,400 doses) that included 69,200 vials distributed for RND2 and 1,848 vials that remained from RND1 were accessed for RND2. The teams returned 70,189 unusable vials (empty, partial used or broken) and 859 usable vials. Below is a summary of vaccine utilization comparing RND1&2. No missing or unaccounted for vials were reported during RND2.

RND#	# nOPV2 Vaccine Vials in stock (previous balance)	# Vials received for RND2	Vials transferred to other districts (relocation)	Actual cials accessed at DVS	Total UNUSABLE balance	Total USABLE balance	Total Un accounted for vials	Vaccine wastage rate
RND 1		69,200	733	69200	67,374	1,848	5	2.94%
RND2	1,848	69,200	342	71,048	70,189	859	0	2.04%

Below are the vaccine utilization reports Form A's RND1&2

Uganda nOPV2 FORM - A 2024

Round number (GPEI Number) : **RND1** Start date for the round:**03/10/202** End date for the round : **08/10/2024**

Level: √ √National • •District • •Sub-County

Name of the District: **MOH- UNEPI (Uganda)** Address : **NMS** Target population : **2,765,871**

Total Number of children vaccinated : **3,269,122** Number of doses used : **3,367,600** Wastage Rate : **2.92%**

nOPV2 vials received and distributed at this round

# of vials in stock at the beginning of the round	# of vials received	# of vials distributed from this store	# of Usable Vials (1) received from lower level	# of Unusable Vials (2) received from lower level	# of vials, unaccounted for	Physical inventory balance of Usable Vials (1) vials in stock	# of Usable Vials (1) returned to higher level
A	B	C	D	E	F	G	H
0	69,200	69,200	0	67,347	5	1,848	

Notes: 17 Districts experienced vaccine shortage and received replenishments from neigbhoring 21 districts. 67,347 unusable vials to be witdrawn by NMS for inactivation and disposal. 1,848 usable vials kept at DVS to be used in RND2. 5 vials found missing in packets in districts of Kamuli (3), Amuria (1) and Nabiratuk (1)

Title and name of the EPI Manager or Responsible Person

Dr. Baganizi Micheal

Signature :

Reporting date :

Instructions to report on utilization of nOPV2 vials at the end of each SIA round

Vaccine:
- *nOPV2 is a vaccine used exclusively to respond to an outbreak of type 2 vaccine-derived poliovirus (VDPV2).*
- *Type 2 poliovirus is an eradicated pathogen and so it is critical to have very precise counts of nOPV2 vaccine vials at each level of the health infrastructure.*
- *Once all SIA rounds are completed, all unopened vials must be returned to the national vaccine store and no nOPV2 vial should remain at any level of the health infrastructure.*

Stock reporting:
- *Form A should be used to report on nOPV2 stock levels from all administrative areas conducting nOPV2 SIAs.*
- *Vaccine quantities should be recorded as vials rather than doses.*
- *The vaccine cold chain responsible should fill the form to be reviewed by the immunization programme manager.*
- *The immunization officer responsible at the facility level should report to the district level within 2 days following completion of each SIA round.*
- *The immunization officer responsible at the district/regional level should retrieve all nOPV2 vials (opened and unopened) within 5 days following the completion of each SIA round and report to the upper level within 7 days.*
- *All unopened vials at the end of each round should be physically counted and their VVM status checked.*

(1) Usable Vials : vials that have not been opened, whose VVM has not passed the discard point, whose label is legible and whose expiry date has not passed.
(2) Unusable Vials : empty vials, all opened vials (opened vials must not be reuse the next day), vials with an unreadable label and/or a VVM that has passed the discard point

Uganda nOPV2 FORM - A 2024

Round number (GPEI Number) : **RND2**

Start date for the round : **07.11.202** End date for the round : **11.11.202**

Level: ■ National • District • Sub-County

Name of the District: **MOH- UNEPI (Uganda)**

Address : **NMS**

Target population : **2,765,871**

Total Number of children vaccinated : **3,437,937**

Number of doses used : **3,509,450**

Wastage Rate : **2.04%**

nOPV2 vials received and distributed at this round

# of vials in stock at the beginning of the round	# of vials received	# of vials distributed from this store	# of Usable Vials (1) received from lower level	# of Unusable Vials (2) received from lower level	# of vials, unaccounted for	Physical inventory balance of Usable Vials (1) vials in stock	# of Usable Vials (1) returned to higher level
A	B	C	D	E	F	G	H
1,848	69,200	69,200	859	70,189	-	859	859

Note: The coverage for RND2 was higher than RND1 and as a result 11 districts received replenishment from 13 other districts that had suplus. There was no reported missing vial during RND2

Title and name of the EPI Manager or Responsible Person

Dr. Baganizi Micheal

Signature :

Reporting date :

Instructions to report on utilization of nOPV2 vials at the end of each SIA round

Vaccine:

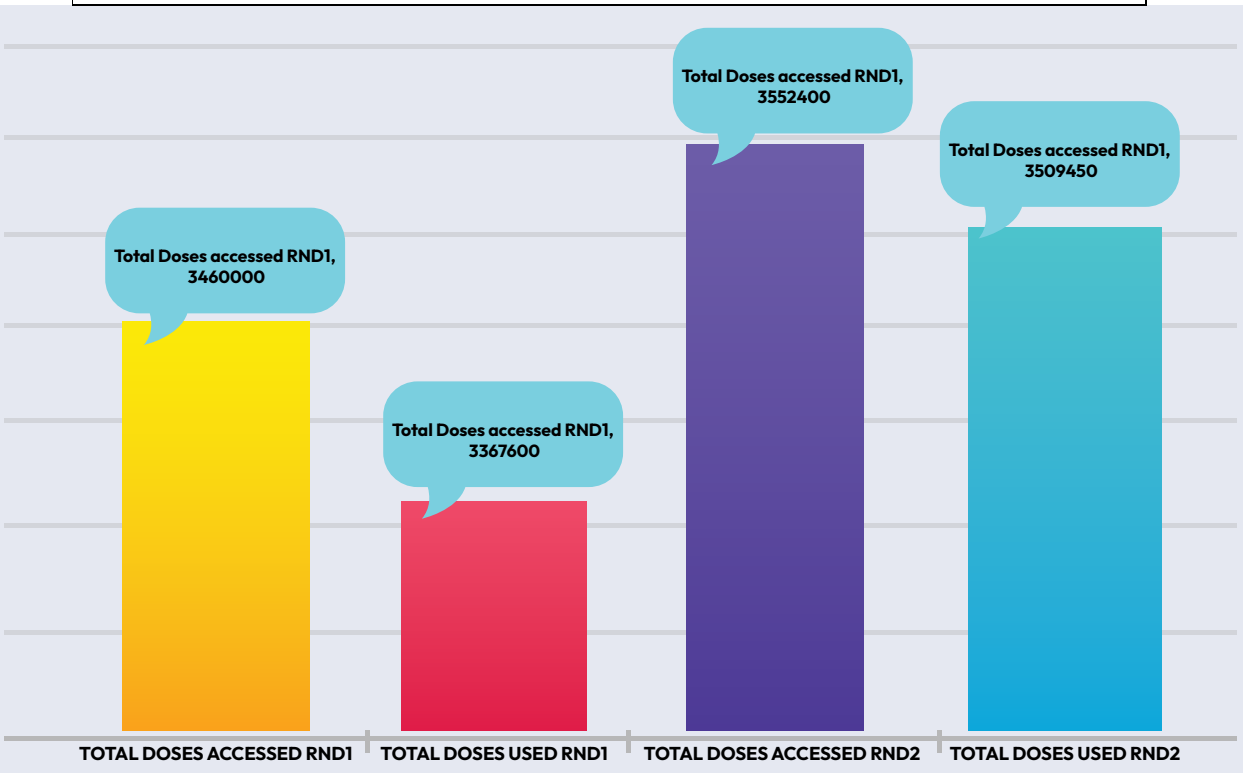
- *nOPV2 is a vaccine used exclusively to respond to an outbreak of type 2 vaccine-derived poliovirus (VDPV2).*
- *Type 2 poliovirus is an eradicated pathogen and so it is critical to have very precise counts of nOPV2 vaccine vials at each level of the health infrastructure.*
- *Once all SIA rounds are completed, all unopened vials must be returned to the national vaccine store and no nOPV2 vial should remain at any level of the health infrastructure.*

Stock reporting:

- *Form A should be used to report on nOPV2 stock levels from all administrative areas conducting nOPV2 SIAs.*
- *Vaccine quantities should be recorded as vials rather than doses.*
- *The vaccine cold chain responsible should fill the form to be reviewed by the immunization programme manager.*
- *The immunization officer responsible at the facility level should report to the district level within 2 days following completion of each SIA round.*
- *The immunization officer responsible at the district/regional level should retrieve all nOPV2 vials (opened and unopened) within 5 days following the completion of each SIA round and report to the upper level within 7 days.*
- *All unopened vials at the end of each round should be physically counted and their VVM status checked.*

(1) Usable Vials : vials that have not been opened, whose VVM has not passed the discard point, whose label is legible and whose expiry date has not passed.

(2) Unusable Vials : empty vials, all opened vials (opened vials must not be reuse the next day), vials with an unreadable label and/or a VVM that has passed the discard point



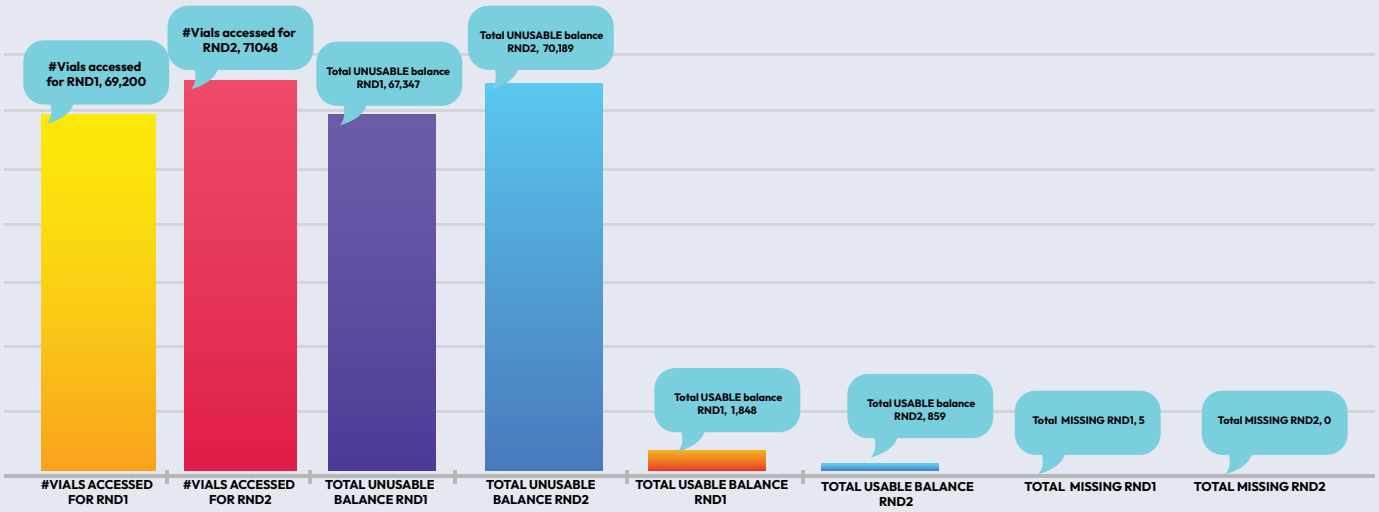


Chart showing vaccine utilization in vials RND1&2

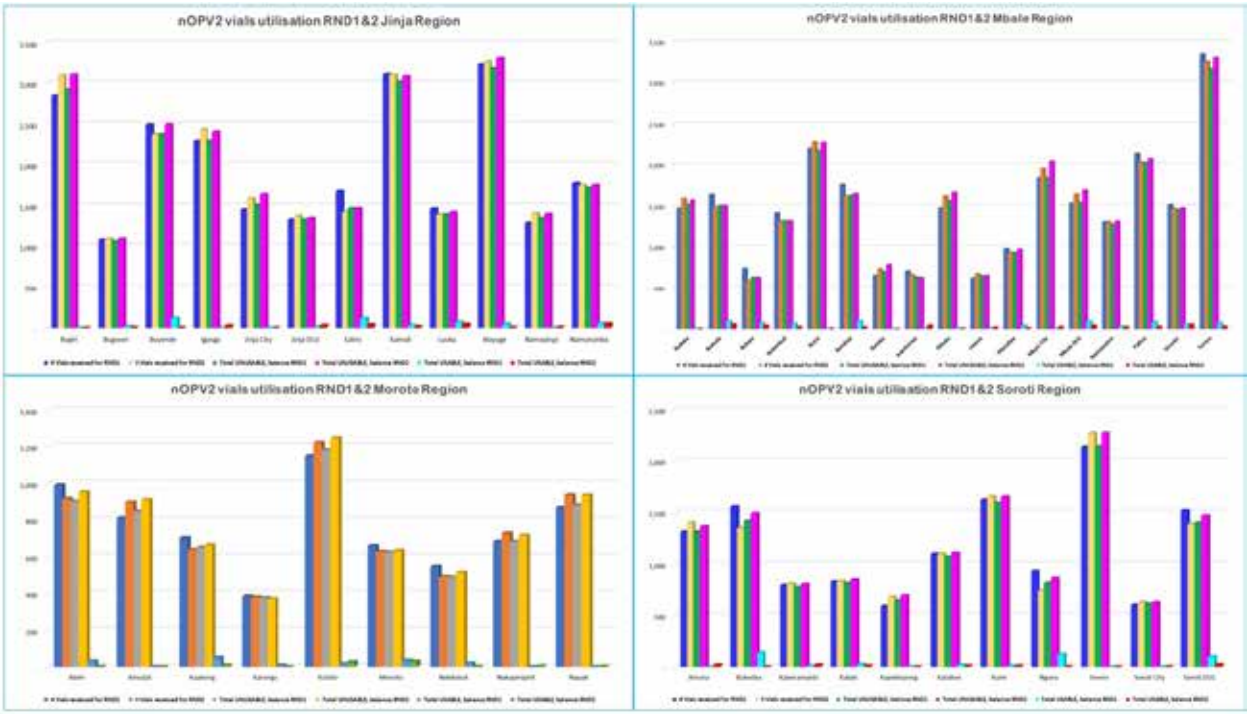


Chart showing vials utilization by region RND1&2

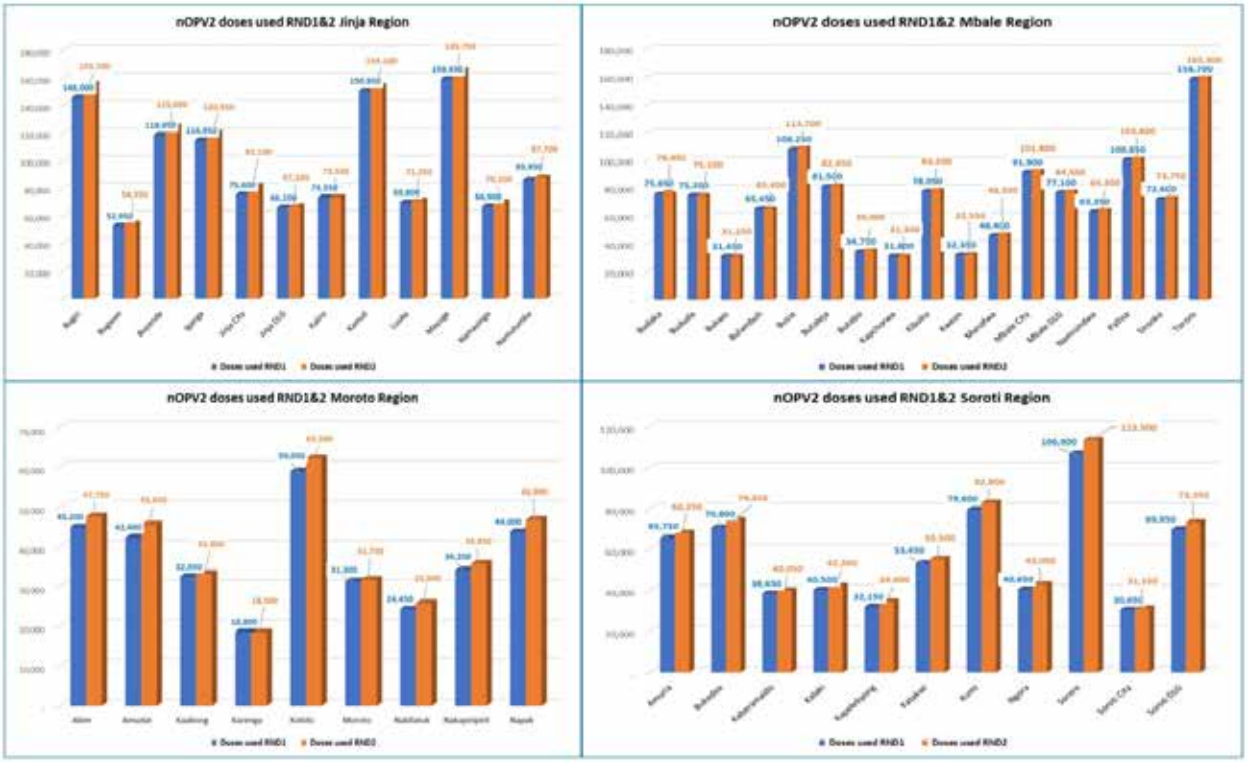


Chart showing doses used by region RND1&2

Vaccine wastage monitoring

Based on administrative data for RND1, a vaccine wastage rate of 2.92% was reported for national level. 16/49 districts reported <3.0% wastage rate, 23/49 districts reported 3.0% to 6.0%, wastage rate, 8/49 districts reported >6.0% but <10% wastage rate 2/49 districts recorded -ve wastage rates. In second round, there was effective supportive supervision and monitoring of teams to ensure effective vaccine utilization that also encouraged teams to cross villages when they still had partial vials which minimized the vaccine wastage.

As per administrative data, a vaccine wastage rate of 2.04% was reported for national level for RND2. 26/49 districts reported <2.0% wastage rate, 23/49 districts reported 2.0% to 6.3%, wastage rate.

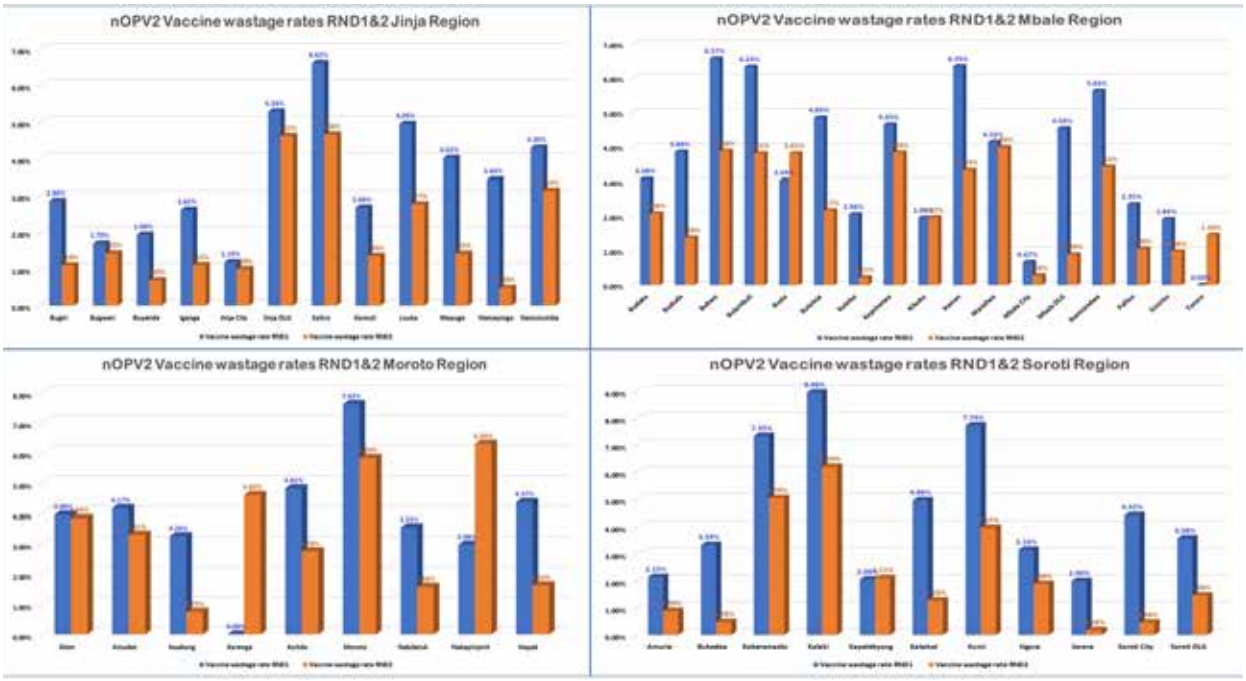


Chart showing vaccine wastage rates by region RND1&2

Vials withdraw and disposal

67,347 unusable nOPV2 vials were withdrawn from the districts to NMS after RND1. All the 71,048 vials (70,189 unusable and 859 usable vials) were verified by NVAMs and withdraw to NMS is in progress.

Considering the country context, the country has opted for inactivation and disposal of the vials by incineration using the approved incineration facility at Nakasongola. The process will be guided by the polio NTF following the closure of the OBR.

Reported good practice for RND2

- The VAMs fast tracked and verified all the usable and unusable vials in time
- Coordinated distribution of vaccines and supplies to meet the deadline of starting the campaign in time
- The transport given to NVAM's supported district in distribution of vaccines and supplies, supportive supervision, transfer of vaccines to other districts and timely withdraw of vials to DVS
- The recording and reporting of vaccine accountability were timely and enabled early detection of potential vaccine shortage or excess which gave room for inter-district vials transfer.
- There was good vaccine management practice and no reported vials with VVM reaching discard point
- Timely submission of district Form A

Constraints / Challenges

Using UBOS projected target in vaccine procurement resulted into shortages in some districts.

Inadequate slow cold chain facilities in hard-to-reach communities

Inadequate transport facilities in some districts

Recommendations

Support hard to reach communities with slow CCE with sustainable energy supply such as SDDs

Preferably use the administrative coverage of the most recent campaign to estimate vaccine and supplies to minimize shortages

Logistics pictorials

NMS vaccine delivery truck at Manafa DVS

Bundling vaccine and supplies Bududa DVS

Dispatch of vaccine and supplies Kaberamaido DVS

ibution of vaccines and supplies in Kween district

Hardships of VAM movement for support supervisio districts of Bulambuli and Sironko

Checking the vaccine storage conditions in Likil HC11 -Kween

Checking the vaccine storage conditions in Bubbalya HC111 -Tororo

Checking the vaccine storage conditions in Atunga HC11 - Abim

Monitoring the filling of VAM forms and reconciling with tally sheets Bududa

Monitoring the filling of VAM forms and reconciling with tally sheets Nambale HC111_Iganga


Unusable vials verification Soroti DLG
Unusable vials verification Butebo
Unusable vials verification Luuka DVS
Unusable vials verification Katakwi DVS


Vials verification and Manafa DVS RND2
Vials verification and Namayingo DVS RND2


Labelling the sack containing unusable vials Namayingo DVS
Labelling the sack containing unusable vials Sironko DVS
Labelling the sack containing unusable vials Katakwi DVS

Vaccine utilization by region

nOPV2 vaccine utilisation RND1 - Jinja Region

SN.	Region	District	# nOPV2 Vaccine Vials in stock (previous balance)	# Vials received for RND3	Vials received from other districts (repleshiment)	Vials transferred to other districts (relocation)	Actual vials accessed at DVS	Total UNUSABLE, balance	Total USABLE, balance	Total MISSING, balance	Doses used	Target population	Children immunised	Coverage	Vaccine wastage rate
1	Jinja	Bugiri	0	2,850	70	0	2,920	2,920	0	0	146,000	113,939	141,819	124%	2.86%
2	Jinja	Bugweri	0	1,079	0	0	1,079	1,059	20	0	52,950	43,112	52,048	121%	1.70%
3	Jinja	Buyende	0	2,498	0	0	2,498	2,379	119	0	118,950	99,856	116,637	117%	1.94%
4	Jinja	Iganga	0	2,299	0	0	2,299	2,299	0	0	114,950	91,902	111,941	122%	2.62%
5	Jinja	Jinja City	0	1,458	54	0	1,512	1,512	0	0	75,600	58,282	74,700	128%	1.19%
6	Jinja	Jinja DLG	0	1,323	12	4	1,331	1,322	9	0	66,100	52,870	62,606	118%	5.29%
7	Jinja	Kaliro	0	1,681	0	92	1,589	1,471	118	0	73,550	67,199	68,679	102%	6.62%
8	Jinja	Kamuli	0	3,120	0	66	3,054	3,016	35	3	150,950	124,722	146,904	118%	2.68%
9	Jinja	Luuka	0	1,468	0	0	1,468	1,396	72	0	69,800	58,671	66,348	113%	4.95%
10	Jinja	Mayuge	0	3,239	0	0	3,239	3,189	50	0	159,450	129,560	153,036	118%	4.02%
11	Jinja	Namayingo	0	1,285	54	0	1,339	1,338	1	0	66,900	51,373	64,598	126%	3.44%
12	Jinja	Namutumba	0	1,777	0	0	1,777	1,719	58	0	85,950	71,053	82,251	116%	4.30%
	Sub-Store		**0**	**24,077**	**190**	**162**	**24,105**	**23,620**	**482**	**3**	**1,181,150**	**962,539**	**1,141,567**	**119%**	**3.35%**

nOPV2 vaccine utilisation RND2- Jinja Region															
SN.	Region	District	# nOPV2 Vaccine Vials in stock (previous balance)	# Vials received for RND2	Vials received from other districts (repleshiment)	Vials transferred to other districts (relocation)	Actual vials accessed at DVS	Total UNUSABLE, balance	Total USABLE, balance	Total MISSING, balance	Doses used	Target population	Children immunised	Coverage	Vaccine wastage rate
1	Jinja	Bugiri	0	3,100	14	0	3,114	3,114	0	0	155,700	113,939	153,984	135%	1.10%
2	Jinja	Bugweri	20	1,090	0	14	1,096	1,091	5	0	54,550	43,112	53,768	125%	1.43%
3	Jinja	Buyende	119	2,380	5	0	2,504	2,500	4	0	125,000	99,856	124,132	124%	0.69%
4	Jinja	Iganga	0	2,440	0	0	2,440	2,411	29	0	120,550	91,902	119,217	130%	1.11%
5	Jinja	Jinja City	0	1,590	53	0	1,643	1,642	1	0	82,100	58,282	81,276	139%	1.00%
6	Jinja	Jinja DLG	9	1,380	0	13	1,376	1,342	34	0	67,100	52,870	64,002	121%	4.62%
7	Jinja	Kaliro	118	1,430	0	35	1,513	1,471	42	0	73,550	67,199	70,119	104%	4.66%
8	Jinja	Kamuli	35	3,110	0	45	3,100	3,082	18	0	154,100	124,722	152,006	122%	1.36%
9	Jinja	Luuka	72	1,400	0	0	1,472	1,425	47	0	71,250	58,671	69,278	118%	2.77%
10	Jinja	Mayuge	50	3,270	0	0	3,320	3,315	5	0	165,750	129,560	163,403	126%	1.42%
11	Jinja	Namayingo	1	1,410	0	0	1,411	1,402	9	0	70,100	51,373	69,767	136%	0.48%
12	Jinja	Namutumba	58	1,750	0	0	1,808	1,754	54	0	87,700	71,053	84,944	120%	3.14%
	Sub-total		**482**	**24,350**	**72**	**107**	**24,797**	**24,549**	**248**	**0**	**1,227,450**	**962,539**	**1,205,896**	**125%**	**1.76%**

nOPV2 vaccine utilisation RND1- Mbale Region															
SN.	Region	District	# nOPV2 Vaccine Vials in stock (previous balance)	# Vials received for RND3	Vials received from other districts (repleshiment)	Vials transferred to other districts (relocation)	Actual vials accessed at DVS	Total UNUSABLE, balance	Total USABLE, balance	Total MISSING, balance	Doses used	Target population	Children immunised	Coverage	Vaccine wastage rate
13	Mbale	Budaka	0	1,473	47	0	1,520	1,517	3	0	75,850	58,856	73,515	125%	3.08%
14	Mbale	Bududa	0	1,640	0	40	1,600	1,504	96	0	75,200	65,559	72,300	110%	3.86%
15	Mbale	Bukwo	0	737	0	30	707	629	78	0	31,450	29,438	29,385	100%	6.57%
16	Mbale	Bulambuli		1,418	0	43	1,375	1,309	66	0	65,450	56,683	61,308	108%	6.33%
17	Mbale	Busia	0	2,193	0	28	2,165	2,165	0	0	108,250	87,658	104,963	120%	3.04%
18	Mbale	Butaleja	0	1,759	0	29	1,730	1,630	100	0	81,500	70,336	77,544	110%	4.85%
19	Mbale	Butebo	0	652	45	0	697	695	2	0	34,750	26,035	34,035	131%	2.06%
20	Mbale	Kapchorwa	0	705	0	60	645	632	13	0	31,600	28,147	30,130	107%	4.65%
21	Mbale	Kibuku	0	1,475	104	5	1,574	1,561	13	0	78,050	58,979	76,523	130%	1.96%
22	Mbale	Kween		620	40	0	660	647	13	0	32,350	24,764	30,297	122%	6.35%
23	Mbale	Manafwa	0	975	0	0	975	928	47	0	46,400	38,950	44,479	114%	4.14%
24	Mbale	Mbale City	0	1,840	0	2	1,838	1,838	0	0	91,900	73,534	91,280	124%	0.67%
25	Mbale	Mbale DLG	0	1,533	102	0	1,635	1,542	93	0	77,100	61,295	73,596	120%	4.54%
26	Mbale	Namisindwa	0	1,298	0	0	1,298	1,267	31	0	63,350	51,906	59,782	115%	5.63%
27	Mbale	Pallisa	0	2,130	0	25	2,105	2,017	88	0	100,850	85,178	98,485	116%	2.35%
28	Mbale	Sironko	0	1,516	20	24	1,512	1,452	60	0	72,600	60,598	71,207	118%	1.92%
29	Mbale	Tororo	0	3,350	0	100	3,250	3,174	76	0	158,700	133,947	177,871	133%	-12.08%
	Sub-Store		**0**	**25,314**	**358**	**386**	**25,286**	**24,507**	**779**	**0**	**1,225,350**	**1,011,863**	**1,206,700**	**119%**	**1.52%**

nOPV2 vaccine utilisation RND2- Mbale Region

SN.	Region	District	# nOPV2 Vaccine Vials in stock (previous balance)	# Vials received for RND2	Vials received from other districts (repleshiment)	Vials transferred to other districts (relocation)	Actual vials accessed at DVS	Total UNUSABLE, balance	Total USABLE, balance	Total MISSING, balance	Doses used	Target population	Children immunised	Coverage	Vaccine wastage rate
13	Mbale	Budaka	3	1,590	0	22	1,571	1,569	2	0	78,450	58,856	76,818	131%	2.08%
14	Mbale	Bududa	96	1,490	0	25	1,561	1,502	59	0	75,100	65,559	74,063	113%	1.38%
15	Mbale	Bukwo	78	590	0	0	668	625	43	0	31,250	29,438	30,039	102%	3.88%
16	Mbale	Bulambuli	66	1,310	0	42	1,334	1,308	26	0	65,400	56,683	62,907	111%	3.81%
17	Mbale	Busia	0	2,280	0	0	2,280	2,274	6	0	113,700	87,658	109,363	125%	3.81%
18	Mbale	Butaleja	100	1,620	0	50	1,670	1,649	21	0	82,450	70,336	80,663	115%	2.17%
19	Mbale	Butebo	2	730	49	0	781	781	0	0	39,050	26,035	38,965	150%	0.22%
20	Mbale	Kapchorwa	13	660			673	626	47	0	31,300	28,147	30,101	107%	3.83%
21	Mbale	Kibuku	13	1,620	34	0	1,667	1,664	3	0	83,200	58,979	81,565	138%	1.97%
22	Mbale	Kween	13	670	0	13	670	651	19	0	32,550	24,764	31,466	127%	3.33%
23	Mbale	Manafwa	47	930	0	0	977	967	10	0	48,350	38,950	46,421	119%	3.99%
24	Mbale	Mbale City	0	1,950	112	0	2,062	2,036	26	0	101,800	73,534	101,510	138%	0.28%
25	Mbale	Mbale DLG	93	1,640	0	0	1,733	1,690	43	0	84,500	61,295	83,749	137%	0.89%
26	Mbale	Namisindwa	31	1,300	0	0	1,331	1,306	25	0	65,300	51,906	63,065	121%	3.42%
27	Mbale	Pallisa	88	2,030	0	21	2,097	2,068	29	0	103,400	85,178	102,308	120%	1.06%
28	Mbale	Sironko	60	1,470	0	0	1,530	1,475	55	0	73,750	60,598	73,027	121%	0.98%
29	Mbale	Tororo	76	3,260	0	0	3,336	3,306	30	0	165,300	133,947	162,881	122%	1.46%
	Sub-total		**779**	**25,140**	**195**	**173**	**25,941**	**25,497**	**444**	**0**	**1,274,850**	**1,011,863**	**1,248,911**	**123%**	**2.03%**

nOPV2 vaccine utilisation RND1 - Moroto Region															
SN.	Region	District	# nOPV2 Vaccine Vials in stock (previous balance)	# Vials received for RND3	Vials received from other districts (repleshiment)	Vials transferred to other districts (relocation)	Actual vials accessed at DVS	Total UNUSABLE, balance	Total USABLE, balance	Total MISSING, balance	Doses used	Target population	Children immunised	Coverage	Vaccine wastage rate
30	Moroto	Abim	0	993	0	58	935	904	31	0	45,200	39,688	43,409	109%	3.96%
31	Moroto	Amudat	0	810	38	0	848	848	0	0	42,400	32,349	40,632	126%	4.17%
32	Moroto	Kaabong	0	704	0	0	704	653	51	0	32,650	28,106	31,586	112%	3.26%
33	Moroto	Karenga	0	385	0	0	385	376	9	0	18,800	15,334	18,800	123%	0.00%
34	Moroto	Kotido	0	1149	48	0	1,197	1,181	16	0	59,050	45,900	56,204	122%	4.82%
35	Moroto	Moroto		661	0	0	661	626	35	0	31,300	26,404	28,915	110%	7.62%
36	Moroto	Nabilatuk	0	550	0	42	508	488	19	1	24,450	21,956	23,581	107%	3.55%
37	Moroto	Nakapiripirit		684	0	0	684	684	0	0	34,200	27,306	33,180	122%	2.98%
38	Moroto	Napak		866	14	0	880	880	0	0	44,000	34,584	42,076	122%	4.37%
	Sub-Store		**0**	**6,802**	**100**	**100**	**6,802**	**6,640**	**161**	**1**	**332,050**	**271,627**	**318,383**	**117%**	**4.12%**

nOPV2 vaccine utilisation RND2 - Moroto Region															
SN.	Region	District	# nOPV2 Vaccine Vials in stock (previous balance)	# Vials received for RND2	Vials received from other districts (repleshiment)	Vials transferred to other districts (relocation)	Actual vials accessed at DVS	Total UNUSABLE, balance	Total USABLE, balance	Total MISSING, balance	Doses used	Target population	Children immunised	Coverage	Vaccine wastage rate
30	Moroto	Abim	31	920	5	0	956	955	1	0	47,750	39,688	45,916	116%	3.84%
31	Moroto	Amudat	0	900	13	0	913	913	0	0	45,650	32,349	44,137	136%	3.31%
32	Moroto	Kaabong	51	640	0	18	673	666	7	0	33,300	28,106	33,051	118%	0.75%
33	Moroto	Karenga	9	380	0	19	370	370	0	0	18,500	15,334	17,649	115%	4.60%
34	Moroto	Kotido	16	1,220	37	0	1,273	1,246	27	0	62,300	45,900	60,579	132%	2.76%
35	Moroto	Moroto	35	630	0	0	665	635	30	0	31,750	26,404	29,898	113%	5.83%
36	Moroto	Nabilatuk	19	490	10	0	519	518	1	0	25,900	21,956	25,492	116%	1.58%
37	Moroto	Nakapiripirit	0	730	0	10	720	717	3	0	35,850	27,306	33,592	123%	6.30%
38	Moroto	Napak	0	940	0	0	940	938	2	0	46,900	34,584	46,136	133%	1.63%
	Sub-total		**161**	**6,850**	**65**	**47**	**7,029**	**6,958**	**71**	**0**	**347,900**	**271,627**	**336,450**	**124%**	**3.29%**

nOPV2 vaccine utilisation RND1 - Soroti Region															
SN.	Region	District	# nOPV2 Vaccine Vials in stock (previous balance)	# Vials received for RND3	Vials received from other districts (repleshiment)	Vials transferred to other districts (relocation)	Actual vials accessed at DVS	Total UNUSABLE, balance	Total USABLE, balance	Total MISSING, balance	Doses used	Target population	Children immunised	Coverage	Vaccine wastage rate
39	Soroti	Amuria	0	1,315	0	0	1,315	1,314	0	1	65,750	52,562	64,338	122%	2.15%
40	Soroti	Bukedea	0	1,555	0	0	1,555	1,416	139	0	70,800	62,136	68,435	110%	3.34%
41	Soroti	Kaberamaido	10	793	0	10	783	773	10	0	38,650	31,673	35,809	113%	7.35%
42	Soroti	Kalaki		826	10	0	836	810	26	0	40,500	33,005	36,871	112%	8.96%
43	Soroti	Kapelebyong		592	53	0	645	643	2	0	32,150	23,678	31,489	133%	2.06%
44	Soroti	Katakwi		1,101	0	12	1,089	1,069	20	0	53,450	43,993	50,798	115%	4.96%
45	Soroti	Kumi	0	1,630	0	30	1,600	1,592	8	0	79,600	65,129	73,441	113%	7.74%
46	Soroti	Ngora	0	937	0	2	935	813	122	0	40,650	37,433	39,367	105%	3.16%
47	Soroti	Serere	0	2,136	2	0	2,138	2,138	0	0	106,900	85,383	104,760	123%	2.00%
48	Soroti	Soroti City	0	604	20	11	613	613	0	0	30,650	16,298	29,295	180%	4.42%
49	Soroti	Soroti DLG		1,518	0	20	1,498	1,399	99	0	69,950	68,552	67,445	98%	3.58%
	Sub-total		**10**	**13,007**	**85**	**85**	**13,007**	**12,580**	**426**	**1**	**629,050**	**519,842**	**602,048**	**116%**	**4.29%**
	Total		**10**	**69,200**	**733**	**733**	**69,200**	**67,347**	**1,848**	**5**	**3,367,600**	**2,765,871**	**3,268,698**	**118%**	**2.94%**

nOPV2 vaccine utilisation RND2 - Soroti Region															
SN.	Region	District	# nOPV2 Vaccine Vials in stock (previous balance)	# Vials received for RND2	Vials received from other districts (repleshiment)	Vials transferred to other districts (relocation)	Actual vials accessed at DVS	Total UNUSABLE, balance	Total USABLE, balance	Total MISSING, balance	Doses used	Target population	Children immunised	Coverage	Vaccine wastage rate
39	Soroti	Amuria	0	1,400	0	15	1,385	1,365	20	0	68,250	52,562	67,642	129%	0.89%
40	Soroti	Bukedea	139	1,350	0	0	1,489	1,489	0	0	74,450	62,136	74,096	119%	0.48%
41	Soroti	Kaberamaido	10	810	0	0	820	801	19	0	40,050	31,673	38,032	120%	5.04%
42	Soroti	Kalaki	26	830	0	0	856	846	10	0	42,300	33,005	39,676	120%	6.20%
43	Soroti	Kapelebyong	2	680	10	0	692	692	0	0	34,600	23,678	33,870	143%	2.11%
44	Soroti	Katakwi	20	1,100	0	0	1,120	1,110	10	0	55,500	43,993	54,787	125%	1.28%
45	Soroti	Kumi	8	1,660	0	0	1,668	1,658	10	0	82,900	65,129	79,606	122%	3.97%
46	Soroti	Ngora	122	740	0	0	862	860	2	0	43,000	37,433	42,186	113%	1.89%
47	Soroti	Serere	0	2,270	0	0	2,270	2,270	0	0	113,500	85,383	113,298	133%	0.18%
48	Soroti	Soroti City	0	630	0	0	630	627	3	0	31,350	16,298	31,207	191%	0.46%
49	Soroti	Soroti DLG	99	1,390	0	0	1,489	1,467	22	0	73,350	68,552	72,280	105%	1.46%
	Sub-total		**426**	**12,860**	**10**	**15**	**13,281**	**13,185**	**96**	**0**	**659,250**	**519,842**	**646,680**	**124%**	**1.91%**
	Total		**1,848**	**69,200**	**342**	**342**	**71,048**	**70,189**	**859**	**0**	**3,509,450**	**2,765,871**	**3,437,937**	**124%**	**2.04%**

SC and HF VAMs					
Sn.	**Region**	**District**	**SC VAMs**	**HF VAMs**	**Additional VAMs (communities without slow CC)**
1	Jinja	Bugiri	21	21	4
2	Jinja	Bugweri	8	30	2
3	Jinja	Buyende	16	25	2
4	Jinja	Iganga	12	43	3
5	Jinja	Jinja City	14	45	7
6	Jinja	Jinja DLG	14	34	-
7	Jinja	Kaliro	16	20	-
8	Jinja	Kamuli	22	56	1
9	Jinja	Luuka	13	43	2
10	Jinja	Mayuge	19	52	9
11	Jinja	Namayingo	13	34	16
12	Jinja	Namutumba	23	34	-
13	Mbale	Budaka	21	18	-
14	Mbale	Bududa	29	30	-
15	Mbale	Bukwo	23	13	16
16	Mbale	Bulambuli	27	14	7
17	Mbale	Busia	23	15	-
18	Mbale	Butaleja	17	33	5
19	Mbale	Butebo	18	25	5
20	Mbale	Kapchorwa	17	58	1
21	Mbale	Kibuku	24	12	5
22	Mbale	Kween	20	19	20
23	Mbale	Manafwa	34	19	10
24	Mbale	Mbale City	16	42	5
25	Mbale	Mbale DLG	19	42	10
26	Mbale	Namisindwa	19	42	10
27	Mbale	Pallisa	22	27	8
28	Mbale	Sironko	44	23	7
29	Mbale	Tororo	48	44	1
30	Moroto	Abim	17	20	20
31	Moroto	Amudat	12	11	15
32	Moroto	Kaabong	20	30	10

Sn.	Region	District	SC VAMs	HF VAMs	Additional VAMs (communities without slow CC)
33	Moroto	Karenga	11	10	34
34	Moroto	Kotido	27	20	27
35	Moroto	Moroto	13	17	61
36	Moroto	Nabilatuk	8	32	25
37	Moroto	Nakapiripirit	11	13	39
38	Moroto	Napak	19	23	29
39	Soroti	Amuria	20	20	4
40	Soroti	Bukedea	17	20	-
41	Soroti	Kaberamaido	11	20	3
42	Soroti	Kalaki	11	16	1
43	Soroti	Kapelebyong	16	15	6
44	Soroti	Katakwi	24	24	21
45	Soroti	Kumi	26	20	4
46	Soroti	Ngora	12	12	2
47	Soroti	Serere	18	25	6
48	Soroti	Soroti City	10	22	1
49	Soroti	Soroti DLG	18	22	2
	Total		**933**	**1,305**	**466**

10.0 Implementation

House-to-House Strategy

The cornerstone of the campaign's implementation was the house-to-house strategy:

- **Deployment of Teams:**

  A total of 5,421 vaccination teams, each comprising a vaccinator, a mobilizer, were deployed to visit every household across the 49 districts and four (04) implementing regions. These teams ensured no child under five years of age was missed.

- **Vaccination Coverage**:

  This approach significantly improved access in high-density urban areas and remote rural regions, ensuring every child was vaccinated regardless of location.

Fixed and Mobile Vaccination Sites

- **Fixed Sites:**

  A network of fixed vaccination posts was established in strategic locations such as schools, marketplaces, and other public spaces. These sites served as convenient hubs for families unable to stay at home during house-to-house visits.

- **Mobile Sites:**

  Mobile vaccination teams were deployed to reach migratory populations, pastoral communities, and remote villages. These teams operated in coordination with local leaders and community mobilizers to ensure all eligible children were vaccinated.

Special Strategies

To address unique challenges in certain areas, several special strategies were implemented:

- **Handling Refusals**:

  Teams were trained to engage with households refusing vaccination, using community influencers and local leaders to provide accurate information and reassurance. In cases of persistent resistance, follow-up visits were scheduled.

- **High-Risk Areas:**

  Vaccination efforts in high-risk areas were intensified through micro-targeting approaches, involving additional social mobilizers, security personnel, and logistical support.

- **Migratory Population**s:

  Dedicated mobile teams tracked and vaccinated migratory populations, ensuring they were included in the campaign's coverage.

- **NOMADS, SECURITY COMPROMISED AREAS**

  The region of Karamoja has a nomadic population and has been characterized by insecurity. Escorts were provided to vaccination teams to ensure that all villages are reached without interruption.

Summary of Coverage Achieved in Round 1 and Round 2

- **Round 1 Coverage:**

  In Round 1, the campaign successfully achieved a coverage rate of 118%, vaccinating 3.269 million children across all 49 districts. This exceeded the initial target of 2.7million children, reflecting the campaign's extensive reach and community acceptance.

- **Round 2 Coverage:**

  Round 2 further solidified the campaign's success, with a coverage rate of 127%, vaccinating 3.5 million children. This round focused on addressing missed children from Round 1 and ensuring comprehensive coverage in high-risk and hard-to-reach areas.

- **Overall Impact:**

  Collectively, both rounds of the campaign ensured that more than 100% of the target population was vaccinated, significantly contributing to the interruption of the outbreak and safeguarding the health of vulnerable children.

Breakdown of Performance Across Districts

Performance	Score	Report / Survey	Round	Number of Districts
High	>= 95%	Administrative	1 & 2	49
		Independent Monitoring	1	28
			2	37
		LQAS	1	25
			2	35
Moderate	85 – 94%	Independent Monitoring	1	15
			2	8
		LQAS	1	13
			2	10
Low	Below 85%	Independent Monitoring	1	6
			2	2
		LQAS	1	10
			2	4

Operational Challenges

Challenges Faced

1. **Lack of Preparedness:**

   In certain areas, logistical issues such as vaccine shortages, delayed deliveries, or inadequate cold chain facilities hampered smooth operations.

2. **Coverage Gaps:**

   Remote areas, high-risk regions, and urban slums posed significant challenges in terms of reaching all eligible children.

3. **Misinformation and Refusals:**

   Misinformation about vaccine safety and cultural misconceptions led to resistance in some communities.

4. **Team deployment**: delays in deployment of teams in some districts

Actions Taken

1. **Enhanced Logistics Planning:**

   Rapid response teams were established to address vaccine supply issues, ensuring timely delivery and replenishment. Mobile cold chain units were deployed to maintain vaccine efficacy.

2. **Focused Social Mobilization:**

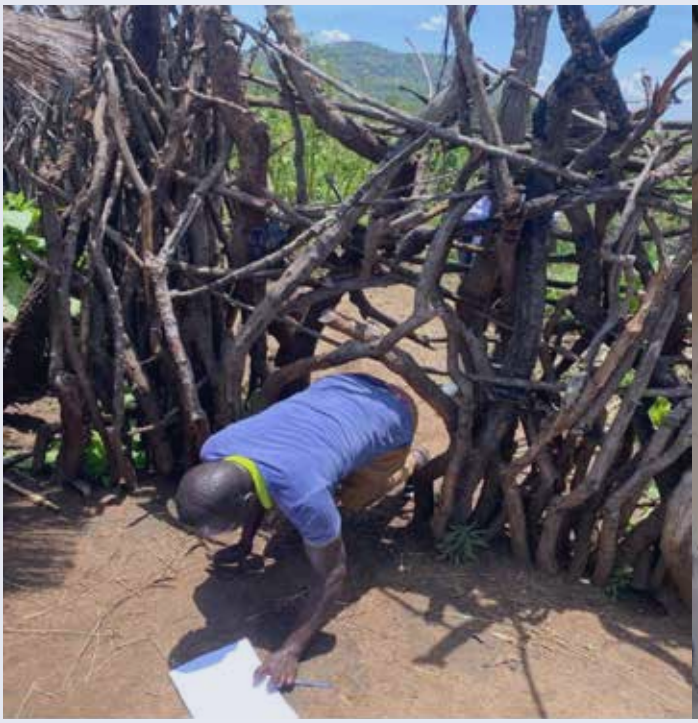
   Teams working in hard-to-reach and high-risk areas received enhanced support through tailored social mobilization and advocacy efforts, involving trusted community leaders and influencers.

3. **Misinformation Countermeasures:**

   Social media campaigns, community dialogues, and live Q&A sessions with health experts were used to counter misinformation and address concerns in real-time.

Implementation pictures Round 1







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IMPLEMENTATION PICTURES ROUND 2

11.0 Monitoring and supervision

National and Regional Supervision

For both rounds the National EOC developed a harmonized supervision plan for all levels.

With funding support from CDC AFENET, the country deployed Regional EOCs and Top Management to supervise at the Regional level. These were supported by the 49 National supervisors deployed with support from WHO to each implementing district. These were trained and thereafter deployed to the 4 implementing regions to support training of district supervisors, facilitate district coordination meetings and review of the micro-plans, development of district distribution plans and supervise implementation in the districts. The supervisors were deployed for two weeks to ensure proper planning, training and implementation.

The country also received support from the UNICEF country office of 49 National VAM Consultants who were responsible for cold chain inventory verification, microplanning, and final accountability of Vaccines within the respective districts.

The National EOC conducted weekly Regional readily assessment reviews with GPEI partners and Regional EOCs.

During these meetings, the National EOC reviewed and provided feedback on the readiness assessment status and mitigation measures. These also supported verification of the cold chain inventory and completeness of district micro-plans by region and district.

In addition, GPEI Partners provided field oversight and feedback to the National level coordination mechanisms at all levels used during the course of implementation. These included WHO, UNICEF, Rotary International, CDC-AFENET, and local dignitaries.

At national level, a team led by MOH followed up with districts to obtain updates on a daily basis. During the daily feedback meetings, the National level EOC, Regional EOCs, and National supervisors received and reviewed status of preparedness, coordination meetings, status of vaccine distribution, status of implementation, identification of challenges and district specific mitigation measures during the campaign.

The Campaign supervision and monitoring was aided by Open Data Kit (ODK) tools which were developed for pre-implementation, implementation and post SIA independent monitoring (IM) and LQAS were used. For post SIA monitoring, a total of 49 monitors were trained and deployed to districts implementing both R1 & 2 SIA. Daily monitoring review meetings were conducted at the national and district level involving partners and monitors to review performance, discuss challenges and mitigation of intra-campaign issues.

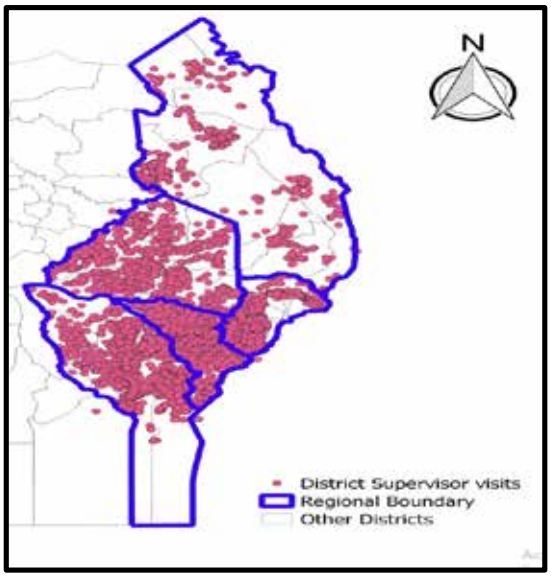
District level Supervision

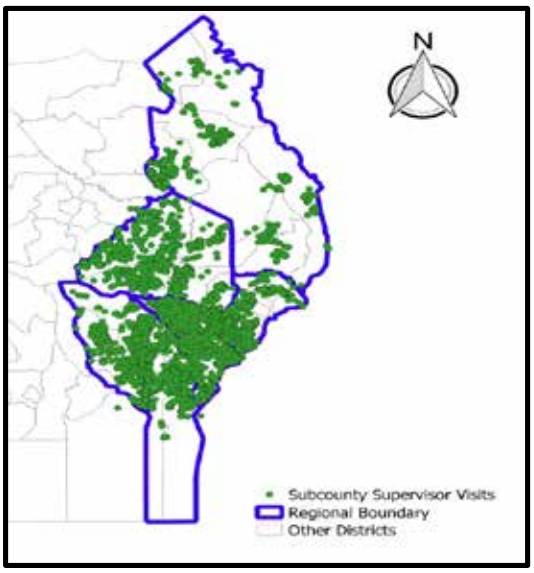
Supervision at implementation level was done by designated teams from district offices and sub-county supervisors, as well as team (Parish) supervisors.

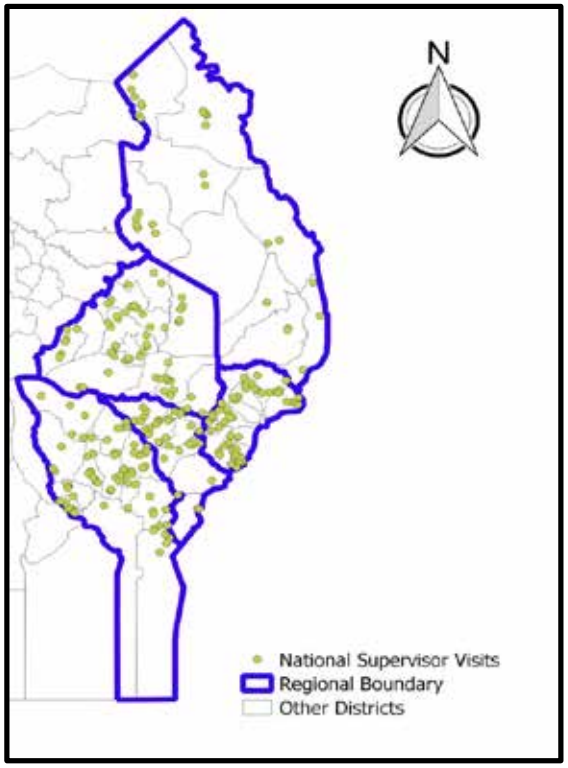
The district supervisors were allocated by sub county and their roles included; training of vaccination teams and parish supervisors at sub county level; review of the sub county distribution plans and actual logistics distribution. With the support of the sub county supervisor, they provided oversight during implementation and report compilation from the vaccination teams to the district level for action.

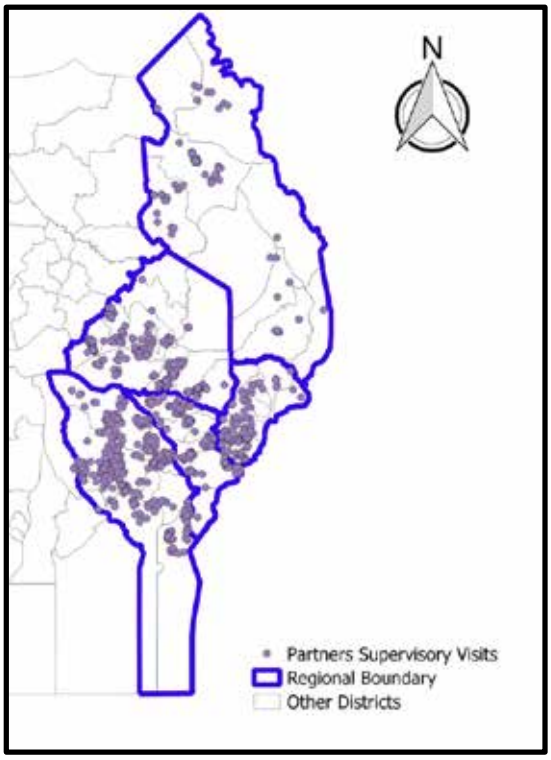
At parish level, one supervisor was responsible for about 3-4 vaccination teams. They were responsible for following up on the Teams based on the Vaccination team deployment plan using the team supervision checklist and rapid convenience monitoring to assess coverage for real time action.

Evidence of Team Supervision using ODK for Round 1

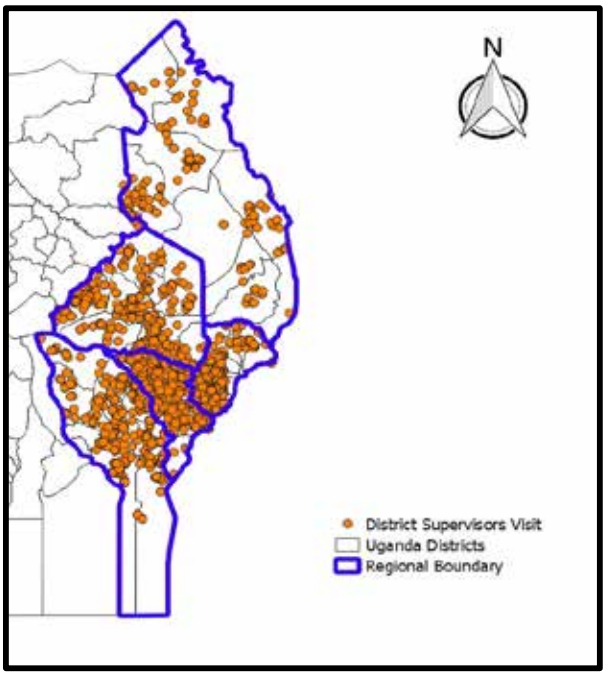


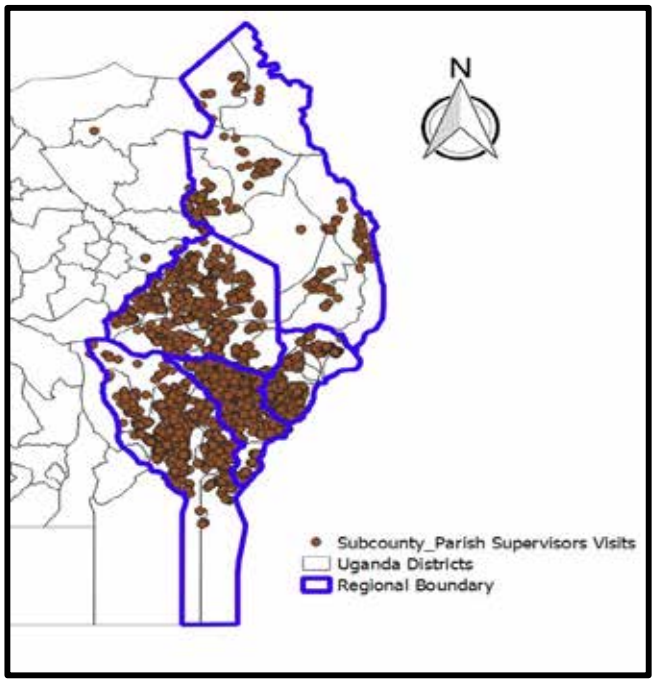


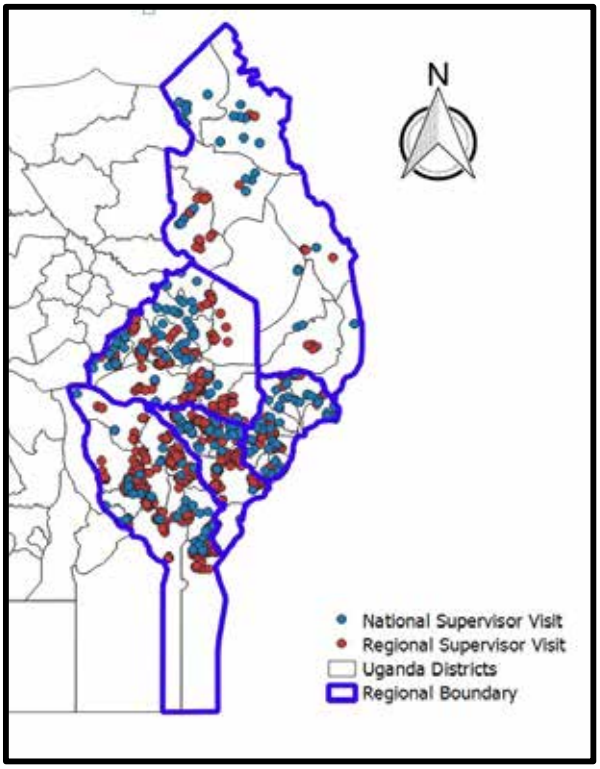


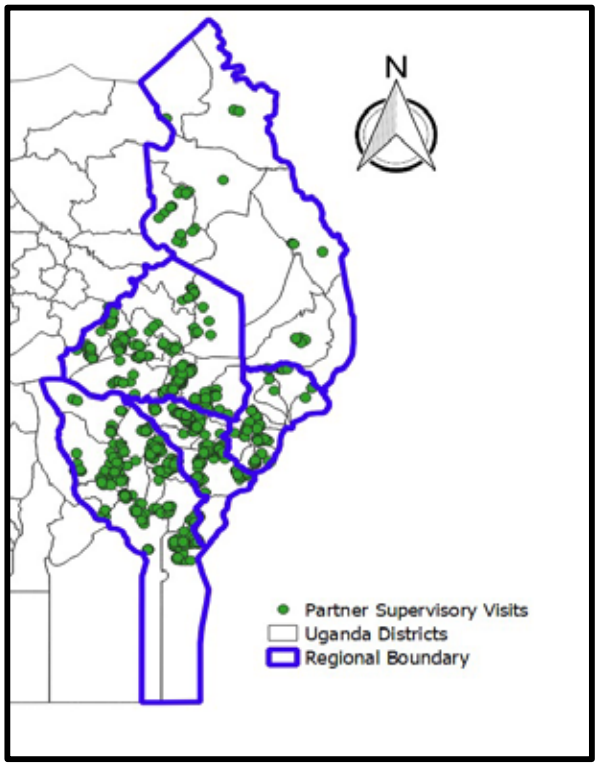


Evidence of Team Supervision using ODK for Round 2









Supervision summaries from ODK-RCM (in house & outside house), reason for no vaccination and preparedness and other ODK supervision reports

The Ministry of Health (MOH) in collaboration with the World Health Organization (WHO) Uganda and the AFRO Rapid Response Team (RRT) designed Rapid Convenience Monitoring (RCM) tools that were used by superiors in the field to conduct exercise during the second round of the Novel Oral Polio Vaccination (NOPV2) campaign in Uganda. The RCM exercise aimed to identify areas with a high number of missed children, assess the need for additional social mobilization support, and evaluate the convenience and effectiveness of the RCM tools for data capturing and summarizing.

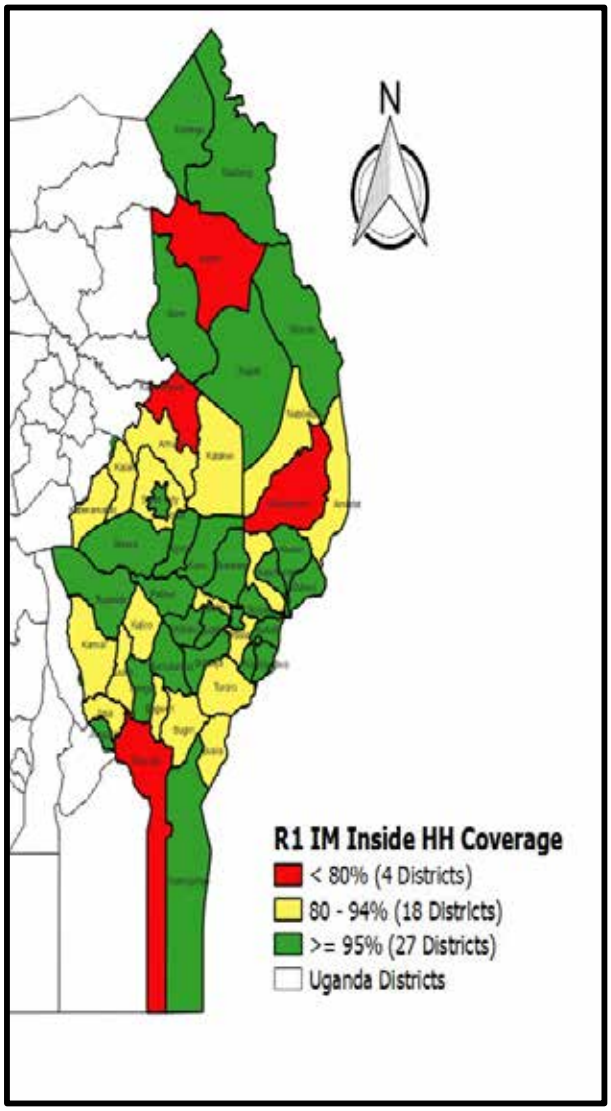
ODK-Rapid Convenient Monitoring (Inside household)

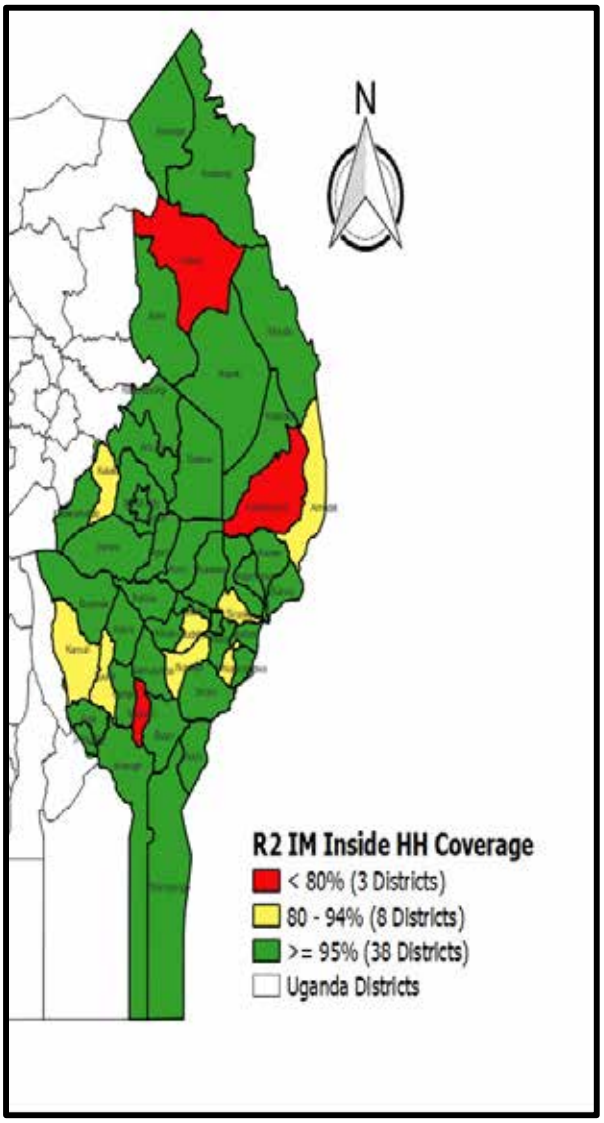
Region	Round 1				Round 2			
	Total U5 in Household	Total U5 Finger Marked	Cov	No. not Finger Marked	Total U5 in Household	Total U5 Finger Marked	Cov	No. not Finger Marked
Jinja	2,407	2,186	**91%**	221	2,673	2,555	**96%**	221
Mbale	3,861	3,701	**96%**	160	3,541	3,414	**96%**	160
Moroto	2,300	2,048	**89%**	252	2,477	2,238	**90%**	252
Soroti	2,805	2,595	**93%**	210	2,263	2,208	**98%**	210
Total	**11,373**	**10,530**	**93%**	**843**	**10,954**	**10,415**	**95%**	**539**

From the table above, majority of regions exhibited high coverage rates and improvements in Round 2 compared to Round 1. Performance in Round 1 ranged from 89% to 96%, whereas performance in Round 2 ranged from 90% to 98%. This indicates that a significant proportion of children under five years in these regions have accessed the nOPV2 vaccines in the two-round campaign.

Notably, the regions of Mbale, Soroti, and Jinja region recorded coverage rates of 96% or higher, highlighting the success of efforts to reach children under five and provide comprehensive support through vaccination. Overall, the data highlights the successes achieved in reaching households and providing vaccination for children under the age of 5 in the implementing regions.

District Level RCM



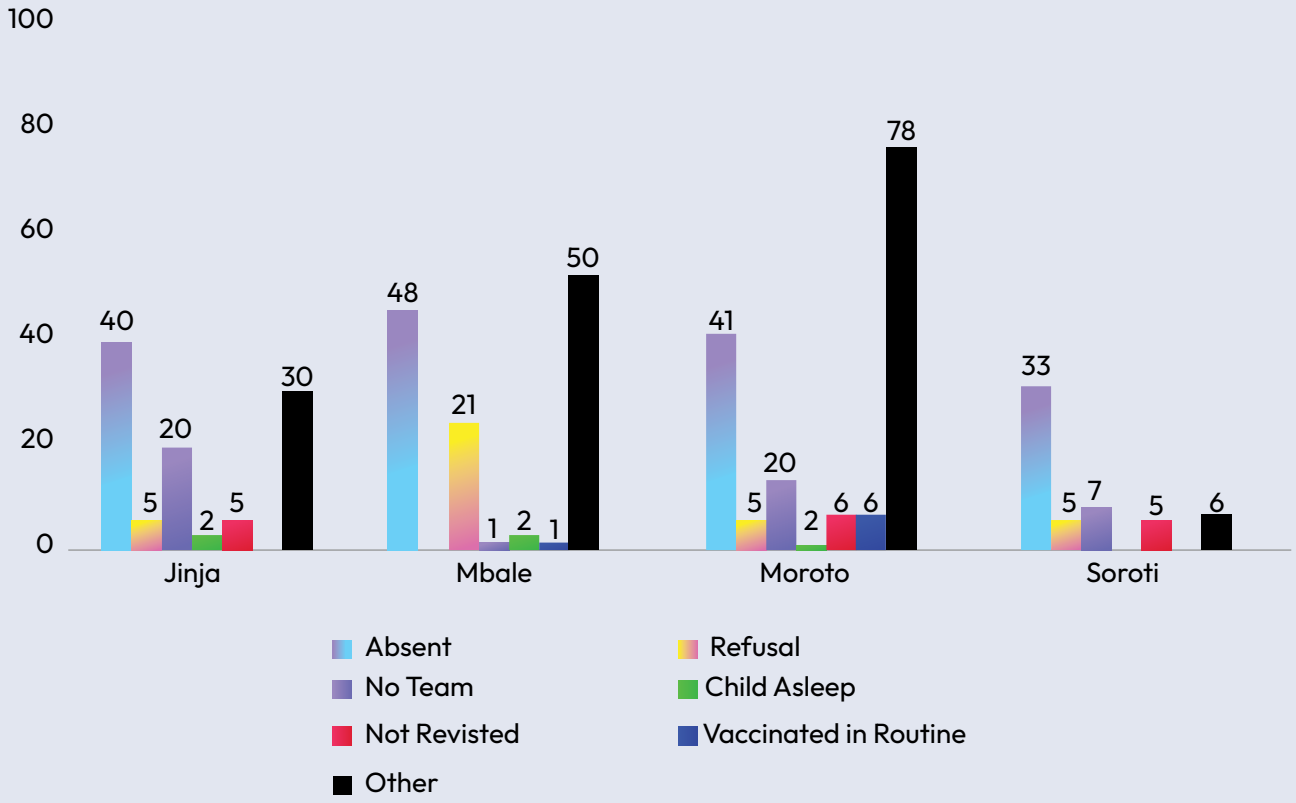


Despite the overall positive trend, several districts still reported a notable number of children not vaccinated. Many districts recorded a low number of children not vaccinated, indicating a high level of immunization coverage gaps. These districts include Mayuge, Nakapiripirit, Kapelebyong, Kotido and Bugweri.

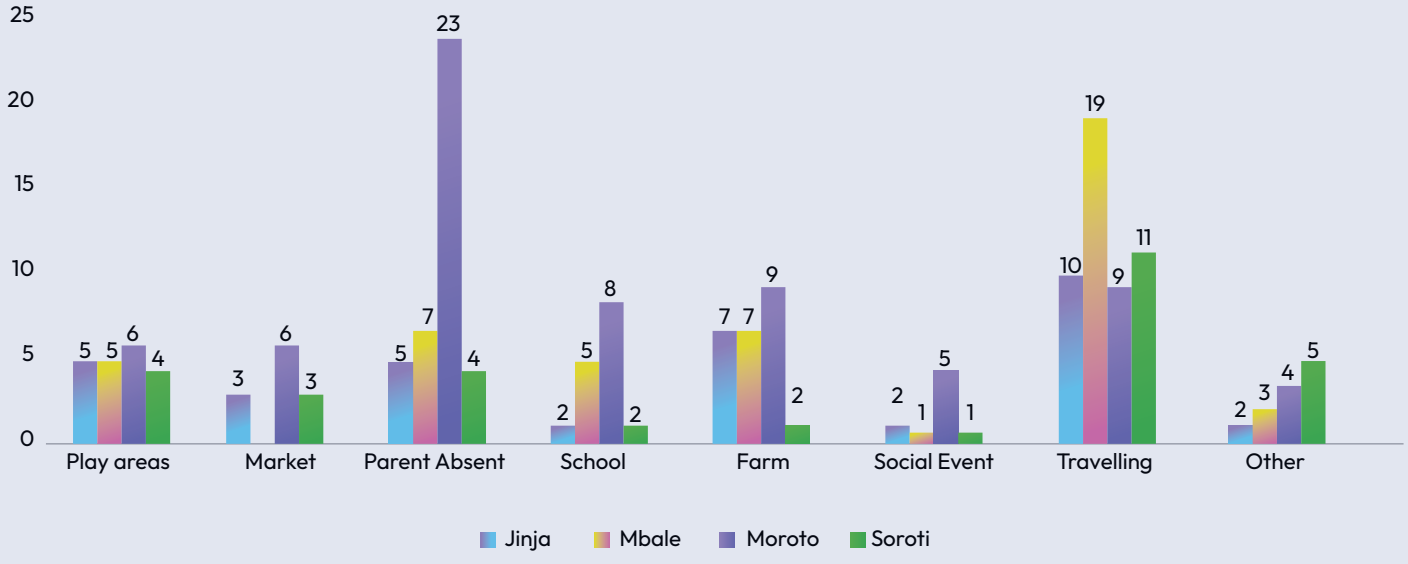
Reasons why Fingers were not marked

1. Children absent at the time of vaccination
2. Some homes were locked and were not revisited to ensure all eligible children are vaccinated
3. Wrong finger marking
4. Children had travelled to their relatives in another subcounty

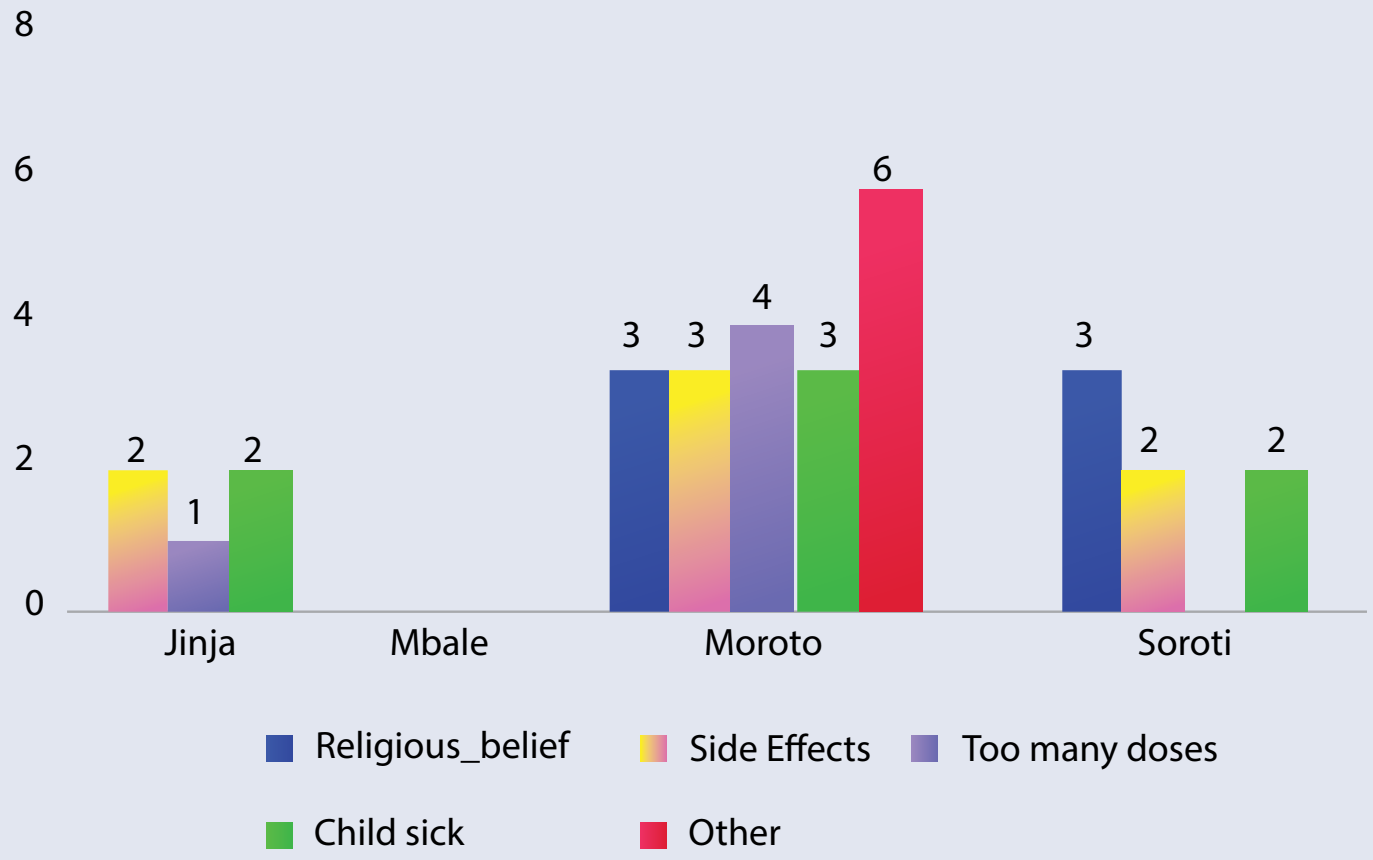
REASONS FINGER WAS NOT MARKED



REASON FOR CHILD ABSENCE BY REGION



REASONS FOR REFUSALS

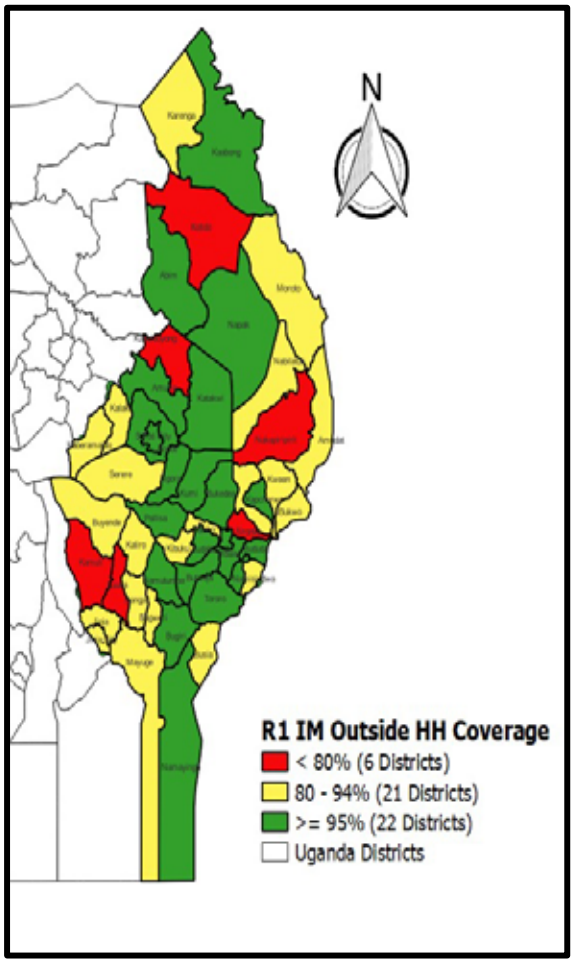


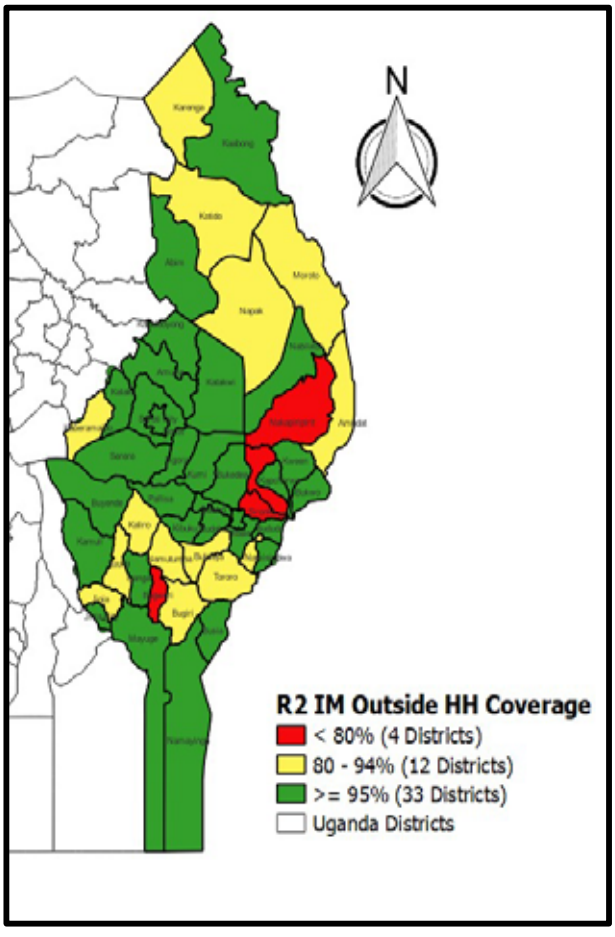
ODK-Rapid Convenient Monitoring (Outside household)

Region	Round 1				Round 2			
	No. of Children Checked	No. of Children FMD	Coverage	No. of Children not FMD	No. of Children Checked	No. of Children FMD	Coverage	No. of Children not FMD
Jinja	1,031	890	**86%**	141	1,934	1,817	**94%**	117
Mbale	1,712	1,595	**93%**	117	3,536	3,368	**95%**	168
Moroto	1,353	1,180	**87%**	173	1,729	1,590	**92%**	139
Soroti	1,198	1,096	**91%**	102	1,955	1,908	**98%**	47
Total	**5,294**	**4,761**	**90%**	**533**	**9,154**	**8,683**	**95%**	**471**

Several regions exhibited a relatively low number of children not vaccinated, indicating a number of children missing the nOPV2 vaccines during both rounds 1 & 2. Moroto region reported a higher number of children not vaccinated compared to other regions, with a total of 173 children in Round 1 and Mbale with 168 children in Round 2. At the national level, the data shows that out of 4,761 children checked in Round 1, 533 were not vaccinated, resulting in an overall coverage rate of 90%. However, there was an improvement in performance during Round 2, out of the total 9,154 children checked, 471 were not vaccinated indicating a coverage of 95%.

Sustaining high immunization coverage rates in regions with low numbers of unvaccinated children is crucial. Regular monitoring, awareness campaigns, and continued support for vaccination programs are essential to maintain the achieved coverage levels. For regions with a significant number of unvaccinated children, targeted interventions should be implemented to in subsequent campaigns to address barriers to immunization, increase access to healthcare services, and enhance community engagement.

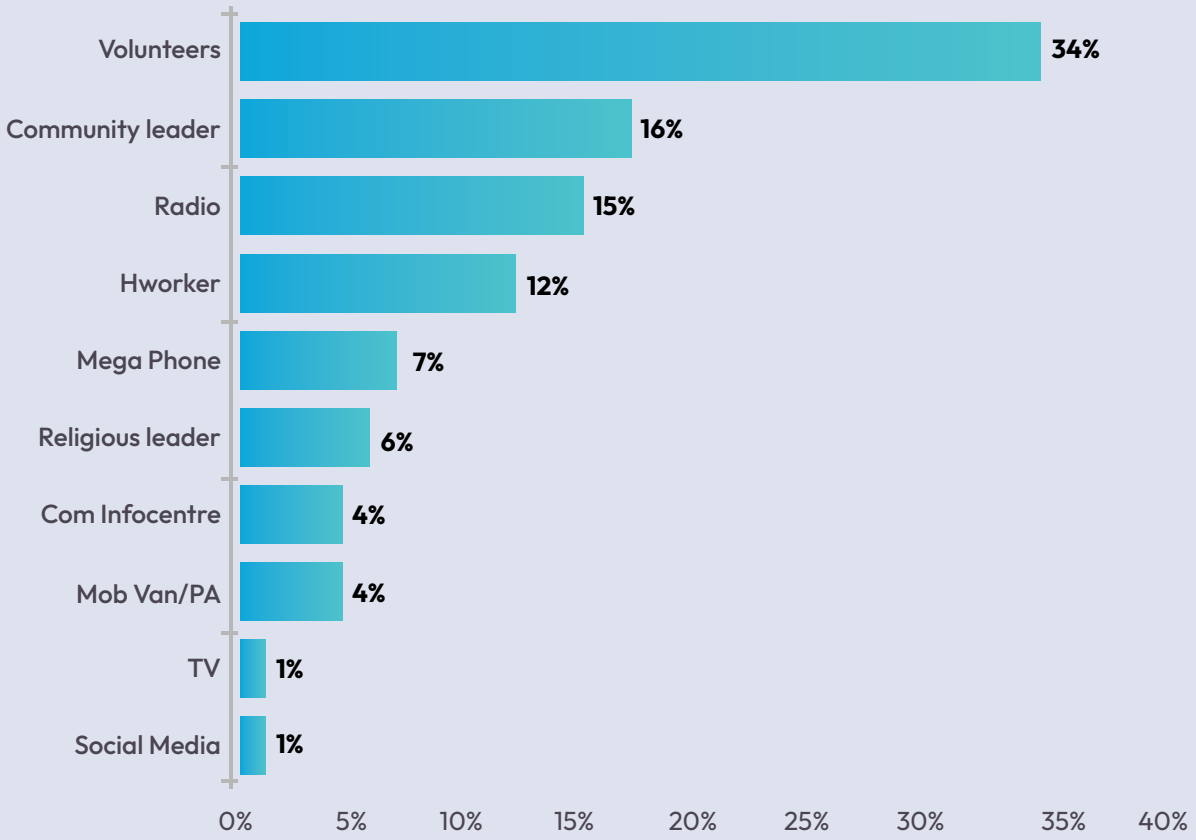




Overall

Overall, the implementation of the RCM exercise during the first and second round of the nOPV2 campaign in Uganda provided valuable insights into the coverage outcomes, quality of implementation, and social mobilization strategies. By addressing the identified gaps and implementing the recommended actions, Uganda was able to strengthen its immunization efforts, reaching more children, and progressed towards the eradication of polio. The lessons learned from this exercise would be integrated into future vaccination campaigns to maximize their impact and ensure the health and well-being of the population.

SOURCE OF INFORMATION ABOUT THE CAMPAIGN



12.0 Post implementation activities

Administrative Coverage (National)

Round 1 Overview

Start and End Dates

Round 1 was implemented from Thursday October 3, 2024, to Sunday October 6, 2024, a four day period designed to reach peak engagement and service delivery across identified regions. It was synchronized with Kenya

Target Population

The campaign targeted 2.7 million children under five years of age across 49 districts, prioritizing rural communities with limited healthcare access.

Coverage Achieved

Round 1 achieved a 118% administrative coverage rate, successfully vaccinating 3.269 million children. All districts achieved above 100% with the exception of Soroti District which achieved 98%.

Round 1 achieved a 92% Independent Monitoring coverage survey rate, noting the successful vaccination and finger marking of 10,012 children out of 10,841 sampled. However, we noted that 16 districts scored below 95%.

Round 1 achieved a 90% LQAS coverage survey rate, indicating a successful vaccination and finger marking of 2,649 children out of the 2,940 sampled. However, we noted that 24 districts scored below 95%.

Teams Deployed

A total of 4,944 teams, each comprising 1 health worker and 1 recorder, were deployed. Mobile / roving teams were pivotal in reaching hard to reach areas. The teams were supported by 1 mobilizer per village to guide the teams to actual houses registered for vaccination. Teams were allocated based on population estimates of the respective districts with specific targets. A target of 125 children per day was allocated for Rural populations whereas a target of 250 children per day was allocated for Urban populations such as cities, municipalities and town councils.

Round 2 Overview

Start and End Dates

Round 2 was implemented from Thursday November 7, 2024, to Sunday November 10, 2024, a four-day period designed to reach peak engagement and service delivery across identified regions.

Target Population

The campaign targeted 2.7 million children under five years of age across 49 districts, prioritizing rural communities with limited healthcare access.

Coverage Achieved

Round 2 achieved 127% administrative coverage rate, successfully vaccinating 3.5 million children. All districts achieved above 100%.

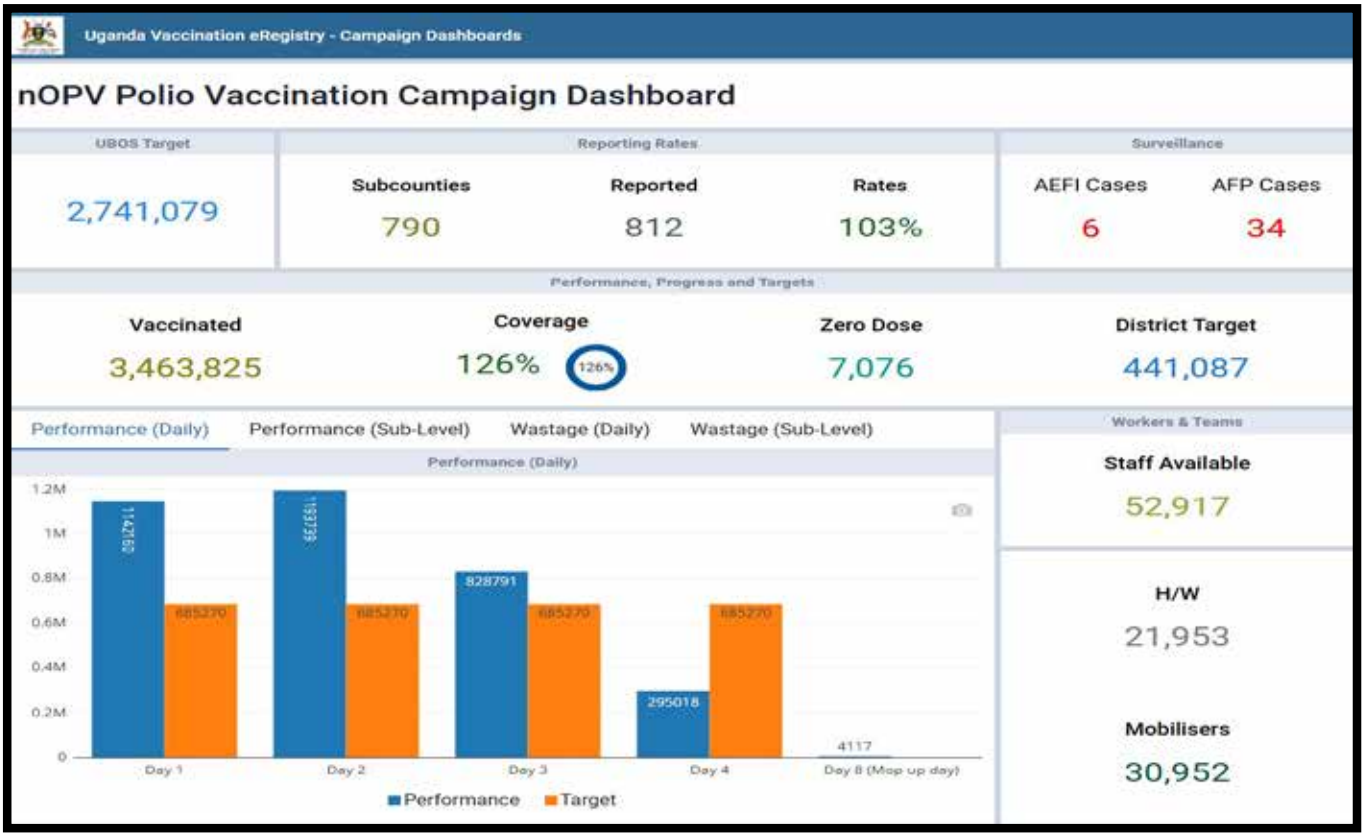
Round 2 achieved a 96% Independent Monitoring coverage survey rate, noting the successful vaccination and finger marking of 10,512 children out of 10,942 sampled. However, we noted that 9 districts scored below 95%.

Round 2 achieved a 95% LQAS coverage survey rate, indicating a successful vaccination and finger marking of 2,791 children out of the 2,940 sampled. However, we noted that 14 districts scored below 95%.

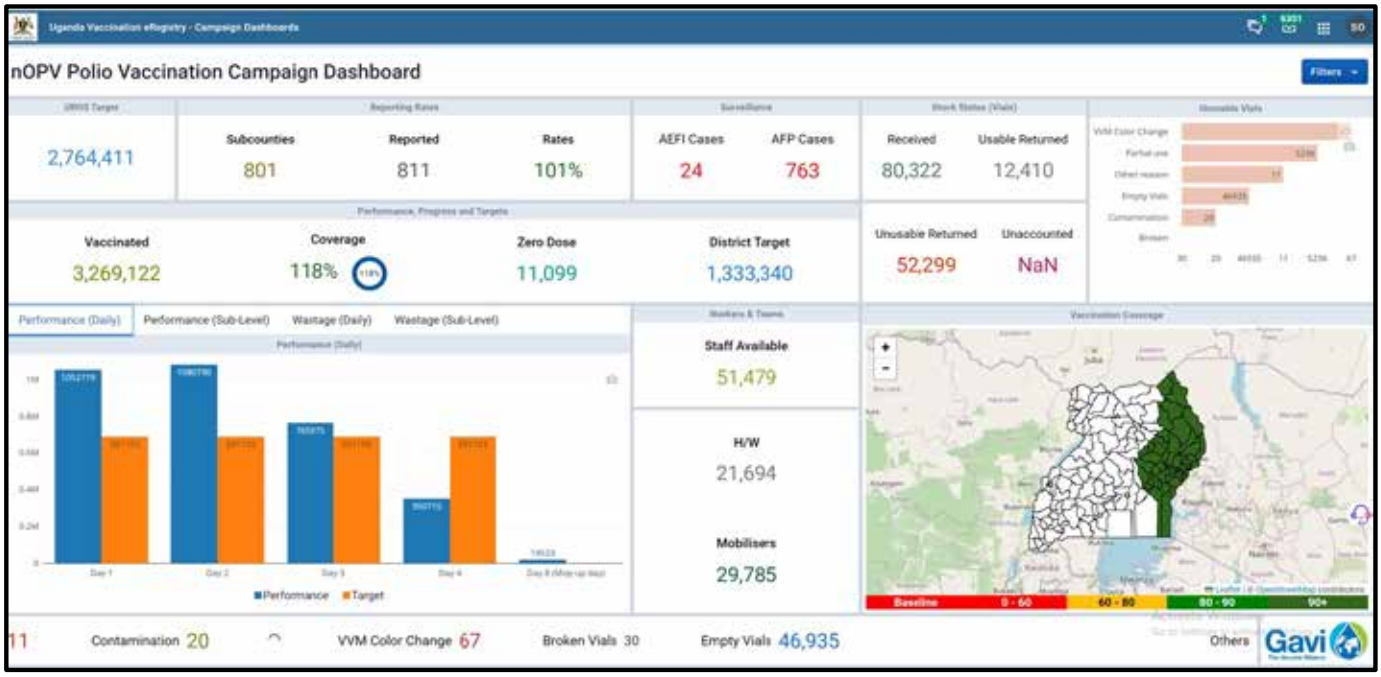
Teams Deployed

A total of 5,456 teams, each comprising 1 health worker and 1 recorder, were deployed. Mobile / roving teams were pivotal in reaching hard to reach areas. The teams were supported by 1 mobilizer per village to guide the teams to actual houses registered for vaccination. Teams were allocated based on population estimates of the respective districts with specific targets. A target of 125 children per day was allocated for Rural populations whereas a target of 250 children per day was allocated for Urban populations such as cities, municipalities and town councils.

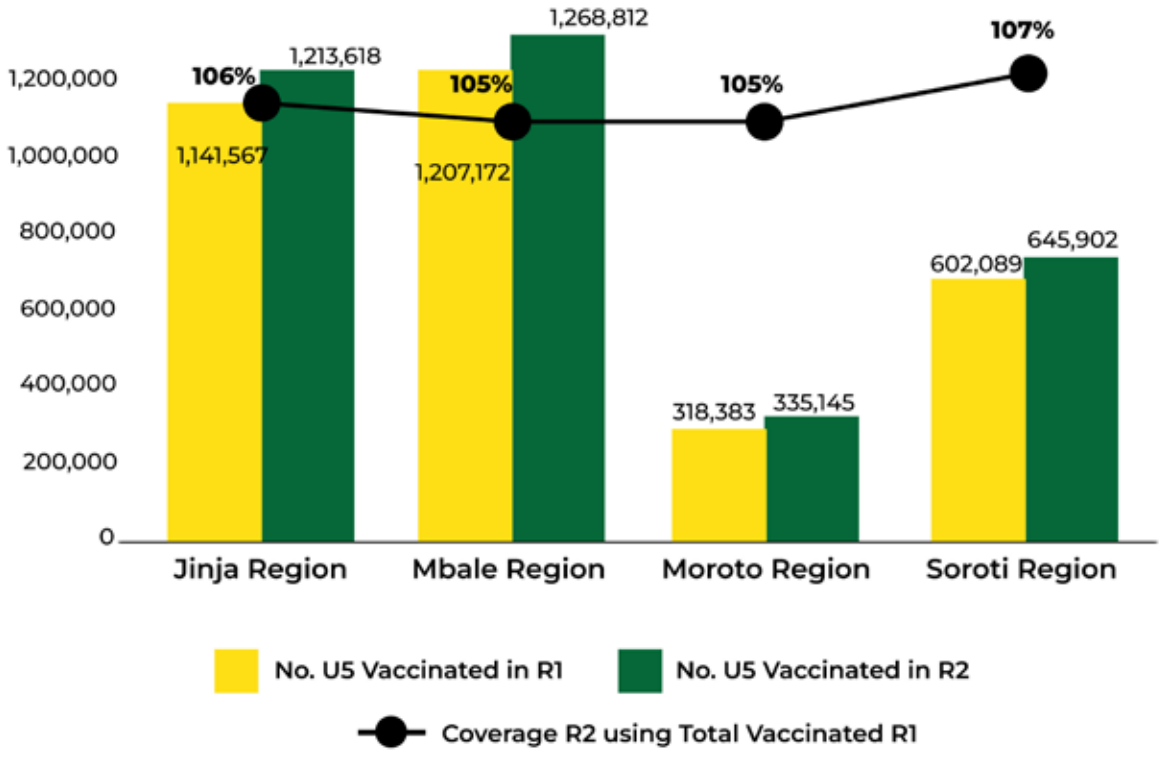
ROUND 2 PERFORMANCE



ROUND 1 PERFORMANCE

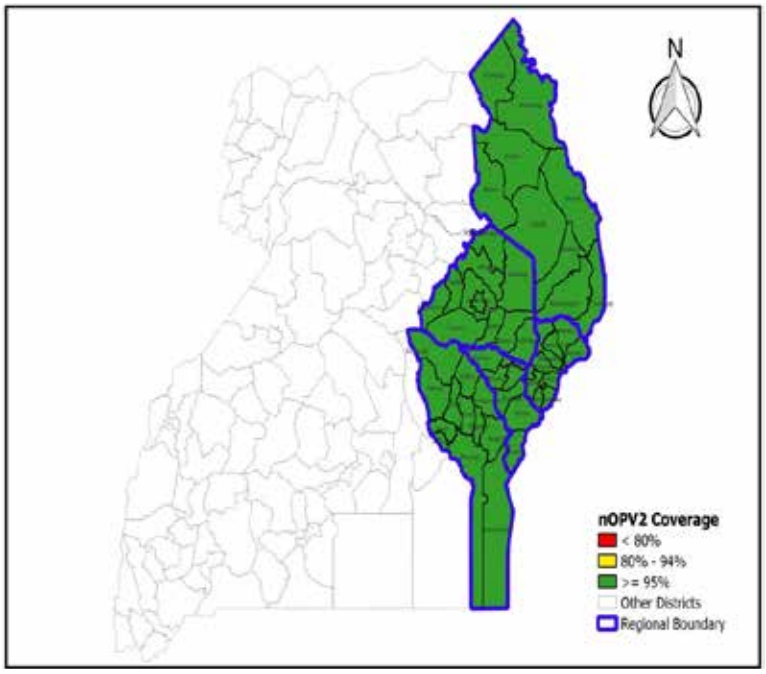


Administrative Coverage (Regional)



In Round 2, all the 4 implementing regions made significant progress in increasing vaccination coverage for children aged 0-59 month indicated in the figure above. The target population of children aged 0-59 months varied across the regions, ranging from 271,627 to 1,011,863. The aggregated data demonstrates significant progress in increasing vaccination coverage across the regions, with administrative coverage percentages ranging from 118% to 127% for Round 1 & 2 respectively. This indicates that the vaccination campaigns have been successful in reaching and protecting a substantial proportion of the target population against polio.

Administrative Coverage (District) R1 & R2



All the 49 (100%) districts have coverage above >=95% in R1 & R2

From the map above, it is noted that in the vaccination campaign, all 49 implementing districts in the four regions achieved remarkable coverage rates of 95% or higher in both Rounds 1 & 2.

On a positive note, most districts experienced a notable increase in coverage when comparing Round Two with Round One of the vaccination campaigns. This signifies the continuous improvement and progress made in reaching more children and enhancing immunization coverage across the implementing regions. The commitment of healthcare providers, community leaders, and vaccination teams in these districts has played a vital role in achieving these positive outcomes.

Overall, the high coverage rates achieved by the all the 49 districts highlights the effectiveness of the vaccination campaign in the 4 implementing regions of Mbale, Jinja, Soroti and Moroto. The notable percentage increase in coverage between the two rounds reflects the dedication and effectiveness of the vaccination teams and the commitment of the communities in prioritizing the health and well-being of their children. It is crucial to sustain and build upon this progress to ensure that all children

in Uganda are protected from vaccine-preventable diseases.

AFP Surveillance

In R2 nOPV2 campaign, all suspected AFP cases identified by vaccination teams were verified by a clinician and a total of 35 true AFP cases have been identified. Whereas in R1, a total of true AFP cases was 110. This is a large number compared to the annual target for the country.

AEFI Reported

A total of 6 adverse events following immunization were reported in Round 2 and were investigated compared to 28 in Round 1. However, there were no serious AESI reported. To determine the occurrence of adverse events of special interest (AESI) in children 0-59 months of age vaccinated with nOPV2 and document the history and medical presentation of AESI detected and to assess causal association between AESI and vaccination, identify possible risk factors and generate safety signals, a sentinel study proposal has been developed and submitted to Centers for Disease Control (CDC).

ROUND 2 RESULTS

Regions	# of AFP cases Reported	# of AEFI cases Reported	# of Zero Dose cases Reported
Jinja	3	0	3,358
Mbale	21	1	2,229
Moroto	6	3	457
Soroti	5	2	1,032
Grand Total	**35**	**6**	**7,076**

ROUND 1 RESULTS

Regions	# of AFP cases Reported	# of AEFI cases Reported	# of Zero Dose cases Reported
Jinja	11	9	5,680
Mbale	55	5	2,809
Moroto	5	3	1,070
Soroti	39	11	1,365
Grand Total	**110**	**28**	**10,924**

13 Post- SIAs Coverage Survey

13.1 LOT QUALITY ASSURANCE SAMPLING SURVEY

In October 2024, Uganda undertook a Polio Supplementary Immunization Activity (SIA), aiming to vaccinate children under five across 49 districts and 4 cities in Eastern Uganda. As part of the Global Polio Eradication Initiative, this campaign was supported by WHO, UNICEF, and other partners. The primary objective was to achieve 95% immunization coverage for children aged 0–59 months, using a single dose of the Novel Oral Polio Vaccine (nOPV) to enhance population immunity.

To assess the quality and coverage of the house-to-house polio Supplementary Immunization Activity (SIA) campaign, the World Health Organization (WHO) and the Ministry of Health promptly evaluated its outcome through the Lot Quality Assurance Sampling (LQAS) method. Conducted within five days of the campaign's completion, this survey assessed 2,940 children to measure vaccination coverage, community awareness, and the effectiveness of social mobilization efforts.

The survey findings indicate that vaccination coverage was generally high, with 90.1% of children showing a visible vaccination mark, thereby demonstrating adherence to campaign protocol. However, despite this overall success, 53.3% of districts did not meet the OPV fingermark coverage threshold, with underperformance varying from moderate to severe. Notably, only 46.7% of districts achieved the targeted coverage, highlighting a need for focused interventions to address low-performance areas.

Further analysis of OPV dose administration reveals that while the median dose count was five doses per child, 10.7% of children received fewer than three doses. This shortfall suggests gaps in coverage, particularly in districts facing logistical challenges or encountering community resistance, as seen in districts like Busia and Buyende. Additionally, although awareness of the SIA was high overall—driven largely by effective communication through community volunteers and radio (reaching 46.5% and 35.3% of the population, respectively)—districts such as Amudat and Namayingo recorded lower caregiver awareness, pointing to the need for localized outreach strategies to improve campaign reception.

In terms of demographic reach, the LQAS survey achieved nearly balanced gender representation (50% female, 49% male), with an average age of 26.3 months among the assessed children. Moreover, the inclusion of infants under 12 months, a group highly susceptible to polio, underscores the campaign's broad and inclusive approach.

Despite these successes, the campaign encountered several challenges that impacted its reach and efficiency. Inconsistent village lists, fading vaccination marks, and occasional errors in finger marking complicated the verification process in areas like Bududa and Soroti. Remote districts such as Kapelebyong and Moroto also experienced access difficulties due to their challenging terrains, which led to delays and reduced vaccination coverage. Additionally, logistical setbacks, such as delays in transport and per diem payments, affected team morale and timing, especially in more isolated areas.

To address these challenges and improve the effectiveness of future SIAs, three key recommendations are proposed. First, it is important to ensure timely provision of essential resources, including transportation and allowances, particularly for teams working in remote regions. This would reduce delays and help vaccination teams reach all targeted areas. Second, expanding mobilization efforts through trusted local leaders and community-specific campaigns is recommended to increase awareness and reduce caregiver hesitancy in lower-coverage districts. Finally, using higher-quality markers can help maintain visible and reliable vaccination marks, thereby facilitating accurate post-campaign verification.

BACKGROUND

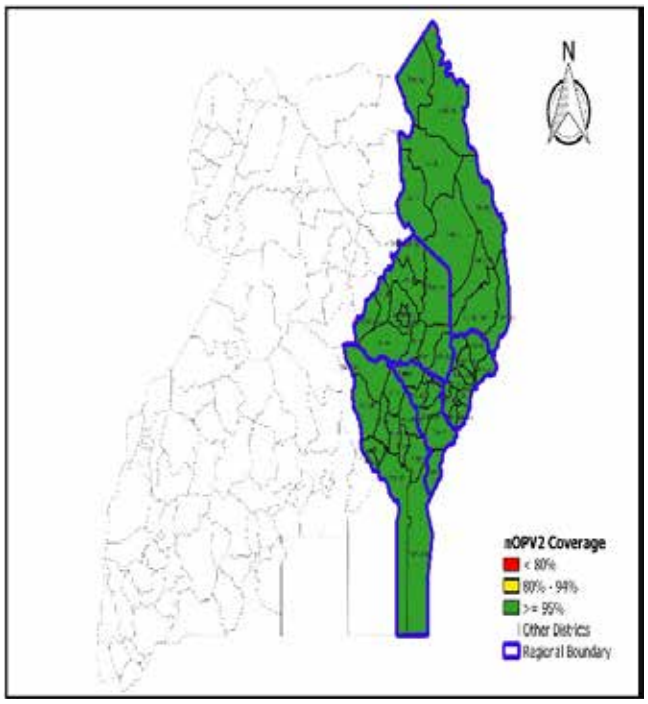
Uganda continues to face the threat of polio outbreaks despite extensive interventions aimed at halting the virus's spread. In May 2024, circulating vaccine-derived poliovirus type 2 (cVDPV2) was detected in environmental samples from a sewage plant in Doko, Mbale District.

In response, the Ministry of Health, with support from partners such as the World Health Organization (WHO) and UNICEF, intensified immunization efforts to prevent further transmission.

Polio is a highly infectious disease that primarily affects children under five, leading to paralysis or even death. The virus spreads through the fecal-oral route and aerosol droplets. Vaccination remains the most effective measure to prevent infection and ensure the health and well-being of children.

To mitigate the risk of outbreaks, the Global Polio Eradication Initiative (GPEI) recommends countries conduct Supplemental Immunization Activities (SIAs) targeting high-risk areas and populations, in addition to routine immunizations. Uganda has implemented SIAs since 1996, targeting children aged 0-59 months with additional polio vaccines to boost population immunity. These campaigns are conducted nationwide as National Immunization Days (NIDs) or in specific high-risk areas as Subnational Immunization Days (SNIDs).

In October 2024, Uganda launched a polio vaccination campaign targeting children in 49 districts across the Busoga, Bugisu, Bukedi, Teso, Sebei, and Karamoja regions. The primary objectives were to increase and sustain high population immunity against polio and to enhance the sensitivity of Acute Flaccid Paralysis (AFP) surveillance. Additional goals included achieving a Non-Polio Acute Flaccid Paralysis (NPAFP) rate of at least 3 per 100,000 among children under 15 years, mitigating the risks of paralytic cVDPV2



Target Round one Districts that conducted SIA

infections among children born after April 2016, and strengthening routine immunization in districts. Health workers administered two drops of the oral polio vaccine to each child during this four-day, door-to-door initiative.

To assess the quality and coverage of the house-to-house polio SIAs, the World Health Organization conducted Lot Quality Assurance Sampling (LQAS) surveys in all 49 districts that implemented the SIA. These surveys aimed to evaluate the effectiveness of the campaign and identify areas needing improvement.

Despite these efforts, the detection of cVDPV2 in environmental samples underscores the need for continued vigilance and robust immunization strategies to maintain Uganda's polio-free status.

DATA PLANNING AND EXECUTION

OVERALL OBJECTIVE

The overall objective of the survey was to assess the quality of polio SIAs, and communication and social mobilization activities to provide evidence-based information that will be used to guide implementation of corrective actions.

SPECIFIC OBJECTIVES

The specific objective of the LQAS survey were.

1. To use LQAS technique to evaluate the coverage of OPV following polio house-to-house SIAs in high-risk districts to determine whether the coverage is acceptable or unacceptable.
2. To provide evidence-based information that will be used to implement corrective actions in districts with unacceptable oral polio vaccine coverage.

LQAS METHODOLOGY

DEFINITION OF A LOT AND CLUSTER

A lot was defined, based on administrative boundaries as a District or a City where there is a responsible officer present and accountable for corrective actions. A cluster was defined as a Parish with clear administrative boundaries.

All the districts that conducted the house-to-house SIA campaign were assessed. In each lot, six clusters were randomly selected by the national LQAS SIAs coordinator using probability proportional to size methods. The sampling frames were obtained from Uganda Bureau of Statistics (UBOS) and further verified with the district Biostatistician/Planner on the existence of specific villages, parishes, and sub counties as well as the household and population sizes of the villages. Any discrepancies found were updated before sampling the six clusters randomly.

Target population

The target population was children aged 0-59 months living in the area defined as the lot during the campaign, which was the same target population for the SIAs.

Selection of Households in a Cluster

In each cluster, 10 households with eligible children were randomly selected for the survey. A household was defined as a group of people who share the same kitchen, or a group of people whose sustainment is provided by the same person(s).

Selection of the first household in the cluster

Surveyors were provided with list of staring villages in each cluster. The villages were

selected using probability proportionate to size. All the selected villages had more than 20 households. The surveyor drew a sketch map of the village with help of the village guide. They divided the village into 4 sectors of approximately equal size. Numbered the sectors from 1 - 4. Randomly selected one sector using a table of random numbers. They then listed the households in the selected sector and randomly selected a starting household. The surveyor with the help of a village guide moved to the selected household to start the survey.

Selection of Subsequent Households in the Cluster

Surveyor exited the first household from the main entrance and turned right and continued to sample households on the right-hand side. Where an eligible child was found, a questionnaire was administered. The surveyor skipped the next two households. Where no eligible child was found in the household, the surveyor did not skip the next household. When the edge of the village was reached before 10 eligible children in the cluster were surveyed, the surveyor moved to the nearest village in the same Cluster to complete the survey in the cluster. The surveyor selected the first and subsequent household in the new village in the same way as in the previous village.

Selection of a child in a household

Only one child aged between 0 and 59 months was randomly selected in a household for the survey. The surveyor asked the head of household, parent/caregiver the number of eligible children who belong to the household and were present at the time of the survey, and then asked him/her to bring all the eligible children out of the house. If a household had only one eligible child, the surveyor administered the questionnaire to that child. If the household had more than one eligible child, the surveyor numbered the children (e.g. left to right), selected one child randomly using the random number table and then administered the questionnaire to the selected child.

Ascertaining Vaccination Status

Vaccination status of an eligible child was ascertained using a ''fingermark" on the left small finger. Any child who did not have the "fingermark" on the left small finger was considered as "not vaccinated". Verbal history was NOT considered. During training of the district teams to implement the house to house Polio SIAs, they were guided to apply two drops of OPV to each child aged 0-59 months and mark the left small finger with an indelible ink immediately as evidence of immunization.

DATA COLLECTION

While in the household, the surveyors completed the cluster data collection form that was programmed in ODK software and installed on their phones. The form contained questions on household location (Lot, Sub County, parish and village); GPS coordinates of the starting village in the lot; date of the survey; number of eligible children (aged 0-59 months) in the household and those available/seen at the time of the survey; OPV

vaccination status and reasons for non-vaccination of the selected child; awareness of the polio SIA campaign and source of the information and knowledge of any AFP cases within the community in the two months preceding the survey. The surveyors were also advised to complete the cluster data collection form in paper as backup. Each surveyor was assigned to collect data for a lot, with support of the supervisor where necessary.

QUALITY ASSURANCE

LQAS surveyors and supervisors were trained for 3 days including one day for field practice on the key concepts of LQAS methodology, sampling strategy, data collection, data analysis and interpretation, and the survey instruments (both paper and in ODK software). Supervisors verified the collected data for two randomly selected children in three randomly selected clusters for each lot to verify whether the data matches with that of the surveyors.

DATA ANALYSIS AND INTERPRETATION FRAMEWORK

The LQAS survey results were analyzed and interpreted using the Global Polio Eradication Initiative (GPEI) cluster LQAS survey combined plan as per the accountability framework (Table 1).

Exhibit 1: GPEI Table for Interpretation of Results

Total number of unmarked children out of 60	Interpretation
0-3	Accepted >90%
4-8	Rejected <90%
9-19	Rejected <70%
>19	Rejected <60%

RESULTS DISSEMINATION

At the end of the four-day exercise, the survey team, led by their district supervisor, presented the findings to district leadership based on data collected using the Lot Quality Assurance Sampling (LQAS) methodology. The feedback session was designed to give immediate insight into district performance, focusing on strengths and areas requiring improvement. Key issues highlighted during the feedback meeting included.

Iganga district team during the dissemination exercise

- **Overall Coverage**

  The LQAS team provided an assessment of each district's vaccination coverage, highlighting areas with high vaccination rates and identifying districts where coverage fell below target levels. The discussion included factors that influenced these outcomes, such as operational challenges, access issues, and logistical barriers. Ensuring high coverage across all areas was emphasized as crucial to maintaining community-wide immunity against polio.

- **OPV Dose Coverage**

  The team reviewed the distribution of Oral Polio Vaccine (OPV) doses, noting the percentage of children who received the recommended number of doses. The findings included districts with strong adherence to dosing guidelines, as well as areas where a notable portion of children received fewer doses than required. This analysis helped pinpoint districts that may need additional support to ensure consistent dosing, with the goal of optimizing immunity levels in every community.

- **Awareness**

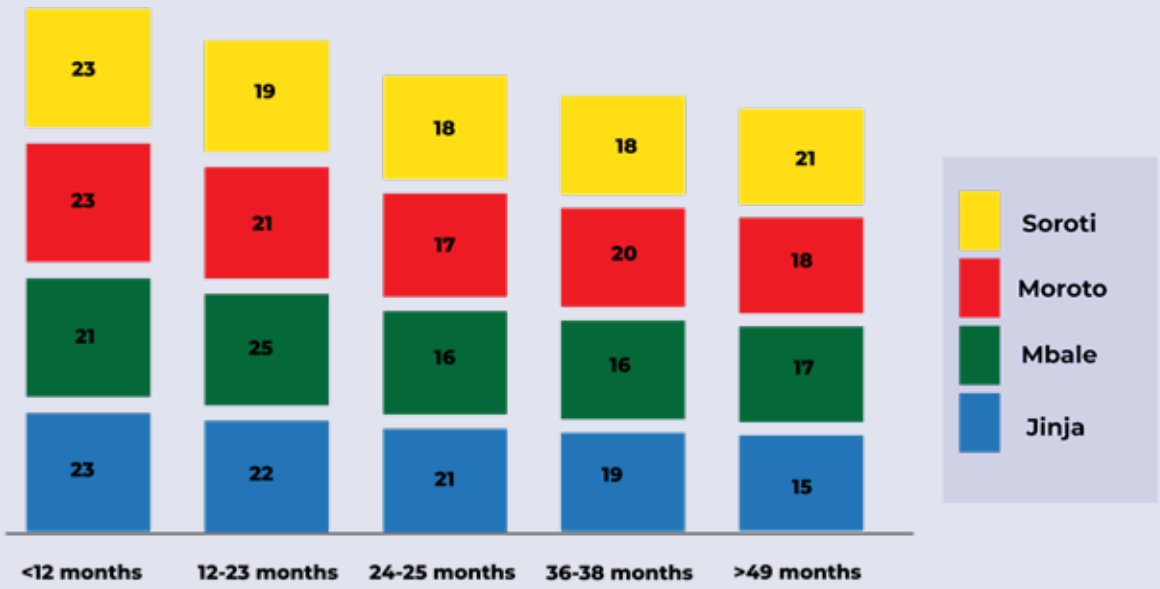
  The LQAS team also assessed community awareness about polio vaccination, which is essential for encouraging participation and understanding the importance of immunization. They discussed districts with high awareness levels and successful outreach efforts, as well as areas where awareness was comparatively low. Recommendations focused on strengthening information dissemination and community engagement in regions where awareness about polio prevention and the vaccination campaign was less robust, helping to enhance future participation and support for immunization initiatives.

RESULTS

DEMOGRAPHIC

The demographic analysis of the assessed children shows an almost even gender split, with 50% female and 49% male. The mean age was 26.3 months (SD = 16.6 months), aligning with the primary target for polio vaccination. Notably, 22.8% of the children were under 12 months, underscoring the importance of early vaccination for this higher-risk age group. Additionally, 16.8% were over 48 months, indicating the need to maintain vaccine outreach for older children within the 0–59-month target range. Age distribution remained consistent across regions, reflecting effective outreach to the full age range of children under five.

Exhibit 2: Age distribution of the children assessed by region.



VISIBLE FIGURE MARK VACCINATED CHILDREN

A total of 2,940 children aged 0-59 months from 49 districts, including 4 cities, were evaluated for the presence of a visible finger mark on the little finger of the left hand as evidence of vaccination during the Supplementary Immunization Activity (SIA). Overall, 90.1% of the children assessed had a visible finger mark, suggesting a generally high vaccination coverage across the surveyed regions. This finger mark serves as a critical indicator of vaccination during the SIA.

Displaying a marked figure in Jinja district

However, 9.9% of children were without a visible finger mark, indicating areas of improvement in marking practices and campaign coverage. Notably, certain districts showed higher counts of unmarked children, which may reflect logistical challenges, marking inconsistencies, or other regional factors. For instance:

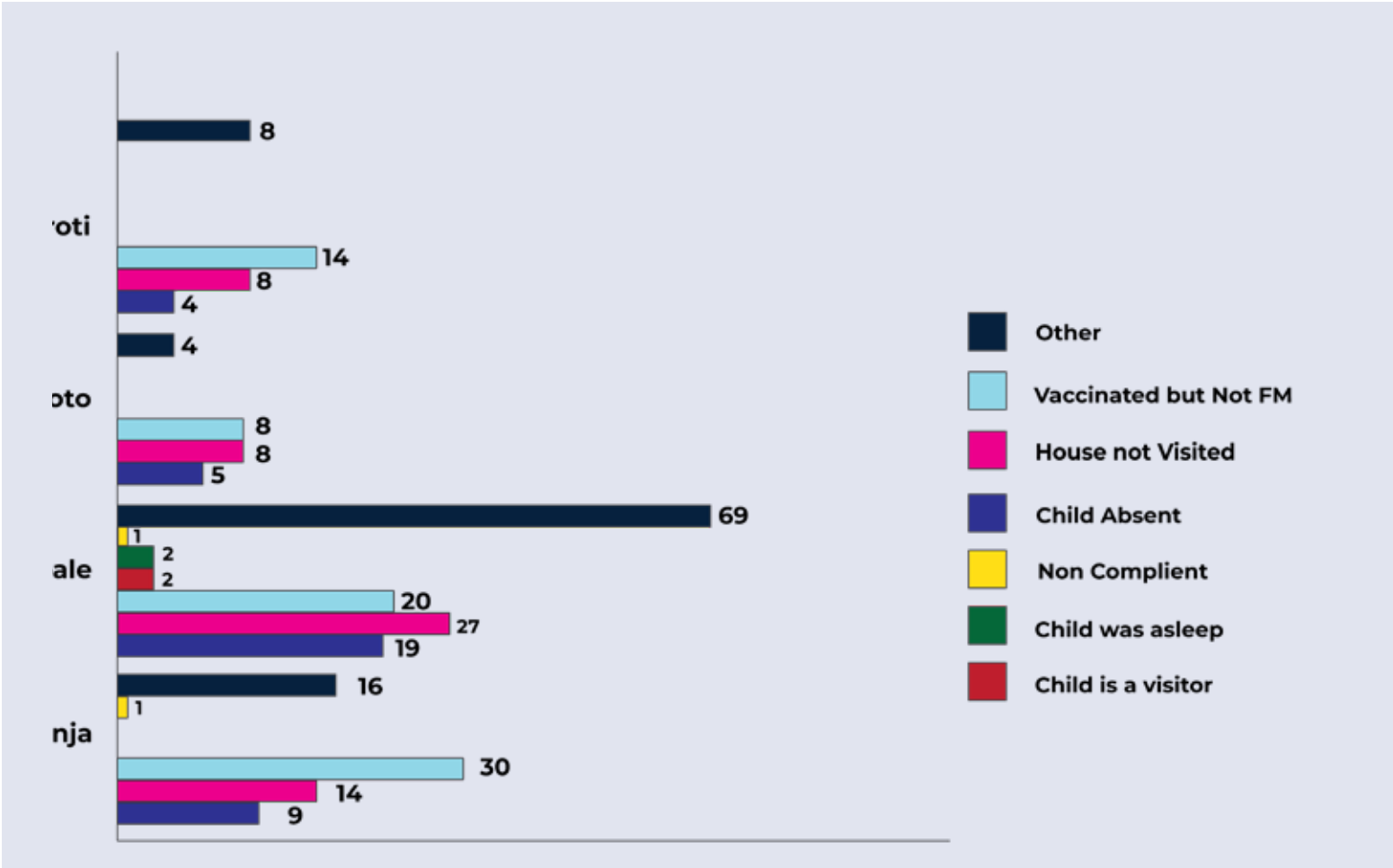
Butebo District had 33 children without visible marks, and Napak District reported 14 unmarked children.

Soroti City had 11 unmarked children, representing the highest count among city districts.

Reasons contributing to the absence of a finger mark (see exhibit 5) included marks that washed off or faded over time, marking of the wrong finger, and challenges related to caregiver availability (e.g., instances where the “mother had gone to the garden”).

These findings highlight the success of the SIA in reaching a large portion of the target population while also underscoring the need for improved marking protocols and targeted outreach in areas with lower coverage. Addressing these gaps will be essential in bolstering the accuracy of vaccination tracking and ensuring comprehensive immunization coverage.

Exhibit 3: Reasons contributing to the absence of a finger mark



Also, Regions with higher proportions of children without a finger mark included Mbale (13.7%), Jinja (10.4%), and Soroti (6.4%), suggesting a need for targeted interventions in these areas to ensure complete vaccination coverage and adherence to marking protocols. Conversely, regions like Soroti (6.4%) and Moroto (6.3%) showed lower percentages of children without finger marks, indicating better adherence to operational standards.

Exhibit 4: Other Reason for Missing Finger Mark

Other Reasons	Description
Faded Ink	The ink used for marking faded or washed off over time, removing visible evidence of vaccination.
Incorrect Marking	The mark was applied to the wrong finger or incorrectly, leading to no visible mark on the left finger
Missed Household Visit	The household was not visited by the vaccination team due to scheduling or logistical challenges.
Child Was Not Present	The child was away when the vaccination team visited, often due to family obligations or mobility.
Caregiver Refusal or Non-Compliance	Some caregivers may have refused the vaccination, though this was recorded as rare.
Other Reasons	Includes issues like administrative errors, unavailability of marking ink, or unclear procedures.

CLASSIFICATION OF DISTRICTS

Overall, nearly half (46.7%) of the districts passed the OPV fingermark threshold in round 1 and 87% of the districts passed the fingermark threshold in Round 2, demonstrating a good level of vaccination coverage. However, a considerable portion (53.3%) failed to meet the desired standards in round 1 and this, with varying degrees of failure across the "Moderate," "Poor," and "Very Poor" classifications. This was greatly improved in Round 2. These findings indicate that while the OPV campaign was largely successful in some areas, there is a critical need to address specific challenges in lower-performing districts to ensure full immunization coverage and mitigate polio risks. The classification of districts in Uganda based on the October 2024 OPV campaign highlights the vaccination coverage achieved, with a focus on the percentage of children with a visible finger mark as evidence of vaccination.

1. Pass (46.7% of Districts)-21 districts for R1 and 87% - 43 districts for R2 achieved a “Pass” rating, indicating that these districts successfully reached the threshold for

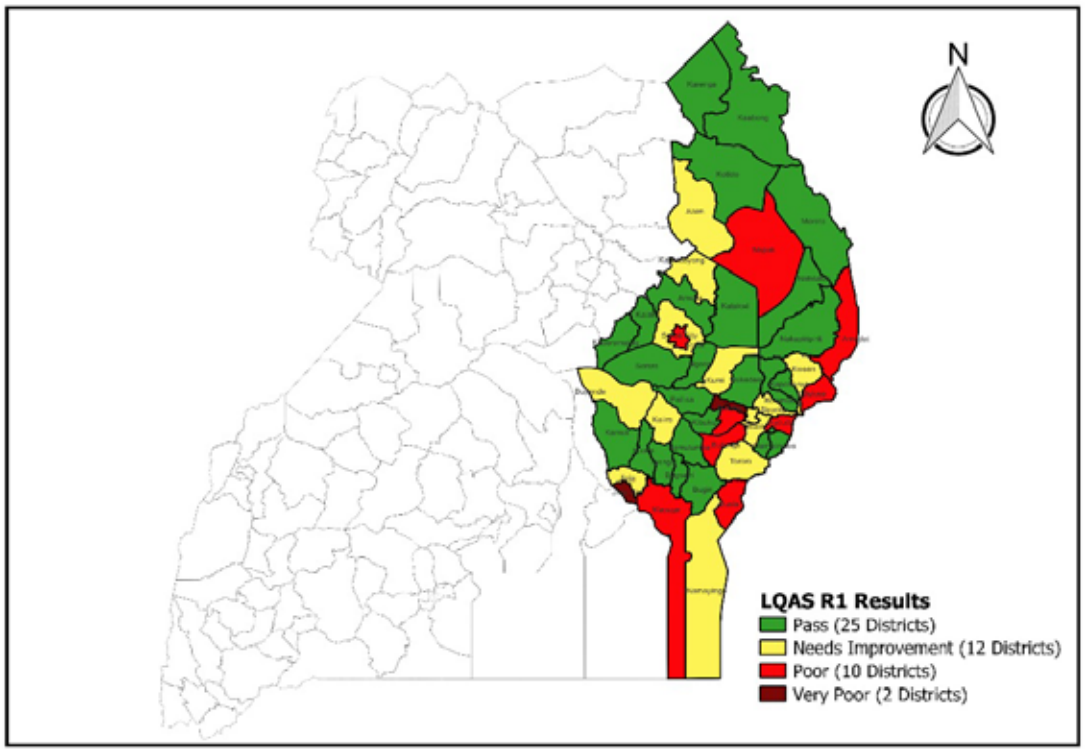
adequate OPV coverage. This means that a significant majority of children in these districts had visible finger marks, showing strong adherence to the vaccination initiative and effective campaign implementation in these areas.

2. Moderate Fail (26.7% of Districts)-12 districts for Round 1 and 10% - 5 Districts for Round 2 were classified as "Moderate Fail," with 4-8 unvaccinated children per district. This indicates a gap in coverage, although not severe, suggesting that these districts encountered moderate challenges in achieving complete outreach. The districts in this category include Abim, Buyende, Jinja, Kaliro, Kapelebyong, Kumi, Kween, Mbale City, Namayingo, Sironko, Soroti, and Tororo for Round 1 and Budaka, Butebo, Jinja City, Katakwi, and Manafwa for Round 2.

3. Poor Fail (22% of Districts)-10 districts for Round 1 and 2% - 1 district for Round 2 fell into the "Poor Fail" category, with 9-19 unvaccinated children. This classification suggests significant challenges in reaching a substantial number of children, possibly due to logistical issues, local resistance, or population mobility. Districts such as Amudat, Budaka, Bududa, Bukwo, Busia, Butaleja, Mayuge, Mbale, Napak, and Soroti City are in this category for Round 1 and Amudat for Round 2, highlighting the need for targeted support to improve coverage in future campaigns.

4. Very Poor Fail (4.4% of Districts)-2 districts—Butebo and Jinja City—in Round 1 were classified as "Very Poor Fail," with more than 19 unvaccinated children. However, no district was in this category in round 2. This severe gap in vaccination coverage places these districts at higher risk for polio outbreaks. The results suggest that these areas may require urgent interventions, such as increased community engagement, improved logistical support, or additional vaccination rounds to close the coverage gaps.

Map of Uganda select districts showing Classification of Districts/Lots by OPV Finger Mark Coverage



REGIONAL OPV COVERAGE

Factors influencing OPV dose intake.

Geographical Factors- Analyze the impact of regions and districts.

Demographics of Caregivers Include any available demographic information such as age, education, or gender if present.

Healthcare Access Indicator: Metrics like health facility visits, interaction with health workers, or availability of vaccines.

Household Characteristics-Such as household size, income levels, or socio-economic indicators.

The median number of OPV doses received from birth among assessed children was five doses, indicating that half of the children received five or more doses. The range of doses varied from 1 to 8, with 51.2% of children receiving five or more doses. However, 10.7% received fewer than three doses, suggesting a gap in vaccination coverage for a small segment of the population.

Districts such as Busia, Buyende, and Kamuli exhibited 16.7% of children with fewer than three doses, emphasizing the need for targeted interventions to increase vaccine coverage in these areas. These districts face higher risks of polio outbreaks, especially due to the presence of mobile populations and foreign communities, which can affect consistent immunization access.

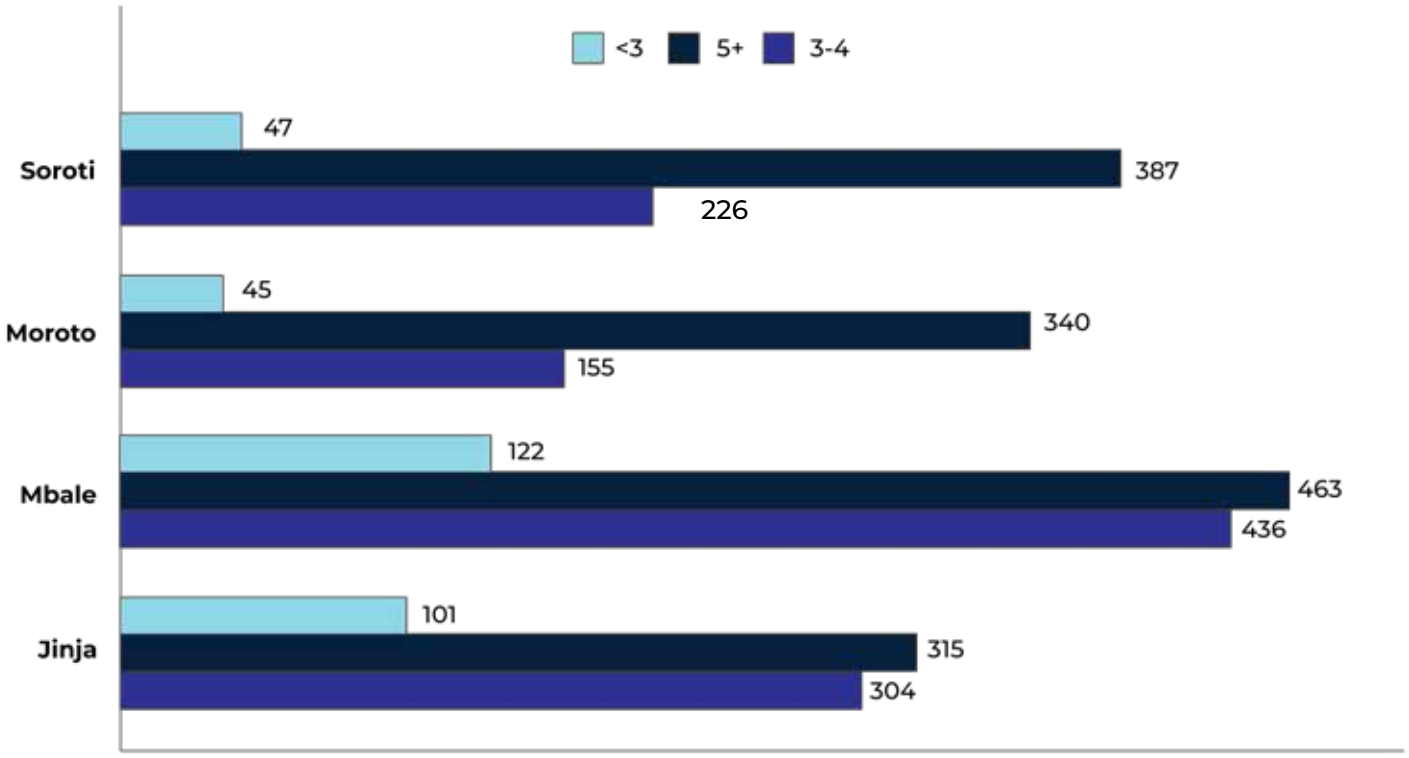
At the regional level, Soroti and Jinja reported the highest proportions of children with lower dose coverage, underlining the importance of focused outreach and support. Conversely, Moroto District recorded the highest overall number of OPV doses administered, reflecting effective vaccination coverage and adherence to protocols in that area.

Comparison between AFP awareness and average OPV doses

- Caregivers who lacked awareness about AFP reported an average of 4.32 OPV doses administered to their children.
- On the other hand, caregivers who were aware of AFP had an average of 5.14 OPV doses administered to their children.

This suggests that caregivers who are knowledgeable about AFP tend to have children who receive more doses of the Oral Polio Vaccine. This correlation highlights the importance of awareness campaigns in promoting better vaccination practices.

Exhibit 6 : Categorized Distribution of OPV Doses by Region



AWARENESS OF POLIO SIAS

In preparation for the October 2024 Supplementary Immunization Activity (SIA), an extensive awareness campaign was conducted to engage local leaders, health workers, and other key stakeholders. The goal was to ensure thorough mobilization and implementation of the SIA to reach all children aged 0–59 months.

High-Awareness Regions

Four districts—Moroto, Amuria, Bukedea, and Katakwi—achieved 100% caregiver awareness. This level of awareness likely reflects strong community mobilization efforts by local leaders, health workers, and outreach teams. High awareness in these areas suggests that the messaging and communication strategies effectively reached and engaged caregivers, preparing them for the arrival of vaccination teams.

Top Awareness Levels Among Large Districts

Among larger districts, Soroti led with 96.2% awareness, followed closely by Moroto at 93.1% and Mbale at 92.4%. These high percentages demonstrate successful engagement and preparedness in areas where a substantial proportion of children needed to be reached. The high awareness rates in these districts are likely due to the combination of radio broadcasts, community leader involvement, and volunteer efforts that effectively conveyed the campaign's importance.

Districts with Lowest Awareness

Despite these successes, some areas reported relatively low caregiver awareness. Amudat had the lowest awareness at 68.3%, followed by Namayingo at 73.3% and Soroti City at 80.0%. The lower awareness in these districts highlights challenges that may include limited access to reliable information sources, lower engagement from local leaders, or logistical barriers in reaching more isolated communities. These areas may require additional targeted communication efforts in future campaigns to ensure full community readiness.

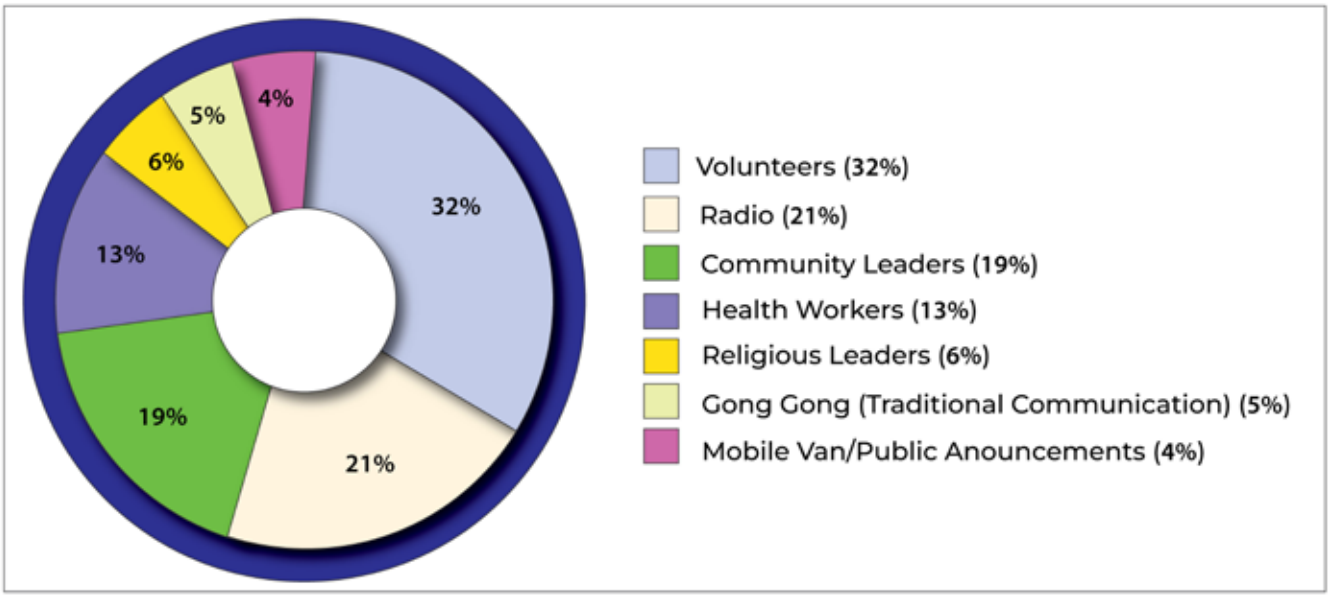
Overall, while caregiver awareness was high in many districts, certain areas require focused improvements. Strategies that proved successful in high-awareness regions, such as Moroto and Bukedea, could be adapted and implemented in districts with lower awareness levels to enhance community engagement and support for upcoming immunization rounds.

SOURCES OF AWARENESS BY PERCENTAGE

A wide variety of communication methods were utilized to overcome barriers to vaccination, such as low motivation, mistrust, and lack of awareness about routine immunization. Door-to-door mobilization efforts were particularly emphasized, with Village Health Teams (VHTs) and local leaders visiting households, markets, churches, shops, playgrounds, and schools to ensure that every household was informed and motivated to vaccinate their children.

The following channels were identified as the most effective sources of awareness among caregivers and the public:

Exhibit 8: Primary Sources of Community Information and Awareness



Less common sources included

- Neighbors (2.24%)
- House-to-House Mobilizers (2.13%)
- TV (0.85%)
- Other Sources (0.83%)
- Mobile Messaging/Social Media (0.13%)
- Teachers/Students (0.11%)
- IEC (Information, Education, and Communication) Materials (0.09%)
- Newspaper (0.02%)

The awareness campaign successfully leveraged a combination of modern, traditional, and community-based communication channels. The reliance on volunteers, radio, and community leaders as primary sources indicates a high level of community involvement and adaptability to local communication preferences. However, certain channels like IEC materials, social media, and newspapers had lower impact, suggesting potential areas for improvement or targeted expansion in future campaigns.

Exhibit 9: Sources of Awareness of Polio SIAs by Parents and Caregiver by region

Region	TV	Radio	Health Workers	Volunteers	Religious Leaders	Community Leaders	Door-to-Door Mobilizers
Jinja	1.5	52.3	10.8	44.6	1.5	20	1.5
Mbale	2.1	37.9	21.1	54.7	6.3	23.2	8.4
Moroto	0	16.3	38.8	40.8	12.2	38.8	0
Soroti	0	41.5	18.5	53.8	10.8	40	0

ACUTE FLACCID PARALYSIS (AFP)

The analysis of caregiver awareness regarding Acute Flaccid Paralysis (AFP) revealed that out of the 2,646 caregivers surveyed, a significant majority (98.94%) reported no knowledge of AFP. Only 1.06% of caregivers indicated awareness, showing that understanding of AFP among caregivers remains extremely low.

This finding underscores the need for targeted education and awareness campaigns focused on AFP. Given AFP's critical role in polio surveillance and early detection, increasing caregiver knowledge is essential to prompt recognition and reporting of potential cases. Enhancing awareness can improve early identification of AFP symptoms, supporting better surveillance and response to potential polio cases. Therefore, future outreach efforts should prioritize raising awareness about AFP, especially in regions with historically low coverage, to strengthen community involvement in polio prevention and overall health vigilance.

CHALLENGES

Access and Logistical Issues

- Remote and Hard-to-Reach Areas- Difficult terrain, especially in districts like Napak and Abim with rugged or mountainous areas, hindered access. Seasonal weather, particularly heavy rains, made travel to certain villages challenging and affected timely visits by vaccination teams.
- In Kapelebyong, survey teams faced unique logistical issues that required water transportation and protective gear for safety, neither of which had been planned for. These unexpected requirements highlight the need for thorough risk assessments in regions with challenging geographic features.

Vaccination Marking Challenges

- In many districts such as Bududa and Soroti, the markers used were of low quality, causing the vaccination marks on children's fingers to fade or wash off. This impacted the accuracy of vaccination records and follow-up checks.
- Some children were marked on the wrong finger or not marked at all, indicating gaps in training and adherence to marking protocols.

Awareness and Community Engagement

- Some parents were unaware of the vaccination campaign, especially in areas with limited community mobilization or lower literacy rates. This issue contributed to missed vaccinations.
- In certain areas, caregivers were hesitant or outright refused to vaccinate their children, which calls for enhanced persuasion efforts and education on vaccine benefits.

Operational Gaps

- Households Not Visited: Some vaccination teams did not reach all households in certain clusters, leaving eligible children unvaccinated. This was sometimes due to teams camping at trading centers rather than conducting thorough house-to-house visits.
- Passive resistance observed among village guides in Namisindwa, expecting monetary compensation.
- Bududa community members were reluctant to engage, fearing potential arrests.
- Areas with mobile or nomadic populations posed challenges for consistent outreach and tracking, leading to lower coverage rates.
- In some regions, logistical constraints such as transportation difficulties, inadequate staffing, and limited resources hampered the effectiveness of vaccination efforts. Ensuring that resources are appropriately allocated and that staff members are adequately trained and equipped is essential for achieving

the desired coverage targets.

Training and Workforce Issues

- Some local guides expected immediate payment, which created conflicts and impacted collaboration with the vaccination teams.

CONCLUSIONS AND RECOMMENDATIONS

Recommendation	Details	District Examples
Enhanced Training and Supervision	Additional training on marking protocols and accurate data recording to reduce marking errors.	Jinja, Budaka
Improved Logistical Support	Ensure timely provision of resources like fuel and allowances to maintain schedule adherence.	Soroti City, Kapelebyong
Community Engagement and Awareness Campaigns	Strengthen community mobilization through trusted local leaders and media to increase awareness and reduce vaccine hesitancy.	Amudat, Namayingo
Use of High-Quality Markers	Utilize durable markers to prevent faded vaccination marks, improving tracking accuracy.	Soroti City, Bududa
Increased Coverage in Hard-to-Reach Areas	Deploy mobile vaccination teams to reach remote or isolated populations more effectively.	Napak, Nabilatuk
Localized Assessments and Follow-Up	Conduct follow-ups in districts with high numbers of unvaccinated children to address specific barriers.	Butebo, Jinja City
Resources for School-Based Immunization	Enhance record-keeping for vaccinations conducted in schools to maintain complete and accurate histories.	Namisindwa

13.2. Independent monitoring of Polio SIAs, 2022

A total of 10,841 children aged 0 – 59 months were evaluated in Round 1 and a total of 10,942 were evaluated in Round 2. Of those present in the households, 10,012 (92%) were vaccinated and finger marked in Round 1 and 10,512 (96%) were vaccinated and finger marked in Round 2.

This signifies a great improvement from Round 1 to Round 2. Districts like Amuria that scored 86% in R2 ended up scoring 100% in Round 2. However, we still noted districts that scored below 80% in Round 2 such as Bugweri and Nakapiripirit.

No	District	IM Coverage R1	IM Coverage R2
1	Abim	97%	99%
2	Amudat	94%	94%
3	Amuria	86%	100%
4	Budaka	97%	94%
5	Bududa	99%	98%
6	Bugiri	94%	97%
7	Bugweri	81%	79%
8	Bukedea	97%	95%
9	Bukwo	99%	99%
10	Bulambuli	95%	98%
11	Busia	89%	95%
12	Butaleja	98%	94%
13	Butebo	80%	96%
14	Buyende	100%	100%
15	Iganga	98%	98%
16	Jinja	93%	98%
17	Jinja City	98%	100%
18	Kaabong	99%	100%
19	Kaberamaido	91%	98%
20	Kalaki	91%	92%
21	Kaliro	86%	96%
22	Kamuli	86%	92%
23	Kapchorwa	100%	99%
24	Kapelebyong	67%	98%
25	Karenga	96%	99%
26	Katakwi	91%	99%
27	Kibuku	99%	100%
28	Kotido	67%	87%
29	Kumi	97%	99%
30	Kween	97%	99%
31	Luuka	91%	95%
32	Manafwa	95%	88%
33	Mayuge	78%	98%
34	Mbale	93%	100%
35	Mbale City	100%	100%
36	Moroto	97%	94%
37	Nabilatuk	94%	97%
38	Nakapiripirit	49%	78%
39	Namayingo	99%	99%
40	Namisindwa	98%	95%

No	District	IM Coverage R1	IM Coverage R2
41	Namutumba	98%	97%
42	Napak	96%	98%
43	Ngora	100%	100%
44	Pallisa	98%	99%
45	Serere	97%	97%
46	Sironko	97%	90%
47	Soroti	91%	96%
48	Soroti City	100%	100%
49	Tororo	94%	96%
	National	92%	**96%**

Mop up activities

Mop-up activities were conducted on days five and six for areas where performance was below target to ensure that no children were left behind. Mop-ups were done after the staggering dates for districts that did not implement in the initial allocated three days.

14.1. Challenges to campaign implementation

Challenges were mainly extracted from the district reports submitted to the National EOC and they include but are not limited to the following;

- Sub optimal budget fingers; 40 villages were missed in the budget, little fuel for coxswain
- failure of timely last mile delivery of logistics
- Late supply of fuel to supervisors; Supervisors accessed fuel lately on the implementation day despite the timely arrival of Fuel cards. This affected prompt support of teams by supervisors on day one.
- Competing Priorities for the DHT; these affected active participation of the ADHO/DHO in the campaign implementation which made decision making on some critical areas difficult such as timely fuel distribution, Transport for DCCT and securing support from partners.
- Delayed submission of daily performance reports – Form 5 by some supervisors
- Inaccurate and delayed daily vaccine accountability reports
- Government health workers were not compliant with time management for the activities
- One-day training was not sufficient enough given the content which included ODK and demonstrations
- Supervisors lacked airtime and data bundles for easy communication and ODK reporting
- Inadequate vaccines by day 3(Occasional stock outs) due to high number of registered children as opposed to UBOS figures although timely redistribution was managed.
- Facilities for non-vaccination of their children in Districts such as Namayingo, Bugiri, Bukwo
- Budgeting based on UBOS figures constrained the few allocated teams
- Fuel allocated was inadequate to effectively cover the Islands and on-land supervision of teams
- There was limited time for registration before implementation for the district due to delays in accessing the books which had been delivered to the DEO's office and received on 31st September 2024
- There was no identifier of the vaccination teams in form of a uniform
- The budget for the Islands was not clear since it did not cater for movements between the different Islands and on-land travel at the Islands, life jackets hire

and also per diem for the District Supervisors who traveled there from period of training till implementation

- High Vaccine wastage experienced due to many doses in vial in districts such as Kaliro
- Quality of Chalk was not good and was delivered broken into pieces due to the transport mode of packing it with several supplies.
- The 2 indelible ink markers allocated per vaccination team were inadequate since the teams have to vaccinate in more than 3 villages for example Kaliro District.
- The teams allocated were very limited and this caused the vaccination teams move to more than three villages in the four days of implementation.
- Poor road network and Long distances on slippery hills in the terrains of many hills in districts such as Bugiri in the listed sub counties; Bududa, Mabono, Bufuma, Nabweya, Bubunji, Bunabutiti, Busiriwa, Bundesi, Bumayoka, Bunamee Bukhasulu, Shisabasi, (Bukwo district sub counties include: Riwo, Riwo T/C, Kapsarur, Chepkwasta and lwongon. Inaccessible roads noted especially a sand deposit barrier between Nabilatuk TC and Kosike.
- Some caretakers removed/scrapped off the ink from left finger marked using razor blade in Nangakho subcounty, Nangako Township A.
- The teachers did not know the age of children in school.
- The Indelible ink markers quality was not good and most fingers marked were observed to be fading away on the next day.
- Inadequate teams at the border point
- No allowance for refreshment for mobilizers
- No allowance for security personnel
- Delayed access to funds by the district
- Resistance from some households e.g., Bukwo district in Suam T/C and Kaptererwo S/C
- Blank tally sheets
- Competing priorities/activities during the implementation e.g. a Regional budget conference organized during campaign implementation period in Bukwo district.
- Poor mobile network and internet connectivity hindering communication, coordination and activities that required use of internet such as zoom meetings. In many districts such as Nabilatuk, Bukwo

- Some officers lacked smart phones resulting into ODK under- utilization during implementation especially at parish level supervision.
- Heavy rainfall partly hindered the activity with health workers having to wait for rain to subside to start (morning) or to leave the field (evening) especially in the last 2 days.
- Rumors about vaccines leading to resistance among a few households. This was addressed through engagements.
- House hold registration forms were not delivered among the logistic delivered, necessitating the District to print them out.
- The compressed schedule for key campaign activities was straining for human and logistical resources.
- Terrain in Kapchorwa district qualifies for a hard-to-reach area .
- Non-involvement of the LC1s and office of the DPC and DISO, However, the PISO were considered
- Vaccine hesitancy were noted in Jehovah witness in Kapchorwa district Gamogo and Kyabugat (This was finally handled) ----(Injiri 666)
- Indelible ink was a challenge (Dries up quickly and used ordinary marker)
- Shortage of chalks and bought on their own
- Burn out of Health workers due to terrain and no bicycles
- Lack of equitable distribution of fuel
- Pens and books were inadequate but was also delivered to Education
- Delay in the availability of funds to facilitate the health workers and the LC1s during the implementation days.
- Some of the implementers, i.e. Vaccinators, VHTs and LC1s were dissatisfied with the payment process of the transport allowances that had been provided.
- Inadequate funds allocated for example Napak District has 14 sub-counties which are so distant and has no provision for the hard to reach supervisors.
- No clear and adequate facilitation for the DHO
- Inadequate vaccines to complete the campaign
- ODK app was not functional, supervisors faced challenges using it. It never clearly showed current correct administrative units for example in Soroti District

14.2 Lessons Learnt and Best Practices

Lessons learnt and best practices were mainly deduced from District reports submitted to the National EOC and the feedback meetings conducted after both rounds of the campaign. They include but are not limited to the following;

- Provision of refreshments during trainings
- Total commitment of sub district supervisors to assigned tasks
- Pre and intra campaign daily virtual review meeting during the planning period
- Timely tracking and planning by the DCCT
- LCV spearheaded dissemination of mobilization announcements
- Active Participation of HSD in charges in campaign supervision
- Active leadership of the command center by the Biostastician
- Active retrieval of daily reports by bio stat for prompt data entry
- The use of community towers for mobilization at the Islands and on-land
- Involving LC 3 Chairperson from the start in the Island of Lolwe Sub county to support in resistant
- cases of Njiri Nkalu a religious cult
- Involving the Njiri Nkalu leader a religious cult in the advocacy meeting in districts such as Namayingo and Sironko
- The service provider for meals assigned cooks at every Sub county which enabled participants to have meals on time
- Registration of children under 5 years by VHTs helped the team know the target population per village/parish and sub county.
- The involvement of chiefs, RDC CAO, LC5, PISO, GISO, Cultural, Traditional and Religious leaders impacted positively on mobilization of the community which led to good coverage and no hesitancy from community.
- The teams moved in rain to reach the children in spite of hash condition like slippery paths on the high hills,
- The health workers moved with emergency kits in community.
- Some LC1s mobilized community though not in budget line.
- Teams reported to facilities as early as 7 am to start vaccination
- The allocation and availability of VAM Supervisors to manage vaccine at all levels of operation
- Timely ordering of vaccines and other supplies

- Monthly distribution of vaccines
- TMC reporting by all health facilities
- Daily immunization static sessions
- Conducting routine out reaches by the facility
- Timely reporting and proper documentation
- Availability of facility micro plans.
- Vaccination of targeted children in schools on first day of implementation was very helpful and most nursery kids were reached.
- Proper coordination from the district up to Village level hence good mobilization and sensitization
- Teaming of the District and S/C supervisors
- Joint boarder meetings between Uganda and Kenya
- DHTs involvement in the training
- Join campaigns between Uganda and Kenya
- Active participation by the health workers
- Team at district command center got involved in sub county supervision
- Partners involvement i.e. Herose and UHA
- Printing additional tally sheet with house hold at the back
- Funds controlled by the Centre avoiding corruption in the district.
- Use of mobile teams to cover hard to reach areas.
- Deployment of teams to point of entry
- Starting the campaign from hard to areas
- Uploading the data to EPIVAC daily
- Partnering with local partners (USAID/SBCA) and other stakeholders to pool resources and expertise.
- Engaging local government officials to support mobilization and monitoring of the exercise.
- Daily feedback meetings to discuss real time progress and mitigate challenges.
- Use of technology (ODK) as this supports real time tracking of campaign progress

14.3 Recommendations

Recommendations were mainly extracted from District reports submitted to the National EOC.

- DHT to immediately update micro plan for administrative structures to inform appropriate funding for round 2
- Bio stat should work with National and District VAM to harmonize vaccine balances
- District EPI focal person should follow up data cleaning and development of an electronic payment sheet for all participants
- DHO to support submission of list of missing villages and other administrative structures core to implementation to World Health Organization.
- District EPI FP should follow up implementation of facility strategies for reaching the Zero dose children by all facilities
- DCCT should hold on with returning the borrowed vaccine careers till end of Round two.
- Ministry of Health/UNEPI
- Determine number of teams according to number villages in the district ensuring that each team is allocated a maximum of 2 villages for the entire implementation period
- Increase Fuel rates for sub county supervisors
- Ensure fuel budgeted is adequately reflected on the fuel cards
- Provide Apron for teams for identification during implementation
- Frontline Implementers recommended that the centrally controlled online payment reimbursed system should be maintained as it re-assures them of their ideal payment rates than when their allowances are reimbursed by the district
- For effective training, 2 days should be allocated for future campaigns to avoid brain overload in a single day
- There is need to provide airtime and data bundles during implementation period for easy communication and timely reporting
- Allocation of vaccines for Round II should be based on actual number of registered children to avoid stock outs during vaccination (some districts received more than they could consume)
- The budgeting process should be Bottom-Top to ensure adequate resources based on actual number of registered children, therefore for Round II there is need to add number of teams
- Budget for T-shirts for the subsequent campaigns
- Registration of children needs to be done a month prior to implementation for

proper planning based on numbers and figures are used instead of relying on UBOS estimates.

- The budget for the Islands needs to be honored since the WHO Regional Coordinator fully participated in the budgeting process and consider a per diem for the District Supervisors and risk allowance for other teams
- The mobilization budget for district leaders should also cater for their movement to the Sub counties on the Islands
- There is need to include Radio Talk shows in the budget
- Lower Local Councils should be fully involved throughout implementation
- Need to Budget for 1 indelible marker per village
- Districts to procure for their own chalk which will be of quality and not get broken to transportation.
- In order to minimize high wastages, the vaccine vial size should be reduced from 50 dozes to at least 10 dozes per vial.
- To provide standard Tally sheet well labelled at the back of the sheet
- Provision of protective gears such as umbrellas, gumboots, raincoats, clear paper bag
- Inter country campaigns should start at the same time.
- Schools should be called off during campaigns
- We need to deploy static teams at the port of entry to avoid leakage
- The security personnel should be budged and deployed officially next campaigns

14.4 Conclusion

The 2 round Outbreak Response SIA in the 49 districts and 4 regions was successfully implemented from 3rd – 6th October and 7th – 10th November 2024. The proportion of lots that passed the survey in R2 was almost double that of the R1 coverage indicating also that the quality of the campaign was much improved. In this campaign, great lessons were learnt as well as best practices and challenges documented with a view to improve subsequent rounds.

Generally, the districts registered excellent performance in terms of coverage at the end of campaign. This achievement is mainly attributed to the commitment and remarkable resilience of district and sub county supervisors, DCCT and vigilance of the district bio stat in empowering teams to report promptly and timely data entry.

However, inadequate funding due to under budgeting caused failure for timely last-mile vaccine delivery, late distribution of fuel to supervisor, noninvolvement of district drivers – lack of adequate transport for distribution, poor quality of indelible ink, poor vaccine accountability due to suboptimal competencies of recruited VAMS, inadequate IEC materials, delayed report submission, low turn up for day review meetings were the major hindrances that stumbled the campaign.

Annexes

Annex 1: Combined performance by District in Admin, IM and LQAS for both Rounds

No	District	Admin Coverage R1	Admin Coverage R2	IM Coverage R1	IM Coverage R2	LQAS R1	LQAS R2
1	Abim	109%	116%	97%	99%	93%	93%
2	Amudat	126%	136%	94%	94%	83%	67%
3	Amuria	122%	129%	86%	100%	100%	97%
4	Budaka	126%	131%	97%	94%	73%	88%
5	Bududa	110%	113%	99%	98%	77%	97%
6	Bugiri	124%	135%	94%	97%	95%	98%
7	Bugweri	121%	125%	81%	79%	95%	93%
8	Bukedea	110%	118%	97%	95%	97%	98%
9	Bukwo	100%	102%	99%	99%	85%	97%
10	Bulambuli	108%	111%	95%	98%	97%	90%
11	Busia	120%	125%	89%	95%	83%	98%
12	Butaleja	110%	115%	98%	94%	70%	93%
13	Butebo	131%	150%	80%	96%	45%	82%
14	Buyende	117%	124%	100%	100%	88%	100%
15	Iganga	122%	130%	98%	98%	97%	98%
16	Jinja	118%	121%	93%	98%	92%	98%
17	Jinja City	128%	139%	98%	100%	62%	82%
18	Kaabong	112%	118%	99%	100%	97%	98%
19	Kaberamaido	113%	120%	91%	98%	95%	100%
20	Kalaki	112%	120%	91%	92%	95%	98%
21	Kaliro	102%	104%	86%	96%	87%	97%
22	Kamuli	118%	122%	86%	92%	95%	98%
23	Kapchorwa	107%	107%	100%	99%	97%	95%
24	Kapelebyong	133%	143%	67%	98%	87%	98%
25	Karenga	123%	115%	96%	99%	98%	98%
26	Katakwi	115%	125%	91%	99%	98%	80%
27	Kibuku	130%	138%	99%	100%	95%	98%
28	Kotido	122%	132%	67%	87%	98%	100%
29	Kumi	113%	122%	97%	99%	93%	97%
30	Kween	122%	127%	97%	99%	93%	97%
31	Luuka	113%	122%	91%	95%	98%	98%
32	Manafwa	114%	119%	95%	88%	98%	97%
33	Mayuge	118%	126%	78%	98%	78%	87%
34	Mbale	120%	137%	93%	100%	85%	97%
35	Mbale City	124%	138%	100%	100%	90%	92%

No	District	Admin Coverage R1	Admin Coverage R2	IM Coverage R1	IM Coverage R2	LQAS R1	LQAS R2
36	Moroto	110%	113%	97%	94%	100%	100%
37	Nabilatuk	107%	116%	94%	97%	100%	100%
38	Nakapiripirit	122%	123%	49%	78%	97%	100%
39	Namayingo	126%	136%	99%	99%	92%	95%
40	Namisindwa	115%	121%	98%	95%	100%	97%
41	Namutumba	116%	120%	98%	97%	97%	98%
42	Napak	122%	133%	96%	98%	77%	95%
43	Ngora	105%	113%	100%	100%	98%	98%
44	Pallisa	116%	120%	98%	99%	98%	100%
45	Serere	123%	133%	97%	97%	95%	93%
46	Sironko	118%	121%	97%	90%	87%	92%
47	Soroti	98%	105%	91%	96%	90%	97%
48	Soroti City	180%	191%	100%	100%	82%	93%
49	Tororo	133%	167%	94%	96%	93%	98%
	National	**118%**	**127%**	92%	**96%**	90%	**95%**

Annex 2: District-wise vaccination performance table – Administrative coverage Round 1

No	District	Target < 5	No. immunized	Coverage
1	Abim	39,688	43,409	109%
2	Amudat	32,349	40,632	126%
3	Amuria	52,562	64,338	122%
4	Budaka	58,856	73,987	126%
5	Bududa	65,559	72,300	110%
6	Bugiri	113,939	141,819	124%
7	Bugweri	43,112	52,048	121%
8	Bukedea	62,136	68,435	110%
9	Bukwo	29,438	29,385	100%
10	Bulambuli	56,683	61,308	108%
11	Busia	87,658	104,963	120%
12	Butaleja	70,336	77,544	110%
13	Butebo	26,035	34,035	131%
14	Buyende	99,856	116,637	117%
15	Iganga	91,902	111,941	122%
16	Jinja	52,870	62,606	118%
17	Jinja City	58,282	74,700	128%
18	Kaabong	28,106	31,586	112%

No	District	Target < 5	No. immunized	Coverage
19	Kaberamaido	31,673	35,809	113%
20	Kalaki	33,005	36,871	112%
21	Kaliro	67,199	68,679	102%
22	Kamuli	124,722	146,904	118%
23	Kapchorwa	28,147	30,130	107%
24	Kapelebyong	23,678	31,489	133%
25	Karenga	15,334	18,800	123%
26	Katakwi	43,993	50,798	115%
27	Kibuku	58,979	76,523	130%
28	Kotido	45,900	56,204	122%
29	Kumi	65,129	73,441	113%
30	Kween	24,764	30,297	122%
31	Luuka	58,671	66,348	113%
32	Manafwa	38,950	44,479	114%
33	Mayuge	129,560	153,036	118%
34	Mbale	61,295	73,596	120%
35	Mbale City	73,534	91,280	124%
36	Moroto	26,404	28,915	110%
37	Nabilatuk	21,956	23,581	107%
38	Nakapiripirit	27,306	33,180	122%
39	Namayingo	51,373	64,598	126%
40	Namisindwa	51,906	59,782	115%
41	Namutumba	71,053	82,251	116%
42	Napak	34,584	42,076	122%
43	Ngora	37,433	39,408	105%
44	Pallisa	85,178	98,485	116%
45	Serere	85,383	104,760	123%
46	Sironko	60,598	71,207	118%
47	Soroti	68,552	67,445	98%
48	Soroti City	16,298	29,295	180%
49	Tororo	133,947	177,871	133%
	National	**2,765,871**	**3,269,211**	**118%**

Annex 3: District-wise vaccination performance table – Independent monitoring Round 1

No	District	No. surveyed	No. vaccinated by Finger Mark	coverage by finger mark	No. vaccinated verbal but not finger marked	Coverage irrespective of whether the finger was marked or not
1	Abim	272	265	97%	0	97%
2	Amudat	254	239	94%	3	95%
3	Amuria	283	244	86%	3	87%
4	Budaka	228	222	97%	2	98%
5	Bududa	176	175	99%	1	100%
6	Bugiri	231	218	94%	0	94%
7	Bugweri	231	187	81%	9	85%
8	Bukedea	249	242	97%	0	97%
9	Bukwo	217	214	99%	0	99%
10	Bulambuli	233	222	95%	0	95%
11	Busia	212	189	89%	0	89%
12	Butaleja	201	196	98%	0	98%
13	Butebo	260	209	80%	0	80%
14	Buyende	159	159	100%	0	100%
15	Iganga	203	199	98%	0	98%
16	Jinja	222	207	93%	2	94%
17	Jinja City	188	185	98%	0	98%
18	Kaabong	223	220	99%	0	99%
19	Kaberamaido	206	188	91%	0	91%
20	Kalaki	234	213	91%	0	91%
21	Kaliro	208	178	86%	6	88%
22	Kamuli	210	180	86%	4	88%

No	District	No. surveyed	No. vaccinated by Finger Mark	coverage by finger mark	No. vaccinated verbal but not finger marked	Coverage irrespective of whether the finger was marked or not
1	Abim	272	265	97%	0	97%
2	Amudat	254	239	94%	3	95%
3	Amuria	283	244	86%	3	87%
4	Budaka	228	222	97%	2	98%
5	Bududa	176	175	99%	1	100%
6	Bugiri	231	218	94%	0	94%
7	Bugweri	231	187	81%	9	85%
8	Bukedea	249	242	97%	0	97%
9	Bukwo	217	214	99%	0	99%
10	Bulambuli	233	222	95%	0	95%
11	Busia	212	189	89%	0	89%
12	Butaleja	201	196	98%	0	98%
13	Butebo	260	209	80%	0	80%
14	Buyende	159	159	100%	0	100%
15	Iganga	203	199	98%	0	98%
16	Jinja	222	207	93%	2	94%
17	Jinja City	188	185	98%	0	98%
18	Kaabong	223	220	99%	0	99%
19	Kaberamaido	206	188	91%	0	91%
20	Kalaki	234	213	91%	0	91%
21	Kaliro	208	178	86%	6	88%
22	Kamuli	210	180	86%	4	88%
23	Kapchorwa	267	267	100%	0	100%
24	Kapelebyong	215	144	67%	24	78%
25	Karenga	239	229	96%	0	96%
26	Katakwi	230	210	91%	0	91%
27	Kibuku	197	196	99%	0	99%
28	Kotido	210	140	67%	21	77%
29	Kumi	199	194	97%	1	98%
30	Kween	207	200	97%	4	99%
31	Luuka	232	211	91%	8	94%
32	Manafwa	179	170	95%	0	95%
33	Mayuge	192	150	78%	15	86%
34	Mbale	245	227	93%	0	93%
35	Mbale City	162	162	100%	0	100%
36	Moroto	251	243	97%	0	97%
37	Nabilatuk	348	326	94%	0	94%
38	Nakapiripirit	210	102	49%	52	73%
39	Namayingo	212	209	99%	0	99%

No	District	No. surveyed	No. vaccinated by Finger Mark	coverage by finger mark	No. vaccinated verbal but not finger marked	Coverage irrespective of whether the finger was marked or not
40	Namisindwa	236	231	98%	3	99%
41	Namutumba	200	196	98%	0	98%
42	Napak	257	248	96%	0	96%
43	Ngora	226	226	100%	0	100%
44	Pallisa	215	210	98%	0	98%
45	Serere	185	179	97%	3	98%
46	Sironko	232	226	97%	0	97%
47	Soroti	232	212	91%	0	91%
48	Soroti City	202	201	100%	0	100%
49	Tororo	161	152	94%	0	94%
	National	**10,841**	**10,012**	92%	**161**	94%

Annex 4: District-wise vaccination performance table – LQAS Round 1

No.	District	No. surveyed	No. vaccinated by Finger Mark	coverage by finger marking	No. vaccinated verbal but not finger marked	Coverage irrespective of whether the finger was marked or not
1	Abim	60	56	93%	1	95%
2	Amudat	60	50	83%	1	85%
3	Amuria	60	60	100%	0	100%
4	Budaka	60	44	73%	11	92%
5	Bududa	60	46	77%	14	100%
6	Bugiri	60	57	95%	3	100%
7	Bugweri	60	57	95%	3	100%
8	Bukedea	60	58	97%	0	97%
9	Bukwo	60	51	85%	7	97%
10	Bulambuli	60	58	97%	0	97%
11	Busia	60	50	83%	2	87%
12	Butaleja	60	42	70%	15	95%
13	Butebo	60	27	45%	9	60%
14	Buyende	60	53	88%	0	88%
15	Iganga	60	58	97%	0	97%
16	Jinja	60	55	92%	4	98%
17	Jinja City	60	37	62%	15	87%

No.	District	No. surveyed	No. vaccinated by Finger Mark	coverage by finger marking	No. vaccinated verbal but not finger marked	Coverage irrespective of whether the finger was marked or not
18	Kaabong	60	58	97%	1	98%
19	Kaberamaido	60	57	95%	2	98%
20	Kalaki	60	57	95%	2	98%
21	Kaliro	60	52	87%	4	93%
22	Kamuli	60	57	95%	1	97%
23	Kapchorwa	60	58	97%	2	100%
24	Kapelebyong	60	52	87%	2	90%
25	Karenga	60	59	98%	1	100%
26	Katakwi	60	59	98%	1	100%
27	Kibuku	60	57	95%	2	98%
28	Kotido	60	59	98%	0	98%
29	Kumi	60	56	93%	4	100%
30	Kween	60	56	93%	3	98%
31	Luuka	60	59	98%	0	98%
32	Manafwa	60	59	98%	0	98%
33	Mayuge	60	47	78%	9	93%
34	Mbale	60	51	85%	7	97%
35	Mbale City	60	54	90%	2	93%
36	Moroto	60	60	100%	0	100%
37	Nabilatuk	60	60	100%	0	100%
38	Nakapiripirit	60	58	97%	0	97%
39	Namayingo	60	55	92%	3	97%
40	Namisindwa	60	60	100%	0	100%
41	Namutumba	60	58	97%	1	98%
42	Napak	60	46	77%	4	83%
43	Ngora	60	59	98%	0	98%
44	Pallisa	60	59	98%	0	98%
45	Serere	60	57	95%	1	97%
46	Sironko	60	52	87%	2	90%
47	Soroti	60	54	90%	3	95%
48	Soroti City	60	49	82%	4	88%
49	Tororo	60	56	93%	1	95%
	National	**2,940**	**2,649**	90%	**147**	95%

Annex 5: District-wise vaccination performance table – Administrative Round 2

No	District	Target < 5	No. immunized	Coverage
1	Abim	39,688	45,916	116%
2	Amudat	32,349	44,137	136%
3	Amuria	52,562	67,642	129%
4	Budaka	58,856	76,818	131%
5	Bududa	65,559	74,063	113%
6	Bugiri	113,939	153,984	135%
7	Bugweri	43,112	53,768	125%
8	Bukedea	62,136	73,574	118%
9	Bukwo	29,438	30,039	102%
10	Bulambuli	56,683	62,907	111%
11	Busia	87,658	109,363	125%
12	Butaleja	70,336	80,663	115%
13	Butebo	26,035	38,967	150%
14	Buyende	99,856	124,150	124%
15	Iganga	91,902	119,217	130%
16	Jinja	52,870	64,002	121%
17	Jinja City	58,282	81,276	139%
18	Kaabong	28,106	33,051	118%
19	Kaberamaido	31,673	38,032	120%
20	Kalaki	33,005	39,676	120%
21	Kaliro	67,199	70,119	104%
22	Kamuli	124,722	152,006	122%
23	Kapchorwa	28,147	30,101	107%
24	Kapelebyong	23,678	33,870	143%
25	Karenga	15,334	17,649	115%
26	Katakwi	43,993	54,787	125%
27	Kibuku	58,979	81,565	138%
28	Kotido	45,900	60,579	132%
29	Kumi	65,129	79,606	122%
30	Kween	24,764	31,466	127%
31	Luuka	58,671	71,783	122%
32	Manafwa	38,950	46,421	119%
33	Mayuge	129,560	163,403	126%
34	Mbale	61,295	83,749	137%
35	Mbale City	73,534	101,510	138%
36	Moroto	26,404	29,898	113%
37	Nabilatuk	21,956	25,492	116%
38	Nakapiripirit	27,306	33,592	123%

No	District	Target < 5	No. immunized	Coverage
39	Namayingo	51,373	69,767	136%
40	Namisindwa	51,906	63,065	121%
41	Namutumba	71,053	84,944	120%
42	Napak	34,584	46,136	133%
43	Ngora	37,433	42,186	113%
44	Pallisa	85,178	102,308	120%
45	Serere	85,383	113,198	133%
46	Sironko	60,598	73,027	121%
47	Soroti	68,552	72,280	105%
48	Soroti City	16,298	31,207	191%
49	Tororo	133,947	223,562	167%
	National	**2,765,871**	**3,500,521**	**127%**

Annex 6: District-wise vaccination performance table – Independent Monitoring Round 2

No	District	No. surveyed	No. vaccinated by Finger Mark	Coverage by finger marking	No. vaccinated verbal but not finger marked	Coverage irrespective of whether the finger was marked or not
1	Abim	258	255	99%	1	99%
2	Amudat	260	245	94%	4	96%
3	Amuria	238	237	100%	0	100%
4	Budaka	246	231	94%	9	98%
5	Bududa	199	196	98%	1	99%
6	Bugiri	259	250	97%	0	97%
7	Bugweri	229	181	79%	16	86%
8	Bukedea	242	231	95%	0	95%
9	Bukwo	214	211	99%	0	99%
10	Bulambuli	205	201	98%	0	98%
11	Busia	220	210	95%	2	96%
12	Butaleja	220	206	94%	1	94%
13	Butebo	266	256	96%	0	96%
14	Buyende	189	189	100%	0	100%

No	District	No. surveyed	No. vaccinated by Finger Mark	Coverage by finger marking	No. vaccinated verbal but not finger marked	Coverage irrespective of whether the finger was marked or not
15	Iganga	241	236	98%	0	98%
16	Jinja	242	237	98%	0	98%
17	Jinja City	203	203	100%	0	100%
18	Kaabong	232	232	100%	0	100%
19	Kaberamaido	258	252	98%	0	98%
20	Kalaki	210	193	92%	0	92%
21	Kaliro	204	196	96%	1	97%
22	Kamuli	188	173	92%	5	95%
23	Kapchorwa	249	247	99%	0	99%
24	Kapelebyong	180	177	98%	1	99%
25	Karenga	226	223	99%	0	99%
26	Katakwi	234	231	99%	0	99%
27	Kibuku	322	322	100%	0	100%
28	Kotido	204	177	87%	9	91%
29	Kumi	196	195	99%	0	99%
30	Kween	191	189	99%	1	99%
31	Luuka	202	191	95%	0	95%
32	Manafwa	189	167	88%	13	95%
33	Mayuge	199	195	98%	0	98%
34	Mbale	239	239	100%	0	100%
35	Mbale City	187	187	100%	0	100%
36	Moroto	234	220	94%	2	95%
37	Nabilatuk	334	323	97%	0	97%
38	Nakapiripirit	229	178	78%	33	92%
39	Namayingo	211	208	99%	0	99%
40	Namisindwa	225	214	95%	4	97%
41	Namutumba	306	296	97%	1	97%
42	Napak	240	234	98%	3	99%
43	Ngora	220	220	100%	0	100%
44	Pallisa	209	206	99%	0	99%
45	Serere	175	170	97%	0	97%
46	Sironko	201	180	90%	5	92%
47	Soroti	222	214	96%	0	96%
48	Soroti City	114	114	100%	0	100%
49	Tororo	181	174	96%	0	96%
	National	**10,942**	**10,512**	**96%**	**112**	**97%**

Annex 7: District-wise vaccination performance table – LQAS Round 2

No	District	No. surveyed	No. vaccinated by Finger Mark	No. vaccinated by Finger Mark	No. vaccinated verbal but not finger marked	Coverage irrespective of whether the finger was marked or not
1	Abim	60	56	93%	0	93%
2	Amudat	60	40	67%	0	67%
3	Amuria	60	58	97%	0	97%
4	Budaka	60	53	88%	0	88%
5	Bududa	60	58	97%	0	97%
6	Bugiri	60	59	98%	0	98%
7	Bugweri	60	56	93%	0	93%
8	Bukedea	60	59	98%	0	98%
9	Bukwo	60	58	97%	0	97%
10	Bulambuli	60	54	90%	1	92%
11	Busia	60	59	98%	0	98%
12	Butaleja	60	56	93%	2	97%
13	Butebo	60	49	82%	11	100%
14	Buyende	60	60	100%	0	100%
15	Iganga	60	59	98%	0	98%
16	Jinja	60	59	98%	0	98%
17	Jinja City	60	49	82%	2	85%
18	Kaabong	60	59	98%	0	98%
19	Kaberamaido	60	60	100%	0	100%
20	Kalaki	60	59	98%	0	98%
21	Kaliro	60	58	97%	0	97%
22	Kamuli	60	59	98%	0	98%
23	Kapchorwa	60	57	95%	3	100%
24	Kapelebyong	60	59	98%	0	98%
25	Karenga	60	59	98%	0	98%
26	Katakwi	60	48	80%	0	80%
27	Kibuku	60	59	98%	0	98%
28	Kotido	60	60	100%	0	100%
29	Kumi	60	58	97%	1	98%
30	Kween	60	58	97%	0	97%
31	Luuka	60	59	98%	0	98%
32	Manafwa	60	58	97%	0	97%
33	Mayuge	60	52	87%	6	97%
34	Mbale	60	58	97%	0	97%

No	District	No. surveyed	No. vaccinated by Finger Mark	No. vaccinated by Finger Mark	No. vaccinated verbal but not finger marked	Coverage irrespective of whether the finger was marked or not
35	Mbale City	60	55	92%	0	92%
36	Moroto	60	60	100%	0	100%
37	Nabilatuk	60	60	100%	0	100%
38	Nakapiripirit	60	60	100%	0	100%
39	Namayingo	60	57	95%	0	95%
40	Namisindwa	60	58	97%	0	97%
41	Namutumba	60	59	98%	0	98%
42	Napak	60	57	95%	0	95%
43	Ngora	60	59	98%	0	98%
44	Pallisa	60	60	100%	0	100%
45	Serere	60	56	93%	0	93%
46	Sironko	60	55	92%	2	95%
47	Soroti	60	58	97%	0	97%
48	Soroti City	60	56	93%	0	93%
49	Tororo	60	59	98%	0	98%
	National	**2,940**	**2,791**	**95%**	**28**	**96%**

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