World Health
Organization

African Region

POLIO GLOBAL
ERADICATION
INITIATIVE

eSURV Annual Report

The use of innovative solutions to enhance active case search

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2024

Contents

1. Impact of electronic SURVEILLANCE in the African Region

Background

The eSURV stands for electronic Surveillance. This is a mobile health innovation engineered to enable field surveillance officers to conduct active case searches for Acute Flaccid Paralysis and other Vaccine Preventable Diseases utilizing their mobile devices within healthcare facilities and traditional sites.

The automatic mapping of active case search visits into country-specific profiles on the server establishes a foundation for assessing active surveillance coverage.

Since its inception in 2016 and subsequent adoption in 2017 by the AFRO GIS Centre, the eSURV innovation has experienced a growth in the number of countries utilizing the tool.
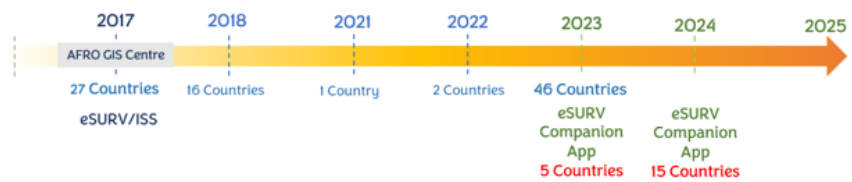
(eSURV Innovation evolution over the years)

Among the 47 countries in the WHO African Region, 46 have adopted and are actively implementing the eSURV Innovation.

eSURV Implementing Countries: 2024

2.   Utilization of eSURV Innovation data for decision making and impacts across the AFRO Region

The eSURV data gathered from the field during active case searches and integrated supportive supervision is analyzed at both the country and AFRO levels to identify areas of concern.

Throughout the years, the data has informed various actions undertaken by both the regional and country offices, including the strategic deployment of human resources to areas with limited or no resources, aimed at enhancing field activities.

The data has significantly contributed to the certification of the African Region as free from Wild Poliovirus (WPV) in August 2020. Evidence indicates that every area of the country has conducted active case search visits and documented these activities using eSURV tools.

As of November 2024, more than **554, 253 eSURV visits** in the Implementing Countries have been logged on the servers, resulting in a significant number of unreported suspected cases of **AFP, NNT, COVID, Yellow Fever, and Measles.**
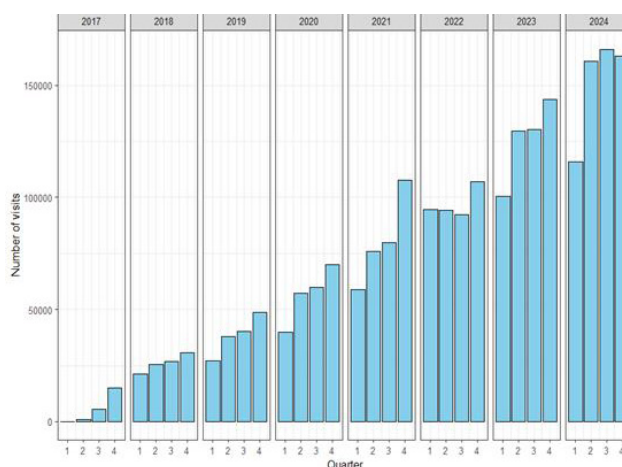
eSURV visits trend: 2020-2024

3.   Challenges associated with the eSURV implementation in the Region

While eSURV has effectively documented field activities, its implementation encounters various challenges, including those related to human resources and technical aspects. It is important to highlight:

1.   The absence of eSURV denominator (Active Surveillance Sites Master List).

2.   Long questionnaires administered during each visits,

3. Absence of a comprehensive Master List for field officers,

4. Lack of smart phones

5. Access hampered by insecurity, flooding, and other natural disasters.

4. Creation of an Active Surveillance Site Master List in the AFRO Region

Justification

The active surveillance sites are a vital repository for both the Polio Eradication Programme and the Ministry of Health, enabling the identification of site locations, assessment of their operational status, determination of priority levels, evaluation of basic healthcare services provided, and development of maintenance strategies to ensure resource allocation and program sustainability.

However, since 2017, the Polio Programme has faced challenges in obtaining the master list of these sites. To address this, the AFRO GIS Centre, in collaboration with the Ministry of Health, initiated a process to gather, refine, and compile information from various sources, which was then returned to each country for validation through an online application.

As of November 2024, 46 out of 47 countries have successfully cleaned and compiled their active surveillance site master lists. Additionally, 9 out of 47 countries have completed the validation of their master lists, while 13 out of 47 countries are in the ongoing process of validation.

The procedure of cleaning, compiling, and validating the active surveillance sites for the AFRO Region represents a significant advancement in addressing denominator challenges. It will establish a sustainable framework for the periodic maintenance of these sites and assist program managers and the country in optimizing resource allocation.
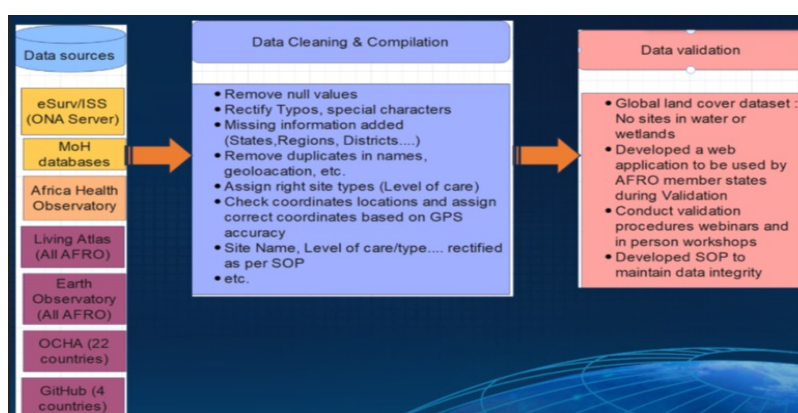
Active Surveillance Sites Compilation Process

5. Introduction of the eSURV Companion App in the AFRO Region to enhance active surveillance

What's eSURV Companion App?

Sine 2021, the team at the AFRO GIS Centre has been engaged in extensive discussions with the Surveillance team to develop an enhanced solution aimed at facilitating seamless field activities. This initiative seeks to improve the quality of data collected, streamline questionnaires, and refine forms. Consequently, the eSURV Companion App was developed.

The eSURV Companion App is designed to significantly enhance active surveillance and provide substantial benefits to field surveillance officers. It contains the following:

1. A comprehensive inventory of all operational surveillance locations, field personnel, guidelines, and standardized eSURV forms.

2. A map of all active surveillance sites within a 1-mile radius on their mobile displaying the site's priority level, visit status, and additional attributes.

3. Ability to systematically plan and allocate resources for field activities .

4. A feedback system enabling field officers to submit screenshots of technical issues and receive immediate assistance.
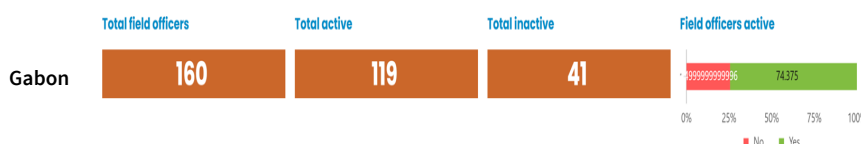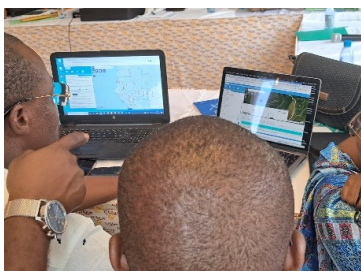
eSURV Companion App interface with refined forms and features

6. Piloting of the eSURV Companion App in 2023: Gabon and Uganda

To ensure that the eSURV Companion App addresses the diverse requirements encountered during field operations, and to enhance data integrity, resource distribution, and oversight of the field surveillance officer's database, it was essential to evaluate the functionalities of the eSURV Companion App.

The AFRO GIS Centre team conducted training sessions for multiple Surveillance Officers and Data Managers in Gabon and Uganda, more than 150 and 700 field officers are now trained, registered and actively reporting within the system in Gabon and Uganda, respectively.

	Total field officers	Total active	Total inactive	Field officers active
Gabon	160	119	41	

0% 25% 50% 75% 100%
■ No ■ Yes

	Total field officers	Total active	Total inactive	Field officers active
Uganda	718	278	440	

0% 25% 50% 75% 100%
■ No ■ Yes

Registered and reporting eSURV Companion App Users:
November 2024

7. Rollout of the eSURV Companion App in the Priority Countries 2023: DRC, Mozambique & Malawi

Following a successful piloting executed in Gabon and Uganda, the AFRO GIS Centre has broadened the use of the innovation in priority countries throughout the region, commencing with DRC-Kinshasa Province, Mozambique and Malawi.

A series of introductory meetings were conducted to establish stakeholder ownership across the provinces and districts. These meetings were followed by training sessions in Kinshasa Province from September 14-26, 2023, involving over 140 Surveillance Officers and Provincial Data Managers.

Concurrently, training in Mozambique and Malawi occurred from November 27 to December 1, 2023, where more than 40 Surveillance Officers from the WHO and Ministry of Health received training. Subsequently, a series of cascaded training sessions were conducted at the district level.
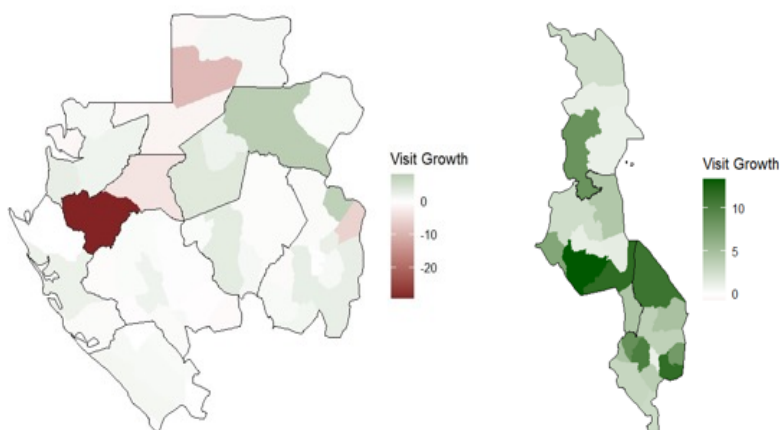
eSURV Companion App performance in DRC-Kinshasa Province and Malawi

8. Superusers training and field deployment of the eSURV Companion App to enhance active surveillance in the 14 countries of focus in 2024.
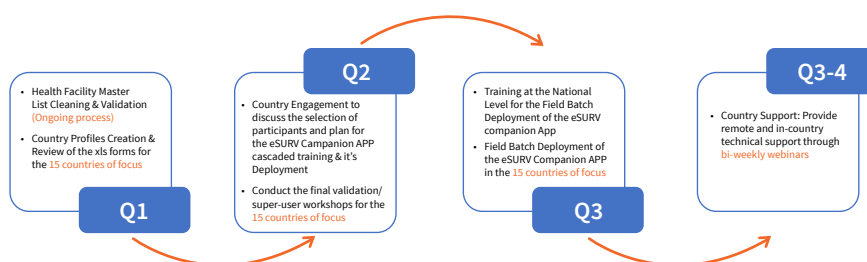
After successfully implementing the eSURV Companion App for field activities in 2023, the insights gained from these countries informed the AFRO GIS Centre's approach to redesigning the rollout in the remaining countries of the region.

At the start of 2024, the AFRO GIS Centre team formulated a roadmap designed to streamline the effective deployment of the eSURV Companion App across the 14 targeted countries.

Q1
- Health Facility Master List Cleaning & Validation (Ongoing process)
- Country Profiles Creation & Review of the xls forms for the 15 countries of focus

Q2
- Country Engagement to discuss the selection of participants and plan for the eSURV Companion APP cascaded training & it's Deployment
- Conduct the final validation/super-user workshops for the 15 countries of focus

Q3
- Training at the National Level for the Field Batch Deployment of the eSURV companion App
- Field Batch Deployment of the eSURV Companion APP in the 15 countries of focus

Q3-4
- Country Support: Provide remote and in-country technical support through bi-weekly webinars

eSURV Companion App superusers training and field deployment roadmap

A total of 54 participants from the Ministry of Health and World Health Organization Country Offices, representing 13 out of 14 countries, convened in Douala, Cameroon, for training as superusers of the eSURV Companion App. The initiative is designed to provide National, Provincial, and District surveillance officers with the necessary skills for the implementation of the eSURV Companion App for field operations.

In addition, the team successful also trained more than 60 field surveillance officers, data managers, and partners separately in Madagascar as part of the superusers plan. The training focused on Standard Operating Procedures (SOPs) for the validation of the active surveillance sites master list and the introduction of the eSURV Companion App. Participants from Rwanda and Burundi's WHO and Ministry of health were also included in the training.

S/N	Country Name	National Training Status	Districts Level Orientation	Active Surveillance Site Master List validation	eSURV Companion App offical rollout date
1	Cameroun	Completed	Pending	Completed	TBD
2	South Sudan	Completed	Completed	Ongoing	TBD
3	Chad	Completed	Pending	Completed	TBD
4	Burundi	Completed	Completed	Completed	15-Nov-24
5	Central African Republic	Completed	Ongoing	Ongoing	TBD
6	Namibia	Completed	Completed	Ongoing	TBD
7	Liberia	Completed	Completed	Pending	TBD
8	Guinea	Pending	Pending	Pending	TBD
9	Rwanda	Completed	Completed	Completed	TBD
10	Cote d'Ivoire	Ongoing	Ongoing	Ongoing	TBD
11	Madagascar	Completed	Pending	Pending	TBD
12	Angola	Pending	Pending	Pending	TBD
13	Ethiopia	Ongoing	Ongoing	Ongoing	TBD
14	Kenya	Pending	Pending	Pending	TBD
15	Niger	Pending	Pending	Pending	TBD
16	Sierra Leone	Pending	Pending	Pending	TBD
17	Burkina Faso	Ongoing	Ongoing	Ongoing	TBD

National Training and eSURV Companion App rollout status in the 17 Countries of focus 2024

9. Post-Superusers Training and field deployment of the eSURV Companion App to enhance active surveillance in the 14 Countries of focus in 2024.

Superusers possessing comprehensive training in all aspects of application functionalities is essential for upholding system integrity and enhancing system efficiency. They are to ensure the complete deployment of the eSURV companion App solution in the implementing countries at all levels.

As of the current date, among the 14 countries that participated in the superusers workshop conducted in Douala, Cameroun from July 1- 12 2024, seven countries have successfully carried out their national-level training focused on validating the active surveillance sites master list and implementing the field deployment of the eSURV Companion App to improve surveillance efforts.

Plans for official lunch of the eSURV Companion App are underway with ongoing technical support provided by the AFRO GIS Centre team.

10.   Challenges associated with the field deployment in the 14 Countries of focus in 2024.

Despite many efforts put in place by the team to ensure that the superusers rollout the training at the National and field levels, the implementation encountered:

1. Delays in rolling out the national training due competing priorities at the Country Offices,

2. Delays in orienting the district-level colleagues to start the validation of the active surveillance sites master list using the online validation App ahead of the eSURV Companion App field deployment.

11.   Roles of superusers during national training on the validation of active surveillance sites master list and the field deployment of the eSURV Companion App.

Superusers represent a group of highly skilled and resourceful individuals trained by the AFRO GIS Centre. Their role is to ensure that GIS innovations in the implementing countries are deployed efficiently and effectively for field use, with the goal of enhancing active surveillance and, most importantly, supporting the Polio Eradication Initiatives.

To facilitate the deployment of the eSURV Companion App in the 15 targeted countries in 2024, the superusers were instrumental in ensuring that training for field surveillance officers at both the Provincial and District levels was conducted effectively, thereby enabling a seamless rollout.

Out of the 15 targeted countries, 12 effectively carried out national training sessions and district orientations, while also consolidating their master list of active surveillance sites. Additionally, Burundi successfully launched the eSURV Companion App on November 15, 2024. A notable milestone that the Programme dedicated substantial time to accomplish.

12. Way forward

In response to the challenges and the insights gained from 2022-2024, the team will continue to support the remaining countries to complete their national-level training on the active surveillance site master list validation and the field deployment of the eSURV Companion App to improve surveillance. The AFRO GIS Centre will:

1. Coordinate with countries regarding the outstanding tasks prior to the deployment of the eSURV Companion App.

2. Provide ongoing technical support to the implementing countries to ensure the sustainability, maintenance, and efficient utilization of the tools and the overall system.

3. Implement the eSURV Companion App in the remaining countries in 2025, following the ARCC recommendations issued in November 2024.

4. Execute an in-country advocacy mission targeting countries that have ceased the implementation of eSURV(Cabo Verde, Comoros, Seychelles, Lesotho, Eritrea) to facilitate their re-engagement.

5. Enhance the capabilities of member states regarding the application of innovations implemented in the field.

13. Conclusion

The implementation of eSURV throughout the WHO AFRO Region since its inception, adoption, and rollout in 46 countries has been crucial for documenting eSURV visits, as well as for data collection and analysis. This process aids the Polio Programme in identifying blind spots and determining actionable improvements to the situation.

To fulfil the complete objective of the Polio Programme, along with the recommendations from the ARCC's meetings, it is essential for countries to resume the use of the eSURV tool **(Cabo Verde, Comoros, Seychelles, Lesotho, Eritrea)** and implement the eSURV Companion App.

This will ensure that the Polio Programme effectively addresses any children who may be overlooked in the Polio eradication efforts.

The WHO Regional Office for Africa

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

Member States

Algeria	Lesotho
Angola	Liberia
Benin	Madagascar
Botswana	Malawi
Burkina Faso	Mali
Burundi	Mauritania
Cabo Verde	Mauritius
Cameroon	Mozambique
Central African Republic	Namibia
Chad	Niger
Comoros	Nigeria
Congo	Rwanda
Côte d'Ivoire	Sao Tome and Principe
Democratic Republic of the Congo	Senegal
Equatorial Guinea	Seychelles
Eritrea	Sierra Leone
Eswatini	South Africa
Ethiopia	South Sudan
Gabon	Togo
Gambia	Uganda
Ghana	United Republic of Tanzania
Guinea	Zambia
Guinea-Bissau	Zimbabwe
Kenya	