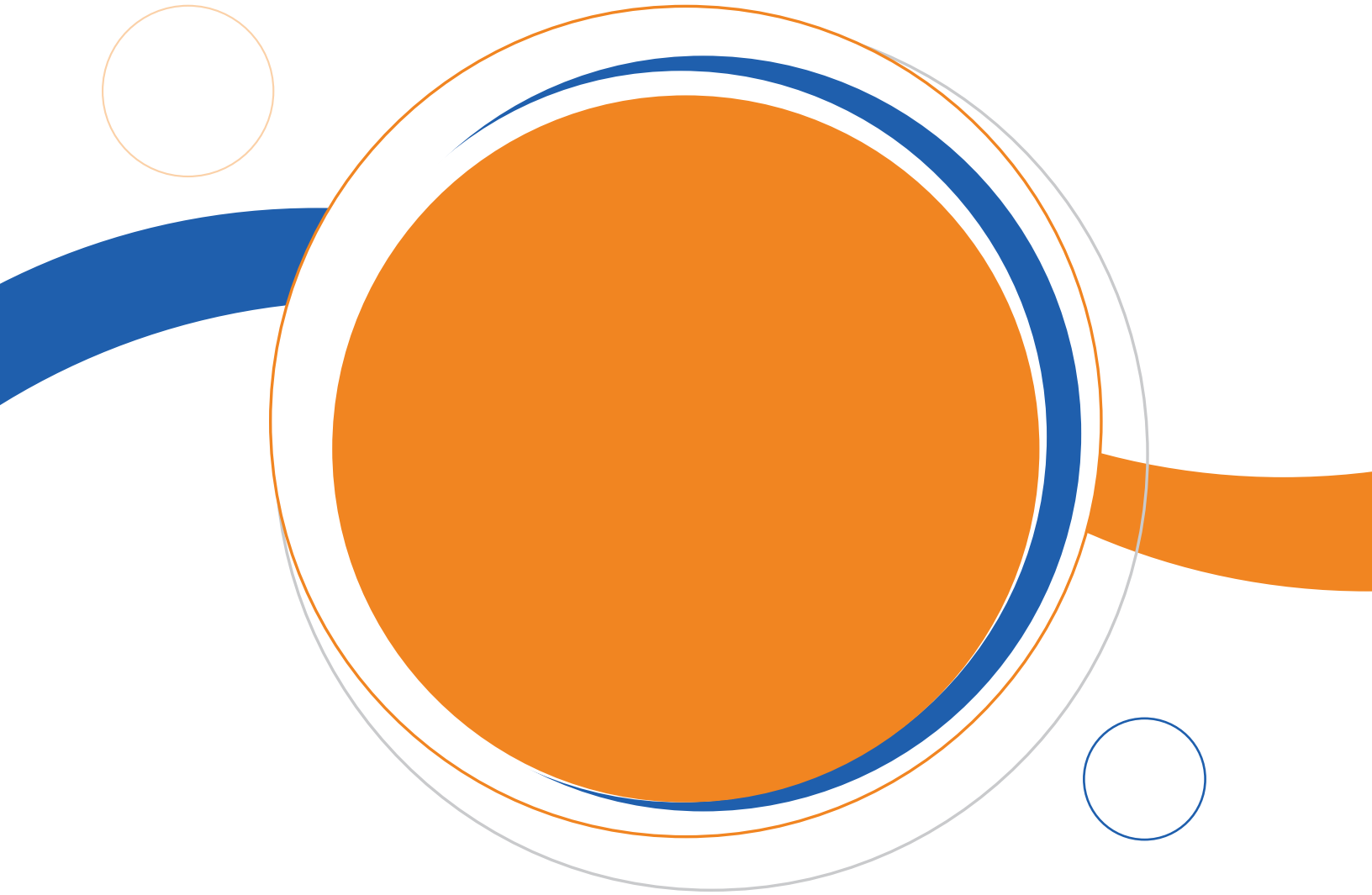
POLICY BRIEF

Strengthening Uganda's emergency response and recovery capacity for COVID-19 through training of health workers in sentinel surveillance sites.



Summary

Capacity building and enhancement in surveillance was undertaken in Twenty-two sentinal sites, including fourteen established surveillance sites and Eight border sites

SERRU - Policy Brief I / 2022

POLICY BRIEF NO. 1/2022

This brief presents highlights of a capacity building intervention targeting health workers engaged in surveillance activities for influenza including COVID-19 at different sites across uganda.

CONTENT

EXECUTIVE SUMMARY

COVID-19 is a global pandemic still in active mode. Uganda felt the gravity of the pandemic in 2020/2021. At the peak of the second wave which was dominated by the SARS-CoV-2 Delta variant, the capacity of national healthcare systems became quickly overwhelmed, and the resilience of the health workforce and systems was put to ultimate test. However, strict mitigation and transmission control measures including; lockdown procedures, travel restrictions, social distancing, hand-washing and other Standard Operating Procedures (SOPs) helped to slow the spread of infection.

In addition, Uganda embarked on extensive surveillance, screening and testing, coordinated by the Uganda Virus Research Institute, and these measures were effective in achieving early detection. Later, mass vaccination enrollment proved even more efficient in containing the spread of COVID-19, slowing down the transmission, protecting masses from having to experience sickness, and potentially against severe illness, although it was characterized by supply-chain inadequacies, which have improved overtime.

Amidst the above strides, it became obvious that in the absence of community testing or screening for viruses or any other disease outbreaks, it is impossible to know the true extent of the pandemic, transmission patterns, the mortality rate, contagiousness or the prevalence of associated morbidities. Government and relevant stakeholders therefore prioritized strengthening surveillance capacities and testing at both community and border points, and with extra support from Partners, this effort has yielded dividends.

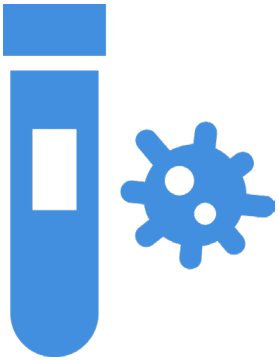
INTRODUCTION

The Uganda Virus Research Institute (UVRI) undertakes surveillance of influenza and other respiratory viruses in fourteen health facilities (sentinel sites) located in Central, Western, Eastern, Northern and West Nile regions of the country.

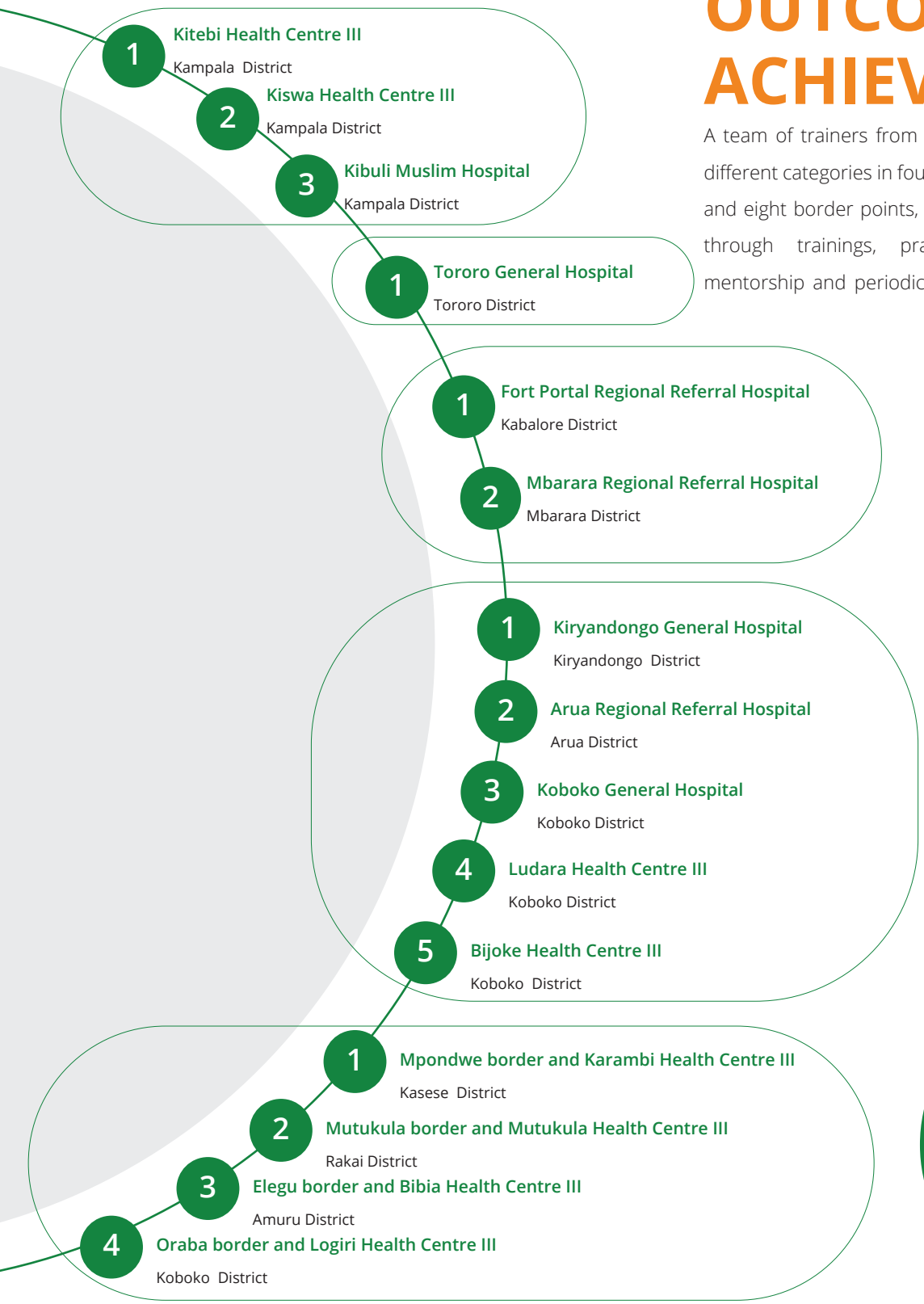
Testing capacity is largely centralized. Samples collected at sentinel sites are shepherd through different trasportation hubs to the National Influenza Centre, at UVRI Entebbe for; testing, analysis and reporting. This results in delays during relay of test results, leading to multiplication of contacts within communities in case of late identification of positive samples. Moreover, there are also challenges that accrue from storage and transportation processes of samples from communities to the UVRI lab. To support solutions to these challenges, UVRI embarked on capacity enhancement activities across the sentinel sites and border points.

UVRI therefore partnered with Office of the Prime Minister (OPM) to implement the *"Strengthening Emergency Response and Recovery to COVID-19 in Uganda (SERRU)"* Project. The partnership was in form of a modest grant from the Bill & Melinda Gates Foundation, channeled through UNDP and OPM, under the auspices of the SERRU project.

The grant to UVRI supported the; training of health workers in surveillance in all sentinel sites, introduction of four new surveillance sites near the borders, specimen collection and transportation from sites to UVRI, procurement and supply of antigen tests for surge capacity, and data entry and reporting to ensure statistics are captured in the wider national database. These activities directly contributed to Result area 1 of the SERRU Project, which aimed at; *expanding capacity for COVID-19 testing and surveillance at higher risk cross-border points of entry, transport corridors and Kampala City.*



TARGET SENTINAL SITES



OUTCOMES AND ACHIEVEMENTS

A team of trainers from UVRI mobilized health workers in different categories in fourteen sentinel sites across Uganda and eight border points, whose capacity was strengthened through trainings, practical demonstrations, on-site mentorship and periodic technical follow-up and support.

86%

OF THE TARGETED SITES WERE TRAINED

AREAS OF FOCUS

Among other areas, the health workers were; Re-oriented in surveillance activities for COVID-19 and other respiratory diseases, Trained in specimen / sample collection, sample handling, sample storage before and during shipment, Trained and oriented on biosafety issues related to COVID-19 testing; and Briefed on the importance of reporting and proper filling of Case investigation forms.

SERRU PROJECT SUPPORTED INTERVENTION

At the end of the SERRU Project supported interventions;

- The trainees' capacity was strengthened in different areas, namely; sample ccollection, sample handling and processing, biosafety issues related to COVID-19 testing, sample storage before and during shipment, and the importance of proper filling of case investigation forms.
- Four new surveillance sites were introduced near main border points to cater for populations along porous crossing points, and these are; Logiri Health Centre III near Oraba border with DRC, Bibia Health Centre III near Elegu border with South Sudan, Mutukula Health Centre III near Mutukula border with Tanzania and Karambi Health Centre III near Mpondwe border with DRC.
- The four border sites have started bringing in samples for testing at UVRI alongside the other sentinel sites. This has resulted in an increase in the number of samples that are being tested for SARS-CoV-2, Influenza, RSV and other respiratory viruses.
- The staff at the sites were trained on use of Rapid Antigen testing for SARS-CoV-2 virus and on interpretation of results.
- Each new border site was given 100 SARS-CoV-2 Rapid Antigen Kits for COVID-19 testing to enhance testing capacity.
- All sites were provided with supplies which included; face masks, laboratory coats, medical gloves, Universal Transport Media, Tourniquets, Tissue, 70% ethanol sanitizer and case investigation forms, and provided logistics to carry out support activities, including monthly allowances and SDAs for the health workers to undertake community outreach.
- Health workers were able to identify more cases that meet the case definition, hence an increase in the number of samples collected at the sites. The more the samples, the better the indication of the community representation regarding the infection status.
- There was an increase in the number of samples collected at all sites with a target of 20 to 30 or more samples per week. This is an increase from the prior average weekly number of samples that ranged between 10 to 15.
- There was an improvement in total samples collected and tested in 2021 and 2022. For example, in 2021, a total of 2,969 samples were tested for influenza and COVID-19, from January to April 2022, a total of 2,112 samples have already been tasted so far, which shows a big difference, and the results will improve further before the year ends.
- Additionally, the transportation schedule of samples to UVRI improved from once a month to every two weeks to reduce the Turn-Around-Time (TAT).
- Health workers put more emphasis on improving the quality of samples collected so as to avoid the issue of inconclusive results in the laboratory.
- UVRI is now able to avail results of all the samples collected back to the hospitals/ health facilities.
- Enhanced surveillance activities made it possible for UVRI to detect (AH1NI) 2009 pandemic at the new border site of Bibia HC III near Elegu border.
- During the trainings, health workers were prepared and given resources to do community outreach and collect samples from communities outside their work stations.
- UVRI acquired mobile data for the health workers to support communication, data entry and reporting.
- There was increased surveillance sentinel site reports, which are analyzed, produced and disseminated every two weeks to various stakeholders, including to the National Emergency Coordination and Operations Centre (NECOC) at OPM. As such NECOC has the opportunity to distill results relevant for early warning that can be published in the Monthly Uganda National Integrated Early Warning System (UNIEWS) bulletin, and in disaster preparedness and coordination.

SERRU interventions have been timely and handy, our communities are better prepared now"

CHALLENGES

14%

OF THE TARGETED SITES WERE NOT TRAINED

Whereas the capacity for surveillance and collecting samples exists at sentinel sites, there is no capacity for testing and analysis, hence requiring all samples to be transported to the National Influenza Centre in Entebbe. This increases the turn-around-time for results.

Surveillance sentinel sites also cited the shortage of liquid nitrogen which is used to store / keep the samples frozen. This compromises the quality of samples and frequency of collection. Moreover, some sites reported inadequate storage facilities notably fridges.

Patients and clients in the communities are often unwilling to allow health workers collect their samples especially for COVID19- and other influenza like illnesses. This was attributed to the prevailing misinformation amongst the communities, which negatively affected the perceptions of the community.

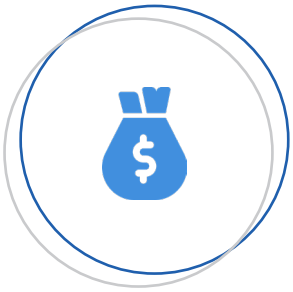
Health workers working in surveillance and in laboratories are not currently considered for risk allowance yet their work is equally intense and risky in nature. This demotivates the staff and affects efficiency.

LOGISTICAL CONSTRAINTS

Three sites namely; Kawaala HC IV, Nsambya Hospital and Mukono General Hospital had been planned for but were not covered due to logistical constraints

POLICY RECOMMENDATION

UVRI has done a commendable job, however, there is need to expand the scope to cover more mileage since the whole country is vulnerable to COVID-19 and other outbreaks.



01 Risk Allowance

Ministry of Health should consider including surveillance workers under categories that receive risk allowance. Under the SERRU project, UVRI provided motivation allowance of 100,000 Shs but this is not sustainable, since it's project funded.

02 Refresher Training

UVRI with support from Government and Partners should continue to organize periodic refresher trainings for health workers in the Sentinel sites on surveillance for respiratory viruses and COVID19- pandemic.

03 Knowledge Sharing

Some of the capacity building / refresher trainings should bring together health workers from various sentinel sites together to meet and share practical experiences. Experience sharing is an impactful form of learning especially among adult learners.

04 Virtual Webnairs

Intermittently, UVRI could optimize the virtual options by organizing virtual webinars of zoom calls for sentinel sites to facilitate experience sharing and keeping the health workers engaged on surveillance issues.

05 Review meetings

UVRI should undertake regular review meetings and conduct monitoring and evaluation visits to the sentinel sites, to ensure quality of service is sustained and timely reporting

06 Storage Facilities

Ministry of Health, UVRI and partners should ensure all sample collection sites are well equipped with storage facilities including fridges and adequate nitrogen. This ensures safety and good quality of samples pending shipment to UVRI lab in Entebbe.

07 Awarenes

Continued and sustained awareness and sensitization campaigns on COVID19- and other severe influenza viruses to mitigate public misinformation and thus hesitancy in seeking health care and testing.

Whereas the training provided an opportunity for capacity building, there is still a significant need to increase testing for COVID-19, influenza and other respiratory viruses of public health concern in the country.

> *Sustained surveillance, testing, analysis and reporting is fundamental in containing outbreaks and transmissions".*

Conclusion

The OPM partnership with UVRI through the SERRU Project was an entry point for OPM-NECOC to expand the disaster and emergency risk management scope, to incorporate pandemics and other disease outbreaks in the national hazard profile. The grant to UVRI was used to strengthen surveillance activities, timely detection and testing, and collaboration on disaster risk information pertaining to outbreaks between UVRI, sub-national and national arms of the NECOC. The collaboration provided a unique opportunity to strengthen the existing capacity and generate timely data to inform policy decisions relating to pandemic mitigation strategies. With the above results and recommendations notwithstanding, it was observed that there is still need to increase testing for COVID-19 especially at community level, influenza and other respiratory viruses plus emerging and re-emerging infections in the country. This therefore calls for sustained financial and logistical support to UVRI to effectively undertake their mandate.

References:

UVRI, OPM (2022), strengthening Uganda's emergency response and recovery capacity for COVID-19 testing: Training of health workers in surveillance sentinel sites across Uganda report. Kampala. Uganda. UVRI.

Acknowledgement:

Drafting Team	|	Pamela Komujuni – SERRU/OPM, Jocelyn Kiconco - UVRI
Editorial Team	|	Pamela Komujuni – SERRU/OPM, Vian Musika – SERRU/OPM, Capt. Stanley Osaba - NECOC
Approved by	|	Acting Commissioner, Disaster Preparedness and Management, OPM

Email: necoc@necoc.opm.go.ug | Tel: 0800177777

WWW.NECOC.OPM.GO.UG

POLICY BRIEF 1/2022

Strengthening Uganda's emergency response and recovery capacity for COVID-19 through training of health workers in sentinel sites surveillance.