

RAPID DEPLOYMENT OF AN INFECTION PREVENTION AND CONTROL RESPONSE STRATEGY TO CONTROL THE SPREAD OF SUDAN VIRUS DISEASE IN AN URBAN SETTING, THE KAMPALA METROPOLITAN AREA, UGANDA, 2022



ABSTRACT

Authors:

Judith Nanyondo Semanda¹, Abdullah Wailagala¹, Andrew Kwiringira¹, Sarah Zalwango³, Paul Katongole⁴, Elizabeth Katwesigye², Ronny Bahatungire², Mohammed Lamorde¹, Stacey Mearns⁵

Affiliations:

1. Infectious Diseases Institute, College of Health Sciences, Makerere University, Kampala, Uganda
2. Uganda Ministry of Health
3. Kampala City Council Authority
4. Monitoring and Evaluation Technical Support Program
5. UK Health Security Agency

Introduction:

On 21st October 2022, the Uganda Ministry of Health (MoH) confirmed the first case of the Sudan Virus Disease (SVD) outbreak in the Kampala Metropolitan Area (KMA). Twenty-one confirmed SVD cases were identified in KMA. KMA is an urban setting of more than 6 million people and was at significant risk of a sustained SVD outbreak with potential international spread. A coordinated multicomponent infection prevention and control (IPC) strategy was implemented to control the spread of SVD in KMA. We describe the rapid deployment of this strategy, its effect on IPC capacities, and the successful control of the SVD outbreak.

Methods:

A multicomponent IPC strategy was deployed: 1) IPC pillar coordination: an IPC task force was convened with government, partners, and district focal persons 2) Ring IPC: intense and targeted IPC support was provided to healthcare facilities (HCF), and communities around each confirmed case 3) IPC in HCF: selected HCF were assessed for IPC readiness using a modified WHO form; mentorships and supplies were deployed.

Results:

7 district-level focal persons were designated. 842 healthcare workers received formal training on IPC. 3,700 of over 4,300 HCF were assessed for SVD IPC readiness. At baseline, the mean score was 48% and increased to 65% at follow-up ($p < 0.001$). 81 technical teams and 95 hygienists were trained to support ring IPC; 6 rings, including 57 HCFs, were activated. Challenges included low IPC capacity at HCFs, inadequate IPC supplies, and limited dedicated human resources for IPC.

Conclusion:

The coordinated multicomponent response strategy rapidly improved response IPC capacities and contributed to SVD outbreak containment within 21 days in KMA. This response strategy could be adapted for use in future outbreaks of Ebola or other high-mortality, highly infectious diseases.