



Strengthening Infection Prevention and Control for Ebola Sudan Virus Outbreak in Healthcare Facilities of Masaka, Uganda

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On 20th September 2022, the Ministry of Health (MoH) declared an Ebola Virus Disease (EVD) outbreak in the District of Mubende in Uganda, with a total of 143 cases registered, including 19 health workers and 55 deaths. Mubende was the most affected, being the outbreak's epicentre; however, the transmission of cases across other districts such as Kassanda, Kagadi, Kyegegwa, Bunyangabo, Wakiso, Kampala, Masaka, and Jinja happened.

Following confirmation of a Sudan ebolavirus (SUDV) case in Masaka City, the Infectious Diseases Institute (IDI) received a request from the MoH to implement the Ring IPC strategy and scale up IPC within the facilities to interrupt the transmission. A Teamwas deployed with funding and technical support from the Centers for Disease Control and Prevention (CDC). The National IPC strategy was used to rapidly improve IPC capacity in health facilities. Improving IPC in healthcare facilities focused on the need to build capacity of health workers to rapidly identify suspected cases through screening, safely isolate suspected cases, and quickly refer them for testing and further management at Ebola treatment units.

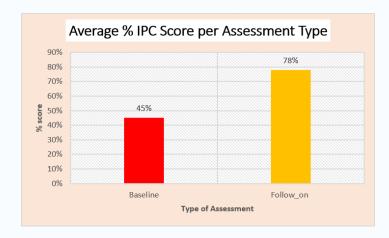
Additionally, the team focused on enhancing healthcare worker (HCW) skills in using standard precautions at all times to ensure hand hygiene, appropriate use of PPE, injection and sharps safety, waste management, environmental cleaning, and disinfection are in place.

Working through the Masaka district and city structures, the IDI team supported strengthening infection prevention at 119 health facilities. First, the team mapped all public and private facilities, trained IPC focal persons, in-charges and owners for buy-in. Then, using the MoH scorecard, deployed IPC supervisors conducted baseline assessments of the facilities, addressed identified gaps over time including distribution of IPC supplies, IEC materials, MoH job aides, SOP documents and conducting onsite facility IPC trainings.

To encourage buy-in and ensure the implementation of the recommended measures, engagement meetings were organized and conducted for private facility owners and IPC focal persons.



The performance of health facilities determined the frequency of the visits to health facilities; that is to say, the team visited a facility in green performing above 80% at least once a month, facilities in yellow performing between 50-79% at least twice a month, and facilities in red performing below 50% at least once a week.



By the end of the outbreak,

721health workers were reached

public, privatenot-for-profit (PNFP), and private for-profit (PFP) facilities supported health workers equipped to cascade support to the health facilities.

In addition, 117 facility owners and focal persons from 75 health facilities were trained on prevention measures and empowered to implement infection prevention measures at their facilities.

Follow-on assessments were conducted, and gaps addressed in consultation with the facility leadership. In addition, IDI provided infection prevention supplies, including 180 infra-red thermometers, 450 digital thermometers, 1000 liters of alcohol-based hand rub, 50 waste bins and bin liners, personal protective equipment, cleaning materials, and chlorine to address glaring gaps.

Infection Prevention and control capacity at public facilities improved from 45% at baseline to 78% at follow on, with an overall performance improvement of 33%. Similarly, progress in infection prevention at private health facilities was registered from 45% at baseline to 65% at follow-on, with an average performance improvement of 20%. These efforts strengthened IPC within the District, and Masaka was among the districts that registered no secondary transmission.

IPC Performance among Private facilities on different parameters assessed at Baseline and Follow-on in Masaka

IPC Areas of Assessment	Baseline	Follow_on
01.IPC leadership during the EVD outbreak score	69%	83%
02. Staff training score	25%	31%
03. Screening capacity score	24%	81%
04. Isolation capacity score	26%	34%
05. Hand washing/hand washing facilities score	66%	84%
06. Personal Protective Equipment (PPE) score	12%	13%
07. Injection safety score	86%	88%
08. Environmental cleaning and disinfection score	34%	52%
09. Decontamination of medical equipment and devices score	48%	69%
10. Inpatient surveillance and management score	18%	44%
11. Health worker post exposure management score	9%	13%
12. Bed occupancy, Hygiene, and Sanitation score	54%	54%
13. Water supply and storage score	84%	94%
14. Waste segregation score	44%	81%
15. Waste elimination score	61%	63%



The IDI team hands over supplies to the Masaka task force team to support continuity of IPC structures built during the Sudan Ebola outbreak response



IDI conducting a practical training session on ambulance decontamination after evacuation of suspect Ebola cases



An IDI supported mentor conducting a training of health workers at one of the health facilities



Orientation of community and religious leaders in Masaka



IDI trainer conducting a training of the decontamination teams that supported RING activities in Masaka