

## Uganda battles Marburg fever outbreak

Health workers in Uganda are dealing with the second viral haemorrhagic fever outbreak to hit the country in the past 6 months. Andrew Green reports from the capital, Kampala.

In Uganda, successive outbreaks of two viral haemorrhagic fevers this year—Marburg and Ebola—have killed at least 26 people and stretched the financial resources of the government and its supporting partners. Even as Ugandan officials scramble for funds, an international team of specialists is working to contain the ongoing Marburg outbreak.

Officially declared on Oct 19, at least nine people have died in the Marburg outbreak, according to the US Centers for Disease Control and Prevention (CDC). WHO has reported 18 cases in total. With no known cure for the virus, teams have fanned out across five districts to identify contacts and isolate potential patients before they transmit the virus.

Health workers were monitoring more than 130 people across the country who came into contact with infected patients. “One important point for us to control an outbreak is to identify the chain of transmission among identified people”, said Michel van Herp, a specialist in viral haemorrhagic fevers working for Médecins Sans Frontières (MSF). And “if the contact develops a fever,

to get him as soon as possible to the isolation ward.”

The recent Marburg diagnosis came less than 3 weeks after the country was confirmed free of Ebola. While Marburg and Ebola fall in the same family of filoviruses, the two outbreaks are not linked. The Ebola outbreak, which started in late July in western Uganda’s Kibaale district, killed 17 people, according to WHO. By tracking contacts and quarantining patients, an international team that included

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Uganda’s Ministry of Health, WHO, and MSF, was able to contain the spread of the virus. Now representatives from those same organisations are back on the ground, this time in the country’s southwest, where the Marburg outbreak is centred. Investigators have tracked the origin of the outbreak to Ibanda district—the same area that hosted a smaller Marburg outbreak in 2007. In the earlier incident, the CDC identified fruit bats sheltering in nearby mines as reservoirs for the virus.

Because the Marburg outbreak came so quickly after Ebola, “we were able to retrieve most of the experts we had working on Ebola”, said Rukia Nakamatte Mbaziira, the ministry of health’s communication officer. And leftover supplies were quickly transferred from Kibaale to the site of the new outbreak.

Uganda also has another advantage. 2 years ago, the CDC set up a fully functioning laboratory at Uganda’s Virus Research Institute to rapidly diagnose viral haemorrhagic fevers. Unique in the region, the laboratory

was able to confirm both the Ebola and Marburg outbreaks in Uganda, as well as an August Ebola outbreak in DR Congo, without having to send samples to the USA and wait for results. “It cuts down on a lot of that time when there’s a lot of transmission possibly going on”, said Trevor Shoemaker, a CDC epidemiologist who runs the laboratory. For the Marburg outbreak, the CDC has also set up a field laboratory in Kabale to rapidly determine if a patient is acutely infected, before sending the sample to the laboratory in central Uganda for confirmation.

Though Uganda was positioned to respond quickly to the Marburg outbreak, there are still questions about where the money needed to pay for salaries, isolation wards, and transportation, will come from. The Ebola response had already taxed the health ministry’s limited resources, Mbaziira said. Now ministry officials are attempting to reallocate from other health programmes the more than US\$674,000 they estimate the response will cost Uganda.

The Marburg outbreak is “more complex” than Ebola was, said Joaquim Saweka, Uganda’s WHO representative. While Ebola was primarily isolated to a rural area, the first Marburg patient was not diagnosed until after he had travelled from the Ibanda to Kabale district, which lies along a major road. That facilitated movement between people who were infected and healthy individuals and necessitated a response across five districts.

Despite the “financial burden”, Saweka said the plan for containing the outbreak “is good. The composition [of the team] is all perfect. There is full functionality.”

Andrew Green



An isolation camp for patients during Uganda’s Ebola outbreak earlier this year