

Communicable Diseases Communiqué

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Outbreak of an acute disease, ex-Zambia.

An outbreak of an (as yet) unknown disease has been identified in South Africa. To date there have been four linked cases, all of whom have died. The index case was a Zambian national, resident in Lusaka who had close contact with horses and a history of possible tick exposure. The subsequent two patients had close contact with the index case in a healthcare setting: a paramedic involved in her medical evacuation to South Africa and an intensive care nurse in Johannesburg. These two patients became ill approximately 7 days after exposure to the index case. The fourth case has been confirmed to have an alternative diagnosis.

Clinical and laboratory features common to the three probable patients include a prodromal illness of approximately 7 days with fever, headache, diarrhoea and myalgia, followed by an acute illness with fever $\geq 38^{\circ}\text{C}$, a morbilliform rash in two patients, and thrombocytopenia and mild hepatic dysfunction in two patients. An initial improvement was reported in the two latter patients, and all three had a sudden and marked deterioration in mental state, rhabdomyolysis in one case, and evidence of acute and severe hepatic necrosis. Bleeding was not a marked clinical feature although oozing from venepuncture sites was noted as well as a petechial rash in one patient.

Laboratory testing for the viral haemorrhagic fevers (VHFs) has been conducted by the Special Pathogens Unit at the National Institute for Communicable Diseases (NICD), a branch of the National Health Laboratory Service. Multiple nucleic-acid and antigen detection assays as well as serological tests have to date been negative for Crimean-Congo haemorrhagic fever (CCHF), Ebola, Marburg, Lassa fever and Rift Valley fever viruses. Serology is negative for the Hantaviruses. The final

results for viral culture in animal and cell cultures are pending. Only specimens from cases 2, 3 and 4 were available for testing. The index case had been given a diagnosis of 'tick bite fever' and no specimens were available for testing (she died shortly after arrival in SA). Negative results to date may be explained by several factors. These could include the timing of collection (taken late – day 10 of illness), and virus variants not detected by current molecular and serological assays. Blood cultures to date have been negative. Further laboratory testing is underway.

No further secondary cases have been identified and there is no indication of similar cases occurring in Zambia. It seems likely that this is an isolated case with secondary transmission in the nosocomial setting. Given the high mortality, nosocomial transmission and clinical presentation, a viral haemorrhagic fever remains possible.

All contacts of cases, including healthcare workers and laboratory staff are under surveillance and are all currently well. There is no need to isolate such contacts unless they become ill. Returning travellers from Zambia should be managed as previously; a good history, clinical assessment and laboratory investigations as indicated. Only individuals who have been in direct contact with the three probable cases are considered to be at risk at present and should be under surveillance.

The recent case of Crimean-Congo haemorrhagic fever (CCHF) from Calvinia in the Northern Cape Province is not linked to the above cluster. CCHF is endemic in the province. The patient is a 44-year-old abattoir worker and is clinically stable.