

Crimean-Congo haemorrhagic fever

On 10 September 2022 Crimean-Congo haemorrhagic fever (CCHF) was confirmed in a 32-year-old man from Burgersdorp, Eastern Cape Province. Prior to falling ill, the patient was working in different areas in the Eastern Cape and Free State provinces. A tick bite was identified as the source of infection. It is, however, important to note that the patient is involved with culling operations on farms and reserves, so exposure to the virus through contact with raw meat or blood of infected wildlife is also a possibility. On 4 September 2022, the patient reported a high temperature of more than 40 °C, as well as headaches, dizziness, and a loss of appetite. The patient was consulted by a general practitioner who prescribed doxycycline treatment to treat possible tick bite fever. The condition of the patient however continued to deteriorate with sustained pyrexia of more than 39°C for the next two days, as well as nausea, vomiting, diarrhoea, and back pain. On 7 September, he manifested with epistaxis and was referred and admitted to a hospital in Bloemfontein, Free State Province. In the days following hospitalisation, the risk for CCHF was appreciated. The patient was isolated and subsequently confirmed for CCHF by RT-PCR testing. During his hospitalisation, bleeding gums, bone marrow venipuncture haemorrhage and haematoma were recorded. Blood testing revealed severe thrombocytopenia with a platelet count of $27 \times 10^9/L$ on admission and $8 \times 10^9/L$ on 9 September, after which he improved to $35 \times 10^9/L$ following treatment with platelet transfusions. In addition, elevated

transaminases were reported (AST > 200 IU/L and ALT > 200 IU/L) with lymphocytopenia ($< 1 \times 10^9/L$). All contacts of the patient were identified and monitored for a period of 14 days following exposure. It is probable that additional culling team members were exposed to a common source rather than human-to-human transmission, and that direct patient exposure in family members and medical staff occurred, although no secondary cases have been identified. The patient developed an adequate antibody response against the infection (IgM and IgG antibody titres of 1:100 and 1:1000, respectively) and recovered, so he was discharged from the hospital.

This is the second case of CCHF to be reported in South Africa for 2022 to date. The first was a fatal case of CCHF reported from the Western Cape Province.

In South Africa, CCHF is a notifiable medical condition (NMC) of category 1 since prompt public health responses are required to reduce the risk of person-to-person transmission of the virus. CCHF is a rare human disease in South Africa with 220 cases reported from 1981 (when CCHF was first recorded in South Africa) and including the case reported here. More information on CCHF and other viral haemorrhagic fevers, in addition to guidelines for submitting samples for testing, can be found at www.nicd.ac.za.

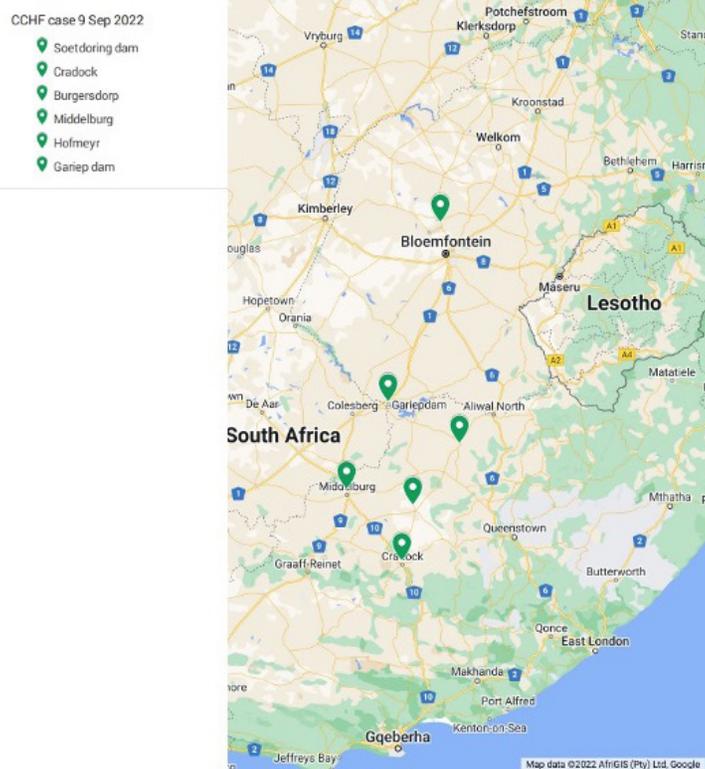


Figure 1. Locations of residence and game culling done by CCHF case in August and September 2022.

Source: Centre for Emerging Zoonotic and Parasitic Diseases, NICD-NHLS; JacquelineW@nicd.ac.za