

## Crimean-Congo haemorrhagic fever

Crimean-Congo haemorrhagic fever (CCHF) was confirmed on Friday 5<sup>th</sup> July in a 42-year-old cattle farmer from Belfast, Mpumalanga Province. The patient presented with a history of fever of seven days duration followed by haematemesis and bleeding from the gums. A history of tick exposure prompted a course of doxycycline for suspected tick bite fever, with no clinical response.

This together with the bleeding, in a farmer, raised the possibility of the diagnosis of CCHF. The key laboratory findings to support the CCHF diagnosis were thrombocytopenia (platelets  $29 \times 10^9/L$ ), raised transaminases (AST 443 IU/L and ALT 137 IU/L) and leucopenia (WCC  $2.98 \times 10^9/L$ ). The patient was treated in isolation in a Middelburg hospital and then transferred to a Pretoria hospital for further care.

The diagnosis was confirmed by CCHF RT-PCR which was positive on repeat specimens, and detection of CCHF IgG and IgM antibodies in the patient's serum. The patient responded well to supportive management and ribavirin and has since been discharged from hospital. No secondary cases have been reported to date.

In addition to this case, three other CCHF cases have been confirmed to date in 2013. Two of these were reported from the Free State Province and one from the North West Province. All three patients recovered from the infection.

CCHF or 'Congo fever' is well-described in South Africa. Cases have been diagnosed almost every

year since 1981, with a case fatality rate of approximately 30% over time. In the past ten years (2003 to date) a total of 37 cases has been laboratory confirmed in South Africa. These cases originated from the Free State (n=12), Northern Cape (n=14), North West (n=4), Gauteng (n=2), Mpumalanga (n=2), Western (n=2) and Eastern Cape (n=1) provinces. For Mpumalanga Province a total of eight cases has been reported since 1985 (including the case reported here).

Although CCHF cases has been recorded from all of the provinces of South Africa, it is more often reported from the Free State and Northern Cape provinces predominantly related to sheep farming. In South Africa, about a third of confirmed CCHF cases reported a tick exposure (most commonly, the so called "Bontpoot" ticks are implicated).

Less common routes of transmission include contact with infected blood or tissues, for example during slaughtering. Livestock and certain wildlife species are infected with CCHF virus through tick bites. The infected animals do not become ill and will be immune to subsequent infection. Ingestion of cooked meat is not considered a risk for CCHF virus exposure.

**Source:** Centre for Emerging and Zoonotic Diseases, and Division of Public Health Surveillance and Response, NICD-NHLS.