

Crimean-Congo haemorrhagic fever

Two people recently tested positive for Crimean-Congo haemorrhagic fever (CCHF) in South Africa.

In the first case, CCHF was confirmed in a 56-year-old farmer from Ventersdorp, North West Province, in early February 2020. The man had multiple tick exposures (bites and squashing of ticks) from his livestock. He presented to a healthcare facility in Ventersdorp on 7 February 2020 with acute fever, rigors, headache, malaise, abdominal, back and body pains. The next day, he was transferred to Klerksdorp hospital for treatment and was isolated on suspicion of a CCHF virus infection. Laboratory confirmation was done on 8 February 2020 by PCR. Antibody response was detected from samples collected on 13 February 2020 – immunoglobulin G (IgG) at titre 1:1000 and IgM at titre 1:10. The patient still had positive PCR result at that time. CCHF PCR was negative on 17 February 2020, and immune response remained the same. The man has since been discharged from the hospital and is recovering at home.

The second case, also 56 years of age, contracted CCHF from crushing ticks in an area in the Free State and Northern Cape provinces where he had recently visited. He became ill with fever and body pains on 19 February 2020 while attending a congress in Skukuza, Kruger National Park, Mpumalanga Province. He visited the local general practitioner on 20 February 2020 in Skukuza who immediately notified the NICD for investigation. A diagnosis of CCHF was confirmed by laboratory testing

at the NICD on 21 February 2020. He is currently receiving medical care in a hospital in Gauteng Province.

These were the first cases of CCHF reported for South Africa in 2020 to date. In the previous year, three cases of CCHF were confirmed, one each from the Free State, Northern Cape and North West provinces.

To date, 217 CCHF cases have been laboratory confirmed since first detection of CCHF in the country in 1981. Majority of the cases occurred from tick exposures in farmers from the Free State, Northern Cape and North West provinces. CCHF is a serious illness in humans with a case-fatality-ratio of 24% recorded amongst laboratory-confirmed cases. At present, there is no vaccine or effective anti-viral therapeutic available. Clothing and protective worn for job-related occupational safety and health purposes (overall, apron, boots, gloves and other) referred to as personal protective equipment (PPE), can prevent CCHF infection from tick or animal blood/products exposure. Laboratory and health facility staff should institute special infection control measures and isolation precautions when managing suspected or confirmed cases of CCHF. More information on CCHF is accessible from www.nicd.ac.za.

Article source: Centre for Emerging Zoonotic and Parasitic Diseases, NICD-NHLS; januszp@nicd.ac.za

VACCINE-PREVENTABLE DISEASES

Cutaneous diphtheria caused by toxin-producing *Corynebacterium diphtheriae*, Eastern Cape Province

A 49-year-old female from Kirkwood, Sarah Baartman District, Eastern Cape Province, was diagnosed on 16 January 2020 with cutaneous diphtheria due to a toxin-producing *Corynebacterium diphtheriae*. The patient presented to the general practitioner on 7 January 2020 and was referred to a local hospital for management of septic ulcers and cellulitis on the left lower leg. On admission, the patient complained of a long-standing ulcer on the left lower leg which started in June 2019, with

episodes of healing and recurring ulcers. On 21 December, she experienced severe pain radiating up to the thigh, fever and chills. On 22 December 2020, she developed swelling of the left lower leg, which subsided after a few days. Meanwhile, the wound progressively got worse with foul-smelling discharge and smaller ulcers developing around the chronic ulcer. During this period, she tried self-medication, including cleaning the wound with salt and water or water with Dettol.