

ZOONOTIC AND VECTOR-BORNE DISEASES

An update on rabies in South Africa

Two cases of human rabies have been laboratory confirmed in South Africa in the last month. For 2020 to date, a total of six human cases has been laboratory-confirmed. These confirmed cases were reported from KwaZulu-Natal Province (KZN) (n=5) (including the two cases reported here), and Limpopo Province (n=1). Three probable cases were also reported from KZN (n=1), Limpopo (n=1) and the Eastern Cape (n=1) provinces. Probable cases present with a clinical and epidemiological history compatible with a rabies diagnosis, where no alternative diagnosis could be confirmed and laboratory investigation for rabies was not possible.

In mid-October, a nine-year old boy from Adam’s Mission, located 40 km south of eThekweni, KZN, presented with headache, fever, restlessness, chest pain, shortness of breath and trouble swallowing. The child was reportedly taken to a traditional healer, and subsequently to a hospital in eThekweni District. The patient was admitted and was reportedly confused, aggressive and hypersalivating. The patient died on the day of admission. Rabies was confirmed by a direct fluorescence assay on a post-mortem brain sample. Investigations revealed no clear exposure history, and post-mortem investigation found no bite wounds or scars. There were reportedly many free-roaming dogs in the Adam’s Mission area. There was no history of rabies post-exposure prophylaxis in this case. Exposures may be related to small wounds or scars or mucous membrane contamination with contaminated saliva.

The second case involved a 28-year-old man from KwaNyuswa, near Port Shepstone, KZN, who was bitten in his neck by a stray dog on 1 November in Inanda, eThekweni District. The dog attacked the man without provocation. The same dog reportedly had bitten cattle, and was therefore killed but not tested for rabies. Nine days later, the man became ill with nausea, vomiting and later hypersalivation and was unable to walk. Rabies was confirmed in two ante-mortem collected saliva samples. The patient demised on 22 November.

Human rabies cases are almost exclusively linked to exposures to rabid dogs. Domestic dog rabies remains uncontrolled throughout Africa; however, it is known that that human rabies can be avoided through control of rabies in these animals. Although cases are recorded across South Africa, the largest proportion of human rabies cases in the country has historically occurred in KZN. 160 canines were diagnosed with rabies through laboratory surveillance by KZN this year alone (Figure 1). Vaccination of domestic dogs (and cats), in combination with health education and awareness of rabies in affected communities, can contribute to the prevention of human rabies cases. When possible exposures do occur, timely and effective administration of post-exposure prophylaxis against rabies prevents infection in 100% of human victims. Please visit the NICD website for more information on rabies and its disease prevention: <https://www.nicd.ac.za/diseases-a-z-index/rabies/>.

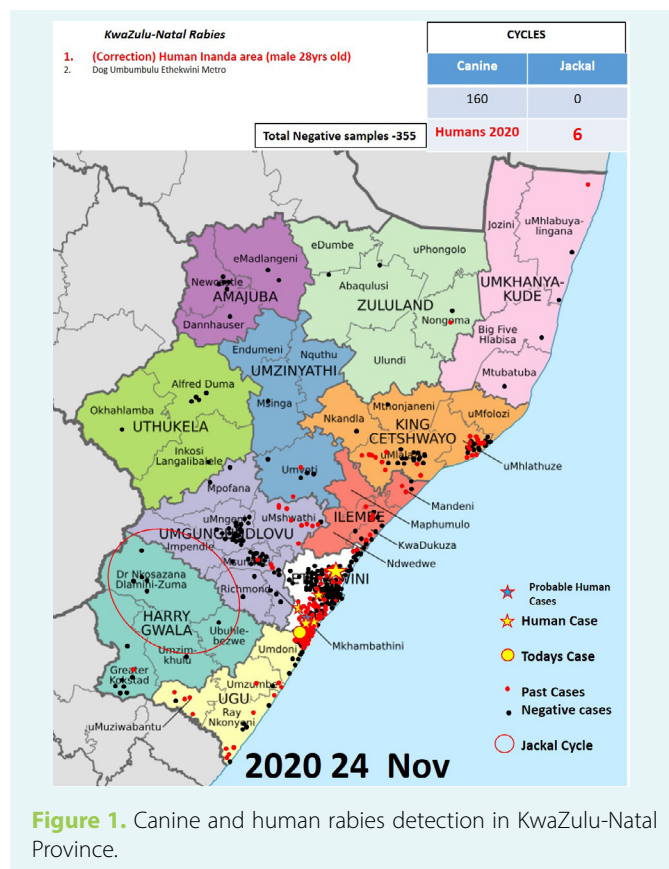


Figure 1. Canine and human rabies detection in KwaZulu-Natal Province.

Source: Kevin le Roux, Department of Agriculture, Environment and Rural Development, KwaZulu-Natal.

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