

ZOONOTIC AND VECTOR-BORNE DISEASES

An update on rabies in South Africa, 1 January - 17 September 2021

Several provinces in South Africa have been facing canine rabies outbreaks during 2021. Foci of dog rabies have been occurring in KwaZulu-Natal Province (KZN), mostly in the eThekweni Metropolitan Municipality, which includes Durban, and the King Cetshwayo district municipality (Figure 1a) (see <https://www.kzndard.gov.za/latest-news/item/309-rabies-update>). As of 17 Sep 2021, more than 200 dogs have tested positive for rabies. A total of two human rabies cases has been confirmed from the province as of 17 Sep 2021, with a further three probable cases reported (cases that fit the rabies case definition but were not laboratory confirmed). In the Eastern Cape Province (EC), a massive resurgence of dog rabies has been recorded in the Nelson Mandela Bay and Buffalo City Metropolitan Municipalities, with more than 150 cases reported in the province (Figure 1b) (see <https://www.kzndard.gov.za/latest-news/item/309-rabies-update>). Three human rabies cases have been recorded as of 17 Sep 2021: one case from Nelson Mandela Bay (reported here) and two prior cases from Amathole district and the Buffalo City Metropolitan Municipality.

Since the previous report (and included in the cases reported above), an 8-year-old boy from Gqeberha, Nelson Mandela Bay Metropolitan Municipality, EC, has been diagnosed with rabies. The child was bitten in an unprovoked attack by a stray dog, sustaining multiple bite wounds on his arm. The child was not taken to a health facility and hence did not receive post-exposure prophylaxis (PEP). The child presented in early September to a Gqeberha hospital with muscle spasms, aggression, confusion, agitation, hydrophobia, and restlessness. Healing wounds were discovered during the examination, and it was only then that the history of a dog exposure came to light. The patient was given rabies immunoglobulin and a dose

of vaccine although not considered to be effective at this late stage. The child demised one day post-admission. A post-mortem brain sample tested positive for rabies. Rabies PEP is only effective if given timeously.

No further cases of animal rabies or human exposures have been reported from the Cradle of Humankind, Gauteng Province, in the past month. No further cases of rabies have been reported from the Cape Metro since rabies was identified in two dogs in Khayelitsha. See previous edition of the NICD Communiqué (see <https://www.nicd.ac.za/wp-content/uploads/2021/08/NICD-Monthly-Communique%CC%81-August.pdf>). In addition to the five human rabies cases mentioned above, three cases of human rabies have also been recorded from the Limpopo Province as of 17 Sep 2021. This amounts to a total of eight human rabies cases reported for South Africa as of 17 Sep 2021.

The most important intervention for rabies prevention and control remains vaccination of dogs. Although provincial veterinary teams are involved in rabies vaccination campaigns, the responsibility for rabies vaccination of pets is that of the pet owner in accordance with the law. Pet owners are urged to ensure that their pets are vaccinated for rabies in order to protect their animals and people who may have contact with those animals. Rabies vaccination is crucial in areas where dog rabies outbreaks have been reported, but rabies vaccination of pets is necessary throughout South Africa. When exposure to potentially rabid animals occur, prompt PEP is critical in the prevention of rabies disease. Information on rabies PEP and rabies disease is available from the NICD website (see <https://www.nicd.ac.za/diseases-a-z-index/rabies/>). World Rabies Day is commemorated on 28 September to raise awareness about rabies prevention and control around the world. For further information, go to the Global Alliance for Rabies Control website (see <https://rabiesalliance.org/world-rabies-day>).

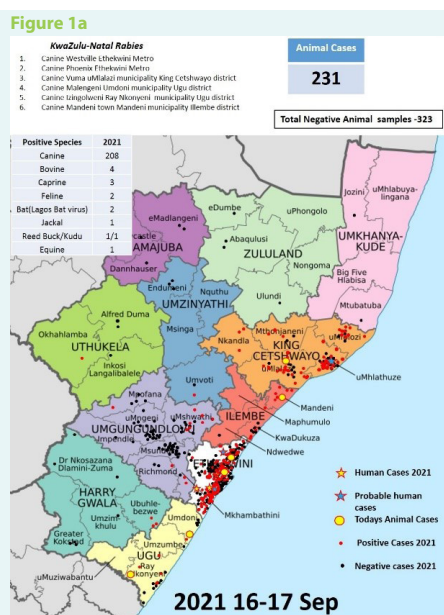


Figure 1a and 1b. Detect the presence of Canine and Human Rabies in KwaZulu-Natal and Eastern Cape. (Source: KZNDARD, <https://www.kzndard.gov.za/veterinary-services>)

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