

ZOONOTIC AND VECTOR-BORNE DISEASES**An update on rabies in South Africa**

Two additional cases of human rabies have been confirmed from KwaZulu-Natal Province during the month of August 2020.

The first case involved a two-year-old child from Umlazi (near Durban) who was admitted to a KwaZulu-Natal hospital with muscle fatigue, hyper-salivation and paralysis. It was reported that he had been bitten on his face two or three months prior to his illness. He had been bitten by a neighbour's dog, which was killed, but not investigated for rabies. The report stated that the child did not receive rabies post-exposure prophylaxis (PEP). On 31 August, three saliva samples obtained from the child tested positive for rabies virus by RT-PCR. The child died shortly after admission to hospital.

The second case involved a four-year-old child that died on 25 August 2020. In April 2020, the child was reportedly attacked by a dog in Marianhill, eThekweni and suffered injuries to his abdomen. Investigations found that the dog in question was still alive and vaccinated for rabies in 2017. Either the evidence is incorrect or the child acquired rabies from a different source. Following the injury, the child was taken to a healthcare facility, but no reports for provision of rabies PEP was available. The child fell ill in August with symptoms including vomiting, weak appetite, headache and dysphagia. The child was hospitalized, but died shortly after admission. Post-mortem investigation on brain and skin samples confirmed the clinical diagnosis of rabies.

For 2020 to date, a total of seven human cases of rabies has been reported in South Africa. These cases include four laboratory confirmed cases (including the two cases reported here), from KwaZulu-Natal (n= 3) and Limpopo (n=1) provinces. In addition, three probable cases were identified from Eastern Cape, KwaZulu-Natal and Limpopo provinces. Probable cases are those that presented with a clinical history and outcome, and epidemiological history compatible with a diagnosis of rabies, but laboratory confirmation was not possible.

World Rabies Day is commemorated worldwide on 28 September to raise awareness for the elimination of rabies. Rabies is a fatal, untreatable disease, but can be prevented firstly by vaccination of companion animals, most importantly domestic dogs and cats. Domestic dogs are linked to the majority of human rabies cases in South Africa. When possible exposures do occur, rabies virus infection can then be prevented by prompt application of rabies PEP. The latter includes thorough wound washing and treatment, provision of rabies vaccination and in cases where the exposure involved the breach of skin and contact with mucous membranes, the administration of rabies immunoglobulin. Rabies PEP is lifesaving emergency medicine.

For more information on rabies and the prevention of the disease please visit the NICD website: www.nicd.ac.za.

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