

## c Rabies

A case of probable human rabies was reported in October 2014. A 52-year-old man was attacked by his neighbour's dogs in Shayandima (in the Tshilidzini surrounds, Limpopo Province) at the end of September 2014. He sustained category 3 wounds on his legs and hands. He consulted a nearby clinic where he received wound treatment and a first dose of rabies vaccine. He was then referred to a clinic nearer his home for follow-up rabies vaccine doses. It is unknown if he ever received rabies immunoglobulin (RIG). He reportedly became ill about a week and a half after the attack. He was admitted to Tshilidzini Hospital on 25 October 2014 (about a month after the exposure), after presenting with agitation and confusion, and died a day later. The treating doctor made a preliminary diagnosis of rabies based on the patient's clinical presentation. An ante-mortem blood sample was submitted for rabies diagnostic testing, and anti-rabies virus antibodies (IgG and IgM) were detected by indirect immunofluorescence testing. Unfortunately, no other samples (ante- or post-mortem) were available for testing, hence the case could not be confirmed and has been classified as probable.

A total of five laboratory-confirmed cases of human rabies has been reported in South Africa for 2014 to date (including one case acquired in Angola). In addition, five probable cases (including the case reported here) were also identified. Probable cases are defined as cases with a clinical and outcome history compatible with a diagnosis of rabies and a history of dog/animal exposure in the absence of supporting laboratory findings. All the cases reported here followed attacks by dogs, and occurred in Limpopo (n=3), Eastern Cape (n=3), Mpumalanga (n=2) and North West (n=1) provinces. The case that was acquired in Angola was also linked to a dog bite. The dogs involving the bite incidents were all unknown to the respective victims, and without a known owner in most cases. Brain samples of only two dogs responsible for the implicated exposures in the ten cases were submitted for testing, and both were positive for rabies antigen. Low awareness of the

necessity to consider rabies post-exposure prophylaxis (PEP) after dog bites and scratches remains a widespread obstacle to preventing rabies deaths. Seven of the victims did not seek or receive rabies PEP following the exposures. Three of the patients did not receive rabies immunoglobulin (critical to administer in category 3 exposures). A total of six of the rabies deaths reported here involved young children.

Various hotspots for rabies in South Africa are currently of particular concern. Limpopo Province, in particular the northern district of Vhembe, reported the re-emergence of rabies in 2006 and human cases of the disease have been reported annually since. The Eastern Cape, Free State and Mpumalanga provinces report few human cases despite evidence of resurgence of animal rabies in certain districts within these provinces in recent years. Poor reporting of human rabies cases in these provinces may be attributed to poor awareness of the disease which leads to mis- and under-diagnosis. KwaZulu-Natal was historically known as the province with the greatest burden of dog rabies, and consequently human rabies, in South Africa; however, due to intensified vaccination programs in dogs since 2009 the number of dog rabies cases is dwindling and no human cases have been reported in the past 15 months.

Health professionals can get clinical advice from the NICD hotline; more information (as well as information for the general public) is available on the NICD website: [www.nicd.ac.za](http://www.nicd.ac.za).

**Source:** Centre for Emerging and Zoonotic Diseases, NICD-NHLS