

2 ZOO NOTIC DISEASES

Rabies

A case of probable* rabies was reported in a 13-year-old boy from Graskop, Mpumalanga Province. The patient was bitten by a dog in August 2013, but did not present to a healthcare facility for rabies post-exposure prophylaxis. He fell ill in February 2014 with symptoms including fever, headache, vomiting, muscle spasms and priapism. On admission to hospital, he was noted to be confused, agitated and hydrophobic. The patient died after a short period of hospitalisation. Saliva specimens collected on three consecutive days, cerebrospinal fluid and serum were submitted to the National Institute for Communicable Diseases for ante-mortem rabies investigation. Although all the samples tested negative, this does not exclude a diagnosis of rabies. Post-mortem laboratory testing on brain specimens remains the gold standard for diagnosis, being the most sensitive and reliable test for excluding or confirming rabies disease.

For 2014 to date, a single case of rabies has been laboratory confirmed; this patient acquired infection in Limpopo Province. In addition to the probable case reported here, another probable case (from Limpopo Province) has also been reported for the year to date. A total of seven laboratory-confirmed cases was reported in South Africa during 2013. These cases originated from Limpopo (n=3), Free State (n=2), KwaZulu-Natal (n=1) and Mpumalanga (n=1) provinces. In addition, 5 clinical cases (3 probable and 2 suspected) were recorded during 2013; these hailed from Limpopo (n=2), Mpumalanga (n=1), KwaZulu-Natal (n=1) and Eastern Cape (n=1) provinces.

Rabies in KwaZulu-Natal Province

KwaZulu-Natal has historically been the province most profoundly affected by rabies in South Africa. The disease was introduced into the province from neighbouring territories in the 1950s, after which it was brought under control, but was re-introduced in the late 1970s and early 1980s; the disease has been raging in domestic dogs ever since. Since

1983, the National Institute for Communicable Disease has confirmed a total of 298 human cases of rabies from the province. This represents 71% (298/420) of the laboratory-confirmed rabies cases in South Africa during this period. These cases are mostly as a result of exposures to domestic dogs, with children and young adults (<20 years of age) being the age groups most affected. In 2009, a collaborative project between the Bill and Melinda Gates Foundation and the World Health Organization was piloted in the province, with the goal of achieving rabies elimination by 2014 (http://www.who.int/rabies/bmgf_who_project/en/).

Significant strides have been made in controlling rabies in the province, particularly with regards mass vaccination of domestic dogs. Laboratory-confirmed domestic dog rabies cases decreased from 235 in 2012 to 60 cases in 2013 (Disease Database, Department of Agriculture, Forestry and Fisheries).

*Classification of clinical cases according to the WHO Recommended Surveillance Standards, WHO/CDS/CSR/ISR/99.2

Source: Centre for Emerging and Zoonotic Diseases and Division of Public Health Surveillance and Response, NICD-NHLS