

ZOONOTIC AND VECTOR-BORNE DISEASES

An update on rabies in South Africa

A case of rabies was reported from the Amathole District, Eastern Cape Province in June 2021. On 24 May 2021, the 7-year-old boy was bitten in the face by a stray dog, in an unprovoked attack. On 26 June 2021, the child presented to a local hospital with unusual behaviour, confusion, hiccups, vomiting, and hypersalivation. The child demised on 29 June 2021. Samples collected for laboratory testing included saliva (ante-mortem sample) and cerebrospinal fluid and nuchal biopsy (post-mortem samples), as rabies disease was clinically diagnosed. Rabies virus infection was confirmed in the cerebrospinal fluid and skin samples by RT-PCR testing at the NICD. Case investigation determined that incomplete post-exposure prophylaxis (PEP) was administered as the child received rabies immunoglobulin (RIG) and only one of the four required anti-rabies vaccine doses.

According to the WHO and SA rabies prevention guidelines, all animal exposures must be assessed for potential rabies virus

exposure. Rabies PEP should be administered as recommended based on the category of exposure when rabies is considered a risk. Rabies PEP should not be delayed pending laboratory confirmation of rabies in the animal. More information on rabies and post-exposure-prophylaxis is available from the NICD website: www.nicd.ac.za

A total of six cases of human rabies has been laboratory confirmed during 2021 to date for South Africa. The cases were reported from Limpopo (LPP=3), KwaZulu-Natal (KZN=2), and Eastern Cape (EC=1) provinces. A total of 14 laboratory-confirmed cases has been recorded from January 2020 to date, with eight cases reported from the eThekweni Metropolitan Municipality in KZN, five from Vhembe District in LPP and one in Amathole District in EC provinces (Figure 1). Children under the age of 11 years account for 13 of these cases, all of whom were exposed to dogs.



Figure 1. Laboratory-confirmed human rabies cases for South Africa during 2020- 2021 (20 July).

In June 2021 two cases of rabies have been confirmed, with a further three cases suspected, in jackal from the Cradle of Humankind area, Mogale City Municipality, Gauteng Province. No human exposures to the jackal were reported. This was followed by the confirmation of rabies in a honey badger in July 2021 in the same area. Human exposures to the rabid badger were reported. Since June, rabies vaccination campaigns in dogs and cats have been underway in the affected and surrounding areas. In 2016, an extensive outbreak of rabies in jackal, with spill-over to domestic dogs was reported in the same area.

The public is urged to ensure that their dogs and cats are fully vaccinated against rabies. Also, the public should refrain from engaging in direct interactions with wildlife. Often, rabid wildlife

may appear tame and it may be tempting to feed or pet such animals. If any animal is suspected to be rabid (including animals presenting with unusual behaviour, hyper-salivation, signs of paralysis), contact your local or state veterinarian (Vet.help@gauteng.gov.za) in order for the animal to be investigated. When possible exposures in humans do occur (for examples bites, scratches inflicted by a suspected rabid animal), rabies post-exposure prophylaxis should be sought immediately. Rabies post-exposure prophylaxis is considered a live-saving emergency intervention following possible rabies virus exposures. Rabies post-exposure prophylaxis entails thorough cleaning of the wound site/s followed by rabies vaccination and rabies immunoglobulin therapy. More details on rabies post-exposure prophylaxis are available from the NICD website.