

1 ZONOTIC AND VECTOR-BORNE DISEASES

b Human rabies cases in South Africa, January-December 2016

During 2016 only two cases of human rabies were laboratory-confirmed in South Africa. These cases were reported from KwaZulu-Natal and Free State provinces respectively. This is the lowest annual incidence in South Africa in thirty years. On average 5 - 30 cases of human rabies have been laboratory-confirmed per annum in the country since the 1980s. Possible explanations for this year's low number of cases include: 1) underdiagnosis and missed cases; 2) improved clinical management of animal bites with appropriate provision of rabies post-exposure prophylaxis; and 3) improved control of canine rabies. While each factor may contribute to the low number of cases over the past year, canine rabies is unfortunately still endemic, and particularly prevalent in KwaZulu-Natal, Mpumalanga, Limpopo provinces and in the eastern parts of Free State Province.

Therefore, the risk of human rabies is still present and appropriate animal bite wound management and post-exposure prophylaxis should be administered when required. This entails flushing of the wound with soap and water for 10 minutes, cleaning with 70% alcohol solution, followed by iodine if available. Rabies immunoglobulin should be injected into the wound with the balance given intramuscularly into the deltoid (only with a category three injury when the skin is broken or scratched or when blood is drawn) and vaccination (four doses administered intramuscularly on days 0, 3, 7 and 14) given intramuscularly into the opposite deltoid.

As human rabies is not treatable, the most important public health intervention to control and ultimately prevent human rabies is vaccination of dogs and cats against rabies (as required by law). Other animals, such as cattle and horses may be vaccinated if necessary.

On 5 December 2016, a family on holiday bought a puppy at the side of the road in the Eastern Cape Province and took it home to KwaZulu-Natal. The

puppy fell ill on 23 December 2016 and bit all five family members and licked the face of an unknown two-year-old child while on the beach. The puppy was taken to a private veterinarian who euthanized and tested it for rabies. On 26 December 2016, the diagnosis of rabies was confirmed. The family was administered prophylaxis (PEP) with rabies immunoglobulin and vaccine after the diagnosis was confirmed. Efforts to identify the child who was licked at the beach have been unsuccessful.

Interesting requests for advice regarding rabies post-exposure prophylaxis have been made to the NICD hotline:

- In two separate incidents, children were bitten by vervet monkeys. In both instances, rabies PEP is not indicated. Rabies has not been confirmed in vervet monkeys in South Africa to date and the behaviour of the animals during these incidents is considered normal.
- A holidaymaker was scratched by a hen in the Western Cape Province. Rabies PEP is not indicated following avian exposures as birds are not infected with nor do they transmit rabies virus.
- A person was bitten by a seal. While rabies virus is theoretically transmissible by all mammals, seals have not been known to transmit rabies.

For more information on rabies post-exposure prophylaxis, visit the NICD website (www.nicd.ac.za). Health care workers may contact the NICD hotline on 082 883 9920 when seeking advice on the management of rabies post-exposure prophylaxis in their patients.

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