## NATIONAL INSTITUTE FOR COMMUNICABLE DISEASES Division of the National Health Laboratory Service

## Quarterly Update for Rabies (May – July 2024)

<u>Rabies</u> is a fatal viral disease that persists as a public health threat in more than 150 countries and territories across the world, resulting in an estimated 59 000 deaths annually, of which 95% occur in Africa and Asia. From 1983 to 2023, South Africa reported an average of 10 laboratory-diagnosed cases annually.

Many different animals may contract and transmit the rabies virus, but domestic dogs are the most important vector of transmission to people. The most effective public health prevention of rabies is vaccination of dogs (and cats) and this is legally required in South Africa. Rabies is preventable in humans through <u>post-exposure prophylaxis</u> (PEP) including rabies immunoglobulin and vaccines. It is recommended that persons at high and continual risk of rabies exposures, for example veterinarians, receive <u>rabies pre-exposure prophylaxis</u> (PrePEP). Since May 2024, a number of <u>cases of rabies have been confirmed in Cape fur</u> <u>seals</u> (*Arctocephalus pusillus*) from locations along the coastline between Plettenberg Bay and Melkbosstrand. Rabies has been very infrequently reported in seals globally and the detection of <u>rabies in seals in the Western Cape</u> may be an unique finding. Investigations are underway to understand the extent of the occurrence of rabies in these animals. Persons who are exposed (for example bitten) to seals, <u>rabies post-exposure prophylaxis</u> is recommended.

During the period of 1 May to 31 July 2024, human rabies was laboratory-confirmed in two cases from the Eastern Cape and one case from KwaZulu-Natal. For the year to date, six people died of rabies in South Africa. In one case, the cause of death was probable rabies based on a history of dog bites and rabies symptoms and signs that led to death. Five of the rabies deaths were confirmed by lab testing. These cases were reported from the Eastern Cape (n=3), KwaZulu-Natal (n=2) and the province of Gauteng (n=1) (See Figure 1). All of the cases were linked to domestic dog bites. Four of the cases involved children under the age of eight, with two cases reported in adults, a 27-year-old man and 61-year-old woman. The rabies case reported in Gauteng province was caused by a dog bite that happened in Zimbabwe, not in South Africa. Two of the victims received insufficient PEP, while four of the cases sought no medical attention at all from a nearby healthcare center. Both of the patients that got initial PEP, did not receive follow-up vaccines on days 3, 7, and 14 after the dog bite. One case received rabies immunoglobulin and one dose of the rabies vaccine, while the other case only received a single vaccine shot. In 2023, 12 cases of human rabies were laboratory-confirmed in South Africa (KZN=6, EC=5, LPP=1), with 7 (KZN=3, EC=3, LPP=1) occurring during the first two quarters and July of 2024.

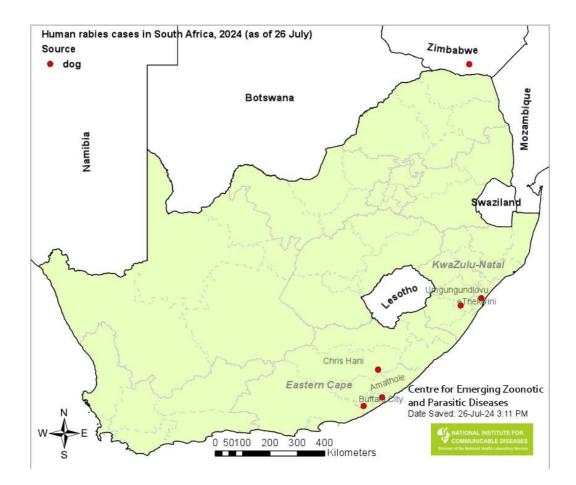


Figure 1 Human rabies cases in South Africa, 1 Jan-26 July 2024.