

ZOONOTIC AND VECTOR-BORNE DISEASES

Rabies update

In the last month, two cases of rabies were reported in two children from the Eastern Cape province of which one was confirmed by post mortem brain biopsy and direct fluorescent antibody testing. The cases are from the Nelson Mandela Bay Municipality and the OR Tambo District. The former case was originally reported as a probable case in the last Communiqué 21 (7) of July 2022, because rabies-compatible illness had occurred in the deceased and there was a credible history of contact with a suspected rabid dog.

As of 25 August, 2022, South Africa reported ten laboratory-confirmed rabies cases, including five from the Eastern Cape province, Nelson Mandela Bay municipality (n=5); three from Limpopo province, Mopani (n=2) and Vhembe (n=1) districts; and two from KwaZulu-Natal province, eThekweni municipality (n=1) and iLembe district (n=1) (Figure 1). Furthermore, five deaths from probable rabies have been reported from the Eastern Cape Province's OR Tambo (n=4) and Amathole (n=1) districts, respectively (Figure 1).

Once clinical symptoms start to manifest, rabies is a fatal viral illness for both humans and animals. However, vaccination and increased awareness of people at risk can completely prevent rabies. Since the majority of cases are in dogs and result from dog bites, rabies can be effectively controlled through mass vaccination of dogs and cats using the One Health strategy. To prevent human cases, the World Health

Organization recommends a coverage rate of 70% for dogs. It is still possible to stop rabies in humans with adequate and prompt post-exposure prophylaxis, which includes thorough wound cleaning with soap and water, the rabies vaccine, and rabies immunoglobulin, all of which must be given on the same day as the exposure to the saliva of an unknown suspicious dog, cat, or wild animal.

Although rabies can be prevented by vaccination, South Africa has been unable to stop continuous outbreaks in some areas of the Eastern Cape, Limpopo, and KwaZulu-Natal. The Eastern Cape, KwaZulu-Natal, Mpumalanga, and Limpopo provinces are the four known source areas of canine rabies. The national plan for eliminating dog-mediated rabies (2019-2030) has as its goal to focus on improving animal surveillance in these regions. It emphasizes the requirement for more funding for annual mass dog vaccination efforts, which have shown to be cost-effective with coverage rates of up to 70%. Animals are given access by owners for vaccination, according to research from rural Africa, but the effectiveness of free programs is far higher than owner-paid ones. Furthermore, there is a need for an improved animal bite and post-exposure prophylaxis surveillance in the South African public health sector to increase the availability and cost-effectiveness of administration to patients.

Please visit www.nicd.ac.za for more information on rabies.

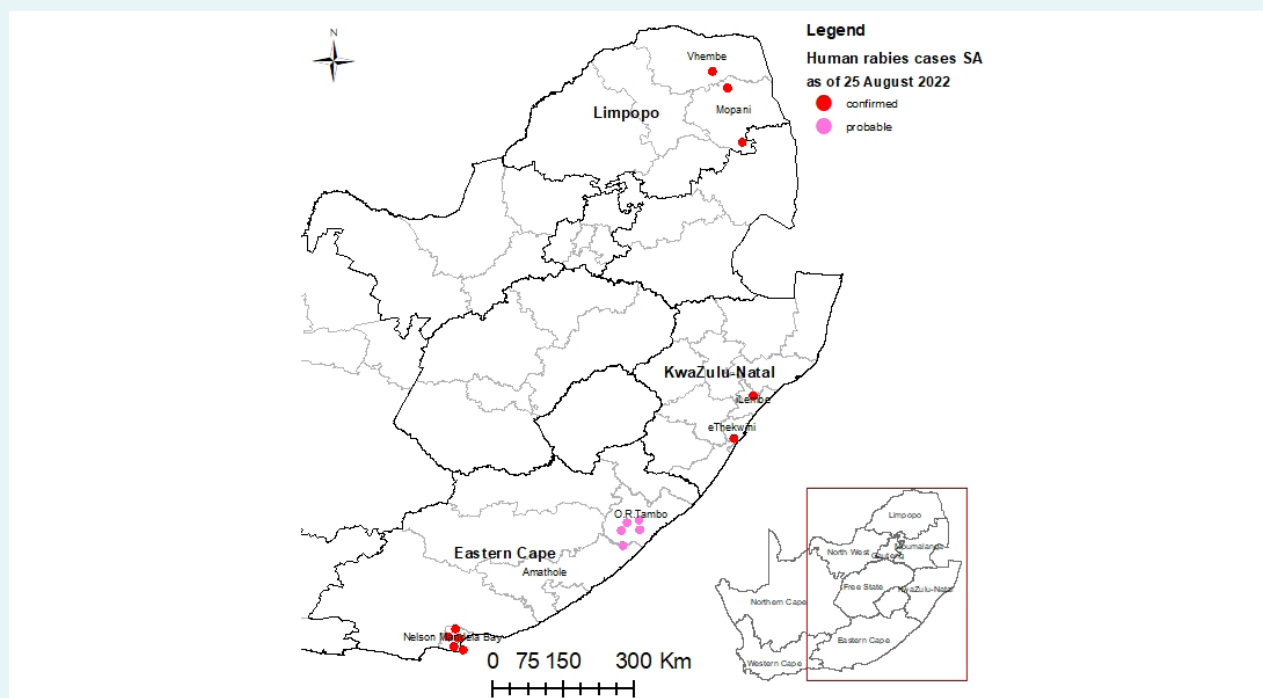


Figure 1. Human rabies cases in South Africa in 2022, as of August 25. (Source: NICD data)



Source: Centre for Emerging Zoonotic and Parasitic Diseases, veerlem@nicd.ac.za