

ZOONOTIC AND VECTOR-BORNE DISEASES

An update on rabies in South Africa

No new cases of human rabies have been reported in South Africa over the past month. In 2020, as of 15 December, rabies accounted for six laboratory-confirmed human deaths in the country, reported from KwaZulu-Natal (n=5) and Limpopo (n=1) provinces. In addition, three probable cases were also reported from KwaZulu-Natal (n=1), Limpopo (n=1) and the Eastern Cape (n=1) provinces. These cases fit with the case definition for probable rabies given the clinical and exposure histories; however, laboratory confirmation for rabies was not possible. The total number of cases in 2020 is lower compared to the previous year where 10 laboratory-confirmed and six probable cases were reported. It is unclear how the emergence of COVID-19 may have affected the recognition and reporting of human rabies cases in South Africa (Figure 1).

Despite being a vaccine-preventable disease, dog-mediated human rabies continues to be reported from low- and middle-income countries. A global initiative to achieve zero human fatalities from dog-mediated rabies by

2030 has been initiated by WHO and partners.¹ The primary tools for meeting this goal are: mass dog vaccination to disrupt transmission in domestic dog populations that maintain infection, adequate post-exposure prophylaxis (PEP) for rabies-exposed persons to prevent the fatal onset of disease, along with education to promote its successful uptake. Various preventive initiatives have been effective in preventing dog-mediated human rabies deaths, including dog population management, parental dog vaccination programmes, access to human rabies vaccinations, and a bite prevention and wound care education programme. It can be difficult to incorporate these strategies in resource-poor settings, and the greatest challenge is maintaining sufficient herd immunity in dog populations, especially when free-roaming.²

Please visit the NICD website for more information on rabies and disease prevention: <https://www.nicd.ac.za/diseases-a-z-index/rabies/>.

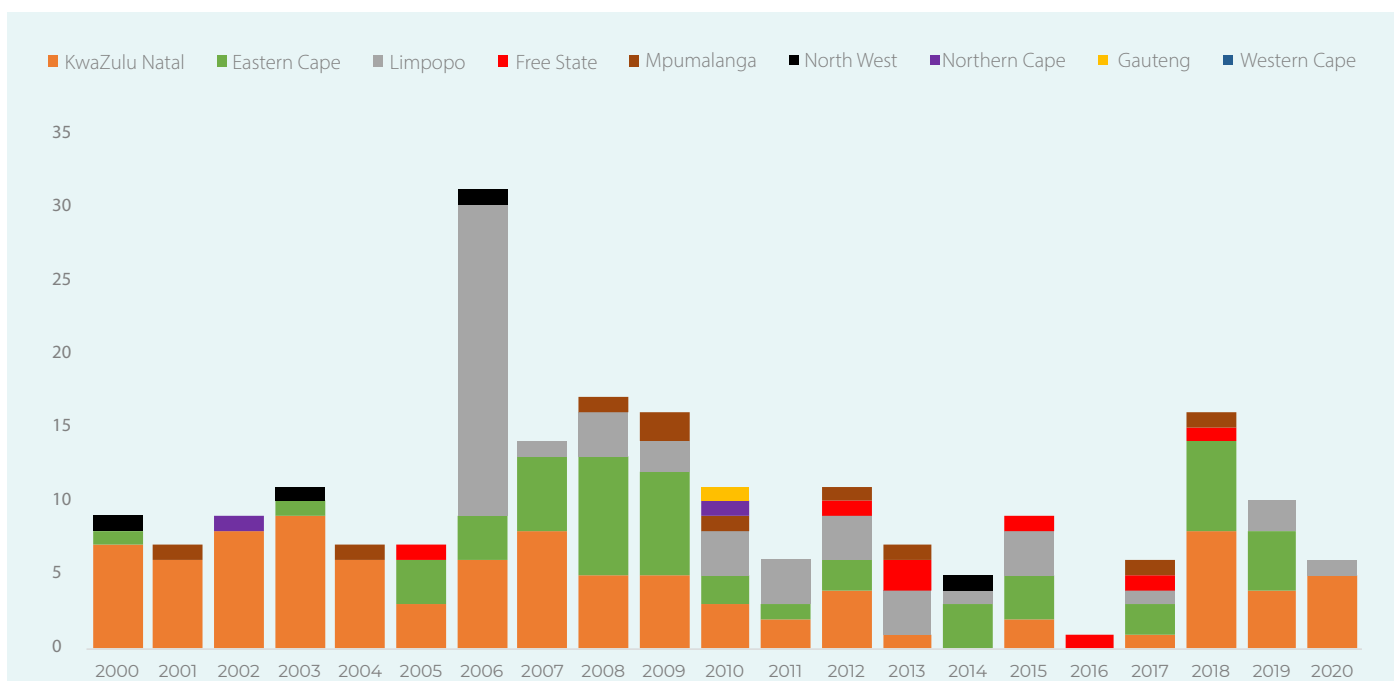


Figure 1. Laboratory-confirmed cases of human rabies in South Africa, 2000 - 2020.

1. WHO Rabies Modelling Consortium. Zero human deaths from dog-mediated rabies by 2030: perspectives from quantitative and mathematical modelling. *Gates Open Res.* 3, 1564 (2019).

2. Wallace, R. M. et al. Role of Oral Rabies Vaccines in the Elimination of Dog-Mediated Human Rabies Deaths. *Emerg. Infect. Dis.* 26, 1–9 (2020).