



RABIES PREVENTION ADVISORY

An update for veterinary and para-veterinary services, animal welfare and animal special interest groups

Updated: 26 January 2022
(first edition: 25 November 2021)

Outbreak Response Unit, Division of Public Health Surveillance and Response
National Institute for Communicable Diseases (NICD)
24-hour hotline number: 0800 212 552

Rabies is endemic in South Africa, however, a significant increase in the number of confirmed dog rabies cases as well as human rabies cases were reported in 2021. The provinces most severely affected by dog rabies outbreaks include the Eastern Cape (notably Ggerbha and Buffalo City and surrounds), Limpopo (notably Vhembe district), and Kwa-Zulu Natal (notably Ethekwini and King Cetshwayo districts). Refer to KZN Department of Agriculture and Rural Development for updates on EC and KZN cases (<https://www.kzndard.gov.za/latest-news/item/309-rabies-update>). Sporadic cases in domestic dogs and a focal outbreak in jackal have been reported in the Western Cape (Khayalitsha and Gordon's Bay areas) and Gauteng (Cradle of Humankind area) provinces, respectively during the course of 2021. As of 26 January 2022, no human cases were associated with these outbreaks.

PRE-EXPOSURE PROPHYLAXIS (PrEP):

Rabies PrEP is recommended for all persons at high or continual risk of exposure to rabies virus, including (but not limited to):

- Veterinary and para-veterinary professionals
- Animal welfare assistants and other welfare workers or any volunteers that may have direct contact with animals
- Animal and bat enthusiasts
- All staff of veterinary facilities that may have direct contact with animals

Table 1: Summary of rabies PrEP schedule

Product Name	Dosage and site of administration	Schedule
Verorab® (Sanofi Pasteur)	1 vial, intramuscular (IM) in deltoid OR* 0.1 ml intradermal (ID) dose per day, 2 sites per day Intradermal sites: deltoid muscle, anterolateral thigh or supra scapular region (1 vial = 0.5 ml)	IM: One dose (or vial) on two days, D0 and D7 ID: Two doses each day on D0 and D7 (each dose at different site, see left)

**Intradermal administration is cost and vaccine saving but requires experience with intradermal vaccine administration technique. Cost effective if 2 persons can be vaccinated at the same time to utilise a vial.*

Individuals donating plasma to the SANBS program should still adhere to the vaccination schedule recommended by SANBS.

What to do when possibly exposed to rabies when previously vaccinated?

PrEP eliminates the need for rabies immunoglobulin (RIG) when exposed to rabid animals, regardless of the severity of the exposure. Booster vaccination should be provided to ensure potent antibody response following an exposure event. This includes two doses of rabies vaccine provided as 1 intramuscular dose each on day 0 and 3. This is required regardless of rabies antibody titre induced by PrEP.

Do I need booster doses of rabies vaccine to retain immunity?

It is recommended that rabies antibody titre levels are monitored through laboratory testing. If indicated, boosters may be recommended. If laboratory testing is not possible, booster doses are recommended ever 2-3 years for individuals at high or continual risk.

For more information, visit the NICD website: <https://www.nicd.ac.za/>

Rabies (general): <https://www.nicd.ac.za/diseases-a-z-index/rabies/>

Updated draft guidelines for the prevention of human rabies in South Africa: https://www.nicd.ac.za/wp-content/uploads/2021/10/Human-Rabies-Prophylaxis-Guidelines_DRAFT_29-October-2021.pdf