

New policy in Belgium for rabies post-exposure prophylaxis (PEP)

Amended advice (18 October 2018) following new vaccination recommendations by the World Health Organization.

13-05-19



Dit is de omschrijving

Following new vaccination recommendations for rabies by the WHO, several changes were formulated to the post-exposure prophylaxis (PEP) policy for rabies in Belgium.

What are the most important changes?

- The calculation for the required quantity of human anti-rabies immunoglobulin (HRIG) has changed!
- People who are at risk of developing rabies following contact with a monkey do not require additional injections of HRIG, even for category III wounds.
- People who have only had mucous membrane contact with saliva from potentially rabid animals - without wounds - do not require HRIG.
- The option has been added to administer rabies post-exposure prophylaxis (PEP) on one day for individuals who have already been vaccinated in advance.

How was the amended advice developed?

In April 2018, the SAGE (Strategic Advisory Group of Experts) working group of the World Health Organization (WHO) presented a number of changes to the rabies policy, regarding both pre-exposure prophylaxis policy (PrEP) and post-exposure prophylaxis policy (PEP) ([Rabies vaccines and immunoglobulins: WHO position: summary report of 2017 updates, Jan 2018](#)).

The Belgian Study Group on Travel Medicine has assessed these new recommendations by the WHO and has decided which recommendations should be adopted. The Superior Health Council ratified these decisions in 2019.

What changes will be made to the pre-exposure (PREP) vaccinations for Belgian travellers?

The [preventive vaccination schedule was changed](#) as of 1 May 2018, from three visits over 28 days to a simplified schedule of two visits over seven days.

The rabies vaccine is administered on Day 0 and Day 7 and can be administered via one of two techniques:

- As a double intradermal dose (2 x 0.1 mL) at two different injection sites (e.g. the anterior side of both forearms).
- As 1 intramuscular dose (1 mL) in the deltoid muscle.

Preventive vaccination is indicated for the following individuals:

- People who spend long or frequent periods in high-risk areas or in remote areas where medical assistance is not available at short notice.
- Travellers making a prolonged cycle trip or who go jogging in endemic areas.
- Travellers who will be visiting specific areas (Monkey Forest, Monkey Beach,...) where the risk is high.
- Children who will be moving with their parents to endemic areas.
- People who are at increased risk of exposure due to their profession or activities, such as veterinarians, forest rangers, veterinary medicine students, or volunteers who protect bats.
- Military personnel being deployed to endemic regions.
- Lab technicians or experts who come into contact with the virus in a professional capacity (for example during laboratory activities).

What changes will be made to the post-exposure prophylaxis for rabies?

As of 11 October 2018, slight changes were made to the [guidelines](#) in Belgium regarding post-exposure procedures.

HRIG only in the wound

In the past, the quantity of HRIG to be administered was calculated based on the patient's body weight. The HRIG that could not be administered near the wound was administered by intramuscular injection. Intramuscular injection of the remaining HRIG volume is no longer recommended in the new WHO advice. From now on, HRIG is only administered in and around the wound, with the aim of neutralising the virus locally.

As a result, the calculation for the required quantity of HRIG has changed. The maximum dose of HRIG remains 20 IU per kilogram body weight. The quantity of HRIG depends on the anatomical location(s) of the wounds and the size of the lesion(s), with a maximum dose still based on body weight. The animal species also plays a role in the size of the wound. For example, a scratch or bite from a bat or a superficial scratch by a cat almost always results in small wounds (2 mL HRIG), in contrast to a full transdermal bite from a dog to the leg, for which the maximum dose (based on body weight) can be administered. In the case of several bite wounds by a dog, the HRIG may need to be diluted with physiological saline to ensure adequate infiltration of all wounds.

No HRIG for risks involving monkeys

HRIG is no longer indicated following category III contact with monkeys in endemic areas. In addition to adequate wound care, only active immunisation is indicated in these cases.

No HRIG for mucous membrane contact without wounds

HRIG is no longer indicated following mucous membrane contact with the saliva of a potentially rabid animal. Only active immunisation is indicated in these cases.

PEP schedule in one visit

The Belgian advice now includes the option to administer rabies post-exposure prophylaxis (PEP) on one day for individuals who have already been vaccinated in advance (following pre-exposure prophylaxis (PrEP): two or three visit schedule).

The rabies vaccine (mini doses of 0.1 mL) is administered via intradermal injection in four different locations (e.g. the front of both forearms and the deltoid muscle of both upper arms).

Communication to third parties

Please disseminate this information as widely as possible to General Practitioners, A&E physicians and travel clinics.

The ITM physicians can always be consulted if there are any questions about rabies post-exposure prophylaxis (or, after hours, the Department of Infectious Diseases at the Antwerp University Hospital).

Links

- [More information about rabies](#)
- [Rabies vaccines and immunoglobulins: WHO position: summary report of 2017 updates. Jan 2018](#)
- [Norwegian woman dies from rabies after Philippines puppy bite](#)