

17 Dec 2019

Worldwide rabies risk reminder

A reminder for travellers of the global risk of rabies

Human rabies is present in more than 150 countries and territories on all continents, apart from Antarctica [1].

Tens of thousands of people die each year from rabies, mainly in Asia and Africa, with over 95% of human deaths occurring in these two continents [1, 2]. Of those bitten by suspect rabid animals, 40% are children under 15 years of age. While rabies can spread to humans in saliva from any infected domestic or wild animal, the World Health Organization estimates that dogs are the main source of human rabies deaths, causing up to 99% of all human rabies transmissions [1].

As of 12 December 2019, a total of four fatal imported rabies cases have been reported in European travellers in 2019. In May 2019, Norway confirmed one rabies-related death following infection in the Philippines. In December 2019, three further fatal rabies cases were confirmed: one in Latvia in a traveller returning from India, one in Spain following infection in Morocco and one in Italy in a traveller bitten by a dog in Tanzania [3].

Advice for travellers

Rabies is spread by contact with saliva from any rabies-infected wild or domestic animal, including pets, via a bite, scratch or a lick to an open wound. It is usually fatal, once symptoms develop in humans. Bats also carry a form of rabies, so all bat bites and scratches should be considered a potential risk for rabies [4, 5]. Bat bites are often felt and not seen, and may not bleed or leave an obvious mark on the skin [5].

A course of rabies vaccine can prevent infection and death. Guidance on when protection should be started prior to travel is available on our [Country Information pages](#) but further management is still needed after all potential exposures [4].

The risk of exposure to rabies increases with longer trips and when undertaking activities such as cycling or running. Certain jobs: vets working overseas, animal control, conservation, wildlife work or volunteering in animal sanctuaries, may be very high risk.

Children are at particular risk, as they are most likely to touch animals and may not report being bitten, scratched or licked.

Before travel

Check our [Country Information](#) vaccine recommendations to see if rabies is present in bats, wild animals and/or domestic animals at your travel destination.

Consider a pre-exposure rabies vaccine course. This is especially important if you are travelling to a high-risk country and/or visiting remote areas, where medical care and rabies post-exposure treatment may not be readily available.

During travel

Avoid contact with any wild and domestic animals/pets. Remember animals that appear to be behaving normally can still be infectious:

- Do not approach any animals
- Do not pick up ill or unusually tame animals
- Do not attract stray animals by being careless with litter or offering food
- Remember activities like cycling or running often attract dogs

What to do if you are bitten, scratched or spat at by any animal abroad:

- Immediate: thorough wound washing with soap and water after animal contact is crucial [1].
- If you are bitten or scratched by an animal or if an animal licks open skin, you must immediately flush the wound/area under a running tap for several minutes, then thoroughly wash with soap/detergent and water to remove saliva.
- Apply a disinfectant like 70% alcohol or iodine solution and cover wound with a simple dressing.
- If animal saliva gets into your eyes, nose or mouth (i.e. if the animal coughs, spits or sneezes close to your face), wash your face thoroughly with clean water as soon as possible [4].

Get urgent medical help, even if the wound or incident seems very trivial. Prompt post-exposure treatment is needed, even if you have already had a full pre-exposure vaccine course, as further vaccine doses are required for full protection. If you had rabies vaccination before you travelled, make sure you carry your vaccine record with you.

If you did not have or did not complete a rabies vaccine course before travel, you may need treatment with a blood product called rabies immunoglobulin, as well as a full vaccine course. These are time critical.

In some world regions, both rabies immunoglobulin and vaccines may be unavailable. However, getting rabies vaccine (a different product to immunoglobulin) is critical in post-exposure treatment and should be started as soon as possible, whether or not immunoglobulin is available. You may need an emergency flight back to the UK or a nearby country for appropriate treatment and vaccines.

Ask for a written record of any post exposure treatment you receive overseas. If you do not feel comfortable with the medical advice you receive overseas, contact your medical insurance company.

After travel

If you had any potential exposure, however minor, get immediate medical advice on your return to the UK. This is important, even if you received post-exposure treatment abroad and the bite/exposure was weeks before, as you may need a rabies vaccine course in the UK. If you have a record of any treatment given abroad, remember to bring this with you.

Advice for health professionals

Health professionals advising travellers can check our [Country Information](#) to check rabies risk and vaccine recommendations at specific destinations

All travellers to [countries where rabies is known or presumed to occur](#) should be advised of the importance of first aid and of seeking urgent reputable medical attention if they are bitten, scratched or licked by any mammal. This advice is important for all travellers, whether or not pre-exposure vaccine was given.

Expert advice and guidance on assessing risk following rabies exposure including post-exposure treatment and public health management of a suspected rabies case in:

England - available from [Public Health England \(PHE\) Rabies and Immunoglobulin Service](#) on 020 8327 6204 or 0208 200 4400 (PHE Colindale Duty Doctor out of hours).

Northern Ireland - available from: the Public Health Agency Duty Room on 030 0555 0119

Wales - available from the Duty Virologist at University Hospital of Wales, Cardiff on 029 20 742 094 or 029 20 747 747 or from the Public Health Wales health protection team on 0300 003 0032.

Scotland - available from [Health Protection Scotland](#). Health professionals should contact their local infectious disease unit.

Resources

- [Public Health England: Rabies – Information for travellers](#)
- [Public Health England: Rabies: risk assessment, post-exposure treatment, management](#)
- [Rabies factsheet](#)
- [US Centers for Disease Control and Prevention: Learning about bats and rabies](#)
- [World Health Organization: Rabies Epidemiology and burden of disease](#)

References

1. World Health Organization. Rabies Factsheet. 27 September 2019. [Accessed 17 December 2019]
2. [World Organisation for Animal Health. What is rabies? 2019. \[Accessed 17 December 2019\]](#)
3. [European Centre for Disease Control. Fourth travel-related rabies case reported in the EU in 2019. 17 December 2019. \[Accessed 16 December 2019\]](#)
4. Public Health England: Rabies - the green book, chapter 27. Rabies immunisation information for public health professionals, including updates. Last updated 10 July 2018. [Accessed 17 December 2019]
5. [Public Health England. Information for individuals who have been bitten by a bat. 30 October 2019. \[Accessed 12 December 2019\]](#)