

12 Nov 2018

Worldwide rabies risk - reminder for travellers

NaTHNaC reminds all travellers of the global risk of rabies

Rabies is an infectious viral disease that is almost always fatal, once symptoms appear [1]. Rabies is one of the deadliest diseases that can be passed to humans from animals. Worldwide, there are tens of thousands of human cases of rabies each year. Rabies is found in all continents, except Antarctica, occurring in more than 150 countries, with over 95% of human deaths in Africa and Asia [1].

Rabies can affect both domestic and wild animals and is spread to people by animal bites or scratches, usually via saliva. Typically, symptoms do not appear immediately, but two to three months after exposure. However, this can vary from a week to a year, depending on the location of the bite/exposure and amount of virus present [1].

In the United Kingdom (UK), no human rabies cases acquired in the UK from animals (apart from bats) have been reported since 1902. Between 1946 and 2017, there were 25 human deaths from travel-related rabies in the UK. Five of these cases occurred between 2000 and 2017 [2]. Additionally, in 2002, a licensed bat handler in Scotland died from infection with a rabies-like virus present in bats in the UK [2]. None of the cases were known to have received pre-or post-exposure rabies treatment [3]. An additional case has been reported in a UK traveller during 2018 [4].

Advice for travellers

Rabies is spread by contact with saliva from any infected wild or domestic animal (including bats) usually by a bite, scratch or a lick to an open wound. It is usually fatal, once symptoms are present. A course of rabies vaccination can prevent infection and death [5].

Before travel

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

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

Children are at greatest risk, as they are most likely to touch animals, and may not report being bitten, scratched or licked, if they are very young or are worried about getting into trouble.

Consider having a [pre-exposure rabies vaccine](#) course, especially if you are travelling to a high risk country, undertaking activities that might put you at greater risk of an unexpected animal encounter (e.g. cycling, running) and/or visiting remote areas, where medical care and rabies post-exposure treatment may not be available.

Get comprehensive travel insurance that covers all medical evacuation costs.

During travel

Avoid contact with any wild animals (including bats) and domestic animals/pets:

- 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 certain activities, like cycling or running can attract dogs

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 a 70% alcohol or iodine solution, and cover the wound covered with a simple dressing. If you have an animal saliva exposure (usually by spitting) to your mucous membranes such as eyes, nose or mouth, wash thoroughly with clean water as soon as possible [3,5].

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 necessary.

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 after a potential exposure. In some parts of the world, 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 advice you have received at the time of your consultation overseas, you should contact your medical insurance company.

After travel

If you had any potential exposure, however minor, get medical advice immediately 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 to continue a course of rabies vaccines in the UK. If you have a record of any treatment given, remember to bring this with you.

Advice for health professionals

Health professionals advising travellers can use the TravelHealthPro website [Country information pages](#), vaccine recommendation section to see if rabies is present in bats, wild animals and/or domestic animals at the specific destination. Travellers considered at risk of rabies exposure include:

- animal workers travelling regularly to rabies risk areas
- travellers to rabies risk areas especially if:
 - visiting areas where access to post-exposure treatment and medical care is limited
 - planning higher risk activities such as cycling and running
 - long-stay travellers (more than one month)
 - health workers in rabies risk regions who may look after rabies infected patients [2]

Schedules for pre-exposure vaccination can be found in the [TravelHealthPro Rabies factsheet](#).

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 animal. This advice is important for all travellers, whether or not pre-exposure vaccine was given.

Health professionals must seek urgent specialist advice on assessing risk following rabies exposure for all individuals (including returning travellers and possible UK bat exposures) requiring post-exposure treatment. Expert advice and guidance for health professionals is available (depending on geographical location) from:

England

PHE Rabies and Immunisation Service, National Infection Service, Public Health England, Colindale on 020 8327 6204 or 020 8200 4400. (PHE Colindale Duty Doctor out of hours: 0208 200 4400)

Information also available on [PHE Bat rabies page: Specialist advice for health professionals](#)

Wales

Duty Virologist, University Hospital of Wales, Cardiff: 029 20 742 094 or 029 20 747 747; or Public Health Wales Health Protection Team on 0300 003 0032 (contact via the local ambulance control out of hours)

Northern Ireland

Public Health Agency Duty Room: 0300 5550119. Rabies vaccine is available from the Royal Victoria Hospital Pharmacy Department, Belfast (028 9024 0503).

Scotland - Local on-call infectious diseases consultant:

Aberdeen Royal Infirmary - 0345 456 6000

Crosshouse Hospital, Ayrshire - 01563 521 133

Queen Elizabeth Hospital, Glasgow - 0141 201 1100

Monklands Hospital, Lanarkshire - 01236 748 748

Ninewells Hospital, Dundee - 01382 680 111

Raigmore Hospital, Inverness - 01463 704 000

Royal Infirmary, Dumfries and Galloway - 01387 246 246

Victoria Hospital, Fife - 01582 643 355

Western General Hospital, Edinburgh - 0131 537 1000

Resources

- [Public Health England: Rabies guidelines on managing post-exposure treatment](#)
- [Public Health England: Rabies risks by country](#)

- [Public Health England: Rabies epidemiology, transmission and prevention](#)
- [Rabies](#)
- [World Health Organization: Rabies Epidemiology and burden of disease](#)

References

1. World Health Organization. Rabies Factsheet. 13 September 2018. [Accessed 7 November 2018]
2. Public Health England. Rabies: epidemiology, transmission and prevention. 2 November 2018. [Accessed 7 November 2018]
3. TravelHealthPro. Rabies Factsheet. 3 October 2018
4. [Public Health England. Public Health England warns travellers of rabies risk. News Story. 12 November 2018](#)
5. Public Health England. Immunisation against infectious disease. Rabies. Ch 27. [Accessed 7 November 2018]