UNPREDICTABLE ANIMAL BEHAVIOR AND OTHER RISK FACTORS

You might not be intending to interact with animals on your trip and feel that you will be able to avoid them, but often animals can behave in unpredictable ways (especially when infected with rabies). There are some simple ways that can help to reduce your risk:

• Don’t approach any animals
• Don’t pick up ill or unusually tame animals, although those behaving normally can still be infected
• Don’t attract stray animals by offering or dropping food

Children are especially at risk as they are more likely to spontaneously interact with animals, less likely to report a bite or scratch, and more likely to be bitten on the head and shoulders, meaning there is less time for treatment before the virus reaches the brain.

Some of the main risk factors for rabies exposure include:

• Travel to Southeast Asia, India and North Africa
• Young age
• Traveling for tourism

WHAT YOU CAN DO BEFORE YOU GO FOR GREATER PEACE OF MIND

Because rabies is a fatal, but vaccine-preventable disease, PrEP can give you psychological reassurance in the case of an animal bite or contact, and partial physiological protection in case of unrecognized exposure or delayed PEP administration.

In addition, PEP greatly simplifies and shortens the course of post-exposure vaccination (Figure 2) and reduces the need for rabies immunoglobulin (RIG). PrEP is made from the donated blood serum of people who have been vaccinated against rabies. It is in short supply worldwide, often requiring significant extra or emergency travel to acquire.

If you’re traveling to a high-risk area, PrEP may be recommended, so make sure you speak to an HCP before you go.

ASSESSING YOUR RISK

WHY YOU MIGHT CONSIDER BEING VACCINATED AGAINST RABIES BEFORE YOUR TRIP:

• Travel plans can change to include previously unplanned higher risk activities
• Peace of mind — although you will still need to seek medical care as soon as possible, PEP means you may have a certain amount of protection and a longer window of opportunity to get to a treatment center

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ONCE YOU’RE THERE

If you are bitten or scratched by an animal, or if it licks open skin, there is a defined procedure to follow:

Firstly, wound washing is crucial. You must immediately remove saliva by flushing the wound/area under a tap for at least 15 minutes, then wash thoroughly with soap or detergent and water.

If possible, disinfect the wound with an alcohol- or iodine-based disinfectant.

Seek medical help as soon as possible from the nearest medical clinic, hospital, or PHO — don’t wait until you return home.

If you’ve had PEP, then you may need 2 additional vaccine doses — RIG is not needed.

FIGURE 1. RABIES IS ENDEMIC IN MANY POPULAR TOURIST DESTINATIONS

Distribution of risk levels for humans contacting rabies, worldwide, 2016

HIGH-RISK AREAS

FIGURE 2. ACTIONS TO TAKE FOLLOWING A POTENTIAL EXPOSURE TO RABIES

PEP

Animal contact:
Potential rabies exposure

Wound washing (≥15 minutes)

Without PrEP

+RIG

If PrEP received before trip

If no PrEP received before trip

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Rabies infection may only take a scratch
- Rabies is transmitted by the bite or scratch of an infected domestic or wild mammal, as well as any direct contact between broken skin or mucous membrane and saliva of an infected mammal.1
- Exposures that can lead to infection vary, from severe bites to small, superficial skin lesions that can often go unrecognized and unnoticed.3–7
- Children under 15 make up 40% of people bitten by suspect rabid creatures as they are generally more likely to interact with animals.1–3
- Rabies is almost always fatal when left untreated.

Rabies is vaccine preventable
- The vaccine is also given after a bite from a potentially infected animal - as post-exposure prophylaxis (PEP) — with fewer doses over shorter time if PrEP has already been given.1
- There are effective vaccines against rabies that are administered in a series of injections.
- Rabies infection may only take a scratch.
- Rabies is present in more than 150 countries but 95% of cases occur in Asia and Africa.
- Globally, up to 99% of rabies transmissions to humans are via dogs; in the Americas, bats are now the major source of rabies deaths, but all mammals can catch it and pass it on, including cats and monkeys.1
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- Traveler exposure to animals is frequently reported in popular destinations such as Thailand, Indonesia and Morocco where rabies is endemic.

Rabies is still present globally
- There is no cure for rabies once clinical symptoms appear.1
- When infected with rabies, progressive and fatal inflammation of the brain develops as the virus spreads there through the central nervous system.1
- There is no rabies vaccine available for those already infected.1
- Rabies is known to be the cause of 59,000 human deaths each year, most in Asia and Africa.1
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Rabies, vaccine preventable
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- These vaccines can be given as a preventative measure. This is known as pre-exposure prophylaxis (PrEP).1
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USEFUL LINKS
Global Alliance for Rabies Control
rabiesalliance.org/about/about-rabies
Bavarian Nordic, Lowering the risk of infectious diseases
loweringtherisk.com/
WHO Fact sheet
who.int/news-room/fact-sheets/detail/rabies
WHO Rabies-Bulletin Europe
who-rabies-bulletin.org/
CDC information for travelers
cdc.gov/rabies/specific_groups/travelers/index.html
International Association for Medical Assistance to Travellers (IAMAT)
iamat.org/guidelines

REFERENCES