



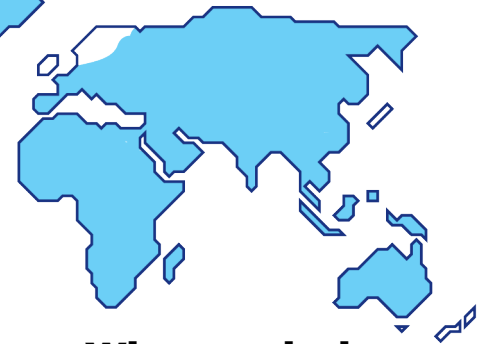
### What

Rabies is caused by a virus which can be transmitted via bodily fluids, usually saliva, through mucous membranes or broken skin. The virus then spreads slowly via the nervous system to the brain.



### Who

Rabies has a worldwide distribution with few exceptions. Approximately 59,000 people worldwide die of dog-mediated rabies each year. Most deaths occur in resource-poor countries because of inadequate control of rabies in domesticated animals and poor access to healthcare services. Almost all cases are caused due to a bite from an infected animal, usually a dog.



### Where and when

In resource poor countries rabies is more prevalent. The virus may be present in any mammal, but bats, cats, and various wild carnivores are particularly known to be reservoirs. Any bite by a mammal in a Rabies endemic country warrants a thorough exposure risk assessment.

### Prevention

Travelers to areas where the risk of exposure may be high should strongly consider pre-exposure vaccination. In addition, all travelers should avoid exposure to stray and wild animals. Children should be closely supervised when traveling, since they are more likely to inadvertently provoke animals.



### Treatment

After an animal bite, prompt wound management should take place and medical advice should be sought immediately. Interventions are intended to prevent infection. For unvaccinated travelers this includes the administration of Human Rabies Immunoglobulins and post-exposure vaccination; for those who have been vaccinated, post-exposure booster vaccination is indicated. Once there is established infection there is no effective treatment. Clinical infection will almost invariably lead to death.

### Symptoms

The incubation period of Rabies is unclear and may range from 20-90 days in humans. Development of symptoms depends on pre-exposure prophylaxis (i.e. vaccination), the management after exposure and depends on the localisation of the wound. Untreated the infection will cause non-specific symptoms, followed by neurological symptoms (typically muscle spasm of the throat and fear of water), coma and death.



### In case of infection

After exposure, ideally the biting animal is tested and/or observed. Pre-exposure prophylaxis and the immunity of the victim will determine the course of action. Untreated an infection will develop from a stage with aspecific symptoms, to neurological symptoms, coma and death.