

# Rabies

## Acute viral disease of the central nervous system of mammals

### Epidemiology

- **Causative agent:** *Rabies virus* (RABV), genus *Lyssavirus*, family *Rhabdoviridae*.
- **Hosts:** All mammals. Carnivores and bats are the main reservoir hosts.
- **Transmission:** Via saliva, usually by a bite of a rabid animal.
- **Incubation period:** 2 weeks - 6 months, most cases present 3 months after infection.
- **Morbidity and mortality:** Extremely high case fatality rate.
- **Zoonotic potential:** High, however preventable by vaccination. Extreme caution should be taken when handling tissue from suspected rabid animals.

### Differential Diagnoses

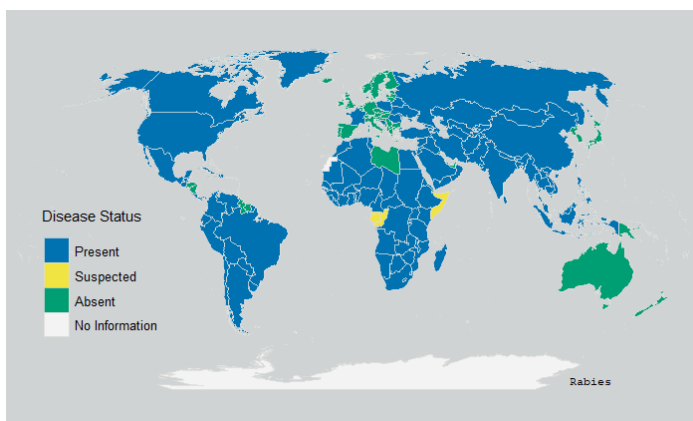
**Endemic:** CNS neoplasia, foreign body in mouth, ketosis, milk fever, sepsis, toxins/poisoning (e.g. lead, organophosphates).

**Exotic:** TSEs.

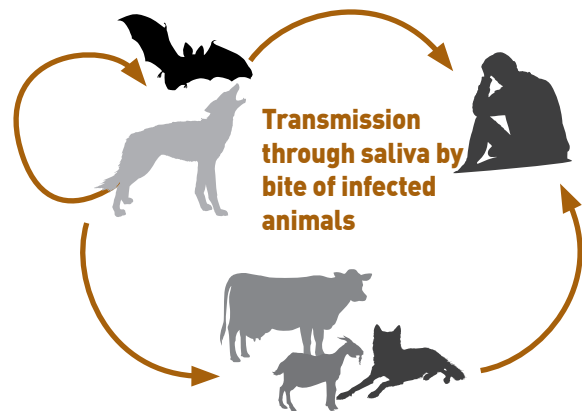
### Global Distribution

Areas free of rabies are typically islands including the United Kingdom, Ireland, Sweden, Norway, Iceland, Japan, Australia, some islands in Southeast Asia, the Caribbean and the Pacific. New Zealand has never had a case of rabies.

This map is only a guide on the global disease distribution of rabies. With the kind authorisation of the World Organisation for Animal Health [OIE], maps are adapted from the latest information on the World Animal Health Information Database (OIE-WAHIS Interface: <https://wahis.oie.int/#/home>), as at April 2021.



### Circulation of RABV in wildlife



**CAUTION: extreme care should be taken and PPE should be worn when handling tissues from suspected rabid animals.**

### Clinical Presentation

Signs are variable but usually see unexplained paralysis +/- behavioural change. There are two main forms:

#### Furious form

- Restlessness, excitement, vocalisation
- Aggression, attacks incl. on inanimate objects
- Ascending paralysis, ataxia, seizures
- Death

#### Paralytic ("dumb") form

- Minimal behavioural changes, may see depression
- Progressive paralysis causing signs such as salivation, ataxia, jaw drop, sagging of hind quarters and tail, loss of rumination.
- Death

**Report any signs of rabies to 0800 80 99 66**