

Rabies Symptoms and Animals

Rabies virus is an enveloped negative sense single stranded RNA virus that causes rabies disease in humans and animals. Rabies is commonly transmitted by a bite from an infected animal and infects the CNS, ultimately causing disease in the brain. Any warm-blooded animal, including humans, are capable of being infected with rabies and developing symptoms. Common animals in the United States that transmit rabies include bats, raccoons, and skunks. Outside the United States, dog bites are the most common mechanism of disease transmission. The incubation period of the disease is usually a few months but can be variable depending on the distance the virus needs to travel to reach the CNS and the brain. For example, bites of the face have very little incubation time and symptoms can be seen relatively quickly after the bite. Early symptoms include fever and malaise and quickly evolve to anxiety, insomnia, agitation, paralysis, and delirium. Patients exhibit hydrophobia due to inability to swallow caused by paralysis of facial and throat muscles and agitation at the site of water. Photophobia is also commonly seen in patients. Rabies is invariably fatal in humans if postexposure prophylaxis is not administered before the onset of severe symptoms.



PLAY PICMONIC

Characteristics

Bats, Skunks, and Raccoons (Inside United States)

Bat, skunk, and raccoon with United States flag

Bats, skunks, and raccoons can transmit rabies are the most common sources of rabies infection in the United States.

Dog Bites (Outside United States)

Dog without American-flag

Outside the United States, one of the most common sources of rabies infection is dog bites.

Fever

Fever-beaver

Early symptoms include fever and malaise.

Agitation

Agitated rabbit

Agitation is a common symptom of rabies disease. Infected individuals can present with extreme agitation, confusion, terror, and hallucinations that progress to delirium.

Paralysis

Wheelchair

Damage to infected neurons can cause partial paralysis in patients with rabies.

Hydrophobia

Scared-of-water

Patients exhibit hydrophobia due to inability to swallow. This is caused by paralysis of facial and throat muscles, and agitation at the sight of water.



Photophobia

Afraid-of-light

Photophobia is an abnormal intolerance to light, and is commonly seen in patients with rabies.

Considerations

Fatal If Not Treated

Gravestone

Rabies is invariably fatal in humans if postexposure prophylaxis is not administered before the onset of severe symptoms.