

# Rabies

The rabies virus is a member of the rhabdovirus family. The virus can cause disease in any mammal, but horses and humans are two species with above-average susceptibility to the disease. Once the neurological signs of rabies are detected in horses, the disease is 100% fatal. In animals, there is no known cure.

Bites and licks are the big risk because the virus is found in infected animals' salivary glands and is transmitted through their saliva--usually through a bite or a scratch, but potentially also through contact with the victim's mucous membranes or an existing wound. You can't get rabies through unbroken-skin contact with a rabid animal. There must be saliva-to-wound contact (most likely a bite) or saliva-to-mucous membrane contact. Blood and urine do not contain the rabies virus.

Rabies is a disease of the central nervous system. When a horse or other mammal is bitten by a rabid animal, the virus enters the victim's body through the bite wound. It proceeds to replicate in the local area of the bite, thereby invading the local nerves. There might be some localized redness or itchiness around the bite wound but in many cases, no symptoms exist.

During the incubation period, the rabies virus migrates to the central nervous system and eventually to the horse's brain, by working its way up the local nerve pathway. The length of the incubation period varies widely, depending on the location of the bite. It could take as long as six months for the virus to reach the brain — with no clinical signs of illness. But if the bite were close to his brain--say, on his nose--the incubation period could be as short as two weeks. As the virus multiplies, it consumes the brain matter, and the resulting symptoms vary depending on what parts of the brain the virus invades. This is the swift and final stage of the disease; death is at most three to five days away.

Acute rabies symptoms can include a high fever, temporary or permanent blindness, behavior change, depression, excessive salivation, difficulty swallowing (caused by paralysis of the facial muscles and the salivary glands, where the virus is concentrated), heart arrhythmia, abnormal

aggressive or excitable behavior, colic, depression, seizures and sensitivity to water, from the maddening combination of excessive thirst and an inability to drink caused by paralyzed face and throat muscles.

A rabid horse which displays aggressive behavior is said to be afflicted with the "furious" form of the disease. One which shows extreme depression and lethargy is said to suffer from the "dumb" or "stuporous" form. In horses, the latter form is more common, or may be followed by the "furious" form. If the horse is not humanely destroyed soon after it begins showing symptoms, he'll eventually lapse into a coma as the disease ravages his brain, and death soon will follow.

If Rabies is suspected the animal should be isolated into a safe enclosure such as a round pen or stall that is difficult to kick out of. Clothing for personnel should be full coveralls with long sleeves, boots and double gloves. Only saliva contains the virus - clothing that touches these fluids of the animal should be sanitized with bleach and all facilities cleaned thoroughly. Blood or urine do not contain the rabies virus.

Rabies cannot be diagnosed through blood, saliva, or urine tests or by any other means in a living animal. The only way to obtain a definitive diagnosis is by examining the victim's brain tissue after death.



Self Mutilation by a Rabid horse