



Rabies Control

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Rabies is a serious disease caused by a virus. The rabies virus is present predominantly in the saliva of rabid animals and is transmitted most often by a bite. Rabies causes an inflammation of the brain and is almost always fatal once symptoms develop. Each year many thousands of cases of rabies in animals are confirmed in the United States and more than 20,000 people receive anti-rabies immunizations after being exposed to a rabid or suspected rabid animal.

What signs does an animal with rabies exhibit?

Animals infected with rabies may be aggressive and attack without fear or provocation, or they may act sluggish and have difficulty walking because of partial or total paralysis. Animals that are usually out only at night may be seen in daylight and may approach people or other animals they would normally avoid. Drooling, or what has become known as "foaming at the mouth," may or may not be present. It is very difficult to know if an animal has rabies just by the way it acts or appears. The only sure way to know if an animal has rabies is to euthanize it and have its brain tested. Early signs of rabies are subtle; in fact, these animals can appear innocent, healthy and docile. Therefore, caution should always be applied when encountering wildlife or stray animals.

Which animals are most frequently infected with rabies?

Mammals, such as skunks, raccoons, foxes and bats are most commonly infected. Although bats are considered a minor reservoir of rabies in nature, recently they have been responsible for most of the human rabies in the U.S. All mammals can be infected with rabies if they are bitten by a rabid animal and survive long enough to develop rabies disease. Nationally, cats are the domestic animal most frequently reported rabid. This frequency is due to several factors, one of which is their low vaccination rate. Animals such as squirrels, rats, mice, other rodents and rabbits are rarely infected with rabies. Reptiles, amphibians, fish, birds and insects cannot get rabies or transmit rabies virus.

How do people get rabies?

Rabies infection most often occurs when a rabid animal bites an individual. Exposure to rabies also can occur when



saliva from a rabid animal comes in contact with a fresh, open wound (one that has been bleeding in the last 24 hours), or with the eyes or other mucous membranes. Getting saliva on the intact surface of the skin does not cause rabies. You cannot get rabies by petting an animal. Saliva from an infected animal must get through the skin, usually from a bite. If a person or animal is infected with rabies virus, it generally takes two to eight weeks for the virus to multiply and cause signs and symptoms of rabies. If rabies post exposure immunizations are not obtained and the infection progresses to the central nervous system, rabies is almost always fatal.

What should I do if my dog, cat or ferret is bitten or exposed to rabies?

Management of a pet bitten by a rabid animal depends on the circumstances of the exposure and whether the exposed animal has a current rabies vaccination. If the animal has not currently been vaccinated by a veterinarian, it will have to be euthanized or quarantined from contact with other animals and people for six months under veterinary supervision in a special confinement pen or kennel. This is why it is very important to have rabies vaccinations kept up to date and administered by a veterinarian for all dogs, cats, and ferrets.

What is the Treatment for Rabies?

There is no specific treatment for rabies once clinical symptoms of the disease have begun. Therefore, prevention is key.

Wounds resulting from exposures to animals, especially if rabies is suspected, should be immediately and thoroughly washed with soap and water. Medical attention should then be sought to determine if anti-rabies immunizations should be initiated and to evaluate wounds for tissue damage and need for antibiotics to prevent bacterial infections commonly associated with animal bites.

Before a decision is made to start rabies post-exposure shots, all attempts should be made to capture the biting animal, if available, and have it evaluated to determine if it has rabies. Wild animals may need to be euthanized and their brains tested for rabies. A healthy dog, cat or ferret that bites a person must be confined for 10 days and observed for signs of rabies. Pets with no current history of rabies vaccination by a veterinarian must be quarantined at a veterinary hospital or recognized animal control facility according to state rabies control regulations. If the animal is not available for testing, the decision to undergo treatment is usually based upon a doctor's recommendation. Consultation with the Oklahoma State Department of Health is also encouraged.

Rabies can be prevented with immunizations if administered within days of an exposure. The rabies post-exposure treatment consists of a series of inoculations (most administered in the muscle of the arm) through a period of 14 to 28 days. This regimen is not the painful shots in the stomach used years ago. The rabies immune serum and vaccinations are both very safe and effective, but can be costly. Despite the availability of this highly effective vaccine, rabies is best managed through prevention measures.

How can rabies be prevented?

- 1. Vaccinate all dogs, cats, ferrets, horses and valuable livestock.** Unvaccinated domestic animals are susceptible to rabies if they come in contact with rabid wildlife and could then transmit rabies to people. Rabies vaccinations should be kept current. Even if you consider your animal an indoor pet, your pet could get outside when a door is opened. It is very important to have your veterinarian vaccinate ALL DOGS, CATS and FERRETS against RABIES. Oklahoma administrative law requires all dogs, cats and ferrets over four months of age be currently immunized against rabies. Horses and cattle get rabies too, so check with your veterinarian about vaccinating your horses, cattle and sheep.
- 2. Avoid contact with wildlife.** Teach children not to feed or touch wildlife (including bats). If you encounter injured or orphaned wildlife, contact local animal control or a game warden for assistance. Never touch or pick up a bat without gloves. Sick bats are often infected with rabies.

- 3. Avoid attracting wild animals that might have rabies into your yard or home.** Keep garbage cans covered with tight-fitting lids. Do not leave pet food outdoors. Prevent animals from getting into your home by placing a cap on your chimney, keep garage doors closed and eliminate places where animals can take up residency. Exclude bats from houses and structures near homes.
- 4. Avoid contact with stray animals and animals you do not know.** Stray cats and dogs are more likely to come in contact with wildlife that could be infected with rabies. Do not pet or feed these animals; rather, call the animal control officer in your area.
- 5. If you are bitten or possibly exposed to rabies,** wash the wound thoroughly with lots of warm water and soap as soon as possible. If you cannot confine the biting animal, pay close attention to what it looked like and where it went, so this information can be quickly shared with animal control officers or other persons involved with trying to locate the animal for observation. Seek medical attention from a health care provider. Treatment should be considered for any physical contact with bats. All animal bites should be reported to a local animal control officer or the county health department.
- 6. If you see an animal that looks like it has rabies,** do not approach the animal or try to help it. Contact your local animal control agency or health department for assistance.
- 7. Responsible pet ownership.** It is critical to vaccinate all dogs, cats, ferrets and livestock, and quarantine any biting animals. If pets come in contact with a skunk or bat, take the pet to a veterinarian because they should receive a rabies booster. All pets should be kept in some type of enclosure, either a house, fenced yard, or kennel, and not allowed to roam free. Keep pets on a leash when they are outside their enclosure.

For additional information, see: https://www.ok.gov/health/Disease_Prevention_Preparedness/Acute_Disease_Service/Disease_Information/Rabies.html

References

- CDC - Human Rabies - Montana and Washington, 1997. MMWR 1997, 46,770-773.
- Clark, Keith A. Rabies. Zoonosis Updates from JAVMA, from Zoonosis Control Division, Texas Department of Health, Austin, TX 78756. 1990.
- Compendium of Animals Rabies Control, 1997, Part III: Rabies Control. JAVMA, Vol. 210, No. 1, January 1, 1997, p. 33-37.
- Public Health. Source: Clinical Veterinary Medical Newsletter, Extension Veterinary Medicine, KSU Veterinary Medical Teaching Hospital, November 1994. Submitted by Michael Anderson, DVM, Animal Welfare Committee, as published in the AABP Newsletter, August, 1994.
- Rabies: Advancing Toward the 21st Century. Publisher: Professional Information Management, Inc., February 10, 1995.

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