

Rabies

What is rabies?

Rabies is a disease caused by the rabies virus that affects the nervous system of humans and other warm-blooded mammals. Human rabies is very rare in the United States.

Can you die from rabies?

Rabies infections are almost always fatal once symptoms of the disease have started.

How is rabies spread?

The rabies virus is found only in the brain, spinal cord, and saliva of animals sick with rabies. The rabies virus can be spread to humans if any of these fluids or tissues from an animal sick with rabies are introduced through a bite, into a fresh opening of the skin that has not scabbed over, or onto a mucous membrane (eyes, lining of the nose, or mouth).

How are you exposed to rabies?

The most direct route of exposure occurs from the bite of a rabid animal that breaks the skin. A non-bite exposure is when saliva, spinal fluid, or brain tissue from a rabid animal gets into an open wound or mucous membrane (eyes, nose, or mouth).

The following are NOT exposures to rabies:

- Being scratched by the animal (with no saliva contact)
- Contact with blood
- Contact with urine or feces
- Contact with dried saliva
- Petting, or otherwise touching the hair of a rabid animal
- Touching bowls, lead ropes, gates, trailers, or other surfaces the rabid animal contacted
- Being sprayed by a skunk



What steps should be taken following an animal bite?

1. Wash all bite wounds immediately with soap and water, and continue washing for at least ten minutes when possible.
2. Contact your healthcare provider as soon as possible. Animal bite wounds contain bacteria, so a tetanus booster and/or antibiotics may be needed.
3. If possible, safely catch or restrain the animal. Your local animal control or sheriff may be able to help catch the animal. Or, if the animal has an owner, get information about the animal's history of rabies vaccination and contact information about the owner.
4. Call the local county health department sanitarian to report animal bites. The sanitarian will help confirm the animal's condition and rabies vaccination status.
5. Call the Oklahoma State Department of Health Epidemiologist-on-Call at (405) 426-8710 to talk about rabies risk and if the rabies post-exposure prophylaxis (PEP) should be started. If the animal can be observed for signs of rabies, PEP should not be started during that observation period.
 - If a rodent or rabbit caused the bite, these are very low risk and rabies vaccination is usually not recommended.
 - If the biting animal was a dog, cat, or ferret (not owned by the bite victim and not currently vaccinated by a licensed veterinarian), the animal should be quarantined with a licensed veterinarian for 10 days.
 - Dogs, cats, and ferrets (not owned by the bite victim and currently vaccinated by a licensed veterinarian) may be allowed to be quarantined by the animal owner for 10 days.
 - If the biting dog, cat, or ferret dies or is euthanized during the ten day quarantine, it should be tested for rabies.
 - If the dog, cat, or ferret remains healthy after 10 days, it was not sick with rabies at the time of the bite and no further action is needed.
6. If another species of animal caused the bite, the local county health department sanitarian should be contacted. Animals other than dogs, cats, or ferrets may need to be quarantined for 30 days under the care of a veterinarian, or euthanized and tested for rabies.

When do you need the rabies shots?

People bitten by an animal that tests positive for rabies should always receive the rabies shots, also called post exposure prophylaxis (PEP). PEP generally consists of four doses of human rabies vaccine given in the arm (or thigh for small children) and rabies immune globulin (RIG), usually given at the same time as the first vaccine dose. Contact the Oklahoma State Department of Health Epidemiologist-on-Call for individual case recommendations. Rabies shots are NOT recommended while the biting animal is in quarantine or awaiting test results (for dogs and cats).

Which animals get rabies?

Bats, raccoons, skunks, foxes, and coyotes have strains of rabies virus adapted to their species. In Oklahoma, the rabies virus strains primarily include those adapted to skunks and bats. All mammals, including dogs, cats, horses, and cattle can be infected with rabies. Rodents (squirrels, hamsters, mice, rats, etc.), rabbits, and hares are very rarely infected and have never been known to cause rabies in humans in the United States. Birds, reptiles (snakes, turtles), and amphibians (frogs, toads) do not get rabies. In Oklahoma, skunks are the major carrier of rabies. Other rabid animals identified each year include bats, horses, cattle, cats, dogs, and other mammals.

How long after exposure to the rabies virus will the first symptoms start?

The time interval between the exposure to the rabies virus and onset of symptoms can depend on; the type of animal exposed, and the place on the body where the exposure occurred. For cats, dogs, and horses, this time interval is generally between three to eight weeks. **For humans**, the time interval is typically four to 12 weeks.

How can an animal be tested for rabies?

In order to test an animal for rabies, brain tissue must be undamaged. It is important to remember:

- Not to shoot the animal in the head
- Not to crush the skull of the animal
- To refrigerate (not freeze) the animal carcass until it can be delivered to a veterinarian for removal of the head, then quickly send the head to the Oklahoma Animal Disease Diagnostic Laboratory.
- Call the Epidemiologist-on-Call at (405) 426-8710 for details and directions.

How can rabies be prevented?

- Be a responsible pet owner! Make sure all pets are current on their rabies vaccination. Oklahoma state law **requires** that all dogs, cats and ferrets be immunized against rabies by or under the supervision of a veterinarian by the age of **four months**. It is also recommended that horses and valuable livestock be vaccinated against rabies.
- Keep dogs and cats close to home. Dogs should be leashed or within a fenced-in area when outside. Cats should be kept in at night and not allowed to roam freely.
- If your pet comes into contact with a skunk or bat, contact your veterinarian as soon as possible.
- Do not keep wild animals as pets. If you see an injured wild animal, contact the nearest animal control agency or wildlife rehabilitation station to handle the situation. Teach children to avoid contact with animals that are unfamiliar to them, especially downed bats and stray dogs and cats.
- Discourage wild animals from inhabiting areas close to residences. Do not leave pet food outdoors for long periods of time, keep trash cans tightly sealed, keep brush piles cleared away from buildings, and seal chimneys.
- Bats found inside your home, whether alive or dead, should be tested for rabies. **DO NOT** release or dispose of the bat before contacting the Epidemiologist-on-Call at (405) 426-8710 for advice.



OKLAHOMA
State Department
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Infectious Disease
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For more information please visit
oklahoma.gov/health/rabies
or call (405) 426-8710.