

What is rabies?

Rabies is a rare but deadly disease, caused by a virus that attacks the nervous system. Rabies still exists throughout the world and at least 60,000 people die from it each year. Rabies can be prevented, but once symptoms appear it is invariably fatal.

Vaccination and animal control programs have successfully decreased the frequency of cases in the United States. On average, 3 people and 7,000 animals are known to die from rabies in the U.S. each year. In Ohio, approximately 60 animals are confirmed positive for rabies annually. The last human case in Ohio occurred in 1970.

Who can get rabies?

In the United States, Rabies is most often found among wild mammals such as raccoons, bats, skunks, coyote and foxes. Cats, dogs, horses and livestock can also get rabies, if they are not vaccinated

Some animals rarely get rabies. These include rabbits, squirrels, chipmunks, rats, mice, guinea pigs, gerbils and hamsters. They can get rabies, but it *almost* never happens.

Other animals, such as birds, reptiles, fish, and insects *never* get rabies.

How is rabies spread?

Rabies is spread through contact with infected saliva. This usually happens during a bite, but may also occur if saliva contacts an open wound or mucous membranes such as eyes, nose or mouth. Contact with the brain or other nervous tissue of an infected animal may also spread the disease. Rare cases of human to human transmission have occurred through organ donations.

Other body fluids including urine, blood, feces and skunk spray do not contain enough virus to transmit the disease.

How long after exposure before symptoms appear?

It may take several weeks or even a few years for people to show symptoms after getting infected with rabies, but usually people start to show signs of the disease 1 to 3 months after exposure to the virus.

What are the symptoms of rabies in humans?

The early signs of rabies can be fever or headache, but this changes quickly to nervous system signs, such as confusion, sleepiness, or agitation. Once someone develops these symptoms they will likely die of the disease. This is why it is very important to talk to your doctor or health care provider right away if any animal bites you, especially a wild animal.

What are the signs of rabies in an animal?

The first sign of rabies is typically a change in the animal's behavior. It may become unusually aggressive or unusually tame. The animal may lose fear of people and natural enemies. It may become excited, irritable and snap at anything in its path. A wild animal may appear affectionate and friendly. Staggering, convulsions, spitting, choking, frothing at the mouth and paralysis are sometimes noted. Many animals have a marked change in voice. The animal usually dies within a few days after showing signs of rabies.

How is rabies diagnosed in humans?

Several tests are necessary to diagnose rabies ante-mortem (before death) in humans; no single test is sufficient. Tests are performed on samples of saliva, serum, spinal fluid, and skin biopsies of hair follicles at the nape of the neck.

How is rabies diagnosed in animals?

There are no reliable tests for animals that can be used while they are alive. Animals with clinical signs of rabies should be humanely euthanized so they can be sent to the Ohio Department of Health Laboratories for testing.

Can rabies be treated?

There are no standard treatments that are successful once signs are apparent.

Can rabies be prevented?

Yes, rabies is preventable. Licensed vaccines are available for dogs, cats, ferrets, and horses. These vaccines are important not only to keep your pets from getting rabies, but also to provide a barrier of protection for you, if your animal is bitten by a rabid wild animal.

Human pre-exposure vaccines are available for those at high risk of exposure such as wildlife officers, veterinarians, and animal care workers.

After an exposure occurs in humans, vaccines are still effective in preventing the disease. For most people, rabies post-exposure vaccinations consist of a dose of human rabies immune globulin and four doses of rabies vaccine given on the day of the exposure and then again on days 3, 7, and 14. This set of vaccinations is highly effective at preventing rabies if given as soon as possible following an exposure. If a person has previously received post-exposure vaccinations or received pre-exposure vaccinations, only two doses of vaccine (on the day of exposure and then 3 days later) are needed. The circumstances surrounding each exposure are different and you should discuss the treatment options with your physician. If the animal is available for testing or can be quarantined for a 10-day period, it is sometimes recommended to wait until the results are available before undergoing the treatment.

What should I do after a bite or possible exposure to rabies?

Wash the wound thoroughly with soap and water. The rabies virus is easily destroyed by common disinfectants such as soap, so washing is a critical step in preventing rabies. Contact your doctor and your local health department immediately. If it can be done safely, have someone try to capture the animal without damaging its head. Having the animal available for quarantine or testing may eliminate the need for costly rabies prevention treatments.

What if I think my pet has been exposed?

If your pet has been in a fight with another animal, wear gloves to handle it or isolate your pet for several hours to avoid exposure to saliva on the animal's fur. Call your veterinarian right away. Vaccinated pets will need a booster dose of rabies vaccine within five days of exposure and should be kept under observation for 45 days. Unvaccinated animals exposed to a known or suspected rabid animal must be confined for six months or humanely destroyed.

For more information, visit these websites:

World Health Organization (WHO) rabies fact sheet:

<http://www.who.int/mediacentre/factsheets/fs099/en/>

CDC rabies homepage: <http://www.cdc.gov/rabies/>