

Protecting Your Family and Pets from Rabies¹

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Rabies is a disease that can be transmitted to you or your pets from an infected mammal. Rabies can be carried by both wild animals (such as raccoons, foxes, and bats), as well as domestic pets or livestock that have not been vaccinated (such as cats, dogs, and horses). The risk of catching rabies is low, but if left untreated the disease is fatal, and for this reason it is important to understand how to protect yourself and your pets.

What is rabies and how does it spread?

Rabies is a viral disease that is carried exclusively by mammals and is deadly to humans and animals if they are not treated shortly after exposure. It can be prevented but it cannot be cured if, or when, symptoms become evident. The virus attacks the central nervous system (the brain and spinal cord). The most common way the virus is transmitted is through saliva when a mammal with the virus bites another animal or person. Less commonly, the virus is transmitted when saliva or brain tissue of an infected mammal comes into direct contact with open wounds or mucous membranes (the eyes, nose, or mouth) of another animal or person. Although the virus can survive outside the body of a host for only a short period of time, it can survive in bodies of dead

animals for much longer periods. Therefore, the virus could spread through contact with saliva or brain tissue of a dead rabid animal. Rabies cannot be contracted by touching the fur, blood, urine, or feces of live animals with rabies.

Which animals can get rabies?

Fish, amphibians, reptiles, and birds cannot transmit rabies — only mammals are capable of spreading the disease. Worldwide, rabies is most frequently reported in dogs. However, rabies is uncommon in domestic animals in the United States, due to vaccination laws. The vast majority (90%) of reported cases of animal with rabies in the U.S. are wildlife.

The animals most commonly reported to have rabies in Florida are raccoons, foxes, bats, cats, dogs, bobcats, skunks, otters, horses, and cows (see Table 1 for details). Raccoons, foxes, and bats account for nearly 90% of all individuals testing positive for rabies, with the number of infected raccoons outnumbering the number of foxes or bats 6 to 1.

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Table 1. Number of individuals of each species that tested positive for rabies in Florida between 1986 and 2005

| Animal | # of individuals with rabies |
|---------|------------------------------|
| Raccoon | 2,519 |
| Fox | 405 |
| Bat | 390 |
| Cat | 258 |
| Dog | 63 |
| Bobcat | 36 |
| Skunk | 25 |
| Otter | 20 |
| Horse | 18 |
| Cow | 2 |

What are the symptoms of rabies?

Animals with rabies often behave abnormally. They may be either remarkably aggressive or unexpectedly passive. Aggressive animals may attack and bite other animals or humans for no apparent reason. Passive animals may seem unusually tame, and may be active at odd times of the day. For example, bats or raccoons active at midday in your home or yard that are easy to approach may be rabid. Infected animals are often unable to swallow, which makes eating and drinking impossible, and causes excessive drooling. Animals with rabies often move slowly and have difficulty walking or flying. The period of time between infection and when symptoms appear (the incubation period) can range from 1 week to 7 months. The period of time between the onset of symptoms and death (the morbidity period) is usually 1 to 17 days. Call your County Animal Control if you notice a wild mammal behaving unusually, and be prepared to describe the location and behavior of the animal.

Early symptoms in humans include headache, fever, irritability, insomnia, restlessness, anxiety, throat muscle spasms, and feelings of pain, burning, or numbness at the site of exposure. Eventually the victim experiences convulsions, paralysis, unconsciousness, and then death. In humans, the period of time between infection and when symptoms appear usually ranges from 2 weeks to 6 months. Once symptoms appear, it is too late to treat the disease. The period of time between the onset of symptoms and death is usually only 2 to 12 days.

The only way to confirm that a person or an animal has rabies is through testing done in a laboratory. It is advisable that any person or pet bitten by a mammal that may not be vaccinated visit a doctor or veterinarian at a hospital or clinic as soon as possible.

How common is rabies?

Although more than 30,000 people die of rabies each year worldwide, rabies is very uncommon in people in the U. S. On average, only 3 people in the U.S. die from the disease each year. To put this in perspective, the number of people that die each year from lightning strikes in the U.S. is 73. So, the likelihood of a person dying from rabies in this country is extremely low.

In the state of Florida, only 73 people have died from rabies during the past 125 years. Most of these people were children bitten by rabid dogs or cats prior to the 1950s. Due to stricter vaccination requirements for pets, the number of people contracting the disease has declined dramatically. According to Florida law, all dogs, cats, and ferrets greater than 4 months of age must be vaccinated against rabies by a licensed veterinarian.

How can you limit the spread of rabies?

There are many steps you can take to reduce the chances of getting rabies, which are summarized in Table 2. One of the first things to consider is your pets. Vaccinating your cats, dogs, ferrets, and horses will reduce the chances they will contract the virus, which in turn lowers the chances that you will get it from them. To reduce the chances that your pets come into contact with rabid animals, keep all pets on a leash when they leave the yard. If you think your pet may have been bitten by an unvaccinated mammal, put on gloves before examining your pet for bite wounds to avoid direct contact between yourself and the saliva from the other animal. If you don't notice any bite wounds but saliva is present on the fur of your pet, wash your pet with soap and water to remove the saliva. If you do notice any bite wounds, call your veterinarian immediately for advice. Do not try to remove a bat from the mouth of your pet

without wearing thick gloves, and contact your County Animal Control officer for advice on what to do with the bat.

Protect your home, yard, and neighborhood. Take steps to prevent wild mammals from entering your home or workplace. Exclude bats and raccoons from buildings by sealing potential entrances. See <http://edis.ifas.ufl.edu/MG342> or <http://edis.ifas.ufl.edu/UW007>

for more information on excluding bats from buildings. Do not leave items in your yard that might attract wild mammals near your home and your pets. For example, pet food should not be kept in the yard, and all trash should be kept in covered containers animals cannot open or knock over. Consider spaying or neutering your pet to prevent attracting stray animals and to limit the birth of unwanted animals that might become strays in the future. Do not trap wild or stray mammals and later release them in other locations, as this may spread disease. It is unlawful to relocate wildlife to public lands, and both a handling permit plus permission from the receiving landowner are required before wildlife can lawfully be released on someone else's private property. See <http://edis.ifas.ufl.edu/UW154> for more information on relocating wildlife.

Protect yourself. You should never pet or touch wild mammals (including stray cats and dogs) whether they are alive or dead. A bat found on the ground should not be picked up, as this behavior is unusual and could indicate the animal has a disease. The only exception to this is if a bat is found inside your home under one of the following three conditions: (1) if someone in your household wakes up to find a bat has landed on her or him while he or she slept, (2) he or she wakes to find a bat on the floor that seems incapable of flying, or (3) he or she finds a bat flying in a room with an unattended baby. In these three situations, it is recommended that the bat is captured (see <http://edis.ifas.ufl.edu/MG342> for instructions on safely catching a bat indoors) and tested for rabies. In each of these three situations, it is possible (although unlikely) that the bat could have bitten someone in the house while she or he slept without her or his notice.

Call a local animal rehabilitation center or County Animal Control if you find a sick or injured wild mammal rather than bringing the animal into your home to care for it yourself. See <http://edis.ifas.ufl.edu/UW069> for more recommendations on what to do with injured wild animals.

What should you do after a wild animal bite?

Only mammals are capable of transmitting rabies to humans, so if you were bitten by a fish, amphibian, reptile, or bird, there is no reason to worry about rabies. If you get bitten by a wild mammal or somehow get saliva from a wild mammal into your mouth, nose, eyes, or a wound, you should do three things. First, scrub the site of infection with soap and running water for 5-10 minutes. Second, call your County Health Department or County Animal Control Agency and give a detailed description of the animal you were in contact with plus information on your location at the time the incident occurred. Third, report to your doctor, a clinic, or an emergency room as soon as possible so a medical professional can determine if you should receive post-exposure rabies prevention measures.

Remember that rabies can only be transmitted through contact with the saliva or brain tissue of an infected mammal. There is little need to be concerned about getting rabies by touching the fur, scat, urine, or blood of wild animals (although you could potentially contract other diseases by touching some of these things)! Similarly, there is no reason to fear getting rabies when a bat is simply seen flying indoors or out, as long as no one is asleep or otherwise unable to notice being bitten.

Those few people who have died from rabies in the U.S. in the recent past could probably have been saved if they had been aware of the risk of rabies associated with bites from wild mammals. Obtaining immediate medical attention after a bite wound can save your life!

Table 2. Steps you can take to reduce the spread of rabies.

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| <p><u>Protect Your Pets</u></p> <ol style="list-style-type: none"> 1. Vaccinate your pets and your livestock 2. Keep your pets on a leash when they leave your yard 3. Wash your pet to remove saliva if your pet comes into contact with a wild mammal 4. Call your veterinarian if your pet is bitten by a mammal that may not be vaccinated |
| <p><u>Protect Your Home, Yard, and Neighborhood</u></p> <ol style="list-style-type: none"> 1. Do not allow wild animals to get into your home or workplace 2. Do not leave pet food outdoors that could lure wildlife with rabies into your yard 3. Do not leave uncovered trash outdoors that could attract wildlife with rabies to your home 4. Do not contribute to the spread of the disease by relocating wildlife that could have rabies 5. Spay or neuter your pet to reduce the number of unwanted pets that may become strays |
| <p><u>Protect Yourself</u></p> <ol style="list-style-type: none"> 1. Do not pet or touch wild mammals or strays with bare hands 2. Keep your distance from wild animals that are acting strangely (i.e., those that seem especially aggressive, particularly friendly, are active at an usual time of day, or are in a place you wouldnt normally expect them to be). 3. Notify County Animal Control when you observe wild mammals behaving unusually 4. Notify wildlife rehabilitators when you find injured mammals rather than caring for them yourself |

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