

# Rabies Prevention in Livestock

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Rabies is a viral disease of the central nervous system of mammals. The infection creates a progressive inflammation of the brain. In the United States, the primary reservoir for the virus is in wildlife; domestic animals are usually exposed by contact with infected wild animals. Bats, skunks and foxes are the usual culprits for spreading infection in Arkansas. In recent years, raccoons in the eastern United States have been severely affected by the rabies virus.

## How Is Rabies Spread?

The rabies virus is spread by contact with saliva from an infected animal, usually through bites or scratches, abrasions or open wounds in the skin. Domestic animals may become exposed during normal grazing or roaming. Occasionally, rabid wild animals will enter barns, paddocks and lots. Livestock are often exposed when they investigate this new animal in their surroundings.

## Symptoms

A rabies bite to an animal that has not been vaccinated is invariably fatal. There are various factors that determine the timing of the onset of symptoms, but the most important are the number of virus particles in the infection and how close the bite is to the brain. The classic, or “furious,” form of rabies may occur in livestock or pets. The animal appears nervous and agitated or becomes aggressive, attacking other animals and people.

However, the main symptom is unusual behavior, which gradually leads to depression or partial paralysis.

Cows typically develop a hoarse bellow. Drooling and abnormal swallowing may make them appear to have something caught in their throats. Some animals may only show depression and weakness, or partial paralysis, of the hindquarters. During the course of several hours to a few days, the animal will go down, develop convulsive seizures and die. Sheep have symptoms similar to cattle and sometimes vigorously pull their wool. The disease is often seen in more than one sheep in a flock because the animals stay close together and several can be easily bitten at one time. Goats with rabies are often aggressive and bleat continuously. Horses tend to contract the paralytic form of the disease and may initially show abnormal postures with wobbliness of the hindquarters, frequent whinnying, unexplained aggressiveness (with kicking and biting) and signs of colic. They may also show lameness in one leg, followed by an inability to rise the next day. Pigs with rabies tend to act excited and uncoordinated. Some animals will chew rapidly, salivate and convulse. Paralysis eventually occurs and death follows in 12 to 48 hours.

The symptoms seen in rabid animals may be quite variable, making early detection difficult. In addition, other diseases may mimic some of the signs of rabies. For these reasons, owners should isolate animals showing suspicious behavior or

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other signs so they may be observed carefully, and precautions should be taken to avoid injury by them. A veterinarian should be consulted to determine whether rabies should be considered in the diagnosis.

## Vaccination

All dogs and cats in Arkansas are required to be vaccinated for rabies by a licensed veterinarian. A number of rabies vaccines are available for domestic animals. All of the vaccines are killed, or inactivated, so they cannot cause disease. Several products are licensed for dogs, cats, cattle, sheep and horses. No products are currently licensed for goats, pigs, exotic animals (except ferrets) or captive wild animals. Vaccination of animals for which no approved product exists can create a false sense of security, especially in exotic or captive wild animals.

If you have questions about vaccinations of your livestock or horses, contact your local veterinarian, the Arkansas Department of Health's state public health veterinarian, the Arkansas state veterinarian or the University of Arkansas Division of Agriculture Cooperative Extension Service veterinarian.

## Animal Control

Stray cats, dogs, raccoons and other wildlife in and around barns and other farm buildings can increase the risk of rabies. Make your farm less attractive to these animals by eliminating nesting, hiding and roosting places and by using specific deterrents, such as screening potential entry points. Never feed stray animals or wildlife, and don't allow pet food or garbage to remain in open, unsecured containers. If you feed your own dogs and farm cats outside, leave the food down for 30 minutes, then take it up so that it will not attract wildlife or strays.

## Testing

Animals that demonstrate changes in behavior, especially extreme nervousness or aggression, difficulty in swallowing or signs of choking, changes

in voice or other suspicious signs, should be treated with caution and isolated. A veterinarian who can help make a diagnosis of possible rabies should be contacted. Rabies suspects are tested by the Arkansas Department of Health Public Health Laboratory. Arrangements for testing can be made through your veterinarian, local health department or the Arkansas Department of Health.

## What You Can Do To Help Protect Yourself

- Teach children to not approach or touch wild animals or animals they do not know.
- Do not keep wild animals as pets.
- Report any animal bite to your physician immediately.
- If you see a wild animal that is acting strangely such as a skunk or bat out during the daylight hours, do not approach it and protect yourself from being scratched or bitten by the animal.
- Report the location of the animal and the type of animal to your local animal control office or your local county health unit environmental health specialist.
- If you kill a wild animal that is acting strangely, do not shoot it in the head and call your local veterinarian, animal control officer or county health unit for instructions for getting the animal checked for rabies. There is no test for a live animal. Animal tissues tested for rabies are sent to the Arkansas Department of Health in special containers to prevent exposure.

If you have additional questions concerning rabies, contact your local veterinarian, public health department, the Arkansas state veterinarian, Arkansas public health veterinarian, USDA-APHIS veterinarian or Arkansas Extension veterinarian.

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