

Rabies in Horses: Should Horses be Vaccinated in Colorado?

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Livestock Series | Management

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Colorado Department of Public Health and Environment (CDPHE) reported a significant rise in the number of rabid skunks in heavily populated areas of Colorado in 2013. Horse owners in Colorado should seriously consider vaccinating their horses against rabies. The decision is based on a combination of factors: understanding the severity of the disease, the incidence of rabies in Colorado, the horse's relative risk of exposure and the number of people with whom the horse comes in contact.

Background

Rabies is a fatal viral disease that affects both animals and people. All warm-blooded animals are believed to be susceptible. Although the risk of being exposed is low, the consequence of contracting the disease is high. The rabies virus is shed in the saliva of a rabies-infected animal usually a few days prior to the development of clinical signs until death. The virus is normally transmitted between animals through bite wounds. Because there are no known effective antiviral treatments, once a person or animal exhibits clinical signs of rabies infection, death follows in days or weeks. However, rabies infections are rare in animals and people who have been protected by vaccination.

The rabies virus resides in the United States in two populations of wildlife: the carnivores (skunks, raccoons, foxes, etc) and bats. The incidence of rabies in these "reservoir" wildlife populations varies geographically and is a major determinant of the risk of domestic animal and human exposure. The primary ways of preventing human rabies and controlling animal

rabies are by vaccinating domestic animals, managing animals exposed to rabies, and managing animals that bite humans.

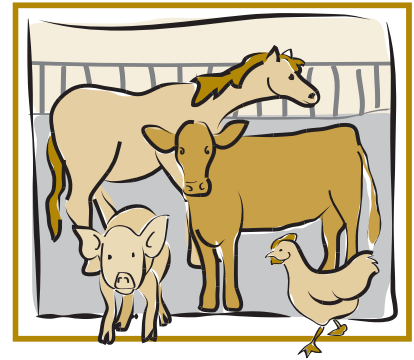
Incidence of Rabies in Colorado

Historically, the incidence of rabies has been low in Colorado but in 2007 a form of rabies associated with skunks began to appear in the eastern part of the state. Rabies is now commonly reported in the eastern counties and along areas of the Front Range. This form of rabies has caused rabies in domestic animals including dogs, cats, horses and livestock. Historic and current information about the incidence of rabies in Colorado animals (www.colorado.gov/cs/Satellite/CDPHE-DCEED/CBON/1251607766329) can be found at the CDPHE website on rabies under data and statistics.

Rabies in Horses

In horses as in other warm blooded animals; rabies is a severe, rapidly progressive neurological disease. It is transmitted via saliva, most commonly through bite wounds from an infected wild animal. Although symptoms may appear anytime from two weeks up to one year after exposure, on average symptoms appear four to eight weeks after the exposure. Death usually occurs two to four days after the horse begins to show clinical signs.

Once the virus enters the body, it replicates at the site of exposure, migrates through the peripheral nerves to the spinal cord, and then travels up the spinal cord to the brain. From the brain the virus migrates to the salivary glands where it replicates and is shed in high quantities in the saliva. At this point, the infected animal can expose others through its saliva.



Quick Facts

- Rabies is a fatal viral disease that affects both animals and people. All mammals are believed to be susceptible.
- The rabies virus is shed in the saliva of a rabies-infected animal usually a few days prior to the development of clinical signs until death. The virus is normally transmitted between animals through bite wounds.
- Historically, Colorado has not been an area with a large incidence of rabies. Beginning in 2007, a variant associated with skunks began moving westward and is now commonly reported in the eastern counties and along areas of the Front Range.
- The Colorado Department of Public Health and Environment reported a rise in the number of rabid skunks in heavily populated areas of Colorado in 2013.

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Rabies should be suspected in all horses that show a sudden onset of rapidly progressing neurological signs. However, horses with rabies may also show a wide range of clinical signs that resemble other more common diseases:

- Depression with loss of appetite
- Low-grade fever
- Abdominal pain or colic (straining to urinate or defecate)
- Lameness and/or incoordination
- Increased sensitivity to touch
- Swallowing problems and drooling
- Odd behavioral changes, nervousness, irritability
- Convulsions or seizures

Rabies can only be diagnosed with a laboratory test performed after death. Because the horse's symptoms may mimic other more common diseases, many people may be exposed to the infected horse while it is infectious. The best method to prevent human exposure is to ensure that horses, livestock and pets are protected against rabies with current vaccinations.

Vaccination Recommendations for Horses in Colorado

The [2011 Compendium of Animal Rabies Prevention and Control](http://nasphv.org/Documents/RabiesCompendium.pdf) (<http://nasphv.org/Documents/RabiesCompendium.pdf>) published by the National Association of State Public Health Veterinarians (NASPHV) recommends that vaccination be considered for valuable livestock, horses traveling interstate, and animals that have frequent human contact (such as public exhibition like fairs and petting zoos). The American Association of Equine Practitioners lists rabies vaccination as part of the core group of vaccines that should be administered to horses annually due to the rise of rabies across the country and the severity of the disease. [2013 AAEP Core Vaccination Guidelines](http://www.aaep.org/-i-165.html) (www.aaep.org/-i-165.html).

Rabies vaccines should be given by a licensed veterinarian and the owner should keep documentation of the vaccination

from their veterinarian. Without proper documentation, the horse may be considered “unvaccinated” by public health officials at the time of rabies exposure and treated as a threat to human safety.

Summary

Consult your veterinarian about the risk of your horse being exposed to rabies. Your veterinarian is familiar with your horse's management situation and knows the incidence and risk of rabies in your area. The risk of your horse getting rabies is low but the consequence of getting rabies is high because the disease is fatal.

To minimize exposure to rabies in general, remember:

- Do not handle wild animals or do any feeding around the house that may attract them.
- If you see wild animals that are acting strange, showing neurological symptoms, or showing odd behavior such as nocturnal animals (skunks and raccoons) being active during the day, contact your animal control officials or your local public health department.

References

- Compendium of Animal Rabies Prevention and Control, 2011
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