Equine Rabies

Rabies is caused by a virus that is contained in the saliva of the rabid animal and any warm-blooded vertebrate animal is susceptible to infection. However only a few types of animals serve as reservoirs of the virus in nature. Rabies is a zoonotic disease, which is a disease that is shared by and can spread between animals and man.

Domestic animals account for less than 10 percent of all animal rabies cases in the United States. The number of laboratory confirmed equine rabies cases reported in the U.S. in the recent past is generally around 50 cases per year across all the continental states. The largest number of equine rabies cases is generally reported in Texas. The majority of rabies cases occur in animals with no rabies vaccination history. Because horses are
curious and many types of wildlife with rabies lose their fear of humans and other domestic animals the likelihood of exposure is heightened.

“In eastern Colorado we are seeing the skunk strain of rabies circulating farther west than at anytime in the last 30 years. Skunks are highly efficient at transmitting rabies to other animals like pets,” said John Pape of the zoonosis unit of the Colorado Department of Public Health and Environment.

Terrestrial rabies suggests more risk of exposure to pets as well as livestock than if rabies is occurring only in bat populations. For more information go to the CDPHE website at http://www.cdphe.state.co.us/dc/zoonosis/rabies/index.html or phone at 303-692-2700 and ask to speak to someone in the Colorado Department of Public Health Disease Control Division.

The reported signs of rabies in horses have ranged from poor racing performance to bizarre behavior. Some animals develop an apparent lameness, colic like signs and genitourinary signs. The classic description is of the brain form, with evidence of progressive depression, called dumb rabies, or aggression with self mutilation and biting, called furious rabies. Equine rabies cases also may have an inability to swallow as well as excessive salivation.

One of the most consistent signs of rabies in horses in a case series from Canada was irritability when touched, called hyperesthesia. Veterinarians who have seem multiple equine rabies cases have said that a horse with rabies can initially look like anything and the classic signs may not initially be apparent or never develop. Once signs develop the course of the disease is hours to days but the time from exposure to onset of signs can be quite variable and may be long. The disease is fatal.

There is no laboratory test that can be done on the live animal to make a definitive diagnosis of rabies in horses. A rabies infected horse can expose owners, care takers, veterinary personnel and many other people to rabies.

Once the animal dies or is euthanized, a veterinarian should be involved in collection of appropriate samples to make a diagnosis. This includes the collection of the brain to be submitted for specific laboratory testing to detect the rabies virus in this tissue. It is important that those who will be involved in the necropsy take appropriate precautions to avoid exposure to the virus during the collection of tissues and that all samples collected from suspect animals be labeled appropriately so that those performing testing can take precautions.

There is no known effective treatment of horses with clinical rabies. Rabies is a disease that is better prevented. The mainstay of prevention of rabies is through vaccination. Equine owners should have their veterinarian involved in the development of a vaccination plan for their horses including the use of rabies vaccine.
Rabies vaccine is now considered a core vaccine by the American Association of Equine Practitioners (AAEP); vaccination guidelines are available at the AAEP website at http://www.aaep.org/vaccination_guidelines.htm.

Rabies vaccine meets the criteria as a core vaccine based on the fact that rabies is recognized in wildlife in all geographic areas of the continental United States, the vaccine has been demonstrated to be safe and effective and there is a public health risk from exposure if a horse developed the disease.