Rabies Background

What is rabies?
Rabies is a preventable viral disease of mammals. The vast majority of rabies cases reported to the Centers for Disease Control and Prevention (CDC) each year occur in wild animals like raccoons, skunks, bats, and foxes. The majority of rabies cases reported in northeast Colorado are in skunks. The rabies virus infects the central nervous system, ultimately causing disease in the brain and death. It is a fatal disease for animals and humans.

What are the signs and symptoms of rabies?
HUMANS: The early symptoms of rabies in people are similar to that of many other illnesses, including fever, headache, and general weakness or discomfort. As the disease progresses, more specific symptoms appear and may include insomnia, anxiety, confusion, slight or partial paralysis, excitation, hallucinations, agitation, hypersalivation (increase in saliva), difficulty swallowing, and hydrophobia (fear of water). The acute period of disease typically ends after 2 to 10 days. Once clinical signs of rabies appear, the disease is nearly always fatal, and treatment is typically supportive.

ANIMALS: The first sign of rabies in animals is usually a change in behavior. Animals may act more aggressive or more tame than usual. Nocturnal animals like skunks, foxes and bats may be out during the day. Rabid animals may stagger, tremble, or seem weak or may appear agitated and excited or paralyzed and frightened. Sometimes, rabid animals do not show any signs of illness before death from rabies.

How is rabies transmitted?
Transmission of rabies virus usually begins when infected saliva of a host is passed to an uninfected animal. The most common mode of rabies virus transmission is through the bite and virus-containing saliva of an infected host. Although rare, rabies can also be transmitted from brain tissue and nervous system fluids (this is more of a risk to veterinarians or those who may have direct exposure to these tissues/fluids).
How can rabies be prevented?
• Vaccinate your pets against rabies and keep vaccinations up-to-date
• Do not feed or touch wild animals
• Avoid contact with strays or pets other than your own
• Report unusual behavior in stray or wild animals to municipal animal control.
• Report all animal bites immediately to your local health department

Why is rabies a concern in northeast Colorado?
Since 2007 a new strain of rabies, skunk rabies, has been circulating in northeast Colorado, predominately in rural areas. This new strain is more dangerous than Colorado's normal strain from bats, due to the habitat of skunks and the ease with which they can pass this virus on to other wild animals, including your pets. The number of rabid skunks discovered in northeast Colorado is on the rise, and in February, 2013 a rabid skunk was discovered inside the city limits of Sterling. This presents a new and immediate threat to public health because anytime a disease enters an area with a larger population, there is a significant increase in the possibility of human exposure.

Rabies and Humans

What should I do if I suspect I see a rabid animal?
If you witness a suspected rabid skunk or other wild animal contact the sheriff’s office in your county. In the event the animal is euthanized, care should be taken to avoid damage to the brain, which should be submitted for testing.

What should I do if I am bitten by an animal?
• Clean the wound immediately with soap and water.
• Seek prompt medical attention from a physician or hospital emergency department.
• Report the bite to the local health department.

If you are bitten by a wild animal:
• Try to contain the animal while taking care to prevent additional bites and exposure to saliva. Contact the animal control officer or local police for assistance.
• Human treatment to prevent rabies may be started immediately or delayed until the testing results are known.
• If the animal is not available for testing, the decision to start human treatment will be made by the bite victim and his/her physician based on recommendations by the local health department.

If you are bitten by a dog, cat, or other domestic animal:
• Obtain information about the pet including owner’s name, phone, address, description of the animal, and its vaccination status.
• Biting animals should be ordered observed for 10 days by the local health department to ensure that they are free of rabies. If showing signs of rabies, the animal should be euthanized immediately and tested. If the animal dies during the observation period, it must be submitted for testing.
• Bites from other domestic animals (such as horses, cows, goats, and sheep) will be evaluated by your local health department. The animals can usually be observed for 10 days to rule out the possibility of rabies.
What to expect with post exposure prophylaxis:
In the United States, post exposure prophylaxis consists of a regimen of one dose of immune globulin and four doses of rabies vaccine over a 14-day period. Rabies immune globulin and the first dose of rabies vaccine should be given by your health care provider as soon as possible after exposure. Additional doses or rabies vaccine should be given on days 3, 7, and 14 after the first vaccination. Current vaccines are relatively painless and are given in your arm, like a flu or tetanus vaccine. People cannot transmit rabies to other people unless they themselves are sick with rabies. The prophylaxis you are receiving will protect you from developing rabies, and therefore you cannot expose other people to rabies. You should continue to participate in your normal activities.

Rabies and Animals

How can I protect my pets?
Vaccination and animal control programs have helped to prevent rabies in most pets. It is important to keep your dog or cat up-to-date on rabies vaccinations. Cats and dogs that spend time outdoors may have more risk of coming into contact with a rabid wild animal, but it is important to also vaccinate pets that stay indoors. In the United States, there have been more cases of rabies in cats than in dogs in recent years. Therefore, rabies vaccination is especially important for cats. See your veterinarian for more information on rabies vaccination or take your pets to state/municipal-sponsored rabies clinics.

What should I do if my pet has bitten someone:
• Urge the victim to seek medical care immediately.
• Report the bite to your local health department.
• Check with your veterinarian to see if your pet’s vaccinations are up-to-date.
• Report any unusual illness or behavior from your pet to the local health department and veterinarian.
• Don’t let your pet free-roam and don’t give your pet away. The animal must be available for observation.
• After the recommended observation period, have your pet vaccinated for rabies if it is overdue.

What happens if my pet is attacked by a wild animal?
UNVACCINATED ANIMALS:
Unvaccinated dogs, cats, and ferrets exposed to a rabid animal, or suspected rabid animal, should be euthanized immediately. If the owner is unwilling to have this done, there are some cases where an animal could be placed in strict isolation for 6 months and vaccinated 1 month before being released. This will be at an approved facility and at the owners expense, which can often times run thousands of dollars for the full quarantine period.
ANIMALS WITH EXPIRED VACCINATIONS:
Animals with expired vaccinations need to be evaluated on a case-by-case basis.
ANIMALS THAT HAVE CURRENT VACCINATIONS:
Dogs and cats that are currently vaccinated receive a rabies booster and are kept under home observation for 45 days.

What is considered a rabies exposure for animals?
Any animal bitten or scratched by either a wild, carnivorous mammal or a bat that is not available for testing should be regarded as having been exposed to rabies.
What is a valid vaccination?
Only rabies vaccines administered by a licensed veterinarian are valid. Any vaccine that is purchased at local animal supply store and administered by the pet owner, or anyone else that is not a licensed veterinarian, will not be recognized as a valid vaccination.

For more information about rabies visit the state health department’s website at www.cdphe.state.co.gov or the Centers for Disease Control and Prevention at www.cdc.gov.