

Rabies  
by Laurie Getzendanner  
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Many of us have vaccinated our goats against the rabies virus. Rabies in the United States is mostly sylvatic, or occurring in wildlife. Although rare, rabies can occur in goats. There are no rabies vaccines approved specifically for goats. However, there are several approved for sheep that appear to work in goats. Vaccination after exposure does not prevent the disease, which is always 100% fatal in animals. Because of the rarity of the disease and the cost of the vaccination each goat owner must decide whether or not to vaccinate their herd. Rabies vaccinations can be given only by a veterinarian.

However, this article is not about preventing rabies in our goat herds, but rather preventing rabies in us. We are all animal lovers. Most of us know that animals commonly infected with the rabies virus include but are not limited to dogs (especially wild dogs), bats, skunks, foxes, coyotes and raccoons, but what about feral (wild) cats?

So this is my story. While visiting my family in Maryland over the Christmas holiday I went outside for a picnic bench to seat the kids for dinner. The cry of a cat caught my attention. It seemed in distress and as my cousin the cat lover was around back I thought I would take the cat to her. I knew it was unusual to see a cat there. What I did not know was that my dog had just chased this wild cat up a tree and hence, it allowed me to pick it up. When I did pick it up it let out what seemed to me an odd cry and turned its neck funny. Now, I am not a cat person and this was probably a normal cry and turn of the neck, especially in an animal not wanting to be touched. But I immediately thought that this cat could have rabies and yet I continued to take the cat to my cousin. Thinking then to not allow the cat to bite me, I held it even tighter around its neck. More screeching and neck turning prompted more of a death grip by me around the neck. Finally I reached my cousin just in time to throw the cat down- but not before it managed to bite me in five places.

I washed the wound with hydrogen peroxide but waited until the next day when we were to leave for home to call the local Health Department. I was surprised that the man I spoke with stated that they have about 4 cases of rabies in feral cats each year in that county. He said they consider feral cats "mini-raccoons". I was advised to get the full set of rabies shots starting immediately. Once home, the following morning I began to make calls to inquire where to get the shots. This was still the holidays and messages left were not being returned readily. I called our local Health Department and found that one can only get the shots at an Emergency Room with the exception that one distant doctor's office might give the last four shots but not the first. A call to my doctor verified that they "do not and will not ever give the shots". So I was headed to the Emergency Room but first had to call the insurance company to determine if the shots were covered. Initially I was told they were only covered if given in a doctor's office but I finally convinced them that was not possible.

As the cat that bit me was long gone and not available for testing, and as the disease is nearly always 100% fatal, I chose to get the shots. (I say nearly 100% fatal as recently there was a report of a young girl who survived rabies. I believe that this girl was put into an induced coma. She is the only person on record to survive rabies.) So this required five trips to the Emergency Room. The first shots are given on what is known as "day one". Then you return on day three, day seven, day fourteen and day twenty-eight. On the last four visits you are given a shot of rabies vaccine or human-diploid-cell-strain vaccine to be exact. The first visit requires more shots. You are given the rabies vaccine and in addition a tetanus booster if needed. You are also given a shot that is divided into several sites of rabies-immune-globulin. This is given by weight and some of it is injected into your wound. Fortunately, the doctor numbed the area first but unfortunately, this meant more injections. Although I was bitten in five places he injected only the most proximal site as venous return would drain the other sites toward this site. The remainder of this viscous immune globulin is injected into the buttocks, 4 cc's in each side by my weight. These shots are now given intra-muscularly, not intra-abdominally, as was formerly the case. I was also given an antibiotic for the cat bite that I did not tolerate well.

On a good note I was very lucky. I have heard of cat scratch fever but what I did not know was that cat bites could be extremely virulent. My infection was not bad. It was an eye opener when the doctor said that if my hand had been any worse he would be on the phone calling a hand surgeon. And that if one bite had been just a pinch to the side it would have hit my tendon and I most likely would have lost the use of my thumb. I was also lucky to have insurance that covered most of these visits. Otherwise, the bill for these five visits was approximately \$3000.

If you are for some reason exposed to a potentially rabid animal and it is at all possible to sequester the animal without further endangering yourself (i.e., shutting the garage door and calling animal control), do so. Testing of the animal may save you the ordeal, time and expense of the shots if the animal tests negative. Keep your tetanus booster current, as in be sure to get one every ten years.

Yes, I was lucky, and a bit naive, a lot stupid, but very lucky. Mistake one was picking up the strange cat in the first place and mistake two was continuing to carry it even after I thought of rabies. This animal probably did not have rabies as I provoked it by picking it up. But that was a chance not worth taking. Remind yourself and remind your children and remind your friends and everyone you know to never ever touch a wild animal - even one that seems in distress.

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The following information was taken from the discharge instruction form from Duke University Emergency Room.

#### General Information on Rabies (Hydrophobia)

Description- A serious viral infection of the central nervous system, transmitted by the bite of infected animals.

#### Frequent Signs and Symptoms

In two-thirds of patients, symptoms may appear 1 to 3 months after the bite. Sometimes it can be as short as 5 days or as long as 5 years.

Early symptoms are:

- \* Restlessness and irritability
- \* Fatigue
- \* Slight fever
- \* Cough
- \* Sore throat
- \* Increased saliva and tears

Two to ten days later:

- \* Violent spasms of throat muscles that make swallowing impossible
- \* Hyperactivity and violent behavior
- \* Confusion
- \* High fever
- \* Irregular heartbeat
- \* Irregular breathing

Causes

- \* A virus in the saliva of infected animals passes to humans through broken skin or a mucous membrane. The virus travels slowly from the bite area to the brain.
- \* Animals that are commonly infected include dogs (especially wild dogs), bats, skunks, foxes, coyotes, and raccoons. Other animals can also be infected, so consult your local health department after any animal bite.

Risk Increases With- Professions or activities that may involve exposure to wild animals (cave exploration, hunting, farm or ranch workers, forest rangers, some laboratory workers, veterinarians).

#### Preventive Measures

- \* Vaccinate your dog or cat against rabies.
- \* Report stray animals in your neighborhood, and teach children to avoid them.
- \* Have a rabies immunization if your work involves animals.
- \* Keep tetanus up to date.
- \* Avoid wild animals. In the U.S. bats, skunks, and raccoons are the most likely to be infected, but any carnivore can carry the disease.

Expected Outcome- Rabies can be prevented with early treatment following exposure to animal bites.

Possible Complications- Once symptoms begin, survival is unlikely.

#### General Measures

- \* Diagnostic tests may include laboratory blood tests and fluid and electrolyte measurements, pathological exam of the animal's tissue and your own observation of the animal's behavior. Determine if the animal was provoked. Attacking animals are more likely to be infected.
- \* Treatment will be determined by type of exposure (bite or nonbite), the possibility of rabies in the animal, circumstances of the biting incident, and vaccination status of the animal.
- \* Surgery to clean and repair the bite wound (sometimes).
- \* Hospitalization, if symptoms develop.
- \* Wash the bite area for 10 minutes with soap and water to remove all saliva.
- \* Cover the wound with a clean bandage.
- \* Call the doctor's office or local emergency room for advice.
- \* Call your local animal control center to catch the animal, if possible.
- \* Don't panic. The incubation period allows time for diagnosis and treatment.

#### Medications

- \* Injections of rabies-immune-globulin
- \* Injections of human-diploid-cell-strain vaccine, if the animal is proven rabid
- \* Tetanus booster

Painful injections in the abdomen are no longer necessary.

Activity- No restrictions unless symptoms begin. If they do, bed rest in a hospital is necessary.

Seek Immediate Medical Attention If- Anyone is bitten by an animal.