



Bulletin No. 1
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Rabies Epizootic Among Foxes

Introduction

Rabies is enzootic among the fox populations of northern and western Alaska. Periodic epizootics (epidemics among animals) have been documented every 3-5 years; one is currently underway. Epizootics tend to occur early fall through early spring. Sporadic cases of rabies occur year round. Because elimination of rabies from the fox population is impractical, a mainstay of preventing human rabies is to reduce the chance of rabies transmission from wildlife reservoirs to domestic animals that in turn can transmit the fatal virus to humans.

Animal rabies cases winter 2001-2002

From October 1, 2001 through February 15, 2002, the State Virology Laboratory in Fairbanks tested 157 animals for rabies; 61 (39%) were positive, and 57 (93%) of the positives were foxes. All of the other four rabies-positive animals were dogs that had been exposed to a rabid fox. As expected, the majority of the rabies-positive animals came from the northern and western regions of Alaska (Figure 1). During the current rabies season, 15 humans had animal exposures that required rabies post-exposure prophylaxis.

Vaccination of all dogs and cats

Because domestic pets can serve as the transmission vehicle of rabies virus from wildlife to humans, it is essential that **all** dogs and cats are adequately vaccinated against rabies. Dogs and cats need to be vaccinated against rabies at the first opportunity after 12 weeks of age. The first rabies vaccine given, regardless of the animal's age at the time, must be followed by a booster dose 12 months later. Thereafter, rabies vaccines are given every 3 years. Animal rabies vaccine is available from private veterinarians and, in rural Alaska, from lay vaccinators. The Division of Public Health's Lay Vaccinator program trains local personnel from public agencies or organizations to provide animal rabies vaccination services to communities without access to veterinary care. For more information about the program, contact Don Ritter, Manager, State Virology Laboratory (907) 474-7017.

Control stray and feral dogs

In addition to attaining a high level of rabies vaccine coverage of domestic pets, communities need to actively control stray and feral dogs by requiring owned dogs to be tied up or otherwise prevented from running free in the community, for example. Feral and un-owned dogs should be captured and transported to animal control facilities. Effective animal control requires a collaborative community effort to devise a rigorous plan that meets the needs and resources of that community.

Scenario: Fox in the community

Numerous cases of rabies among dogs have resulted after these dogs sustained wounds from fighting with foxes. Therefore, it is crucial to act swiftly if foxes are sighted wandering through a community and exhibiting unusual behavior, like a staggering gait or fearlessness of humans. These animals should be euthanized, (without damaging their heads) and tested for rabies. Once an animal is documented to be rabid, all other animals that had contact with the rabid animal's saliva must be located.

- The Section of Epidemiology strongly recommends that all unvaccinated animals with rabid animal contact should be immediately euthanized. In situations where a human exposure occurred, these animals should also be tested for rabies.
- Any animal, regardless of rabies vaccination status, displaying signs of illness compatible with rabies should be immediately euthanized and tested for rabies. Rabid animals may display obvious neurologic impairment, such as a staggering gait or inappropriate response to stimuli, but also may display subtle signs, such as mild drooling or reluctance to move. Any animal that dies without an obvious cause in a rabies enzootic area should be tested for rabies.
- Vaccinated animals exposed to a rabid animal should be immediately revaccinated and then confined for a minimum of 30 days. If these animals cannot be adequately confined or quarantined, they should be euthanized.
- Lay Vaccinators and all animal owners should be encouraged to maintain readily accessible, up-to-date rabies vaccination records to expedite public health decision-making.

Rabies exposure is a **public health emergency**. Section of Epidemiology staff are available 24-hours a day for consultation in determining what constitutes a rabies exposure, and for assistance in submitting an animal head for testing or obtaining rabies post-exposure prophylaxis for humans exposed to a rabid animal. Call (907) 269-8000 during business hours and (800) 478-0084 after hours.

(Reported by Louisa Castrodale DVM, MPH, Section of Epidemiology and Don Ritter, Microbiologist IV, Manager, Alaska State Virology Laboratory.)

Figure 1. Geographic Distribution of Animal Rabies Cases, October 2001 - February 2002.



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