


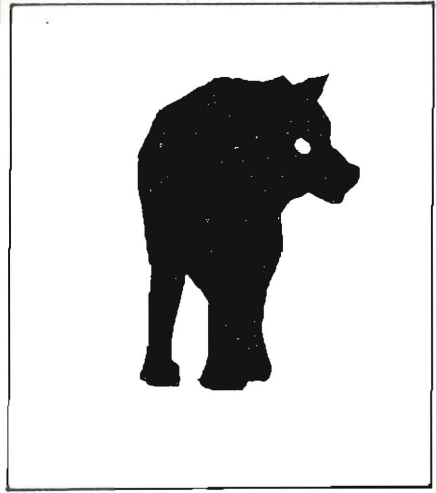
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RABIES

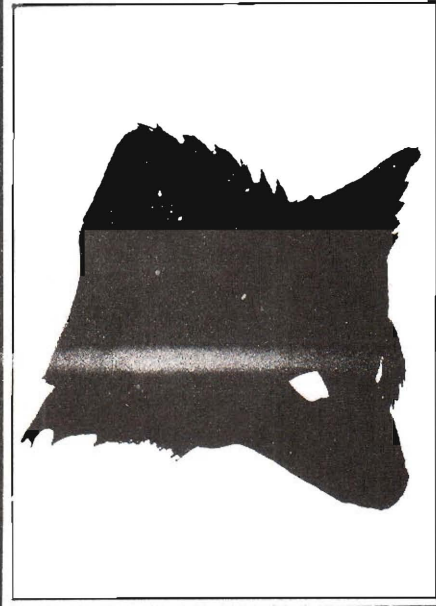
They May Look Friendly ***BUT...***



RABIES apparently has occurred in Alaska and other arctic regions of the world since ancient times. In northerly regions, rabies often first appears in epidemic proportions in Arctic and red foxes and then spreads into other species, particularly wolves. A rare case of rabies in caribou was observed several years ago near Barrow. A life-long resident Nunamiut Eskimo of the Brooks Range recalls that first foxes, then wolves and wolverines, became rabid during the epidemic which started in the mid-forties. Since that time rabid foxes have been observed with some regularity, particularly along the northwest coast and, more recently, on the Alaska Peninsula. The disease evidently may become epidemic at times and in places where populations of foxes reach peak proportions.



Over the years, rabies has been commonly observed in foxes, wolves and sled dogs in many places in Alaska, even including two cases in dogs in Anchorage in 1950 and 1951, but only three human cases have been diagnosed in the state since 1914.



For centuries, rabies was thought to be of supernatural origin. We now know that it is caused by several strains or varieties of a specific virus which most often, but not always, affects the brain as well as other organs. It is fatal in most cases.

Many kinds of domestic and wild animals are known to be susceptible to one or more of the several strains of rabies virus that have been identified. The common strain of virus from dogs or wild canines can fatally infect man and his primate relatives, rodents, carnivores, lagomorphs (i.e. rabbits and hares), bats and ungulate animals. The latter category includes cattle, horses, swine, sheep and various wild herbivores such as caribou, moose and deer.

In most instances, the prevention of rabies is largely a matter of common sense backed up by modern medical, veterinary and public health techniques.

Avoiding Exposure

Prevention of rabies in dogs has played a major role over the years in minimizing human exposure to the disease. To avoid rabies, all dogs should be vaccinated and given booster shots and should be controlled by leash, chain or owner. The proper management of wild animals (foxes, wolves, coyotes) in order to minimize human exposure to rabies is somewhat more of a problem.

One helpful procedure involves proper garbage disposal by burying or burning. Open garbage dumps may attract foxes or other nuisance species in numbers. If a rabid fox enters the picture, the disease can be quickly transmitted to a number of other animals. Normally the disease kills quickly, races through populations and then burns itself out.

The current situation on the Alaska Peninsula does not warrant extensive trapping or poisoning. In large, open, under-populated areas such methods are not as effective as is the disease itself in eliminating infection and minimizing the likelihood of exposure.

Not much needs to be said about avoiding strange dogs, or unusually "friendly" or strangely acting wild animals.

Avoiding Infection

The first thing to do if a person is bitten is to gain control of the biter. If a wild species is at fault, it should be killed, but in a manner which does not damage the brain. Normally it is not practical to kill or control a strange dog which has bitten someone. However, one should attempt to clearly identify the animal and to notify local authorities as soon as possible. The reason for controlling either a wild animal or pet which has bitten someone is that it is very important to determine whether the animal was in fact rabid. Medical treatment to prevent infection should be used only when it is known that the animal was rabid, or when it is impossible to find out. The treatment is unpleasant, particularly for youngsters. In special cases it involves some degree of danger, especially if one has been previously treated for rabies.

Rabies can be diagnosed reliably by study of the undamaged brain of a wild animal, or by observing a quarantined dog. If the dog is rabid, it will soon develop the symptoms of the disease and die. If the animal is not rabid, no treatment is needed.

Suitable first-aid can also be a very effective procedure in avoiding infection. As soon after being bitten as possible, but not if it prevents or hampers identifying and/or controlling the biter, the wounds should be washed thoroughly with soap or detergent. Bleeding may help clean out the virus particles. One should then seek the help of a physician. If the biter is proven rabid, or if it is not available for study, the physician will begin immediate treatment. This treatment consists of two series of

injections. Anti-serum is given to inhibit the rabies virus and to allow time for a series of vaccine injections to stimulate the body into producing an anti-serum of its own. Such "double barreled" treatment is extremely effective.

Things to Remember About Rabies

1. The rabies virus can infect, and can be caught from, all warm-blooded animals.
2. Trapping or poisoning campaigns are useful only in controlling rabies in special cases and never in large, unbounded geographical areas.
3. All dogs should be vaccinated at regular intervals.
4. Dogs should be under control of their owners at all times. They should be locked up, on a chain or under immediate voice command.
5. If a person is bitten, every effort should be made to get the animal for study. A dog should be quarantined and a wild animal should be killed in such a manner that the brain is unharmed.
6. The head should be carefully wrapped in a waterproof container and shipped to the Arctic Health Research Center, Zoonotic Disease Section, College, Alaska, for study. The container should carry a label stating that it contains a rabies specimen. Persons handling rabies specimens should wear rubber gloves and care should be taken to avoid touching the animal's saliva.
7. Allow the wound to bleed freely and wash it thoroughly with soap or detergent.
8. Seek medical help as soon as possible after the biter has been caught or identified and first-aid has been administered.
9. Not more than one of the six individuals bitten by a proven rabid animal will contract the disease even though no rabies treatment is taken.
10. More people are killed on the highways of North America on one holiday weekend than die from rabies in the entire world during a full year in recent times. Infection in humans is rare even in rural Alaska where rabid animals are encountered each year. ■

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