

RABIES

General Information

All mammals may become infected with rabies and all mammals should be considered potentially rabid when they attack or otherwise expose others to their saliva. Nationwide, potential rabies reservoirs include wild and domestic *Canidae* (dogs, foxes, wolves, coyotes) raccoons, skunks, and bats. Other exposures that could also be considered high risk may include contacting nervous tissue (brain or spinal cord) from a potentially rabid animal or waking in a room with a bat, without having a clear idea of the bat's behavior during the night.

Transmission typically occurs when an infected animal introduces saliva into a scratch or bite wound. Person-to-person spread has not been documented, with the exception of organ transplants, but is theoretically possible. Bats are the only important rabies reservoir in Idaho (see below); however, any mammal including domestic animals may pose a theoretical rabies risk.

The rabies virus is primarily shed in the saliva of a rabid animal. The virus enters the body via a wound (bite or scratch) or mucus membrane and travels up a peripheral nerve, ultimately attacking the brain. Human infections are virtually 100% fatal without the timely use of rabies post-exposure prophylaxis (rPEP), which includes an immune globulin injection during the initial visit to a healthcare provider along with five vaccine injections given over the course of a month. There is no effective treatment for rabies once symptoms begin. The rPEP course should begin within 10 days of the exposure, but can be started any time. rPEP may be delayed if a dog, cat, or ferret is undergoing a 10-day observation period (beginning on the day of the incident) or the animal is tested for rabies soon after the incident has occurred.

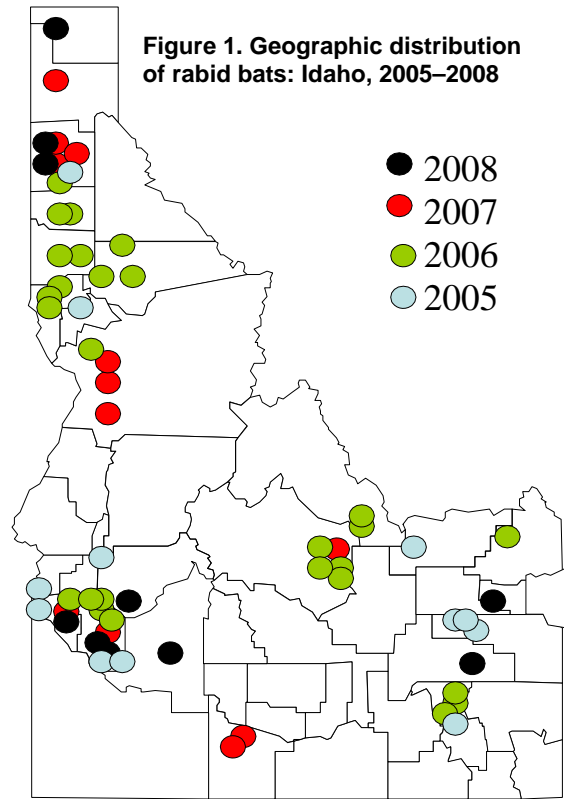
Observation: Dogs, cats, or ferrets that bite/scratch a person are observed for signs of rabies for 10 days. If the animal were shedding rabies in their saliva, the animal would show clinical signs of rabies within the 10 day period. If the animal does not show clinical signs of rabies during the 10-day quarantine, the animal was not transmitting rabies at the time of the bite. Health District and OEFP Epidemiologists are familiar with animal management practices associated with suspected rabies exposures.

Testing: Wild animals and animals other than dogs, cats, or ferrets, are not observed for 10 days, rather, they are tested for the presence of the rabies virus by humanely euthanizing the animal and testing a portion of the brain. There is **no** non-lethal testing method currently available. Euthanasia and testing may also be used for dogs, cats, or ferrets instead of a 10-day quarantine, when, for example, there is no known history of rabies vaccination, no known owner, or the owner opts for euthanasia instead of the observation period).

Rabies in Idaho

In Idaho, only bats are known to be natural reservoirs for rabies. Rabid bats have been recorded annually in Idaho since documentation began in 1961 (see Table 1 for recent data.) Data includes only animals submitted to IBL for testing; the actual number of rabid bats is likely much higher. Rabid bats have been reported from almost all parts of Idaho and have been detected from May to November.

Table 1. Rabid bats diagnosed in Idaho, 1999–2008	
Year	Number of rabid bats
2008	10
2007	12
2006	26
2005	12
2004	7
2003	15
2002	38
2001	28
2000	10
1999	5



Bats are not the only animal of interest when it comes to rabies. A handful of other species have also been documented as having the bat strain of rabies in Idaho (Table 2). Because other mammals have tested positive for rabies, the risk of rabies exposures from bites, scratches, or other exposures from domestic or wild mammals other than bats must not be ignored and should be discussed to determine if rPEP would be recommended. The actual geographic distribution of rabies in Idaho may be more far-reaching than is known due to a lack of human habitation and, therefore, a lack of samples submitted for testing. In addition, some bats migrate annually and may introduce rabies into an area not previously reporting rabid animals. No area of Idaho should be considered to be free of rabies.

Table 2: Rabid animals (other than bats) diagnosed in Idaho by reporting health district (DHD), 1967–2004	
Year	Rabid animal species (reporting district)
2004	1 skunk (DHD5)
2001	1 bobcat (DHD6)
1999	1 horse (DHD7)
1992	1 cat (DHD7)
1991	1 cat (DHD7)
1968	1 raccoon Imported from Florida, (DHD2)
1967	1 cat (DHD2)
1967	1 skunk (DHD3)