

Rabies

Agent: Rabies virus, a rhabdovirus of the genus *Lyssavirus*.

Mode of Transmission: Most commonly transmitted through the bite of an infected animal, but may be transmitted through any method by which virus-infected saliva or central nervous system tissue enters the body.

Signs/Symptoms: Vary widely, but often include an initial headache, fever and apprehension which progresses to paralysis, spasms of the muscles used for swallowing, delirium and convulsions. Once symptoms appear, rabies is almost invariably fatal.

Prevention: Important prevention methods include vaccinating cats and dogs, eliminating stray animals, and avoiding handling wildlife. A pre-exposure vaccine should be given to people at high risk of infection (e.g., veterinarians and laboratorians working with rabies virus). Post-exposure vaccine should be administered to anyone possibly exposed to a rabid animal.

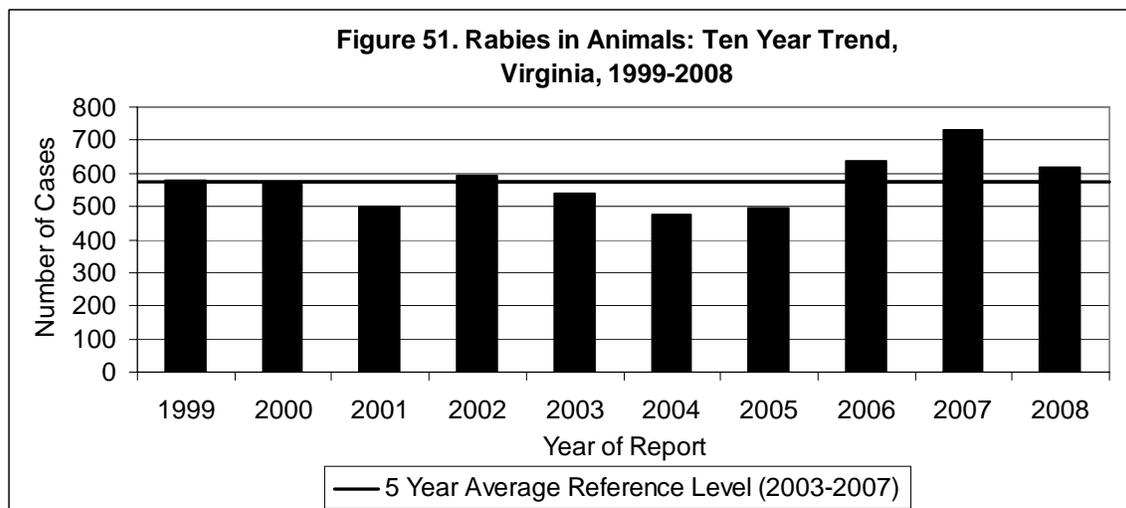
Other Important Information: The main reservoir of rabies in the United States is wildlife. In most other countries, the main reservoir is dogs.

Human

No human cases of rabies were reported in Virginia during 2008. The last human case occurred in 2003 in an adult male from the northern region that was infected with a raccoon rabies variant. Though no specific exposure event could be determined, the case had lived and worked in an area with endemic raccoon rabies. This was the first instance in the United States of a human infected with raccoon-variant rabies.

Animal

A 15% decrease occurred in the number of animals testing positive for rabies, down from 730 in 2007 to 620 in 2008 (Figure 51). The proportion of tested animals that were positive decreased slightly from 16% in the previous year to 15% in 2008. The Central Shenandoah Health District reported the most positive animals (44 positives, slightly more than 7% of Virginia's positives), followed by the Rappahannock/Rapidan Health District (42 positives, 7%) and Fairfax Health District (39 positives, 6%).



Among the 4,168 specimens sent for analysis, the most commonly tested animals were cats (1,070), bats (758), raccoons (702), dogs (603), skunks (241), foxes (187) and opossums (143) (See Table 8) While skunks had the highest positivity rate (65%), followed by raccoons (44%), and foxes (42%), nearly half of all rabid animals identified in Virginia in 2008 were raccoons..

Table 8. Animals Testing Positive for Rabies by Species, Virginia, 2008

Animal Species	Number of Animals Tested	Animals Positive	
		Number	Percent
Bat	758	22	3%
Bobcat	1	0	0%
Cat	1,070	33	3%
Cow	62	6	10%
Dog	603	4	1%
Fox	187	79	42%
Goat	26	2	8%
Groundhog	122	5	4%
Horse	53	2	4%
Opossum	143	1	1%
Raccoon	702	309	44%
Sheep	5	0	0%
Skunk	241	157	65%
Other	195	0	0%
TOTAL	4,168	620	15%