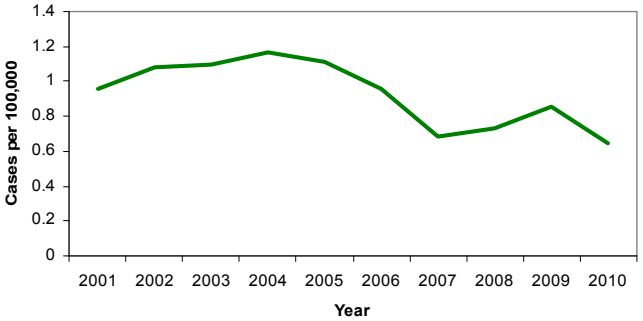
Rabies, Animal

Rabies, Animal: Crude Data	
Number of Cases	130
2010 incidence rate per 100,000	0.7
% change from average 5 year (2005-2009) reported incidence rate	-20.7
Age (yrs)	
Mean	N/A
Median	N/A
Min-Max	N/A

Figure 1. Rabies, Animal Incidence Rate by Year Reported, Florida, 2001-2010



Disease Abstract

Rabies, Human: From 2001 through 2010, there was one human rabies case in Florida. That infection occurred when an adult male was bitten by a dog in Haiti in 2004 and became ill after returning to Florida. A canine variant strain of rabies then circulating in Haiti was isolated from the patient. There were no human cases identified in 2010, although testing was performed on two Florida residents and one resident of the Philippines. Two suspect cases related to the Haiti earthquake response were also investigated but rabies was ruled out. Please refer to the Rabies, Possible Exposure summary in this same section for further details.

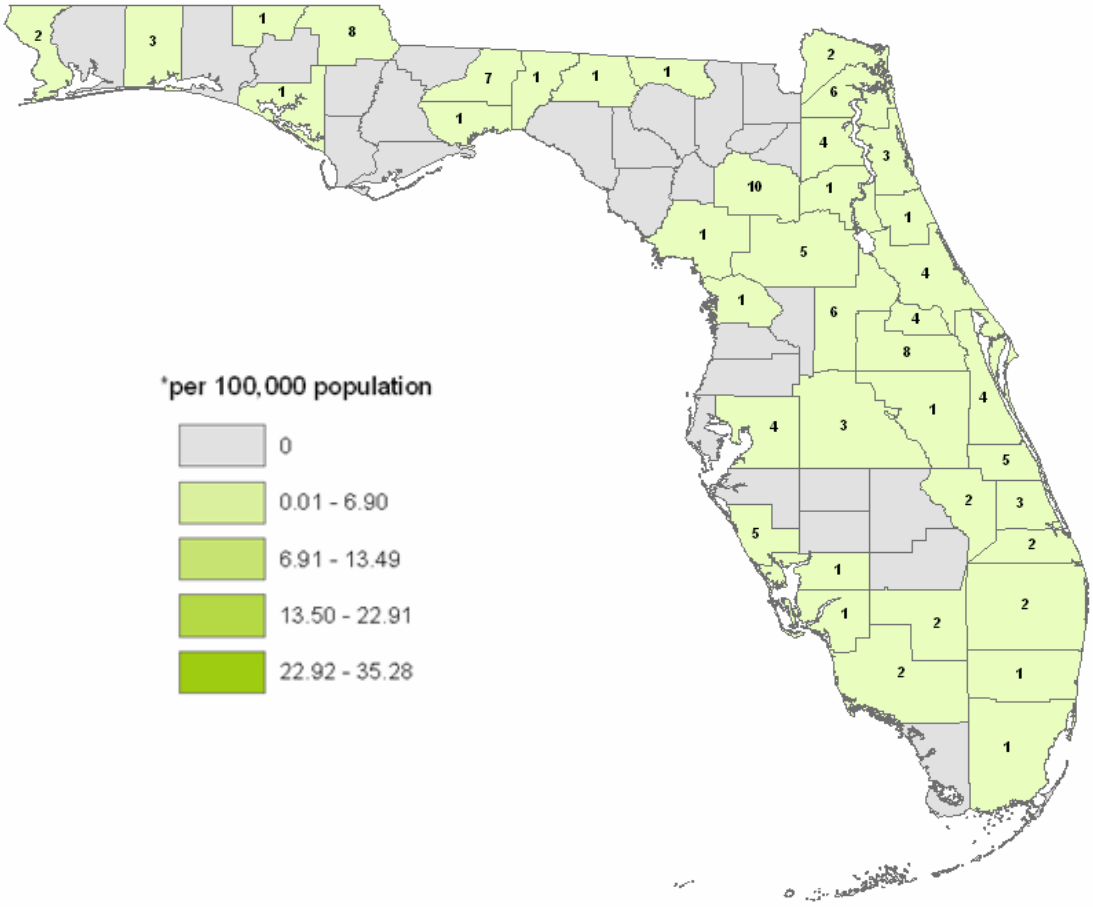
Rabies, Animal: There were a total of 130 rabid animals reported in 2010, but only 128 of those positive results were tested in 2010. This report will describe data based on date tested.

Rabies is endemic in the raccoon and bat populations of Florida, and frequently spills over from raccoons and occasionally from bats into other animal species such as foxes and cats. Laboratory testing for animal rabies is only done when animals expose humans or domestic animals, thus these data do not necessarily correlate with the true prevalence of rabies by animal species in Florida. Among the 2,747 animals tested at the Bureau of Laboratories (BOL) in 2010 there were 128 confirmed rabid animals. This represents a 20.5% decrease in rabid animals from the previous five-year average. There was also an 8.5% decrease in the number of total animals tested for rabies. The decrease may be in part due to decreasing state and local budgets resulting in fewer resources available to pursue animal testing, as well as strict enforcement of a policy limiting testing to wild animals or instances where exposure of humans or pets has occurred prior to animal testing. Fee-based testing through the Kansas State University (KSU) Rabies Laboratory is available for those jurisdictions with funds available to pay for animal testing not associated with a human exposure. One of ten animals submitted to KSU Rabies Laboratory was positive for rabies. The rabies positive animal was a raccoon submitted from Wakulla County following increased reports of suspected rabies activity in wildlife. In 2010, rabid animals were found in 42 of 67 counties in Florida, with the highest activity concentrated in the north and central parts of the state. Alachua County reported the most cases with 10 animals testing positive for rabies; Duval, Jackson, and Orange Counties all had eight animal rabies cases (see map). Animals testing positive for rabies were identified in each month of the year with most activity in summer: July (19) and August (16), followed by a smaller winter-spring peak: February (12), March (12), and April (13). The highest numbers of raccoons testing positive for rabies were identified in July (10), January (9), and February (9). June and July had the most foxes testing positive for rabies, with three each. Six (40%) of 15 rabid bats were identified in August. Four (27%) of 15 rabid cats were identified in December.

Raccoons accounted for the majority of rabid animals in 2010 (75 cases, 59%); rabies was identified in 15 animals (12%) each for bats, foxes, and cats. For the first time since 1997, cats moved from the 4th most common species identified with rabies to second, tied with bats and foxes. Feline rabies was above the 20 year average, while rabies in raccoons, bats, and foxes was below their respective 20 year averages. This may represent increased rabies activity in cats or increased likelihood of human and domestic animal contact with rabid cats compared to rabid wildlife. Since 1997, rabid cats have continued to outnumber rabid dogs although rabies vaccination is compulsory for both. All rabid cats tested in 2010 were either not vaccinated against rabies or had unknown rabies vaccination history. All positive cats were feral (12) or pets (3) allowed to roam outdoors. No dogs were found to be rabid in 2010, although over 600 were tested. One horse from Marion County was found to be rabid and resulted in rabies post-exposure prophylaxis being recommended for 11 people in Marion and Alachua counties. In addition, four bobcats and three otters were positive for rabies. An exhaustive search for several children seen playing with a rabid bat at a local pier was conducted by the Lee County Health Department. An Epi-X alert distributed nationwide resulted in an out-of-state visitor submitting a photo of the children to their local health department, followed by successful identification and prophylaxis of five children in Lee County. A similar situation with a rabid bat at a convenience store in Okeechobee County resulted in successful identification of three children following queries from the county health department to the local school.

Molecular sequencing of select positive samples by KSU Rabies Laboratory confirmed 12 terrestrial animals (one raccoon, three cats, two gray fox, three bobcats, two otters, and one horse) were infected with the eastern U.S. raccoon rabies variant. Bat samples submitted for variant typing are pending.

Animals Testing Positive for Rabies by County, Florida, 2010



Prevention

The Florida Department of Health *Rabies Prevention and Control in Florida, 2011* contains information for county health departments and others involved in rabies control and prevention.

Use preventive measures that include the following strategies.

- Vaccinate pets and at-risk livestock.
- Avoid direct human and domestic animal contact with wild animals.
- Educate the public to reduce contact with stray and feral animals.
- Support animal control in efforts to reduce feral and stray animal populations.
- Bat-proof homes.
- Provide pre-exposure prophylaxis for people in high-risk professions, such as animal control and veterinary personnel, laboratory workers, and those working with wildlife.

Consider pre-exposure prophylaxis for those traveling extensively where rabies is common in domestic animals. Oral bait vaccination programs for wildlife are justified in some situations. These programs can be effective but require careful advance planning and substantial time and financial commitments.

References

Florida Department of Health, *Rabies Prevention and Control in Florida, 2011*, Bureau of Environmental Public Health Medicine, 2011.

Pickering LK, Baker CJ, Long SS, and McMillan JA (eds.), *Red Book: 2009 Report of the Committee on Infectious Diseases*, 28th ed., American Academy of Pediatrics Press, 2009.

Additional Resources

Information is available from the Florida Department of Health website at:
http://www.doh.state.fl.us/environment/medicine/rabies/rabies-index.html.

Disease information is also available from the Centers for Disease Control and Prevention at:
http://www.cdc.gov/rabies/.