

## 2010 Iowa Rabies Summary

## **ANIMAL RABIES IN IOWA:**

In 2010, 27 cases of animal rabies were reported in Iowa, which is a slight decrease from 2009 (see the Table 1 below). Rabies was identified most frequently in wildlife species including 13 skunks, 10 bats, and one fox. Two cases were diagnosed in domestic species including 1 cat and 1 dog. One cow also tested positive.

**Table 1: Positive Rabies Cases 2001-2010** 

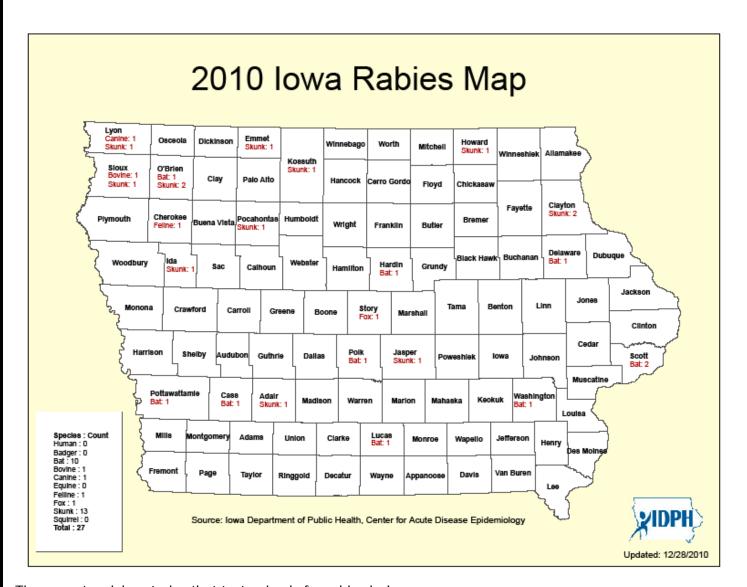
Species	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Bat	31	27	47	47	60	28	13	11	11	10	285
Skunk	28	27	38	28	33	13	5	7	13	13	205
Cat	10	7	8	11	5	7	7	9	3	1	68
Cow	10	12	3	10	7	4	0	1	5	1	53
Dog	2	3	6	3	2	2	5	1	2	1	27
Horse	3	2	3	0	1	3	1	0	0	0	13
Fox	1	0	0	1	0	0	0	0	0	1	3
Squirrel	0	0	0	0	0	0	0	0	1	0	1
Badger	0	0	1	0	0	0	0	0	0	0	1
Total	85	78	106	100	108	57	31	29	35	27	656

During 2010, 1479 animals in Iowa were tested for rabies and 27 were confirmed positive (1.83%). The percent positive varies greatly by species, see the Table 2 below. It is important to note that this data is greatly influenced by the number of animals tested. Many animals are tested because they exhibit unusual behavior or clinical signs making them more likely to be infected with the rabies virus. For these reasons, the percentages should not be considered representative of the true distribution of disease within the animal population in Iowa.

Table 2: Percent Positive by Species in 2010

			%
Species	Positive	Total Tested	Positive
Dog	1	322	0.31%
Cow	1	72	1.39%
Cat	1	425	0.24%
Bat	10	444	1 2.25%
Fox	1	(	6 16.67%
Skunk	13	27	7 48.15%

There are two rabies strains that commonly circulate in Iowa (bat and skunk), and many different species can be infected with these strains. In animal samples that are strongly positive for rabies (the strain typing procedure is only effective in samples that are strongly positive as opposed to weakly positive), the State Hygienic Laboratory (SHL) can differentiate the rabies strain that infected the animal. In 2010, SHL was able to identify the rabies strain in 22 of the 27 positive rabies cases, 14 were skunk strain and 8 were bat strain. Skunk strain rabies was identified in 12 skunks, 1 cat, and 1 fox. Bat strain rabies was identified in 8 bats.



There are two laboratories that test animals for rabies in Iowa:

- State Hygienic Laboratory at the University of Iowa
- Iowa State University Veterinary Diagnostic Laboratory
  Iowa animals are also periodically tested in out-of-state laboratories

## **HUMAN RABIES IN IOWA:**

Iowa's most recent human rabies case occurred in 2002. The illness was caused by the bat strain. Prior to that, the last reported case occurred in 1951.

While the exact number of people who receive rabies post exposure prophylaxis each year in the United States is unknown, it is estimated to be about 40,000 people. Based upon Iowa's population, that would equate to approximately 390 Iowan's receiving preventative treatment each year.