2007 Iowa Rabies Summary

In 2007, 31 cases of animal rabies were reported in Iowa, which is significantly less than previous years (see Table 1: Positive Rabies Cases 2001-2007). Rabies was identified most frequently in wildlife species (13 bats and 5 skunks), and thirteen cases were diagnosed in domestic species (7 cats, 5 dogs, and 1 horse).



Table 1: Positive Rabies case by species 2001-2007

Year								
Species	2001	2002	2003	2004	2005	2006	2007	Total
Bat	31	27	47	47	60	28	13	279
Skunk	28	27	38	28	33	13	5	172
Cat	10	7	8	11	5	7	7	55
Cow	10	12	3	10	7	4	0	46
Dog	2	3	6	3	2	2	5	23
Horse	3	2	3	0	1	3	1	13
Fox	1	0	0	1	0	0	0	2
Badger	0	0	1	0	0	0	0	1
Total	85	78	106	100	108	57	31	591

Rabies information is accessible on the IDPH website <u>http://www.idph.state.ia.us/adper/rabies.asp</u> and IDPH provides rabies consultation at 800-362-2736.

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CDC announced this year that the United States is free from dog strain rabies, a strain that is easily transmitted from dog to dog. However, this does not mean our dogs are free from rabies risk. Dogs (and other mammals) are susceptible to the bat and skunk strain rabies we commonly see in Iowa. Therefore, we need to continue to vaccinate our pets and valuable livestock against rabies. Dog bites to humans are still considered a rabies risk and need to be assessed accordingly.

As stated above both bat and skunk strain rabies commonly circulate in Iowa, and many different species can be infected with these strains. In samples that are strongly positive (the strain typing procedure is only effective in samples that are strongly positive as opposed to weakly positive), the University of Iowa Hygienic Laboratory (UHL) can differentiate the strain that infected the animal. In 2007, UHL was able to identify the strain in 17 of the 31 positive rabies cases, 10 were skunk strain and 7 were bat strain. Skunk strain rabies was identified in 4 skunks, 4 dogs, 1 cat, and 1 horse. Bat strain rabies was identified in 6 bats and 1 cat. UHL was not able to identify the strain in the 14 remaining positive samples because they were not strongly positive.

In Iowa during the late summer and early fall months, we have traditionally seen an increase in the number of indeterminate rabies diagnosis in bats. In 2007, there were 26 bats diagnosed as indeterminate i.e., the laboratories observed a non-specific fluorescence on the immuno-fluorescent assay. In these cases, additional testing is performed to try to distinguish between non-specific fluorescence and the fluorescence normally seen in positive rabies samples. If this testing is not able to make this distinction the laboratories classify the sample as indeterminate. Indeterminate and unsuitable samples are treated as positives, and if there was human exposure, post exposure prophylaxis is recommended.

Nationwide, one human rabies case was reported in 2007. This case occurred in Minnesota and underscores the importance of seeking prompt medical attention if you are bitten by or come in direct contact with a bat. The tragic case involved a 46 year old man who was exposed to a bat in north-central Minnesota in mid-August. According to the Minnesota Department of Public Health, the man reportedly felt a "needle-prick." However, he and a companion examined his hand and saw no bite marks or blood. He concluded he was not bitten and did not seek medical advice. The bat was not submitted for testing.

Bat bites can be visibly undetectable, and, therefore, if you have any physical contact with a bat, you should wash the exposed area thoroughly with soap and water. If possible, the bat should be captured and tested for rabies. If capture is not possible, you should seek medical attention. Additionally, if a bat is found in a room with an unattended child, a sleeping person, or anyone who cannot reliably communicate what happened, this is considered a potential bat exposure, and medical attention should be sought immediately. Iowa's most recent human rabies case occurred in 2002 and the virus was identified as a bat strain, and prior to that the last case was in 1951.

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