



Pat Quinn, Governor
Damon T. Arnold, M.D., M.P.H., Director

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MEMORANDUM

TO: Local Health Departments, Regional Offices of Illinois Department of Public Health, Illinois Department of Public Health Rabies Laboratories, Illinois Department of Agriculture Rabies Laboratories, Illinois Department of Agriculture Animal Welfare, Illinois Department of Natural Resources

FROM: Connie Austin, D.V.M., M.P.H., Ph.D.
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DATE: February 17, 2010

SUBJECT: **Animal Rabies Surveillance for 2009**

In 2009, a total of 5,979 animals were submitted for rabies testing to the Illinois Department of Agriculture (IDOA) and the Illinois Department of Public Health (IDPH) diagnostic laboratories. Ninety-nine animal brains were not suitable for testing. Of the total number of animals tested, 83 were fluorescent antibody-positive for rabies. All of those that were antibody-positive were bats. Animals testing positive for rabies from 2000 to 2009 are listed in Table 1. In 2009, the most frequently tested animals were bats (2,502), dogs (1,620), cats (979), skunks (291) and raccoons (173).

Table 1. Rabies test positive animals by species and year in Illinois

Species	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Bat	22	24	31	24	50	43	46	113	103	83
Cat	0	0	0	0	0	0	0	0	0	0
Cattle	0	0	0	0	0	1	0	0	0	0
Dog	0	0	0	0	0	0	0	0	0	0
Fox	0	0	0	0	0	1	0	0	0	0
Skunk	0	0	0	0	0	6	0	0	0	0
Raccoon	0	0	0	0	0	0	0	0	0	0
Horse	0	0	0	0	1	0	0	0	0	0
Total	22	24	31	24	51	51	46	113	103	83

BATS

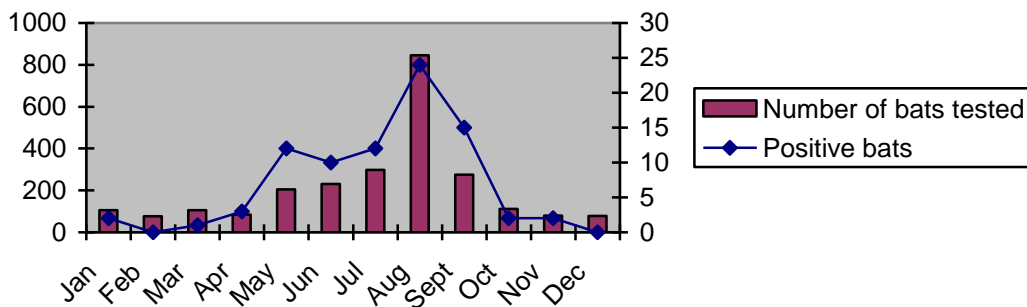
In 2009, bats were the only species identified with rabies in Illinois. In this year, 2,502 bats were tested for rabies. Of those tested, 2,419 were determined negative for the virus and 83 were confirmed positive. An additional 71 bats were submitted for testing but specimens were unsatisfactory. The percent of bats tested which were positive for rabies in 2009 was 3.3 percent (See Table 2).

Table 2. Bat rabies testing results in Illinois for 2009.

Negative	Positive	Total Tested	% Positive
2,419	83	2,502	3.3

Geographic location of mammals testing positive for rabies is shown in the map. The majority, 1,854 (74 percent) of testing occurred from May to September when bats are very active and likely to come in contact with humans or pets, as demonstrated in Figure 1.

Figure 1. Number of all bats and positive bats tested in Illinois by month for 2009



SPECIMEN SUBMISSION

Animal brains should be submitted for rabies testing under the following conditions:

1. When a domestic animal or a person is bitten by a mammal that is not eligible for the 10 day confinement period. (Note: rabbits and small rodents are not recommended for rabies testing due to their low risk of rabies)
2. When an animal exhibits symptoms suggestive of rabies.
3. Routine submission of skunks for rabies surveillance.

All brain or head specimens should be submitted immediately for testing and not batched with other specimens. If someone has been exposed to a possibly rabid animal, the animal should be sent immediately for testing. If the animal should test

positive, the person would need to be started immediately on rabies treatment. A delay in obtaining results could result in a delay in starting needed treatment and result in a poor outcome for the exposed individual.

SKUNKS AND OTHER TERRESTRIAL MAMMALS

In 2009, no skunks tested positive for rabies. Of the 5,979 animals tested, only 291 (4.9 percent) were skunks. The following counties submitted skunks for rabies testing DuPage (72), Cook (52), Will (44), Sangamon (22), Clinton (21), Lake (19), McLean (11), Peoria (11), Grundy (four), Kane (four), Madison (four), Marion (four), McHenry (three), Champaign (three), Jackson (two), Dekalb (two), Washington (two) and one each in Calhoun, Crawford, Effingham, Hamilton, Henry, Iroquois, Jefferson, JoDaviess and Tazewell. No county was available for two skunks submitted. Forty-three percent of the skunks were submitted from DuPage and Cook Counties.

To maintain adequate surveillance in the state, testing of the skunk must be maintained, since it is the main terrestrial animal reservoir for the rabies virus in Illinois. Negative testing of wild mammals, especially skunks, in counties is one factor used to determine whether rabies post-exposure treatment is recommended for persons bitten by dog and cats that cannot be observed for the 10 day period.

County animal control officers are encouraged to submit skunks for testing if

- they have exposed a person or a domestic animal or
- they have signs suggestive of rabies, including
 - lack of fear of humans
 - aggressive behavior
 - salivation
 - sighted during the day
 - staggering
 - paralysis and muscle tremors
 - found in places unusual for a skunk

Local animal control and local public health agencies are also asked to submit skunks which have not exposed persons or animals. This is especially important if limited numbers of skunks have been tested for rabies in their jurisdiction. This will help in determining the extent of circulation of this strain of the virus in this area of the state. Local agencies are encouraged to contact nuisance wildlife trappers, police officers, streets and sanitation personnel and others in their jurisdictions who may have freshly killed skunks that could be tested and arrange for transportation and testing by one of the IDOA or IDPH laboratories. Please check with the IDOA laboratory about testing fees for skunk testing. The IDOA laboratories typically charge a fee for rabies testing. All rabies testing is free at the IDPH laboratories. Please share this document with your local animal control partners.