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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: January 14, 2005

SUBJECT: Animal Rabies Surveillance for 2004

In 2004, a total of 4,607 animals were submitted for rabies testing to the Illinois Department of Agriculture (IDA) and the Illinois Department of Public Health (IDPH) diagnostic laboratories. Fifty-two additional animal brains were not suitable for testing. Of the total tested, 51 were fluorescent antibody-positive for rabies. Fifty were bats and one was a horse. Animals testing positive for rabies are listed in Table 1.

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

Species	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Bat	12	23	16	16	10	22	24	31	24	50
Cat	0	1	0	0	0	0	0	0	0	0
Cattle	1	0	0	0	0	0	0	0	0	0
Dog	0	0	0	0	0	0	0	0	0	0
Fox	0	0	0	0	0	0	0	0	0	0
Horse	0	0	0	0	0	0	0	0	0	1
Raccoon	0	0	0	0	0	0	0	0	0	0
Skunk	2	1	4	1	0	0	0	0	0	0
Total	15	25	20	17	10	22	24	31	24	51

BATS

In 2004 bats were the main species identified with rabies in Illinois. This year, 1,122 bats have been tested for rabies. Of those tested, 1,072 were determined negative for the virus, 50 were confirmed positive. An additional 27 bats were submitted for testing but results were inconclusive. The percent of bats tested which were positive for rabies in 2004 was 4.4 percent (See Table 2).

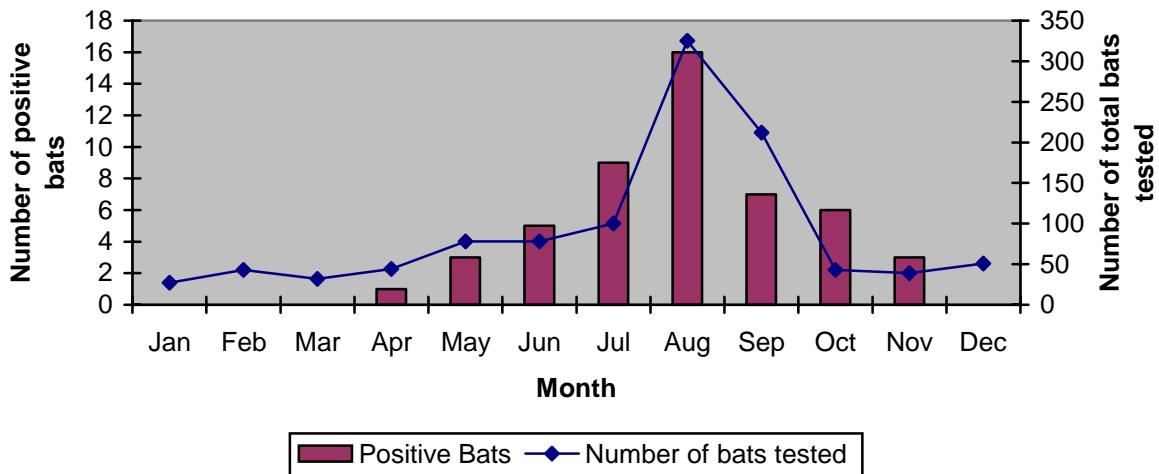
Table 2. Bat rabies testing results in Illinois for 2003.

Negative	Positive	Inconclusive	Total Tested	% Positive
1072	50	27	1122	4.4

Geographic location of mammals testing positive for rabies is shown in the map below. The majority 614 (55 percent) of testing occurred from May to August when bats are most active and likely to come in contact with humans or pets, as demonstrated in Figure 1.

Seven bats were speciated and all were little brown bats.

Figure 1. Number of all bats and positive bats tested in Illinois by month for 2004.



SPECIMEN SUBMISSION

Rabies specimens should be submitted under the following conditions:

1. When a domestic animal or a person is bitten by a mammal and needs to be tested.
2. When an animal exhibits the neurological symptoms 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 2004, no skunks tested positive for rabies, yet the number of skunks tested continues to be low. Of the 4,607 animals tested, only 100 (2.2 percent) were skunks. The following counties submitted skunks for rabies testing: Cook (28), Lake (18), Will (10), McLean (9), Jackson (8), DuPage (4), Knox (3), Madison (2), Mercer (2), Wabash (2), Wayne (2), Williamson (2) and one each in Boone, Clinton, DeKalb, Hancock, JoDaviess, Kane, McHenry, Perry, Sangamon and Union. Twenty-eight of the skunks (28 percent) were submitted from Cook County. Cook County has a strong animal control program that has informed all municipalities of the need to submit skunks for rabies testing and has a program to pick up the skunks for testing.

In December 2004, a horse with rabies was identified in northern LaSalle County. The Centers for Disease Control and Prevention (CDC) identified the rabies strain as the skunk strain of rabies. A skunk had been seen about in daylight hours at the farm but no bite to the horse was observed.

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. Due to the horse with rabies identified in LaSalle County, local jurisdictions in this north-central area of the state are asked to concentrate their efforts on testing of skunks for rabies for surveillance purposes. 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. Rabies testing is free at the IDOA and IDPH laboratory for this enhanced skunk

surveillance program. For other animal rabies testing, the IDOA laboratories charge \$12 per animal. All rabies testing is free at the IDPH laboratories. Please share this document with your local animal control partners.