



STATE OF CONNECTICUT

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Rabies Testing of Domestic and Wild Animals – Connecticut, 2014-2015

The Department of Public Health (DPH) Public Health Laboratory (PHL) offers testing of animals that could have exposed people to the rabies virus. Results of testing help guide decision making regarding post exposure prophylaxis for persons exposed. The Advisory Committee on Immunization Practices (ACIP) develops national guidelines for determining the likelihood of rabies virus exposure and considers multiple factors, including the species of animal, type of contact, and circumstances of the incident (1). Euthanasia and testing of animals should be conducted when: 1) risk assessment of an incident indicates virus transmission could have occurred, and 2) other measures, such as observation of animals in confinement, are not adequate to determine the need for rabies post-exposure prophylaxis.

To better align rabies testing activities with public health priorities and laboratory resources, analysis of data collected on the Request for Rabies Examination form was conducted during 2010 (2,3). This analysis showed specimens were submitted under circumstances that did not constitute human exposures. The Request for Rabies Examination form was subsequently revised and included clarification of submission guidelines (4). Analysis of data collected during 2011-2013 was published in 2014 (5). This article summarizes testing performed at the DPH PHL during 2014-2015.

During 2014-2015, the total number of specimens tested was 4,462, and included 1,586 (36%) bats, 1,023 (23%) cats, 693 (16%) dogs, 416 (9%) raccoons, 301 (7%) skunks, 145 (3%) groundhogs, and 95 (2%) opossums. These seven species accounted for 95% of all animals submitted. Among these species, 334 (8%) tested positive. Positivity varied by species tested including 44% of raccoons, 28% of skunks, 3% of groundhogs, 3% of bats, 1% of cats, and <1% of dogs; no opossums tested positive.

Of the skunk, raccoon, groundhog, and opossum submissions with known exposure types, 69% (643/926) were due to potential exposures of domestic animals not involving people. Of bat submissions with known exposure types, 89% (1,319/1,474) were due to concern for potential human exposures. The current Request for Rabies Examination form does not capture details needed to determine if ACIP recommendations are followed for bat exposures; however, guidance is provided on the back of the form.

Of the cat and dog submissions, 81% (1,385/1,716) were due to potential human exposures only. Of these, bites accounted for 89% (523/590) of dog submissions. Of the cats and dogs submitted for testing with a known vaccine history and history of biting a human only, 72% (322/449) of dogs and 28% (98/345) of cats were current on their vaccinations.

Reported by

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Editorial

Rabies is primarily a disease of animals that can be spread to people. In people, rabies virus infection causes encephalitis that is nearly always fatal. However, clinical illness can be prevented by conducted a thorough risk assessment based on [ACIP national guidelines](#), and administering rabies post-exposure prophylaxis when an exposure has occurred. To help guide medical management of domestic animals and people who are at risk of rabies virus infection, the DPH PHL has offered testing of potentially infected animals at no charge to the public, state agencies, and municipal governments. To assure that currently

available DPH PHL resources are utilized for public health priorities, submission requirements have been modified and are currently being implemented.

The DPH PHL will continue free testing on animals involved in human exposures resulting from a bite or introduction of infectious material including saliva or central nervous tissues into an open wound or onto mucous membranes. These may include wild terrestrial mammals known to transmit rabies involved in human exposures, bats in direct contact with people or present in a room when a person was unable to recognize (e.g. sleeping) or communicate (e.g. young child) that contact occurred, and domestic animals euthanized because of illness while in quarantine for biting a person.

For questions regarding human rabies exposures, contact the DPH Epidemiology and Emerging Infections Program at 860-509-7994. For questions regarding domestic animal rabies exposures contact the Department of Agriculture Animal Control Division at 860-713-2506. Information regarding the submission form is available at:

http://www.ct.gov/dph/lib/dph/infectious_diseases/rabies/rabiestestform_0197a.pdf

or by calling 860-920-6662 or 860-920-6500 during normal business hours.

References

1. CDC, Human Rabies Prevention- United States. 2008 MMWR 2008; 57 (no. RR-3)
2. Connecticut Department of Public Health. Rabies Surveillance Update – Connecticut. 2005-2009, Connecticut Epidemiologist, Vol. 30, No. 4; 13-15, May 2010.
3. Connecticut Department of Public Health, Animal Testing for Potential Rabies Exposures – Connecticut 2003-2008. Connecticut Epidemiologist, Vol. 30, No. 7; 25-27, November 2010.
4. Connecticut Department of Public Health Request for Rabies Examination Form, http://www.ct.gov/dph/lib/dph/infectious_diseases/rabies/rabiestestform_0197a.pdf
5. Connecticut Department of Public Health, Animal Testing for Potential Rabies Exposures – Connecticut 2003-2008. Connecticut Epidemiologist, Vol. 30, No. 7; 25-27, November 2010.

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