

VETERINARY PROCEDURES FOR HANDLING RABIES SITUATIONS

March 2014

I. SUSPECT RABID ANIMALS

New Jersey Law

New Jersey Revised Statutes 26:4-78 states that: whenever a dog, cat, or other animal is affected by rabies or suspected of being affected by rabies or has been bitten by an animal known or suspected to be affected by rabies, the owner or person in charge of the animal or any person having knowledge thereof, shall notify the local board (i.e., health department) having jurisdiction of the place where the animal is located. A directory of local health departments (LHDs) is posted online: www.localhealth.nj.gov

The Veterinarian's Responsibility

If a practitioner determines that a domestic animal is displaying clinical signs of rabies, he or she must make a report to LHD. A complete history should be taken from the owner of the animal including vaccination status, history of wounds, contact with wildlife, onset of symptoms and the names of people who have been bitten by the animal or may have had nonbite exposures (saliva from the animal contaminating an open wound or mucous membrane) within 10 days prior to the onset of illness. Although this report can initially be made via telephone, a written report should also be either mailed or faxed to the LHD.

If the owner consents to have the animal euthanized, the veterinarian should decapitate and store the head under refrigeration until it is delivered to the State laboratory for rabies testing. Decapitation should be done using gloves and eye protection to ensure that the veterinarian is not exposed to the rabies virus. Pursuant to laboratory regulations, specimens submitted to the rabies lab cannot be returned to the owner.

If the animal is not euthanized, it is recommended that it be hospitalized and observed or, for livestock, confined separately from other animals and observed. Precautions should be taken to prevent bites or exposures by isolating the animal, limiting staff contact and wearing gloves, eye protection, and other PPE whenever the animal must be handled. If the animal does have rabies, its condition will deteriorate rapidly, with death usually occurring within several days of onset. If the owner refuses to hospitalize a suspect rabid animal, immediately notify the LHD with jurisdiction where the animal is kept.

Veterinarians may be presented with sick raccoons or other high-risk wildlife (i.e. skunks, foxes, groundhogs, or bats). If there has been a bite or other exposure to a person or domestic animal, the animal should be euthanized and tested for rabies. Rabid wildlife may not show characteristic clinical signs of rabies and may survive the infection.

LHDs can address rabies-related questions and be a valuable resource to practitioners for other zoonotic disease situations. They can usually be contacted through the police department in the event of emergencies on nights, weekends, and holidays.

II. ANIMALS THAT HAVE BITTEN STAFF, PET OWNERS OR OTHER PEOPLE

New Jersey Law

New Jersey Statutes 26:4-78 through 80 require physicians, parents and guardians of children, and adults when they are not attended by a physician, to report animal bites to the LHD where they reside. Reports should include the contact information for the bite victim, information describing the biting animal and the contact information for the animal's owner, if applicable. A directory of local health departments is posted online: www.localhealth.nj.gov

New Jersey Revised Statutes 26:4-82 authorizes the Health Officer to order the owner of a dog, cat or other domestic animal that has attacked or bitten a person to confine the animal upon the premises of the owner or at another place designated by the Health Officer for at least 10 days after the animal has attacked or bitten a person.

New Jersey Revised Statutes 26:4-85 authorizes an agent of the LHD to examine the confined animal at any time to determine if the animal has developed clinical signs of rabies. If the animal dies or is euthanized within the 10 day confinement period, the Health Officer may order laboratory testing for rabies to be performed.

The Veterinarian's Responsibility

It is strongly recommended that veterinary practitioners report all known or suspected human bites or exposures to a suspect rabid animal to their LHD. The report should include the animal owner's contact information and a description of the biting animal, if applicable. LHDs have designated staff to investigate and confine biting animals for 10 days or arrange for rabies testing at the State laboratory, if the animal is clinically ill with signs of rabies. Laboratory testing would not be necessary if the animal remains healthy through the 10 day confinement. Domestic animal confinements are usually completed at the owner's residence. LHD staff typically will give the confinement notice to the animal owner and then return to release the confinement order 10 days later to ensure that the animal didn't die or is not ill with signs of rabies.

It is recommended that practitioners verbally ask all owners of animals presented for euthanasia if anyone was bitten by the animal within 10 days and include this question on any euthanasia release form used in the practice. Laboratory testing would not be necessary if the animal completes the 10 day confinement before euthanasia. However, if a bite has occurred within 10 days of death, the Health Officer can, and usually will, order the animal to be tested for rabies, pursuant to their authority by N.J.R.S. 26:4-85. Therefore, it's best to delay euthanasia until the 11th day after a bite, whenever possible.

In the event a practitioner becomes aware of a bite AFTER euthanizing an animal, they should notify the Health Officer immediately and not freeze or dispose of the animal's carcass until such action is endorsed by the Health Officer.

In situations where the animal owner is upset that his or her pet will be decapitated for rabies testing, practitioners may remove the brain, submit it for laboratory testing, and return the body of the animal to the owner in (almost) intact condition. Proper protective equipment should be used when removing the brain or decapitating the head to prevent exposure.

III PREPARATION OF SPECIMENS FOR LABORATORY SUBMISSION

Note: Once submitted to the Rabies Laboratory, specimen remains cannot be returned to veterinarians or animal owners under any circumstances.

1. If the animal is over 2 pounds or larger than a squirrel (e.g. adult raccoons, most dogs and cats) **ONLY THE HEAD OR BRAIN OF THE ANIMAL** will be accepted for testing.
2. **During the tick season, specimens are to be sprayed with an insecticide**, such as a flea and tick spray containing permethrin, to kill ticks before packaging.
3. Bats may be submitted alive; however, they should be packaged in an **escape-proof** container (e.g. coffee can with tight fitting lid) and labeled: **“CAUTION - LIVE BAT.”** Under no circumstances should a bat, dead or alive, be wrapped in anything that could hinder access to it (e.g. a cloth towel, packing material, etc.).
4. The specimen should not be frozen, as freezing delays the test process. Frozen specimens can still be tested, but the the tissue must thaw before testing and freezing increases the probability that the sample will be unsatisfactory for testing.
5. If the specimen is not being transported immediately, refrigerate it and pack as directed below before transport. Specimens that will be in transit for more than 12 hours should be packaged as directed below and, additionally, placed in an insulated container.
6. The specimen should be placed in a watertight container, such as a heavy plastic bag tightly secured, or a container (not glass) with a tight fitting lid to **prevent fluid leakage**. This container should be placed in a larger waterproof unbreakable container, and the space between the 2 containers packed with coolant packs, NOT DRY ICE OR ICE IN BAGS. The specimen should be in a separate container from the cold packs.

Note: Couriers are instructed not to pick up improperly packaged specimens.

7. In the event that individuals are exposed to fluid leakage from an animal head, splashed with fluids or cut during the specimen preparation process, they should immediately wash the exposed areas thoroughly with soap and water. The name and telephone number of the exposed individual should be added to the Rabies Examination Request Form and the type of exposure noted.
8. The Rabies Examination Request Form, VIR-16, (<http://www.state.nj.us/health/forms/vir-16.dot>) should be completely filled out and placed in an envelope accompanying the specimen; either securely attached to, or inside, the transport container. If put inside the transport container, the exam form should be in a separate plastic bag from cold packs, preventing it from becoming wet.

Address specimens to:

Public Health, Environmental and Agricultural Laboratories
New Jersey Department of Health, **Rabies Laboratory**
3 Schwarzkopf Drive
Ewing, New Jersey 08628

The Rabies laboratory is located in the State Police Headquarters Complex near Exit 1 of I-95, bordered by Upper Ferry Road and Route 175/River Road. Because Schwarzkopf Drive may not be found using mapping software, use "98 State Police Drive East, Ewing, NJ 08628" to locate the guard station at the entrance of the Complex.

For specimen delivery information, contact **609-530-8387**

Rabies specimen submission forms and instructions are posted on the NJDOH website, <http://www.state.nj.us/health/cd/rabies/techinfo.shtml>.

Health Officers and their staff can reach Rabies Laboratory staff by calling **609-530-8416** and leaving a message. Lab staff will return calls when they are available.

IV TRANSPORTATION OF SPECIMENS TO THE RABIES LABORATORY

It is the duty of the local health department to ensure that specimens are packaged properly and submitted to the laboratory on a timely basis. **High priority specimens need to be delivered to the Rabies Laboratory by 3:00 PM Thursday to ensure that testing is completed by the end of the work week.** If possible, animals should not be euthanized until prompt delivery has been arranged, so that rabies observation can continue if transport and testing cannot be performed in a timely manner (if the animal improves in health, testing may not be necessary).

The loading dock of the PHEAL is open from 8:30 AM to 4:00 PM to receive specimens for the Rabies Laboratory. Rabies specimens arriving prior to 3:00PM on a working (non-weekend or state holiday) day will be set-up that day and completed on the next working day. Results will be faxed at the completion of testing to the local health agency with jurisdiction over the case. Specimens arriving after 3:00 PM will be set up the next working day with testing completed on the second working day after submission.

Note: The New Jersey Department of Agriculture, Division of Animal Health (609-292-3965) may be able to assist with delivery of livestock rabies specimens.

The following methods of transportation can be utilized:

1. Hand delivery - This is the fastest and most reliable method of delivery to ensure the quickest test result turnover time for high priority specimens. If the situation is urgent, **the owner of the affected animal or the person bitten or otherwise exposed can be asked to hand deliver the specimen.** Alternatively, if they are

unable to deliver the specimen, they can arrange for a family member or friend to do so. Specimens can be delivered on a 24-hour basis (see instructions below).

2. Private delivery services - There are numerous private delivery services that will transport specimens. Specimens must always be sent for arrival on non-holiday weekdays. **Express Mail, and other delivery services offered through the U.S. Postal Service (USPS), should NOT be used because such specimens are not classified as mailable and the USPS does not deliver specimens directly to the Rabies Laboratory, resulting in transit times of 3 days or more.** Specimens delivered by USPS have decomposed during transit.
3. State Courier - There is a courier system that picks up laboratory specimens from various locations throughout the State and delivers them to the PHEAL. Local health departments can assist with utilizing these couriers. Because courier pick-up schedules can change without notice and utilizing the state courier system will usually result in at least a 1-4 day delivery delay compared to other methods of transportation, **couriers should only be used for surveillance, animal exposure, or very low risk human exposure specimens.** The entity dropping off the specimen at a courier pick-up location is responsible to verify that the specimen was subsequently picked up and delivered to the State laboratory. If there is a question or problem with a courier, please contact Fenton Snell at PHEAL (609-530-8519).
4. In some circumstances (e.g., high-risk human exposures), local health departments may be able to assign staff to deliver specimens to the rabies laboratory.

Delivery during normal hours, Mon. through Fri. between 6:00 a.m. and 6:00 p.m.

Enter the State Police Headquarters Complex via the Alternate Entrance off Upper Ferry Road. Follow directions (<http://www.state.nj.us/health/forms/vir-16inst.shtml>) to the PHEAL building. Specimens should be delivered to the Loading Dock/Specimen Receiving area in the rear of the building.

Delivery on weekends, holidays, and weekdays after 6:00 p.m. and before 6:00 a.m.

Enter the State Police Headquarters Complex via the Main Entrance off Route 175/River Road. Follow directions (<http://www.state.nj.us/health/forms/vir-16inst.shtml>) to the PHEAL building. Specimens should be delivered to the Loading Dock/Specimen Receiving area in the rear of the building, where the security guard will facilitate specimen submission.

Prepared by: The New Jersey Department of Health, Communicable Disease Service, Infectious and Zoonotic Diseases Program, Zoonotic Disease Unit