

Animal Rabies Testing

General Information

Any person who has been bitten by an animal or where there is reason to believe that infective saliva has come into contact with an open wound or raw abrasion requires evaluation by a physician. Any domestic animals that have bitten a person should be captured and confined for a 10-day observation period. Wild animals should be euthanized immediately and submitted for testing. For wild deer/elk testing, contact the Illinois Department of Agriculture.

Information Required

Completed Rabies Submission Form (IL482-0798), see Appendix I. Include the following information on the form: type of animal (dog, cat, fox, etc.); date of death (specify if killed); full name, age, address and telephone number of exposed person; date of exposure; full name, address and telephone number of the domestic animal's owner; full name, address and telephone number of the health care professional who is to receive the report. Pack the request form in such a manner that it will not become wet or lost.

Packaging Requirements

TRIPLE bag each specimen. Place the specimen in a primary container such as a sealed plastic bag. Place the primary container in a watertight secondary container. Place the secondary container inside an outer container with sufficient cold packs to maintain refrigeration temperatures. The minimum volume of cold pack surrounding the specimen is double that of the specimen (never use ice cubes). Ample insulation surrounding the specimen and cold packs is essential (e.g., styrofoam or newspaper). **Do not freeze specimens** unless the specimen is held over a long weekend (weekend + holiday) or if the animal is decomposed. Cold, not frozen is the general rule. Do not package rabies specimens with dry ice since dry ice may freeze the specimens. **Label the outer shipping container "UN3373 Biological Substance Category B."** Pack rabies specimens separately from other types of laboratory specimens (even if they are going to the same lab).

Transportation of Rabies Specimens

Do not ship specimens on Fridays or the day before a state holiday. Do not ship on Thursdays unless sent by guaranteed, overnight delivery. Specimens held by a commercial carrier over a weekend are frequently received in various stages of decomposition that may preclude the possibility of reliable test results. In case of emergency, please notify the appropriate laboratory during working hours, 8 a.m. to 4:30 p.m., Monday through Friday. For an after-hours emergency, follow the emergency response procedures provided on Page 4. Send specimens by the most expeditious means available, preferably by direct messenger. If this is not possible, the United States Postal Service may be used providing the specimens are properly sealed, packaged, and labeled; and next-day delivery is specified. However, if a commercial carrier is used, the shipper is responsible for conforming to any special packaging requirements of the carrier.

Specimen Requirements

When euthanizing the animal, **do not damage the brain**. Submit only the head of large (more than 2 lbs.) animals. For very large animals (horses, cattle, sheep, etc.), submit only the complete excised brain.

Criteria for Rejection

Whole animals larger than 2 lbs., non-mammalian species, decomposed specimens, whole head of very large animal, skull crushed, specimen preserved in formalin, alcohol, etc.

Test Methodology

Rabies direct fluorescent antibody (DFA)

Interfering Substances

Decomposition or morphological damage; gross contamination with bacteria or yeast; preservative added

Table 16. Rabies

Disease or Agent	Specimen	Performed at	TAT (Days)
Rabies	Head or brain	Ca, Ch, Sp	2

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Guidelines for Submission of Rabies Specimens

Specimen Collection and Removal of Head and Brain

1. Submit only the head of ALL SKUNKS and other suspect animals.
2. Submit only the entire brain from large animals (e.g., cow, horse).
3. It is acceptable to submit the whole carcass from animals weighing less than 2 pounds (e.g., bat).
4. **Live animals will not be accepted under any circumstances.**
5. Isolate and retain the carcasses of rabies suspects until testing is completed and the report is obtained.
6. Head / brain removal must be performed by individuals who are immunized against rabies and trained in the proper precautions to avoid exposure, such as use of personal protection equipment.
7. Clean and disinfect all instruments used for head removal after each use.
8. *For advice on testing of animals, contact your local health department (if not available, call 217-782-2016).*
 - Healthy domestic animals that have not exposed a person or owned animal will not be tested.
 - Animals showing signs and symptoms of rabies should be tested, even if an exposure did not occur.
 - Submission of biting or non-biting rodents (squirrels, mice, rats, hamsters, gerbils, etc.) or rabbits is discouraged unless unusual circumstances surround the bite.
 - Animals that have bitten either a person or owned animal can be tested. Healthy dogs, cats or ferrets that bite a person or owned animal after being provoked can be confined for 10 days rather than be tested.
 - Any bat that may have exposed a person or owned animal should be tested even if a bite is not known to have occurred (e.g., found in a room with an infant or with a sleeping, intoxicated or otherwise incapacitated person).
 - Scratches alone have not been documented to transmit rabies; if wound(s) could have been made by scratches and/or bites, and the animal is otherwise considered a candidate for testing, or if the scratches were made by a bat, submit the animal for testing.
9. *Rabies Submission Form:* Provide all information requested on the form, if available. Be certain that a complete history accompanies each specimen submitted (see Appendix I Rabies Submission Form). Indicate on the submission form if more than one animal is submitted. Mark individual specimens with the same identification (e.g., No.3 of 5 total animals submitted).

Packaging and Transportation

1. Place the specimen in a primary container such as a sealed plastic bag. Bats and other small animals must be placed inside a clear zip-lock bag or equivalent. Place the primary container in a watertight secondary container with sufficient absorbent material to assure complete absorption if leakage should occur. If plastic bags are used, please TRIPLE bag each specimen. Place the test requisition on the outside of the secondary container. Package forms so that they remain clean.
2. Place the secondary container inside an outer container with sufficient cold packs to maintain refrigeration temperatures. The minimum volume of cold packs surrounding the specimen is double the size of the specimen (never use ice cubes).
3. Ample insulation surrounding the specimen and cold packs is essential (e.g., styrofoam packing material or newspaper).
4. **Do not freeze specimens** unless the specimen is held over a long weekend (weekend + holiday) or if the animal is decomposed. Cold, not frozen is the general rule. Do not package rabies specimens with dry ice since dry ice may freeze the specimens.
5. Pack rabies specimens separately from other types of laboratory specimens (even if they are going to the same lab).
6.
 - a. By ground transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place wrapped specimen(s) into a biohazard labeled bag and seal securely.
 - iii. Place the test requisition(s) in the biohazard bag outside pouch so that it does not come in contact with the specimen sealed inside the bag.
 - iv. Place the sealed biohazard bag and test requisition(s) inside the shipping container.
 - v. The shipping container must be rigid such as a cooler and labeled with the UN 3373 Biological Substance Category B marking.
 - vi. Close securely.
 - b. Commercial carrier by ground/air transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place the wrapped specimen(s) inside a biohazard labeled 95 kPa bag and seal following the instructions on the bag.

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- iii. Place the test requisition(s) in the 95 kPa bag outside pouch so that it does not come in contact with the specimen sealed in the bag.
 - iv. Place the sealed 95 kPa bag and completed test requisitions(s) inside the outer shipping container and close securely.
 - v. Label the outer shipping container with the appropriate Illinois Department of Public Health laboratory address.
 - vi. Complete the return address section to include the name of the person shipping the package, business name and address and a business phone number.
 - vii. The shipping container must include the UN3373 Biological Substance Category B marking.
7. **Do not ship specimens on Fridays or the day before a state holiday. Do not ship on Thursdays unless sent by guaranteed, overnight delivery.** Specimens held by a commercial carrier over a weekend are frequently received in various stages of decomposition that may preclude the possibility of reliable test results. In case of emergency, please notify the appropriate laboratory during working hours, 8:30 a.m. to 4 p.m. Monday through Friday. For an after-hours emergency, notify the state emergency officer at 217-785-9224.
8. **Send specimens by the most expeditious means available**, preferably by direct messenger. However, if a commercial carrier is used, the shipper is responsible for conforming to any special packaging requirements of the carrier.
9. **The Illinois Department of Public Health has no pick-up and delivery service and assumes no responsibility for any specimen until it is received and identified.**

You, as the shipper, not the transport company, are responsible for the shipment until the package reaches its destination.

Illinois Department of Public Health Laboratories

Carbondale Laboratory
1155 S. Oakland St.
Carbondale, IL 62902-2797
Phone: 618-457-5131

Chicago Laboratory
2121 W. Taylor St.
Chicago, IL 60612
Phone: 312-793-4746

Springfield Laboratory
825 N. Rutledge St.
Springfield, IL 62794-9435
Phone: 217-782-6562

*(Animal testing other than for rabies is **not** performed by the Illinois Department of Public Health laboratories)*

Illinois Department of Agriculture Laboratories

Animal Disease Laboratory
9732 Shattuc Road
Centralia, IL 62801
Phone: 618-532-6701

Animal Disease Laboratory
2100 S. Lake Storey Road
Galesburg, IL 61401
Phone: 309-344-2451

(A fee will be charged for rabies examinations performed by the Department of Agriculture; fee is doubled for emergency procedure)