Utah Department of Health

Utah Public Health Laboratories

RABIES
COLLECTION, PACKAGING, AND SHIPPING INSTRUCTIONS

1. Rabies Specimen Submission Instructions
2. Rabies QUICK Packaging Guide
3. Federal Shipping Regulations
4. UPHL Rabies Testing Policy and Fee Schedule
5. UPHL Rabies Test Request Form
1. RABIES SPECIMEN SUBMISSION INSTRUCTIONS

NOTE: This document is intended as guidance. Field conditions, animal variability, and experience may require different strategies. UDOH Epidemiology and UPHL Virology subject matter experts should be consulted with questions or concerns.

NOTE: Rabies is a lethal virus in humans. Persons handling animals or tissues should be aware of risk and consequence of rabies exposure. Safety and biosafety precautions, such as vaccination and Personal Protective Equipment (PPE), are warranted for all specimens where rabies virus may be present.

General Guidance

- For information regarding rabies testing in Utah, please contact the Zoonotic Disease Epidemiologist, 801-538-6191, Dallin Peterson (ddpeterson@utah.gov, 801-538-6333), or the epidemiologist on-call for rabies testing (888-374-8824) at Utah Department of Health (https://health.utah.gov)
- Shipping Address: Utah Unified Laboratories
  4431 South 2700 West
  Taylorsville, UT 84129-8600
- Utah Public Health Laboratories specimen receiving hours: M-F 0800-1700, Sat 0800-1600 (801-965-2522).
- Bats should be submitted intact – dead or alive. Veterinarians can euthanize live bats (https://www.cdc.gov/rabies/bats/contact/capture.html). Freezing will not necessarily kill the bat.
- All other animals should be decapitated and only the head submitted.
- Birds, reptiles, and most rodents do not harbor rabies virus and should not be sent for testing. If you have questions regarding an exposure to one of these animals, please consult with your local health department.

Sample Collection (animal heads and whole bats)

- Refrigerate specimen as soon as possible after death of animal. Do not freeze (freezing may delay results).
- Submit one of the following, as appropriate:
  o Head of animal for all domestic animals (dogs, cats, etc.)
  o Intact brain for all large animals (e.g., cattle or horses)
  o Whole animal if less than 12 inches long and exclusive of tail (e.g., bat, small mammal)
• Do not:
  o Fix specimen in formalin or other preservative
  o Euthanize animal by clubbing or shooting in the head
• Do not submit:
  o Live animals;
  o Animals raised/confined to cage (hamsters, gerbils, mice, rats, rabbits, etc.);
  o Wild or domestic birds (including chickens), turtles, or other reptiles;
  o Animals without evidence of human exposure risk, such as wild rodents/mammals (mice, rats, rabbit, coyote, etc.) that have ONLY potentially exposed other animals.

SPECIMEN SUBMISSION

Submission Form:

A Rabies Testing Request Form must be completed for each specimen submitted.
• Verify all information for accuracy before submission.
• Circumstances of exposures (e.g., bite, scratch, or direct skin contact with saliva or blood from wild animal or probable exposure to rabid animal) should be documented in the Exposure Information section of the Request Form.

Shipping: (Federal regulations for shipping rabies specimens apply and are appended as note 3.)
• Refrigerate all specimens before and during shipment.
• Frozen cold packs should be used to provide refrigeration during transport.
  o DO NOT USE DRY ICE – GEL ICE PACKS ONLY.
• Ship specimens within 24 hours of euthanasia.
• Do not ship specimens to arrive on a weekend or a holiday unless the courier can guarantee delivery.
  o The Utah Public Health Laboratory is closed on Sundays and all state and federal holidays.
• Preferred shipping methods include:
  o Commercial carriers (e.g., FedEx, UPS, or local courier services).
    ▪ NOTE: Shipping fees are the responsibility of the sender.
  o Hand-delivery:
    ▪ During regular working hours (Mon-Fri: 8:00am - 5:00pm), deliver to the UPHL Public Health Laboratory, Clinical Specimen Receiving, located on the Northwest side of the UPHL building (West submission window).
Packaging Specimens (also see the enclosed QUICKGUIDE):

- Place specimen in a clear plastic bag.
  - If submitting a head, thoroughly drain excess blood and fluids before placing in the bag.
  - Place an absorbent material (newspaper or absorbent padding) in the bag with the specimen to prevent fluid leakage.
  - If the head has sharp protuberances (e.g., teeth, shattered bone, quills), wrap the head in layers of newspaper or absorbent padding before placing it in the bag.
  - If submitting multiple specimens, use separate bags and label the outside of each bag with an identification that matches information on the Rabies Specimen Submission Form.
  - Submit a separate form for each specimen.
- Seal the bag securely with a rubber band or tape to prevent leakage of any blood or fluids during transport.
- Place the clear bag(s) containing the specimen(s) inside an orange/red biohazardous bag, and seal using the supplied rubber band or tape.
  - Double bag the specimen(s) in a second clear bag if a biohazard bag is not available.
- Place the bag(s) in an inner Styrofoam box.
- Place enough frozen gel packs in the inner box to ensure the specimen(s) will remain cold for at least 48 hours. Use of wet ice is not recommended but if wet ice must be used, double-bag the ice and seal the bags securely to prevent leakage during shipment. DO NOT USE DRY ICE!
- Place the Styrofoam container into a labelled mailer.
- Complete a Rabies Testing Request Form for each specimen submitted. Place the form(s) in a separate clear plastic Ziploc bag and place on top of the Styrofoam insert.
- Close the lid to the outer container ensuring that a “Ship-to: UPHL” label is prominently displayed on the exterior of the box. Then secure the lid of the box with packing tape.
- Place a diamond-shaped UN3373 (Biological Substance, Category B) label on the outside of the box.
- Provide the name and a 24/7 telephone number of a contact person who is knowledgeable about the shipment of the rabies specimen(s). Place label on outside of outer box. The package is ready to ship.

NOTE: Packing supplies are available through the Utah Department of Health or Utah Public Health Laboratory. (Contact the Zoonotic Disease Epidemiologist, 801-538-6191.)
**Laboratory Reports:**
- Specimens received by 11:00 am Monday –Friday (minus holidays) are usually reported by 5:00 pm on the same day. Specimens received after 11:00 am are reported the next working day.
- Urgent requests for testing on weekends or holidays may be made in consultation with the UDOH Epidemiologist-On-Call at (888) EPI-UTAH (374-8824, 24/7/365 availability).
- Rabies results may be reported by telephone, fax and/or US Mail.

**Laboratory Contact:**
For questions concerning rabies testing, call Utah Public Health Laboratory at 801-965-2400 and ask to speak to or leave a message for the Rabies Virologist (8:00 am - 5:00 pm Monday through Friday).
2. RABIES QUICK PACKAGING GUIDE

1. Drain specimen of all fluids then place in clear plastic bag. If necessary, wrap specimen in newspaper or absorbent pad to prevent sharp edges from puncturing bag. If submitting multiple specimens, place in separate bags, and label each bag with an identifier that matches the Rabies Specimen Submission Form. Submit a separate form for each specimen.

2. Place absorbent padding in the bag with specimen then tightly seal bag using rubber band or tape. (The bag must be leak-proof—check that it is tightly sealed)

3. Place clear bag into a (orange/red) biohazard bag, or second clear bag, and seal this bag using rubber band or tape.

4. Place bag(s) inside an inner Styrofoam box.

5. Place frozen gel pack(s) on top of specimen bag.

6. Close the inner Styrofoam box and place the Styrofoam lid on top.

7. Complete the Rabies Specimen Submission Form, place in a clear Ziploc bag, and then place on top of the Styrofoam lid. Submit a separate form for each specimen.
8. Seal the lid of the outer box with packing tape.

9. Label with the address of the Utah Public Health Laboratory visible outside the box.

10. Send to the Utah Public Health Laboratory. Your facility will need to arrange transport and pay transport costs.

11. Place UN3373, Shipping Address and Emergency Contact labels on outside of outer box.

12. Write name of emergency contact person and 24/7 contact number on the Emergency Contact label.
3. NOTE: Regulations for Shipping Rabies Specimens

- Per federal regulations, rabies specimens must be shipped as a "UN 3373 Biological Substance, Category B" (49 CFR 173.199). These materials are regulated by DOT and IATA regulations.

- It is a federal requirement that the shipper of a Biological Substance, Category B be familiar with 49 CFR 173.199; these regulations are available online at http://hazmat.dot.gov/.

- Shipping containers and labels meeting federal regulations for shipping rabies specimens are available to local health departments and veterinarians at no charge upon request. Similar containers are acceptable provided they comply with the 49 CFR 173.199 instructions for Biological Substance, Category B.

- The shipper is responsible for packaging specimens correctly and shipping them rapidly. Packages that are not correctly labeled may be returned to the sender by the commercial courier.

- People who package specimens for shipping are legally required to take a class in shipment of infectious substances; the class is available commercially or through Utah Public Health Laboratories Training Program. Training and guidance for packaging and shipping is available through CDC and ARUP web sites (https://www.aruplab.com/training/handling-shipping, https://www.cdc.gov/labtraining/training-courses/packaging-shipping-division-6.2-materials.html).