



State of Louisiana
Louisiana Department of Health
Office of Public Health

Instructions for removing the head of an animal to be sent to the OPH laboratory for examination of the brain for presence of rabies virus. (Effective August 30, 2017)

Note: All persons involved in the preparation of rabies test samples should receive rabies pre-exposure immunization, however if the technician performing the procedure is not vaccinated, appropriate precautions should eliminate risk. There has never been a case of human rabies associated with an exposure received during animal head removal. However, caution should be taken as the brain, spinal cord, cerebral spinal fluid, salivary glands, and saliva of the animal may contain rabies virus. If the virus enters into an open cut or onto mucous membranes (such as eyes, nose or mouth), it could possibly cause a rabies infection. It is therefore important to wear protective gear and exercise caution with the use of scalpels, knives and other sharp objects used during the procedure.

General Considerations:

- To decrease potential inadvertent exposures, limit the number of employees involved in head removal to the minimum number needed.
- If an accident occurs, wash any wound with copious amount of soap and clean water. **Any breaches in PPE or cuts/dermal exposure should be reported immediately to a supervisor.** A risk assessment of the exposure can be done by the state public health veterinarian.

Personal Protective Equipment (PPE) needed:

- Protective coveralls, waterproof smock or apron, or gown. A large plastic garbage bag with holes for arms and head cut out can serve as good disposable protection for clothes.
- Disposable gloves (nitrile) or rubber kitchen gloves
- Heavy leather gloves, butcher's gloves, or heavy waterproof autopsy gloves to be worn over the above disposable gloves (Stainless steel mesh knife cut resistant protective gloves are best)
- Eye protection (safety glasses or goggles to avoid splashes to the eyes). Note: NEITHER CORRECTIVE EYEGLASSES NOR CONTACT LENSES ARE A SUBSTITUTE FOR GOGGLES OR SAFETY GLASSES.
- Surgical mask, respirator, or bandana tied over nose and mouth
- Face shield, if hack saw or high speed saws utilized. The face shield should be inspected regularly for damage before use, cleaned and disinfected after each use, and stored in a cool, dry place.

*Note: All non-disposable items must be cleaned and disinfected after each use.

***COVER ALL WOUNDS, CUTS, SCRATCHES on hands arms, face, and any exposed skin!!!**

Cleaning supplies required:

- Cleaning agent (liquid or powdered soap)
- Disinfectant (1:10 Clorox and water solution may be used)
- Paper towels
- Plastic trash bags

Equipment needed for procedure:

- Large scalpel or preferably a high quality, sharpened necropsy or boning knife
- Hack saw. Do NOT use an axe, hatchet or power saw because of the danger created by flying bone and tissue. Note: If a high speed device or hack saw is used, use of a face shield in addition to eye protection and a surgical mask is required. A face shield serves as an additional protective barrier for the mucous membranes of the eyes, nose, and mouth, and adds extra protection to the face and neck area in case any pieces of tissue or bone shards are shot towards the staff member. Goggles or safety glasses and a mask or respirator is worn under the face shield.
- Hair clippers
- Newspapers or disposable plastic bags or sheets to lie under area of head removal to catch body fluids (if procedure not performed in tub or table with drain).
- Ice chest with cool packs

Before proceeding:

The procedure should be performed in a well-ventilated, well-lit room, on a surface that can be appropriately cleaned and sanitized.

Don all personal protective equipment (PPE)

Verify that the animal is dead

The head removal procedure:

- 1) If animal has long hair on neck, clip hair to skin.
- 2) Ensure the skull is intact. It is best to sever the head halfway between the terminus of the skull and the shoulders (mid-neck).
- 3) Sever the skin and all dorsal and lateral muscles over the neck.
- 4) Sever the skin, vessels, trachea, and muscles ventral to the neck. Note: A freshly deceased animal may bleed profusely during this step. It is often advisable to carefully clean the area after this step, continuing to don appropriate PPE.
- 5) Continue to sever the above tissues until down to bone on all sides.
- 6) If possible disarticulate the vertebra in the intervertebral space using the knife or scalpel. If the space cannot be found, utilize a hack saw with a sharp blade or other type saw to cut through the vertebra.

- 7) Once the head is removed, the head can be cleaned with tap water (while continuing to don PPE).
- 8) The head should be placed immediately in a plastic bag and sealed. This bag should be placed into a second plastic bag, which should also be sealed. The head should immediately be placed on ice (refrigerated) until shipped. Please see accompanying shipping instructions.
- 9) Before removing PPE, the remaining carcass should be placed in a plastic bag and disposed of according to shelter policy. Note: The body of the animal should be incinerated. If this is not possible, it can be buried at a depth of at least three (3) feet or disposed of as potentially infectious medical waste.
- 10) Cleaning and disinfection of the post-mortem lab: All work surfaces, floors, and instruments should first be cleaned with a detergent (e.g., dishwashing liquid) and rinsed with cool or warm water to remove visible gross contamination. These surfaces and equipment should then be disinfected with a virucidal solution such as bleach (1 cup per gallon of water), alcohol (40-70% ethanol), iodine (25 ppm) or quaternary ammonium (200 ppm) compounds. The disinfectant should have a contact time of 10 minutes before rinsing surfaces with water.
- 11) The outer gloves should be removed first, second the coveralls, gown or apron, then lastly the inner gloves.
- 12) Wash hands thoroughly with clean water and soap.
- 13) Place all PPE (except eyewear) in a sealed medical waste bag, sealed garbage receptacle, sealed laundry bag for later cleaning, or directly into a washing machine or disinfectant solution. If the laundry bag is collected for later cleaning, ensure that the bag is labeled so that care is used in handling the soiled material. Reusable clothing (e.g., coveralls, scrubs) should be laundered on site in hot water and dried mechanically in a dryer.
- 14) Wash hands thoroughly once more and remove and clean protective eye wear.
- 15) Wash hands thoroughly once again.

Handle and ship the head according to attached OPH protocol.