

LSU SVM Policy Manual	Policy Number:
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**STANDARD-OPERATING-PROCEDURE FOR DOGS AND CATS
PRESENTED TO THE LSU-SVM VTH WITH
CLINICAL SIGNS COMPATIBLE WITH RABIES**

1) **Risk assessment in dogs and cats with neurologic clinical signs**

It is the receiving clinician's responsibility to consider rabies as a differential diagnosis in dogs and cats presented with compatible neurologic clinical signs (see below, section 6) that cannot be explained otherwise.

a) **Rabies vaccination status of the animal**

- i. Vaccination status of the animal **MUST** be included in the medical record of all dogs and cats presented with neurologic signs. Fortunately, rabies can be ruled out in dogs and cats with up-to-date vaccination.
- ii. Written evidence of vaccination must be available. The reception staff and the VTH veterinarian arranging the referral shall remind the owners resp. referring veterinarians of animals with neurologic signs to submit proof of rabies vaccination upon admission at the VTH.
- iii. For unvaccinated animals or those with overdue vaccination, rabies **MUST** remain on the list of differential diagnoses. House officers **MUST** consult with their supervising faculty without delay in order to make the best possible decision in such cases.
- iv. While there is no vaccination requirement for puppies and kittens younger than 3 months old, rabies must be considered as a differential diagnosis if neurological signs are present.

b) **Procedure in dogs and cats with overdue vaccination that present with compatible clinical signs**

- i. Time elapsed since last vaccination, number of prior vaccinations, possible rabies exposure (i.e. contact with wildlife) must be considered in order to establish the likelihood of rabies in dogs and cats with overdue vaccination status
- ii. A faculty clinician of the Companion Animal Medicine service must be consulted in each suspect case prior to dismissing rabies as a differential diagnosis

c) Procedure in unvaccinated dogs and cats with neurologic signs

- i. Unvaccinated stray animals with neurologic signs **MUST** be euthanized immediately and their head sent in for rabies diagnosis
- ii. In owned unvaccinated dogs and cats with neurologic signs, the possibility of rabies must be considered seriously. If such an animal is not euthanized immediately, it may **ONLY** enter the LSU-SVM VTH as a rabies suspect using the stringent procedures outlined below.

2) **Procedure for hospitalizing unvaccinated dogs and cats with neurologic signs**

- a) Personal protective equipment (PPE): barrier clothing is required and includes mask with eye shield, gloves, gowns and disposable shoe covers
- b) Exposure and exposure record:
 - i. Only a restricted amount of individuals may have contact with the animal.
 - ii. Individuals who have not received a complete initial rabies vaccination series **MUST NOT** enter in contact with any rabies suspect animal
 - iii. An exposure record must be maintained throughout the duration of the animal's stay: all people who enter in contact with the rabies suspect animal **MUST** be listed on the exposure record which is kept with the patients medical record at all times.
 - iv. It is the responsibility of the attending house officer and faculty to make sure that the above procedures are strictly enforced.
- c) Strict isolation: animals **MUST** be placed in the SA ISO Unit. The SOP for use of the SA ISO unit must be strictly followed. A sign reading "RABIES SUSPECT, DO NOT HANDLE" must be placed conspicuously on the door of the cage/ward.
- d) The VTH Hospital Director and the Chair of the VTH Infection Control Committee must be informed if a rabies suspect dog or cat is hospitalized
- e) All biological samples taken from that animal must be clearly labeled as RABIES SUSPECT (on the sample and on the submission form) and placed in Biohazard plastic bags to ensure proper handling in the clinical pathology lab or LADDL
- f) All disposable contaminated materials (including sharps in appropriate containers) should be placed in red biohazard bags. There are no additional special requirements, and the biohazard bags will be disposed of in a routine manner.
- g) All services involved with the diagnostic work-up of the animal **MUST** be informed verbally and on all request forms of the RABIES SUSPECT status of

the dog or cat. As stated under (b) above, all people entering in contact with the animal MUST sign up on the exposure record

- h) If a work-up is performed and allows identification of a cause other than rabies for the neurological signs presented by the rabies suspect animal, and therefore rules-out rabies, the VTH Hospital Director and/or the Chair of the VTH Infection Control Committee must be notified. Only they may allow changing the status of the animals so it can be taken out of the SA ISO, and placed in the VTH for further care.
- i) If a rabies suspect animal dies during hospitalization in the VTH, it must be examined for rabies by the LADDL.

3) Procedure to follow if a person is bitten by a rabies suspect animal

- a) Ensure that the wound, bare hands, etc., are washed thoroughly with strong soap or disinfectant. The wound should be opened to encourage bleeding. This may help flush out the virus and will make the deeper areas of the wound accessible. The application of a quaternary ammonium compound (0.1% benzalkonium chloride) or other substance (43.70% ethanol, tincture of thimerosal, tincture of iodine up to 0.01% aqueous solution of iodine) of proven cidal effect on rabies is advised.
- b) Proper medical care for bite wounds must be made available with no delay, and the need for post-exposure rabies prophylaxis must be established by the Student Health Center physician or any physician of the victim's choosing.
- c) The Hospital Office must be informed without delay. The office staff which will in turn inform the VTH Director, LSU Student Health Services, the Chair of the VTH Infection Control Committee, and a representative of the LSU Biosafety Committee.
- d) Follow proper reporting procedures as outlined in sections 1 and 2 of the LSU VTH standard-operating-procedure for dogs and cats which have bitten a human (Bite incident SOP)
- e) The biting animal should be euthanized and submitted to the LADDL for rabies testing (see section 4 below).
- f) The Infectious Disease Epidemiology (IDE) Section at the Louisiana Department of Health and Hospitals (State Public Health Veterinarian) is a great resource for additional guidance regarding the best possible approach in people who had contact with rabid animals. The phone number for IDE is 504-568-8313 (24 hour emergency number: 800-256-2748).

4) **Procedure for submitting the head of a rabies suspect animal for analysis**

- a) Dead animals that are suspect of having rabies **must not be touched without gloves and adequate PPE** (see paragraph 2a above). In particular, the mouth of the animal must not be handled.
- b) The animal must be tagged with a necropsy tag labeled "RABIES SUSPECT"
- c) Carcasses must be double bagged in biohazard red bags and the outside bag must be conspicuously identified as "RABIES SUSPECT"
- d) The properly bagged and duly identified animal is to be delivered to the necropsy cooler room.
- e) The Louisiana Animal Disease Diagnostic Laboratory (LADDL) Small Animal Submission Form must be filled out and Rabies Examination (Virology Section) must be requested.
- f) If a necropsy is requested, complete the proper paper work, which will include a Necropsy and Laboratory Request Form. Label all paperwork as "RABIES SUSPECT".
- g) Client will be charged \$34.00 for the Rabies examination regardless if a bite is has occurred or not.

5) **Procedure to follow if a dead animal is brought for rabies examination at the small animal VTH reception**

- a) Dead animals, domestic or wild, that have bitten (or are suspected to have bitten) a human within the past ten days, or dead animals otherwise considered to be rabies suspects are to be submitted directly to the LADDL Receiving and Accessioning Office for rabies examination.
- b) Should a situation arise that such a dead animal is presented to the Small Animal VTH, the procedures outlined under section 3 above **MUST** be followed.
- c) Small animal staff, students and clinicians that are in contact with the cadaver must write their names on a exposure record that will be given to the VTH Hospital Director or the Infection Control Committee Chair either immediately or at the beginning of the next business day
- d) For description of mandatory PPE and submission of the carcass, follow the directions outlined under paragraph 2a and section 3 above.

6) **Procedures to follow after rabies has been confirmed by direct fluorescent analysis of brain tissue (LADDL)**

- a) Upon confirmation of a positive rabies test, The LADDL will notify
 - i. the attending clinician(s) identified on the request form,
 - ii. the LSU SVM Dean,
 - iii. the LSU SVM VTH Director,
 - iv. the LSU SVM Safety Officer,
 - v. the State Public Health Veterinarian, Infectious Disease Epidemiology (IDE) Section at the Louisiana Department of Health and Hospitals. The phone number for IDE is 504-568-8313 (24 hour emergency number: 800-256-2748).

- b) The VTH Director will immediately inform the VTH ICC Chair, and will obtain the exposure record (see 2b and 4c above), and notify students, staff and clinicians who have been in contact with the animal of the positive rabies results. The individuals listed on the exposure record will be requested to report to the LSU Student Health Center or a physician of their choice for further advice regarding further treatment.

- c) The State Public Health Veterinarian, Infectious Disease Epidemiology (IDE) Section at the Louisiana Department of Health and Hospitals, is a great resource for additional guidance regarding the best possible approach in people who had contact with rabid animals. The phone number for IDE is 504-568-8313 (24 hour emergency number: 800-256-2748).

7) **Clinical presentation of rabies in dogs and cats**

(from Greene, Infectious Diseases of the Dog and Cat, 2012)

Rabies should be considered as a differential diagnosis in a dog or cat with rapidly progressive neurological disease of less than 10 days duration. The typical clinical signs are described below, however it is important to remember that clinical signs may also be less typical.

Prodromal phase (dogs and cats)

Duration 2-3 days, apprehension, nervousness, anxiety, solitude, variable fever. Licking/pruritus at the site of inoculation.

Furious type

Dogs: duration 1-7 days, restlessness, irritability, increased response to stimuli. Excitable, photophobic, hyperesthetic. Bark or snap at imaginary objects. Want to roam, become more irritable and vicious. Pica may cause GI foreign bodies. Muscular incoordination, disorientation, grand mal seizures.

Cats: often have an anxious, staring, wild, spooky or blank look in their eyes, otherwise similar signs to dogs

Paralytic or dumb type:

Dogs show this phase more commonly. Usually within 2-4 days after the first clinical signs. LMN paralysis from the site of injury, progressing until entire CNS is involved. Cranial nerve paralysis may be the 1st recognizable sign if bite occurs on the face. Affection of brain stem may lead to change in bark (laryngeal paralysis), salivation, excessive frothing as a result of inability to swallow, dropped jaw is possible. Dog may make choking sounds suggestive of pharyngeal foreign body, coma, and respiratory failure.

Cats: usually follows furious form. Mandibular and laryngeal paralysis are less common. Increased frequency of vocalization with a change in pitch.