

Recommendations for Managing Human Rabies Exposure *

For **Bat** Exposures see *Rabies Exposure Management for Bat-related Incidents Flow Chart*, available at www.idph.state.ia.us/adper/common/pdf/cadefrabies_exposure_bats.pdf

Animal Species	Situation	Rabies Post Exposure Prophylaxis (PEP) Recommendations
Dogs, cats, ferrets	Animal available for testing or 10 day confinement and observation	If the animal is exhibiting symptoms consistent with rabies, immediately euthanize and test. If the animal is not exhibiting symptoms, a 10 day confinement period can be instituted. If the animal exhibits signs of rabies during the 10 day confinement period, it should be euthanized immediately and tested. If results are positive, unsuitable or indeterminate administer PEP immediately. If the animal does not exhibit clinical signs during the 10 day confinement period, PEP is not recommended, since the animal was not excreting virus at the time of the bite or saliva exposure.
Horses or other farm animals	Animal unavailable (waiting up to 72 hours to capture the animal may be reasonable, assuming the correct animal can be identified)	If the animal is not available for confinement or testing, administer PEP. (If the animal is captured later contact IDPH at 800-362-2736.)
	If the animal exhibits signs of rabies or dies suddenly, test the animal for rabies.	Defer administration of PEP until outcome of testing. If results are positive, unsuitable or indeterminate, administer PEP.
	All other cases, contact IDPH for guidance.	Contact IDPH at 800-362-2736 during business hours or 515-323-4360 after hours.
Skunk, raccoon, fox, coyote	Euthanize and test animal	Defer administration of PEP until outcome of testing. If results are positive, unsuitable or indeterminate, administer PEP.
	Animal unavailable for testing	Administer PEP immediately.
	Euthanize and test animal	Defer administration of PEP until outcome of testing. If results are positive, unsuitable or indeterminate administer PEP.
Large rodents: such as beavers, muskrats, or groundhogs	Animal unavailable for testing	Contact IDPH for consultation at 800-362-2736 during business hours or 515-323-4360 after hours.
	Animal unavailable for testing	No PEP is recommended, as these species almost never carry rabies.
	Provoked bite and animal behaving normal	Contact IDPH for consultation at 800-362-2736 during business hours or 515-323-4360 after hours.
Small rodent: such as squirrels, hamsters, guinea pigs, gerbils, chipmunks, rats, mice, rabbits, or opossum	Unprovoked bite or animal behaving abnormal	Contact IDPH for consultation at 800-362-2736 during business hours or 515-323-4360 after hours.
	Unprovoked bite and animal behaving normal	No PEP is recommended, as these species almost never carry rabies.

* Exposure: a bite or saliva/nervous tissue contact to an open wound or mucous membrane

NOTE: If the patient was **bitten above the shoulders**, IDPH recommends that the health care provider consider starting PEP immediately. PEP can be discontinued if the animal tests negative for rabies or is healthy at the end of the quarantine period.

Thoroughly wash all wounds with soap and water and, if available, flush with povidone iodine solution (or other virucidal solution). Evaluate tetanus vaccination status, update if needed.

(Updated 6/18/2010)

If questions arise on any of the above information or circumstances related to the exposure are unusual, please contact IDPH for consultation at:
 During business hours: 800-362-2736
 After hours: 515-323-4360



Iowa Department of Public Health,
 Center for Acute Disease Epidemiology (CADE)

<http://www.idph.state.ia.us/CADE/DiseaseIndex.aspx?disease=Rabies>
<http://www.cdc.gov/rabies>



<http://www.cfsph.iastate.edu>

Rabies exposure management frequently asked questions (FAQs)

What constitutes an exposure?

- A bite from an animal to a human.
- Saliva or neural tissue contact from an animal to a human's open wound or mucous membrane.
- A bat is found in the same room with a sleeping person, an unattended child, an intoxicated person, or anyone unable to confirm that they were NOT bitten.

What is NOT an exposure?

- Other contact, such as contact with the blood, urine, skunk spray, or feces, does not constitute an exposure and is not an indication for prophylaxis.

What are the rules for animal rabies quarantine in my area?

- Cities and counties enforce animal rabies quarantine rules and regulations. Rules and regulations can differ from one area to another. The most accurate information can be obtained from your city animal control department or your local public health agency.

Do all animals that bite humans need to be tested for rabies?

- If the biting animal is a rodent (rat, mouse, squirrel, guinea pig, chipmunk or gerbil), a marsupial (opossum) or a lagomorph (rabbit), we usually do not recommend testing unless the animal is behaving abnormally or the bite was not provoked. If one of these animals exhibited unusual behavior or if the bite was unprovoked, testing the animal would be recommended. Contact CADE, (800) 362-2736, for consultation on the need for testing and post exposure prophylaxis.

How do I get an animal tested for rabies?

Animals can be tested for rabies at one of the following laboratories:

State Hygienic Lab (SHL)

Address
Coralville Laboratory State Hygienic Laboratory
U of I Research Park, 2490 Crossspark Road
Coralville, IA 52241
800-421-4692 (call first)

Web instructions <http://www.shl.uiowa.edu/kits/questforms/rabiesslip.pdf>

Submissions
Submit the whole (dead) animal if it is bat-sized or mouse-sized. Submit the HEAD ONLY if animal is larger than a bat/mouse (Should be removed by veterinarian).
Live bats are accepted when container labeled "LIVE BAT".

Results
SHL Rabies Test Request Form is required (Available from the SHL Web site). Results are reported ONLY to the physician or veterinarian listed on submission form.
Testing is performed 7 days/week. Results (except negatives) phoned to physician/veterinarian.

Packaging
Double bag the specimen to prevent leaking.
Package the specimen with ice or refrigerant packs.
DO NOT FREEZE THE SPECIMEN.
If bat is alive, label the package "LIVE BAT".

Transport
Private carrier (patient, relative, or designee) drives the sample and completed form to SHL.
Overnight commercial carrier (FedEx preferred) transports properly packaged sample (dead animals only) and completed form.

After hours drop off University of Iowa Hospitals and Clinics (JIHC) Emergency Room will receive after hour samples.
Remain in ER until specimen is properly received by ER staff.

Charge for testing? There is no charge for testing if there has been a human exposure (exposure definition above).

If a person previously vaccinated with Human Rabies Vaccine is exposed to a rabid animal, what is required for post exposure prophylaxis?

- Persons with previous rabies vaccination [completed series of the three vaccine pre exposure prophylaxis or the series of four/five vaccines and Human Rabies Immune Globulin post exposure prophylaxis (using Human Diploid Cell Vaccine, Rabies Vaccine Adsorbed, or Purified Chick Embryo Vaccines)], should receive two doses of rabies vaccine on days 0 and 3. The person does not need Human Rabies Immune Globulin.

Persons previously vaccinated with a rabies vaccination regimen NOT LISTED ABOVE should receive full post exposure prophylaxis unless they have a documented rabies antibody titer (corresponding to complete neutralization dilution of 1:5 or greater by RFFIT testing). Persons with a documented antibody titer should receive two doses of rabies vaccine on days 0 and 3.

What if a patient cannot / does not adhere to the rabies post exposure vaccination schedule?

- The effectiveness of the rabies vaccines may be compromised if the recommended vaccination schedule is not followed. EVERY EFFORT should be made to administer the vaccines in accordance with the recommended schedule. In general, if a rabies vaccine dose has been missed, the schedule should resume with the dose missed (i.e., if day 7 vaccine is missed (3rd dose), administer a vaccine today and call this vaccination the "day 7" (3rd dose) vaccination. The next vaccine (4th dose) would be given in 7 more days on "day 14", in keeping with the remainder of the 0, 3, 7, 14 day schedule. Immune compromised patients will need a 5th dose of vaccine 14 days later on "day 28" and will need to have their titers checked as well. Contact CADE, (800) 362-2736 for additional consultation.

Iowa State University Veterinary Diagnostic Laboratory (VDL)

600 S. 16th Street
Ames, IA 50010
515-294-1950 (call first)

Web instructions <http://vetmed.iastate.edu/sites/default/files/vdl/forms/RabiesForm.pdf>

Whole (dead) animal submissions are preferred.
Heads of larger animals are accepted (removed by veterinarian, removal instructions on VDL Web site).

Occasionally, live animal submissions are accepted with prior approval. There is a fee for euthanasia.
VDL Rabies Examination Submission Form is required. (Available x from the VDL Web site.) Note if a human exposure has occurred for prompt testing. Results are reported to the submitter listed on the submission form.

Testing performed M-F (after-hrs testing on approval, only if human exposure). Results phoned to submitter.

Packaging
Use a leak-proof container with refrigerant packs.
Package the specimen with refrigerant packs. DO NOT FREEZE THE SPECIMEN.
Label the package "RABIES SUSPECT".

Transport
Private carrier (patient, relative, or designee) drives the sample and completed form to VDL or an overnight commercial carrier (FedEx, UPS, etc.) transports the sample properly packaged and completed form to VDL.

After hours drop off Call after hours staff at 515-290-1959 prior to submission for proper drop-off instructions. Dead animals are preferred. There is a fee for euthanasia.

Charge for testing? Yes. Please note if human exposure has occurred to ensure prompt testing