



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

Laboratories Administration
John M. DeBoy, Dr.P.H., Director

MEMORANDUM

DATE: November 29, 2010

TO: Local Health Department Health Officers, Rabies Coordinators, Nursing Directors, Environmental Health Directors, Communicable Disease Directors, and Communicable Disease Staff

FROM: Maria Paz Carlos, Ph.D., Chief, Division of Virology and Immunology, Laboratories Administration *mpc*

THROUGH: Robert A. Myers, Ph.D., Deputy Director Scientific Programs, Laboratories Administration *R.A.M.*
John M. DeBoy, Dr.P.H., Director, Laboratories Administration *JMD*

SUBJECT: Updated Animal Rabies Testing Submission Guidelines

The DHMH Laboratories Administration recognized the need to improve the process and communications in rabies testing with the local health departments, as well as understand the importance of producing quality rabies testing. **This memo provides an update on the animal rabies submission procedural changes listed below effective January 1, 2011.**

1. The Rabies Laboratory operates from 8:00AM to 4:30PM weekdays (Mondays through Friday except on holidays and salary reduction days). **On-call scientists are available during holidays, weekends and salary reduction days for after-hours submissions that require results as soon as possible so that a medical determination on rabies post-exposure prophylaxis (PEP) can be made.** (See enclosed and our website at <http://dhmh.state.md.us/labs/html/rabies.html>). Note that we are improving the communications and coordination to see to it that human exposure cases are tested immediately, thus those that need medical attention will get it sooner.
2. Updated Specimen Submission Form and Electronic Lab Test Request/Reporting.
 - a. Submission of specimens for animal rabies testing using the DHMH Laboratories Administration's MyLIMS (Laboratory Information Management Systems) (<http://starlims.dhmh.md.gov/starlims10.dhmlabs.prod/>). The local health departments must use MyLIMS for submission of specimens for rabies testing. This would allow the LHDs to

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view test results on-line, as well as print a copy of the official test report. These new procedures include the updated animal rabies testing submission form (DHMH 1188 11/10) (See enclosed and our website at <http://dhmh.state.md.us/labs/html/rabies.html>).

b. These procedural improvements were the result of the collaborative efforts of the DHMH Center for Zoonotic and Vector-borne Diseases, the local health departments, and DHMH Laboratories Administration. The improvements in the rabies submission policies have been vetted across the State of Maryland the past six months. Extensive outreach by the DHMH Laboratories Administration Rabies Staff in collaboration with the Center for Zoonotic and Vector-borne Diseases staff has been provided to the local health departments. These on-site trainings were held at 16 local health departments with about 140 local health department staff in attendance. In addition, these procedural changes were presented at the local health officer's meeting held on November 10, 2010 for the Deputy Secretary and the Local Health Officers to view the improvements and provide feedback. We sincerely appreciate the active participation and cooperation of the local health department staff.

3. On-Line Tools and Resource. To assist the LHDs with training, on-line tools and resource including the rabies submission policies, handouts, FAQs, submission forms, as well as both screen-shot and on-line video tutorials, were posted on our website at <http://dhmh.state.md.us/labs/html/rabies.html>.

For questions, please contact the Rabies-Zoonotic Program Laboratory at (410) 767-6177. Also, please routinely visit the DHMH Laboratories Administration website at <http://dhmh.state.md.us/labs/html/rabies.html> for rabies testing submission guidelines and updates.

Lastly, we believe that by improving the communications with the LHDs, as well as providing access to electronic test submissions will make the process better, moving forward; and this is what we have done. Thank you for your continued support and contributions to animal rabies testing activities in Maryland.

Enc: Animal Rabies Submission Policy, Animal Rabies Submission Form

cc: Deputy Secretary Frances B. Phillips
Heather Hauck
Dr. Katherine Feldman
Dr. David Blythe
Dr. Lucy Wilson
Kimberly Mitchell
Dr. Guy Hohenhaus, MDA
Dr. Jo Chapman, MDA
Dr. Tom Jacobs, MDA
Dr. Cindy Driscoll, DNR
Nicky Ratliff, PAWS

Rabies Laboratory Submission Policy

Hours of Operation

The DHMH Laboratories Administration Rabies Laboratory operates from 8:00 AM to 4:30 PM weekdays (Monday through Friday except on holidays and salary reduction days [SRD]). **On-call laboratory scientists are available for requests** that require test results as soon as possible so that a medical determination on rabies post-exposure prophylaxis (PEP) can be made.

Specimens must be received at the DHMH Laboratories Administration by 12:00 PM on Fridays to have the test results reported by Friday 4:30 PM. Specimens received on Fridays after 12:00 PM will have the results ready the next regular workday.

Specimens received on evenings from Monday through Friday, Fridays from 12:00 PM to 4:30 PM, on a weekend, SRD, or on a State holiday will be processed on the next regular workday, except for situations that require test results as soon as possible so that a medical determination about rabies PEP can be made (emergency examination). In these situations, prior approval by epidemiology staff in the DHMH Office of Infectious Disease Epidemiology and Outbreak Response (IDEOR) is necessary before testing will be initiated by on-call laboratory scientists. (For details, please see the Emergency Examination Requests section below).

Delivery Procedures

Delivery of specimens must be from Monday through Friday 7:30AM to 6:00PM (regular workdays) to the DHMH Laboratory Tower in the Receiving Area on the Service Level of the O'Connor Building at 201 W. Preston Street. All animal submission of specimen must be routed through the local health department and sent via courier service. Do not use the U.S. Postal Service or other public transportation service to send specimens. (For emergency examination situations, please see the Emergency Examination Requests section below).

Ordering Tests

For routine testing Monday through Friday, all local health departments must use the DHMH Laboratories Administration's MyLIMS (Laboratory Information Management Systems) <http://starlims.dhmh.md.gov/starlims10.dhmlabs.prod/> for submission of specimens. The updated rabies submission form (DHMH 1188 11/10) will print out automatically when the animal rabies test is ordered through the MyLIMS system, and must be included in the cooler and attached to the specimen being submitted. One Rabies Submission Form should accompany each animal submitted. Specimens approved for emergency testing must be accompanied by a fully completed handwritten Rabies Submission Form if access to MyLIMS is not possible. An emergency contact name and phone number must be listed on the Rabies Submission Form. The updated rabies submission form (DHMH 1188 11/10) can be downloaded from our website at <http://dhmh.state.md.us/labs/html/rabies.html>.

Criteria for Animal Submission

Terrestrial animals acceptable for submission to DHMH are rabies vector species (e.g., raccoons, foxes, skunks, etc.) that expose humans, livestock, or pets. Exposure is defined as a bite that breaks the skin or contact of mucous membranes or broken skin with either animal saliva or nervous tissue. Birds, fish, reptiles and amphibians will not be accepted for rabies testing under any circumstances. Small rodents, including squirrels, chipmunks, gerbils, guinea pigs, hamsters, rabbits, mice, rats, voles, shrews and moles, will not be accepted for testing unless (1) the animal has bitten a human and (2) prior approval for testing has been authorized by the DHMH IDEOR epidemiology staff. Most recent human cases of rabies in the U.S. have been associated with bats, and bat bites may be difficult to recognize.

Bats should be submitted for testing in all cases of direct human contact with a bat or when bite or mucous membrane contact cannot be ruled out.

Emergency Examination Requests

Some situations that occur after regular business hours may require rabies test results as soon as possible so that a medical determination about rabies PEP can be made. In these situations, on-call laboratory scientists are available; and specimens may be examined Fridays from 12:00 PM to 4:30 PM, on a weekend, SRD, or on a State holiday, **with prior approval** of DHMH IDEOR epidemiology staff. To reach the epidemiology staff during regular business hours, contact the DHMH IDEOR Center for Zoonotic and Vector-borne Diseases (CZVD) at 410-767-5649 (main); 410-767-6703 (DHMH State Public Health Veterinarian); or 410-767-6618 (CZVD Rabies Chief). After hours, use the DHMH IDEOR Epidemiologist-On-Call pager at 410-716-8194.

After receiving approval for an emergency examination request, contact one of the following DHMH Laboratories Administration staff (in the order listed below) to arrange for testing and appropriate submission. (NOTE: In addition to the rabies submission form, the specimen should be accompanied by the submitter's after-hours contact information to receive results).

- 1) Algernon Prioleau: 443-468-0264
- 2) Rabies Lab On-Call No: 443-735-1291
- 3) Dr. Maria Paz Carlos: 410-241-3303
- 4) Dr. Robert Myers: 443-928-0925
- 5) OLEPR (Jim Svrjcek or Gwendolyn Paszkiewicz): 410-925-3121

Specimen Collection

Animals should be euthanized in a manner that will not destroy the brain tissues to be examined in the diagnosis of rabies. When possible, only the animal's head should be submitted for diagnostic purposes. For animals weighing more than 20 pounds, particularly large dogs, only the head may be submitted for testing. If an animal is being submitted to DHMH Labs from an animal pathology or diagnostic laboratory, and the animal has already been prepared for necropsy, the submitter should submit all or a cross section of the brainstem and half of the cerebrum.

Packaging and Shipping

- All rabies specimens must be placed into coolers that are clearly marked as rabies coolers. No other non-rabies clinical samples may be placed into rabies coolers or these samples will be rejected.
- Rabies coolers must fully close and must be waterproof.
- Each specimen must be individually packaged in a leak-proof bag and clearly labeled.
- Each specimen must be accompanied by a Rabies Submission Form for proper identification.
- All Rabies Submission Forms must be filled out correctly and legibly including exposure type.
- Coolers may be shipped with ice or ice packs but the ice should not occupy more than 1/3 of the cooler.
- Submitters should provide advanced notice and clear labeling for live bat submissions. All other animals being submitted for testing must be dead.
- Submitters should avoid freezing specimens. If frozen specimens are received, testing will be delayed.
- No trash should be sent in rabies coolers.
- Specimens containing ectoparasites (including ticks, fleas and maggots) must be sprayed with insecticide before being packaged and submitted. This is to ensure that couriers and lab staff are protected from infestations. The Rabies Lab will provide insecticide if requested.
- Animal rabies packaging and training video available at <http://dhmh.state.md.us/labs/html/rabies.html>.

Maryland Department of Health and Mental Hygiene

Laboratories Administration

201 W. Preston Street, Baltimore, Maryland 21201

Main Phone No: 410-767-6100 http://www.dhmh.state.md.us/labs

Division of Virology and Immunology Rabies Laboratory Phone No: 410-767-6177 Fax No: 410-333-7790

Animal Rabies Examination Submission Form

NOTE: Normal business hours are 8:00AM- 4:30PM Monday thru Friday. Specimens received without prior approval after 12:00PM on Fridays will be processed the next business day. Weekends and holidays require prior approval from State Epidemiology/ Center for Zoonotic and Vector-borne Diseases Staff/Laboratory Administrations for emergency testing only.

1. SUBMITTER INFORMATION		2. OWNER OF SUBMITTED ANIMAL INFORMATION (or person who found animal)	
Name:		Name: First Last	
Address		Address	
City State Zip Code		City State Zip Code	
Phone Number () Submitter Animal ID No.		Phone Number () Jurisdiction	
Address where Exposure Incident Occured:		City State Zip Code Jurisdiction	
3. SPECIMEN INFORMATION		<input type="checkbox"/> Pet <input type="checkbox"/> Stray <input type="checkbox"/> Wildlife <input type="checkbox"/> Livestock	
Species: <input type="checkbox"/> Bat <input type="checkbox"/> Cat <input type="checkbox"/> Dog <input type="checkbox"/> Raccoon <input type="checkbox"/> Skunk <input type="checkbox"/> Fox <input type="checkbox"/> Opossum <input type="checkbox"/> Beaver <input type="checkbox"/> Cow <input type="checkbox"/> Horse <input type="checkbox"/> Ground Hog <input type="checkbox"/> Deer <input type="checkbox"/> Bear <input type="checkbox"/> Sheep <input type="checkbox"/> Goat		Death Date: _____ Month Day Year	
Any other animal requires prior approval from the State Epidemiologist/Center for Zoonotic and Vector-borne Diseases Staff/Laboratories Administrations		Cause of Death: <input type="checkbox"/> Diseased <input type="checkbox"/> Euthanized <input type="checkbox"/> Accidental <input type="checkbox"/> Unknown <input type="checkbox"/> Other _____	
If submitting an animal requiring prior approval and or emergency testing: Species: _____ Arrangements made with: _____ Date: ____/____/____ Month Day Year		Reason for Rabies Testing: <input type="checkbox"/> Human Exposure <input type="checkbox"/> Pet Exposure	
Clinical Signs: <input type="checkbox"/> Disoriented <input type="checkbox"/> Seizures <input type="checkbox"/> Aggression <input type="checkbox"/> Lethargy <input type="checkbox"/> Unexplained wound <input type="checkbox"/> Ataxia <input type="checkbox"/> Paralysis <input type="checkbox"/> Other _____		Rabies Vaccination History: <input type="checkbox"/> Current - Vaccinated <input type="checkbox"/> Lapsed Rabies Vaccination <input type="checkbox"/> Unvaccinated <input type="checkbox"/> Unknown	
4. EXPOSURE INFORMATION			
Type of Exposure: <input type="checkbox"/> Human <input type="checkbox"/> Animal <input type="checkbox"/> Both		Exposure Date: ____/____/____ Month Day Year	
Name of Person Exposed: First Last		Name/Species of Animal Exposed (if applicable):	
Address:		Phone Number () Jurisdiction of Exposure:	
City State Zip Code		Type of Exposure: <input type="checkbox"/> Bite <input type="checkbox"/> Other <input type="checkbox"/> Scratch <input type="checkbox"/> Lick	
Exposed body area:		Circumstance of Human Exposure: <input type="checkbox"/> Other _____ <input type="checkbox"/> Capture <input type="checkbox"/> Unprovoked attack <input type="checkbox"/> Provoked attack	
Circumstance of Animal Exposure: <input type="checkbox"/> Fight <input type="checkbox"/> Dead animal contact <input type="checkbox"/> Other _____			
FLUORESCENT RABIES ANTIBODY TEST RESULTS: (For Laboratory Use Only)			
<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Unsatisfactory Specimen Comments: _____			
Results Phoned To: _____ Date: ____/____/____ Time: _____ Virologist: _____			

Laboratory Use Only

Date Received: _____ Rabies Accession No: _____