

Rabies Laboratory Animal Submission Procedures

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Virologist

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Chief
Division of Virology and Immunology

Maryland DHMH Laboratories Administration

The DHMH Laboratories Administration recognized the need to improve the processes in animal rabies test submissions with the Local Health Departments, State Lab, and Center for Zoonotic and Vector-borne Diseases, as well as understand the importance of producing quality rabies testing.

Purpose of the Lab Presentation:

To provide an update on the animal rabies submission procedural improvements

To provide an overview of rabies animal testing and achieve a better understanding of the workflow

The improvements in the rabies submission policies have been discussed and vetted to the local health department staff (environmental health, animal control) across the State of Maryland in 2010 (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 from October 20 through November 19, 2010.

These on-site trainings were held at 16 local health departments with about 140 local health department staff from Allegany, Garrett, Washington, Frederick Carroll, Cecil, Harford, Anne Arundel, Dorchester, Wicomico, Caroline, Talbot, Montgomery, Howard, Queen Anne, St. Mary's, Baltimore, Prince George's, Calvert, Charles Somerset County and Worcester counties and Baltimore City in attendance.

We sincerely appreciate the active participation and cooperation of the local health department staff.

Updated Animal Rabies Submission Form

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
201 W. FREDERICK STREET
PO Box 2433, Baltimore, Maryland 21203
1-800-MD-DISEASE FAX: 410-326-7300

Package ID: A3X053 Lab ID: A10212353 Submitter ID: 1531001 Printed Date: 11/30/10

Animal Rabies Examination Submission Form

NOTE: Normal business hours are 8:00AM - 4:00PM Monday thru Friday. Specimens received without prior approval after 12:00PM on Friday 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 Administration for emergency testing only.

1. SUBMITTER INFORMATION

Name: [Redacted]
Address: [Redacted]
City: ROCKVILLE MD Zip Code: 20850
Phone Number: (124) 773-8800 Submitter Animal ID No: A345529 State: MD Jurisdiction: Montgomery
Address where Exposure Incident Occurred: [Redacted] City: [Redacted] Zip Code: [Redacted] Jurisdiction: [Redacted]

2. OWNER OF SUBMITTED ANIMAL INFORMATION (or person who found animal)

Name: [Redacted]
Address: [Redacted]
City: [Redacted] State: [Redacted] Zip Code: [Redacted] Jurisdiction: [Redacted]

3. SPECIMEN INFORMATION Pet Stray Wildlife Livestock

Species: Bat Cat Dog Raccoon Skunk Fox Opossum Beaver Squirrel Other Bird Horse Cow Pig Sheep Goat Deer Rabbit Snake Fish Reptile Amphibian Invertebrate Unknown

Death Date: 10 / 29 / 2010

Cause of Death: Disease Euthanized Accidental Unknown Other

* Any other animal requires prior approval from the State Epidemiological Center for Zoonotic and Vector-borne Diseases Staff/Laboratory Administration *

4. Exposure Information:

Type of Exposure: Human Animal Both Exposure Date: 10 / 26 / 2010

Name of Person Exposed: [Redacted] Last Name: [Redacted] Address: [Redacted] City: [Redacted] State: [Redacted] Zip Code: [Redacted] Phone Number: [Redacted] Jurisdiction of Exposure: [Redacted]

Name of Animal Exposed (if applicable): [Redacted] Address: [Redacted] City: [Redacted] State: [Redacted] Zip Code: [Redacted] Phone Number: [Redacted] Jurisdiction of Exposure: [Redacted]

Circumstance of Human Exposure: Handling Capture Feeding Contact Bite Scratch Lick Other

Circumstance of Animal Exposure: Fight Provoked attack Unprovoked attack Other Dead animal contact Other

LABORATORY REPORT

Date Received: 7-17-10 Negative Positive RA 02200
Rabies Fluorescent Antibody Test: Positive Negative Date Reported: [Redacted]

Telephoned Results: Yes No Date: 7-17-10

Copies to: 1) Laboratory 2) Submitting Authority LABORATORY

DHMH 1100 9/09

Maryland Department of Health and Mental Hygiene
Laboratories Administration
201 W. Frederick Street, Baltimore, Maryland 21201
Main Phone No: 410-326-6318 http://www.dhmdh.maryland.gov
Division of Virology and Immunology Rabies Laboratory Phone No: 410-574-4177 Fax No: 410-333-7799

Package ID: A3X053 Lab ID: A10212353 Submitter ID: 1531001 Printed Date: 11/30/10

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Circumstance of Human Exposure: Handling Capture Feeding Contact Bite Scratch Lick Other

Circumstance of Animal Exposure: Fight Provoked attack Unprovoked attack Other Dead animal contact Other

FLUORESCENT RABIES ANTIBODY TEST RESULTS: (For Laboratory Use Only)

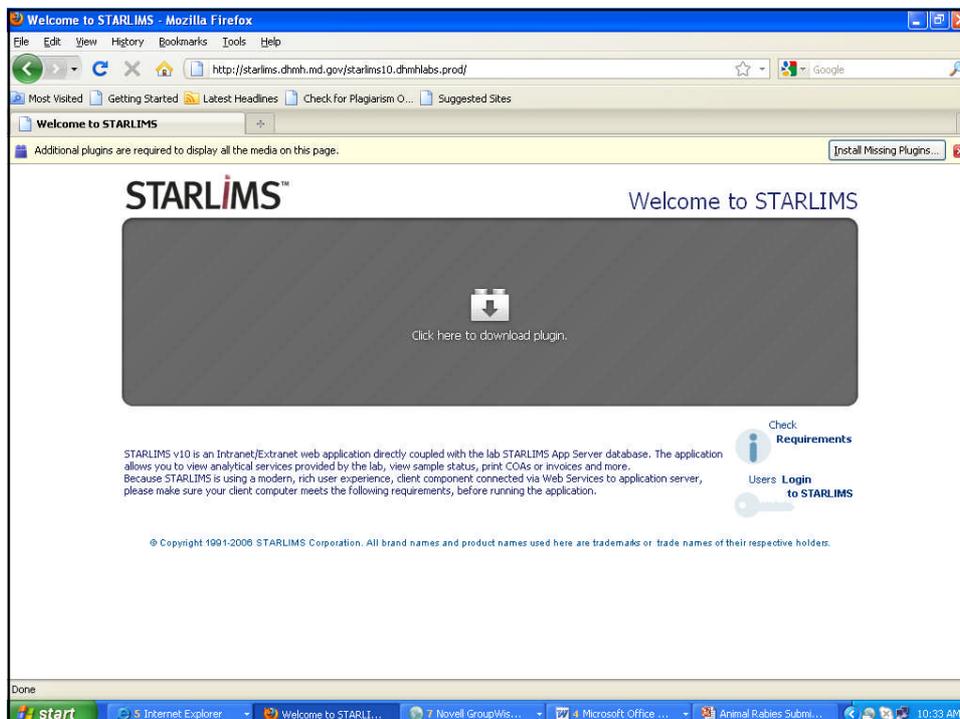
Positive Negative Unsatisfactory Specimen Comments: [Redacted]

Results Phoned To: [Redacted] Date: [Redacted] Time: [Redacted] Virologist: [Redacted]

11-03-7010 1R 212363 - RA03925-10 ©2009-2010 DHMH/DMH/DMH/DMH

Electronic Test Request Electronic Reporting

- Submission of animal rabies test electronically using the DHMH Lab MyLIMS (Laboratory Information Management Systems) <http://starlims.dhmh.md.gov/starlims10.dhmlabs.prod/>).
- The local health departments use MyLIMS for submission of specimens for rabies testing. These new procedures include updated animal rabies testing submission form.
- Allow the LHDs to view test results on-line and print a copy of the official test report.
- This electronic access will aid in reporting of statistics.
- A quick demo will be provided later by Stephen Longdo, Rabies Laboratory Staff.



To strengthen coordination to see to it that human exposure cases are tested immediately, thus those that need medical attention will get it sooner.

Animal rabies testing will be performed Mondays through Fridays (8:00AM to 4:30PM).

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 about rabies post-exposure prophylaxis (PEP) can be made.

	<p>STATE OF MARYLAND DHMH</p> <p>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</p> <p>Laboratories Administration John M. DeBoy, Dr.P.H., Director</p>	
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 <i>MPC</i>	
THROUGH:	Robert A. Myers, Ph.D., Deputy Director Scientific Programs, Laboratories Administration <i>R.A.M.</i> John M. DeBoy, Dr.P.H., Director, Laboratories Administration <i>JMD</i>	
SUBJECT:	<u>Updated Animal Rabies Testing Submission Guidelines</u>	
<p>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. <u>This memo provides an update on the animal rabies submission procedural changes listed below effective January 1, 2011.</u></p>		
<ol style="list-style-type: none"> 1. <u>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.</u> (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. <u>Updated Specimen Submission Form and Electronic Lab Test Request/Reporting.</u> <ol style="list-style-type: none"> a. Submission of specimens for animal rabies testing using the DHMH Laboratories Administration's MyLIMS (Laboratory Information Management Systems) http://lismy.dhmh.md.gov/statelims10.dhmlabs.prod/. The local health departments must use MyLIMS for submission of specimens for rabies testing. This would allow the LHDs to <p style="font-size: small; margin: 0;">P.O. BOX 2355 • Baltimore, Maryland 21203-2355 410-767-6100 • TTY for Disabled - Maryland Relay Service 1-800-735-2258 Toll Free 1-877-440-3444 • Web Site www.dhmh.state.md.us/labs/</p> 		

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://dnhm.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://dnhm.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://dnhm.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

P.O. BOX 1355 • Baltimore, Maryland 21203-2155
410-767-6100 • TTY for Deaf/blind • Maryland Relay Service 1-800-735-2258
Toll Free 1-877-410-DHMH • Web Site: www.dnhm.state.md.us/labs/

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 (IDEO) 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://starlms.dnhm.md.gov/starlms10_dnhmlabs_portal/ 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://dnhm.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 IDEO 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) Aigernon Proteau: 443-668-0264
- 2) Rabies Lab On-Call No: 443-735-1291
- 3) Dr. Maria Paz Carlos: 410-241-3303
- 4) Dr. Robert Myers: 443-828-0925
- 5) OLEPR (Jim Svrjek 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://dhhm.state.md.us/labs/html/rabies.html>.

Rabies Laboratory 410-767-6177 (<http://dhhm.state.md.us/labs/html/rabies.html>) 11/29/2010 Page 2 of 2

Maryland Department of Health and Mental Hygiene
 Laboratories Administration
 201 W. Preston Street, Baltimore, Maryland 21201
 Main Phone No: 410-767-6100 <http://www.dhhm.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 8:00 AM - 4:00 PM Monday thru Friday. Specimens received without prior approval after 12:00 PM 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 Occurred: _____		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			
If submitting an animal requiring prior approval and/or emergency testing: _____		Reason for Rabies Testing: <input type="checkbox"/> Human Exposure <input type="checkbox"/> Pet Exposure	
Species: _____ Date: / / Month _____ Day _____ Year _____		Rabies Vaccination History: <input type="checkbox"/> Current - Vaccinated <input type="checkbox"/> Lapsed Rabies Vaccination <input type="checkbox"/> Unvaccinated <input type="checkbox"/> Unknown	
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 _____		Cause of Death: <input type="checkbox"/> Discarded <input type="checkbox"/> Euthanized <input type="checkbox"/> Accidental <input type="checkbox"/> Unknown <input type="checkbox"/> Other _____	
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	
Circumstance of Human Exposure: <input type="checkbox"/> Other <input type="checkbox"/> Capture <input type="checkbox"/> Unprovoked attack <input type="checkbox"/> Provoked attack		Exposed body area: _____ 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: _____			

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 DEPARTMENT OF HEALTH AND MENTAL HYGIENE
J. Mehsen Joseph - Public Health Laboratory

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GENERAL INFORMATION

- Lab Hours
- Holiday Schedule
- Receiving Policy
- FAQ
- Certificates of Licensure
- Labs in the News

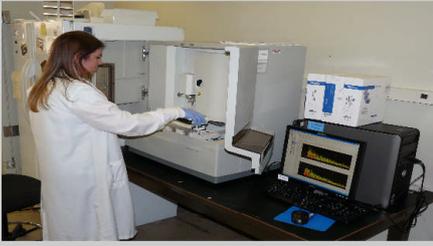
LABORATORY GUIDES

- Public Health Laboratory Services
- Environmental Laboratory Services

OTHER DHMH LINKS

- DHMH Home
- County Health Departments
- Community Health Administration
- Family Health Administration
- External Links

About the Office of the DHMH Secretary
DHMH Secretary Welcome Message



PHASE Program Laboratory Internships
Projects and Students in the Division of Virology and Immunology

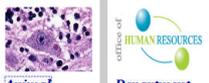
Important Information

- 2011 Chlamydia/GC NAAT Updates (Updated: 2/3/2011)
- Influenza Season 2010-2011 Updates
- MEMO: Updated Animal Rabies Testing Submission Guidelines November 29, 2010
- Newborn Screening Blood Storage Policy and Procedures

Also of Interest

- Emerging Infectious Diseases (EID) Fellowship Program
- Well Water Testing Fees (Effective July 1, 2011)
- NCAA Student Athlete Sickle Cell Recommendation





Governor Martin O'Malley
Lt. Governor Anthony G. Brown

DHMH Office of the Secretary

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 - Deputy Director for Scientific Services: Robert A. Myers, Ph.D
 - Deputy Director for Regulatory & Administrative Programs:
 - Division Chief for Fiscal Services Division: Kenneth Keys, Jr
- Virology and Immunology
 - Division Chief: Maria Paz Carlos, Ph.D, DVM
- Newborn & Childhood Screening
 - Division Chief: Fizza Gulamali-Majid, Ph.D
- Molecular Biology
 - Division Chief: Robert A. Myers, PhD
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 DEPARTMENT OF HEALTH AND MENTAL HYGIENE
J. Mehsen Joseph - Public Health Laboratory

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RABIES-ZOONOTIC DISEASE LABORATORY

DIVISION OF VIROLOGY AND IMMUNOLOGY

Maryland DHMH Laboratories Administration
201 W. Preston Street
Baltimore, MD 21201

Contact Information

410-767-6177
(Tel/Voicemail) Voicemail monitored during normal business hours
410-333-7790 (Fax No.)

Normal Business Hours:
Monday thru Friday 8:00AM-4:30PM (except holidays and salary reduction days)

For after-hours submissions that require results as soon as possible so that a medical determination about rabies post-exposure prophylaxis (PEP) can be made, on-call scientists are available during holidays, weekends and salary reduction days.

March 2011 Critical Link Article: Animal Rabies Testing Electronic Submission Guidelines 2011
MEMO: Updated Animal Rabies Testing Submission Guidelines November 29, 2010

DHMH Laboratories Administration Animal Rabies Submission Presentation (November 10,2010, Local Health Officers Meeting)

[Rabies Submission Presentation \(PDF Version\)](#)
[Rabies Submission Presentation \(PowerPoint Version\)](#)

Animal Rabies Test

[Specimen Submission Policy](#)
Animal Rabies Submission Policy (including Packaging and Shipping) Document

Hours of Operation
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Delivery Procedures

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Ordering Tests

For routine testing Monday through Friday, all local health departments must use the DHMH Laboratories Administration's MyLIMS (Laboratory Information Management System) (<http://hesystems.dhmh.md.gov/submit>) (<http://dhrtablea.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://dhrm.state.md.us/dhsh/submitrabies.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 410-767-6046 (main); 410-767-6703 (Doralee State Public Health Veterinarian); or 410-767-6016 (CCVD Rabies Chief). After hours, use the DHMH IDEOR Epidemiologist-On-Call page 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. Algamon Prokocak: 443-688-0284
2. Rabies Lab On-Call No: 443-735-1291
3. Dr. Maria Paz Galvan: 410-241-5303
4. Dr. Robert Myers: 443-929-0925
5. OLEPR (Jim Surjani or Qwendolyn Paszkiawicz): 410-625-3121

Specimens Collection

5. OLEPR (Jim Surjani or Qwendolyn Paszkiawicz): 410-625-3121

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 caudatum.

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 watertight.
- 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.
- Animal rabies packaging and training video available at <http://dhrm.state.md.us/dhsh/submitrabies.html>.

Animal Rabies Packaging and Shipping Training Video
Part 1
Part 2

Specimen Submission Form (Updated: November 15, 2010)
Specimen Submission Form (PDF)
Specimen Submission Form (Word Document)
Electronic Submission MyLIMS specimen submission
MyLIMS Computer Requirements & Configuration
Rabies MyLIMS Information and Protocol
Rabies OIA MyLIMS Frequently Asked Questions
Rabies MyLIMS ScreenShot Tutorial

Animal Rabies MyLIMS Training Video
Part 1 (November 1, 2010)
Part 2 (November 1, 2010)

MyLIMS Helpdesk
For assistance or issues with MyLIMS, please contact the Laboratories IT Division (Monday thru Friday from 8:00AM - 4:30PM except holidays and salary reduction) by phone at 410-767-3073 or e-mail DMShapostol@dhmh.state.md.us

RPFIT Test

Maryland DHMH Related Links

DHMH Center for Zoonotic and Vector-borne Diseases
State Public Health Veterinarian
Medical Disease and Environmental Health Administration

This was a collaboration.....

Local Health Departments

Center for Zoonotic and Vector-borne Diseases

Dr. Katherine Feldman, State Public Health Veterinarian
Kim Mitchell, Chief of Rabies

Laboratories Administration

OIMS – Steve Montgomery (Chief), Marcus Rottman, Rob Wagner, Kim Mitchell,
Carlton Jennings
Dr. De Boy and Dr. Myers

Dedicated Rabies Laboratory Scientists, Division of Virology and Immunology

Al Prioleau, M.S.
Barbara Fremd
Stephen Longdo, M.S.
Brock Spinks
Keisha Friday



CRITICAL LINK
A Publication of the Maryland Department of Health and Mental Hygiene

The Laboratories Administration—Maryland's State Public Health Laboratory

Animal Rabies Testing Electronic Submission Guidelines 2011

Collaborative efforts result in procedural improvements

The Laboratories Administration recognized the need to improve the process and communications in animal rabies testing with the local health departments, as well as understand the importance of producing quality rabies testing. It was imperative to provide updated animal rabies testing submission guidelines, and this has been accomplished. Discussions on the procedural improvements were the result of the collaborative efforts of the DHMH Center for Zoonotic and Vector-borne Diseases (CZVD), the local health departments (LHDs), and the Laboratories Administration. The improvements in the rabies submission policy have been vetted across Maryland for six months, from June through

November 2010. Extensive outreach by the Laboratories Administration Rabies Staff, in collaboration with the CZVD staff, has been provided to the local health departments. On-site trainings were held at 16 local health departments with about 140 local health department staff in attendance. In addition, the procedural changes were presented at the local health officer's meeting held on November 10, 2010 for the Deputy Secretary of Health and the Local Health Department Officers to view the improvements and provide feedback. It was well received and seen as a huge improvement, as well as an innovative step towards electronic test submissions and reporting. This could not have been achieved without the active participation and cooperation of the local health department staff.

The Updated Animal Rabies Testing Submission Guidelines were fully implemented effective January 1, 2011.



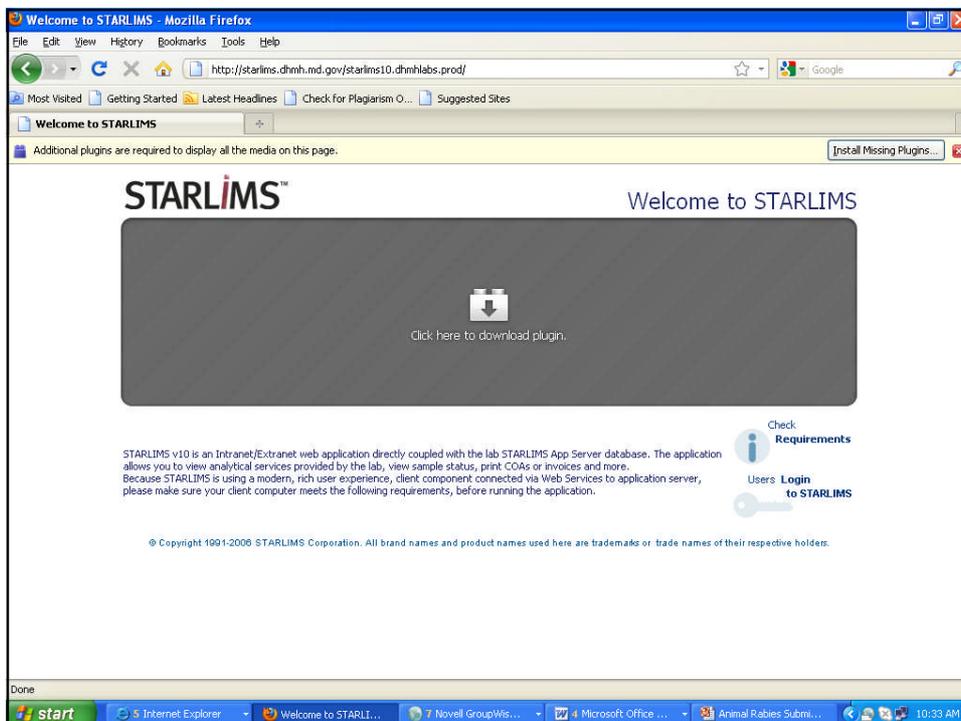
Photo 1: Laboratory Scientist Keisha Friday scans rabies testing submission forms that have been submitted electronically using MyIMS. Please view here.

This was communicated to the LHDs by Dr. Maria Paz Carlos in the "Updated Animal Rabies Testing Submission Guidelines November 29, 2010" Memo (<http://www.dhmh.state.md.us/lab/labsci/RabiesLabMemo.pdf>)

(Continued on page 2)

March 2011
Volume 15, Number 3

Rabies Animal Testing



SUBMITTER SITE
ENTERS DATA IN
MYLIMS

AND

CLICK PRINT
SUBMISSION FORM

**Maryland Department of Health and Mental Hygiene
Laboratories Administration**
201 W. Ross Street, Baltimore, Maryland 21201
Main Phone No: 410-767-4200 MyLIMS: mylms.doh.maryland.gov
Division of Virology and Serology/ Rabies Laboratory Phone No: 410-767-4177 Fax No: 410-333-7799

Package ID: Lab ID: A10212553 Submitter ID: 1531001 Printed Date: 11/03/2010

Animal Rabies Examination Submission Form

NOTE: Street business hours are 8:00AM - 4:00PM Monday thru Friday. Specimens received without prior approval after 3:00PM will be processed the next business day. *Pet owners and holders register your approval for your Epidemiological Center for Zoonotic and Vector Borne Diseases Staff/Laboratories Administration for emergency testing only.

1. SUBMITTER INFORMATION		2. OWNER OF SUBMITTED ANIMAL INFORMATION (or person who found animal)	
Name: MONTGOMERY CD AC		Name: First: SECLIA & JUAN Last: ESCORBORE	
Address: 14645 ROTHGEB DRIVE		Address: 13202 AUTUMN DRIVE	
City: ROCKVILLE	State: MD Zip Code: 20850	City: SILVER SPRING	State: MD Zip Code: 20904
Phone Number: (24) 773-5900	Submitter Animal ID No: A345529	Phone Number: (301) 388-0784	Jurisdiction: Montgomery
Address where Exposure Incident Occurred: _____		City: _____ State: MD Zip Code: _____ Jurisdiction: _____	
3. SPECIMEN INFORMATION <input checked="" 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 checked="" type="checkbox"/> Dog <input type="checkbox"/> Raccoon <input type="checkbox"/> Skunk <input type="checkbox"/> Fox <input type="checkbox"/> Possum <input type="checkbox"/> Beaver		Death Date: 10 / 28 / 2010	
<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		*Black "Red" Fox	
* Any other animal requires prior approval from the State Epidemiologist / Center for Zoonotic and Vector Borne Diseases Staff/Laboratories Administration		Cause of Death: <input type="checkbox"/> Unvaccinated <input checked="" type="checkbox"/> Euthanized <input type="checkbox"/> Accidental	
<input type="checkbox"/> Unknown <input type="checkbox"/> Other: _____		Reason for Rabies Testing: <input type="checkbox"/> Human Exposure <input type="checkbox"/> Pet Exposure	
If submitting an animal requiring prior approval and/or emergency testing: _____ Date: _____			
Arrangements made with: _____		Rabies vaccination history: <input checked="" type="checkbox"/> Current - Vaccinated	
Clinical Signs: <input type="checkbox"/> Disoriented <input type="checkbox"/> Seizure		<input type="checkbox"/> Current - Unvaccinated	
<input checked="" type="checkbox"/> Aggression <input type="checkbox"/> Lethargy <input type="checkbox"/> Unexplained wound		<input type="checkbox"/> Unvaccinated	
<input type="checkbox"/> Ataxia <input type="checkbox"/> Paralysis <input type="checkbox"/> Other: _____		<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: 10 / 28 / 2010	
Name of Person Exposed: First: JUAN Last: ESCORBORE State: _____ (Animal Exposed (if applicable): _____)			
Address: 13202 AUTUMN DRIVE		Phone Number: (301) 388-0784	Jurisdiction of Exposure: Montgomery
City: SILVER SPRING	State: MD Zip Code: 20904	Type of Exposure: <input type="checkbox"/> Bite <input type="checkbox"/> Other	Exposed Body Area: ARMS
Circumstance of Human Exposure: <input type="checkbox"/> Handling <input type="checkbox"/> Capture		Circumstance of Animal Exposure: <input type="checkbox"/> Fight	
<input type="checkbox"/> Provoked attack <input type="checkbox"/> Unprovoked attack <input type="checkbox"/> Other: _____		<input type="checkbox"/> Dead animal contact <input type="checkbox"/> Other: _____	
FLUORESCENT RABIES ANTIBODY TEST RESULTS: (For Laboratory Use Only)			
Results: <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Unsatiable Specimen		Comments: _____	
Results Phoned To: _____	Date: _____	Time: _____	Virologist: _____

11-03-7010 1W 212363 - RA03925-10 ©2008-11 WAGENKNECHT-CHENEY www.maryland.gov





RABIES SPECIMEN

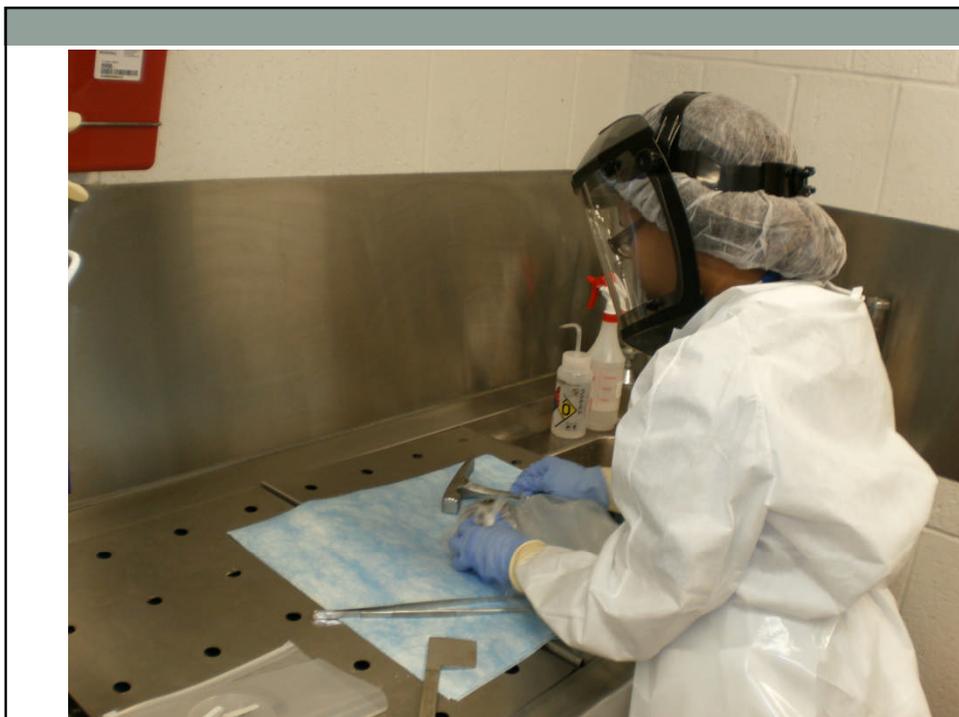
Maryland Department of Health and Mental Hygiene
 Laboratories Administration
 201 W. Prater Street, Baltimore, Maryland 21201
 MDA Phone No. 410-331-6300 Fax No. 410-331-6300
 Division of Fielding and Preventive Control Laboratory Unit No. 407-94477 Fax No. 410-331-7748

Package ID: Lot ID: A1020303 Submitter ID: 153303 Printed Date: 11/20/10

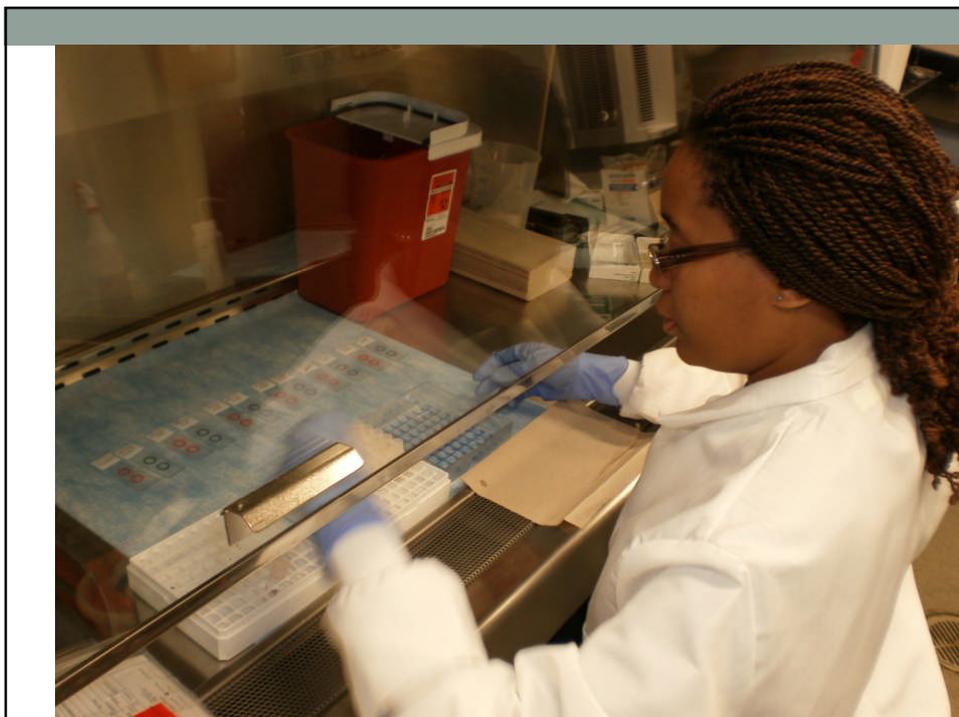
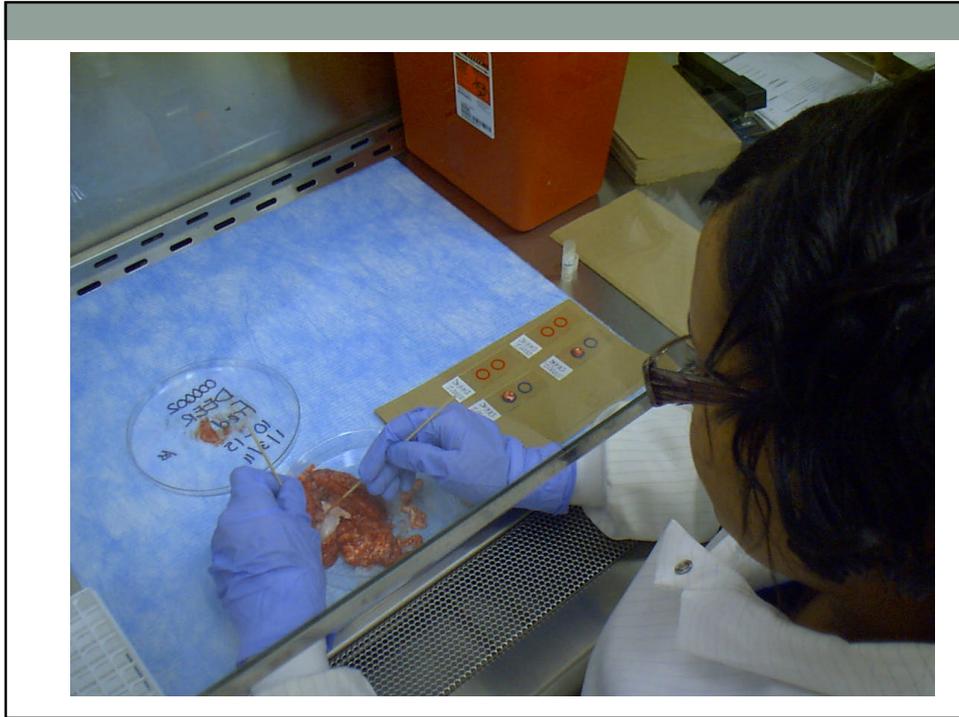
Animal Rabies Examination Submission Form
NOTE: Rabies Specimens require prior approval from the State Epidemiologist. Certain specimens require special handling. CSFNS is a rabies lab. Rabies specimens must be submitted to the appropriate rabies laboratory. Rabies and other rabies related agents approved from the State Epidemiologist. Contact the Division of Fielding and Preventive Control Laboratory Administration for emergency testing info.

I. SUBMITTER INFORMATION Name: MONTGOMERY CO AC Address: 14600 BOTCHER DRIVE CITY: ROCKVILLE STATE: MD ZIP CODE: 20850 PHONE NUMBER: (301) 775-5600 ADDRESS WHERE SPECIMENS WERE COLLECTED:		II. OWNER OF SUBMITTED ANIMAL INFORMATION <small>(for persons who found animal)</small> Name: ESCOBAR & JUAN LARA ESCOBAR Address: 1300 AUTUMN DRIVE CITY: SILVER SPRING STATE: MD ZIP CODE: 20904 PHONE NUMBER: (301) 388-0794 State: MD	
III. SPECIMEN INFORMATION			
Species: <input type="checkbox"/> Bat <input checked="" type="checkbox"/> Dog <input type="checkbox"/> Ferret <input type="checkbox"/> Fox <input type="checkbox"/> Groundhog <input type="checkbox"/> Horse <input type="checkbox"/> Mink <input type="checkbox"/> Skunk <input type="checkbox"/> Squirrel <input type="checkbox"/> Weasel <input type="checkbox"/> Other:		Health Date: 10/29/2010 Cause of Death: <input type="checkbox"/> Disease <input type="checkbox"/> Trauma <input type="checkbox"/> Accidental <input type="checkbox"/> Unknown <input type="checkbox"/> Other:	
*Any other animal requires prior approval from the State Epidemiologist. Contact the Division of Fielding and Preventive Control Laboratory Administration for emergency testing info.			
If submitting an animal requiring prior approval and/or emergency testing: Submit: _____ Date: _____ Intergovernmental with: _____		Reason for Rabies Testing: <input type="checkbox"/> Rabies Exposure <input type="checkbox"/> Pre-Exposure <input type="checkbox"/> Other:	
Clinical Signs: <input type="checkbox"/> Unvaccinated <input type="checkbox"/> Seizure <input type="checkbox"/> Aggression <input type="checkbox"/> Paralysis <input type="checkbox"/> Unexplained wound <input type="checkbox"/> Alopecia <input type="checkbox"/> Fractures <input type="checkbox"/> Other:		Rabies vaccination history: <input checked="" type="checkbox"/> Correct - Vaccinated <input type="checkbox"/> Incorrect - Not Vaccinated <input type="checkbox"/> Unvaccinated <input type="checkbox"/> Unknown	
IV. Exposure Information: Type of Exposure: <input type="checkbox"/> Human <input type="checkbox"/> Animal <input type="checkbox"/> Both Exposure Date: 10/28/2010 Name of Person/Species/Place: JUAN ESCOBAR Last: _____ Address: 1300 AUTUMN DRIVE Phone Number: (301) 388-0794 Jurisdiction of Exposure: Montgomery CITY: SILVER SPRING STATE: MD ZIP CODE: 20904			
Circumstances of Animal Exposure: <input type="checkbox"/> Biting <input type="checkbox"/> Contact <input type="checkbox"/> Other: _____ <input type="checkbox"/> Preceded attack <input type="checkbox"/> Unprovoked attack <input type="checkbox"/> Other: _____			
FLUORESCENT RABIES ANTIBODY TEST RESULTS (for Laboratory Use Only) <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Inconclusive (Specimen) Comments: _____ Results Reported To: _____ Date: _____ Time: _____			

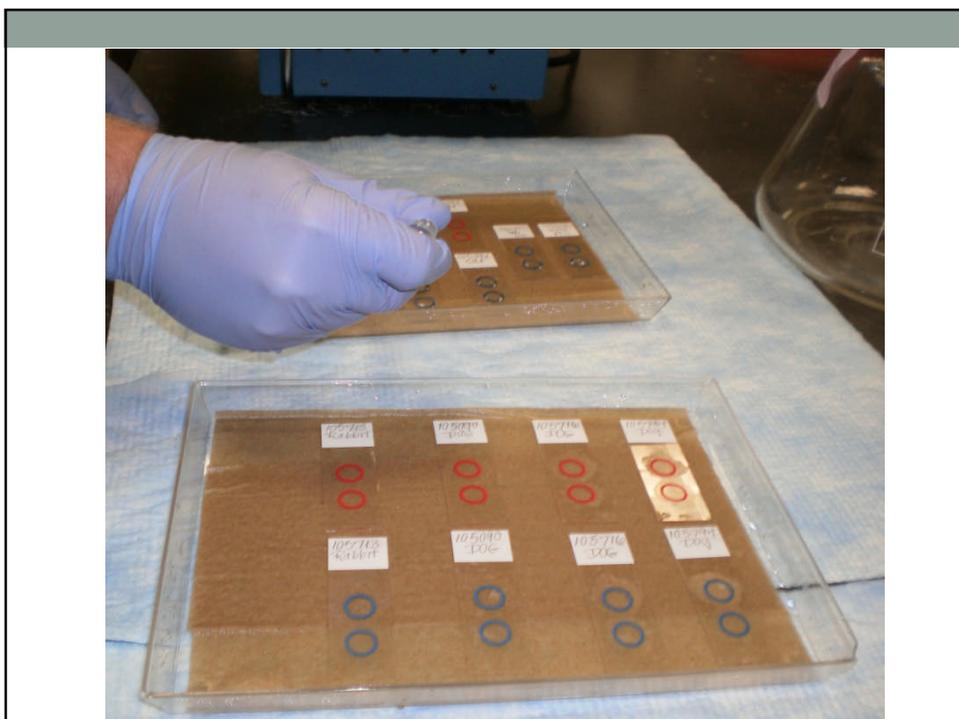
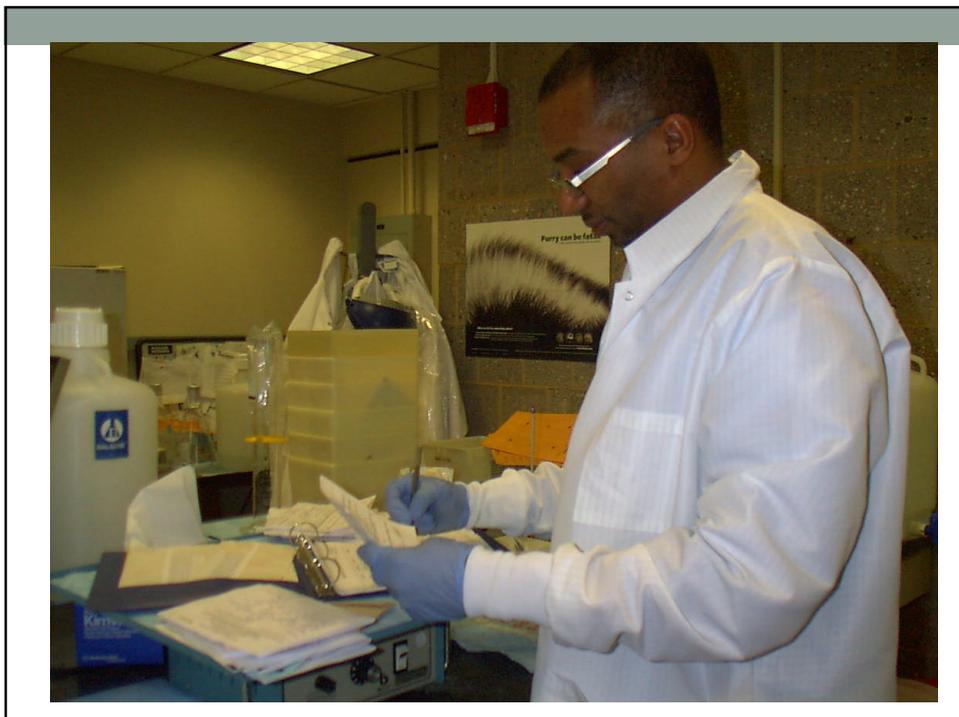


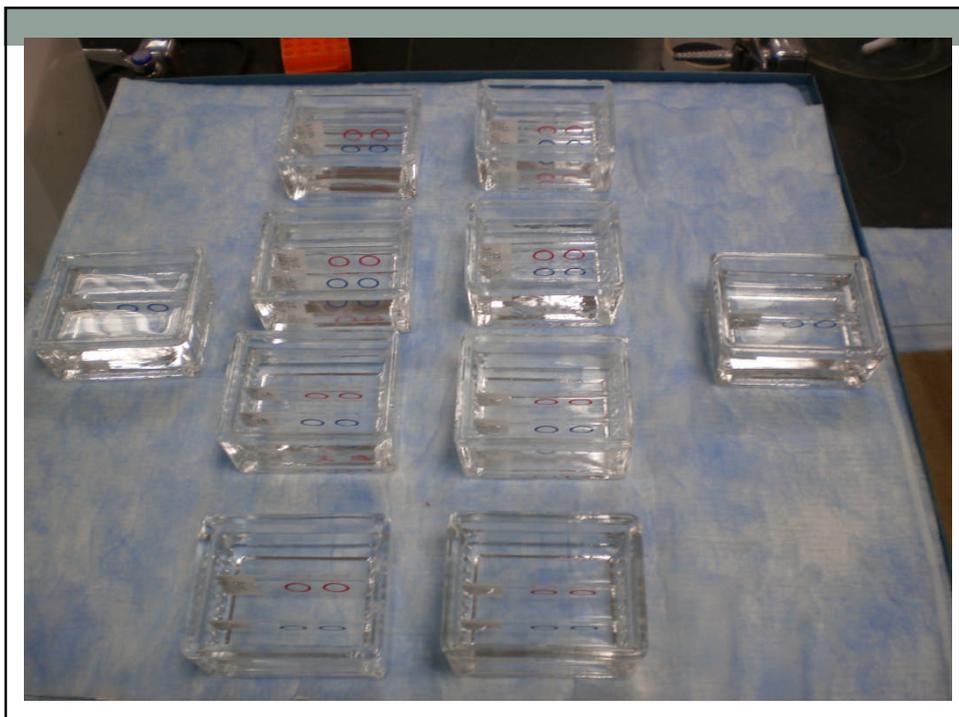
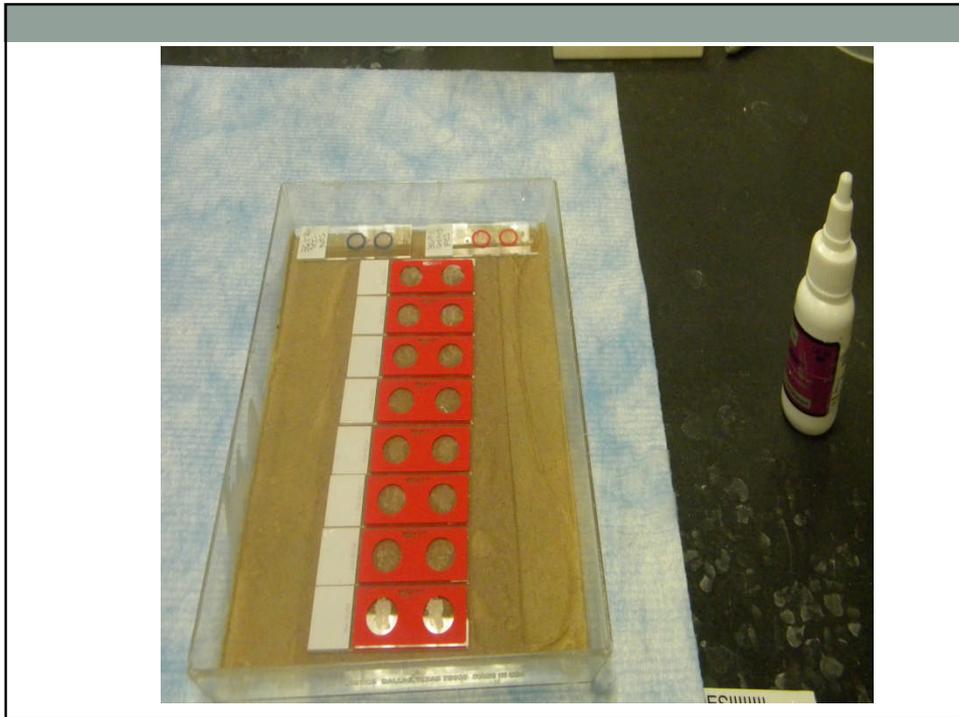




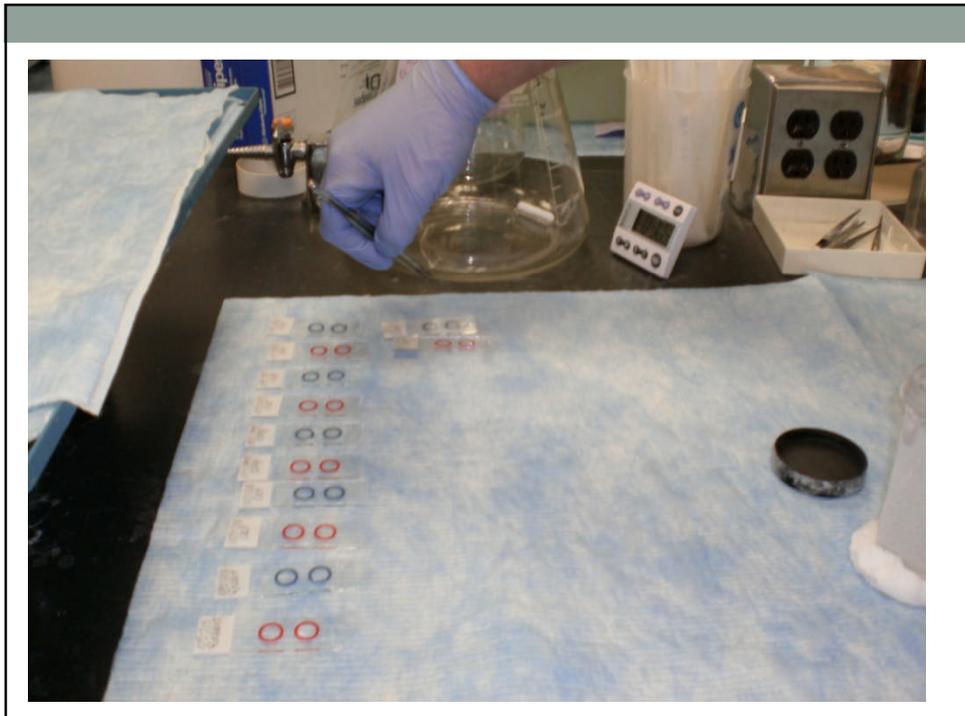


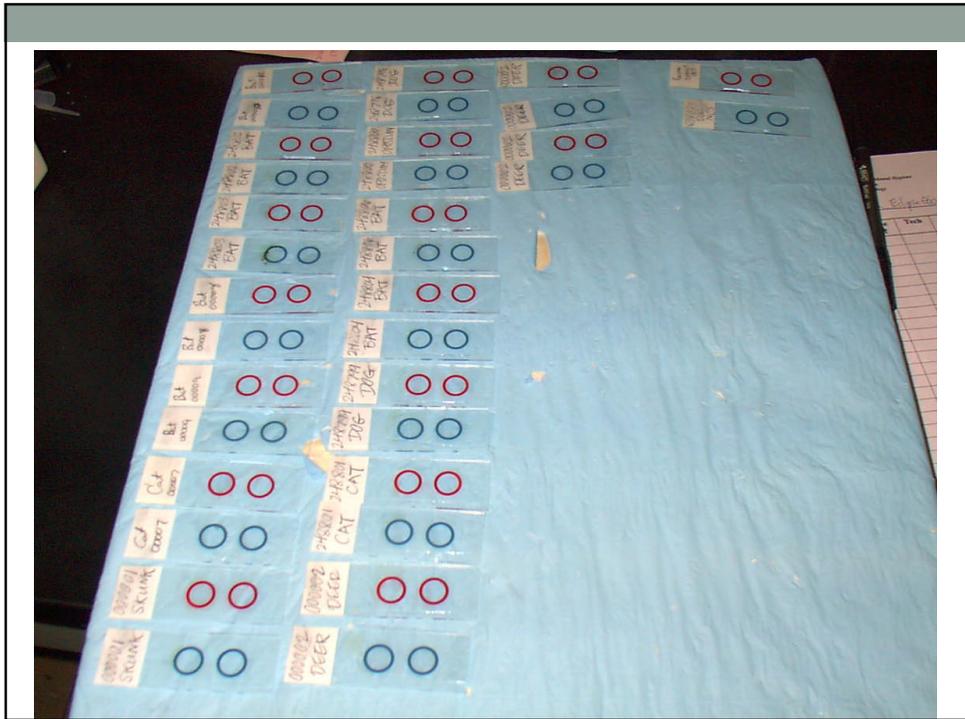






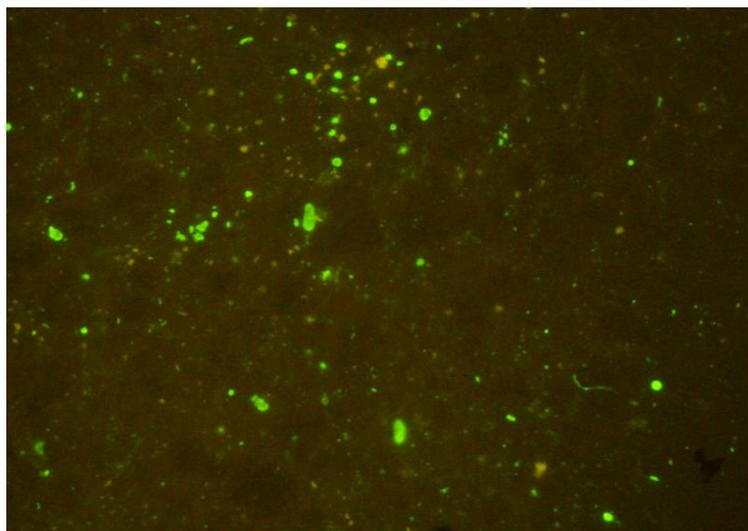




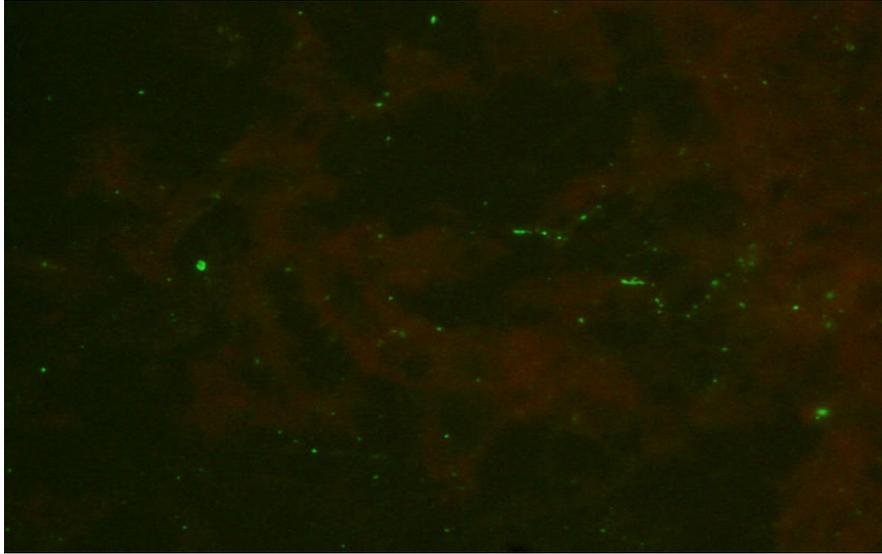




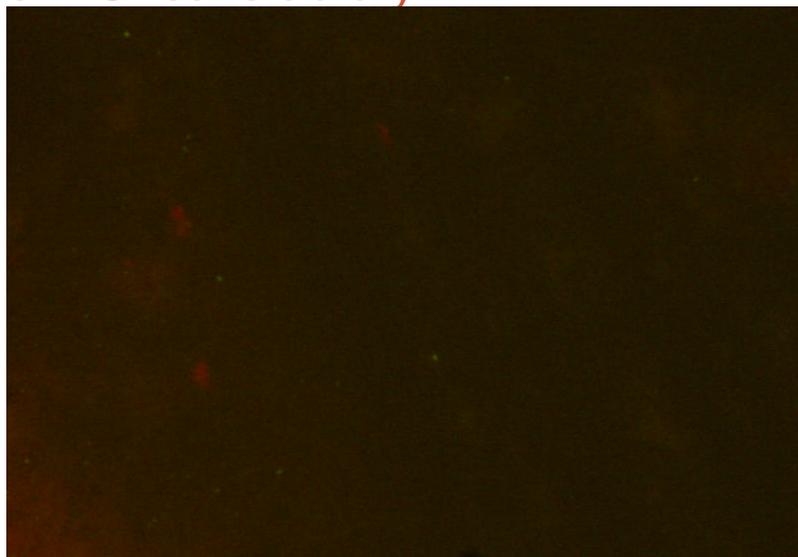
Raccoon - Positive



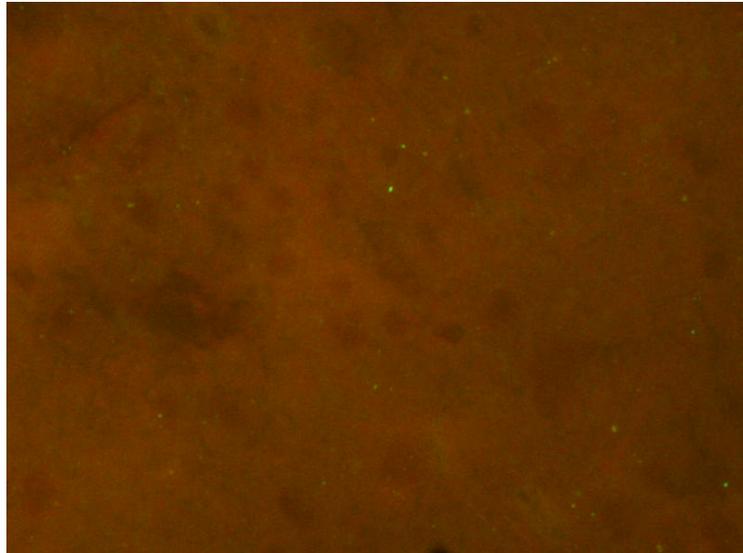
Cat - Positive



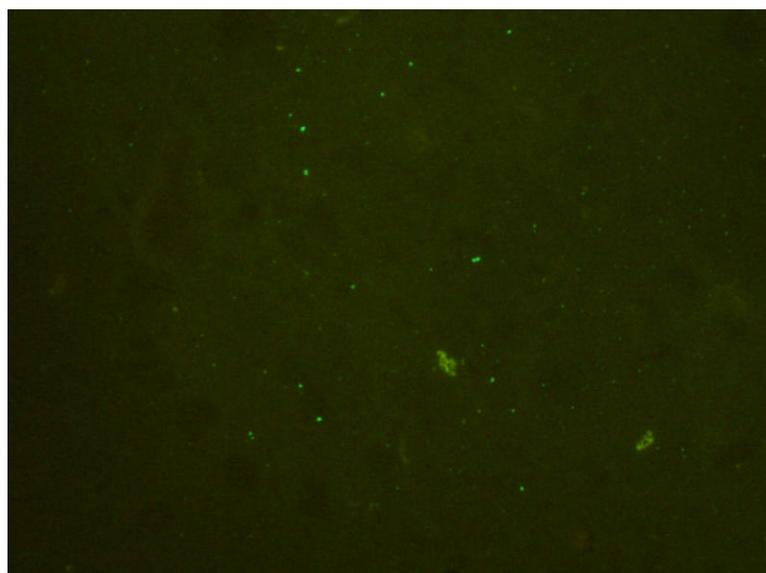
Cat - Unsatisfactory

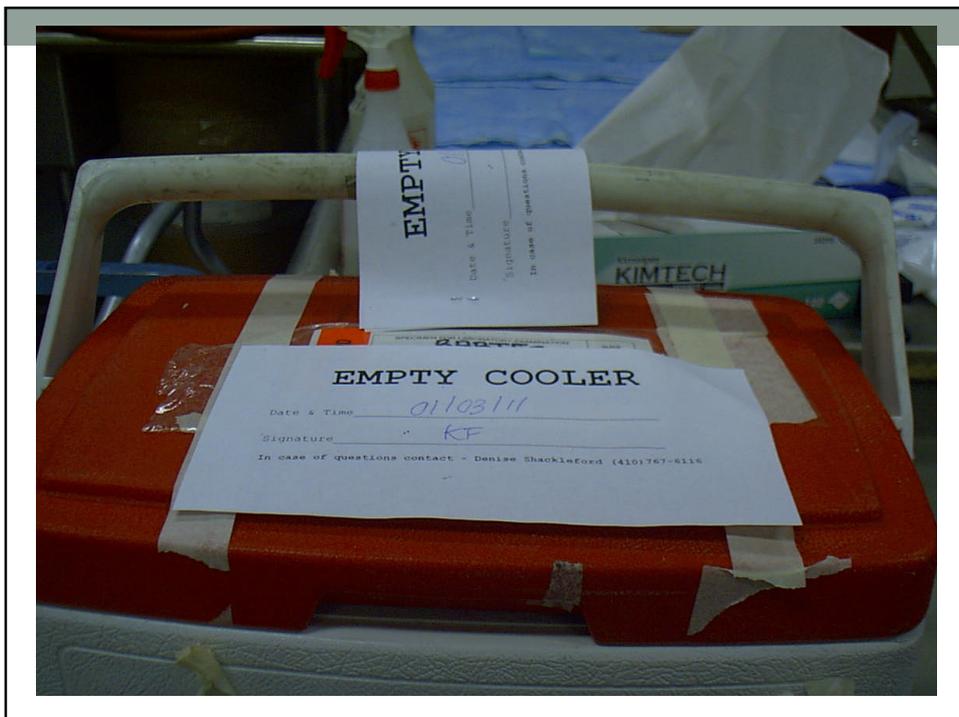


Bat - Positive



Bat - Positive





Case Scenarios

Improperly packaged specimen:







410-767-3573 (8:00 AM-4:30 PM)

Rabies Lab Team

- Algernon Prioleau
- Brock Spinks
- Barbara Fremd
- Keisha Friday

- Thomas Lawson (Acting Supervisor)
- Marcus Rottman (Office of Information Management Systems)

This was a
collaboration !!!

Thank you LHDs!