Warren County Health Services
Health Services Committee
AGENDA FOR
February 25, 2022
Information Submitted By: Ginelle Jones, DPH/DPS

Health Services Committee Members: Edna Frasier, Peter McDevitt, Andrea Hogan, Claudia Braymer, Ronald Conover. Doug Beaty, Michael Geraci and Chair of the Board shall serve as the Ex-Officio member when needed in accordance with the Section C (4) of the Rules of the Board.

I. **Committee meeting called to order by Chairperson**

II. **Motion to approve the minutes of the January 24, 2022 Committee meeting.**

III. **Action Agenda/New Business**

Request Resolution: 1	To adopt the 2022-2026 Rabies Plan. **(Attachment #1)**
Rationale:	Warren County is required to have a Rabies Plan to address prevention and control of rabies. The most recent plan was 2016-2020, which continued to be utilized in 2021. The plan was recently updated in 2022.

Request Resolution: 2	To amend 2022 Budget to reflect additional allocation with the ELC COVID Enhanced Detection (CommCare) Contract (6347-01) **(Attachment #2)**
Rationale:	Tawn Driscoll, Fiscal Manager, will be available at the meeting.

I. **Information for Discussion/Review**

Report of Revenues and Expenditures for 2021
Please see **Attachment 3.** Tawn Driscoll, Fiscal Manager, will be present at the meeting to review the reports and answer any questions.

Revenue and Expense Comparison Report for 2020 vs 2021
Please see **Attachment #4.**
Tawn Driscoll, Fiscal Manager, will be present at the meeting to review the reports and answer any questions.

Status of Referrals
Please see **Attachment #5 A/B** for the report.

Emergency Response and Preparedness
Please see **Attachment #6** for the report.

Rabies Report:
Please see **Attachment #7** for the report.

Meeting/ Conference Authorizations: (Attachments #8 and #9)

1) Jodi Brynes, Supervising Public Health Nurse, will be virtually participating in a Home Care Association sponsored 4 session training: OASIS E Prep: Building Blocks for Success on 2/17/22, 3/17/22, 11/10/22, and 12/8/22. The cost of training is $260 and is in the Health Services budget. **(Attachment #8)**
2) Beth Paquette and Jolie Navatka, WIC Nutrition Facilitators, will be virtually participating in a NYS sponsored training: NYS Breastfeeding Coalition Conference on March 28, 2022. This training is also recommended by WIC. The early bird registration fee is $95/ participant for a total of $190, which is in the WIC budget, which is covered by grant funding. **(Attachment #9)**

II. Referral/Pending Items

There are no pending items.

III. Privilege of the floor to discuss any additional items to come before Committee (Please allow 15 second delay on live stream meetings)

IV. Motion to adjourn the Health Services Meeting

Attachments:

1. Resolution Request: Rabies Plan 2022
2. Resolution Request: 2022 Budget Amendment
3. Report of Revenues and Expenditures for 2022
4. Revenue and Expense Comparison Report for 2021 vs 2022
5. Report of Referrals Status **A/B**
6. Emergency Response and Preparedness Activities Report
7. Rabies Report
8. Meeting Authorization: HCA Oasis E Prep: Building Blocks for Success (Virtual)
9. Meeting Authorization: WIC/NYS Breastfeeding Coalition Conference (Virtual)

RESOLUTION REQUEST FORM NO. 20

MISCELLANEOUS

Please List All Other Requests Not Covered by Previous Resolution Request Forms Here. Please attach any backup information available and be as detailed as possible.

DEPARTMENT NAME: Health Services

DATE: February 22, 2022

(a) Purpose of Request:
To adopt the 2022-2026 Warren County Rabies Plan.

(b) Details:
Warren County is required to submit Rabies Plan to address the prevention and control of Rabies. The most recent plan was 2016-2020, which continued through 2021 due to the Covid pandemic. The plan was recently updated and needs approval.

(c) Previous Resolution Number:
55 of 2017 and 187 of 2017

(d) Where are the Funds (if required)? List Budget Code, Object Code, Full Title* and Amount:
N/A

Sample: A.8021 470 Planning & Community Development – Contract

* as listed in budget and LOGOS






RABIES PLAN

FOR

WARREN COUNTY

2022 – 2026



WARREN COUNTY

RABIES PLAN
2022-2026

(Resolution)

RABIES PLAN FOR WARREN COUNTY

TABLE OF CONTENTS

PURPOSE AND GOALS

Purpose:

•To prevent, monitor, identify, and control rabies in Warren County

Goals:

- To reduce incidence of rabies in Warren County
- To educate and inform Warren County residents on rabies prevention
- To prevent spread of rabies from wildlife to the domestic animal population
- To monitor and manage human exposures to rabies
- To communicate and coordinate activities with other collaborating agencies

Functions:

- Provide outreach and education to the community
- Rabies vaccination clinics for animals
- Rabies pre and post exposure vaccination for humans
- Authorize and facilitate quarantine and/or rabies testing of suspect animals to rule out potential exposures
- Receive and manage animal bite reports and possible rabies exposures

REPORTING OF RABID ANIMALS AND DOMESTIC ANIMAL BITES

Law: All suspected rabid animals and animal bites are required by law to be reported to the local health officer immediately.

Public Health Law, Title IV, Article 21, Section 2140-2146

NYS Sanitary Code, Chapter I, Title 10, Part 2, Section 2.14

Every animal bite or exposure must be reported to Warren County Health Services Division of Public Health at 761-6580 by anyone having knowledge of an animal bite. Direction will be provided per a standard protocol.

Animals suspected of having rabies must be reported to Warren County Health Services Division of Public Health to determine exposure risk and facilitate any testing and/or rabies post exposure treatment.

Warren County Health Services: 518-761-6580
800-755-8102

Contacts: Sarah Arnold, Public Health Nurse
Patricia Belden, Assistant Director Public Health
Ginelle Jones Director Health Services

There will be 24 hour coverage: 518-761-6580 or 800-755-8102

Monday – Friday 8:00am – 4:00pm for any above mentioned staff.

After hours calls will be answered by the answering service and forwarded to a supervisor.

FIRST AID FOR A BITE

Upon initial intake, wound management recommendations shall be reviewed with the victim or parent/guardian as follows:

1. Wash wound or exposed area thoroughly with soap and water.

2. Seek medical attention if professional care is needed for wound – ER or urgent care if after MD office hours.

3. Advise family to notify MD of bite/exposure for follow-up, Tetanus booster, antibiotic therapy and/or rabies prophylaxis treatment. If it has been more than 5 years since last tetanus shot was given, a booster is indicated. Tetanus immunization is also available at Public Health Monday through Friday. Call 761-6580 for an appointment. *Rabies post exposure treatment requires Public Health approval.

4. Advise owners not to handle their dog or cat immediately after an encounter with a wild animal, without adequate protection (i.e. gloves).

5. Avoid letting other pets or children handle exposed domestic animal for several hours after exposure has occurred.

WARREN COUNTY HEALTH SERVICES
DIVISION OF PUBLIC HEALTH
1340 State Route 9, Lake George NY 12845
TEL#: (518)-761-6580 ~ FAX#: (518)-761-6422
Email: healthservices@warrencountyny.gov

ANIMAL BITE REPORT

Date of Incident: _____

Description of Incident

Person Reporting Incident: _____ Animal Control _____
Name of Individual Bitten: _____
Address: _____ Telephone: (H) _____
(W) _____

Was Medical Attention Sought? ___Yes ___ No
If Yes, Where? _____
Medical Provider Seen: _____
Treatment Rendered _____ Last TD (date) _____
Informed of S&S Infection: _____ Initials _____

Name Of Animal Owner: _____ Telephone: (H) _____
Address: _____ (W) _____
_____
Type of Animal Involved: _____ Description: _____
Rabies Vaccination Date: _____ Type: __1yr __3yr Tag#: _____

Plan for Animal: ___ 10 Day Quarantine- Where? _____
___6 Month Quarantine- Where? _____
___ ACO/DCO Agree to Supervise (Initials) _____
___ Euthanize- By Whom? _____
___ Specimen Sent for Evidence of Rabies _____
Follow Up Rendered: _____

_____

Animal Status After Testing/Quarantine: _____
Reported By: _____ Date: _____
Signature of Nurse Receiving Report: _____ Date: _____

06/14, 6/21

Warren County Public Health
PROCEDURE FOR MANAGING ANIMAL BITES TO HUMANS

Warren County Public Health ***must receive all animal bite/exposure reports***.

Domestic animal bites/exposures

1. When Public Health (PH) is notified of a bite /exposure, Public Health will check vaccination status and assist with locating animal/ evoking confinement with the owner unless otherwise indicated.

- Vaccinated: Contact owner and determine if owner is going to keep pet. Initiate confinement and set up an appointment with the owner for a check after 10-day confinement is up. PH will mail a letter to the owner reinforcing the confinement instructions. Unless otherwise noted, a copy of the letter will be provided to the victim, animal/dog control officer, and town/city clerk. If the owner wants the pet euthanized, Public Health will facilitate rabies testing.

- Unvaccinated: Same as for vaccinated animals (above) unless it is a high-risk incident, uncooperative owner, animal/owner history, or owner is unable to confine pet. Typically, animal can remain at home for confinement. Public Health will encourage vaccination after confinement.

- Vaccinated/Unvaccinated: PH has the authority to require confinement at an approved facility at the owner's expense if there are validated concerns from incident reporter, victim, animal/dog control, or public health that indicates a more formal confinement is necessary.

- Dangerous dog: The Town ACO/DCO will advise all victims of their right to file a Dangerous Dog complaint and the directions on how to file a complaint. If the victim chooses to file a "Dangerous Dog" complaint, the town ACO/DCO will be responsible for follow-up. The dog can be seized by the town ACO/DCO until the threat status is determined by Judge. If the pet is at large, off the owner's property, the pet should be seized, based on routine town ACO/DCO responsibilities. The goal is to prevent rabies and utilize the resources we have to ensure the safety of those in our community.

- Strays:

    - If the victim is familiar with the animal, it can be taken to Glens Falls Animal Hospital for confinement. If it is an animal that typically hangs around (i.e. comes every evening at 5pm), an informal confinement can take place. An informal confinement consists of the victim watching for the animal and reporting to PH if the animal is not seen 10 days after the bite.

    - If the victim feels he/she can identify the animal, the Warren County SPCA will be contacted to assist with locating and capturing the stray animal.

- Rabies Testing: Rabies testing must be pre-approved by Warren County Public Health. If the animal is wild it must be tested if there was potential exposure. If the owner of a domestic animal wants the animal destroyed rabies testing must also be arranged. The owner is responsible for euthanasia and specimen preparation charges. If an animal becomes sick or dies during confinement, testing is also necessary. Refer to Specimen to Lab for Rabies Testing and the Procedure for Submission.

- Rabies Post Exposure Prophylaxis Treatment: If animal is unknown or cannot be located or identified, Public Health will approve Rabies Post Exposure Treatment through Glens Falls Hospital.

2. Public Health will contact a Warren County ACO and request follow-up after confinement to verify health status of animals with different owner/victim address or as needed.

Sample Confinement Letter

Date

Owner Name
Address

Dear **Owner Name**,

I am writing in response to a potential exposure incident that occurred on **Date** involving your pet and **Victim Name** of Town. Your pet's confinement period will be through **Date,** to ensure that he/she was not exposed to the rabies virus. I sincerely appreciate your anticipated compliance.

NYS Public Health Law (Title IV) mandates animals including cats, dogs, and ferrets to be vaccinated against Rabies by four months of age. Warren County Public Health offers at least two clinics a month. Please call 761-6580 or refer to Warren County Public Health's website, www.warrencountyny.gov for clinic information. Vaccination is free, although a $10 donation is requested if it does not pose a financial hardship.

In addition, the law mandates all pets involved in exposure incidents (bites) be observed for 10 days.

__**Your pet is up to date with its Rabies Vaccination; this confinement period can be facilitated at your home. During the confinement period, the animal must not be allowed to run at large. The animal must be confined to a leash, chain, cage, fenced yard, or in the home. The animal can be seized, if the owner fails to comply with the quarantine, and taken to a veterinary hospital for the remainder of confinement at your expense.**
Animal/ Dog Control will contact you at the end of the confinement to check your pet. Please notify Public Health immediately if your pet is displaying symptoms of rabies including, loss of appetite, change in behavior/disposition, paralysis, or other signs of illness. In addition, please notify Public Health immediately if your animal runs away or dies before the end of confinement.

___Your pet **is not** up to date with its Rabies Vaccination; this confinement period can be facilitated at your home. During the confinement period, the animal must not be allowed to run at large. The animal must be confined to a leash, chain, cage, fenced yard, or in the home. The animal can be seized, if the owner fails to comply with the quarantine, and taken to a veterinary hospital for the remainder of confinement at your expense.
Animal/ Dog Control will contact you at the end of the confinement to check your pet. Please notify Public Health immediately if your pet is displaying symptoms of rabies including, loss of appetite, change in behavior/disposition, paralysis, or other signs of illness. In addition, please notify Public Health immediately if your animal runs away or dies before the end of confinement. **A rabies vaccination is required at the end of quarantine. If your pet is already vaccinated, please call Warren County Health Services @ 761-6580 to update.**

__Your pet is not vaccinated secondary to his age. *Pets must be vaccinated by 4 months of age, enclosed you will find a rabies clinic schedule. Your pet's confinement period can be facilitated at your home as above.

If you decide to have your pet destroyed before the end of confinement, the animal must be submitted for rabies testing through Glens Falls Animal Hospital at the owner's expense. Warren County Public Health (761-6580) must be notified so testing can be facilitated.

Please call if you have any questions or concerns.

Sincerely,

Public Health Staff
Rabies Program

cc: Name, Animal/Dog Control Officer
Name, Town Clerk
Name, Victim

***Public Health will follow-up on same owner/victim address**

COUNTY APPROVAL FOR RABIES POST EXPOSURE

Approval has been given for Rabies Post Exposure Prophylaxis for the following:

Name:_____DOB:_____Weight:_____

Address:_____

Phone Number: Home:_____ Work:_____ *Insurance Company:_____

Exposure:_____

_____

Will receive all Pep at:_____

*If not insured, will return to_____County Public Health for the remaining 4 doses.

Encourage patient to call _____ to schedule appointments if needed.

Signature:_____Date:_____

County:_____

Glens Falls Hospital Express Care	Telephone:	926-3130
	Fax:	926-3110
Glens Falls Hospital Billing Contact- Hope Dane	Fax:	926-5199

06/18, 9/18, 06/2020

10 DAY CONFINEMENT PROCEDURE FOR DOMESTIC ANIMALS

Animals to be confined are dogs, cats, ferrets, and domestic livestock i.e. sheep, horses, cattle, goats. Bats and all other animals suspected of being rabid would not be observed but rather destroyed and submitted to NYS Rabies Lab for testing.

The purpose of confinement is to determine if a human has been exposed to an animal displaying the clinical illness of rabies. The animal's owner will be notified of the need for confinement.

The confinement will guarantee that the animal will not escape. The animal must be confined in the house and can only be taken out on a leash, chain or fenced in yard, under the control of the owner - never allowing animal to run loose. No additional contact with other humans or animals should be allowed during this observation time.

The animal will be observed daily for signs of rabies. The animal will be evaluated by a veterinarian at the first sign of illness or death during confinement. Any illness or death should be reported immediately to Public Health so rabies testing can be arranged and those exposed, notified and treated accordingly.

If noncompliance occurs, the animal can be seized by the Warren County animal/dog control officer and brought to one of the designated veterinary hospitals for the remainder of the confinement period at owner's expense. If the animal becomes ill however, it will be tested to rule out rabies.

Following the 10 day confinement unvaccinated animals must be vaccinated.

SPECIMENS FOR RABIES TESTING

Public Health authorizes and coordinates **all** specimen submissions to the rabies lab at NYS DOH and reports positives back to involved personnel and complainants. Only animals in contact with humans and unvaccinated pets are approved for testing. Vaccinated animals can receive a booster dose of rabies vaccine for exposure to suspected rabid animals and wildlife, therefore testing is not necessary.

Public Health receives notification of potential exposure and determines if testing is appropriate. Public Health calls veterinarian with information and approval. Glens Falls Animal Hospital or an approved facility will make arrangements to send specimen to NYS Lab for testing. Specimens will not be mailed on Fridays, weekends, or holidays unless emergency testing is indicated.

Procedure for Specimen Submission

- Call is referred to Public Health, who completes a report of potential rabies exposure. If animal is owned, owner is responsible for costs associated with preparation and shipping. If wild animal or stray, Public Health will assume financial responsibility if testing has been authorized

- PH contacts the complainant to determine exposure risk and if testing is indicated. PH explains procedure as follows:

    - Specimen is transported to contract vet for preparation and shipping by owner or caller. Animal/Dog Control, Law Enforcement, and DEC may provide assistance with transport to vet if needed.
    - PH will contact vet to approve testing and enter the specimen on NYSDOH Health Commerce System via the Remote Entry application and fax a copy to the vet to include with the specimen package.
    - The vet prepares the specimen for testing. The veterinary staff calls a shipping vender (i.e. UPS) and prepares the specimen for shipping. *PH must provide approval for same day or exclusive shipping if needed.
    - Results are emailed to the PH agency typically within 2 to 3 days. Results are relayed to complainant and other involved parties. If positive, PH will notify all involved agencies (i.e. vet) to ensure there were no additional exposures during response, preparation and shipping.
    - Based on the results, rabies post exposure treatment is facilitated for humans with exposures.
      Public Health will contact family to discuss confinement of an animal bitten or exposed if animal has not been vaccinated. If unvaccinated animals were exposed, euthanasia or a 6- month quarantine is put in place with assistance and support of Animal/Dog Control.
      If animal is to be confined due to exposure to a rabid animal, a 6-month confinement will be authorized by Public Health.
    - For currently vaccinated animals exposed to a rabid animal, a rabies booster should be given within 5 days if the animal was previously vaccinated.

DOMESTIC ANIMAL EXPOSURE

The strongest evidence for exposure is the observation of direct contact between a rabid or suspect rabid animal and the domestic animal, with or without an inflicted wound consistent with a bite or mucous membrane exposure from the rabid animal. Circumstantial evidence alone could be questioned. The strongest circumstantial would be an observation (or sound) of a rabid or suspect animal in the vicinity of the domestic animal, and a subsequent lesion on the domestic animal, that in the professional opinion of a veterinarian, is compatible with a bite from the suspect animal.

SUSPECT RABID ANIMAL

Animals with rabies may act differently than healthy animals. Wild animals may move slowly or act tame. Also, some wild animals, like foxes, raccoons, and skunks, that normally avoid porcupines, may receive a face full of quills if they become rabid and try to bite these prickly rodents. A pet that is usually friendly may snap at you and try to bite.

There are two common types of rabies. One type is "furious" rabies. Animals with this type are hostile, may bite at objects, and have an increase in saliva. In the movies and in books, rabid animals foam at the mouth. In real life, rabid animals look like they have foam in their mouth because they have more saliva.

The second and more common form is known as paralytic or "dumb" rabies. An animal with "dumb" rabies is timid and shy. It often rejects food and has paralysis of the lower jaw and muscles.

Signs of rabies in animals include:

- changes in an animal's behavior
- general sickness
- problems swallowing
- an increase in drool or saliva
- wild animals that appear abnormally tame or sick
- animals that may bite at everything if excited
- difficulty moving or paralysis
- death

Animals in the early stages of rabies may not have any signs, although they can still infect you if they bite you. The incubation period is the time from the animal bite to when signs appear. In rabies, it is usually 1-2 months. But the incubation period can last as long as several years. Once the virus reaches the brain or spinal cord, signs of the disease usually appear.

A suspect rabid animal consists of a rabies vector species, or any mammal with clinical signs compatible with rabies.
Some characteristic clinical signs of rabies are listed below, but these are neither comprehensive nor exclusive to rabies. All of these clinical presentations, if due to rabies, would occur over an acute time course of hours to days, ultimately ending in death.

Cat:	unusual aggression, facial asymmetry, ataxia, difficulty swallowing, paresis (weakness) or paralysis
Dog:	unusual aggression, unusual passiveness, ascending paralysis, difficulty swallowing, snapping at the air
Cattle:	bellowing, difficulty swallowing (i.e. choking, excessive salivation), posterior weakness, ataxia (not showing coordination), circling, head pressing
Other livestock:	ataxia, difficulty swallowing, paresis or paralysis, facial asymmetry
Raccoon:	"Drunken Sailor" gait, juvenile vocalization, self-mutilation
Bat:	on the ground, not able to fly

PROCEDURE FOR DOMESTIC ANIMALS EXPOSED TO RABIES

Confirmation of an up-to-date rabies vaccine is attempted. If this cannot be verified, the animal is considered unvaccinated. If an animal has had known contact with a positive rabid animal the following will be recommended:

When the vaccination status is up-to-date, a booster rabies vaccine is recommended within 5 days of contact/exposure. The owner is advised of this recommendation

When vaccination is not up-to-date there are 2 options: 1) Euthanize animal or 2) confine and observe for symptoms for 6-months.

If owner decides to have animal euthanized, the owners will arrange and pay through a veterinarian.

If 6 month confinement is requested, Public Health will determine an appropriate plan. In addition, exposure to pet must be limited to one or two caregivers in the event the animal becomes sick and infectious.

WILD LIFE CALLS

Wild animal bites/exposures shall be referred to Public Health who will determine further follow-up. **Law enforcement or DEC will respond if there is an exposure.** Prevention Measures:

- Advise caller how to keep pets and family members safe until help arrives
  - Encourage callers to seek shelter for pets and family members
  - Encourage callers not to capture live animals
  - Advise those exposed to wash areas with soap and water
  - Advise to not handle pets involved in wild animal attacks for at least 2 hrs unless gloves are worn to prevent secondary exposure
- Contact law enforcement or DEC for exposures to humans and unvaccinated pets to assist in destroying animal if rabies testing is necessary.

Miscellaneous Wildlife Calls:

Nuisance- Animals destroying or bothering property- Encourage caller to keep family members and pets away from the area until animal leaves. Do not leave pets or children unsupervised. Unless there is an extenuating circumstance, typically this situation requires education on preventing contact with animals and pet vaccination, **not** official response from official agencies (DEC, Law Enforcement, PH, or Animal/Dog Control. If appropriate, callers can be referred to a nuisance control officer at their expense. Sometimes DEC can provide free advice. Owners of unvaccinated pets should be encouraged to vaccinate to protect their pets! PH offers clinics which are listed on the website.

Animals Acting Strangely: Encourage caller to keep pets and family members away from area until animal wanders off. In the event an aggressive animal is preventing someone from entering/leaving house or car, instruct caller to contact law enforcement. As long as humans and unvaccinated pets have not had any contact, rabies testing is not needed. Vaccinated animals can receive a booster dose of rabies vaccine within 5 days of exposure if there was exposure.

Dead Animals: If a caller reports a dead animal on his/her property, typically it is the owner's responsibility. Provide education on preventing exposure. Determine if anyone was seen touching the animal or if an unvaccinated pet was seen in contact with the animal. Vaccinated animals can receive a rabies booster. As long as there was no contact or exposure, the animal can be buried. Advise the caller to wear gloves to prevent contact. Neighbors and family members may be a resource to caller if assistance is needed.

- Owner can bury animal at least 3 ft deep and 75 yds away from water source
- Owner can double bag and throw in trash.

APPENDIX A

RABIES LAWS

Public Health Law – State Rabies and Animal Control Statutes

State Sanitary Code Part 2 – Section 2.14 (a) – (k)

Part 57 – Conditions for a Dog Actively Immunized against Rabies

Public Health Law, Article 21

Title 4: Rabies

§ 2140. Definitions. For the purpose of this title:

1. "Actively immunized" shall mean that the animal has been injected with a rabies vaccine suitable to the species and which meets the standards prescribed by the United States department of agriculture for interstate sale and which was administered according to the manufacturer's instructions under the direction of a duly licensed veterinarian not later than the expiration date on the package. Active immunization shall begin fourteen days following primary vaccination or immediately following a booster vaccination, and continue for the period stated in the manufacturer's instructions.

2. "County" shall mean a county of the state other than those in the city of New York.

3. "County health authority" shall mean the county health agency.

4. "Domestic livestock" includes cattle, goats, horses, donkeys, mules, sheep, and swine.

5. "Certificate of immunization" shall mean a signed statement issued by the veterinarian containing the following information: name and address of the owner, date or dates of vaccination, type of vaccine administered and duration of immunity, amount and manner of administration, name of manufacturer of the vaccine, and the lot number and expiration date of the vaccine. The certificate of immunization for domestic livestock may include multiple animals. The system of identification applicable to the livestock is to be used.

6. "Owner" shall mean any person keeping, harboring, or having charge or control of, or permitting any dog, cat or domesticated ferret to remain on or be lodged or fed within such person's house, yard, or premises. This term shall not apply to veterinarians or other facilities temporarily maintaining on their premises dogs, cats or domesticated ferrets owned by others for periods of no more than four months or to the owner or occupant of property inhabited by a feral animal.

7. "Confinement and observation" refers to the conditions under which apparently healthy dogs, cats, domesticated ferrets, and domestic livestock, which are not exhibiting symptoms of rabies, must be maintained to determine rabies status if such an animal has potentially exposed a person to rabies, and the owner wishes to avoid euthanizing and testing the animal. If the county health authority does not approve home confinement, the ten day confinement and observation period must take place, at owner's expense, at an appropriate facility such as an

animal shelter, veterinarian's office, kennel or farm. The confinement must include (i) provisions to prevent escape of the animal during the confinement period and (ii) requirements that the owner notify the public health authority immediately if the animal becomes ill at anytime during confinement, and (iii) verification by the county health authority or their designee at the end of the ten day period that the animal is healthy. If a police work dog bites an individual in the course of such dog's official duty the police department may apply for a waiver from confinement from the local department of health. As part of such application for a waiver, the police department shall provide the local health department with records of such dog's past vaccination for rabies and proof that such dog's rabies vaccinations are up-to-date.

8. "Quarantine" refers to a six month period of restriction for animals which are not actively immunized against rabies and have been exposed to a potentially rabid animal, in accordance with applicable regulations of the department. The quarantine must include provisions to prevent escape of the animal during the quarantine period and to minimize contacts with humans and other animals, and these provisions must be verified by the county health authority during and at the end of the six month period.

9. "Local residence", under the conditions hereinafter specified, shall mean any person who has his or her primary residence, secondary residence, vacation home or school within a county of the state of New York shall be deemed to have local residence in such county.

10. "Qualification on residence." Local residence shall not include residence:

(a) as an inmate of any state or federal prison, or

(b) on a military reservation.

11. "Initial treatment after human exposure to rabies" shall mean administration of the first postexposure dose of rabies vaccine and, when necessary, administration of rabies immune globulin.

12. "Animal control officer" shall mean one or more persons designated by the county health authority as having responsibility for animal control issues in the county. This responsibility may be delegated to others such as cities and towns, law enforcement agencies, animal shelters, or private nuisance control officers.

13. "Feral animal" shall mean any cat, dog or ferret that is born in the wild and is not socialized, is the offspring of an owned or feral cat, dog or ferret and is not socialized, or is a formerly owned cat, dog or ferret that has been abandoned and is no longer socialized.

§ 2141. Compulsory vaccination. 1. Every dog, cat and domesticated ferret shall be actively immunized against rabies in accordance with regulations promulgated by the commissioner. Every dog, cat and domesticated ferret shall have all initial vaccinations administered no later than four months after birth. Every dog, cat and domesticated ferret shall have a second vaccination within one year of the first. Terms of subsequent vaccine administration and duration of immunity must be in compliance with USDA licenses of vaccines used. The veterinarian immunizing or supervising any person authorized by law to immunize such animal shall provide the owner with a certificate of immunization consistent with the requirements of section one hundred nine of the agriculture and markets law. The veterinarian immunizing or supervising any person authorized by law to immunize such animal shall provide any public health official with the certificate of immunization in any case involving a dog, cat or domesticated ferret which has been or may have been exposed to rabies or in any case of possible exposure of a person or another animal to rabies.

2. Subdivision one of this section shall not apply to any feral animal or any dog, cat or domesticated ferret:

(a) that is transported through the state and remains in the state fifteen days or fewer;

(b) confined to the premises of an incorporated society devoted to the care of lost, stray or homeless animals;

(c) for which vaccination against rabies would adversely affect the animal's health, as determined by a licensed veterinarian; or

(d) confined for the purposes of research to the premises of a college or other educational or research institution.

3. (a) Every veterinarian providing treatment to a dog, cat or domesticated ferret shall verify, in accordance with standards established by the commissioner, if such animal is actively immunized against rabies or is exempt under subdivision two of this section. If active immunization or exemption cannot be verified, the veterinarian shall immunize the animal at the owner's request.

(b) If the animal is exempt from the provisions of subdivision one of this section, pursuant to paragraph (c) of subdivision two of this section, the veterinarian shall provide the owner of the dog, cat or domesticated ferret with a certified statement verifying that the animal is exempt from immunization because the immunization would adversely affect the health of the animal, and verifying the nature and duration of such exemption. The certified statement shall be in a form prescribed by the commissioner and shall be consistent with the requirements of section one hundred nine of the agriculture and markets law. Medical exemptions are to be renewed on an annual basis.

4. The owning of a dog, cat or domesticated ferret by any person in violation of subdivision one of this section shall constitute a violation, and shall be subject to a fine not to exceed two hundred dollars for each offense.

§ 2142. Rabies; emergency provisions. Whenever the commissioner confirms an outbreak of the disease rabies in terrestrial animals in any county or the vicinity thereof, the commissioner shall declare a rabies alert for that area and so certify to the county or local health authorities or any local health district contained therein. It shall be the duty of the health officials to immediately and annually thereafter publish a notice of the existence of the disease, together with a summary of the provisions of this title, in a newspaper generally circulated within the county or local health district, or to post notices in several conspicuous places, or both. Such certification shall remain in force until such time as the commissioner confirms that the outbreak is over.

§ 2143. Rabies; seizure and disposal; reports. Whenever the commissioner certifies a county to have a rabies alert pursuant to section twenty-one hundred forty-two of this title, any duly appointed dog control officer, animal control officer, peace officer, police officer, or health officer for that area may seize and confine any dog, cat or domesticated ferret found at large and may destroy a dog, cat or domesticated ferret found at large that is exhibiting symptoms of rabies and cannot be seized without placing any person at serious risk of physical injury. Any duly appointed person who seizes, confines, or destroys a dog, cat or domesticated ferret pursuant to this section shall immediately report in writing the facts relating thereto to the county or local health authority.

§ 2144. Rabies; county responsibility. Each county health authority is required to develop a rabies control protocol that identifies and coordinates all activities within the county to accomplish a comprehensive rabies response. The county health authority shall have responsibility for the implementation of the protocol, including the coordination of the response to rabies issues by other local agencies. This protocol must be approved by the department and revised and updated as directed by the department.

§ 2145. Rabies; services and expenses of suppression. 1. The county health authority is responsible for the services and expenses necessary for the suppression of human rabies. Suppression of human rabies shall include, but not be limited to:

(a) availability at all times for prompt investigation of reports of possible exposures to rabies of people, pets, or domestic livestock occurring within the county, and to render authorization for human postexposure treatment,

(b) making arrangements for appropriate disposition of the animals involved, including confinement and observation, quarantines, vaccination boosters, or euthanasia and testing,

(c) collection, preparation and submission of animal specimens to a laboratory approved by the commissioner for rabies diagnosis,

(d) verifying terms of confinement, observation and quarantines,

(e) authorized human postexposure treatment under the conditions hereinafter specified, except that third party coverage or indemnification shall first be applied against the cost of treatment, and

(f) operation of rabies vaccination clinics free of charge for dogs, cats and domesticated ferrets owned by persons with local residence.

2. Under the conditions specified below, the county health authority is responsible for authorized human postexposure treatment for all persons exposed within the county, regardless of the location of the person's residence; except in any case where the person's county of residence has agreed to be responsible for such treatment in accordance with the provisions of this title. In addition, for persons with local residence who are exposed to rabies in New York city or out of state, the county health authority is responsible for that portion of treatment that occurs after such persons return to their local residences.

3. Human postexposure treatment specifically authorized by the county health authority shall be rendered by the provider or providers selected by the county health authority, located within the county or the vicinity thereof, and approved by the person's health insurance carrier or managed care plan if pre-approval is required by the health insurance carrier or managed care plan, provided that:

(a) any person may, at his or her option, be treated at his or her own expense by the health care provider of his or her choice,

(b) the county health authority may, at its option, assume financial responsibility for necessary treatment rendered by other providers,

(c) the county shall authorize initial treatment from a provider or providers geographically accessible to the location of the exposed person at the time that treatment is determined to be necessary, and

(d) the county shall authorize post-initial treatment from a provider or providers geographically accessible to the exposed person's residence if the person returns to his or her residence during the course of treatment.

4. Consent by any person to human postexposure treatment authorized by the county health authority shall constitute assignment of any third party health benefits to the county health authority and permission for

the person's health care and insurance providers to release medical and financial information regarding the treatment to the county health authority.

5. Health care and insurance providers shall comply with any requests by the county health authority for information regarding human postexposure treatment rendered to an enrollee whose treatment was authorized by the county health authority.

6. Under the terms of this title, the county health authority is not responsible for:

(a) services and expenses of human postexposure treatment that were not specifically authorized by the county health authority, except for completion of treatment for their residents exposed and started on rabies treatment in New York city or elsewhere outside of New York state,

(b) services and expenses of medical treatment unrelated to the prevention of rabies infection such as wound suturing and measures to control bacterial infection of bite wounds, and

(c) expenses of preexposure rabies vaccination.

7. A clinic for rabies vaccination for dogs, cats and domesticated ferrets of persons with local residence shall be conducted at least every four months within the county under the direction of the county government, by the health officials of the county and the several local health districts within a county. Donations may be requested but not required at the clinics. Any listing of costs in clinic announcements or advertisements must indicate that vaccinations are available free of charge, and that donations are optional. Counties may at their option provide vaccination clinic services to persons without county residence, and may require a fee based on cost from these persons.

8. Claims for services and expenses, approved by the county shall be paid by the fiscal officer of the county from funds in his or her custody upon presentation of such claim, without further or other audit or may be paid pursuant to the local finance law.

§ 2146. City of New York; exceptions. The provisions of sections two thousand one hundred forty through two thousand one hundred forty-five of this title, inclusive, shall not apply to the city of New York.

Questions or comments: bcdc@health.ny.gov
Revised: March 2015

General Business Law and Agriculture and Markets Law
(only those sections added or amended are included below)

A new Section 753(2-a) of the general business law

2-a. Every pet dealer who sells an animal required to be vaccinated against rabies, pursuant to section twenty-one hundred forty-one of the public health law, to a consumer shall provide the consumer at point of sale with a written notice, provided by the department of health, summarizing rabies immunization requirements.

Section 105-d of the agriculture and markets law

§ 105-d. Indemnification for rabies.

Each county shall be liable for damages resulting within the county to domestic animals from the disease known as rabies and indemnification therefore shall be made in the manner provided by this article. The term "domestic animals" as used in this article shall mean domesticated sheep, horses, cattle, swine and goats. Such indemnification shall not exceed the actual damage and shall in no event exceed the sum of five hundred dollars for each animal in the case of damage to horses or cattle, or one hundred fifty dollars for each animal in the case of damage to swine, goats or sheep, provided, however, that in the case of registered purebred bovine animals indemnification may be made in an amount not to exceed seven hundred dollars for each animal. The board of supervisors of each county shall have power to cause to be assessed, levied and collected in the same manner as other charges against the county, such sums of money as shall be necessary to pay indemnification on account of damages resulting from rabies as provided in this article.

Section 109 of the agriculture and markets law

(1)(a) The owner of any dog reaching the age of four months shall immediately make application for a dog license. No license shall be required for any dog which is under the age of four months and which is not at large. A license shall be renewed after a period of one year beginning with the first day of the month following the date of issuance and shall be renewable annually thereafter prior to the expiration date, provided that any municipality, authorized to issue licenses pursuant to this article, which has a population not exceeding two thousand five hundred may, upon the approval of and pursuant to rules and regulations promulgated by the commissioner, establish a common renewal date for all such licenses.
(2)(c) The application shall state the name, address and telephone number of the owner; the county and city, town or village where such dogs are harbored; the sex, breed, registry name and number of each purebred registered dog over the age of four months which is harbored on the premises; and the sex and breed of each purebred dog over the age of four months which is harbored on the premises and which is eligible for registration. The application shall also include a statement by the owner that all purebred dogs over the age of four months which are harbored on the premises have been listed.

3. The clerk, authorized dog control officer or authorized pound or shelter manager, at the time of issuing any license pursuant to this article, shall require the applicant to present a statement certified by a licensed veterinarian showing that the dog or dogs have been vaccinated to prevent rabies or, in lieu thereof, a statement certified by a licensed veterinarian stating that because of old age or other reason, the life of the dog or dogs would be endangered by the administration of vaccine. The clerk, authorized dog control officer or pound or shelter manager shall make or cause to be made from such statement a

record of such information as may be required by the commissioner and shall file such record with a copy of the license.

Revised Section 110(4)(c) and new Section 110(4)(d) of the agriculture and markets law

c. In addition to the fee charged pursuant to subdivisions one and two of this section, any person applying for a dog or purebred license shall pay a fee of three dollars for any dog four months of age or older which has not been spayed or neutered unless an owner presents with the license application a statement certified by a licensed veterinarian stating that he or she has examined the dog and found that because of old age or other reason, the life of the dog would be endangered by spaying or neutering. All fees collected pursuant to the provisions of this paragraph shall be forwarded by the commissioner to the state comptroller for deposit in the animal population control fund, created pursuant to section ninety-seven-xx of the state finance law and section one hundred seventeen-a of this article.

d. In addition to any other applicable fee, any person applying for a dog or purebred license for a dog identified as unlicensed during an enumeration conducted pursuant to subdivision seven of section one hundred fourteen of this article shall pay a fee of five dollars. Such additional fee shall be the property of the licensing municipality and shall be used to pay the expenses incurred by the municipality in conducting the enumeration. In the event the additional fees collected exceed the expenses incurred by the municipality in conducting an enumeration in any year, such excess fees may be used by the municipality for any other lawful purpose.

Section 114 of the agriculture and markets law

7. The governing body of any municipality in which licenses are issued, may, either individually or in cooperation with other municipal entities, require its dog control officer or animal control officer or any other authorized agent to ascertain and list the names of all persons in the municipality owning or harboring dogs, or in lieu thereof, such municipality may contract to have the same done.

Chapter 115 of the laws of 1894

§ 3-a. In addition to the fee charged pursuant to sections one and two of this chapter, any person applying for a dog license shall pay a fee of three dollars for any dog four months of age or older which has not been spayed or neutered unless an owner presents with the license application a statement certified by a licensed veterinarian stating that he or she has examined the dog and found that because of old age or other reasons, the life of the dog would be endangered by spaying or neutering. All fees collected pursuant to the provisions of this section shall be forwarded to the state comptroller for deposit in the animal population control fund created pursuant to section 97-xx of the state finance law and section 117-a of the agriculture and markets law.

NEW YORK
state department of
HEALTH

Nirav R. Shah, M.D., M. P.M.
Commissioner

Sue Kelly
Executive Deputy Commissioner

December 16, 2013

TO: Local Health Departments (LHDs)

FROM: New York State Department of Health (NYSDOH) Bureau of Communicable Disease Control (BCDC)

INFORMATIONAL MESSAGE: CHANGE TO PUBLIC HEALTH LAW - POLICE DOGS MAY BE GRANTED WAIVER FROM 10-DAY CONFINEMENT IF THEY BITE DURING THE COURSE OF THEIR OFFICIAL DUTY

In July, Governor Cuomo signed a bill into law that allows police departments to ask the LHD to grant a waiver from confinement for police dogs that bite a human in the line of duty (see Public Health Law, Article 21, Title 4, Section 2140, subparagraph 7). New York State Department of Health supported this amendment to the Rabies Law. Previously police dogs were not exempt from the 10-day confinement requirements if they bit an individual during the course of their official duty.

The amended law, applying only to the subparagraph referenced above is currently in effect. The new subparagraph 7 states (new language underlined):

7. "Confinement and observation" refers to the conditions under which apparently healthy dogs, cats, domesticated ferrets, and domestic livestock, which are not exhibiting symptoms of rabies, must be maintained to determine rabies status if such an animal has potentially exposed a person to rabies, and the owner wishes to avoid euthanizing and testing the animal. If the county health authority does not approve home confinement, the ten day confinement and observation period must take place, at owner's expense, at an appropriate facility such as an animal shelter, veterinarian's office, kennel or farm. The confinement must include (i) provisions to prevent escape of the animal during the confinement period and (ii) requirements that the owner notify the public health authority immediately if the animal becomes ill at any time during confinement, and (iii) verification by the county health authority or their designee at the end of the ten day period that the animal is healthy. <u>If a police work dog bites an individual in the course of such dog's official duty the police department may apply for a waiver from confinement from the local department of health. As part of such application for a waiver, the police department shall provide the local health department with records of such dog's past vaccination for rabies and proof that such dog's rabies vaccinations are up-to-date.</u>

Under the current law, police dogs will be able to continue to work during the 10-observation period if the LHD grants the police department a waiver of confinement. **It is the responsibility of the police department to apply for a waiver from the LHD in the county where the bite occurred.** In granting the waiver, the LHD will need to verify that the biting dog is actively immunized and require the police department to notify the LHD if the dog were to develop a neurologic illness or die within 10-days of a bite for which waiver of confinement has been granted. If the animal dies or a veterinarian determines the animal is exhibiting signs consistent with rabies during the 10-day period, the dog's head must be submitted for rabies testing. The NYSDOH guidance regarding 10-day confinement of animals is in the

process of being updated to reflect the amended law.

The Public Health Law pertaining to rabies is accessible here: http://goo.gl/YmTCdS. Please direct any questions about this amended law to Dr. Andie Newman apnO 1 @health.ny.gov) or Dr. Angela Maxted (amm23@health.ny. gov) by e-mail or at (518) 473-4439. Thank you.

NEW YORK STATE DEPARTMENT OF HEALTH *January 11, 2012*
Rabies Policies and Procedures
(518) 473-4439
(866) 881-2809 (after hours)

SUBJECT: Guidance Regarding 10-day Confinement of Animals for Rabies Observation

1. Introduction/Purpose

Animals that have potentially exposed a person to rabies through bite or other means must be evaluated to determine whether they may have been transmitting rabies at the time of the exposure incident. Under New York State (NYS) public health law[1] domesticated animals[2] may be observed for 10 days following an exposure incident to determine whether they were possibly shedding rabies virus. If a domesticated animal was shedding rabies virus in its saliva at the time of exposure, that animal will be showing signs of rabies either at the time of the exposure incident or within several days following the incident. Based on guidelines from the Advisory Committee on Immunization Practices[3], if a domesticated animal remains clinically normal for 10 days following a potential exposure incident, it is assumed that the animal was not shedding rabies at the time of the incident; therefore there was no rabies exposure. Determination of rabies status of animals other than domesticated animals requires euthanasia of the animal and testing of the animal's brain for evidence of rabies virus.

Under NYS Public Health Law effective 22 December 2011, "If the county health authority does not approve home confinement, the ten day confinement and observation period must take place, at owner's expense, at an appropriate facility such as an animal shelter, veterinarian's office, kennel or farm."

This document provides general guidelines and best practices for effective 10-day confinement of domesticated animals that have potentially exposed a person to rabies. The conditions under which an animal may be kept during, and the method by which an animal is evaluated at the end of, the 10-day confinement are ultimately determined by the local health department (LHD) with jurisdiction over the incident. LHD staff are in the best position to determine, in each situation, what confinement conditions will provide the greatest assurance that the animal will be available for follow-up at the end of confinement. Rabies response staff of the New York State Department of Health (NYSDOH) Bureau of Communicable Disease Control (BCDC) are available to discuss situations requiring further guidance. Contact BCDC staff at (518) 473-4439.

The following general principles should guide confinement decision-making, and are further detailed in this document:

- In general, healthy domesticated animals behaving normally at the time of a potential rabies exposure incident may be confined for 10-day observation at the owner's home. **Animals with neurologic disease, or that are acting unusually aggressive, should not be placed under 10-day confinement without consultation with BCDC rabies response staff.**
- In circumstances where owner compliance is in doubt, or where the exposing animal's exposure and vaccination history are unknown, confinement in a facility may be more appropriate.
- Confinement conditions should be explained and provided to owners in writing to ensure compliance.

1 Article 21, Title 4, Section 2140, Subparagraph 7

2 Domesticated animals include dogs, cats, ferrets, horses, donkeys, mules, cattle, sheep, goats, and pigs.

[3] CDC. Human rabies prevention - United States, 2008: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR. 2008; 57.

- Method of assessment of the animal at the end of confinement can vary from telephone confirmation with the owner to evaluation by a veterinarian, and will depend on the circumstances in each case.

Information on what is considered an exposure, as well as considerations to use in the assessment of risk in particular exposure incidents, can be found in the guidance document, "Guidance Regarding Human Exposure to Rabies and Postexposure Prophylaxis Decisions," available at http://www.health.ny.gov/diseases/communicable/zoonoses/rabies/docs/nys_rabies_treatment_guidelines.pdf.

2. Home vs. Facility Confinement

No animal that has been placed in 10-day confinement in New York State has ever gone on to develop rabies. Healthy, normal acting animals are considered low risk for rabies, and home confinement is generally appropriate. Facility confinement should be considered under the following circumstances:

- There are concerns about owner compliance, such as in situations involving potential legal action or other hostility between animal owner and bite victim.
- There is little known about the animal's exposure and vaccination history, as might occur with stray or feral animals.
- The animal's behavior or health is not normal.

Owner compliance concerns

- LHD staff should use broad discretion to consider facility confinement if an animal's owner is not forthcoming with information, appears hostile or unreliable, or has a history of non-compliance.
- If the LHD is aware that legal action may be pending between a bite victim and animal owner, facility confinement may be advisable to ensure follow-up.
- Facility confinement may be necessary if an owner cannot meet the conditions of confinement, e.g., LHD determines animal must be kept indoors for confinement, but owner insists the animal can only be kept in the yard.

Lack of animal history

Stray or feral animals have greater opportunities than pets to become exposed to rabies without a person's knowledge, and are typically unvaccinated. Recently acquired animals similarly may have little history. In these cases, if an owner is identified and home confinement is considered, it is especially important to ensure owner compliance.

Animal behavior/health status

An animal behaving abnormally (based on knowledge of that specific animal's normal behavior, not just the general behavior of the breed or species) or demonstrating neurologic disease at the time it is involved in a potential rabies exposure of a person should be considered high risk for rabies and generally should be tested for rabies unless an alternative cause for the illness or behavior is established. In some situations, observation under a veterinarian's care may be appropriate for the ill animal that has been involved in a human exposure. Examples include animals with a good vaccination history, and animals with little opportunity for rabies exposure (e.g., indoor-housed cats and dogs that are only leash-walked and never out of the owner's sight).

These exposure situations should be evaluated on a case-by-case basis, and discussed with BCDC staff to ensure that state and local health authorities are in agreement on the proper course of action. In all situations where observation and clinical workup of an abnormally acting animal is permitted, observation must occur in a veterinary hospital and not at the owner's home.

3. Conditions of 10-day confinement

Documentation
Owners of animals under 10-day confinement **should be provided written documentation** stating, at a minimum:

- Start and end dates of confinement.
- Requirements for how the animal is to be confined.
- Signs of rabies to look for in the animal (e.g., changes in behavior, unusual aggression, weakness,lameness, paralysis, seizures).
- How the LHD should be notified, including after work hours, in the event the animal becomes ill.
- Consequences of failure to comply (e.g., immediate facility confinement at owner expense.)

Contact with the animal
It is generally not necessary to prevent members of the owner's household and immediate family from having contact with an animal under confinement, however contact with people or pets outside the household or immediate family should be limited to reduce the possibility of additional exposures.

Control of the animal
Confinement conditions should be established to ensure the animal is always under the owner's control and to minimize the risk of the animal escaping and being lost to follow up. Examples of confinement conditions include being loose inside the home; in a securely fenced yard or enclosure; or off the owner's property on a leash.

Unacceptable means of owner control of the animal include:

- Invisible fences
- Off leash on the assumption that the animal will respond to voice commands.

Relocation of the animal during confinement
Animals under confinement may not be moved from the jurisdiction of the LHD without prior approval of the local health Commissioner (or equivalent) of both the origin and destination locations. Out of state movement requires approval at both state health departments.

If relocation of an animal to another location is necessary, the owner should contact the LHD immediately to seek approval for the new location prior to moving the animal. In cases where the animal is not a resident of the county of exposure and has returned to its home county or state or will be returning to its home prior to the end of 10-day confinement, arrangements should be discussed with the LHD in the county of residence as soon as possible. For out of state movement, contact BCDC rabies response staff who will assist with arranging confinement and follow up with the other state.

For emergency movement (e.g., an emergency requiring admission to a veterinary hospital) owners should be instructed to contact the LHD as soon as possible.

4. Assessment of the animal at the end of confinement
LHD staff must verify that the animal is healthy before releasing the animal from confinement. Examples of methods of verification include:

- Verbal confirmation by the owner that the animal is healthy (provided owner reliability is not in question)
- Visit by animal control, law enforcement, or LHD staff to observe the animal

- Confirmation by a veterinarian that the animal was examined and determined not to be displaying signs of rabies

Verbal confirmation vs. visit and visual inspection
Assessment of animals when the exposed individuals are part of the owner's family can often be managed through verbal confirmation from the owner. For exposures to non-family members, or if there are concerns with the reliability of the owner for any reason, it is advisable to have an independent party such as an LHD staff person or animal control officer visually inspect the animal and document that visit. A veterinary exam is typically not necessary; the individual performing health verification should be familiar enough with animals to judge whether the animal appears to be healthy. If there is any question about the health status of the animal, referral should be made for veterinary evaluation at owner expense.

Veterinary exam to assess health status of the animal
A veterinary exam, with or without written documentation, may be necessary to verify the health of the animal in cases where:

- there is a question about the health of the animal at the end of confinement
- other circumstances warrant it (e.g., legal action between bite victim and animal owner).

In such cases, it is the responsibility of the owner to have the animal evaluated by a licensed veterinarian at the owner's expense. If appropriate based on the circumstances of the incident, the veterinarian should provide a signed, written statement verifying the health of the animal to the LHD before the animal is released from confinement.

5. Other considerations
Animals that have potentially exposed other animals
While not mandated in law or regulation, situations involving animal-to-animal exposure may warrant 10-day follow-up of the animal causing exposure. Such situations might include:

- Dog gets loose and attacks another dog that is not currently vaccinated
- Dog attacks unvaccinated farm animals
- Outdoor cats fight and wound each other and one or both are overdue for vaccination

In these cases, getting voluntary compliance for 10-day observation from the owner of the biting animal can avoid a 6 month quarantine of an unvaccinated bitten animal. The same policies regarding conditions and final assessment should apply to these incidents as to incidents involving human exposure.

Follow-up of animals outside the LHD's jurisdiction
For potential human exposures that occur outside the jurisdiction of the LHD (e.g., a county resident exposed out of state or in New York City) BCDC rabies response staff will assist with coordinating follow-up of animals.

State Sanitary Code, Chapter 10, Health

Part 2 - Section 2.14

Reporting of suspected rabid animals and persons exposed to them.
***Action to be taken by health authority.

(a) Definitions:

1. Health care provider shall mean any person or facility which gives primary or secondary medical care to humans.

2. Exposure shall mean introduction of the rabies virus into the body of a human or animal. Any penetration by mouth to the skin of humans or animals constitutes a bite exposure. A nonbite exposure is a scratch, abrasion, open wound, or contamination of mucous membranes with saliva or other potentially infectious material from a rabid animal.

3. Domestic livestock shall mean sheep, horses, cattle, goats and swine.

4. Current vaccination shall mean the administration of a rabies vaccine suitable to the species, which meets the standards prescribed by the United States Department of Agriculture for interstate sale and is administered according to the manufacturer's instructions under the direction of a duly licensed veterinarian not later than the expiration date on the package. Current vaccination shall begin 14 days following primary vaccination, and continue for the period stated in the manufacturer's instructions.

5. Approved vaccine shall mean any rabies vaccine which meets the standards prescribed by the United States Department of Agriculture for interstate sale.

(b) It shall be the duty of every health care provider to report immediately to the local health authority having jurisdiction the full name, age, address and telephone number of any person under his care or observation who has been exposed to any animal suspected by the health care provider of having rabies and all pertinent facts relating to such exposure. Such notification shall occur prior to starting rabies postexposure prophylaxis, except in those cases where prior notification would compromise the health of the patient.

(c) If no health care provider is in attendance and the person exposed is a child, it shall be the duty of the parent or guardian to make such report immediately. If the person exposed is an adult, such person shall himself make the report, or, if incapacitated, it shall be made by whomever is caring for such person.

(d) It shall be the duty of every health care provider who has cause to believe that contact has occurred with a rabid animal or animal suspected of being rabid by the health care provider which requires rabies prophylaxis subsequent to the exposure to report the initiation of such prophylaxis and all pertinent facts relating to any such bite, exposure or treatment to the local health authority.

(e) It shall be the duty of every person having knowledge of the existence of an animal exhibiting clinical signs suggestive of rabies to report immediately to the local health authority the existence of such animal, the place where seen, the owner's name, if known, and the signs of infection suggesting rabies.

(f) Whenever, in accordance with this section, the local health authority is notified of a person who has been exposed to any dog, cat, ferret or domestic livestock, vaccinated or not, the local health authority may cause the animal to be confined for 10 days. Any costs associated with this confinement shall be an expense of the animal's owner. Such health authority may, subject to the approval of the owner, if known, cause the animal to be destroyed immediately and have the animal's head submitted to a laboratory approved by the State Commissioner of Health for examination. The dog, cat, ferret or domestic livestock whose ownership cannot be determined may be confined for 10 days, under the direction of the local health authority. Any costs associated with this confinement shall be an expense of the party seeking this confinement. Confinement of the animal, in any case, shall be subject to such conditions and instructions, and under the control of such persons, including the owner if ascertainable, that the local health authority determines will reasonably assure the continued confinement of the animal for the prescribed 10-day period. Should the confined animal develop signs of rabies within the 10-day period, it shall be destroyed under the direction of the local health authority and submitted to a laboratory approved by the State Commissioner of Health for examination. In the case of a dog, cat, ferret or domestic livestock whose ownership cannot be determined, if confinement is not possible or desirable, the animal may be destroyed immediately and an appropriate specimen shall be submitted to a laboratory approved by the State Commissioner of Health for examination.

(1) Bats and any animal other than a dog, cat, ferret or domestic livestock suspected of being rabid shall not be held for observation and shall be destroyed immediately, without injury to the head, and may be submitted upon approval of the local health authority to a laboratory approved by the State Commissioner of Health for examination.

(g) Except as hereinafter provided, any mammal which has been bitten by or in direct contact with a known rabid animal or animal suspected by the local health authority of being rabid shall be destroyed unless it shall be isolated for a period of six months either in a veterinary hospital approved by the local health authority, or in a locked enclosure approved by the local health authority as being so constructed and maintained that the animal cannot escape and cannot have contact with any other animal or human except, when absolutely necessary, with the person responsible for the care of the confined animal. Quarantine of the animal, in any case, shall be subject to such conditions and instructions, and under the control of such persons, including the owner if ascertainable, that the health authority determines will reasonably assure the continued quarantine of the animal for the prescribed six-month period. The expense of such isolation shall be borne by the owner. Any animal currently vaccinated as defined in this section, prior to exposure, may remain at large or under the owner's immediate control as may be required by local ordinance provided a booster injection of such approved vaccine is given within five days of the date of exposure.

(h) An animal under such restrictions shall not be removed from one health district into another prior to the conclusion of the prescribed isolation period except with the permission of the health authority from whose district such animal is to be removed and the permission of the health authority to whose jurisdiction such animal is to be transferred. The former shall give permission only after securing the consent of the health authority to whose jurisdiction the animal is to be transferred, except that if removal is to be to New York City or into another state, he shall give permission only after securing the consent of the Commissioner of Health of the State of New York. Such removal shall be by private conveyance, in charge of a responsible person and conducted in such a manner as to prevent the escape of the animal or its coming in contact with other animals or persons.

(i) The local health authority shall report forthwith to the state district health office or county health office having jurisdiction the name, age and address of every person exposed to any animal suspected of having rabies, any incident which requires rabies prophylaxis and all the pertinent facts relating to any such bite, exposure or treatment.

(j) Whenever any animal that has or is suspected of having rabies dies, or is killed, the local health authority may, at his discretion, cause the head of such animal to be removed and sent immediately,

properly packed, with a complete history of the case, to a laboratory approved for this purpose by the State Commissioner of Health for examination.

(k) Whenever the disease rabies is confirmed by the State Wadsworth Center for Laboratories and Research in a raccoon in any county of New York State, within 30 days of notice to the county of the confirmation, all cats residing in the county who are not then actively immunized as defined in this section must be vaccinated as outlined below. Such notice will be sent to the county's local health authority by the Commissioner of Health. Actively immunized shall mean injection of a rabies vaccine which meets the standards prescribed by the United States Department of Agriculture for interstate sale and administered according to the manufacturer's instructions under the direction of a duly licensed veterinarian. All cats in the county, three months of age or over, are to be vaccinated to prevent rabies. This section shall not apply to cats owned by a non-resident, while passing through any town, city or village for a period not exceeding fifteen days, if entered in any exhibition at any cat show therein, and if confined and in immediate charge of the exhibitor, or to cats actually confined to the premises of incorporated societies, devoted to the care or hospital treatment of lost, strayed or homeless animals, or confined to the premises of public or private hospitals devoted to the treatment of sick animals, or confined for the purposes of research institutions, or to cats actually confined to the premises of a person, firm, or corporation actually engaged in the business of breeding or raising cats for profit and are so licensed as a class A dealer under the Federal Laboratory Animal Welfare Act, or if such vaccination would adversely affect the health of the cat as determined by a duly licensed veterinarian.

The veterinarian either administering the vaccine or responsible for supervising the vaccination shall give to the owner of the cat a signed statement. Such statement shall include the following information: name and address of the owner, date or dates of vaccination together with the type of vaccine injected and its duration of immunity, amount and manner of injection, name of manufacturer, lot number and expiration date of the vaccine. Or, if applicable, the veterinarian shall give the owner of the cat a signed statement verifying that the cat is exempt because such vaccination would adversely affect the health of the cat.

Compulsory vaccination shall remain in effect until the county presents evidence to the Commissioner that it has been one year since the last confirmed case of rabies in a terrestrial animal species.

Proof of rabies immunization must be shown by the owner to the local health authority whenever a cat bites a person. If the owner is unable to show such proof, the local health authority must follow the procedures outlined in subdivision (f) of this section.

*** See Public Health Law, Sections 2140-2146; Agriculture and Markets Law, Sections 106-127.

CHANGED EFFECTIVE AUGUST 30, 2000

State Sanitary Code Part 2

Questions or comments: bcdc@health.ny.gov
Revised: May 2006

Title: Part 57 - Conditions Under Which A Dog Actively Immunized Against Rabies May Be At Large In Designated Areas Certified For Rabies

(Statutory authority: Public Health Law, õ 2140)

Sec.

Volume: A-1

Statutory Authority: Public Health Law, Section 2140)

Title: Section 57.1 - Definitions

Section 57.1 Definitions.

(a) Three-year vaccine is a rabies vaccine for dogs which the Federal government has accepted as providing three-year duration of immunity.

(b) Active Immunization, to permit a dog to be at large, * shall mean the injection of a three-year vaccine which meets the standards prescribed by the United States Department of Agriculture for interstate sale ** and has been administered by a duly licensed veterinarian not later than the expiration date on the package. Vaccines shall be administered following the directions of the manufacturer as approved by the Federal government.

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* FOOTNOTE: In accordance with section 2140, article 21 of the Public Health Law "at large" means "elsewhere than on the premises of the owner, except it be on the premises of another person with the knowledge and assent of such other person". An opinion from the Attorney General states a dog on leash is not "at large" within the meaning of this statute (1943, Op. Att. Gen. 290).
** FOOTNOTE: Such products have the legend "U.S. Veterinary License No.---" printed on all containers.

(c) Certified area means an area certified by the State Commissioner of Health in accordance with section 2140 of article 21 of the Public Health Law as one in which, or in the vicinity of which, rabies exists.

(d) Designated area means an area which the State Commissioner of Health has designated as one in which dogs which have been actively immunized against rabies in accordance with the provisions in the rules may be permitted to be at large.

Volume: A-1

Title: Section 57.2 - Privilege of vaccinated dogs to run at large in a designated area

57.2 Privilege of vaccinated dogs to run at large in a designated area. The privilege of vaccinated dogs to run at large in a designated area shall not apply:

(a) to any dog until 21 days after rabies vaccination;

(b) to any dog after three years from its last vaccination against rabies with a three-year vaccine;

(c) to any dog which has been bitten by or has been in intimate contact with a rabid animal from the date of such bite or exposure until four months later, except that dogs vaccinated with a three-year vaccine within an interval of three weeks to three years prior to exposure shall be permitted to remain at large, providing a booster injection of a three-year vaccine is given within five days of exposure.***

(d) to any dog which has bitten a person until 10 days after such bite.***

*** FOOTNOTE: See Regulation 5, Chapter II, Sanitary Code.

Volume: A-1

Title: Section 57.3 - Additional conditions to be complied with

57.3 Additional conditions to be complied with.

(a) The veterinarian administering the vaccine shall give to the owner **** of the dog a signed statement which shall give the name and address of owner, and date or dates of vaccination together with the type of vaccine injected, the amount and manner of injection, name of manufacturer, lot number, and expiration date of the vaccine.

**** FOOTNOTE: Section 107 of the Agriculture and Markets Law States: "The word 'owner' includes a person harboring or keeping a dog."

(b) The owner shall keep this statement readily available for inspection by official agents concerned with the control of rabies.

(c) The veterinarian administering the vaccine shall attach an indestructible tag securely to the collar of the dog indicating that the dog has been vaccinated against rabies, with the date of last vaccination marked on the tag, which shall be worn by the dog at all times, and which shall be of a size plainly visible at a reasonable distance for purposes of inspection by officials concerned, and readily distinguishable from the dog license tag.

Volume: A-1

Title: Section 57.4 - Requirements for designated area

57.4 Requirements for designated area.

(a) An area may be designated after at least 70 percent of the enumerated dogs have been vaccinated as defined in subdivision (b) of section 57.1 of this Part.

(b) An area may be designated upon receipt of a resolution from the board of supervisors of the county, requesting the State Commissioner of Health to permit all dogs vaccinated against rabies to run at large, whereupon the commissioner may grant such privilege subject to the limitations of section 57.2 of this Part and subject to the following conditions:

(1) that the board of supervisors shall have provided funds and made the necessary arrangements for giving dog owners the opportunity of having their dogs vaccinated;

(2) that every effort shall be made to permit only vaccinated dogs to run at large;

(3) that, if within four months of the date of granting this request, 70 percent or more of the enumerated dog population have not been vaccinated, the commissioner may revoke this privilege.

Designation may be revoked at any time for failure to enforce the provisions of the Public Health Law.

Volume: A-1

Questions or comments: bcdc@health.ny.gov
Revised: May 2006

July 24, 2013
Albany, NY

Governor Cuomo Signs Legislation to Increase Penalties for Killing a Police Animal

Governor Andrew M. Cuomo today signed legislation that will make the killing of a police animal a felony. Specially-trained police animals, particularly dogs and horses, are often put in harm's way when they are relied upon by law enforcement to keep New Yorkers safe. The new law will hold responsible individuals who kill these animals.

"Police animals go where others will not in order to keep law enforcement officials and all New Yorkers safe from harm and its a tragedy when one is killed," Governor Cuomo said. "This new law will hold the guilty parties accountable and offer better protections for these highly trained animals who are important members of our law enforcement community.

Law enforcement agencies have increasingly relied on the use of animals to assist with a variety of tasks to protect New Yorkers, including crime solving as well as rescue and recovery operations. The animals' specialized abilities are the result of extensive training that requires a great deal of time and resources. The killing of a police animal is both a tragic event and a serious loss to law enforcement in their work to keep New Yorkers safe. The new law signed today by Governor Cuomo (S1079A) will make the killing of a police dog or a police horse while it is performing its duties a class E felony. It is currently a Class A misdemeanor. The new law takes effect on November 1, 2013.

In addition, the Governor today signed legislation (S1993A) that will allow police departments to waive the requirement that a police dog must be confined for 10 days after biting an individual while in the course of official duties. Under current law, dogs that had bitten individuals are detained for a 10 day observation period as a precaution to protect against any possible rabies exposure. As police dogs are a vital part of a police department's mission, the new law will allow law enforcement to receive a waiver from a local health department based on the dog's up-to-date rabies vaccinations to allow the dog to immediately return to its duties keeping New Yorkers safe. The new law will take effect immediately.

Senator George D. Maziarz, who sponsored (S1079A), said: Every day, police animals throughout New York are protecting and serving our citizens. In 2011, Rocky, the Niagara County Sheriff's Office K-9, lost his life while tracking clues in a robbery. Animals like Rocky are continually and increasingly used for tasks that place their lives on the line. It is time that we provide these animals with the protection they deserve under the law when they are injured or die in the line of duty.

Senator David Carlucci, who sponsored (S1993A), said, This is common sense legislation that will provide our law enforcement personnel with the tools and flexibility they need to protect all New Yorkers. Our K-9 officers provide an invaluable service and should not be subjected to unnecessary confinement for simply doing their jobs. Today, we have taken another step forward to remove an additional costly mandate. I would like to thank Governor Cuomo for signing this into law and for his commitment to law enforcement and overall public safety."

Assemblyman Ken Zebrowski, who sponsored both bills, said, "I want to thank Governor Cuomo for signing these two important bills. The importance of police animals during investigations and apprehensions has significantly grown over the years. These animals provide protection, assistance and improve public safety. State and local police invest a great deal of time and resources in the training of these extraordinary animals and our laws must reflect that."

Source URL: https://www.governor.ny.gov/press/07242013-increased-penalties-for-killing-police-animal

Links:
[1] https://www.governor.ny.gov/press/07242013-increased-penalties-for-killing-police-animal

New York State
Assembly

S01993 Summary:

Exempts certain police work dogs, that may bite an individual in the course of their official duty, from confinement and observation periods.

BILL NO	S01993A
SAME AS	SAME AS A01287-A
SPONSOR	CARLUCCI
Law Selection	Public Health Law
Law	Amd S2140, Pub Health L

S01993 Actions:

BILL NO	S01993A
01/09/2013	REFERRED TO HEALTH
01/24/2013	1ST REPORT CAL.5
01/28/2013	2ND REPORT CAL.
01/29/2013	ADVANCED TO THIRD READING
02/04/2013	PASSED SENATE
02/04/2013	DELIVERED TO ASSEMBLY
02/04/2013	referred to health

05/01/2013 RECALLED FROM ASSEMBLY

05/01/2013 returned to senate

05/01/2013 VOTE RECONSIDERED - RESTORED TO THIRD READING

05/01/2013 AMENDED ON THIRD READING 1993A

05/08/2013 REPASSED SENATE

05/08/2013 RETURNED TO ASSEMBLY

05/08/2013 referred to codes

05/20/2013 substituted for a1287a

05/20/2013 ordered to third reading cal.297

05/20/2013 passed assembly

05/20/2013 returned to senate

07/19/2013 DELIVERED TO GOVERNOR

07/24/2013 SIGNED CHAP.163

S01993 Committee Votes:

DATE:05/20/2013Assembly Vote YEA/NAY: 132/1

Abbate	Y	Crespo	Y	Goodell	Y	Lupardo	Y	Paulin	Y	Simanowitz	Y
Abinanti	Y	Crouch	Y	Gottfried	Y	Lupinacci	Y	Peoples-Stokes	Y	Simotas	Y
Arroyo	Y	Curran	Y	Graf	Y	Magee	Y	Perry	Y	Skartados	Y
Aubry	Y	Cusick	Y	Gunther	Y	Magnarelli	Y	Pretlow	Y	Skoufis	Y
Barclay	Y	Cymbrowitz	ER	Hawley	ER	Maisel	Y	Quart	Y	Solages	Y
Barrett	Y	DenDekker	Y	Heastie	Y	Malliotakis	Y	Ra	Y	Stec	Y
Barron	ER	Dinowitz	ER	Hennessey	Y	Markey	Y	Rabbitt	Y	Steck	Y
Benedetto	Y	DiPietro	Y	Hevesi	Y	Mayer	Y	Raia	Y	Stevenson	ER
Blankenbush	Y	Duprey	Y	Hikind	Y	McDonald	Y	Ramos	Y	Stirpe	Y
Borelli	Y	Englebright	Y	Hooper	Y	McDonough	Y	Reilich	Y	Sweeney	Y
Boyland	ER	Espinal	Y	Jacobs	ER	McKevitt	Y	Rivera	Y	Tedisco	Y
Braunstein	Y	Fahy	Y	Jaffee	Y	McLaughlin	Y	Roberts	Y	Tenney	ER
Brennan	Y	Farrell	Y	Johns	Y	Miller	Y	Robinson	Y	Thiele	Y
Brindisi	Y	Finch	ER	Jordan	Y	Millman	Y	Rodriguez	ER	Titone	Y
Bronson	Y	Fitzpatrick	ER	Katz	Y	Montesano	Y	Rosa	Y	Titus	ER
Brook-Krasny	Y	Friend	Y	Kavanagh	NO	Morelle	Y	Rosenthal	Y	Walter	Y
Buchwald	Y	Gabryszak	Y	Kearns	Y	Mosley	Y	Rozic	Y	Weinstein	Y
Butler	Y	Galef	Y	Kellner	Y	Moya	Y	Russell	Y	Weisenberg	Y
Cahill	Y	Gantt	Y	Kim	Y	Nojay	Y	Ryan	Y	Weprin	Y
Camara	Y	Garbarino	Y	Kolb	Y	Nolan	Y	Saladino	Y	Wright	Y
Ceretto	Y	Gibson	Y	Lalor	Y	Oaks	Y	Santabarbara	Y	Zebrowski	Y
Clark	ER	Giglio	Y	Lavine	Y	O'Donnell	Y	Scarborough	ER	Mr Spkr	Y
Colton	Y	Gjonaj	Y	Lentol	Y	Ortiz	Y	Schimel	Y		
Cook	Y	Glick	Y	Lifton	Y	Otis	Y	Schimminger	Y		
Corwin	Y	Goldfeder	Y	Lopez	Y	Palmesano	Y	Sepulveda	Y		

S01993 Floor Votes:

S01993 Memo:

Memo not available

S01993 Text:

STATE OF NEW YORK

1993--A

Cal. No. 5

2013-2014 Regular Sessions

IN SENATE

(Prefiled)

January 9, 2013

Introduced by Sen. CARLUCCI -- read twice and ordered printed, and when printed to be committed to the Committee on Health -- reported favorably from said committee, ordered to first and second report, ordered to a third reading, passed by Senate and delivered to the Assembly, recalled, vote reconsidered, restored to third reading, amended and ordered reprinted, retaining its place in the order of third reading

AN ACT to amend the public health law, in relation to exempting police dogs from confinement and observation

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Subdivision 7 of section 2140 of the public health law, as amended by chapter 510 of the laws of 2011, is amended to read as follows:

7. "Confinement and observation" refers to the conditions under which apparently healthy dogs, cats, domesticated ferrets, and domestic livestock, which are not exhibiting symptoms of rabies, must be maintained to determine rabies status if such an animal has potentially exposed a person to rabies, and the owner wishes to avoid euthanizing and testing the animal. If the county health authority does not approve home confinement, the ten day confinement and observation period must take place, at owner's expense, at an appropriate facility such as an animal shelter, veterinarian's office, kennel or farm. The confinement must include(i) provisions to prevent escape of the animal during the confinement period and (ii) requirements that the owner notify the public health authority immediately if the animal becomes ill at anytime during confinement, and (iii) verification by the county health authority or their designee at the end of the ten day period that the animal is healthy.

If a police work dog bites an individual in the course of such dog's official duty the police department may apply for a waiver from confinement from the local department of health. As part of such application for a waiver, the police department shall provide the local health department with records of such dog's past vaccination for rabies and proof that such dog's rabies vaccinations are up-to-date.

§ 2. This act shall take effect immediately.

EXPLANATION--Matter in ***italics*** (underscored) is new; matter in brackets [-] is old law to be omitted.

LBD00483-03-3
S. 1993--A

APPENDIX B

Resources For Physicians

Explanation For Animal Bite Report Form

Animal Bite Form

Rabies Post Exposure Prophylaxis Algorithm 11/2010

Guidance Regarding Human Exposure To Rabies and Post Exposure Prophylaxis Decisions 06/2018

MMWR: Use of Reduced 4-Dose Vaccine Schedule For Post Exposure Prophylaxis 03/2010

County Requirements/Guidelines For Patients Needing Rabies Series

Explanation For County Approval For Rabies Post Exposure

Post Exposure Approval Form

Rabies Vaccine VIS Form 01/2020

EXPLANATION FOR ANIMAL BITE REPORT FORM

Purpose:	To make reporting easier, faster, and produce a record for each individual.
Complete, Call or Fax:	To victim's county of residence.
Call:	Call victim's county of residence if there is a high risk exposure or post exposure prophylaxis is needed. County approval must be obtained prior to starting rabies post exposure prophylaxis for county to ensure payment. Each county has a mechanism for accepting after hour calls.
Incident Date:	Necessary to determine quarantine period and record incident.
Demographic Information:	Necessary for adequate follow up, especially if animal control must be dispatched. If visiting, temporary and permanent address is helpful.
ER Treatment:	Necessary to reinforce teaching given at ER. In addition, reinforce s/s of infection.
Animal Owner:	Necessary for locating animal. If animal is stray, description, location is important.
Reported To:	Public Health by fax or phone.

WARREN COUNTY HEALTH SERVICES
DIVISION OF PUBLIC HEALTH
1340 State Route 9, Lake George NY 12845
TEL#: (518)-761-6580 ~ FAX#: (518)-761-6422
Email: healthservices@warrencountyny.gov

ANIMAL BITE REPORT

Date of Incident: _____

Description of Incident

Person Reporting Incident: _____ Animal Control _____

Name of Individual Bitten: _____

Address: _____ Telephone: (H) _____

(W) _____

Was Medical Attention Sought? ___Yes ___ No

If Yes, Where? _____

Medical Provider Seen: _____

Treatment Rendered _____ Last TD (date) _____

Informed of S&S Infection: _____ Initials _____

Name Of Animal Owner: _____ Telephone: (H) _____

Address: _____ (W) _____

_____

Type of Animal Involved: _____ Description: _____

Rabies Vaccination Date: _____ Type: __1yr __3yr Tag#: _____

Plan for Animal: ___ 10 Day Quarantine- Where? _____

___6 Month Quarantine- Where? _____

___ ACO/DCO Agree to Supervise (Initials) _____

___ Euthanize- By Whom? _____

___ Specimen Sent for Evidence of Rabies _____

Follow Up Rendered: _____

_____

Animal Status After Testing/Quarantine: _____

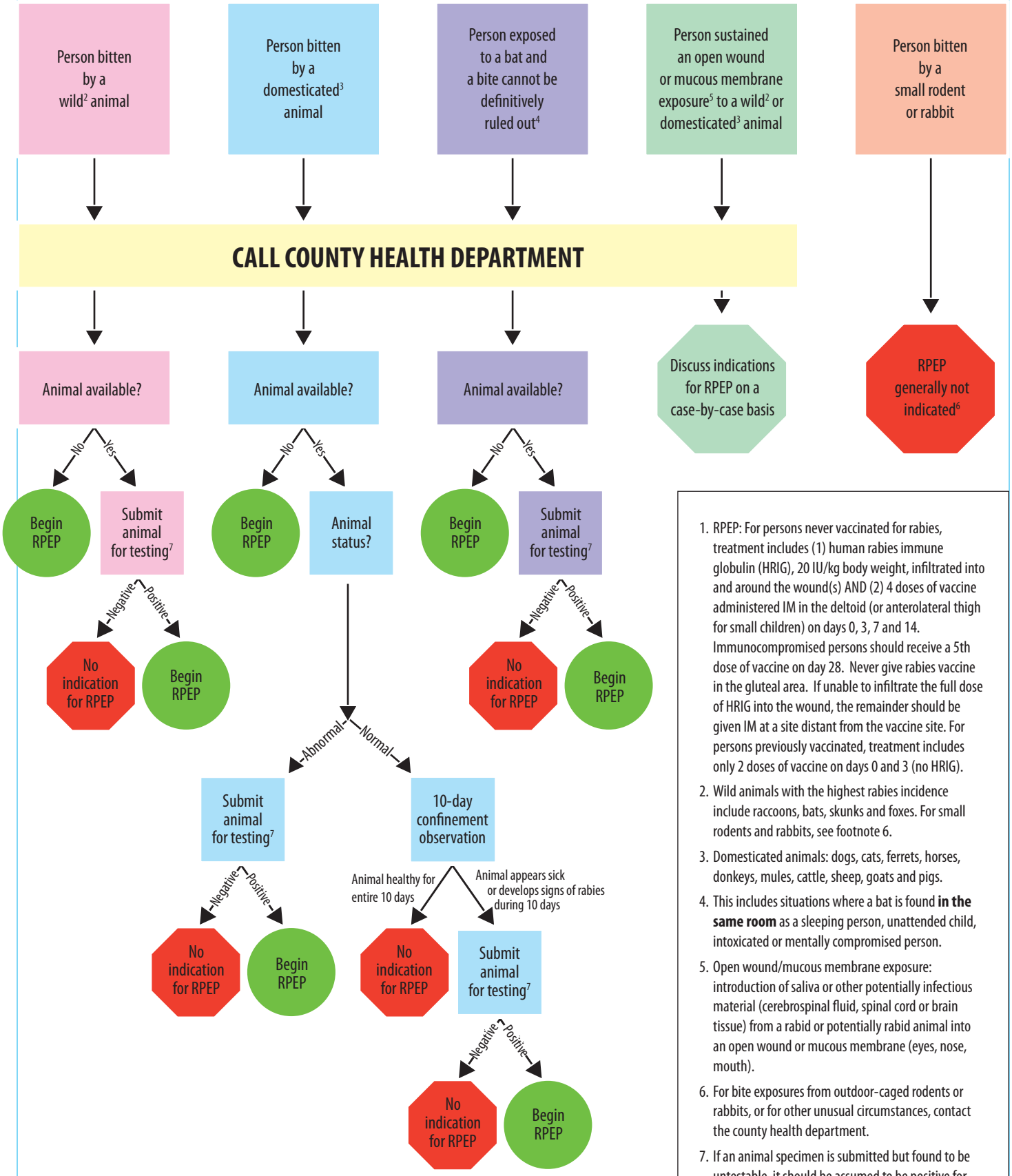
Reported By: _____ Date: _____

Signature of Nurse Receiving Report: _____ Date: _____

06/14, 6/21

Rabies Post Exposure Prophylaxis (RPEP)[1] Algorithm

NEW YORK state department of HEALTH



1. RPEP: For persons never vaccinated for rabies, treatment includes (1) human rabies immune globulin (HRIG), 20 IU/kg body weight, infiltrated into and around the wound(s) AND (2) 4 doses of vaccine administered IM in the deltoid (or anterolateral thigh for small children) on days 0, 3, 7 and 14. Immunocompromised persons should receive a 5th dose of vaccine on day 28. Never give rabies vaccine in the gluteal area. If unable to infiltrate the full dose of HRIG into the wound, the remainder should be given IM at a site distant from the vaccine site. For persons previously vaccinated, treatment includes only 2 doses of vaccine on days 0 and 3 (no HRIG).
2. Wild animals with the highest rabies incidence include raccoons, bats, skunks and foxes. For small rodents and rabbits, see footnote 6.
3. Domesticated animals: dogs, cats, ferrets, horses, donkeys, mules, cattle, sheep, goats and pigs.
4. This includes situations where a bat is found **in the same room** as a sleeping person, unattended child, intoxicated or mentally compromised person.
5. Open wound/mucous membrane exposure: introduction of saliva or other potentially infectious material (cerebrospinal fluid, spinal cord or brain tissue) from a rabid or potentially rabid animal into an open wound or mucous membrane (eyes, nose, mouth).
6. For bite exposures from outdoor-caged rodents or rabbits, or for other unusual circumstances, contact the county health department.
7. If an animal specimen is submitted but found to be untestable, it should be assumed to be positive for rabies treatment decision making purposes.

SUBJECT: Guidance Regarding Human Exposure to Rabies and Postexposure Prophylaxis Decisions

I. Human exposure to rabies

Human exposures to rabies can generally be categorized as bite, open wound, mucous membrane, or other types of exposure:

Bite exposure: Any penetration of the skin of a person by the teeth of a rabid or potentially rabid animal.

Open wound exposure: Introduction of saliva or other potentially infectious material (cerebrospinal fluid, spinal cord, or brain tissue) from a rabid or potentially rabid animal into an open wound (e.g., broken skin that bled within the past 24 hours).

Mucous membrane exposure: Introduction of saliva or other potentially infectious material (cerebrospinal fluid, spinal cord, or brain tissue) from a rabid or potentially rabid animal onto any mucous membrane (eyes, nose, mouth).

Other exposure: Any interaction with a rabid or potentially rabid animal where a bite, open wound, or mucous membrane exposure cannot be definitively ruled out. This includes situations where a bat is found in a room with a sleeping person, unattended child, intoxicated or mentally compromised person.

Situations that **DO NOT MEET** the criteria for potential human exposure to rabies include the following:

- Wounds of unknown origin where no animal was ever witnessed by any person at the scene.
- Petting a rabid or potentially rabid animal with no saliva contact.
- Direct contact with a bat where the person exposed is reasonably certain a bite did not occur.
- Exposure situations of any type involving **wild/free-roaming** rabbits or small rodents (e.g., squirrels, chipmunks, rats, mice).
- Exposure situations of any type involving pet rabbits or small pet rodents (e.g., rats, mice) **housed exclusively indoors.**
- Contact with the blood, urine, feces (e.g., guano), milk, or spray (e.g., from a skunk) of a rabid or potentially rabid animal.
- Secondary exposure scenarios (i.e., contact with an animal, surface, or object that has had contact with a rabid or potentially rabid animal) that do not meet the definition of open wound or mucous membrane exposure.

Human exposures to bats in multiple person dwellings

Group homes, long term care facilities, dormitories, and camps are examples of dwellings where many persons could be potentially exposed ("other exposure" category, above) to bats. It is absolutely imperative in these multiple person exposure situations to make every attempt to capture the bat for testing, make a list of all persons with possible contact, and thoroughly review each individual's potential exposure. Generally, all persons exposed in these settings should be evaluated as any exposed individual would be evaluated.

Potential exposure scenarios not covered in this guidance document should be discussed as needed on a case by case basis for determination of human exposure criteria by contacting the New York State Department of Health (NYSDOH) Bureau of Communicable Disease Control (BCDC) at (518) 473-4439 and after hours at (866) 881-2809.

II. Determining rabies status of the animal

In order to assist in rabies postexposure prophylaxis (RPEP) decisions, any potentially rabid animal that comes into contact with a human, causing them to be potentially exposed to rabies, should be evaluated for rabies either by confinement/observation (domesticated animals only, see below) or by laboratory testing.

For bat and other non-domesticated animal exposures, every attempt should be made to safely capture the animal to be submitted for laboratory testing. For domesticated[1] animal exposures, decisions about whether to evaluate by confinement/observation versus laboratory testing should take into consideration the risk of rabies in the exposing animal based upon species, behavior, clinical presentation, and exposure circumstances. Table 1 describes various factors that can be used to aid in this assessment; however, often there is no single factor alone that places the risk of rabies clearly into the high or low risk categories. All factors should be considered and contribute to the overall risk assessment.

Table 1: Factors to aid in the assessment for the risk of rabies in the exposing animal

High-suspect for rabies	Low-suspect for rabies
Behavior abnormal for the species or changes in behavior of a known animal	Normal animal behavior
Clinical signs compatible with rabies	No clinical signs of rabies
Unprovoked attack*	Provoked attack*
Rabies vector species (bat, raccoon, fox, skunk)	Owned domesticated species[1]; wild or outdoor housed rabbits and small rodents
Actual or possible contact with a known rabid animal	No neurologic signs (stumbling, seizures, tremors, reduced or heightened excitability)

*Note: Provoking behaviors by a person can include taking food, surprising, inflicting pain, moving suddenly, making loud noises, touching, making eye contact, running, biking, invading territory, approaching a mother animal with a litter, or getting near an old or ill/injured animal.

Confinement/observation

Confinement/observation is considered only for domesticated animals (dog, cat, ferret, sheep, goat, cattle, horse, donkey, mule, or swine). If a domesticated animal has exposed a human and is a low-suspect for rabies, it may be held in confinement and observed daily for signs of rabies for 10 days commencing from the day the exposure occurred. RPEP of exposed persons should not be automatically initiated when pursuing 10-day confinement/observation. Note that animals under rabies observation should not be vaccinated until the conclusion of the 10-day period to avoid potential vaccine reactions that may mimic early rabies signs.

If an animal dies or becomes clinically ill during the 10-day observation period, and the county health authority and consulting veterinarian find the presentation compatible with rabies, then the animal should be humanely euthanized and submitted for rabies testing immediately. RPEP of exposed persons should then be initiated only if rabies is not ruled out.

Laboratory testing

According to the New York State (NYS) Sanitary Code, human exposure from bat and other non-domesticated animal species generally requires euthanasia and testing of the animal to determine rabies status and the necessity of RPEP. Under extenuating circumstances, exceptions can be made on a case-by-case basis after consultation with the NYSDOH.

---

1 Domesticated animals include dogs, cats, ferrets, horses, donkeys, mules, cattle, sheep, goats, and pigs.

Any animal (domesticated or non-domesticated) that is a high-suspect for rabies (see Table 1) and/or exhibiting clinical signs compatible with rabies and has exposed a human should not be confined and observed but should be immediately humanely euthanized and submitted for rabies testing.

Obtaining laboratory testing
Laboratory testing of animals that have potentially exposed a human or animal to rabies is available free of charge at the NYSDOH Wadsworth Center Rabies Laboratory. Testing is performed during routine business hours but can be performed on an emergency basis if the situation warrants, such as when an animal that is strongly suspected to be rabid has bitten a human and treatment is being withheld pending test results.

Detailed submission guidelines (including submission policies for animal species and human specimens) are available at: www.wadsworth.org/rabies or by phone at (518) 485-6464. After hours, please contact (518) 527-7369 or (518) 527-7370.

III. RPEP for exposed persons never previously vaccinated for rabies

For all persons who have never been previously vaccinated for rabies, RPEP includes:

- wound management
- administration of Human Rabies Immune Globulin (HRIG)
- administration of four doses of rabies vaccine on days 0, 3, 7, and 14
- administration of a fifth dose of rabies vaccine on day 28 for persons with immunosuppression

The schedule for all vaccine doses should be adhered to as closely as possible.

This guidance document covers detailed information about timeliness, wound management, HRIG administration, vaccine administration, scheduling variations, and discontinuation of RPEP. Situations falling outside the general recommendations in this guidance document should be discussed on a case by case basis by contacting the NYSDOH BCDC at (518) 473-4439 and after hours at (866) 881-2809.

Timeliness
RPEP should be authorized and provided as soon as possible after exposure to an animal that is known to be rabid or is a high-suspect for rabies. In general, RPEP should only be delayed when a suspect animal's rabies status can be determined with confinement/observation or when laboratory test results will be available in a timely manner. For incidents involving bite, mucous membrane, open wound, or other exposures from an animal known to be rabid or is a high-suspect for rabies but is not available for testing, RPEP should be authorized and initiated regardless of the length of time since the exposure occurred.

For bite, mucous membrane, open wound, or other exposures to animals that are low-suspect for rabies, RPEP for exposures that occurred more than 3 months previously should be discussed on a case-by-case basis though consultation with the NYSDOH prior to authorizing and initiating RPEP. Exposures involving a bat found in a room where exposure cannot be definitively ruled out (as defined in Section I) and that occurred more than 3 months prior should not be authorized.

Exceptions to these general guidelines about timeliness should only be made on a case-by-case basis and through consultation with the NYSDOH prior to authorizing and initiating RPEP.

Delay of RPEP while attempting to locate the exposing animal
For exposures to domesticated animals, all efforts should be made to capture and test (or observe) domesticated animals when there has been a human exposure.

Historically, 3 days has been used as a general guideline for how long one might reasonably wait before deciding that the animal is not likely to be found and so prophylaxis should be started. This "3 day rule" is not intended as a set-in-stone, absolute cutoff for starting treatment. The length of time to wait (if any)

before starting treatment ultimately depends on the circumstances of an individual exposure. In general, due to risk of side effects and resource/cost issues, it is preferable to wait to start treatment when steps are underway to determine the animal's rabies status. Additional guidelines to help determine when to start treatment include:

- Domesticated animals, where the victim cannot be 100% sure of what the animal looked like should not have treatment delayed if rabies prophylaxis is indicated.
- Domesticated animals with a collar and seen around the area may be worth looking for longer than 3 days, in hopes that the animal and its owner reappear in the area. This decision should be made in the context of the bite circumstance and behavior of the animal, for example:
    - The animal was owned, but had an abrupt behavior change, bit someone, and is now gone: treatment should be considered if the animal is not found in three days.
- The animal was a recognized stray, bite was provoked, animal observed to act normally before and after the bite: delaying treatment beyond three days should be considered if steps are actively underway to capture or at least observe the animal (even if not captured) as healthy.
- For an animal which is clearly owned and the owner is identified but cannot be reached, it is worth trying to locate the owner and animal for the full 10 days.

These decisions should be made on a case-by-case basis through consultation with the NYSDOH and depending on the likelihood of the animal being rabid and the likelihood of an exposure.

For wildlife exposures where the animal has escaped or been released, unless there is something very remarkable about the animal and/or the circumstances, positive identification cannot be assured, so treatment should not be delayed.

Wound management
All RPEP should begin with immediate thorough wound cleansing with soap and water and irrigation of the wound with a virucidal agent such as povidine-iodine solution when available.

Dose and site for administration of HRIG
A single 20 IU/kg body weight dose of HRIG, **infiltrated into and around the wound(s)**, should be given when RPEP is initiated (day 0). If it is not possible to infiltrate the entire dose at the site of the wound(s), the remainder should be administered intramuscularly (IM) at a site distant from the site of rabies vaccination. **However, every effort should be made to administer at least some HRIG into the site(s) where the exposure occurred**. HRIG should never be administered in the same syringe or at the same site as vaccine.

HRIG administration considerations:

- Medical personnel should ensure that the correct concentration of rabies antibodies per milliliter contained in the HRIG formulation is used when calculating the volume of HRIG for the recommended dose of 20 IU/kg. The U.S. Food and Drug Administration (FDA) has approved three HRIG products (HyperRab S/D™, Imogam®, and KENRAB) with a potency value of 150 IU/ml and one (HyperRab™) with a potency value of 300 IU/ml. The volume HRIG required for the recommended dose of 20 IU/kg using a product with a concentration of 300 IU/ml is approximately one half of that required for products with a concentration of 150 IU/ml.
- The full dose of HRIG should be infiltrated in the area around the wound. HyperRab™, with a potency value of 300 IU/ml may be diluted with dextrose, 5% (D5W) if additional volume is needed to infiltrate the entire wound. Do not dilute with normal saline.
- If the wound has healed, or there is no obvious wound at the anatomic site of exposure, HRIG must still be administered at the site where contact or wound occurred.
- For mucous membrane exposures the entire dose of HRIG must be administered IM at a site distant from the site of rabies vaccination.
- If a patient was administered a full dose of HRIG without having the wound(s) or exposure site

infiltrated appropriately, administration of additional HRIG into and around the wound(s) within 7 days after the first dose of vaccine may be indicated especially for exposure to animals that are high-suspect for rabies. Re-administration of HRIG should include only the volume sufficient to infiltrate into and around the wound(s) (even if completely healed) up to a maximum volume of a full repeat dose. This is important even if only part of the HRIG can be infiltrated into the wound. Do **not** re-administer any of the remaining calculated dose IM if it was previously provided IM.

- Physicians are often concerned about pain, potential scarring, or potential tissue damage that might be caused by attempting to infiltrate HRIG into fingers, face, joint areas, etc. However, it must be made clear that treatment failures have been documented in other countries when HRIG was not administered at the site of the actual wound. Even if only a small amount of HRIG can be infiltrated, an attempt should be made to instill HRIG at the site of a rabies exposure. This includes RPEPs provided due to bat-skin contact in the absence of a visible wound, but where there is concern because of the possibility of a bat bite. The only exceptions are mucous membrane exposures or bat exposures in which there is no information about the site of exposure; therefore, HRIG should be administered IM at a site distant from the site of rabies vaccination.
- If administration of HRIG was not done at the time RPEP was initiated (e.g., because insufficient quantity was available to treat the patient), it may be given up to the 7th day after the first dose of vaccine. HRIG should not be administered more than 7 days after the first dose of vaccine due to concern that the HRIG could interfere with an individual's active immune response to the vaccines.

Dose and site for administration of human rabies vaccine

RPEP consists of **four** doses of rabies vaccine, 1 ml administered IM in the deltoid area or, for small children, in the anterolateral aspect of the thigh. The first vaccine dose is given when RPEP is initiated on day 0 (the same day as HRIG is administered) and three additional doses are given 3, 7, and 14 days after the first vaccination. Currently there are two human rabies vaccines licensed by the FDA available in the U.S., Imovax® and RabAvert®.

Rabies vaccine administration considerations:

- Rabies vaccine should **never** be given in the gluteal area. This is a specific warning on the product label because of concern for administering the vaccine into adipose (fatty) tissue rather than muscle, which may result in lower neutralizing antibody titers.
- If a dose of vaccine has erroneously been given in the gluteal area, the provider should be advised of the administration error. The necessary follow-up action (e.g., whether to repeat the vaccine dose or not) is generally left to clinician's judgment; however, the NYSDOH recommends that such vaccine doses be treated as though they did not happen unless the provider is certain, due to the body type of the patient, that they did not inject the vaccine into adipose (fat) tissue.
- Rabies vaccine should never be given in the same muscle as HRIG. If HRIG and vaccine were erroneously administered into the same muscle, that vaccine dose should be treated as if it were not given. If within the first 2 days of HRIG initiation, the vaccine dose should be given as soon as possible in an appropriate body site and that dose now considered to be "day 0." If subsequent vaccine doses have already been given, the "day 3" dose should be treated as "day 0" and the schedule adjusted accordingly.
- It is acceptable to give HRIG in the same limb as the vaccine, as long as they are administered in different muscles (e.g., HRIG in a bite wound on the hand, vaccine in the deltoid muscle of that same arm).

Immunosuppressed patients

Immunosuppression (either due to illness, medication, or therapy for an illness or condition) is a clinical diagnosis determined by the patient's physician. Those who are immunosuppressed should receive a 5th dose of rabies vaccine on day 28. In addition, these patients should have their response to treatment assessed with serum antibody titers 14–28 days after finishing the postexposure treatment course. Information on specific conditions that may cause immunosuppression can be found in the Advisory

Committee on Immunization Practices (ACIP) General Recommendations on Immunization, available at: www.cdc.gov/vaccines/pubs/acip-list.htm.

A patient who fails to seroconvert with an acceptable antibody response after the fifth and last dose should be managed in consultation with their physician and appropriate public health officials. Information on titer testing at the NYSDOH Wadsworth Center Rabies Laboratory is available at: http://www.wadsworth.org/rabies/prof/SerologyGuidelines.htm.

RPEP schedule variations

If a patient gets off schedule, consult with the NYSDOH BCDC regarding recommendations for schedule adjustment. In general, RPEP schedule considerations include:

- Under no circumstances should the series be re-started.
- HRIG should not be administered more than once, except in certain circumstances as described above.
- Although HRIG should be given on day 0 with the first dose of vaccine, it can be given up to 7 days after starting the vaccine schedule.
- A deviation of 1 day from the recommended schedule should be managed by maintaining vaccine doses as per the original schedule, if possible.
- If deviations of greater than 1 day from the original schedule are necessary or unavoidable, all subsequent doses should be administered on a new schedule maintaining the same interval between doses.
- If there is concern about **significant** (>2 week) deviation from the schedule, antibody titers should be verified on a serum sample collected 14–28 days after the final vaccine dose.
- If a patient began RPEP in another country and needs to continue here, consult with the NYSDOH BCDC. In rare circumstances, it may be necessary to re-start treatment.

Discontinuation of RPEP

If RPEP is begun and the animal's rabies status is ultimately determined to be negative by laboratory testing or confinement/observation, RPEP should be discontinued. Those who receive partial RPEP (2 or more doses of vaccine) should be advised to request a serum antibody titer drawn 1–2 months after the last vaccine dose in order to potentially allow use of the shortened treatment course in the event of a future rabies exposure.

IV. RPEP for exposed persons previously vaccinated for rabies

Previously vaccinated persons are those individuals who have received either:

- A complete rabies pre-exposure or postexposure prophylaxis regimen in accordance with ACIP recommendations using a modern, cell culture-derived rabies vaccine (such as Imovax® or RabAvert®); or
- Rabies vaccination following another protocol or with another vaccine with a subsequent documented rabies virus neutralizing antibody titer.

In all other cases, including partial RPEP regimens without a documented virus neutralizing antibody titer, the full RPEP consisting of HRIG plus four doses (or five doses for immunosuppressed persons) of vaccine should be administered.

RPEP for previously vaccinated persons consists of wound management as above and **two** doses of rabies vaccine, 1 ml administered IM in the deltoid area or, for small children, in the anterolateral aspect of the thigh, given on day 0 and day 3. Rabies vaccine should **never** be given in the gluteal area, as this is a specific contraindication on the product label. The schedule for these doses should be adhered to as closely as possible.

HRIG is not given to previously vaccinated persons receiving RPEP. Administration of HRIG to a person who already has immunity to rabies is contraindicated because it may interfere with the anamnestic response to vaccine. It is unclear whether such administration could interfere sufficiently to cause treatment failure. Thus, every effort must be made to assure that HRIG is only given if the person is not previously vaccinated. If HRIG is erroneously given, the patient should receive an extra dose of

vaccine on or after day seven. This recommendation is not part of the national ACIP guidelines, but has been suggested by the Centers for Disease Control and Prevention as a precautionary measure.

V. Adverse reactions to RPEP

Treatment with any biological is not completely risk-free and adverse reactions may occur following the administration of human rabies vaccines or HRIG, although no life-threatening reactions have been reported to date. Thus, decisions on the necessity for RPEP in lower-risk exposures should include consideration of the risk of treatment.

Any adverse events related to rabies treatment should be discussed with experts at the NYSDOH BCDC and reported to VAERS at: https://vaers.hhs.gov/.

VI. Additional resources

Additional information regarding human RPEP recommendations can be found in the following ACIP guidance documents. **Note that in cases where NYS law, regulation, or policy differs from ACIP guidelines, the NYS law, regulation, or policy supersedes ACIP guidelines.**

Centers for Disease Control and Prevention. Human Rabies Prevention – United States, 2008. Recommendations of the Advisory Committee on Immunization Practices. MMWR 2008; 57 (RR-3): 1–28, available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5703a1.htm.

Centers for Disease Control and Prevention. Use of a Reduced (4-Dose) Vaccine Schedule for Postexposure Prophylaxis to Prevent Human Rabies – Recommendations of the Advisory Committee on Immunization Practices. MMWR 2010; 59 (RR-2): 1–9 available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5902a1.htm.

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Use of a Reduced (4-Dose) Vaccine Schedule for Postexposure Prophylaxis to Prevent Human Rabies

Recommendations of the Advisory Committee on Immunization Practices

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

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Use of a Reduced (4-Dose) Vaccine Schedule for Postexposure Prophylaxis to Prevent Human Rabies

Recommendations of the Advisory Committee on Immunization Practices

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Summary

This report summarizes new recommendation and updates previous recommendations of the Advisory Committee on Immunization Practices (ACIP) for postexposure prophylaxis (PEP) to prevent human rabies (CDC. Human rabies prevention—United States, 2008: recommendations of the Advisory Committee on Immunization Practices. MMWR 2008;57[No. RR-3]). Previously, ACIP recommended a 5-dose rabies vaccination regimen with human diploid cell vaccine (HDCV) or purified chick embryo cell vaccine (PCECV). These new recommendations reduce the number of vaccine doses to four. The reduction in doses recommended for PEP was based in part on evidence from rabies virus pathogenesis data, experimental animal work, clinical studies, and epidemiologic surveillance. These studies indicated that 4 vaccine doses in combination with rabies immune globulin (RIG) elicited adequate immune responses and that a fifth dose of vaccine did not contribute to more favorable outcomes. For persons previously unvaccinated with rabies vaccine, the reduced regimen of 4 1-mL doses of HDCV or PCECV should be administered intramuscularly. The first dose of the 4-dose course should be administered as soon as possible after exposure (day 0). Additional doses then should be administered on days 3, 7, and 14 after the first vaccination. ACIP recommendations for the use of RIG remain unchanged. For persons who previously received a complete vaccination series (pre- or postexposure prophylaxis) with a cell-culture vaccine or who previously had a documented adequate rabies virus-neutralizing antibody titer following vaccination with noncell-culture vaccine, the recommendation for a 2-dose PEP vaccination series has not changed. Similarly, the number of doses recommended for persons with altered immunocompetence has not changed; for such persons, PEP should continue to comprise a 5-dose vaccination regimen with 1 dose of RIG. Recommendations for pre-exposure prophylaxis also remain unchanged, with 3 doses of vaccine administered on days 0, 7, and 21 or 28. Prompt rabies PEP combining wound care, infiltration of RIG into and around the wound, and multiple doses of rabies cell-culture vaccine continue to be highly effective in preventing human rabies.

The material in this report originated in the National Center for Emerging and Zoonotic Infectious Diseases (proposed), Lonnie King, DVM, Director.
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Introduction

Rabies is a zoonotic disease caused by RNA viruses in the family *Rhabdoviridae*, genus *Lyssavirus* (*1*). Virus is transmitted in the saliva of rabid mammals via a bite. After entry to the central nervous system, these viruses cause an acute, progressive encephalomyelitis. The incubation period usually ranges from 1 to 3 months after exposure, but can range from days to

years. Rabies can be prevented by avoidance of viral exposure and initiation of prompt medical intervention when exposure does occur. In the United States, animal rabies is common. In a recent study, approximately 23,000 persons per year were estimated to have been exposed to potentially rabid animals and received rabies postexposure prophylaxis (PEP) (*2*). With the elimination of canine rabies virus variants and enzootic transmission among dogs, human rabies is now rare in the United States, with an average of one or two cases occurring annually since 1960 (*3*).

Prompt wound care and the administration of rabies immune globulin (RIG) and vaccine are highly effective in preventing human rabies following exposure. A variety of empirical schedules and vaccine doses have been recommended over time, based in part on immunogenicity and clinical experience in areas of the world with enzootic canine or wildlife rabies (*4*). As more potent vaccines were developed, the number of vaccine doses recommended for PEP has decreased, and studies aimed at further revision and reduction of PEP schedules and doses in humans have been encouraged. By the latter half of the 20th century, a 4- to 6-dose, intramuscular regimen using human diploid cell vaccine (HDCV) or purified chick embryo cell vaccine (PCECV) was being recommended (*5–8*). In the United States, a 5-dose PEP vaccine regimen was adopted during the 1980s (*9–12*). In 2007, when human rabies vaccine was in limited supply, an ad hoc National Rabies Working Group was formed to reassess the recommendations for rabies prevention and control in humans and other animals. In 2008, a smaller Advisory Committee on Immunization Practices (ACIP) Rabies Workgroup was formed to review rabies vaccine regimen options. This report provides updated ACIP recommendations regarding the use of a 4-dose vaccination regimen, replacing the previously recommended 5-dose regimen, for rabies PEP in previously unvaccinated persons.

Methods

The ACIP Rabies Workgroup* was formed in October 2008 to review 1) previous recommendations; 2) published and unpublished data from both national and global sources regarding rabies PEP; and 3) the immunogenicity, effectiveness, and safety of a 4-dose PEP rabies vaccination regimen. The ACIP Rabies Workgroup used an evidence-based process for consideration of a reduced vaccination regimen in human rabies PEP. This approach consisted of a review of information available from basic and applied studies of rabies prevention. Because rabies is almost always fatal among immunologically naïve persons once clinical symptoms of rabies occur, randomized, placebo-controlled efficacy studies of vaccine in humans cannot be conducted. The ACIP Rabies Workgroup reviewed six areas: 1) rabies virus pathogenesis, 2) experimental animal models, 3) human immunogenicity studies, 4) prophylaxis effectiveness in humans, 5) documented failures of prophylaxis in humans, and 6) vaccine safety. Studies for review were identified by searching the PubMed database and other relevant references and by consulting subject-matter experts. When definitive research evidence was lacking, the recommendations incorporated the expert opinion of the ACIP Rabies Workgroup members. The ACIP Rabies Workgroup also sought advice and comment from representatives of the vaccine industry, the National Association of State Public Health Veterinarians, the Council of State and Territorial Epidemiologists, state and local public health officials, additional national stakeholder groups, and other national and international experts. The proposed revised recommendations and a draft statement from the ACIP Rabies Workgroup were presented to the full ACIP during February 2009. After review and comment by ACIP, a revised draft, recommending a reduced regimen of 4 1-mL doses of rabies vaccine for PEP in previously unvaccinated persons, was prepared for consideration. These recommendations were discussed and accepted by ACIP at the June 2009 meeting (*13*).

Rationale for Reduced Doses of Human Rabies Vaccine

A detailed review of the evidence in support of a reduced, 4-dose schedule for human PEP has been published (*14*). The totality of the evidence, obtained from the available peer-reviewed literature, unpublished data sources, epidemiologic reviews, and expert opinion strongly supports a reduced vaccination schedule (Table 1). Since the 19th century, prophylactic interventions against rabies have recognized the highly neurotropic characteristics of lyssaviruses and have aimed at neutralizing the virus at the site of infection before it can enter the human central nervous system (Figure 1) (*4,15,16*). To accomplish this, immunologic interventions must be prompt and must be directed toward local virus neutralization, such as local infiltration with RIG and vaccination. Modern recommended rabies PEP regimens emphasize early wound care and passive immunization (i.e., infiltration of RIG in and around the wound) combined with active immunization (i.e., serial doses of rabies vaccine). Accumulated scientific evidence indicates that, following rabies virus exposure, successful neutralization and clearance of rabies virus mediated via appropriate PEP generally ensures patient survival (*8*).

*A list of the membership appears on page 9 of this report.

TABLE 1. Summary of evidence in support of a 4-dose postexposure prophylaxis regimen — United States, 2010

Evidence	Conclusion	Sources
Rabies virus pathogenesis	High neurotropism of rabies virus requires immediate immunization (local infiltration with human rabies immune globulin [HRIG] and vaccination) to neutralize virus at the site of infection and prevent viral entry into the central nervous system.	Published literature,* expert national and international opinion, and historic observations
Experimental animal models	Protection in animal models was elicited without regard to the absolute number of vaccine doses used.	Published literature,† expert national and international opinion, and unpublished data
Human clinical studies	All patients develop adequate levels of virus-neutralizing antibodies by day 14, without any additive value of a 5th dose of vaccine administered at day 28 (in regards to any substantive increase in measured virus-neutralizing antibody levels).	Published literature,§ expert national and international opinion, and unpublished data
Epidemiologic surveillance	No human rabies cases were identified in patients who received appropriate wound care, HRIG, and 4 doses of vaccine.	Published literature,¶ expert national and international opinion, and unpublished data
Health economics	Expected positive national benefits are related to omission of a 5th dose (e.g., minimized travel expenses, reduced time out of work, health-care workers have more time for other patients, and fewer adverse reactions).	Published literature** and expert national opinion

* **SOURCES:** Lyles DS, Rupprecht CE. *Rhabdoviridae*. In: Knipe D, Howley P, eds. Fields virology. 5th ed. Philadelphia, PA: Lippincott, Williams, & Wilkins; 2007:1363–408. Plotkin SA, Koprowski H, Rupprecht CE. Rabies vaccines. In: Plotkin SA, Orenstein WA, Offit PA, eds. Vaccines. 5th ed. Philadelphia, PA: Saunders; 2008:687–714. World Health Organization. WHO Expert Consultation on Rabies. 1st report. WHO Technical Report Series, No. 931. Geneva, Switzerland: World Health Organization; 2005. Rupprecht CE, Briggs D, Brown C, et al. Evidence for a 4-dose vaccine schedule for human rabies post-exposure prophylaxis in previously non-vaccinated individuals. Vaccine 2009;27:7141–8. Charlton KM, Nadin-Davis S, Casey GA, Wandeler AI. The long incubation period in rabies: delayed progression of infection in muscle at the site of exposure. Acta Neuropathol 1997;94:73–7. Dietzschold B, Schnell M, Koprowski H. Pathogenesis of rabies. Curr Top Microbiol Immunol 2005;292:45–56.

† **SOURCES:** Lyles DS, Rupprecht CE. *Rhabdoviridae*. In: Knipe D, Howley P, eds. Fields Virology. 5th Ed. Philadelphia, PA: Lippincott, Williams, & Wilkins; 2007:1363–408. World Health Organization. WHO Expert Consultation on Rabies. 1st Report. WHO Technical Report Series, No. 931. Geneva, Switzerland: World Health Organization; 2005. Rupprecht CE, Briggs D, Brown C, et al. Evidence for a 4-dose vaccine schedule for human rabies post-exposure prophylaxis in previously non-vaccinated individuals. Vaccine 2009;27:7141–8. Baer GM. Animal models in the pathogenesis and treatment of rabies. Rev Infect Dis 1988;10(Suppl 4):S739–50. Franka R, Wu X, Jackson RF, et al. Rabies virus pathogenesis in relationship to intervention with inactivated and attenuated rabies vaccines. Vaccine 2009;27:7149–55. Sikes RK, Cleary WF, Koprowski H, Wiktor TJ, Kaplan MM. Effective protection of monkeys against death from street virus by post-exposure administration of tissue-culture rabies vaccine. Bull World Health Organ 1971;45:1–11. Manickama R, Basheer MD, Jayakumar R. Post-exposure prophylaxis (PEP) of rabies-infected Indian street dogs. Vaccine 2008;26:6564–8.

§ **SOURCES:** Plotkin SA, Koprowski H, Rupprecht CE. Rabies vaccines. In: Plotkin SA, Orenstein WA, Offit PA, eds. Vaccines. 5th ed. Philadelphia, PA: Saunders; 2008:687–714. World Health Organization. WHO Expert Consultation on Rabies. 1st Report. WHO Technical Report Series, No. 931. Geneva, Switzerland: World Health Organization; 2005. Rupprecht CE, Briggs D, Brown C, et al. Evidence for a 4-dose vaccine schedule for human rabies post-exposure prophylaxis in previously non-vaccinated individuals. Vaccine 2009;27:7141–8.

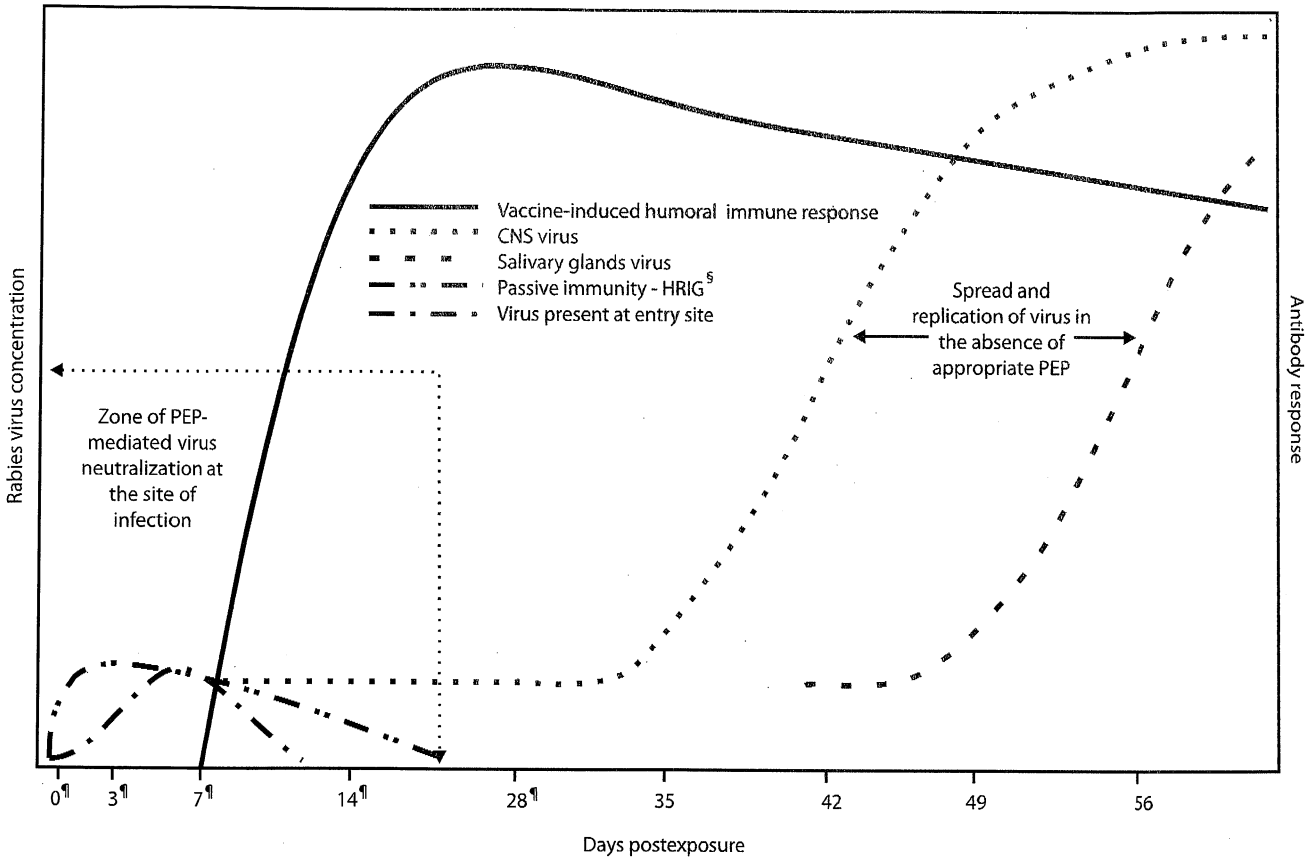
¶ **SOURCES:** Plotkin SA, Koprowski H, Rupprecht CE. Rabies vaccines. In: Plotkin SA, Orenstein WA, Offit PA, eds. Vaccines. 5th ed. Philadelphia, PA: Saunders; 2008:687–714. Rupprecht CE, Briggs D, Brown C, et al. Evidence for a 4-dose vaccine schedule for human rabies post-exposure prophylaxis in previously non-vaccinated individuals. Vaccine 2009; 27:7141–8. Wilde H. Failures of post-exposure rabies prophylaxis. Vaccine 2007;25:7605–9.

** **SOURCES:** Meltzer MI, Rupprecht CE. A review of the economics of the prevention and control of rabies: I: global impact and rabies in humans. PharmacoEconomics 1998:14:365–83. Dhankhar P, Vaidya SA, Fishbien DB, Meltzer MI. Cost effectiveness of rabies post exposure prophylaxis in the United States. Vaccine 2008;26:4251–5.

The induction of a rabies virus-specific antibody response is one important immunologic component of response to vaccination (*4*). Development of detectable rabies virus-specific neutralizing antibodies is a surrogate for an adequate immune response to vaccination. Clinical trials of human rabies vaccination indicate that all healthy persons develop detectable rabies virus-neutralizing antibody titer rapidly after initiation of PEP. For example, in a literature review conducted by the ACIP Rabies Workgroup of at least 12 published rabies vaccination studies during 1976–2008 representing approximately1,000 human subjects, all subjects developed rabies virus-neutralizing antibodies by day 14 (*14*).

Observational studies indicate that PEP is universally effective in preventing human rabies when administered promptly and appropriately. Of the >55,000 persons who die annually of rabies worldwide, the majority either did not receive any PEP, received some form of PEP (usually without RIG) after substantial delays, or were administered PEP according to schedules that deviated substantially from current ACIP or World Health Organization recommendations (*17*). For example, a review of a series of 21 fatal human cases in which patients received some form of PEP indicated that 20 patients developed signs of illness, and most died before day 28 (Figure 2). In such cases, in which widespread infection of the central

FIGURE 1. Schematic of dynamics of rabies virus pathogenesis* in the presence and absence of postexposure prophylaxis (PEP)–mediated immune responses†



* Rabies can progress through five stages: incubation period (5 days to >2 years: U.S. median ~35 days), prodrome state (0–10 days), acute neurologic period (2–7 days), coma (5–14 days), and death.

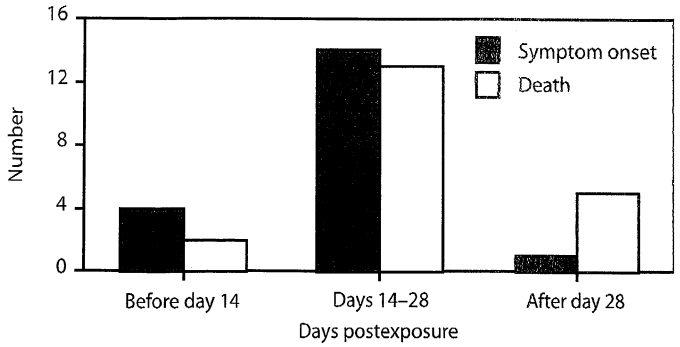
† Once in tissues at the entry site, rabies virus can be neutralized by passively administered rabies immune globulin (RIG). Active immunization (vaccine) stimulates the host immune system, and, as a result, virus-neutralizing antibodies (VNA) are produced approximately 7–10 days after initiation of vaccination. By approximately day 14–28 (after administration of 4 vaccine doses), VNAs peak. In the absence of early and adequate PEP, virus enters host neurons, spreads to the central nervous system (CNS), and causes disease, with inevitably fatal consequence.

§ Human rabies immune globulin.

¶ Day vaccine administered.

nervous system occurs before the due date (i.e., day 28) of the fifth vaccine dose, the utility of that dose must be nil. In the United States, of the 27 human rabies cases reported during 2000–2008, none of the patients had a history of receiving any PEP before illness, and this is the most common situation for human rabies deaths in both developed and developing countries (*3,8*). In India, an analysis from two animal bite centers during 2001–2002 demonstrated that in 192 human rabies cases, all deaths could be attributed to failure to seek timely and appropriate PEP, and none of them could be attributed to a failure to receive the fifth (day 28) vaccine dose (*18*). Even when PEP is administered imperfectly or not according to established scheduled dose recommendations, it might be generally effective. Several studies have reported cases involving persons who were exposed to potentially rabid animals and who received less than 5, 4, or even 3 doses of rabies vaccine but who nevertheless did not acquire rabies (Table 2). For example, in one series from New York, 147 (13%) of 1,132 patients had no report of receiving the complete 5-dose vaccine regimen. Of these patients, 26 (18%) received only 4 doses of vaccine, and two of these patients were exposed to animals with laboratory-confirmed rabies. However, no documented cases of human rabies occurred (CDC, unpublished data, 2003). The ACIP Rabies Working Group estimates that >1,000 persons in the United States receive rabies prophylaxis annually of only 3 or 4 doses, with no resulting documented cases of human rabies, even though >30% of these persons likely have exposure to confirmed rabid animals (*14*). In addition, no case of human rabies in the United States has been reported in which failure of PEP was attributable to receiving less than the 5-dose vaccine course. Worldwide, although human PEP failures have been reported very rarely, even in cases in which intervention

FIGURE 2. Number of documented rabies postexposure prophylaxis (PEP) failures — Burma, India, the Philippines, South Africa, Sri Lanka, and Thailand, 1984–2007*



SOURCES: Wilde H. Failures of post-exposure rabies prophylaxis. Vaccine 2007;25:7605–9; Wilde H, Sirikawin S, Sabcharoen A, et al. Failure of postexposure treatment of rabies in children. Clin Infect Dis 1996;22:228–32; Matha IS, Salunke SR. Immunogenicity of purified vero cell rabies vaccine used in the treatment of fox-bite victims in India. Clin Infect Dis 2005;40:611–3.

* Of 21 reported PEP failures described, 20 patients had symptoms and 15 died before day 28.

appeared both prompt and appropriate (*8*), no cases have been attributed to the lack of receipt of the fifth human rabies vaccine dose on day 28 (*4,17*).

In vivo laboratory animal studies using multiple animal models from rodents to nonhuman primates have underscored the importance of timely PEP using RIG and vaccine, regardless of the absolute number of vaccine doses used or the schedule (*14,19*). For example, in a study in which 1, 2, 3, 4, or 5 doses of rabies vaccine were used in a Syrian hamster model in combination with human rabies immune globulin (HRIG), no statistically significant differences in elicited protection and consequent survivorship were observed among groups receiving different doses (*20*). In the same study, using a murine model, no differences were detected in immunogenicity and efficacy of PEP with 2, 3, or 4 vaccine doses. In another study using a nonhuman primate model, 1 dose of cell-culture vaccine, in combination with RIG administered 6 hours postexposure, provided substantial protection (*21*). In another study, a 3-dose regime was evaluated in a canine model and determined to be effective in preventing rabies (*22*).

Compared with older, nerve tissue-based products, adverse reactions associated with modern human rabies vaccination are uncommon (*4*). A review by the Workgroup of published and unpublished human rabies vaccine clinical trials and Vaccine Adverse Event Reporting System data identified no adverse events that were correlated to a failure to receive the fifth vaccine dose. As some adverse reactions might be independent clinical events with each vaccine administration, the omission of the vaccine dose on day 28 might have some positive health benefits. Otherwise, the overall safety of human rabies PEP is expected to be unchanged from the evidence provided in the 2008 ACIP report (*12*).

Preliminary economic assessments support the cost savings associated with a reduced schedule of vaccination (*23,24*). The ACIP Rabies Workgroup has estimated that, assuming 100% compliance with a recommended vaccine regimen, a change in recommendation from a 5-dose schedule to a 4-dose schedule would save approximately $16.6 million in costs to the U.S. health-care system. Persons who receive rabies vaccination might see some savings related to deletion of the fifth recommended dose of vaccine, measured in both the cost of the vaccine and the costs associated with the additional medical visit.

Revised Rabies Postexposure Prophylaxis Recommendations

This report presents revised recommendations for human rabies PEP (Table 3). Rabies PEP includes wound care and administration of both RIG and vaccine.

Postexposure Prophylaxis for Unvaccinated Persons

For unvaccinated persons, the combination of RIG and vaccine is recommended for both bite and nonbite exposures, regardless of the time interval between exposure and initiation

TABLE 2. Number and percentage of patients with suspected rabies exposures who received <5 doses of vaccine — India, 2003; New York, 1998–2000; and Puerto Rico, 2008*

Location (year)	No. of persons exposed	Persons who received <5 doses of vaccine		No. of documented rabies deaths
		No.	(%)	
New York (1998–2000)†	1,132	147	(13)	0
India (2003)§	439	261	(59)	0
Puerto Rico (2008)¶	191	30	(16)	0

* No cases of human rabies were recorded that were attributable to receipt of only 4 doses of vaccine.

† **SOURCE:** CDC, unpublished data, 2003.

§ **SOURCE:** Association for the Prevention and Control of Rabies (APCRI) in India. Assessing the burden of rabies in India: WHO sponsored national multicentric rabies survey 2003. Final report May 2004. Available at http://rabies.org.in. Accessed March 8, 2010. Sudarshan MK, Madhusudana SN, Mahendra BJ, et al. Assessing the burden of human rabies in India: results of a national multi-center epidemiological survey. Intl J Infect Dis 2007;11:29–35.

¶ **SOURCE:** CDC, unpublished data, 2008.

TABLE 3. Rabies postexposure prophylaxis (PEP) schedule — United States, 2010

Vaccination status	Intervention	Regimen*
Not previously vaccinated	Wound cleansing	All PEP should begin with immediate thorough cleansing of all wounds with soap and water. If available, a virucidal agent (e.g., povidine-iodine solution) should be used to irrigate the wounds.
	Human rabies immune globulin (HRIG)	Administer 20 IU/kg body weight. If anatomically feasible, the full dose should be infiltrated around and into the wound(s), and any remaining volume should be administered at an anatomical site (intramuscular [IM]) distant from vaccine administration. Also, HRIG should not be administered in the same syringe as vaccine. Because RIG might partially suppress active production of rabies virus antibody, no more than the recommended dose should be administered.
	Vaccine	Human diploid cell vaccine (HDCV) or purified chick embryo cell vaccine (PCECV) 1.0 mL, IM (deltoid area†), 1 each on days 0,§ 3, 7 and 14.¶
Previously vaccinated**	Wound cleansing	All PEP should begin with immediate thorough cleansing of all wounds with soap and water. If available, a virucidal agent such as povidine-iodine solution should be used to irrigate the wounds.
	HRIG	HRIG should not be administered.
	Vaccine	HDCV or PCECV 1.0 mL, IM (deltoid area†), 1 each on days 0§ and 3.

* These regimens are applicable for persons in all age groups, including children.
† The deltoid area is the only acceptable site of vaccination for adults and older children. For younger children, the outer aspect of the thigh may be used. Vaccine should never be administered in the gluteal area.
§ Day 0 is the day dose 1 of vaccine is administered.
¶ For persons with immunosuppression, rabies PEP should be administered using all 5 doses of vaccine on days 0, 3, 7, 14, and 28.
** Any person with a history of pre-exposure vaccination with HDCV, PCECV, or rabies vaccine adsorbed (RVA); prior PEP with HDCV, PCECV or RVA; or previous vaccination with any other type of rabies vaccine and a documented history of antibody response to the prior vaccination.

of PEP. If PEP has been initiated and appropriate laboratory diagnostic testing (i.e., the direct fluorescent antibody test) indicates that the animal that caused the exposure was not rabid, PEP may be discontinued.

Vaccine Use

A regimen of 4 1-mL vaccine doses of HDCV or PCECV should be administered intramuscularly to previously unvaccinated persons (Table 3). The first dose of the 4-dose regimen should be administered as soon as possible after exposure. The date of the first dose is considered to be day 0 of the PEP series. Additional doses then should be administered on days 3, 7, and 14 after the first vaccination. Recommendations for the site of the intramuscular vaccination remain unchanged (e.g., for adults, the deltoid area; for children, the anterolateral aspect of the thigh also is acceptable). The gluteal area should not be used because administration of vaccine in this area might result in a diminished immunologic response. Children should receive the same vaccine dose (i.e., vaccine volume) as recommended for adults.

HRIG Use

The recommendations for use of immune globulin in rabies prophylaxis remain unchanged by the revised recommendation of a reduced rabies vaccine schedule. HRIG is administered once to previously unvaccinated persons to provide rabies virus-neutralizing antibody coverage until the patient responds to vaccination by actively producing virus-neutralizing antibodies. HRIG is administered once on day 0 at the time PEP is initiated, in conjunction with human rabies vaccines available for use in the United States. If HRIG was not administered when vaccination was begun on day 0, it can be administered up to and including day 7 of the PEP series (*12,25*). If anatomically feasible, the full dose of HRIG is infiltrated around and into any wounds. Any remaining volume is injected intramuscularly at a site distant from vaccine administration. HRIG is not administered in the same syringe or at the same anatomic site as the first vaccine dose. However, subsequent doses (i.e., on days 3, 7, and 14) of vaccine in the 4-dose vaccine series can be administered in the same anatomic location in which HRIG was administered.

Postexposure Prophylaxis for Previously Vaccinated Persons

Recommendations for PEP have not changed for persons who were vaccinated previously. Previously vaccinated persons are those who have received one of the ACIP-recommended pre- or postexposure prophylaxis regimens (with cell-culture vaccines) or those who received another vaccine regimen (or vaccines other than cell-culture vaccine) and had a documented adequate rabies virus-neutralizing antibody response. Previously vaccinated persons, as defined above, should receive 2 vaccine doses (1.0 mL each in the deltoid), the first dose

immediately and the second dose 3 days later. Administration of HRIG is unnecessary, and HRIG should not be administered to previously vaccinated persons to avoid possible inhibition of the relative strength or rapidity of an expected anamnestic response (*26*). Local wound care remains an important part of rabies PEP for any previously vaccinated persons.

Vaccination and Serologic Testing

Postvaccination Serologic Testing

All healthy persons tested in accordance with ACIP guidelines after completion of at least a 4-dose regimen of rabies PEP should demonstrate an adequate antibody response against rabies virus (*14*). Therefore, no routine testing of healthy patients completing PEP is necessary to document seroconversion (*12*). When titers are obtained, serum specimens collected 1–2 weeks after prophylaxis (after last dose of vaccine) should completely neutralize challenge virus at least at a 1:5 serum dilution by the rapid fluorescent focus inhibition test (RFFIT). The rabies virus-neutralizing antibody titers will decline gradually since the last vaccination. Minimal differences (i.e., within one dilution of sera) in the reported values of rabies virus-neutralizing antibody results might occur between laboratories that provide antibody determination using the recommended RFFIT. Commercial rabies virus antibody titer determination kits that are not approved by the Food and Drug Administration are not appropriate for use as a substitute for the RFFIT. Discrepant results might occur after the use of such tests, and actual virus-neutralizing activity in clinical specimens cannot be measured.

Management of Adverse Reactions, Precautions, and Contraindications

Management of Adverse Reactions

Recommendations for management and reporting of vaccine adverse events have not changed. These recommendations have been described in detail previously (*12*).

Immunosuppression

Recommendations for rabies pre- and postexposure prophylaxis for persons with immunosuppression have not changed. General recommendations for active and passive immunization in persons with altered immunocompetence have been summarized previously (*27,28*). This updated report discusses specific recommendations for patients with altered immunocompetence who require rabies pre- and postexposure prophylaxis. All rabies vaccines licensed in the United States are inactivated cell-culture vaccines that can be administered safely to persons with altered immunocompetence. Because corticosteroids, other immunosuppressive agents, antimalarials, and immunosuppressive illnesses might reduce immune responses to rabies vaccines substantially, for persons with immunosuppression, rabies PEP should be administered using a 5-dose vaccine regimen (i.e., 1 dose of vaccine on days 0, 3, 7, 14, and 28), with the understanding that the immune response still might be inadequate. Immunosuppressive agents should not be administered during rabies PEP unless essential for the treatment of other conditions. If possible, immunosuppressed patients should postpone rabies preexposure prophylaxis until the immunocompromising condition is resolved. When postponement is not possible, immunosuppressed persons who are at risk for rabies should have their virus-neutralizing antibody responses checked after completing the preexposure series. Postvaccination rabies virus-neutralizing antibody values might be less than adequate among immunosuppressed persons with HIV or other infections (*29,30*). When rabies pre- or postexposure prophylaxis is administered to an immunosuppressed person, one or more serum samples should be tested for rabies virus-neutralizing antibody by the RFFIT to ensure that an acceptable antibody response has developed after completing the series. If no acceptable antibody response is detected after the final dose in the pre- or postexposure prophylaxis series, the patient should be managed in consultation with their physician and appropriate public health officials.

Variation from Human Rabies Vaccine Package Inserts

These new ACIP recommendations differ from current rabies vaccine label instructions, which still list the 5-dose series for PEP. Historically, ACIP review and subsequent public health recommendations for the use of various biologics has occurred after vaccine licensure and generally are in agreement with product labels. However, differences between ACIP recommendations and product labels are not unprecedented. For example, during the early 1980s, ACIP review and recommendations concerning the intradermal use of rabies vaccines occurred well in advance of actual label claims and licensing (*9*). On the basis of discussions with industry representatives, alterations of current product labels for HDCV and PCEC are not anticipated by the producers of human rabies vaccines licensed for use in the United States.

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COUNTY REQUIREMENTS/GUIDELINES FOR PATIENTS NEEDING RABIES POST-EXPOSURE TREATMENT

Report all animal bites/exposures to Warren County Public Health at 518-761-6580 (24 hours/day).

Prior approval must be obtained from Public Health before rabies series begins. PH utilizes NYSDOH guidelines to determine if there is an exposure or potential exposure to rabies. If rabies post exposure treatment is approved by PH, rabies post exposure costs in excess of a patient's insurance coverage (i.e. copays) will be paid by the county.

The following are guidelines for patients:

	With Insurance		***Without Insurance***
1.	Go to ER at GFH for HRIG and 1st Rabies Vaccine.	1.	Go to ER for HRIG 1st Rabies Vaccine.
2.	Patient returns to GFH ER for remainder of series on days 3, 7 and 14. If an immunocompromising condition is present, a 5th dose on day 28 may be necessary.	2.	Patient calls PH (518-761-6580) to make arrangements to receive remainder of series on days 3, 7, and 14 at the municipal center. Home visits and after hour appointments can be arranged if necessary.
3.	Patient should call PH if a bill is received.	3.	Patient should call PH if a bill is received.

EXPLANATION FOR
COUNTY APPROVAL FOR RABIES POST EXPOSURE

This form will be faxed by the county approving treatment with post exposure and should be attached to the chart so that the county can be billed for the amount the insurance company does not cover. Typically this form would be faxed before the patient presents to the hospital for treatment. On weekends, holidays, and after hours, approval will be given by phone, followed with a copy of this form faxed on the next business day.

If a patient presents to the ER without prior approval arrangements by the county, the county of residence must be called prior to initiation of treatment. On the next business day, the county that granted the approval will fax a copy of this form.

COUNTY APPROVAL FOR RABIES POST EXPOSURE

Approval has been given for Rabies Post Exposure Prophylaxis for the following:

Name:_____DOB:_____Weight:_____

Address:_____

Phone Number: Home:_____ Work:_____ *Insurance Company:_____

Exposure:_____

_____

Will receive all Pep at:_____

*If not insured, will return to_____County Public Health for the remaining 4 doses.

Encourage patient to call _____ to schedule appointments if needed.

Signature:_____Date:_____

County:_____

Glens Falls Hospital Express Care	Telephone:	926-3130
	Fax:	926-3110
Glens Falls Hospital Billing Contact- Hope Dane	Fax:	926-5199

Rabies Vaccine:

What You Need to Know

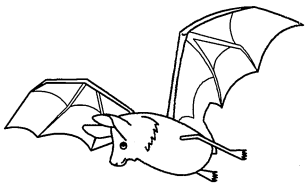
Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vis

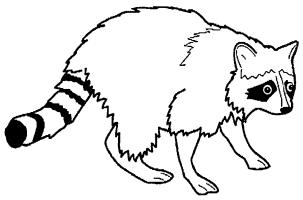
Hojas de información sobre vacunas están disponibles en español y en muchos otros idiomas. Visite www.immunize.org/vis

1 Why get vaccinated?

Rabies vaccine can prevent **rabies**.

Rabies is mainly a disease of animals. Humans get rabies when they are bitten or scratched by infected animals.





- Human rabies is rare in the United States. Wild animals like bats, raccoons, skunks, and foxes are the most common source of human rabies infection in the United States.
- Rabies is more common in other parts of the world where dogs still carry rabies. Most rabies deaths in people around the world are caused by bites from unvaccinated dogs.

Rabies infects the central nervous system. After infection with rabies, at first there might not be any symptoms. Weeks or even months after a bite, rabies can cause general weakness or discomfort, fever, or headache. As the disease progresses, the person may experience delirium, abnormal behavior, hallucinations, hydrophobia (fear of water), and insomnia.

If a person does not receive appropriate medical care after an exposure, human rabies is almost always fatal.

Rabies can be prevented by vaccinating pets, staying away from wildlife, and seeking medical care after potential exposures and before symptoms start.

2 Rabies vaccine

Rabies vaccine is given to people at high risk of rabies to protect them if they are exposed. **People at high risk of exposure to rabies should be offered pre-exposure rabies vaccination**, including:

- Veterinarians, animal handlers, and veterinary students
- Rabies laboratory workers
- Spelunkers (people who explore caves), and
- Persons who work with live vaccine to produce rabies vaccine and rabies immune globulin.

Pre-exposure rabies vaccination should also be considered for:

- People whose activities bring them into frequent contact with rabies virus or with possibly rabid animals.
- International travelers who are likely to come in contact with animals in parts of the world where rabies is common and immediate access to appropriate care is limited.

For pre-exposure protection, 3 doses of rabies vaccine are recommended. People who may be repeatedly exposed to rabies virus should receive periodic testing for immunity, and booster doses might be necessary. Your health care provider can give you more details.

Rabies vaccine can prevent rabies if given to a person after they have had an exposure. Anyone who has been bitten by an animal suspected to have rabies, or who otherwise may have been exposed to rabies, should clean the wound and see a health care provider immediately regardless of vaccination status. The health care provider can help determine if the person should receive post-exposure rabies vaccination.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

For post-exposure protection:

- A person who is exposed and has never been vaccinated against rabies should get 4 doses of rabies vaccine. The person should also get another shot called rabies immune globulin (RIG).
- A person who has been previously vaccinated should get 2 doses of rabies vaccine and does not need Rabies Immune Globulin.

Your health care provider can give you more information.

3 Talk with your health care provider

Tell your vaccine provider if the person getting the vaccine:

- Has had an **allergic reaction after a previous dose of rabies vaccine**, or has any **severe, life-threatening allergies**.
- Has a **weakened immune system**.

In some cases, your health care provider may decide to postpone a routine (non-exposure) dose of rabies vaccination to a future visit.

People with minor illnesses, such as a cold, may be vaccinated. People who are moderately or severely ill should usually wait until they recover before getting a routine (non-exposure) dose of rabies vaccine. **If you have been exposed to rabies virus, you should get vaccinated regardless of concurrent illnesses, pregnancy, or breastfeeding.**

Your health care provider can give you more information.

4 Risks of a vaccine reaction

- Soreness, redness, swelling, or itching at the site of the injection, and headache, nausea, abdominal pain, muscle aches, or dizziness can happen after rabies vaccine.
- Hives, pain in the joints, or fever sometimes happen after booster doses.
- Very rarely, nervous system disorders such as Guillain-Barré syndrome (GBS) have been reported after rabies vaccine.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

5 What if there is a serious problem?

An allergic reaction could occur after the vaccinated person leaves the clinic. If you see signs of a severe allergic reaction (hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, or weakness), call **9-1-1** and get the person to the nearest hospital.

For other signs that concern you, call your health care provider.

Adverse reactions should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your health care provider will usually file this report, or you can do it yourself. Visit the VAERS website at **www.vaers.hhs.gov** or call **1-800-822-7967**. *VAERS is only for reporting reactions, and VAERS staff do not give medical advice.*

6 How can I learn more?

- Ask your health care provider.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call **1-800-232-4636 (1-800-CDC-INFO)** or
  - Visit CDC's rabies website at **www.cdc.gov/rabies**

Vaccine Information Statement

Rabies Vaccine

Office use only

01/08/2020

APPENDIX C

Resources for Animal/Dog Control

Guidance Regarding 10 Day Confinement of Animal For Observation 01/2012

What Pet Owners Need To Know About Pet Vaccination

Guidelines For Pet Shops

Quarantine For Pet Shops

Guidelines For Managing Bats and Risk Of Rabies Transmission 05/2004

Management Of Bat Related Incidents In Public Settings/Home/Camps

Model State Program For Management of Livestock In Rabies Enzootic Areas 09/1998

Rabies Policies and Procedures
(518) 473-4439
(866) 881-2809 (after hours)
SUBJECT: Guidance Regarding 10-day Confinement of Animals for Rabies Observation

1. Introduction/Purpose

Animals that have potentially exposed a person to rabies through bite or other means must be evaluated to determine whether they may have been transmitting rabies at the time of the exposure incident. Under New York State (NYS) public health law[1] domesticated animals[2] may be observed for 10 days following an exposure incident to determine whether they were possibly shedding rabies virus. If a domesticated animal was shedding rabies virus in its saliva at the time of exposure, that animal will be showing signs of rabies either at the time of the exposure incident or within several days following the incident. Based on guidelines from the Advisory Committee on Immunization Practices[3], if a domesticated animal remains clinically normal for 10 days following a potential exposure incident, it is assumed that the animal was not shedding rabies at the time of the incident; therefore there was no rabies exposure. Determination of rabies status of animals other than domesticated animals requires euthanasia of the animal and testing of the animal's brain for evidence of rabies virus.

Under NYS Public Health Law effective 22 December 2011, "If the county health authority does not approve home confinement, the ten day confinement and observation period must take place, at owner's expense, at an appropriate facility such as an animal shelter, veterinarian's office, kennel or farm."

This document provides general guidelines and best practices for effective 10-day confinement of domesticated animals that have potentially exposed a person to rabies. The conditions under which an animal may be kept during, and the method by which an animal is evaluated at the end of, the 10-day confinement are ultimately determined by the local health department (LHD) with jurisdiction over the incident. LHD staff are in the best position to determine, in each situation, what confinement conditions will provide the greatest assurance that the animal will be available for follow-up at the end of confinement. Rabies response staff of the New York State Department of Health (NYSDOH) Bureau of Communicable Disease Control (BCDC) are available to discuss situations requiring further guidance. Contact BCDC staff at (518) 473-4439.

The following general principles should guide confinement decision-making, and are further detailed in this document:

- In general, healthy domesticated animals behaving normally at the time of a potential rabies exposure incident may be confined for 10-day observation at the owner's home. **Animals with neurologic disease, or that are acting unusually aggressive, should not be placed under 10-day confinement without consultation with BCDC rabies response staff.**
- In circumstances where owner compliance is in doubt, or where the exposing animal's exposure and vaccination history are unknown, confinement in a facility may be more appropriate.
- Confinement conditions should be explained and provided to owners in writing to ensure compliance.

[1] Article 21, Title 4, Section 2140, Subparagraph 7
[2] Domesticated animals include dogs, cats, ferrets, horses, donkeys, mules, cattle, sheep, goats, and pigs.
[3] CDC. Human rabies prevention - United States, 2008: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR. 2008; 57.

• Method of assessment of the animal at the end of confinement can vary from telephone confirmation with the owner to evaluation by a veterinarian, and will depend on the circumstances in each case.

Information on what is considered an exposure, as well as considerations to use in the assessment of risk in particular exposure incidents, can be found in the guidance document, "Guidance Regarding Human Exposure to Rabies and Postexposure Prophylaxis Decisions," available at http://www.health.ny.gov/diseases/communicable/zoonoses/rabies/docs/nys_rabies_treatment_guidelines.pdf.

2. Home vs. Facility Confinement

No animal that has been placed in 10-day confinement in New York State has ever gone on to develop rabies. Healthy, normal acting animals are considered low risk for rabies, and home confinement is generally appropriate. Facility confinement should be considered under the following circumstances:

• There are concerns about owner compliance, such as in situations involving potential legal action or other hostility between animal owner and bite victim.

• There is little known about the animal's exposure and vaccination history, as might occur with stray or feral animals.

• The animal's behavior or health is not normal.

Owner compliance concerns

• LHD staff should use broad discretion to consider facility confinement if an animal's owner is not forthcoming with information, appears hostile or unreliable, or has a history of non-compliance.

• If the LHD is aware that legal action may be pending between a bite victim and animal owner, facility confinement may be advisable to ensure follow-up.

• Facility confinement may be necessary if an owner cannot meet the conditions of confinement, e.g., LHD determines animal must be kept indoors for confinement, but owner insists the animal can only be kept in the yard.

Lack of animal history

Stray or feral animals have greater opportunities than pets to become exposed to rabies without a person's knowledge, and are typically unvaccinated. Recently acquired animals similarly may have little history. In these cases, if an owner is identified and home confinement is considered, it is especially important to ensure owner compliance.

Animal behavior/health status

An animal behaving abnormally (based on knowledge of that specific animal's normal behavior, not just the general behavior of the breed or species) or demonstrating neurologic disease at the time it is involved in a potential rabies exposure of a person should be considered high risk for rabies and generally should be tested for rabies unless an alternative cause for the illness or behavior is established. In some situations, observation under a veterinarian's care may be appropriate for the ill animal that has been involved in a human exposure. Examples include animals with a good vaccination history, and animals with little opportunity for rabies exposure (e.g., indoor-housed cats and dogs that are only leash-walked and never out of the owner's sight).

These exposure situations should be evaluated on a case-by-case basis, and discussed with BCDC staff to ensure that state and local health authorities are in agreement on the proper course of action. In all situations where observation and clinical workup of an abnormally acting animal is permitted, observation must occur in a veterinary hospital and not at the owner's home.

Documentation

3. Conditions of 10-day confinement

Owners of animals under 10-day confinement **should be provided written documentation** stating, at a minimum:

- Start and end dates of confinement.
- Requirements for how the animal is to be confined.
- Signs of rabies to look for in the animal (e.g., changes in behavior, unusual aggression, weakness, lameness, paralysis, seizures).
- How the LHD should be notified, including after work hours, in the event the animal becomes ill.
- Consequences of failure to comply (e.g., immediate facility confinement at owner expense.)

Contact with the animal

It is generally not necessary to prevent members of the owner's household and immediate family from having contact with an animal under confinement, however contact with people or pets outside the household or immediate family should be limited to reduce the possibility of additional exposures.

Control of the animal

Confinement conditions should be established to ensure the animal is always under the owner's control and to minimize the risk of the animal escaping and being lost to follow up. Examples of confinement conditions include being loose inside the home; in a securely fenced yard or enclosure; or off the owner's property on a leash.

Unacceptable means of owner control of the animal include:

- Invisible fences
- Off leash on the assumption that the animal will respond to voice commands.

Relocation of the animal during confinement

Animals under confinement may not be moved from the jurisdiction of the LHD without prior approval of
the local health Commissioner (or equivalent) of both the origin and destination locations. Out of state movement requires approval at both state health departments.

If relocation of an animal to another location is necessary, the owner should contact the LHD immediately
to seek approval for the new location prior to moving the animal. In cases where the animal is not a resident of the county of exposure and has returned to its home county or state or will be returning to its home prior to the end of 10-day confinement, arrangements should be discussed with the LHD in the county of residence as soon as possible. For out of state movement, contact BCDC rabies response staff who will assist with arranging confinement and follow up with the other state.

For emergency movement (e.g., an emergency requiring admission to a veterinary hospital) owners should be instructed to contact the LHD as soon as possible.

4. Assessment of the animal at the end of confinement

LHD staff must verify that the animal is healthy before releasing the animal from confinement. Examples of methods of verification include:

- Verbal confirmation by the owner that the animal is healthy (provided owner reliability is not in question)
- Visit by animal control, law enforcement, or LHD staff to observe the animal
- Confirmation by a veterinarian that the animal was examined and determined not to be displaying signs of rabies

Verbal confirmation vs. visit and visual inspection

Assessment of animals when the exposed individuals are part of the owner's family can often be managed through verbal confirmation from the owner. For exposures to non-family members, or if there are concerns with the reliability of the owner for any reason, it is advisable to have an independent party such as an LHD staff person or animal control officer visually inspect the animal and document that visit. A veterinary exam is typically not necessary; the individual performing health verification should be familiar enough with animals to judge whether the animal appears to be healthy. If there is any question about the health status of the animal, referral should be made for veterinary evaluation at owner expense.

Veterinary exam to assess health status of the animal

A veterinary exam, with or without written documentation, may be necessary to verify the health of the animal in cases where:

- there is a question about the health of the animal at the end of confinement
- other circumstances warrant it (e.g., legal action between bite victim and animal owner).

In such cases, it is the responsibility of the owner to have the animal evaluated by a licensed veterinarian at the owner's expense. If appropriate based on the circumstances of the incident, the veterinarian should provide a signed, written statement verifying the health of the animal to the LHD before the animal is released from confinement.

5. Other considerations

Animals that have potentially exposed other animals

While not mandated in law or regulation, situations involving animal-to-animal exposure may warrant 10-day follow-up of the animal causing exposure. Such situations might include:

- Dog gets loose and attacks another dog that is not currently vaccinated
- Dog attacks unvaccinated farm animals
- Outdoor cats fight and wound each other and one or both are overdue for vaccination

In these cases, getting voluntary compliance for 10-day observation from the owner of the biting animal can avoid a 6 month quarantine of an unvaccinated bitten animal. The same policies regarding conditions and final assessment should apply to these incidents as to incidents involving human exposure.

Follow-up of animals outside the LHD's jurisdiction

For potential human exposures that occur outside the jurisdiction of the LHD (e.g., a county resident exposed out of state or in New York City) BCDC rabies response staff will assist with coordinating follow-up of animals.

What Pet Owners Need to Know About Rabies Vaccinations in New York State

(Effective November 20, 2002, this information sheet must be provided by pet dealers to consumers upon point of sale of cats, dogs, and ferrets.)

State law requires rabies vaccinations (shots) for all cats, dogs and domesticated ferrets!
(Note: Ferrets are illegal in New York City.)

Where can I get my pet vaccinated?

All counties (excluding New York City counties) are required to provide a free vaccination clinic every four months. Contact your county health department for the schedule in your area. Rabies vaccinations are also available from your veterinarian. If you have questions about new vaccines developed specifically for cats and for pets at younger ages, contact your veterinarian.

When should my pet receive its first rabies vaccination?

The law requires that your pet's first rabies vaccination be given no later than four months (three months in New York City) after its date of birth. Many rabies vaccines are licensed for use at three months, although some may be given at younger ages.

When should my pet receive its second rabies vaccination?

Your pet should receive its second rabies vaccination within one year after the first vaccination. The second rabies shot and all shots thereafter are sometimes called booster shots.

After my pet gets its second rabies shot, when is the next booster shot due?

After the second rabies shot, you need to get additional booster shots either annually or every three years, depending on the type of vaccine administered.

What proof will I have that my pet received its rabies shots?

The veterinarian, or a person under the veterinarian's supervision, will provide you with a certificate as proof that your pet has been vaccinated. The veterinarian's office will also keep a copy of your pet's vaccination certificate. The law requires the veterinarian to provide the vaccination certificate to any public health official for any case involving your dog, cat or ferret that may have been exposed to rabies, or in any case of possible exposure of a person or another animal to rabies.

What if my pet needs to be taken to the veterinarian?

Whenever you bring your pet to a veterinarian, s/he will verify if the animal is up-to-date on its rabies shots. If the animal is not up-to-date on its rabies shots or exempt as stated below, or if the veterinarian cannot find proof of the animal's rabies vaccination history, you may request your pet be vaccinated at that time.

*If my pet bites a person, does it have to be euthanized (put to sleep)? **

If your pet bites a person and you wish to avoid euthanizing and testing it for rabies, it must be confined and observed for ten days. If your pet is not up-to-date on its rabies shots, the ten-day confinement/observation period must take place, at the owner's expense, at an appropriate facility such as an animal shelter, veterinarian's office, or kennel. If your pet is up-to-date on its rabies shots, the county health department may allow the ten-day confinement/observation period to take place in your home. During the ten-day confinement period, the county or a designated party must verify that your pet is under confinement and observation, has remained healthy during and at the end of the ten-day period. (* In New York City, ten-day observation periods may be done at the home of the pet owner, regardless of the animal's rabies vaccination status.)

Fines

If your dog, cat or domesticated ferret is not vaccinated, is not up-to-date on its vaccinations, or is not properly confined after biting someone, as the owner you shall be subject to a fine not to exceed $200 for each offense. Additional fines may apply locally.

Exemptions

The vaccination requirements shall not apply to any dog, cat, domesticated ferret if the animal is transported through New York state and remains in the state 15 days or less; the animal is confined to the premises of an incorporated society devoted to the care of lost, stray or homeless animals; a licensed veterinarian has determined that the vaccination will adversely affect the animal's health; the animal is confined to the premises of a college or other educational or research institution for research purposes; or if the animal is unowned (feral, wild, not socialized).

NYSDOH, 8/25/05

GUIDELINES FOR PET SHOPS

A. BITES

1. All bites are mandated by Public Health Law to be reported. Please report to Warren County Public Health at 518-761-6580. A supervising nurse will retrieve calls from answering service after hours, holidays, and weekends. Rabies contact person: Sarah Arnold, PHN.

2. Have person bitten (or guardian) wash wound with soap and water. Refer to consult with MD regarding need for tetanus booster.

3. Obtain the following information to assist with reporting:

    a. name of person bitten, include guardian if minor
    b. address and phone number
    c. date and time of incident
    d. location of bite - if skin was broken or not
    e. animal, age of animal - rabies vaccinated?
    f. obtain information from employee(s) familiar with incident

B. RABIES CONTROL PLAN

1. Public Health Nurse, upon receipt of report:

    a. Warren County Public health initiate quarantine
    b. contacts victim to follow up on medical evaluation

2. Warren County ACO
    a. acts under direction of Warren County Public Health
    b. will check animal at end of 10 days
    c. will report findings to PH at end of 10 day period
    d. will consult PH for assist when needed

QUARANTINE GUIDELINES FOR PET SHOPS

Purpose: *To protect person exposed and establish public safety.*

To monitor animal's health for 10 days following the exposure.

THE PURPOSE OF QUARANTINE RESTRICTIONS:

1. Animal must be placed in its own kennel without contact with other animals.
2. Minimal staff should care for animal.
3. Strict handwashing procedures should be followed after handling animal. (gloves should be worn for breaks, cuts, or scratches in skin. Careful attention should be used to avoid rubbing eyes; and eating should be discouraged until hands are washed)
4. Careful records should be maintained of all human contact in case animal is found to be rabid. Phone numbers and addresses would be helpful.
5. No public contact with animal in quarantine.
6. Animal must be quarantined despite rabies vaccination status.
7. Animal must not be sold until approval is granted from animal control in conjunction with Public Health.
8. If the animal displays signs or symptoms - or dies - PH should be notified immediately at 518-761-6580. Call animal control as back up.

QUARANTINE PROCEDURE:

1. Follow requirements above.
2. Animal must be placed in kennel.
3. Observe for signs and symptoms of illness.
   (change in disposition, excitable or delirious behavior, docile, difficulty walking, abnormal behavior, and paralysis)
4. Confinement guarantees animal cannot escape. Animal can be taken out on leash by staff, but no public contact can be made. Public Health should be notified at once if animal escapes and is not caught.

NEW YORK STATE DEPARTMENT OF HEALTH *Updated May, 2004*
Rabies Policies and Procedures
(518) 474-3186
(866) 881-2809 (after hours)

SUBJECT: Guidelines for Managing Bats and Risk of Rabies Transmission

Most of the human deaths from rabies in the United States in recent years have been due to infection with bat variants of the rabies virus, and most of these have been due to a single bat variant which studies show may be uniquely adapted for transmission. The number of human deaths from bat rabies is small, usually fewer than five each year in the U.S., and most bats do not have rabies. Thus the risk of death from contact with bats is low. In addition, bat presence is not abnormal in certain environments. However, evidence indicates that many of the human cases resulted from bites that were not recognized or reported.

Because rabies is an incurable, fatal disease once symptoms begin, it is desirable to reduce the risk of acquiring rabies as much as possible, acknowledging that achieving zero risk is not possible with any health issue. These NYSDOH guidelines have been developed based on national guidelines from the Centers for Disease Control and Prevention*, to provide recommendations for achieving risk reduction with reasonable measures. For questions about implementing these guidelines, please contact the State Department of Health at 518-474-3186.

NYS is unique in that rabies treatments that have been authorized by the county health authority are managed and paid for (after payment by third party payers) by county health authorities. To insure maximum availability of public health resources, and conserve frequently scarce vaccine and immune globulin supplies, NYSDOH recommends that county health authorities only authorize treatments that fall under the recommendations in these guidelines. Patients and physicians who wish to obtain rabies treatment for situations in which NYSDOH or the county health authorities do not recommend or authorize treatment may use their own resources to do so.

I. Definition of Exposure to a Bat

Rabies treatment should be recommended and authorized for all bat exposures that fall under the traditional definitions of exposure to rabies. These are the same as the guidelines for other species. Treatment should be authorized for the following exposures after contact with a rabid or untestable bat:

- bites (this is the primary, well-documented route of exposure)
- scratches
- saliva or nervous tissue in contact with a mucous membrane (e.g., inside of eyes, nose, mouth) or an open break in the skin

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* Human rabies prevention—United States, 1999: recommendations of the Advisory Committee on Immunization Practices (ACIP)

Because people can develop rabies after inapparent exposures, rabies treatment also should be recommended and authorized in situations in which there is a reasonable probability of any of the aforementioned exposures. The primary circumstances in which this could occur include:

- direct physical contact with a bat
- bat found in a room with a sleeping person
- bat found in a room with an unattended child
- in some circumstances, bat found in close proximity to an unattended child outdoors
- bat found in a room with an individual under the influence of alcohol or drugs or with other sensory or mental impairment

See examples of situations (Part III) to assist in determining whether a reasonable probability of exposure has occurred.

II. Determining Rabies Status of the Bat

It is frequently much easier to determine the rabies status of a bat which has potentially exposed someone to rabies than to determine the likelihood of exposure. Thus, in all circumstances in which there could be any questions about potential exposures, NYSDOH strongly advises: CAPTURE THE BAT and call the county health authority. Free rabies testing is available through the Wadsworth Center's Rabies Laboratory, and specimen preparation and shipment is managed by county health authorities. On average, 2% - 3% of bats tested by the Rabies Laboratory are positive for rabies, and thus most of the bat-related postexposure treatments could be avoided if the bats were captured and tested. Details of shipment procedures are available from the county health authorities and at the Rabies Laboratory web page: www.wadsworth.org/rabies.

All homes, buildings, and camps where bats are seen indoors should have procedures and equipment in place to capture bats safely. Recommendations for bat capture in a building include:

- wear gloves and avoid direct skin contact with the bat
- avoid damage to the bat's head
- confine the bat to one room (close the windows, the room and closet doors)
- turn on lights if room is dark
- wait for the bat to land
- cover the bat with a coffee can or similar container
- slide a piece of cardboard under the can trapping the bat
- tape the cardboard tightly to the can
- if necessary, use a net or long pole with a piece of duct tape (sticky side out) to capture bat
- do not use glue board to capture bat (it cannot be easily removed for rabies testing)
- immediately contact local health authority to arrange for rabies examination of the bat

III. Examples of situations in which there is a reasonable probability of exposure (postexposure treatment should be considered)

Direct contact with a bat:

- child touches live or dead bat
- teenager or adult touches bat without seeing the part of the bat they touched
- bat flies into someone of any age and touches bare skin
- adult sees bat fly near child and child reports it hit me
- someone steps on a dead bat in bare feet
- unidentified flying object hits someone and the time of day (dusk or dawn), presence of marks where it hit, and place that it was coming from (good for roosting bats, not birds) all support that it was a bat and not a bird or insect

Bats near a person:

- person awakens to find a bat in the room with them
- adult comes into room where child was left alone for a period of time, and live bat is found near child
- person slept in camp cabin which was small, closed-in, and bats were swooping past sleeping people
- bat found on ground near unattended infant, toddler, or a person with sensory or mental impairment
- person puts hand in firewood or brush, feels pain, then sees a bat

Examples of situations in which there is less evidence to support that there is a reasonable probability of exposure (depending on the circumstances, postexposure treatment probably should not be recommended, but mitigating measures should be implemented, see Parts IV-VI)

Direct contact:

- teenager or adult touches the back of a live bat while looking at it
- bat brushes past thick long hair of teenager or adult and they are certain there was no skin contact
- person has contact with a completely dried-up carcass of a bat

Bats near a person:

- bats swoop past awake teenager or adult who does not feel them touch
- dead bat found in room of home with no evidence that child touched it
- bats are heard or seen in walls or attic of house
- bats are found in other parts of the house even if bedroom doors were open
- bats are heard or seen hanging from upper rafters of large A-frame cabin
- bat guano or other signs of bat are found in sleeping quarters
- bat found in sleeping quarters at a time when no one is there or there is an awake adult

IV. Bats In Homes

It is not unusual to find bats in homes in New York State, and the presence of bats usually does not result in a need for rabies postexposure prophylaxis. Most (~98%) bats tested at the NYS Wadsworth Center's Rabies Laboratory are negative for rabies. However, because many of the recent human cases of rabies may have acquired their disease from a bat bite in a home situation, all reasonable steps should be taken to keep bats out of the home environment, especially sleeping quarters.

To keep bats from getting into buildings, bat proofing techniques should include:

- not leaving unscreened doors open to the outside
- not leaving unscreened windows open to the outside
- making sure windows have screens, chimneys are capped, and electrical and plumbing openings are plugged
- sealing up all openings larger than ½ inch by ½ inch square into the attic, basement, walls, or occupied areas of the house
- using materials such as expanding spray-on foam, caulk, wire mesh, wood that fits tightly, steel wool (around pipes that enter buildings), or polypropylene bird netting, to seal or cover gaps and holes.

To determine whether bats are already in a house, evidence can be obtained by:

- hearing squeaking noises coming from attic, walls, or elsewhere
- inspecting attic space, rafters, porches, and walls for signs of roosting bats, including bat guano and crystallized urine, or bare scratched areas on beams
- walking around the outside of the house at dusk to see if bats are flying out of the house to feed, or before dawn to see if bats are flying into the house to roost

To get bats out of a house in which they are roosting or entering, bat exclusion techniques should include the following considerations:

- killing or poisoning the bats is seldom a necessary or desirable solution
- openings should not be sealed while bats are inside--this may drive them into occupied areas or create a sanitary problem if the bats are trapped and die inside
- major home renovations and sealing should be done during the winter when most bats have left buildings
- the bats' entry and exit points should be determined by observing the house at dusk or dawn as described above
- special netting can be used in a manner that allows bats to exit the house, but not to re-enter it
- pest control experts specializing in bat control should be consulted when necessary

V. Bats In Children's Camps

Camps are usually located in areas that are prime habitat for bats and other wildlife, and the type of construction in camp buildings is often conducive to roosting bats. Bats are frequently encountered in the camp setting. If people are sleeping in cabins with bats, or children are handling bats found on the ground, rabies exposures can occur. Bats that are infected with rabies are often mistaken for injured animals when they are found flopping around on the ground. Abnormal behavior seen in rabid bats includes being on the ground, landing on someone, and flying during the day. Occasionally, there is no obvious abnormal behavior, so all contact with bats and other wild animals should be reported to the camp nurse.

Inspections for making decisions about which cabins will be used for sleeping should take place every spring before the camp opens. Inspections should include:

- inspecting attic space, rafters, porches, and walls for signs of roosting bats, such as bat guano and crystallized urine, or a musty odor
- looking for openings through which bats could get into sleeping quarters, such as openings larger than ½ inch by ½ inch and long thin slots larger than ¼ inch by 2 inches
- not allowing cabins with evidence of bat roosts to be used as sleeping quarters until they have been bat proofed

Camp buildings and cabins, particularly those used as sleeping quarters, should be bat proofed:

- do not bat proof buildings during the period from late May to mid-August, to avoid trapping baby bats inside the building
- seal openings larger than ½ inch by ½ inch, or long thin slots larger than ¼ inch by 2 inches
- use materials such as expanding spray-on foam, caulk, wire mesh, wood that fits tightly, steel wool (around pipes that enter buildings) etc., to seal gaps and holes.
- make sure windows have screens, chimneys are capped, and electrical and plumbing openings are plugged

To reduce the risk of rabies and the need for large-scale exposure investigations and postexposure treatments, health and environmental authorities should consider requiring that:

- camp directors and managers attend a pre-opening training session about zoonotic disease risks, including rabies
- information about zoonotic diseases is provided by camp management to all camp staff and attendees at orientation sessions
- information about zoonotic diseases is pre-approved by county health authorities

Information for camp directors, managers, staff, and attendees should include messages about:

- avoiding contact with sick, injured or dead animals
- preventing human or pet contact with a grounded bat
- capturing a bat which may have exposed someone by covering it with a box or can and placing a rock or brick on top of the container to secure it
- avoiding damage to the bat when capturing it; the brain must be intact for laboratory testing
- calling the county health authority for advice regarding all potential bat encounters and submission of bats to the NYS Wadsworth Center's Rabies Laboratory for testing
- immediately washing with soap and water any wounds or areas of skin contact with wild animals

VI. Recommended Actions for Camp Areas and Buildings Based on Building Location, Use, and Findings:

During Pre-Camp Inspection

	Outdoors	Unoccupied	Day Use	Overnight
area is conducive to roosting bats	education*	education	education	seek information about bat proofing
evidence of solitary bat presence	education	enter with caution	3rd priority** for batproofing	2nd priority for batproofing
a rabid bat is confirmed	education	enter with caution	re-inspection, 3rd priority for batproofing	re-inspection, 2nd priority for batproofing
roosting bats observed	education	restrict access	2nd priority for batproofing, cautious bat exclusion	1st priority for batproofing, bat exclusion confirmed prior to overnight use

During Camp Sessions

area is conducive to bats	education	education	education	seek information about bat proofing
evidence of solitary bat presence	education	restrict access, don't disturb bat	re-inspection, 3rd priority for batproofing	re-inspection, 2nd priority for batproofing
a rabid bat is confirmed	education	restrict access, don't disturb other bats	re-inspection, 3rd priority for batproofing	re-inspection, 2nd priority for batproofing
Roosting bats observed	education	restrict access, don't disturb bats	cautious bat exclusion, consider restricting access until batproofed based on bat proximity and age of campers	relocate campers until successful bat exclusion and batproofing (determined by bat watches)

*Education: General education about bats and risk of rabies, avoiding exposures, and reporting exposures must be provided to all camp staff and camp attendees regardless of circumstances.

**Priority for batproofing is based on the degree of risk for exposures which may require rabies postexposure treatments. Priority level reflects the relative importance for batproofing a particular building if a camp has a number of problem buildings. It may also be used by health and/or environmental authorities to develop appropriate timetables for remediation. Priority level may be used for determining resources and funds for remediation. The Zoonoses Program (518-474-3186) should be the first contact for questions about implementation of these priorities.

VII. General Guidelines for Management of Bat-Related Incidents at Children's Camps

- Bats observed flying at night outside
  - provide general education to all camp staff and camp attendees about bats and risk of rabies, avoiding exposures, and reporting possible exposures

- Bat observed flying outside in daytime
  - provide general education to all camp staff and camp attendees about bats and risk of rabies, avoiding exposures, and reporting possible exposures (note: if bat appears to be aggressively and deliberately swooping at people, keep campers away from area, capture bat, and submit for rabies testing)

- Bat found outside grounded or roosting in camper accessible location
  - restrict access to area
  - temporarily contain bat, for example with an inverted pail or coffee can
  - capture bat
  - report incident to county health authority
  - submit bat for rabies testing

- Bat flying in or roosting in camper-occupied building
  Building large, no children are present unattended:
  - evaluate situation for potential risk, consider exclusion and bat-proofing as soon as possible

  Building small, leading to close proximity of bat to occupants, and children are present:
  - leave one person in building to observe bat
  - remove campers from building, as well as adults who will not be involved in capturing the bat
  - make a list of building occupants while they exit the building or immediately afterwards
  - capture bat
  - report incident to county health authority
  - submit bat for rabies testing

- Bat present indoors with sleeping adults or unattended children
  - leave one person in building to observe bat
  - remove campers from building, as well as adults who will not be involved in capturing the bat
  - make a list of building occupants while they exit the building or immediately afterwards
  - capture bat
  - report incident to county health authority
  - submit bat for rabies testing

- Known or suspected contact with a bat
  - capture bat
  - immediately make list of those with possible contact
  - have those persons with possible contact wash the area of potential contact with soap and water
  - report incident to county health authority
  - submit bat for rabies testing
  - depending on severity, consider having wounds evaluated by health care provider for medical treatment

Management of Bat-Related Incidents in Public Settings

Indoor Structures

(e.g., schools, day care centers, hospitals, health care clinics, prisons, fairs, camps, etc.)

Bat flying in or roosting in an occupied building
•Building large, no children are present unattended: ◦evaluate situation for potential risk, consider exclusion and batproofing as soon as possible

•Building small, leading to close proximity of bat to occupants, and children are present:
◦leave one person in building to observe bat
◦remove occupants from building, as well as adults who will not be involved in capturing the bat
◦make a list of building occupants while they exit the building or immediately afterwards
◦capture bat
◦report incident to local health department; submit bat for rabies testing

Bat present indoors with sleeping adults or unattended children
•leave one person in building to observe bat
•remove occupants from building, as well as adults who will not be involved in capturing the bat
•make a list of building occupants while they exit the building or immediately afterwards
•capture bat
•report incident to local health department; submit bat for rabies testing

Known or suspected contact with a bat
•capture bat
•immediately make list of those with possible contact
•have those persons with possible contact wash the area of potential contact with soap and water
•report incident to local health department; submit bat for rabies testing
•depending on severity, consider having wounds evaluated by health care provider for medical treatment

Outdoors -- Public Locations

Bats observed flying at night outside
•provide general education to persons frequenting location about bats and risk of rabies, avoiding exposures, and reporting possible exposures

Bat observed flying outside in daytime
•provide general education to persons frequenting location about bats and risk of rabies, avoiding exposures, and reporting possible exposures (note: if bat appears to be aggressively and deliberately swooping at people, keep people away from area, capture bat, contact local health department and submit for rabies testing)

Bat found outside grounded or roosting in a location accessible to the public
•restrict access to area
•temporarily contain bat, for example with an inverted pail or coffee can
•capture bat
•report incident to local health department; submit bat for rabies testing

All bat-related incidents should be reported to the local health department.

For questions about handling incidents, or to immediately report those which may require rabies treatment, the local health department should be contacted. They have someone available 24 hours per day.

For this building, the name of the local health department is:
_____

Their business hours phone number is: _____

Their off hours phone number is: _____

Instructions for use of bat capture kit:

When an incident occurs, the person in this building who should be immediately notified to capture the bat is: _____

They can be reached by: _____ *(phone number, pager number, etc.)*

In this building, the bat capture kit is kept: _____
(location)

Carefully avoid direct contact with the bat and avoid damaging its head.

•Close the windows, and the room and closet doors; turn on the lights if the room is dark
•Wait for the bat to land
•Wearing gloves (heavy, preferably pliable thick leather), cover the bat with a coffee can or similar container with a lid (see note below)*
•Slide a piece of cardboard under the can, trapping the bat
•With one hand firmly holding the cardboard in place against the top of the can, turn the can right side up
•Replace the cardboard with the lid (if no lid, tape the cardboard tightly to the can)

•While wearing gloves (heavy, preferably pliable thick leather), slowly approach the bat with net
•Rotate the pole so that the bat is scooped into the net and the net turns in on itself containing the bat

•With a gloved hand, grab the bat through the outside of the net, slide the coffee can into the net, push the bat into the can and place the lid on the can (if no lid, tape a piece of cardboard over the can)

** Note: If a bat has landed behind something or in a space that is too narrow to cover with a coffee can, forceps may be used to capture it. Using a gloved hand to hold the forceps, firmly but gently grasp the bat under a wing and close to its body. Place the bat in the bottom of the coffee can and release your grip on the forceps. Cover the coffee can and contact the local health department as stated above.*

In the event that four or more hours are needed before transportation of a bat for subsequent rabies testing occurs, the bat should be double-bagged in plastic and placed in a cooler or refrigerated area. Under no circumstances should a bat be stored in the same cooler or refrigerator as food or pharmaceuticals. The specimen should be kept away from potential contact with people or other animals.

Questions or comments: bcdc@health.ny.gov

Revised: May 2001

Management of Bat-Related Incidents in Homes

In New York State, it is not uncommon for bats to appear in occupied dwellings, such as homes, apartments or camps. Evaluating potential human and domestic animal contact with a bat and capturing and retaining it for rabies testing, if necessary, is critical for the effective management of rabies exposures.

Almost all of the human rabies deaths that have occurred in the United States since 1990 were linked to bat rabies. Of the bat-associated fatalities, the majority of people did not report any known contact with a bat. Among bats submitted to the NYS Department of Health Wadsworth Center Rabies Laboratory for testing,

Evaluate potential human and domestic animal contact.

All bat-related incidents should be reported to the local health department.

For questions about handling incidents, or to immediately report those which may require rabies treatment, the local health department should be contacted. They have someone available 24 hours per day.

The name of the local health department is: _____

Their business hours phone number is: _____

Their off hours phone number is: _____

Instructions for use of bat capture kit:

In this home, the bat capture kit is kept: _____
(location)

Carefully avoid direct contact with the bat and avoid damaging its head.

- *Close the windows, and the room and closet doors; turn on the lights if the room is dark*
- *Wait for the bat to land*
- *Wearing gloves (heavy, preferably pliable thick leather), cover the bat with a coffee can or similar container with a lid**
- *Slide a piece of cardboard under the can, trapping the bat*
- *With one hand firmly holding the cardboard in place against the top of the can, turn the can right side up*
- *Replace the cardboard with the lid (if no lid, tape the cardboard tightly to the can)*

- *While wearing gloves (heavy, preferably pliable thick leather), slowly approach the bat with net*
- *Rotate the pole so that the bat is scooped into the net and the net turns in on itself containing the bat*

•With a gloved hand, grab the bat through the outside of the net, slide the coffee can into the net, push the bat into the can and place the lid on the can (if no lid, tape a piece of cardboard over the can)

** Note: If a bat has landed behind something or in a space that is too narrow to cover with a coffee can, forceps may be used to capture it. Using a gloved hand to hold the forceps, firmly but gently grasp the bat under a wing and close to its body. Place the bat in the bottom of the coffee can and release your grip on the forceps. Cover the coffee can and contact the local health department as stated above.*

In the event that four or more hours are needed before transportation of a bat for subsequent rabies testing occurs, the bat should be double-bagged in plastic and placed in a cooler or refrigerated area. Under no circumstances should a bat be stored in the same cooler or refrigerator as food or pharmaceuticals. The specimen should be kept away from potential contact with people or other animals.

Questions or comments: bcdc@health.ny.gov

Revised: July 2006

Fact Sheet for Bat Inspection in Homes

It is not unusual to find bats in homes in New York State, and the presence of bats usually does not result in a need for rabies post-exposure prophylaxis. Most (97%) bats tested at the NYS Wadsworth Center's Rabies Laboratory are negative for rabies. However, because many of the human rabies cases in the United States since 1990 appear to have acquired their disease from an unrecognized bat bite in a home situation, all reasonable steps should be taken to keep bats out of the home environment, especially sleeping quarters.

•not leaving unscreened doors open to the outside
•not leaving unscreened windows open to the outside
•making sure windows have screens, chimneys are capped, and electrical and plumbing openings are plugged
•sealing up all openings larger than 1/2 inch by 1/2 inch square into the attic, basement, walls, or occupied areas of the house
•using materials such as expanding spray-on foam, caulk, wire mesh, wood that fits tightly, steel wool (around pipes that enter buildings), or polypropylene bird netting, to seal or cover gaps and holes

•hearing squeaking noises coming from attic, walls, or elsewhere
•inspecting attic space, rafters, porches, and walls for signs of roosting bats, including bat guano and crystallized urine, or bare scratched areas on beams
•walking around the outside of the house at dusk to see if bats are flying out of the house to feed, or before dawn to see if bats are flying into the house to roost

•killing or poisoning the bats is seldom a necessary or desirable solution
•openings should not be sealed while bats are inside--this may drive them into occupied areas or create a sanitary problem if the bats are trapped and die inside
•major home renovations and sealing should be done during the winter when bats have mostly left buildings
•the bats' entry and exit points should be determined by observing the house at dusk or dawn as described above
•special netting can be used in a manner that allows bats to exit a house, but not re-enter
•pest control experts specializing in bat control should be consulted when necessary

Questions or comments: bcdc@health.ny.gov

Revised: July 2006

Fact Sheet for Bat Habitat Inspection and Bat-proofing in Children's' Camps

Camps are usually located in areas that are prime habitat for bats and other wildlife, and the type of construction in camp buildings is often conducive to roosting bats. Bats are frequently encountered in the camp setting. If people are sleeping in cabins with bats, or children are handling bats found on the ground, rabies exposures can occur. Bats that are infected with rabies are often mistaken for injured animals when they are found flopping around on the ground. Abnormal behavior seen in rabid bats includes being on the ground, landing on someone, and flying during the day. Occasionally, there is no obvious abnormal behavior, so all contact with bats and other wild animals should be reported to the camp nurse.

Inspections for making decisions about which cabins will be used for sleeping should take place every spring before the camp opens. Inspections should include:
•inspecting attic space, rafters, porches, and walls for signs of roosting bats, such as bat guano and crystallized urine, or a musty odor
•looking for openings through which bats could get into sleeping quarters, such as openings larger than 1/2 inch by 1/2 inch and long thin slots larger than 1/4 inch by 2 inches
•not allowing cabins with evidence of bat roosts to be used as sleeping quarters until they have been bat-proofed

Camp buildings and cabins, particularly those used as sleeping quarters, should be bat-proofed
•do not bat-proof buildings during the period from late May to mid-August, to avoid trapping baby bats inside the building
•seal openings larger than 1/2 inch by 1/2 inch, or long thin slots larger than 1/4 inch by 2 inches
•use materials such as expanding spray-on foam, caulk, wire mesh, wood that fits tightly, steel wool (around pipes that enter buildings) etc., to seal gaps and holes.
•make sure windows have screens, chimneys are capped, and electrical and plumbing openings are plugged

For questions on inspections or bat-proofing, please contact your local health department for more information.

Questions or comments: bcdc@health.ny.gov

Revised: May 2001

General Guidelines for Management of Bat-Related Incidents at Children's Camps

Bats observed flying at night outside
•provide general education to all camp staff and camp attendees about bats and risk of rabies, avoiding exposures, and reporting possible exposures

Bat observed flying outside in daytime
•provide general education to all camp staff and camp attendees about bats and risk of rabies, avoiding exposures, and reporting possible exposures (note: if bat appears to be aggressively and deliberately swooping at people, keep campers away from area, capture bat, and submit for rabies testing)

Bat found outside grounded or roosting in camper accessible location
•restrict access to area
•temporarily contain bat, for example with an inverted pail or coffee can
•capture bat
•report incident to local health department
•submit bat for rabies testing

Bat flying in or roosting in camper-occupied building

Building large, no children are present unattended:
•evaluate situation for potential risk, consider exclusion and bat-proofing as soon as possible

Building small, leading to close proximity of bat to occupants, and children are present:
•leave one person in building to observe bat
•remove campers from building, as well as adults who will not be involved in capturing the bat
•make a list of building occupants while they exit the building or immediately afterwards
•capture bat
•report incident to local health department
•submit bat for rabies testing

Bat present indoors with sleeping adults or unattended children
•leave one person in building to observe bat
•remove campers from building, as well as adults who will not be involved in capturing the bat
•make a list of building occupants while they exit the building or immediately afterwards
•capture bat
•report incident to local health department
•submit bat for rabies testing

Known or suspected contact with a bat
•capture bat
•immediately make list of those with possible contact
•have those persons with possible contact wash the area of potential contact with soap and water
•report incident to local health department
•submit bat for rabies testing

•depending on severity, consider having wounds evaluated by health care provider for medical treatment

All bat-related incidents should be reported to the local health department.

For questions about handling incidents, or to immediately report those which may require rabies treatment, the local health department should be contacted. They have someone available 24 hours per day.
For this camp, the name of the local health department is:
Their business hours phone number is:
Their off hours phone number is:

Instructions for use of bat capture kit:
When an incident occurs, the person in this building who should be immediately notified to capture the bat is:
and they can be reached by: (phone number, pager number, etc.)
In this camp the bat capture kit is kept: (location)

If a bat is within arm's reach, the coffee can method should be used:

Carefully avoid direct contact with the bat and avoid damaging its head

To capture the bat:
•Close the windows, and the room and closet doors; turn on the lights if the room is dark;
•Wait for the bat to land.1
•Wearing gloves, cover the bat with a coffee can (or similar container with a lid).
•Slide a piece of cardboard under the can, trapping the bat.
•With one hand firmly holding the cardboard in place against the top of the can, turn the can right side up.
•Replace the cardboard with the lid (if no lid, tape the cardboard tightly to the can.)
•Immediately contact your local health department to arrange for rabies examination of the bat.

If a bat is not within arm's reach, an extension pole with a net may be used to capture the bat:
•While wearing gloves, slowly approach the bat with net.
•Rotate the pole so that the bat is scooped into the net and the net turns in on itself containing the bat.
•With a gloved hand grab the bat through the outside of the net, slide the coffee can into the net, push the bat into the can, and place the lid on the can. (if no lid, tape a piece of cardboard over the can.)
•Immediately contact your local health department to arrange for rabies examination of the bat.
1If a bat has landed behind something or in a space that is too narrow to cover with a coffee can, forceps may be used to capture it. Using a gloved hand to hold the forceps, firmly but gently grasp the bat under a wing and close to its body. Place the bat in the bottom of the coffee can and release your grip on the forceps. Cover the coffee can and contact the local health department as stated above.

In the event that four or more hours are needed before transportation of a bat for subsequent rabies testing occurs, the bat should be double-bagged in plastic and placed in a cooler or refrigerated area. Under no circumstances should a bat be stored in the same cooler or refrigerator as food or pharmaceuticals. The specimen should be kept away from potential contact with people or other animals.

Questions or comments: bcdc@health.ny.gov

Revised: May 2008

Bat Capture Kit for Children's' Camps

•Gloves (heavy, preferably pliable thick leather)
•Forceps (9" to 12" length, rat-tooth for gripping)
•Extension pole w/net (fine mesh insect net of polyester or muslin material with a spring steel hoop on telescoping pole – net and pole sold separately)
•Coffee can w/tight-fitting lid or similar container (e.g., cardboard ice cream carton w/lid; keep multiple containers on hand)
•Sheet of cardboard to slide between wall and container to act as a lid
•Tape (to secure lid on container)
•Flashlights (including fresh batteries & extra batteries)
•General Guidelines for Management of Bat-Related Incidents at Children's Camps (for display, guidelines should be double-sided, laminated and hung on lanyard/string)

To obtain some of the items listed above the following types of vendors are suggested:
•Hardware store/home & garden center - gloves, extension pole, flashlight, batteries, tape
•Medical supply company - forceps
•Forestry supply company - fine mesh insect net

Questions or comments: bcdc@health.ny.gov

Revised: May 2001

NEW YORK STATE DEPARMTENT OF HEALTH
Bureau of Community Environmental Health and Food Protection
Children's Camp Program

Potential Rabies Exposure Report

See Environmental Health Manual Procedure CSFP-146 and back of form before completing.

Camp Name:_____ **Address:**_____

Exposure Date: __/__/__ **Time:** __:__ (Military time) **Report Date:** __/__/__ **eHIPS Log Number:** _____

Rabies Analysis- Provide the following information for each animal involved in the incident.

Animal Description	Submitted for Rabies Analysis		If Submitted for Analysis, Indicate Results		
#1	❑ Yes	❑ No	❑ Positive	❑ Negative	❑ Untestable
#2	❑ Yes	❑ No	❑ Positive	❑ Negative	❑ Untestable
#3	❑ Yes	❑ No	❑ Positive	❑ Negative	❑ Untestable
#4	❑ Yes	❑ No	❑ Positive	❑ Negative	❑ Untestable

If exposure was a result of a bat entering a building, were bat exclusion techniques utilized after the incident to prevent future bat entry and potential human exposure? ❑ Yes ❑ No

COMPLETE FOR **ALL** PERSON(S) INVOLVED IN THE EXPOSURE INCIDENT – Shaded information is confidential

1. Victim Information: eHIPS Victim Number: _____ **Exposure Date** __/__/__ **Time** __:__ **(military)**

Name of Patient: (Last, First, M.I.) _____

Home Address: _____

Parent or Guardian Name_____ Home Phone Number (___) _____

Age: |__|__| **Sex:** ❑ Male ❑ Female **Status:** ❑ Camper ❑ Developmentally Disabled Camper ❑ CIT/Jr. Counselor ❑ Counselor ❑ Other Staff* ❑ Other* (Specify*)_____

Animal	Type of Exposure (select from back of form)	Animal	Type of Exposures (select from back of form)
#1		#3	
#2		#4	

Was postexposure prophylaxis (PEP) recommended? ❑ Yes ❑ No Was PEP administered? ❑ Yes ❑ No ❑ Refused

2. Victim Information: eHIPS Victim Number: _____ **Exposure Date** __/__/__ **Time** __:__ **(military)**

Name of Patient: (Last, First, M.I.) _____

Home Address: _____

Parent or Guardian Name_____ Home Phone Number (___) _____

Age: |__|__| **Sex:** ❑ Male ❑ Female **Status:** ❑ Camper ❑ Developmentally Disabled Camper ❑ CIT/Jr. Counselor ❑ Counselor ❑ Other Staff* ❑ Other* (Specify*)_____

Animal	Type of Exposure (select from back of form)	Animal	Type of Exposures (select from back of form)
#1		#3	
#2		#4	

Was postexposure prophylaxis (PEP) recommended? ❑ Yes ❑ No Was PEP administered? ❑ Yes ❑ No ❑ Refused

3. Victim Information: eHIPS Victim Number: _____ **Exposure Date** __/__/__ **Time** __:__ **(military)**

Name of Patient: (Last, First, M.I.) _____

Home Address: _____

Parent or Guardian Name_____ Home Phone Number (___) _____

Age: |__|__| **Sex:** ❑ Male ❑ Female **Status:** ❑ Camper ❑ Developmentally Disabled Camper ❑ CIT/Jr. Counselor ❑ Counselor ❑ Other Staff* ❑ Other* (Specify*)_____

Animal	Type of Exposure (select from back of form)	Animal	Type of Exposures (select from back of form)
#1		#3	
#2		#4	

Was postexposure prophylaxis (PEP) recommended? ❑ Yes ❑ No Was PEP administered? ❑ Yes ❑ No ❑ Refused

4. Victim Information: eHIPS Victim Number: _____ **Exposure Date** __/__/__ **Time** __:__ **(military)**

Name of Patient: (Last, First, M.I.) _____

Home Address: _____

Parent or Guardian Name_____ Home Phone Number (___) _____

Age: |__|__| **Sex:** ❑ Male ❑ Female **Status:** ❑ Camper ❑ Developmentally Disabled Camper ❑ CIT/Jr. Counselor ❑ Counselor ❑ Other Staff* ❑ Other* (Specify*)_____

Animal	Type of Exposure (select from back of form)	Animal	Type of Exposures (select from back of form)
#1		#3	
#2		#4	

Was postexposure prophylaxis (PEP) recommended? ❑ Yes ❑ No Was PEP administered? ❑ Yes ❑ No ❑ Refused

DOH-61 Rabies (1/05)

Instructions for Completing the Children's Camp Rabies Exposure Report Form

For each exposure incident, complete the requested information for all persons exposed. A separate form must be utilized for each incident. An incident can be exposures of one or more people to one or more animals over the course of a period of time (onsite petting zoo) or to a single animal one time. The local health department Rabies Coordinator must be consulted to arrange for and determine the appropriateness of postexposure prophylaxis (PEP). A copy of the Children's Camp Potential Rabies Exposure Incident Report should be sent to the Rabies Coordinator for their records. When an exposure occurred over a period of time, indicated the first exposure date and time as that for the incident and specify each victims exposure date and time in the victim information section.

When an exposure is a result of a bat inside a building, the path of entry must be identified and the appropriate exclusion techniques to prevent future exposure(s) must be employed.

TYPE OF EXPOSURE - Using the coding scheme below, indicate the letter that corresponds to each victim's type(s) of exposure; up to four letters may be selected, if appropriate. When multiple animals are involved with a single incident, consistency must be maintained between the animal number designation in the "Rabies Analysis" section and the animal number designation in the "Type of Exposure" section.

The below exposure types have a reasonable probability of transmitting rabies and must be reported to the Local Health Department by the camp. In general, PEP is recommended for these exposures when rabies exposure cannot be ruled out. A-C can be used for all exposures, D-M are for bats only. Select N only after consultation with the Bureau of Community Sanitation and Food Protection and describe the exposure in the narrative.

A = Bite.
B = Scratch.
C = Saliva or nervous tissue contact.
D = Direct physical contact with live or dead bat.
E = Person touched bat without seeing the part of bat touched.
F = Bat flew into person and touched bare skin.
G = Bat flew into person on part of body with lightweight clothing and the person reports feeling an unpleasant sensation at the point of contact.
H = Person with bare feet stepped on bat.
I = Person awakens to find a bat in the room with them.
J = Live bat found in room with unattended infant, child, or person with sensory or mental impairment.
K = Person slept in small, closed-in camp cabin, bats swooping past while sleeping.
L = Bat found on ground near unattended infant, child, or person with mental impairment.
M = Unidentified flying object hits person and time of day (dusk or dawn), presence of mark where hit, and place where flying object came from (i.e., good site for roosting bats) all support likelihood that it was a bat.
N = Other

Narrative:
Provide a description of the exposure incident. When the exposure was a result of a bat entering a building, state which building the exposure occurred in.

_____

_____

_____

_____

_____

Children's Camp Inspector:_____ **Title:**_____

Local Health Department:_____ **Date:**___/___/____ **Telephone (___)____-____**

Date Rabies Coordinator Consulted: ___/___/____ **Date Form Sent to Rabies Coordinator:** ___/___/____

DOH-61 Rabies (1/05)

SUBJECT: Model State Program for Management of Livestock in Rabies Enzootic Areas

1. Rabies vaccines are licensed for cattle, horses, and sheep. Annual revaccination is required to maintain a current vaccination status (except for sheep that receive a booster vaccination with a three year vaccine after having received a primary vaccination).

2. Vaccination of all livestock may not be economically feasible or justified from a public health standpoint. However, vaccination should be considered for:

   a. Vaccination of valuable livestock in rabies enzootic areas.
   b. Livestock housed in structures with roosting bats or frequented by bats.
   c. Livestock with frequent contact with humans.

3. Livestock in contact with general public (e.g., fairs, petting zoos, shows, farm tours) should be vaccinated:

   a. All species for which a USDA licensed vaccine is available must be accompanied by a veterinary certification of current immunization for rabies, as defined in the applicable passage of the New York State Sanitary Code* : "current vaccination shall mean the injection of a rabies vaccine suitable to the species, which meets the standards prescribed by the United States Department of Agriculture for interstate sale and is administered according to the manufacturer's instructions under the direction of a duly licensed veterinarian not later than the expiration date on the package. Current vaccination shall begin 14 days following primary vaccination, and continue for the period stated in the manufacturer's instructions."

   b. It is strongly recommended that all mammals to be exhibited at a fair or similar exhibition in NYS be vaccinated annually for rabies no less than 14 days prior to arrival at the fair grounds. While the New York State Interdepartmental Rabies Committee recognizes the safety and probable efficacy of licensed rabies vaccines for use off-label in other mammals, it is important to note: (1) efficacy of the vaccine in off-label species has not been established, and it must be assumed that vaccine failure may occur; (2) in compliance with the terms of the State Sanitary Code, a mammal vaccinated by off-label use will be treated as an unvaccinated animal if it is exposed to rabies or if it bites or otherwise potentially exposes a human to rabies.

   c. Small mammals such as hamsters, gerbils, rats and rabbits may alternatively be isolated from any direct contact with the public.

   d. Unvaccinated and off-label vaccinated mammals should be restricted from certain activities at fairs and similar settings that encourage intimate contact with the public (e.g., petting zoo's, on-leash walks through general pedestrian areas).

   e. For off-label vaccinated mammals, public contact may be allowed if the animals are kept under surveillance for rabies symptoms and if contacts are limited to a small, defined number of animals which have been vaccinated at least two months prior to contact. In addition, a register of those having contact must be maintained with names, addresses, and phone numbers, in order to quickly identify those possibly needing rabies treatment if the animal develops symptoms.

* New York State Sanitary Code, Chapter 10, Health, Part 2 - Section 2.14 para. (a) 4.

4. All suspected cases of rabies in animals, and animal bites to humans must immediately be reported to the local health authority. When appropriate the health authority will arrange ten day observation or rabies examination of the biting animal.

5. Unvaccinated and off-label vaccinated mammals (including livestock) in contact with a rabid animal must be destroyed unless quarantined for a 6 month period. Animals currently vaccinated (as defined in 3.a., above) in contact with a rabid animal must receive a rabies booster injection within 5 days of the exposure. Quarantine on a farm for livestock means isolation from other domestic animals and from all humans except for the person caring for the animal. NYS Ag & Markets veterinarians should be consulted for on-site advice on setting up the quarantines.

6. When rabies is confirmed in a domestic animal on a farm, it is not necessary to consider all animals in the herd as exposed, as horizontal transfer (e.g., cow to cow) is unlikely. However, any mammal known to be bitten by or otherwise exposed to the saliva of the rabid animal must be managed as in 5 (above). Furthermore, because another member of the herd may have been exposed to rabies through the same carrier that infected the rabid domestic animal, other members of the herd must be watched carefully for development of signs of rabies, and isolated immediately should that occur. Milk from the remainder of the herd may be sold. Rabies virus has not been demonstrated in infectious doses in milk. Pasteurization will inactivate rabies virus.

7. The meat from an animal exposed to rabies (i.e., known to be bitten by a rabid animal) may be eaten without risk of rabies providing the animal is slaughtered within 7 days of exposure to rabies and liberal portions of the exposed area are discarded. Milk from an animal in quarantine may be used if pasteurized. Neither meat nor milk from a rabid animal (i.e., became ill with or died from the disease) should be used for human or animal consumption.

8. Veterinarians, their staff, and livestock owners in rabies enzootic areas should immediately suspect rabies when animals become ill or demonstrate abnormal behavior. Promptly isolate the animal. Protective rubber gloves should be worn when handling and medicating sick animals, especially animals suspected of choking, as this is frequently an early sign of rabies.

9. Barns, fences, and other barriers to sick wildlife should be maintained in good repair. Doors should be kept closed whenever possible, especially at night.

10. Dogs and cats are required to be currently vaccinated for rabies at all times. Barn cats should be vaccinated and controlled (rabies is 5 to 10 times more prevalent in cats than in dogs in areas affected by the raccoon rabies outbreak).

11. Veterinarians, veterinary technicians, and others in intimate contact with sick livestock in rabies enzootic areas should receive rabies pre-exposure immunization. Care must be taken while treating and during necropsy of rabies-suspect animals. Protective clothing should include rubber gloves, surgical mask and face shield or other eye protection.

12. Specimens for diagnosis of rabies in livestock must include refrigerated (not fixed) samples of brainstem and cerebellum.

APPENDIX D

Resources For Veterinarians

Rabies Packaging And Shipping Instructions

Address To Rabies Lab

MMWR: Compendium Of Animal Rabies Prevention And Control 03/2016

NEW YORK STATE OF OPPORTUNITY. Department of Health

ANDREW M. CUOMO
Governor

HOWARD A. ZUCKER, M.D., J.D.
Commissioner

SALLY DRESLIN, M.S., R.N.
Executive Deputy Commissioner

May 16, 2016

To better provide rabies testing services the New York State Department of Health has made two key changes to the requirements for specimen delivery to the Rabies Laboratory.

- **Specimens must be shipped so that they are guaranteed to arrive at the laboratory within one day after shipment.**
- **For emergency testing on a Saturday please select the 'early Saturday morning delivery' option.**

In addition, please note the following continuing guidance:

- Do not ship specimens for emergency testing on Saturdays without obtaining prior approval for weekend testing from the Bureau of Communicable Disease Control (BCDC).
- Any specimens received for which approval for emergency testing was not given will be held for testing on the next business day.
- Properly packaged specimens should be shipped to the Wadsworth Center Rabies Laboratory at this address:
  Griffin Laboratory
  Wadsworth Center
  NYS Department of Health
  5668 State Farm Road
  Slingerlands, NY 12159
- When specimens are being prepared for emergency testing on Saturdays, the LHD should verify that 'early Saturday AM delivery' is requested and obtain a tracking number for all specimens. The tracking number should be emailed to rabies@health.ny.gov.
- LHDs can continue to send in specimens that will be delivered to the laboratory on Saturday but that do not require weekend testing. These specimens should have printed on the outside of the shipping container "For Saturday Delivery, Non-Emergency".

A delay in specimen delivery can result in specimen decomposition, unsatisfactory testing results, delays or unnecessary post-exposure prophylaxis and/or unnecessary quarantine of companion animals.

Summary of emergency animal rabies testing policy

1. Emergency/off-hours rabies testing of animals must be reviewed and approved by BCDC either during normal business hours at (518) 473-4439, or after hours through the NYSDOH Duty Officer at (866) 881-2809.

2. After consultation with BCDC, if off-hours testing is approved, the LHD must immediately notify the rabies laboratory at (518) 485-6464 during business hours, or after hours through the NYSDOH Duty Officer system at (866) 881-2809. Immediate notification of the rabies laboratory is necessary to:
    - Ensure that rabies lab technologists are available to receive and test the specimen.
    - Verify appropriate shipping will be requested so that the specimen will arrive in a timely manner.
    - Confirm to whom and how emergency testing results will be reported.

3. Emergency rabies testing is indicated for an animal that has ***bitten a human*** *and is* ***highly suspect for rabies infection*** based on species, behavior, and circumstances of the incident. Emergency testing is reserved for situations where, due to timing around weekends or holidays, it may not be possible to have the results of testing back within 3 days of the date of the exposure incident.

Some examples of incidents that should be considered for emergency testing would include:

- A bite, or significant saliva exposure to an open wound, from abnormal acting raccoon, skunk, or fox.
- A bite or other **direct contact** where a bite cannot be ruled out involving a bat (note that a bat found with a sleeping person with no known direct contact must still be tested, but would not be considered for emergency testing).
- A known bite from domestic animal that has been examined by a veterinarian and determined to be showing signs consistent with rabies.

The rabies specimen submission policy can be found on the Rabies Laboratory website at http://www.wadsworth.org/programs/id/rabies/animal-specimen-testing.

NEW YORK STATE | Department of Health | Wadsworth Center

Published on *New York State Department of Health, Wadsworth Center* (https://www.wadsworth.org)

Animal Specimen Testing [1]

Changes in Weekend/Holiday Staffing at the Rabies Laboratory

Beginning on January 9, 2017, the New York State Department of Health Rabies Laboratory will no longer routinely staff the laboratory on weekends or holidays unless the Bureau of Communicable Disease Control (BCDC) has approved a request for emergency testing.

Requests for emergency testing must be received by 3:00PM on Fridays (or the last business day before a holiday) to ensure Rabies Laboratory staff are aware of an incoming weekend/holiday specimen. To request emergency testing, please contact BCDC at 518-473-4439 during business hours.

For emergency requests during non-business hours please call the NYSDOH Duty Officer at 1-866-881-2809.

Non-emergency samples received over the weekend/holiday will be stored appropriately and tested the next business day.

Testing

Rabies testing in animal specimens consists of microscopic examination of brain tissue samples using an immunofluorescence staining technique. Results are confirmed by virus isolation in a cell culture system. All local health departments should submit specimens using the Electronic Submission for Animal Rabies through the Health Commerce System [2]. For parties that do not have access to the Health Commerce System, such as veterinary practices, pest control companies and wildlife rehabilitators, a copy of the animal rabies specimen history form [3] may be filled out, printed and included with the specimens according to specimen packaging instructions.

Specimen Collection

Do not submit live animals. The animal should be humanely euthanized without damage to the head. The head must then be removed from the body and submitted intact for examination except in the case of bats where the entire animal should be submitted. For livestock, samples of all 3 lobes of the cerebellum (equal to 2 walnuts) and a complete cross-section of the brainstem are required and may be removed through the foramen magnum. The cerebellum and brainstem samples must be placed in a small, crush-resistant plastic canister or tub, then sent to the lab in the standard New York rabies specimen shipping container according to the provided detailed instructions. Decapitation and livestock brain sample extraction can best be performed at a co-operating veterinary hospital.

Authorization for rabies testing is required; contact your local health department [4].

Request rabies kits and mailers. [5]

Bites and other exposures to saliva or nervous tissue from animals suspected of having rabies must be reported to the local health authority.

Questions regarding submission of specimens and the handling of animal bites should be directed to the Rabies Laboratory weekdays from 8 a.m. to 4:30 p.m. at (518) 485-6464. Emergency weekend or holiday examinations must be arranged with the laboratory by the local health authority or should be directed to the Duty Officer at (866) 881-2809.

Specimen Storage

Specimens must be preserved by refrigeration. Freezing should be avoided, but is acceptable if refrigeration is not possible. Tissues must not be fixed with chemical preservatives.

Specimen preparation for shipping

Although the rabies specified shipping container provided is compliant with current federal shipping regulations, the shipper is responsible for the proper packaging and labeling of diagnostic specimens. Tools, cages and other surfaces potentially contaminated with infectious saliva or blood can be disinfected with a 10% solution of sodium hypochlorite (household bleach) in water.

Shipping sets include:

- One pre-assembled shipping container, including:
  - Outer cardboard box
  - EPS cooler
  - 2 biohazard pressure bags
- Packing instructions are printed on top-inner flaps of the outer cardboard box.
- Two gel packs of refrigerant (store frozen until needed).
- Two plastic bags (13 x 20 x 4 ml) for the animal head, livestock or other large animal brain, or entire bat.
- One large plastic bag that surrounds the closed EPS cooler.
- Two absorbent sheets which are to be placed in biohazard pressure bags along with the specimen.
- Two blank rabies history forms with directions for collection and submission of specimens.
- One zip-lock bag for the rabies history forms.

Packing Directions:

1. Remove the head from the body of the animal (except bats-which are shipped whole and livestock) and place the head in a small plastic bag.
   - When shipping samples consisting of only cerebellum and brain stem (livestock submissions), first place the brain tissue in a small, hard plastic container, then place in the small plastic bag.

   - When shipping more than one specimen in the container (bats), be certain that: each specimen is individually bagged to prevent cross contamination and that each specimen is clearly identified.
2. Cool specimen in refrigerator or freezer, whenever possible, before packaging, to enhance preservation (especially in warm weather).
3. If sharp objects protrude from the specimen (bone fragments, porcupine quills), wrap specimen in several layers of newspaper prior to putting the specimen into plastic bag.
4. Place the bagged specimen into the biohazard pressure bag along with the sheet of absorbent.
5. Seal the biohazard specimen bag:
   1. Remove the tape adhesive backing from the bag.
   2. Fold the bag at the slit and orient lines onto corresponding lines.
   3. Press hard from the center working outward.
   4. Do not force larger heads into the biohazard pressure bag.
   5. If the head is too large for the biohazard pressure bag, contact the Rabies Laboratory (518-485-6464) for assistance.
6. Complete the history form on-line at Health Commerce System [2] or fill out the one provided with the shipper.
   - Complete one form per sample.
   - The identification on the bag containing the specimen and the history form should be identical. If the specimen bag is labeled "bat #1-Smith", then the history should also have the identification "bat #1-Smith", written clearly and in indelible ink.
   - Answer all questions as accurately as possible. The information provided will be used to report results to the local health authority.
7. Place the completed rabies history form in the zip-lock bag provided.
8. Place the zip-lock bag on top of the EPS cooler.
9. Follow packaging instructions printed on the inside flap of box.
10. Do not use glass, wire, tag fasteners or other materials which could puncture packaging or cause injury.
11. Wash hands.
12. Disinfect or burn all materials contaminated in specimen preparation process. Surfaces potentially contaminated with infectious saliva or blood can be disinfected with a 10% solution of sodium hypochlorite (household bleach) in water.
13. **Next day delivery is required for all specimens**

Shipping Specimens

Properly packaged specimens may be shipped directly to the Rabies Laboratory as described below. **Special arrangements are necessary with carriers for weekend delivery**. Local health offices may arrange transportation to the laboratory. **DO NOT ship emergency specimens on Friday without prior approval for emergency testing.**

To better provide rabies testing services, the New York State Department of Health has made two key changes to the requirements for specimen delivery to the Rabies Laboratory.

- **Specimens must be shipped so that they are guaranteed to arrive at the laboratory within one day after shipment.**
- **For emergency testing on a Saturday, please select the 'early Saturday morning delivery' option.**

  In addition, please note the following continuing guidance:

  - Do not ship specimens for emergency testing on Saturdays without obtaining prior approval for weekend testing from the Bureau of Communicable Disease Control (BCDC)
  - Any specimens received for which approval for emergency testing was not given will be held for testing on the next business day.

Properly packaged specimens should be shipped to the Wadsworth Center Rabies Laboratory at this address:

Griffin Laboratory
Wadsworth Center
NYS Department of Health
5668 State Farm Road
Slingerlands, NY 12159

- When specimens are being prepared for emergency testing on Saturdays, the local health department should verify that 'early Saturday AM delivery' is requested and obtain a tracking number for all specimens.
- Local health departments can continue to send in specimens that will be delivered to the laboratory on Saturday but that do not require weekend testing. These specimens should have printed on the outside of the shipping container "For Saturday Delivery, Non-Emergency".

A delay in specimen delivery can result in specimen decomposition, unsatisfactory testing results, delays or unnecessary post-exposure prophylaxis and/or unnecessary quarantine of companion animals.

Summary of emergency animal rabies testing policy

Emergency/off-hours rabies testing of animals must be reviewed and approved by BCDC either during normal business hours at (518) 473-4439, or after hours through the NYSDOH Duty Officer at (866) 881-2809.

After consultation with BCDC, if off-hours testing is approved, the local health department must immediately notify the rabies laboratory at (518) 485-6464 during business hours, or after hours through the NYSDOH Duty Officer system at (866) 881-2809. Immediate notification of the rabies laboratory is necessary to:

- Ensure that rabies lab technologists are available to receive and test the specimen.
- Verify appropriate shipping will be requested so that the specimen will arrive in a timely manner.
- Confirm to whom and how emergency testing results will be reported.

Emergency rabies testing is indicated for an animal that has ***bitten a human*** *and is* ***highly suspect for rabies infection*** based on species, behavior, and circumstances of the incident. Emergency testing is reserved for situations where, due to timing around weekends or holidays, it may not be possible to have the results of testing back within 3 days of the date of the exposure incident.

Some examples of incidents that should be considered for emergency testing would include:

- Terrestrial Animals:
  - A bite, or significant saliva exposure to an open wound, from abnormal acting raccoon, skunk, fox, or feral cat.
  - A known bite from domestic animal that has been examined by a veterinarian and determined to be showing signs consistent with rabies.
- Bats:
  - A bite, scratch, or other **direct contact** where a bite cannot be ruled out (note that a bat found with a sleeping person with no known direct contact must still be tested, but would not be considered for emergency testing).

The rabies specimen submission policy can be found at the top of this web page.

A printable pdf of the Shipping Instructions [6] is provided.

Results

Results are routinely available at the local health authority on the workday following arrival of the specimen at the laboratory.

Related Links

- International Air Transport Association - Dangerous Goods Documentation [7]
- United States Postal Service - Toxic Substances and Infectious Substances [8]

Source URL (modified on 06/08/2021 - 1:15pm): https://www.wadsworth.org/programs/id/rabies/animal-specimen-testing

Links
[1] https://www.wadsworth.org/programs/id/rabies/animal-specimen-testing
[2] https://commerce.health.state.ny.us/public/hcs_login.html
[3] https://www.wadsworth.org/sites/default/files/WebDoc/26923434/DOH487.pdf
[4] https://www.health.ny.gov/contact/contact_information/
[5] mailto:ogs.sm.gdc@ogs.ny.gov?
subject=Rabies%20specimen%20mailer%20kit%20order%20(NYSDOH%20WC)&body=Full%20name%20and%20email%20_____%0AFacility%20name_____
large%20specimen%20transport%20bag%20___quantity%20requested%0A%0AIf%20you%20have%20any%20questions%2C%20please%20contact%20the%20following%20Wadsworth%2
408-2981)%20or%20daiadmin%40health.ny.gov%0A
[6] https://www.wadsworth.org/sites/default/files/WebDoc/October2016AnimalSpecimenShipping.pdf
[7] http://www.iata.org/whatwedo/cargo/dgr/Pages/download.aspx
[8] https://pe.usps.com/text/pub52/pub52c3_024.htm

Compendium of Animal Rabies Prevention and Control, 2016

National Association of State Public Health Veterinarians Compendium of Animal Rabies Prevention and Control Committee

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Endorsed by the AVMA, American Public Health Association, Association of Public Health Laboratories, Council of State and Territorial Epidemiologists, and National Animal Care and Control Association.

This article has not undergone peer review.

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Rabies is a fatal viral zoonosis and serious public health problem.[1] All mammals are believed to be susceptible to the disease, and for the purposes of this document, use of the term animal refers to mammals. The disease is an acute, progressive encephalitis caused by viruses in the genus *Lyssavirus*.[2] Rabies virus is the most important lyssavirus globally. In the United States, multiple rabies virus variants are maintained in wild mammalian reservoir populations such as raccoons, skunks, foxes, and bats. Although the United States has been declared free from transmission of canine rabies virus variants, there is always a risk of reintroduction of these variants.[3-7]

The rabies virus is usually transmitted from animal to animal through bites. The incubation period is highly variable. In domestic animals, it is generally 3 to 12 weeks, but can range from several days to months, rarely exceeding 6 months.[8] Rabies is communicable during the period of salivary shedding of rabies virus. Experimental and historic evidence documents that dogs, cats, and ferrets shed the virus for a few days prior to the onset of clinical signs and during illness. Clinical signs of rabies are variable and include inappetance, dysphagia, cranial nerve deficits, abnormal behavior, ataxia, paralysis, altered vocalization, and seizures. Progression to death is rapid. There are currently no known effective rabies antiviral drugs.

The recommendations in this compendium serve as a basis for animal rabies prevention and control programs throughout the United States and facilitate standardization of procedures among jurisdictions, thereby contributing to an effective national rabies control program. The compendium is reviewed and revised as necessary, with the most current version replacing all previous versions. These recommendations do not supersede state and local laws or requirements. Principles of rabies prevention and control are detailed in Part I, and recommendations for parenteral vaccination procedures are presented in Part II. All animal rabies vaccines licensed by the USDA and marketed in the United States are listed and described in Appendix 1, and contact information for manufacturers of these vaccines is provided in Appendix 2.

Modifications of note in this updated version of the compendium, compared with the previous version,[9] include clarification of language, explicit en-

couragement of an interdisciplinary approach to rabies control, a recommendation to collect and report at the national level additional data elements on rabid domestic animals, changes to the recommended management of dogs and cats exposed to rabies that are either unvaccinated or overdue for booster vaccination, reduction of the recommended 6-month quarantine period for certain species, and updates to the list of marketed animal rabies vaccines.

Part I. Rabies Prevention and Control

A. Principles of rabies prevention and control

1. Case definition. An animal is determined to be rabid after diagnosis by a qualified laboratory as specified (*see* Part I.A. 10. Rabies diagnosis).The national case definition for animal rabies requires laboratory confirmation on the basis of either a positive result for the direct fluorescent antibody test (preferably performed on CNS tissue) or isolation of rabies virus in cell culture or a laboratory animal.[10]

2. Rabies virus exposure. Rabies is transmitted when the virus is introduced into bite wounds, into open cuts in skin, or onto mucous membranes from saliva or other potentially infectious material such as neural tissue.[11] Questions regarding possible exposures should be directed promptly to state or local public health authorities.

3. Interdisciplinary approach. Clear and consistent communication and coordination among relevant animal and human health partners across and within all jurisdictions (including international, national, state, and local) is necessary to most effectively prevent and control rabies. As is the case for the prevention of many zoonotic and emerging infections, rabies prevention requires the cooperation of animal control, law enforcement, and natural resource personnel; veterinarians; diagnosticians; public health professionals; physicians; animal and pet owners; and others. An integrated program must include provisions to promptly respond to situations; humanely restrain, capture, and euthanize animals; administer quarantine, confinement, and observation periods; and prepare samples for submission to a testing laboratory.

4. Awareness and education. Essential components of rabies prevention and control include ongoing public education, responsible pet ownership, routine veterinary care and vaccination, and professional continuing education. Most animal and human exposures to rabies can be prevented by raising awareness concerning rabies transmission routes, the importance of avoiding contact with wildlife, and the need for appropriate veterinary care. Prompt recognition and reporting of possible exposures to medical and veterinary professionals and local public health authorities are critical.

5. Human rabies prevention. Rabies in humans can be prevented by eliminating exposures to rabid animals or by providing exposed persons prompt postexposure prophylaxis consisting of local treatment of wounds in combination with appropriate administration of human rabies immune globulin and vaccine. An exposure assessment should occur before rabies postexposure prophylaxis is initiated and should include discussion between medical providers and public health officials. The rationale for recommending preexposure prophylaxis and details of both preexposure and postexposure prophylaxis administration can be found in the current recommendations of the Advisory Committee on Immunization Practices.[11,12] These recommendations, along with information concerning the current local and regional epidemiology of animal rabies and the availability of human rabies biologics, are available from state health departments.

6. Domestic animal vaccination. Multiple vaccines are licensed for use in domestic animal species. Vaccines available include inactivated and modified-live virus vectored products, products for IM and SC administration, products with durations of immunity for periods of 1 to 3 years, and products with various minimum ages of vaccination. Recommended vaccination procedures are specified in Part II of this compendium; animal rabies vaccines licensed by the USDA and marketed in the United States are specified in Appendix 1. Local governments should initiate and maintain effective programs to ensure vaccination of all dogs, cats, and ferrets and to remove stray and unwanted animals. Such procedures have reduced laboratory-confirmed cases of rabies among dogs in the United States from 6,949 cases in 1947 to 89 cases in 2013.[3] Because more rabies cases are reported annually involving cats (247 in 2013) than dogs, vaccination of cats should be required.[3] Animal shelters and animal control authorities should establish policies to ensure that adopted animals are vaccinated against rabies.

An important tool to optimize public and animal health and enhance domestic animal rabies control is routine or emergency implementation of low-cost or free clinics for rabies vaccination. To facilitate implementation, jurisdictions should work with veterinary medical licensing boards, veterinary associations, the local veterinary community, animal control officials, and animal welfare organizations.

7. Rabies in vaccinated animals. Rabies is rare in vaccinated animals.[13–15] If rabies is suspected in a vaccinated animal, it should be reported to public health officials, the vaccine manufacturer, and the USDA APHIS Center for Veterinary Biologics

(www.aphis.usda.gov; search for "adverse event reporting"). The laboratory diagnosis should be confirmed and the virus variant characterized by the CDC's rabies reference laboratory. A thorough epidemiologic investigation including documentation of the animal's vaccination history and potential rabies exposures should be conducted.

8. Rabies in wildlife. It is difficult to control rabies among wildlife reservoir species.[16] Vaccination of free-ranging wildlife or point infection control is useful in some situations,[17] but the success of such procedures depends on the circumstances surrounding each rabies outbreak (See Part I. C. Prevention and control methods related to wildlife). Because of the risk of rabies in wild animals (especially raccoons, skunks, coyotes, foxes, and bats), the AVMA, American Public Health Association, Council of State and Territorial Epidemiologists, National Animal Care and Control Association, and National Association of State Public Health Veterinarians strongly recommend the enactment and enforcement of state laws prohibiting the importation, distribution, translocation, and private ownership of wild animals.

9. Rabies surveillance. Laboratory-based rabies surveillance and variant typing are essential components of rabies prevention and control programs. A comprehensive surveillance program should not be limited to testing only those animals that have potentially exposed people or domestic animals to rabies. Accurate and timely information and reporting are necessary to guide decisions regarding postexposure prophylaxis in potentially exposed humans, determine appropriate management of potentially exposed animals, aid in the discovery of emerging variants, describe the epidemiology of the disease, and assess the effectiveness of vaccination programs for domestic animals and wildlife. Every animal submitted for rabies testing should be reported to the CDC to evaluate surveillance trends. Public health authorities should implement electronic laboratory reporting and notification systems.[18] Information reported on every animal submitted for rabies testing should include species, point location, vaccination status, rabies virus variant (if rabid), and human or domestic animal exposures. To enhance the ability to make evidence-based recommendations from national surveillance data, additional data should be collected and reported on all rabid domestic animals. In this regard, essential data elements include age, sex, neuter status, ownership status, quarantine dates (if any), date of onset of any clinical signs, and complete vaccination history. Rabid animals with a history of importation into the United States within the past 60 days are immediately notifiable by state health departments to the CDC; for all indigenous cases, standard notification protocols should be followed.[19]

10. Rabies diagnosis.

a) The direct fluorescent antibody test is the gold standard for rabies diagnosis. The test should be performed in accordance with the established national standardized protocol (www.cdc.gov/rabies/pdf/rabiesdfaspv2.pdf) by a qualified laboratory that has been designated by the local or state health department.[20,21] Animals submitted for rabies testing should be euthanized[22,23] in such a way as to maintain the integrity of the brain so that the laboratory can recognize anatomic structures. Except in the case of very small animals, such as bats, only the head or entire brain (including brainstem) should be submitted to the laboratory. To facilitate prompt laboratory testing, submitted specimens should be stored and shipped under refrigeration without delay. The need to thaw frozen specimens will delay testing. Chemical fixation of tissues should be avoided to prevent significant testing delays and because such fixation might preclude reliable testing. Questions about testing of fixed tissues should be directed to the local rabies laboratory or public health department.

b) Rabies testing should be available outside of normal business hours at the discretion of public health officials to expedite exposure management decisions.[20] When confirmatory testing is needed by state health departments (eg, in the event of inconclusive results, unusual species, or mass exposures), the CDC rabies laboratory can provide additional testing and results within 24 hours of sample receipt.[24]

c) Professional associations such as the Association of Public Health Laboratories should advocate for, distribute, and promote the development of guidelines for routinely assessing testing practices within rabies laboratories to ensure maintenance of quality and safety.

d) A direct rapid immunohistochemical test (referred to as dRIT) is being used by trained field personnel in surveillance programs for specimens not involved in human or domestic animal exposures.[25–28] All positive direct rapid immunohistochemical test results need to be confirmed by means of direct fluorescent antibody testing at a qualified laboratory.

e) Currently, there are no commercially available, USDA-licensed rapid test kits for rabies diagnosis. Unlicensed tests should not be used owing to the following concerns: sensitivity and specificity of these tests are not known, the tests have not been validated against current standard methods, the excretion of virus in the saliva is intermittent and the amount varies over time, any unlicensed test result would

need to be confirmed by validated methods such as direct fluorescent antibody testing on brain tissue, and the interpretation of results from unlicensed tests may place exposed animals and persons at risk.

11. Rabies serology. Some jurisdictions require evidence of vaccination and rabies virus antibodies for animal importation purposes. Rabies virus antibody titers are indicative of a response to vaccine or infection. Titers do not directly correlate with protection because other immunologic factors also play a role in preventing rabies and our abilities to measure and interpret those other factors are not well-developed. Therefore, evidence of circulating rabies virus antibodies in animals should not be used as a substitute for current vaccination in managing rabies exposures or determining the need for booster vaccination.[29-32]

12. Rabies research. Information derived from well-designed studies is essential for the development of evidence-based recommendations. Data are needed in several areas, including viral shedding periods for domestic livestock and lagomorphs, potential shedding of virus in milk, the earliest age at which rabies vaccination is effective, protective effect of maternal antibody, duration of immunity, postexposure prophylaxis protocols for domestic animals, models for treatment of clinical rabies, extralabel vaccine use in domestic animals and wildlife rabies reservoir species, host-pathogen adaptations and dynamics, and the ecology of wildlife rabies reservoir species, especially in relation to the use of oral rabies vaccines.

B. Prevention and control methods in domestic and confined animals

1. Preexposure vaccination and management. Adherence to a regular rabies vaccination schedule is critical to protect animals against recognized and unrecognized rabies exposures. Parenteral animal rabies vaccines should be administered only by or under the direct supervision of a licensed veterinarian on premises. Rabies vaccines may be administered under the supervision of a licensed veterinarian to animals held in animal shelters before release.[33,34] The veterinarian signing a rabies vaccination certificate must ensure that the person who administered the vaccine is identified on the certificate and has been appropriately trained in vaccine storage, handling, and administration and in the management of adverse events. This ensures that a qualified and responsible person can be held accountable for properly vaccinating the animal.

Within 28 days after initial vaccination, a peak rabies virus antibody titer is expected, and the animal can be considered immunized.[31,35-37] Regardless of the age of the animal at initial vaccination, a booster vaccination should be administered 1 year later (*see* Part II and Appendix 1). An animal is currently vaccinated and is considered immunized immediately after any booster vaccination.[38,39]

a) Booster vaccination. Following the initial vaccination, booster vaccinations should be given in a manner consistent with the manufacturer's label. If a previously vaccinated animal is overdue for any booster vaccination, including the first booster vaccination due 1 year after initial vaccination, it should be given a booster vaccination. Immediately after this booster vaccination, the animal is considered currently vaccinated and should be placed on a booster vaccination schedule consistent with the label of the vaccine used. There are no laboratory or epidemiological data to support the annual or biennial administration of 3-year vaccines after completion of the initial vaccine series (ie, the initial vaccination and 1-year booster vaccination).

b) Dogs, cats, and ferrets. All dogs, cats, and ferrets should be vaccinated against rabies and revaccinated in accordance with recommendations in this compendium (Appendix 1).

c) Livestock. All horses should be vaccinated against rabies.[40] Livestock, including species for which licensed vaccines are not available, that have frequent contact with humans (eg, in petting zoos, fairs, and other public exhibitions) should be vaccinated against rabies.[41,42] Consideration should also be given to vaccinating livestock that are particularly valuable.

d) Captive wild animals and wild animal hybrids (the offspring of wild animals crossbred to domestic animals).

(1) Wild animals and wild animal hybrids should not be kept as pets.[43,44] No parenteral rabies vaccines are licensed for use in wild animals or wild animal hybrids.[45]

(2) Animals that are farmed (eg, for food, fur, or fiber) or maintained in exhibits or zoological parks and that are not completely excluded from all contact with rabies vectors can become infected.[46] Moreover, wild animals might be incubating rabies when initially captured. Therefore, wild-caught animals susceptible to rabies should be quarantined for a minimum of 6 months.

(3) Employees who work with animals in exhibits or zoological parks should receive preexposure rabies vaccination. The use of preexposure or postexposure rabies vaccination for handlers who work with animals at such facilities might reduce the need for euthanasia of captive animals that expose handlers. Carnivores and bats should be housed in a manner

that precludes direct contact with the public.[41,42] Consideration may be given to vaccinating animals that are particularly valuable (*see* Part II. D. Vaccination of wildlife and wild animal hybrids).

2. Stray animals. Stray dogs, cats, and ferrets should be removed from the community, and mechanisms should be put in place to facilitate voluntary surrender of animals to prevent abandonment. Local health departments and animal control officials can enforce the removal of strays more effectively if owned animals are required to have identification and be confined or kept on leash. Strays should be impounded for at least 3 business days to determine whether human exposure has occurred and to give owners sufficient time to reclaim animals.

Stray and feral cats serve as a significant source of rabies exposure risk.[47] If communities allow maintenance of feral cat colonies despite this risk, they should safeguard the health of the cats and the communities in which they reside by requiring that cats receive initial rabies vaccinations and appropriately scheduled booster vaccinations.

3. Importation and interstate movement of animals.

a) Areas with dog-to-dog rabies transmission. Canine rabies virus variants have been eliminated from the United States[3,7]; however, rabid dogs and a rabid cat have been introduced into the continental United States from areas with dog-to-dog rabies transmission.[4-6,48,49] The movement of dogs for the purposes of adoption or sale from areas with dog-to-dog rabies transmission increases the risk of introducing canine-transmitted rabies to areas where it does not currently exist, and this practice should be prohibited.

b) International importation. Current federal regulations are insufficient to prevent the introduction of rabid animals into the United States and must be strengthened and appropriately enforced.[4-6,48,49] The CDC and USDA APHIS have regulatory authority over the importation of dogs and cats into the United States.[6] Importers of dogs must comply with rabies vaccination requirements.[50,51] These regulations require that dogs from rabies-endemic countries be currently vaccinated against rabies prior to importation. The appropriate health official of the state of destination should be notified by the appropriate federal authorities within 72 hours of the arrival of any unvaccinated imported dog required to be placed in confinement (as defined by the CDC[52]) under these regulations. Failure of the owner to comply with these confinement requirements should be promptly reported to the CDC's Division of Global Migration and Quarantine (CDCAnimalImports@cdc.gov).

All imported dogs and cats are also subject to state and local laws governing rabies and should be currently vaccinated against rabies with USDA-licensed products in accordance with this compendium. Failure of the owner to comply with state or local requirements should be referred to the appropriate state or local official.

c) Interstate movement (including commonwealths and territories). Before interstate movement occurs, dogs, cats, ferrets, and horses should be currently vaccinated against rabies in accordance with this compendium. Animals in transit should be accompanied by a current, valid rabies vaccination certificate such as Form 51 from the National Association of State Public Health Veterinarians.[53] When an interstate health certificate or certificate of veterinary inspection is required, it should contain the same rabies vaccination information as Form 51.

4. Adjunct procedures. Methods or procedures that enhance rabies control include the following[54]:

a) Identification. Dogs, cats, and ferrets should be identified (eg, metal or plastic tags or microchips) to allow for verification of rabies vaccination status.

b) Licensure. Registration or licensure of all dogs, cats, and ferrets is an integral component of an effective rabies control program. A fee is frequently charged for such licensure, and revenues collected are used to maintain rabies or animal control activities. Evidence of current vaccination should be an essential prerequisite to licensure.

c) Canvassing. House-to-house canvassing by animal control officials facilitates enforcement of vaccination and licensure requirements.

d) Citations. Citations are legal summonses issued to owners for violations, including the failure to vaccinate or license their animals. The authority for officers to issue citations should be an integral part of animal control programs.

e) Animal control. All local jurisdictions should incorporate training and continuing education of personnel regarding stray-animal control, leash laws, animal bite prevention, and rabies prevention and control into their programs.

f) Public education. All local jurisdictions should incorporate education covering responsible pet ownership, bite prevention, and appropriate veterinary care into their programs.

5. Postexposure management. This section refers to any animal exposed (*see* Part I.A. 2. Rabies virus exposure) to a confirmed or suspected rabid animal. Wild mammalian carnivores, skunks, and bats that are not available or suitable for testing should be regarded as rabid. The rationale for

observation, confinement, or strict quarantine periods of exposed animals despite previous vaccination is based in part on the potential for overwhelming viral challenge, incomplete vaccine efficacy, improper vaccine administration, variable host immunocompetence, and immune-mediated death (ie, early death phenomenon).[13,55-57]

a) Dogs, cats, and ferrets. Any illness in an exposed animal should be reported immediately to the local health department. If signs suggestive of rabies develop (eg, paralysis or seizures), the animal should be euthanized, and the head or entire brain (including brainstem) should be submitted for testing (*see* Part I.A. 10. Rabies diagnosis).

(1) Dogs, cats, and ferrets that are current on rabies vaccination should immediately receive veterinary medical care for assessment, wound cleansing, and booster vaccination. The animal should be kept under the owner's control and observed for 45 days.

(2) Dogs, cats, and ferrets that have never been vaccinated should be euthanized immediately. There are currently no USDA-licensed biologics for postexposure prophylaxis of previously unvaccinated domestic animals, and there is evidence that the use of vaccine alone will not reliably prevent the disease in these animals.[58] If the owner is unwilling to have the animal euthanized, the animal should be placed in strict quarantine for 4 (dogs and cats) or 6 (ferrets) months. Strict quarantine in this context refers to confinement in an enclosure that precludes direct contact with people and other animals. A rabies vaccine should be administered at the time of entry into quarantine to bring the animal up to current rabies vaccination status. Administration of vaccine should be done as soon as possible. It is recommended that the period from exposure to vaccination not exceed 96 hours.[59,60] If vaccination is delayed, public health officials may consider increasing the quarantine period for dogs and cats from 4 to 6 months, taking into consideration factors such as the severity of exposure, the length of delay in vaccination, current health status, and local rabies epidemiology.

(3) Dogs and cats that are overdue for a booster vaccination and that have appropriate documentation of having received a USDA-licensed rabies vaccine at least once previously should immediately receive veterinary medical care for assessment, wound cleansing, and booster vaccination. The animal should be kept under the owner's control and observed for 45 days.[39] If booster vaccination is delayed, public health officials may consider increasing the observation period for the animal, taking into consideration factors such as the severity of exposure, the length of delay in booster vaccination, current health status, and local rabies epidemiology.

(4) Dogs and cats that are overdue for a booster vaccination and without appropriate documentation of having received a USDA-licensed rabies vaccine at least once previously should immediately receive veterinary medical care for assessment, wound cleansing, and consultation with local public health authorities.

(a) The animal can be treated as unvaccinated, immediately given a booster vaccination, and placed in strict quarantine (*see* Part I.B. 5. a) (2)).

(b) Alternatively, prior to booster vaccination, the attending veterinarian may request guidance from the local public health authorities in the possible use of prospective serologic monitoring. Such monitoring would entail collecting paired blood samples to document prior vaccination by providing evidence of an anamnestic response to booster vaccination. If an adequate anamnestic response is documented, the animal can be considered to be overdue for booster vaccination (*see* Part I. B. 5. a) (3)) and observed for 45 days.[39] If there is inadequate evidence of an anamnestic response, the animal is considered to have never been vaccinated and should be placed in strict quarantine (*see* Part I. B. 5. a) (2)).

(5) Ferrets that are overdue for a booster vaccination should be evaluated on a case-by-case basis, taking into consideration factors such as the severity of exposure, time elapsed since last vaccination, number of previous vaccinations, current health status, and local rabies epidemiology, to determine need for euthanasia or immediate booster vaccination followed by observation or strict quarantine.

b) Livestock. All species of livestock are susceptible to rabies; cattle and horses are the most frequently reported infected species.[3] Any illness in an exposed animal should be reported immediately to the local health department and animal health officials. If signs suggestive of rabies develop, the animal should be euthanized, and the head or entire brain

(including brainstem) should be submitted for testing (*see* Part I.A. 10. Rabies diagnosis).

(1) Livestock that have never been vaccinated should be euthanized immediately. Animals that are not euthanized should be confined and observed on a case-by-case basis for 6 months.

(2) Livestock that are current on rabies vaccination with a USDA-licensed vaccine approved for that species should be given a booster vaccination immediately and observed for 45 days.

(3) Livestock overdue for a booster vaccination should be evaluated on a case-by-case basis, taking into consideration factors such as severity of exposure, time elapsed since last vaccination, number of previous vaccinations, current health status, and local rabies epidemiology, to determine need for euthanasia or immediate booster vaccination followed by observation or strict quarantine.

(4) Multiple rabid animals in a herd and herbivore-to-herbivore transmission of rabies are uncommon.[61] Therefore, restricting the rest of the herd if a single animal has been exposed to or infected with rabies is usually not necessary.

(5) Rabies virus is widely distributed in the tissues of rabid animals.[62-64] Tissues and products from a rabid animal should not be used for human or animal consumption[65,66] or transplantation.[67] However, pasteurization and cooking will inactivate rabies virus.[68] Therefore, inadvertently drinking pasteurized milk or eating thoroughly cooked animal products does not constitute a rabies exposure.

(6) Handling and consumption of uncooked tissues from exposed animals might carry a risk for rabies transmission.[69] Persons handling exposed animals, carcasses, and tissues should use appropriate barrier precautions.[69,70] State and local public health authorities, state meat inspectors, and the USDA Food Safety and Inspection Service should be notified if exposures occur in animals intended for commercial use. Animals should not be presented for slaughter in a USDA-regulated establishment if such animals originate from a quarantine area and have not been approved for release by the proper authority. If an exposed animal is to be custom slaughtered or home slaughtered for consumption, it should be slaughtered immediately after exposure, and all tissues should be cooked thoroughly.

c) Other animals. Other mammals exposed to a rabid animal should be euthanized immediately. Animals maintained in USDA-licensed research facilities or accredited zoological parks should be evaluated on a case-by-case basis in consultation with public health authorities. Management options may include quarantine, observation, or administration of rabies biologics.

6. Management of animals that bite humans.

a) Dogs, cats, and ferrets. Rabies virus is excreted in the saliva of infected dogs, cats, and ferrets during illness and for only a few days before the onset of clinical signs or death.[71-73] Regardless of rabies vaccination status, a healthy dog, cat, or ferret that exposes a person should be confined and observed daily for 10 days from the time of the exposure[74]; administration of rabies vaccine to the animal is not recommended during the observation period to avoid confusing signs of rabies with rare adverse vaccine reactions.[15] Any illness in the animal should be reported immediately to the local health department. Such animals should be evaluated by a veterinarian at the first sign of illness during confinement. If signs suggestive of rabies develop, the animal should be euthanized, and the head or entire brain (including brainstem) should be submitted for testing (*see* Part I.A. 10. Rabies diagnosis). Any stray or unwanted dog, cat, or ferret that exposes a person may be euthanized immediately, and the head or entire brain (including brainstem) should be submitted for testing (*see* Part I.A. 10. Rabies diagnosis).

b) Other animals. Other animals that might have exposed a person to rabies should be reported immediately to the local health department. Management of animals other than dogs, cats, and ferrets depends on the species, the circumstances of the exposure, the epidemiology of rabies in the area, the exposing animal's history and current health status, and the animal's potential for exposure to rabies. The shedding period for rabies virus is undetermined for most species. Previous vaccination of these animals might not preclude the necessity for euthanasia and testing.

7. Outbreak prevention and control. The emergence of new rabies virus variants or the introduction of nonindigenous viruses poses a significant risk to humans, domestic animals, and wildlife.[75-82] A rapid and comprehensive response involves coordination of multiple agencies (*see* Part I.A. 3. Interdisciplinary approach) to accomplish the following outcomes[83]:

- Characterize the virus at the national reference laboratory.
- Identify and control the source of the introduction.

- Enhance laboratory-based surveillance in wild and domestic animals.
- Increase animal rabies vaccination rates.
- Restrict the movement of animals.
- Evaluate the need for wildlife intervention activities (eg, point infection control, trap-vaccinate-release programs, and oral rabies vaccination programs).
- Provide public and professional outreach and education.

8. Disaster response. Animals might be displaced during and after man-made or natural disasters and require emergency sheltering.[84-86] Animal rabies vaccination and exposure histories are often not available for displaced animals, and disaster response can create situations where animal caretakers might lack appropriate training or preexposure vaccination. In such situations, it is critical to implement and coordinate rabies prevention and control measures to reduce the risk of rabies transmission and the need for human postexposure prophylaxis. Such measures include the following actions:

- Coordinate relief efforts of individuals and organizations with the local emergency operations center before deployment.
- Examine each animal at a triage site for possible bite injuries or signs of rabies.
- Isolate animals exhibiting signs of rabies pending evaluation by a veterinarian.
- Ensure that all animals have a unique identifier.
- Administer a rabies vaccine to all dogs, cats, and ferrets unless reliable proof of current vaccination exists.
- Adopt minimum standards for animal caretakers as feasible, including use of personal protective equipment, completion of the preexposure rabies vaccination series prior to deployment, and provision of appropriate training.[87]
- Maintain documentation of animal disposition and location (eg, returned to owner, died or euthanized, adopted, or relocated to another shelter with address of new location).
- Provide facilities to confine and observe animals involved in exposures (*see* Part I. B. 6. Management of animals that bite humans).
- Report human exposures to appropriate public health authorities (*see* Part I. A. 2. Rabies virus exposure).

C. Prevention and control methods related to wildlife

The public should be warned not to handle or feed wild mammals. Wild mammals and wild animal hybrids that expose persons, pets, or livestock should be considered for euthanasia and rabies testing. A person exposed by any wild mammal should immediately wash the wound thoroughly and report the incident to a health-care provider who, in consultation with public health authorities, can evaluate the need for postexposure prophylaxis.[11,12]

Translocating infected wildlife has contributed to the spread of rabies,[75-80,88] and animals that appear healthy can still be rabid. Therefore, translocation (ie, moving live animals from their point of capture and releasing them) of known rabies reservoir species should be prohibited.[89] Whereas state-regulated wildlife rehabilitators and nuisance-wildlife control operators should play a role in a comprehensive rabies control program, minimum standards for these persons who handle wild mammals should include rabies preexposure vaccination, specific rabies prevention and control training, and ongoing continuing education.

1. Carnivores. The use of oral rabies vaccines for mass vaccination of free-ranging wildlife should be considered in selected situations, with the approval of appropriate state and local agencies.[16,90] There have been documented successes using oral rabies vaccines to control rabies in wildlife in North America.[90-93] The currently licensed vaccinia-vectored oral rabies vaccine is labeled for use in raccoons and coyotes. Research to improve existing oral rabies vaccine and baits and to develop and test novel products to determine safety and efficacy must be encouraged. The distribution of oral rabies vaccines should be based on scientific assessments of the target species and followed by timely and appropriate analysis of surveillance data, with results provided to all stakeholders. In addition, parenteral vaccination (trap-vaccinate-release) of wildlife rabies reservoir species may be integrated into coordinated oral rabies vaccine programs to enhance their effectiveness. Continuous and persistent programs for trapping or poisoning wildlife are not effective in reducing populations of wildlife rabies reservoir species on a statewide basis. However, limited population control in high-contact areas (eg, picnic grounds, camps, and suburban areas) might be indicated for the removal of selected high-risk species of wildlife. State agriculture, public health, and wildlife agencies should be consulted for planning, coordination, and evaluation of vaccination or point infection control programs.[16]

2. Bats. From the 1950s to today, indigenous rabid bats have been reported from every state except Hawaii and have caused rabies in at least 54 humans in the United States.[94-103] Bats should be excluded, using appropriate methods, from houses, public buildings, and adjacent structures to prevent direct association with humans.[104,105] Such structures should then be made bat-proof by sealing entrances used by bats. Controlling rabies in bats through programs designed to reduce bat populations is neither feasible nor desirable.

Part II. Recommendations for Parenteral Rabies Vaccination Procedures

A. Vaccine administration

All animal rabies vaccines should be restricted to use by or under the direct supervision of a veterinar-

ian,[106] except as recommended otherwise (*see* Part I. B. 1. Preexposure vaccination and management).

B. Vaccine selection

All vaccines licensed by the USDA and marketed in the United States at the time of publication of this compendium are listed (Appendix 1). Newly approved vaccines and changes in label specifications made subsequent to publication should be considered as part of this list. Any of the listed vaccines can be used for revaccination, even if the product is not the same as the one previously administered. Vaccines used in state and local rabies control programs should have at least a 3-year duration of immunity. This constitutes the most effective method of increasing the proportion of immunized dogs and cats in any population.[107]

C. Adverse events

Currently, no epidemiological association exists between any particular licensed vaccine product and adverse events.[15,34,108-110] Although rare, adverse events such as vomiting, injection site swelling, lethargy, hypersensitivity, and the occurrence of rabies despite previous vaccination of an animal have been reported. Adverse events should be reported to the vaccine manufacturer and to USDA APHIS's Center for Veterinary Biologics (www.aphis.usda.gov; search for "adverse event reporting"). Although ill animals may not have a full immunologic response to vaccination, there is no evidence to suggest that adverse events are more likely to occur with rabies vaccination of ill than healthy animals. A veterinarian choosing to temporarily delay vaccinating an animal with an acute illness or condition should ensure that the animal is vaccinated as soon as possible. Animals with a previous history of anaphylaxis can be medically managed and observed after vaccination.[56] Severe adverse events related to rabies vaccination are extremely rare in animals. Decisions concerning rabies vaccination of animals with well-documented severe adverse events to rabies vaccine must be made within the context of a valid veterinarian-client-patient relationship. Due consideration should be given to the attendant risks and benefits of not vaccinating, including regulatory noncompliance. Animals not currently vaccinated that experience a rabies exposure are at greater risk for infection and death and also put their owners and the community at risk.

D. Vaccination of wildlife and wild animal hybrids

The safety and efficacy of parenteral rabies vaccines in wildlife and wild animal hybrids have not been established, and no rabies vaccines are currently licensed for use in these animals. Thus, any use of rabies vaccines in these animals is considered extralabel use. Zoos or research institutions may establish vaccination programs in an attempt to protect valuable animals, but these should not replace appropriate public health activities that protect humans (*see* Part I. B. 1. d) (3)).

E. Accidental human exposure to rabies vaccines

Human exposure to parenteral animal rabies vaccines listed in Appendix 1 does not constitute a risk for rabies virus infection. Human exposure to vaccinia-vectored oral rabies vaccines should be reported to state health officials.[111,112]

F. Rabies certificates

All agencies and veterinarians should use Form 51, the rabies vaccination certificate recommended by the National Association of State Public Health Veterinarians,[53] or should use an equivalent. The form must be completed in full and signed by the administering or supervising veterinarian. Computer-generated forms containing the same information are also acceptable.

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Appendix 1

Rabies vaccines licensed and marketed in the United States, 2016.

Product name	Produced by	Marketed by	For use in	Dose	Age at primary vaccination*	Booster vaccination	Route of inoculation
Monovalent (inactivated)							
RABVAC 1	Boehringer Ingelheim Vetmedica Inc License No. 124	Boehringer Ingelheim Vetmedica Inc	Dogs and cats	1 mL	3 mo	Annually	IM or SC
RABVAC 3	Boehringer Ingelheim Vetmedica Inc License No. 124	Boehringer Ingelheim Vetmedica Inc	Dogs and cats	1 mL	3 mo	1 year later and triennially	IM or SC
			Horses	2 mL	3 mo	Annually	IM
EQUI-RAB with Havlogen	Merck Animal Health License No. 165A	Merck Animal Health	Horses	1 mL	4 mo	Annually	IM
DEFENSOR 1	Zoetis License No. 190	Zoetis	Dogs	1 mL	3 mo	Annually	IM or SC
			Cats	1 mL	3 mo	Annually	SC
DEFENSOR 3	Zoetis License No. 190	Zoetis	Dogs	1 mL	3 mo	1 year later and triennially	IM or SC
			Cats	1 mL	3 mo	1 year later and triennially	SC
			Sheep and cattle	2 mL	3 mo	Annually	IM
NOBIVAC: 1-Rabies	Zoetis License No. 190	Merck Animal Health	Dogs	1 mL	3 mo	Annually	IM or SC
			Cats	1 mL	3 mo	Annually	SC
NOBIVAC: 3-Rabies and 3-Rabies CA	Zoetis License No. 190	Merck Animal Health	Dogs	1 mL	3 mo	1 year later and triennially	IM or SC
			Cats	1 mL	3 mo	1 year later and triennially	SC
			Sheep and cattle	2 mL	3 mo	Annually	IM
IMRAB 1	Merial Inc License No. 298	Merial Inc	Dogs and cats	1 mL	3 mo	Annually	SC
IMRAB 1 TF	Merial Inc License No. 298	Merial Inc	Dogs and cats	1 mL	3 mo	Annually	SC
IMRAB 3	Merial Inc License No. 298	Merial Inc	Dogs and cats	1 mL	3 mo	1 year later and triennially	IM or SC
			Sheep	2 mL	3 mo	1 year later and triennially	IM or SC
			Cattle and horses	2 mL	3 mo	Annually	IM or SC
			Ferrets	1 mL	3 mo	Annually	SC
IMRAB 3 TF	Merial Inc License No. 298	Merial Inc	Dogs and cats	1 mL	3 mo	1 year later and triennially	IM or SC
			Ferrets	1 mL	3 mo	Annually	SC
IMRAB Large Animal	Merial Inc License No. 298	Merial Inc	Dogs and cats	1 mL	3 mo	1 year later and triennially	IM or SC
			Cattle and horses	2 mL	3 mo	Annually	IM or SC
			Sheep	2 mL	3 mo	1 year later and triennially	IM or SC
Monovalent (rabies glycoprotein; live canary pox vector)							
PUREVAX Feline Rabies	Merial Inc License No. 298	Merial Inc	Cats	1 mL	3 mo	Annually	SC
PUREVAX Feline Rabies 3 YR	Merial Inc License No. 298	Merial Inc	Cats	1 mL	3 mo	1 year later and triennially	SC
Combination (inactivated)							
Equine POTOMAVAC + IMRAB	Merial Inc License No. 298	Merial Inc	Horses	1 mL	3 mo	Annually	IM
Combination (rabies glycoprotein; live canary pox vector)							
PUREVAX Feline 3/Rabies	Merial Inc License No. 298	Merial Inc	Cats	1 mL	8 wk	Every 3 to 4 wk until 3 mo and annually	SC
					3 mo	3 to 4 wk later and annually	SC
PUREVAX Feline 4/Rabies	Merial Inc License No. 298	Merial Inc	Cats	1 mL	8 wk	Every 3 to 4 wk until 3 mo and annually	SC
					3 mo	3 to 4 wk later and annually	SC
Oral (rabies glycoprotein; live vaccinia vector)†							
RABORAL V-RG	Merial Inc License No. 298	Merial Inc	Raccoons and coyotes	NA	NA	As determined by local authorities	Oral

*One month = 28 days. †Oral rabies vaccines are restricted for use in federal and state rabies control programs.
NA = Not applicable.
Information is provided by the vaccine manufacturers and USDA APHIS's Center for Veterinary Biologics and is subject to change.

Appendix 2

Rabies vaccine manufacturer contact information

Manufacturer	Phone No.	URL
Boehringer Ingelheim Vetmedica Inc	800–638–2226	www.bi-vetmedica.com
Merck Animal Health Inc	800–521–5767	www.merck-animal-health-usa.com
Merial Inc	888–637–4251	us.merial.com
Zoetis	800–366–5288	www.zoetis.com

RABIES FAST FACTS

What is rabies?	Rabies is a serious disease that is caused by a virus. Each year it kills more than 50,000 people and millions of animals around the world.
Is rabies a problem everywhere?	Rabies is a big problem in Asia, Africa, and Central and South America. In the United States, rabies has been reported in every state except Hawaii.
Who gets rabies?	Any mammal can get rabies. Raccoons, skunks, foxes, bats, dogs, and cats can get rabies. Cattle and humans can also get rabies. Animals that are not mammals–such as birds, snakes, and fish–do not get rabies.
How does an animal get rabies?	Rabies is caused by a virus. An animal gets rabies from saliva, usually from a bite of an animal that has the disease.
How do you know if an animal has rabies?	Animals with rabies may act differently from a healthy animal. Wild animals may move slowly or may act as if they are tame. A pet that is usually friendly may snap at you or may try to bite. Some signs of rabies in animals are: • changes in an animal's behavior • general sickness • problems swallowing • increased drooling • aggression
Can rabies be prevented?	Yes! Rabies can be prevented by vaccine and thorough cleaning of the wound. If you are bitten by an animal that could have rabies, immediately clean the bite wound with soap and water and see your doctor.
How can I prevent rabies?	• Vaccinate your dogs, cats, and ferrets against rabies • Keep your pets under supervision • Do not handle wild animals. If you see a wild animal or a stray, especially if the animal is acting strangely, call an animal control officer. • If you do get bitten by an animal, wash the wound with soap and water for at least 5 minutes. Call your doctor to see if you need shots. • Get your pets spayed or neutered. Pets that are fixed are less likely to leave home, become strays, and make more stray animals.

GENERAL INFORMATION ABOUT RABIES DISEASE

Rabies is preventable, however, is always fatal if untreated! Edward Rubenstein and Daniel Federman write in their 1993 edition of "Scientific American Medicine" the following specifics with regard to rabies:

Rabies is an acute viral infection of the central nervous system that affects mammals. It is transmitted by the bite of an infected animal which inoculates saliva containing the rabies virus into the patient. The virus replicates in muscle cells near the site of the bite. The incubation period ranges from 12 to 701 days and probably averages 30 days or less.

After replicating in local muscle cells, the virus spreads via nerves to the central nervous system. It then replicates in the brain before moving via the nerves into other tissues, including the salivary glands from which it is shed.

A rabid animal can transmit the disease through its saliva during the clinical period and also for as much as 5 days prior to showing signs of the disease.

Clinical Course: The entire clinical course is quite variable and may take only a few hours but usually is 5 to 7 days.

The *initial phase*/prodromal phase in the typical case lasts 1 to 2 days - marked by pain and paresthesia in the area of the bite, gastrointestinal and upper respiratory symptoms, irritability, apprehension and a sense of impending death. Hydrophobia and aerophobia occur in some patients.

The patient then enters an *excitation stage* that is marked by hyperventilation, hyperactivity, disorientation and even seizures.

During the next few days the patient becomes lethargic and begins to show paralysis, particularly in those areas innervated by the cranial nerves and in the somatic muscles, bladder, and bowels. Gradual involvement in the cardiac muscle and paralysis of respiratory muscles lead to death.

Diagnosis: Rabies should be considered if classic signs of hydrophobia, aerophobia and excited behavior are present and in any case of encephalitis or myelitis of unknown etiology.

A rabid animal can transmit the disease through the saliva during the clinical period and also for as much as 5 days prior to showing signs of the disease. Aerosol transmission has been reported from bats in caves - one in Texas and corneal transmission has occurred from transplants. Rabies in most animals is characterized by changes in behavior (including aggressiveness or unusual friendliness) and paralysis, especially of the hind quarters and throat. Although rabies is primarily transmitted by bite, there is some risk of infection should saliva or nervous tissue from a rabid animal get into an open wound or into mucous membranes.

Prompt local wound treatment is important. Human bites and scratches should be thoroughly washed with soap and water.

Rabies has been confirmed in bats from all areas of New York. The proportion of rabid bats is small, probably less than 1% but the widespread distribution of the cases in New York makes every bat bite or contact a potential exposure to rabies. Whenever a person is bitten or exposed by a bat that is not available for immediate testing, rabies vaccination should be given without delay. Anywhere in New York bats may be a source of infection for terrestrial mammals, especially gray foxes, cats, and horses.

Rabies in Humans

In humans, signs and symptoms usually occur 30-90 days after the bite but can occur within days. Once a person develops symptoms, it is most likely to be fatal. This is why it is very important to notify Public Health (761-6580) right away if you are aware someone has been bitten by an animal that might be rabid. **In Warren County, post exposure prophylaxis treatment is available at Glens Falls Hospital following Public Health approval.**

Early symptoms of rabies include fever, headache, sore throat, and feeling tired. As the virus gets to the brain, the person may act nervous, confused, and upset. With quick reporting and adequate treatment, rabies is preventable.

Other symptoms of rabies in humans include:

- pain or tingling at the site of the bite
- hallucinations (for example seeing things that are not really there)
- hydrophobia ("fear of water" due to spasms in the throat)
- paralysis (unable to move parts of the body)

As the disease advances, the person enters into a coma and dies.

Rabies

Last reviewed: November 2011

- Versión en español

What is rabies?

Rabies is a deadly disease caused by a virus that attacks the central nervous system (brain and spinal cord). Infected mammals can transmit rabies virus to humans and other mammals. Rabies is almost always fatal once symptoms appear. Fortunately, only a few human cases are reported each year in the United States.

What animals can get rabies?

Rabies is most often seen among wild animals such as raccoons, bats, skunks and foxes, but any mammal can be infected with rabies. Pets and livestock can get rabies if they are not vaccinated to protect them against infection. Among domestic animals, cats are most frequently diagnosed with rabies in New York State.

Some animals *almost never* get rabies. These include rabbits and small rodents such as squirrels, chipmunks, rats, mice, guinea pigs, gerbils and hamsters. It is possible for these animals to get rabies, but only in rare circumstances, such as if they are attacked but not killed by a rabid animal.

Reptiles (such as lizards and snakes), amphibians (like frogs), birds, fish and insects do not get or carry rabies.

What are the signs of rabies in animals?

The first sign of rabies is usually a change in an animal's behavior. It may become unusually aggressive or tame. The animal may lose its fear of people and natural enemies. A wild animal may appear affectionate and friendly. It may become excited or irritable and attack anything in its path. Staggering, convulsions, choking, frothing at the mouth and paralysis are sometimes seen. Many animals will make very unusual sounds. Infected animals usually die within one week after showing signs of rabies.

How do people become exposed to rabies?

People usually get exposed to the rabies virus when an infected animal bites them. Exposure may also occur if saliva from a rabid animal enters an open cut or mucous membrane (eyes, nose or mouth).

What should I do if I am exposed to rabies?

Wash all wounds thoroughly with soap and water and seek medical attention immediately.

Report all animal bites to your county health department, even if they seem minor. The phone number for your county health department can be found in the government listing of your telephone directory or the New York State Department of Health (NYSDOH) website at: http://www.health.ny.gov/diseases/communicable/zoonoses/rabies/contact.htm.

Try to keep track of the animal that exposed you and report this information to your county health department so the animal can be captured safely, if possible. In the case of a bat, you may be able to safely capture it yourself and take it to your county health department where it will be transferred to the state for rabies testing. To learn

how to capture a bat safely, view a short video (1 minute 22 seconds) at www.health.ny.gov/diseases/communicable/zoonoses/rabies/ .

Healthy dogs, cats, ferrets and livestock that have bitten or otherwise caused a potential human exposure to rabies will be confined under the direction of the county health department and observed for ten days following the exposure. If the animal remains healthy during this period, the animal did not transmit rabies at the time of the bite.

Other types of animals that cause a potential human exposure must be tested for rabies under the direction of the county health department. If an animal cannot be observed or tested for rabies, treatment may be necessary for the people exposed. Your county health department will assist you and your physician to determine whether treatment is necessary.

What is the treatment for people exposed to rabies?

Treatment after rabies exposure consists of a dose of human rabies immune globulin (HRIG) administered as soon as possible after exposure, plus 4 doses of rabies vaccine given over two weeks. If there is a wound, the full dose of HRIG should go into the wound, if possible. The first vaccine dose is given at the same time, with the remaining injections given on days 3, 7 and 14 following the initial injection. People who have weakened immune systems may require a fifth dose of vaccine, as determined by their doctor.

A person who has already been vaccinated for rabies and is exposed to rabies must receive two booster vaccine doses three days apart immediately after exposure. They do not need an injection of HRIG.

What happens if a rabies exposure goes untreated?

Exposure to a rabid animal does not always result in rabies. If treatment is initiated promptly following a rabies exposure, rabies can be prevented. If a rabies exposure is not treated and a person develops clinical signs of rabies, the disease almost always results in death.

How do I protect my pets from rabies?

The best way to keep pets safe from rabies is to vaccinate them and keep their shots up-to-date. If your pet has been injured by a rabid animal, contact your veterinarian to get medical care. Even though your pet has been vaccinated, a booster dose of rabies vaccine may be needed within five days of the incident. Contact your county health department to determine what additional follow-up may be needed.

What can people do to protect themselves against rabies?

- Don't feed, touch or adopt wild animals, stray dogs or cats.
- Be sure your pet dogs, cats and ferrets as well as horses and valuable livestock animals are up-to-date on their rabies vaccinations. Vaccination protects pets if they are exposed to rabid animals. Pets too young to be vaccinated should be kept indoors and allowed outside only under direct observation.
- Keep family pets indoors at night. Don't leave them outside unattended or let them roam free.
- Don't attract wild animals to your home or yard. Keep your property free of stored bird seed or other foods that may attract wild animals. Feed pets indoors. Tightly cap or put away garbage cans. Board up any openings to your attic, basement, porch or garage. Cap your chimney with screens.
- If nuisance wild animals are living in parts of your home, consult with a nuisance wildlife control expert about having them removed. You can find wildlife control experts, who work on a fee-for-service basis, in your telephone directory under pest control.

- Teach children not to touch any animal they do not know and to tell an adult immediately if they are bitten by any animal.
- If a wild animal is on your property, let it wander away. Bring children and pets indoors and alert neighbors who are outside. You may contact a nuisance wildlife control expert who will remove the animal for a fee.
- Report all animal bites or contact with wild animals to your county health department. If possible, do not let any animal escape that has possibly exposed someone to rabies.

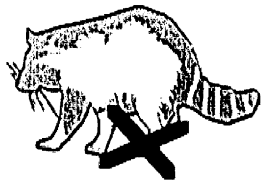
Where can I get more information about rabies?

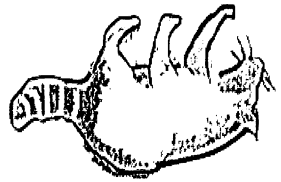
The county health department is your best source of additional rabies information. The phone number for your county health department can be found in the government listing of your telephone directory or the NYSDOH website at: www.health.ny.gov/diseases/communicable/zoonoses/rabies/contact.htm.

Detailed rabies information is also available at the following websites:

- NYSDOH: Rabies
- Centers for Disease Control and Prevention (CDC): Rabies

Pathogenesis of Rabies





Exposure	Incubation Period	Clinical Period	Death
Bite*	usually 3 - 12 weeks	usually 3 - 7 days	• saliva dries up • virus remains in tissue of dead animal for time period limited by elevated temperature and advanced decomposition
Scratch		Virus Shedding • may begin to shed virus up to 3+ days before becoming ill • capable of active transmission	
Corneal transplant			
Aerosol			
Mucous membrane & open wound		<u>clinical signs</u> • paralysis • behavioral changes (aggressive or tame) • self mutilation	
Oral			

* A bite exposure from a rabid animal is the most common route of transmission.

Rabies in Domestic Animals[1]: Management of Exposure[2] to a Known or Suspect-rabid Animal

	Exposure	Incubation Period	Pre-clinical Period	Clinical Period
		Duration: 10 days to several months	Duration: 3-4 days	Duration 1-7 days --->Death
Progression of Disease	BITE SCRATCH (from rabid animal, e.g., raccoon, bat, etc.)	*can't tell animal is infected *animal can't infect others during this stage	*animal may shed virus a few days before signs of illness appear *capable of active transmission	Clearly abnormal behavior *paresis/paralysis *unusually aggressive or tame *foaming at mouth *self-mutilation
Animal Management	If currently vaccinated[3], boost within 5 days of exposure to protect against rabies from this encounter If not vaccinated, quarantine for 6 months or euthanize	**6 MONTH QUARANTINE** The 6 month quarantine period will prevent contact between the exposed animal and the public and other animals during the period the animal is likely to develop rabies due to this encounter	**10 DAY OBSERVATION** When a domestic animal bites a person, it MUST be confined AND observed for 10 days to determine if the animal has rabies; unless the owner wishes the animal to be destroyed, in which case the animal must be tested for rabies. If the animal is not sick or dead in 10 days, did <u>not</u> expose person to rabies; If animal shows signs of rabies or dies within 10-day period, immediate rabies examination is necessary.	

NOTE: There is no post-exposure treatment for animals which are not currently vaccinated. If an animal is **not currently vaccinated**, it MUST be quarantined for 6 months OR euthanized.

[1]Domestic animals include: `cat, dog, ferret, and domestic livestock i.e. sheep, horses, cattle, goats, swine`

[2]A domestic animal exposure is defined as a bite or scratch from, or direct contact with, a rabid or suspect-rabid animal.

[3]See NYS Sanitary Code, Chapter 10, Health, Part 2, Section 2.14 subdivision (a)(4) for definition of "current vaccination."

WARREN COUNTY RABIES PROGRAM STATISTICS

	2017	2018	2019	2020	2021
Confirmed Rabid Animals	1 cat 1 raccoon	1 bat 1 Unsatisfactory specimen	1 bat 1 raccoon-no exposure	1 raccoon 1 fox	1 skunk
Animal Specimens Submitted for Testing	39	30	40 1 unsatisfactory	29	37
Animal Bites	272	255	259	207	228
Patients Receiving Pre-Exp. Vac. (3 Injections) or Booster Vacc. Fee: $345.00/Dose	8	5	9	unknown	1
Patients Receiving Post-Exp. Vac. Series @ GF Hosp. (All RIG and First Injections are Given at GF Hospital)	27 4 refusals	29 @ GFH 6 @ other hospitals 6 refusals 3 boosters	25	20	35
Patients Receiving Post-Exp. Vac. Series @ P. Health (All RIG and First Injections are Given at GF Hospital)	3	0	1	2	0
Animal Clinics	**20**	**17**	**17**	**5**	**5**
Animals Receiving Rabies Vaccinations	**598**	**693**	**638**	**160**	**280**

	2019	**2020**	**2021**
Expenses paid in relation to Rabies Program:	$27,671.97	$20,969.81	
Amount vouchered to New York State:	$21,616.63	$17,331.17	*Not Available*
Rabies Clinic Donations:	$5,672	$1,948	*At This Time*
Total program cost to Warren County:	$383.34	$1690.64	
	98.61% covered	91.94% covered	

Note: Data above reflects actual expenses incurred and both actual cash received at clinics and amounts vouchered to the State during 2019 and 2020. Due to COVID-19 pandemic, we did not have any clinics from March to September 2020, therefore less in donations for that year. However, overall we were able to cover 98.16% of all rabies costs in 2019 and 91.94% in 2020. In 2019, 67.66% of the clinics were covered by donations while in 2020 ,71.54% was covered. We find that human vaccines, most patients have health insurance therefore the hospitals are able to bill for these services and this reduces the costs to the County. However, if someone does not have health insurance, the local hospital will discount the first dose of rabies vaccine at the Medicaid rate and the patient then comes for the last three or four doses to the County for those vaccinations. All these can be billed to the State. 2021 expenses are not available at this time.

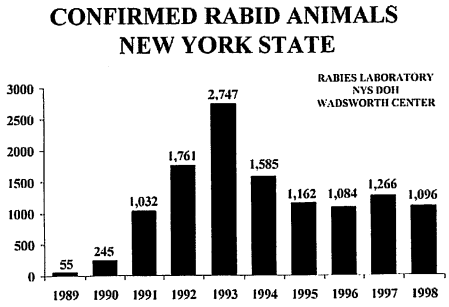
Published on *New York State Department of Health, Wadsworth Center* (https://www.wadsworth.org)

History [1]

History in New York State

Rabies in New York State was initially a disease carried by domestic dogs, a problem brought to all of North America by European settlers in the 1700s. With the advent of record keeping in the 1930s, reported cases of animal rabies fluctuated between 20 and 600 annually. Most cases were recorded in domestic dogs although there was also some spillover to livestock. From 1925 until 1944 there were 10 human rabies fatalities, all linked to domestic dog contact.

Postwar compulsory canine vaccination programs in New York controlled the rabies cycle in domestic dogs by the early 1950s, but rabies in foxes spread concomitantly into the state from the south. Wildlife rabies has cycled in terrestrial carnivores in some areas of the state since the 1950s, mainly in red foxes, skunks and raccoons. The most persistent problems until 1990 were periodic rabies incursions into red fox populations in northern New York counties. The disease found its way to northern New York from the Provinces of Ontario and Quebec, Canada, where rabies was enzootic.



Bat Rabies

Rabies virus infection in bats was first recognized in the US in 1953, and the first rabid bat was identified in New York State in 1956. Since then, the disease has been identified in each of New York's nine species of insectivorous bats and is widely distributed geographically within the state. Bats and rabid bats can be found in every corner of New York State, from Manhattan to the most remote area of the Adirondacks.

Among bats encountered by people and pets that are submitted to the rabies laboratory for testing, about 3% are found to be rabid. Among normally behaving bats collected in their natural habitats, a fraction of 1% are rabid. Outbreaks of rabies in bat populations have not been observed, and finding one rabid bat in a colony of bats is not evidence of greater prevalence of rabies in that population.

Rabies infection in bats is similar to the disease in other mammals. It is characterized by a variable incubation period that can be months long, a clinical period of about a week with behavioral

changes and progressive paralysis leading to death, and the capacity to transmit the virus by bites inflicted during the clinical period.

Well documented instances of transmission of rabies from bats to terrestrial mammals have occurred in the state, particularly to domestic cats, grey foxes and horses.

There have also been two human rabies deaths attributable to bat rabies in New York State: in 1993 in an 11-year-old Sullivan County resident, and in 1995 in a 13-year-old resident of a nearby Connecticut community that was being treated in a Westchester County hospital.

Since 1990, 20 of 22 domestically acquired human rabies infections in the United States have resulted from infection with bat rabies variants, and in only one of these cases was there a clearly documented bat bite. In many of the other cases there had been a bat encounter where direct contact was probable, but no bite was detected.

Because of these observations, and because bat bites may result in limited injury, rabies post-exposure treatment may be provided following encounters with bats where there is a probability a bite may have occurred and gone undetected, unless the bat can be captured and tests negative for evidence of rabies infection. These changing practices [2] have resulted in an increase in the number of bats received for testing at the Wadsworth Rabies Laboratory.

The Raccoon Rabies Epidemic

An intense and widespread rabies outbreak presently affects raccoon populations across the US eastern seaboard, from Maine to Florida. The raccoon rabies outbreak reached New York from the south in 1990, and has continued to spread so that now nearly the entire state is affected.

This wildlife rabies problem first emerged in Florida in the early 1950's, and spread to its current distribution at a steady rate of 10-20 miles per year, augmented by a few "jumps" of greater distances resulting from the long-distance movement of infected raccoons by human activities.

The great majority of cases in New York have occurred in raccoons, but the disease also has been transmitted by infected raccoons to a wide variety of other wild mammals and unvaccinated domestic animals.

The number of laboratory-confirmed rabid animals in the state increased dramatically as the outbreak spread across the state, reaching 2,747 in 1993, the greatest single-state annual total in the history of the United States.

When raccoon rabies invades an area, there are increasing numbers of cases for a 1 -2 year period, followed by diminished numbers of rabid animals as the raccoon population wanes due to the rabies-related mortality. Periodic flare-ups occur as raccoon populations rebound locally (approximately 5 year cycles).

The raccoon rabies outbreak is extremely costly, due to increased expenditures for traditional rabies control activities such as pet and livestock vaccination programs, laboratory testing, animal control activities, and public education preventive measures.

The greatest outbreak-related increase in expenditures has been a consequence of a tremendous increase in the number of human rabies exposures requiring rabies post-exposure vaccinations. At approximately $1,000.00 per person treated, the increase from the pre-outbreak average of 100 per year to greater than 2,500 treatments per year is costing New Yorkers more than $2 million annually.

New York State has been a leader in the conduct of field trials to develop novel methods of wildlife rabies control, such as the distribution of vaccine-laden baits to immunize raccoon populations to interrupt and extinguish the rabies outbreak.

Source URL (modified on 06/08/2021 - 1:16pm): https://www.wadsworth.org/programs/id/rabies/history

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Links
[1] https://www.wadsworth.org/programs/id/rabies/history
[2] http://www.cdc.gov/rabies/exposure/index.html

Report of N.Y. State Dept. of Health Rabies Laboratory

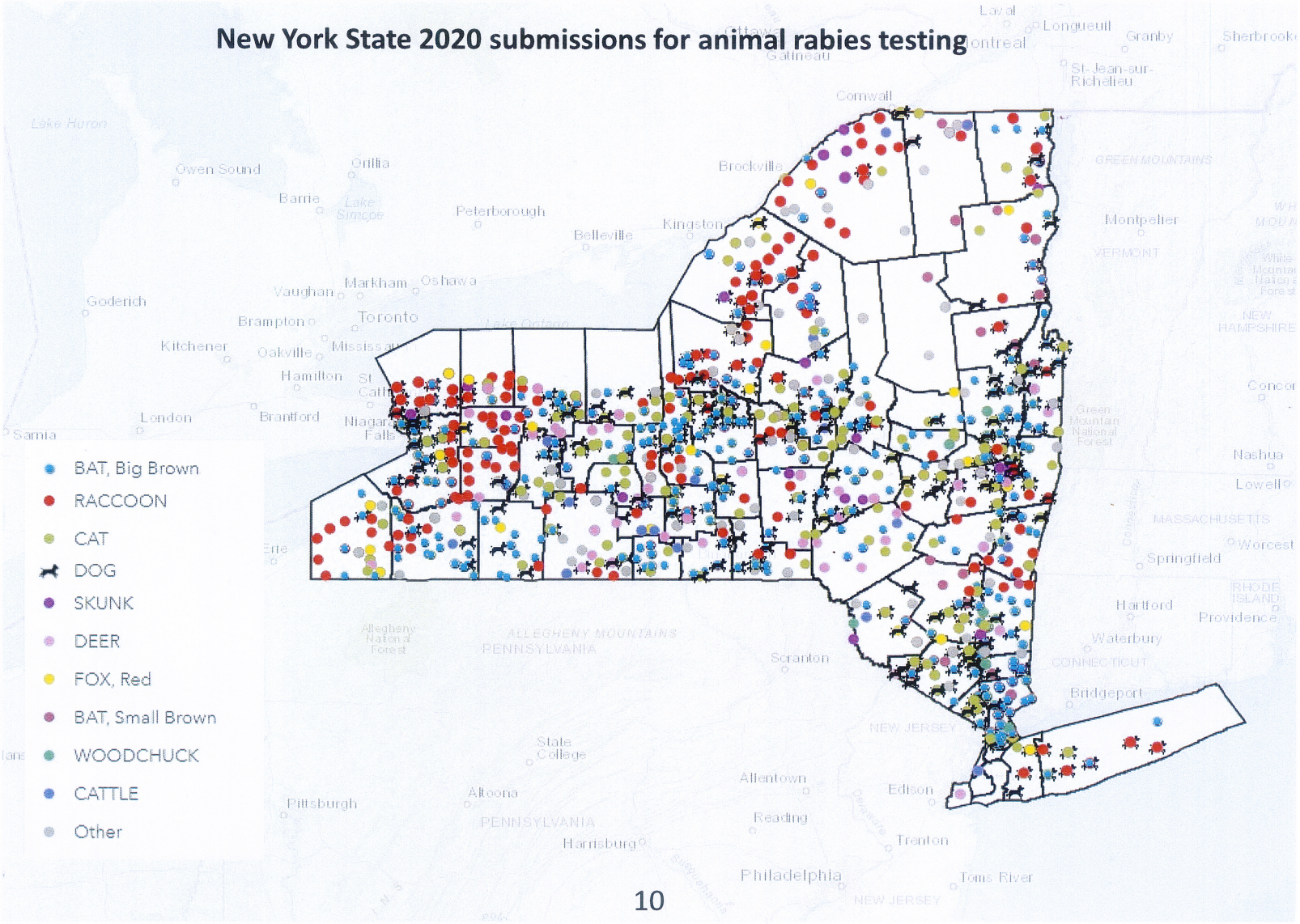
01/01/2019 to 12/31/2019

Number examined ... Number positive

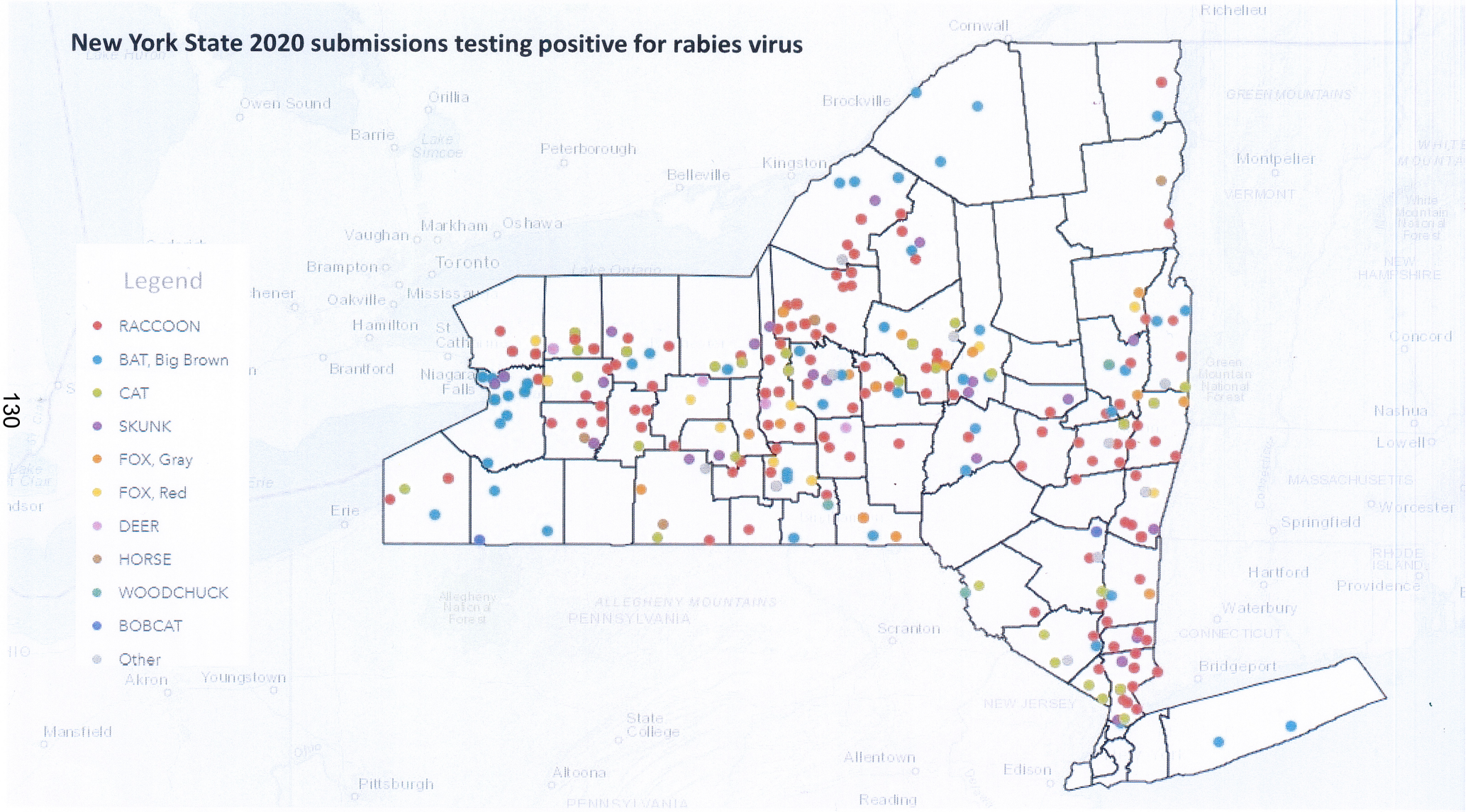
COUNTY	Dogs		Cats		Cattle		Other Domestic		Skunk		Fox		Bats		Raccoons		Rodents Lagamorphs		Other Wild		Total Rcvd	Total Positive
Albany	34	0	46	1	1	0	7	0	4	1	3	1	112	2	10	5	11	0	4	0	232	10
Allegany	1	0	4	0	2	1	4	2	0	0	0	0	16	0	3	0	2	0	7	0	39	3
Bronx	3	0	3	0	0	0	0	0	0	0	0	0	2	0	2	0	6	0	0	0	16	0
Broome	22	0	18	0	0	0	3	0	3	2	1	1	51	2	0	0	2	0	7	0	107	5
Cattaraugus	1	0	12	0	1	0	3	0	2	1	2	0	35	0	13	1	1	0	7	0	77	2
Cayuga	11	0	19	2	0	0	1	0	5	4	1	1	57	1	16	9	2	0	4	0	116	17
Chautauqua	1	0	18	1	1	0	5	0	1	0	2	1	21	2	13	1	0	0	4	0	66	5
Chemung	4	0	13	1	2	1	1	0	2	1	1	1	20	3	3	0	1	0	1	0	48	7
Chenango	4	0	10	0	1	0	0	0	1	0	2	0	23	3	6	3	2	0	5	0	54	6
Clinton	13	0	9	0	2	0	4	0	29	0	2	0	24	2	16	0	0	0	21	0	120	2
Columbia	6	0	19	0	2	0	4	0	1	0	4	2	30	0	18	9	1	0	2	0	87	11
Cortland	9	0	7	0	2	0	0	0	1	1	2	0	16	3	0	0	0	0	9	0	46	4
Delaware	2	0	3	0	1	0	2	0	1	1	1	0	16	1	8	3	1	0	5	0	40	5
Dutchess	7	0	27	0	0	0	3	0	2	0	3	2	44	0	10	6	2	0	7	1	105	9
Erie	126	0	118	0	0	0	3	0	9	0	9	0	490	18	148	6	12	0	20	0	935	24
Essex	3	0	5	0	0	0	0	0	8	0	0	0	23	1	20	12	1	0	14	0	74	13
Franklin	6	0	5	0	3	0	4	0	3	0	4	0	18	2	22	0	2	0	7	0	74	2
Fulton	3	0	5	0	1	0	0	0	0	0	0	0	9	0	0	0	0	0	1	0	19	0
Genesee	3	0	15	1	1	0	2	0	0	0	1	0	16	0	28	5	0	0	2	0	68	6
Greene	4	0	4	0	0	0	1	0	0	0	1	1	13	1	3	0	1	0	3	0	30	2
Hamilton	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	6	0
Herkimer	4	0	7	1	2	0	0	0	1	1	1	0	29	1	7	7	2	0	3	0	56	10
Jefferson	13	0	19	1	1	0	0	0	75	3	14	0	75	2	129	4	2	0	7	0	335	10
Kings	0	0	1	0	0	0	0	0	0	0	0	0	3	0	1	0	5	0	2	0	12	0
Lewis	4	0	10	0	3	0	4	0	6	0	1	0	28	0	11	2	1	0	5	0	73	2
Livingston	2	0	12	0	0	0	3	0	0	0	2	1	16	1	2	1	0	0	8	0	45	3
Madison	10	0	8	1	2	0	0	0	0	0	0	0	25	3	9	2	0	0	2	0	56	6
Monroe	17	0	23	1	0	0	2	0	2	0	2	0	84	3	8	6	1	0	11	0	150	10
Montgomery	2	0	2	0	2	0	3	0	0	0	0	0	7	0	2	1	1	0	1	0	20	1
Nassau	21	0	58	0	0	0	1	0	1	0	0	0	11	0	12	0	5	0	2	0	111	0
New York	2	0	6	0	0	0	0	0	1	0	0	0	3	0	11	0	4	0	0	0	27	0
Niagara	13	0	18	0	1	0	1	0	11	0	5	0	61	3	106	2	1	0	2	0	219	5
Oneida	11	0	19	0	1	1	5	0	8	4	2	2	38	0	8	2	1	0	1	0	94	9
Onondaga	67	0	60	2	1	0	2	0	3	1	1	1	230	7	4	1	2	0	7	0	377	12
Ontario	3	0	10	1	4	0	1	0	0	0	0	0	32	2	2	2	0	0	4	0	56	5
Orange	25	0	34	0	0	0	1	0	2	0	5	1	42	2	12	4	2	0	8	0	131	7
Orleans	2	0	11	0	1	0	1	1	1	1	2	0	30	1	11	3	2	1	4	0	65	7
Oswego	16	0	10	0	2	0	9	0	12	4	11	2	70	3	40	17	1	0	7	0	178	26
Otsego	4	0	12	0	0	0	0	0	1	0	1	0	52	1	1	0	0	0	10	0	81	1
Putnam	1	0	9	0	0	0	0	0	1	0	0	0	79	1	3	3	2	0	0	0	95	4
Queens	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	4	0
Rensselaer	15	0	10	1	1	0	4	0	2	0	0	0	38	0	7	5	1	0	5	0	83	6
Rockland	3	0	30	0	0	0	0	0	3	1	2	1	20	1	11	5	8	2	3	1	80	11
Saratoga	13	0	44	0	0	0	2	0	6	1	6	1	41	1	12	3	5	0	3	0	132	6
Schenectady	13	0	24	1	0	0	0	0	1	0	0	0	31	1	1	0	3	0	1	0	74	2
Schoharie	10	0	16	1	0	0	2	0	1	1	0	0	8	0	3	0	1	0	4	0	45	2
Schuyler	0	0	2	0	0	0	2	0	1	1	1	1	4	1	0	0	0	0	2	0	12	3
Seneca	3	0	4	0	0	0	4	0	3	2	0	0	8	0	4	1	0	0	3	0	29	3
St. Lawrence	4	0	12	0	1	0	2	0	11	0	5	0	66	1	62	0	0	0	14	0	177	1
Steuben	8	0	23	1	3	0	2	0	3	3	3	3	22	2	11	4	1	0	10	0	86	13
Suffolk	23	0	45	0	0	0	0	0	0	0	2	0	37	0	14	0	2	0	14	0	137	0
Sullivan	5	0	9	1	1	0	1	0	0	0	2	0	7	0	2	1	3	0	4	0	34	2
Tioga	4	0	8	0	0	0	2	0	0	0	5	4	19	1	4	3	0	0	8	1	50	9
Tompkins	12	0	22	0	3	1	2	0	4	2	7	3	131	2	9	3	2	0	9	0	201	11
Ulster	15	0	31	3	2	0	3	0	1	1	4	1	47	1	29	10	4	0	10	1	146	17
Warren	8	0	8	0	0	0	1	0	1	0	1	0	26	1	2	1	0	0	2	0	49	2
Washington	7	0	8	1	2	0	1	0	1	1	4	1	21	1	4	3	1	0	1	0	50	7
Wayne	4	1	16	1	3	0	3	2	0	0	3	3	14	0	6	5	2	0	3	0	54	12
Westchester	17	0	48	1	0	0	1	0	6	1	0	0	245	10	8	4	6	0	2	0	333	16
Wyoming	1	0	5	0	3	0	3	0	0	0	2	0	12	0	15	6	1	1	5	0	47	7
Yates	7	0	11	0	0	0	2	0	1	1	1	0	5	0	1	1	0	0	2	0	30	2
Total	653	1	1066	24	59	4	117	5	242	40	135	35	2754	94	925	172	119	4	323	4	6,393	383

Any unlisted county had no specimens processed during the reporting period.

New York State 2020 submissions for animal rabies testing



New York State 2020 submissions testing positive for rabies virus



RABIES

Rabies is a deadly disease caused by a virus that attacks the nervous system. Rabies virus is in the saliva and nervous tissue of a sick animal.

Rabies is most often seen in wildlife animals such as raccoons, bats, skunks and foxes. Cats, dogs, ferrets and livestock can also get rabies if they are not vaccinated to protect them.

You can get rabies if a rabid animal bites you or its saliva or nervous tissue gets into an open cut or your eyes, nose or mouth.

To protect yourself, your family, and your pets...

Don't feed, touch or adopt wild animals, stray dogs or cats.

Be sure your dog, cat or ferret has up-to-date rabies vaccinations. Pets too young to be vaccinated should be kept indoors.

(over)

Don't try to separate fighting animals. Put gloves on before touching your pet if it has been in a fight.

Don't attract animals to your yard. Feed pets inside, don't leave them outside alone and don't let them run free.

A rabid animal may be unusually mean or friendly. Stay away from any animal that seems dazed or paralyzed.

Never touch a bat. If you see a bat indoors, tell an adult to call the county health department — don't let the bat get away — it may need to be tested for rabies.

Tell an adult and wash the wound immediately if you are bitten or scratched by any animal. Tell an adult to call your doctor and the county health department immediately.

For more information, contact your county health department.

New York State Department of Health

3011 02/06

NEW YORK STATE OF OPPORTUNITY. | Department of Health

ANDREW M. CUOMO
Governor

HOWARD A. ZUCKER, M.D., J.D.
Commissioner

SALLY DRESLIN, M.S., R.N.
Executive Deputy Commissioner

COMMUNICABLE DISEASE FORM FOR RABIES MATERIALS

The New York State Department of Health offers limited quantities of free rabies disease educational materials to New York State (NYS) residents and organizations.

To order, complete this form and submit it by mail or email to:

- Mailing address:
  NYS DOH Distribution Center
  OGS Consolidated Warehouse
  PO Box 343
  Guilderland, NY 12084
- Email address: OGS.SM.GDC@OGS.NY.GOV

Please allow 2 to 3 weeks for delivery. ***Last Update 8/6/18***

ITEM # **TITLE** (and language if other than English) (Circle)	**TYPE**	**QUANTITY** (Circle)
3002 Protect Your Cat Against Rabies!	Flier (8-1/2" x 11")	1 10 25
3012 Rabies (Spanish)	Bookmark	1 10 50 100 200
3019 Rabies: It's No Way For a Friend to Die	Poster (Husky and cat)	1 10 50 100 200
3020 Rabies: It's No Way For a Friend to Die	Poster (Retriever and cat)	1 10 50 100 200
3021 Protect Your Pet–Vaccinate Against Rabies	Poster (Cat and dog)	1 10 50 100 200
3023 Bat Rabies Alert	Magnet	1 50 100 200 300
3025 Don't Touch Me	Sticker (Bat)	1 50 100 200 300
3027 Don't Touch Me 8-1/2 x 11	Laminated Sheet (Bat)	1 50 100 200 300
3029 Don't Touch Me (Spanish)	Sticker (Bat)	1 50 100 200 300
3030 Bat Rabies Alert (Spanish)	Magnet (Bat)	1 50 100 200 300
PP18 Catch the Bat!	DVD (1:25 minute)	1 2 3 4 5

Please complete legibly. Illegible or incomplete information will affect the ability to send your requested materials.

Requestor's Name: _____

Organization: _____

Street Address: _____

(Note: no delivery to Post Office Boxes)

City/State/Zip: _____

Telephone Number: _____

Email Address: _____

Date of order: _____

Additional free NYS Department of Health educational materials available:

- Mosquito-borne and tick-borne diseases, go to https://www.health.ny.gov/forms/order_forms/mosquito-borne_tick-borne.pdf
- Other health matters, go to www.health.ny.gov/publications/4208/

APPENDIX F

Reference Names And Numbers In Warren County

Town Offices

Resources

- Contract Veterinarian
- Veterinarian
- NYS Agencies
- Law Enforcement
- Physicians

Nuisance/Wildlife Businesses

NYS County Contacts

Animal/Dog Control Officers Quick List

Warren County Public Health Rabies Clinic Information

RESOURCES

Contract Veterinarian:
(Veterinarian is available on weekends and after hours to prepare specimens if necessary.)

Contract Veterinarian	Phone	Fax	Contract Services
Glens Falls Animal Hospital 66 Glenwood Avenue Queensbury, NY 12804	792-6575	792-5136	Rabies Clinics Prep Specimens Ship Specimens Quarantine

Other Veterinarians:

	Phone	Fax	Contacts/Comments
Adirondack Animal Hospital 462 Ridge Rd Queensbury, NY 12804	793-6663	793-4793	
Countryside Veterinary Hospital 270 Queensbury Ave Queensbury, NY 12804	793-7083	793-2242	
Dr. Lansing/Queensbury Animal Hospital 623 West Mountain Rd Queensbury, NY 12804	793-5098	745-7540	
North Country Cat Hospital 13 Main St Queensbury, NY 12804	793-0994	Same as phone #	
Northway Animal **EMERGENCY Clinic** 35 Fawn Rd Gansevoort, NY 12831	761-2602	798-0692	
Quaker Animal Hospital 324 Quaker Rd Queensbury, NY 12804	761-9299	761-9296	
Schroon River Animal Hospital 150 Schroon River Rd Warrensburg, NY 12885	623-3181	623-3338	

Hospitals:

	Department	Phone	Fax
Glens Falls Hospital 100 Park Street Glens Falls, NY 12801	General **Express Care** Emergency **Inpatient Pharmacy** Infection Control **Billing**	926-1000 **926-3130** 926-3000 **926-2500** 926-2180 **926-5149**	 **926-3110** **926-2557** 926-3406 **926-5199**
Saratoga Hospital 211 Church St Saratoga Springs, NY 12866		587-3222	583-8323

New York State Agencies

		Phone	Fax
Department of Health	Zoonoses Program www.wadsworth.org/rabies	474-3186	
Department of Environmental Conservation Regional Office Hudson Street Warrensburg, NY 12885	Bureau of Wildlife	623-1200	623-3671

Law Enforcement:

	Phone	Fax
Warren County Sheriff's Office Municipal Center, 1400 State RT 9 Lake George, NY 12845	743-2500	743-2589
New York State Police Aviation Road Queensbury, NY 12804	745-1033	745-1314
Glens Falls Police Department 42 Ridge Street Glens Falls, NY 12801	761-3841	

Physicians:

	Phone	**Fax**
Adirondack Pediatrics 84 Broad Street, Glens Falls, NY 12801 email: adirondackpediatrics@yahoo.com	798-9538	798-9576
Convenient Medical Care (Andrea Becker) 319 Bay Road., Queensbury, NY 12804 email: merrihewmd@gmail.com or merrihew@me.com andrea@convenientmedicalcare.com	792-2181	792-1531
Evergreen Health Center (Andrea) 13 Palmer Avenue, Corinth, NY 12822 email: ademarsh@glensfallshosp.org	654-6499	654-7303
Garner, Andrew MD (Cindy) 8 Harrison Ave., Glens Falls, NY 12801 email: agarner@roadrunner.com	798-9401	798-9411
Glens Falls Pediatric Consultants 154 Warren Street, PO Box 141 Glens Falls, NY 12801 email: cbethel@gfpeds.com for anything clinical: dtocci@gfpeds.com	798-9985	761-7043
Goe, Eric (Trudy) 65 Elm Street, Glens Falls, NY 12801 email: goemed@nycap.rr.com	793-9636	812-0564

Health Center on Broad Street 100 Broad Street, PO Box 112 Glens Falls, NY 12801 email: mbayliss@hhhn.org	792-2223	792-8231
Hogan-Moulton, Amy MD (Melissa) 2 Broad Street Plaza, Glens Falls, NY 12801 email: lmurphy@glensfallshosp.org	926-1770	926-1799
Hoy, Christopher MD (Kim) 102 Park St., Suite 2, Glens Falls, NY 12801 email: hoy102parkstreet@live.com	798-2871	798-0216
Hudson Headwaters Health Network **(Paula x 31111)** **(Lori Gravelle, Corporate Compliance Officer)** 9 Carey Road, PO Box 3253, Qby, NY 12804 email: Lgravelle@hhhn.org	761-0300 x31312	745-1378
Irongate Family Practice Associates **(Mary King x247)** 3 Irongate Center, Glens Falls, NY 12801 email: nursemgr@irongatefamilypractice.com	793-4409	793-5886 or 615-0140
Moreau Family Health Center (Laurel Dixon) PO Box 381, Fort Edward, NY 12828 email: ldixon@hhhn.org (Office Manager) nwest@hhhn.org (Nancy West, Nurse Mgr)	761-6961	761-1006
North Country Holistic Care Center 461 Glen St., Glens Falls, NY 12801 email: northcountrymedicine@gmail.com	745-5889	745-0010
Queensbury Health Center (Janet M. Petschauer) 14 Manor Drive, Queensbury, NY 12804 email: jpetschauer@hhhn.org	798-6400	798-4105
School Based Health Clinic Stuart M. Townsend Middle School 27 Hyland Drive, Lake Luzerne, NY 12846 **Eva Guenther** (Nurse) email: guenthere@hlcs.org **Annie Horn** (Nurse) email: horna@hlcs.org **Kathy Herren** PA email: kathyherren@hotmail.com	585-6708 696-2378 x107 696-2378 x107 696-2337	585-3260 696-2160 696-2160
VA Primary Care (Tracy Arredondo RN Adm) 84 Broad Street, Glens Falls, NY 12801 email: Tracy.Arrendo@Va.gov	798-6066	761-2097
Warrensburg Health Center (Deb Lawson) 3767 Main Street, Warrensburg NY 12885 Email: dlawson@hhhn.org	623-2844	623-2476
West Mountain Primary Care (Melissa Kostek) 161 Carey Road, Queensbury NY 12804 Email: mkostek@hhhn.org	824-8610	824-2390

NUISANCE and WILDLIFE CONTROL

(Private Companies)

Adirondack Nuisance Wildlife Control
551 Dean Road
Hudson Falls, NY 12839
747-2571

Hotline for Animal Rehab & Orphans
(North Country Wild Care)
518-964-6740

Hunt's Quality Pest Control
53 Boulevard
Queensbury, NY 12804
518-793-0804

Nuisance Wildlife Control
David Lafforthun
1383 W. Galway Road
Galway, NY 12074
882-9145

ENCON:
623-1240

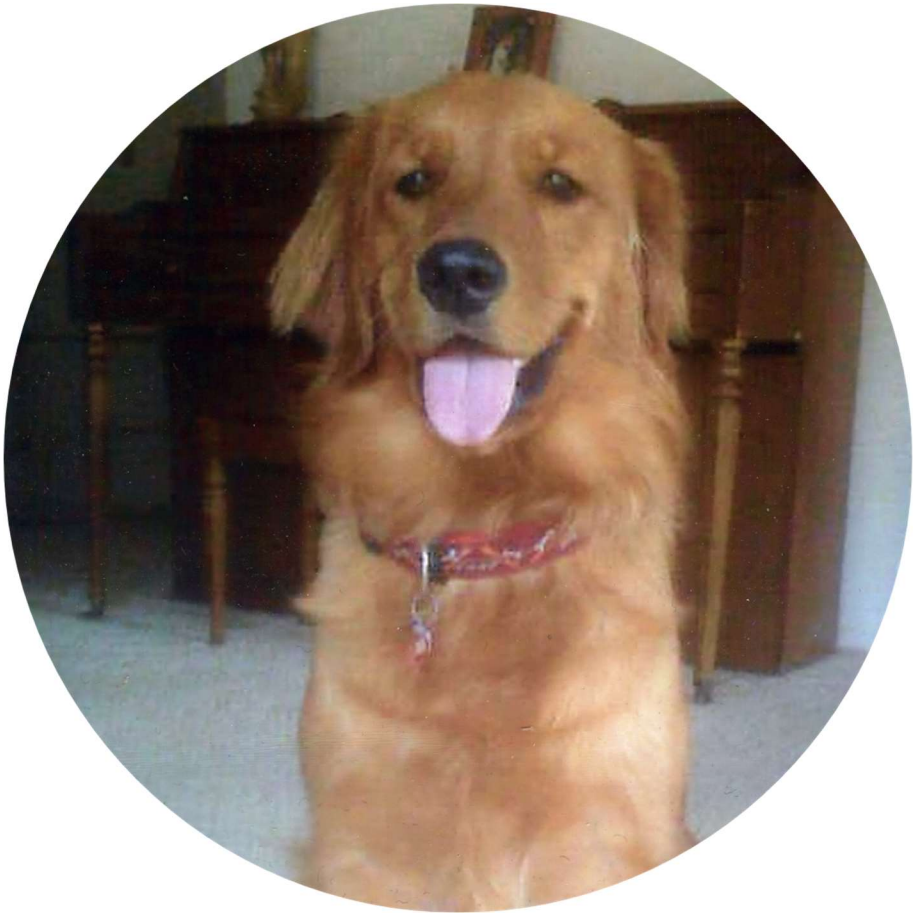
Warren County Sheriff
518-743-2500

01/11, 8/16

COUNTY HEALTH AGENCIES IN NEW YORK STATE

Albany	518-447-4620	Niagara	716-439-7456
Allegany	585-268-9250	Oneida	315-798-5064
Broome	607-778-2887	Onondaga	315-435-3165
Cattaraugus	716-373-8050	Ontario	585-396-4343
Cayuga	315-253-1405	Orange	845-291-2331
Chautauqua	716-753-4491	Orleans	585-589-3278
Chemung	607-737-2019	Oswego	315-349-3564
Chenango	607-337-1673	Otsego	607-547-4230
Clinton	518-565-4870	Putnam	845-278-6130
Columbia	518-828-3358	Rensselaer	518-270-2655
Cortland	607-753-5035	Rockland	845-364-2594
Delaware	607-832-5200	St. Lawrence	315-386-2325
Dutchess	845-486-3404	Saratoga	518-584-7460
Erie	716-961-6800	Schenectady	518-386-2818
Essex	518-873-3500	Schoharie	518-295-8382
Franklin	518-891-4471	Schuyler	607-535-8140
Fulton	518-736-5720	Seneca	315-539-1945
Genesee	585-344-2580	Steuben	607-664-2438
Greene	518-719-3600	Suffolk	631-853-3055
Hamilton	518-648-6497	Sullivan	845-292-0100
Herkimer	315-867-1176	Tioga	607-687-8563
Jefferson	315-786-3720	Tompkins	607-274-6688
Lewis	315-376-5453	Ulster	845-340-3010
Livingston	585-243-7280	Warren	518-761-6580
Madison	315-366-2361	Washington	518-746-2400
Monroe	585-753-5171	Wayne	315-946-5749
Montgomery	518-853-3531	Westchester	914-864-7359
Nassau	516-227-9663	Wyoming	585-786-8894
New York City	212-788-9830	Yates	315-536-5160

NOTES:



For Rabies Information

or a Rabies Clinic Schedule

contact

Warren County Public Health

at

518-761-6580 or 800-755-8102

or online at

www.warrencountyny.gov/healthservices

RESOLUTION REQUEST FORM NO. 7

Request to Amend County Budget*

***If this is the result of a grant award, also complete and submit Form No. 5 or 6**

DEPARTMENT NAME: Warren County Health Services
DATE: February 22, 2022

(a) **Purpose of Amendment**: To amend the 2022 budget to reflect the total additional allocation for the ELC COVID Enhanced Detection Contract **(Contract 6437-01)**

(b) Appropriation Code (with title), Object Code (with title) and Amount:
A.4193 410 Public Health-COVID-COMMCARE, Office Supplies $ 7,497.00

Revenue Code (with title), and Amount:
A.4193 4408 Public Health-COVID-COMMCARE $7,497.00

***Note: On 1/4/22 we requested a Budget Amendment of $314,492 however the additional funding total should have been $321,989.**

WARREN COUNTY HEALTH SERVICES BUDGET ANALYSIS

REVENUE AND EXPENDITURES FOR 2022 AS OF 2/10/2022 8:59:21 PM

FUND(S): A, CL, D, DM, EF, GI, MS, SD, V

CODE(S): 4010, 4013, 4054, 4190, 4018, 4189, 4191, 4192, 4193, 4194

EXPENSES	2022 BUDGETED	2022 YTD ACTUAL	2021 Prior Year Totals
Salaries - Regular	$2,863,997.00	$156,756.73	$2,257,145.86
Salaries - Overtime	$190,700.00	$11,187.66	$155,258.31
Salaries - Part Time	$804,865.00	$38,860.91	$533,265.12
100's PERSONAL SERVICES	$3,859,562.00	$206,805.30	$2,945,669.29
200's EQUIPMENT	$202,300.00	$0.00	$69,942.71
400's CONTRACTUAL	$6,390,305.00	$172,393.69	$4,927,454.35
800's EMPLOYEE BENEFITS	$1,520,202.00	$120,530.29	$1,294,741.31
TOTALS	**$11,972,369.00**	**$499,729.28**	**$9,237,807.66**

REVENUES	2022 BUDGETED	2022 YTD ACTUAL	2021 Prior Year Totals
	$9,501,877.00	$530.00	$4,788,257.21

Note: Above are Warren County Health Services YTD for 2022 Revenues and Expenses. We are in the process of closing January 2022 for our Homecare. For 2021, there are still final expenses that need to be posted and all year end quarterly grants. We also are still waiting for our Year end Preschool AVL and WIC Food vouchers. We have vouchered the state for a total of $95,373 for one of the original COVID grants for 20/21 services.

Warren County Health Services
Salaries Comparison
2022 v 2021

Total of All Depts	YTD 2022	YTD 2021	YTD 22v21	% Change	Total Budget 2022	to 12/31/21 Total Actual 2021
Regular Salaries	$156,756.73	$179,892.27	($23,135.54)	-12.86%	$2,863,997.00	$2,257,145.86
Overtime Salaries	$11,187.66	$34,371.11	($23,183.45)	-67.45%	$190,700.00	$155,258.31
Part Time Salaries	$38,860.91	$53,609.35	($14,748.44)	-27.51%	$804,865.00	$533,265.12
TOTALS	$206,805.30	$267,872.73	($61,067.43)	-22.80%	$3,859,562.00	$2,945,669.29
% current YTD Salary to Total Budget	5.36%	9.09%				

***Source: Detail G/L report for all Salary Category from 1/1/22-1/30/22.**

COVID Clinics began 1/2/2021.

Overall, total salaries are $61,067.43 or 22.80% under 2021 Salaries. Regular salaries are under 2021 due primarily to positons that remain open in both the CHHA and WIC programs. Both part time and Overtime salaries are below 2021, due to the fact that less hours have been needed for contact tracing and some clinics. The state late January took over most of the contact tracing which has helped relieve the stress on our Public Health Department. However, Public Health still needs to follow up on concerns for the community.

Warren County Health Services

Revenue and Expense Comparison 2022 vs 2021 as of 02/10/22 (2021 not final)

EXPENSES	2022 YTD Actual as of 2/10/22 G/L	2021 YTD as of 2/10/21 G/L	Variance
Salaries - Regular	$156,756.73	$179,892.27	($23,135.54)
Salaries - Overtime	$11,187.66	$34,371.11	($23,183.45)
Salaries - Part Time	$38,860.91	$53,609.35	($14,748.44)
100's PERSONAL SERVICES	$206,805.30	$267,872.73	($61,067.43)
200's EQUIPMENT	$0.00	$61,278.51	($61,278.51)
400's CONTRACTUAL	$172,393.69	$213,357.80	($40,964.11)
800's EMPLOYEE BENEFITS	$120,530.29	$163,083.43	($42,553.14)
TOTALS	**$499,729.28**	**$705,592.47**	**($205,863.19)**

REVENUES	2022 YTD ACTUAL	2021	Variance
	$530.00	**$4,293.89**	**($3,763.89)**

Comments:
Salaries: (please see previous page) overall are $61,067.43 or 22.80% below 2021 as of the 1/30/22 payroll. Salaries for 2022 are 5.36% of the budget YTD while was 9.09% of budget for 2021. As stated, due to COVID activities, Per Diem and Part Time staff were being utilized in 2021 by the Public Health Department to continue with COVID clinics and contact tracing. We have seen a signaficant decrease in both Part time and Overtime salary expenses due to the State taking over much of the contact tracing. later in January 2022. However, our Public Health staff still need to be utilized for issues that need to be addressed and followed up by our Contact Tracers, Staff for Covid Clinics and others as needed by our Public Health Department.

Equipment: No purchases as of 2/10/22.

Contractual Expenses: These are below 2021 as we still have to close year end. The Preschool and Early Intervention Program Expenses/Accruals still need to be finalized. Along with the expense related to the WIC food voucher program.

Employee Benefits: Employee benefits remain under 2021 due to savings in salaries within programs and utilizing less per diem and overtime expenses.

Revenues: Revenues reflect the YTD billings for 2022 vs 2021. January for both years have not been booked yet. We are in the process of closing January for the Homecare.

Warren County Health Services
Patient Referrals (May or May not have become Patients)
CHHA Division

CATEGORY	01/2020	02/2020	03/2020	04/2020	05/2020	06/2020	07/2020	08/2020	09/2020	10/2020	11/2020	12/2020	
SN Referral	97	88	97	58	70	80	75	85	81	94	76	74	
PRI	0	3	0	1	0	1	1	0	0	4	0	0	
SN Referrals per month	**97**	**91**	**97**	**59**	**70**	**81**	**76**	**85**	**81**	**98**	**76**	**74**	
PT Referral	49	45	42	31	30	60	51	56	68	60	53	50	
PT only	12	6	7	3	4	9	12	12	10	11	12	6	
Total Referrals per month	**109**	**97**	**104**	**62**	**74**	**90**	**88**	**97**	**91**	**109**	**88**	**80**	**1089**
19 vs 20 (%)	-4	-13	-21	-19	-21	-55	-10	-50	-29	-46	-12	-6%	

CATEGORY	01/2021	02/2021	03/2021	04/2021	05/2021	06/2021	07/2021	08/2021	09/2021	10/2021	11/2021	12/2021	
SN Referral	55	54	73	57	55	59	49	57	45	42	40	32	
PRI	1	0	0	1	0	2	3	1	1	2	4	1	
SN Referrals per month	**56**	**54**	**73**	**58**	**55**	**61**	**52**	**58**	**46**	**44**	**44**	**33**	
PT Referral	40	39	50	47	41	54	32	48	40	30	36	37	
PT only	9	11	12	9	8	11	8	8	10	5	13	12	
Total Referrals per month	**65**	**65**	**85**	**67**	**63**	**72**	**60**	**66**	**56**	**49**	**57**	**45**	**750**
20 vs 21 (%)	-40	-33	-18	8	-15	-20	-32	-32	-38	-55	-35	-44	

VISITS	01/2020	02/2020	03/2020	04/2020	05/2020	06/2020	07/2020	08/2020	09/2020	10/2020	11/2020	12/2020
SN visits	630	548	746	643	678	772	792	730	690	870	813	706
LPN visits	72	62	59	70	52	69	89	97	67	63	87	55
PT visits	326	289	254	190	205	347	364	290	363	351	332	339
OT visits	50	42	61	58	61	44	61	65	61	66	45	46
Speech visits	0	1	4	1	4	9	15	9	8	15	43	37
Total visits per month	**1078**	**942**	**1124**	**962**	**1000**	**1241**	**1321**	**1191**	**1189**	**1365**	**1320**	**1183**

VISITS	01/2021	02/2021	03/2021	04/2021	05/2021	06/2021	07/2021	08/2021	09/2021	10/2021	11/2021	12/2021
SN visits	573	561	686	668	550	624	583	618	457	381	385	328
LPN visits	57	68	76	76	61	67	49	65	43	33	35	25
PT visits	270	309	358	310	282	373	319	264	308	261	310	285
OT visits	54	61	56	29	28	42	42	38	32	31	28	42
Speech visits	32	44	37	26	28	17	24	10	5	2	2	2
Total visits per month	**986**	**1043**	**1213**	**1109**	**949**	**1123**	**1017**	**995**	**845**	**708**	**760**	**682**

Numbers current as of 02/01/2022

Attachment 5A

Warren County Health Services
Patient Served by Town
CHHA Division

Town	01/2020	02/2020	03/2020	04/2020	05/2020	06/2020	07/2020	08/2020	09/2020	10/2020	11/2020	12/2020
Adirondack	0	0	0	0	0	2	3	3	1	4	4	4
Athol	2	3	2	2	4	2	1	1	0	1	2	1
Bakers Mills	1	1	1	0	1	1	2	2	2	2	1	1
Bolton Landing	6	6	6	6	5	4	5	5	7	5	6	3
Brant Lake	6	3	4	1	4	3	7	5	4	6	5	7
Chestertown	8	7	8	10	10	10	11	8	9	9	6	7
Cleverdale	1	0	0	0	0	0	0	2	3	10	0	0
Diamond Point	2	6	7	3	1	0	2	0	4	5	5	3
Glens Falls	57	48	49	34	37	36	44	46	51	48	41	34
Hague	0	1	0	1	2	2	1	9	4	6	7	6
Johnsburg	3	3	2	2	2	3	3	5	5	4	4	4
Kattskill Bay	1	1	1	1	1	1	1	1	1	1	1	1
Lake George	13	13	11	11	13	12	18	17	16	25	27	22
Lake Luzerne	13	11	10	10	9	9	11	12	11	9	7	9
North Creek	3	3	3	4	1	2	2	1	0	0	0	0
North River	1	2	2	1	1	1	1	1	0	0	0	1
Olmstedville	0	0	0	1	1	1	1	1	2	2	2	2
Pottersville	11	8	5	4	3	4	5	7	4	5	3	4
Queensbury	90	84	92	63	61	66	66	67	66	79	82	72
Riparius	0	0	0	0	0	0	0	0	0	0	0	0
Silver Bay	0	0	0	0	1	2	2	1	0	0	1	2
Stony Creek	0	0	1	1	2	1	1	2	2	0	1	1
Warrensburg	15	17	17	15	16	25	22	20	24	26	18	22
Wevertown	1	1	0	0	0	1	0	0	0	0	1	2
Total	234	218	221	170	175	188	209	216	216	247	224	208

Town	01/2021	02/2021	03/2021	04/2021	05/2021	06/2021	07/2021	08/2021	09/2021	10/2021	11/2021	12/2021
Adirondack	3	4	3	3	2	0	3	1	1	1	0	0
Athol	0	0	4	4	1	0	0	0	3	3	1	0
Bakers Mills	1	1	1	1	1	1	1	1	1	1	1	1
Bolton Landing	3	5	2	2	4	9	12	11	6	3	3	1
Brant Lake	3	1	2	3	1	3	4	3	1	1	2	3
Chestertown	6	6	9	8	5	5	8	7	8	8	6	6
Cleverdale	0	1	2	0	0	0	0	0	0	0	0	0
Diamond Point	5	2	3	2	0	2	3	3	1	0	0	0
Glens Falls	42	46	47	51	52	46	38	31	30	27	29	27
Hague	6	3	2	3	2	3	3	4	4	2	2	2
Johnsburg	4	4	2	5	5	3	2	4	3	4	2	1
Kattskill Bay	0	0	0	0	1	2	0	0	0	0	0	0
Lake George	15	14	15	14	11	18	18	12	12	7	12	18
Lake Luzerne	8	7	7	7	5	6	10	8	6	5	6	7
North Creek	2	3	2	2	3	4	5	3	2	3	4	3
North River	0	0	0	0	0	0	0	0	0	0	0	1
Olmstedville	1	2	2	4	3	2	1	1	1	1	1	1
Pottersville	2	1	2	4	7	6	3	2	2	1	1	1
Queensbury	59	60	76	67	57	66	59	57	56	50	50	53
Riparius	0	0	0	0	0	0	0	0	0	0	0	0
Silver Bay	1	1	1	0	1	2	2	2	1	0	0	0
Stony Creek	1	1	1	0	0	0	1	1	0	0	1	2
Warrensburg	16	20	20	16	13	13	14	13	15	14	16	9
Wevertown	2	1	2	2	2	2	1	1	1	1	0	0
Total	180	183	205	198	176	193	188	165	154	132	137	136

Attachment 5B

BT ACTIVITY SHEET
BP3 (new) - 7/1/21 - 6/30/22
Page 1
Topic Color Codes
Red/Chempack; Green/SNS; Blue/Mass Fatality; Black/Training;
Purple/Special Needs; Orange/Drill; Black/Pan Flu

January every Tuesday	In Person	COVID-19 Vaccination Clinic @ HSB	Clinic team	Response
1/4	Virtual	NYSACHO COVID-19 Review of NYS Guidance Updates	Ginelle Jones, Pat Belden	Planning/Response
1/7	Virtual	NYSACHO Rural County COVID-19 Response Meeting	Ginelle Jones, Pat Belden	Planning/Response
1/7	Virtual	SUNY ADK return To School Spring Semester COVID-19 Planning meeting	Ginelle Jones, Pat Belden	Planning/response
1/11	Virtual	NYS Virtual Call Center Meeting for transition to State Contact tracing	Ginelle Jones, Pat Belden	Planning/Response
1/10 – 1/14	In Person	Delivery of SPERA COVID-19 Rapid Antigen tests to participating school districts	Dan Durkee, Don Stack	Response
1/10-1/14	In Person	COVID-19 Booster Clinics at Various School Districts in Warren County	Clinic Team	Response
1/13	Virtual	Warren County Schools COVID-19 Superintendent Meeting	Ginelle Jones, Pat Belden	Response/Planning

BT ACTIVITY SHEET
BP3 (new) - 7/1/21 - 6/30/22
Page 2
Topic Color Codes
Red/Chempack; Green/SNS; Blue/Mass Fatality; Black/Training;
Purple/Special Needs; Orange/Drill; Black/Pan Flu

1/13	Virtual	NYS Virtual Call Center Follow-up meeting for transition to NYS Contact tracing take-over	Ginelle Jones, Pat Belden	Response/Planning
1/18	Virtual	Capital District/WSWHE BOCES Superintendent meeting	Ginelle Jones	Planning/response
1/26	Virtual	Warren County EPR/LEPC Qtrly. Meeting	Dan Durkee, Don Stack	Planning
February every Tuesday	In Person	COVID-19 Vaccination Clinic @ HSB	Clinic Team	Response
2/4	Virtual	NYSACCHO COVID-19 Meeting	Ginelle	Planning
2/8	Virtual	Regional BT Coordinators Meeting	Dan Durkee	Planning
2/				

Warren County Public Health
Rabies Program
January 2022

	Different Address Owner/Victim *Follow up by Town ACO				**Same Address Owner/Victim** * Follow up by Public Health				**Out of Town Owner** *Follow Up by Public Health				**Strays** Follow Up by Public Health • Vet's Office • Victim Watching • Victim Treated Rabies PEP • Euthanized Follow Up by ACO **Animal needs to be captured and taken to Animal Hospital. Public Health to check after confinement**					
Town	Cats		Dogs		Cats		Dogs		Cats		Dogs		Vet	Victim Watched	Treated with PEP	Refused PEP	Euthanized	ACO Capture
	UTD	NOT UTD	UTD	NOT UTD	UTD	NOT UTD	UTD	NOT UTD	UTD	NOT UTD	UTD	NOT UTD						
Bolton			1															
Chester																		
Glens Falls							1								1			
Hague																		
Horicon							1											
Johnsburg																		
Lake George																		
Lake Luzerne			1															
Queensbury			1				2											
Stony Creek																		
Thurman																		
Warrensburg							1											
Totals			**3**				**5**								**1**			

*UTD- Up to date
*PEP- Post exposure prophylaxis

Total Bites for January – 9
Specimens tested for rabies this month - 0
Positive specimens for rabies - 0
People pre-approved for rabies post exposure treatment - 1
Rabies Clinics this month - 0
Next Rabies Clinic- To be determined

SCHEDULE "A"

AUTHORIZATION TO ATTEND MEETING OR CONVENTION

Check one:

☐ In-State (Must be approved by Department Head, County Administrator & Committee Chair)
☐ Out-of-State (Must be approved by Department Head, County Administrator & Committee Chair)
☑ On-Line (Must be approved by Department Head, County Administrator & Committee Chair)

The Health Services (Supervisory Committee) hereby authorizes Jodi Brynes (Employee Name)

to attend HCA OASIS E Prep: Building Blocks for Success (Name of meeting or organization)

at ONLINE (Address) on 2/17/22, 3/17/22, 11/10/22, and 12/8,22 (Dates)

Meeting/Convention/Training Cost: $260 Mode of transportation to be used: N/A (County Vehicle or Mass Transportation)

If the mode of transportation is **not** a county vehicle or mass transportation, please explain:

Proper documentation must be attached when submitting for approval.
(Please check documents attached)

☑ Notice of meeting/convention/training including cost. Total Cost $260 (Include travel costs)

For Overnight Travel

☐ Room rate $ _____ GSA* Rate $ _____ Funding in Budget? ☑ Y ☐ N

☐ Meal costs $ _____ GSA* per diem rate $ _____ Budget Code: A.4010.444

* www.gsa.gov

Date: 2/8/2022 Department Head Signature

Date: 2/8/22 County Administrator Signature

Date: 2/9/22 E. Frasier approved via email Committee Chair Signature

Please refer to the Warren County Travel Policy and County Vehicle Use Regulations for general policy guidelines.

****

Please check to request a fleet vehicle. ☐ **REQUEST FOR USE OF FLEET VEHICLE**

Filing Instructions:

1. Original with voucher to Auditor.
2. Copy to Buildings & Grounds if fleet vehicle is needed.
3. Copy to Purchasing with Purchase Order, if required.
4. Copy to Clerk of the Board if credit card will be used.
5. Copy of executed form needs to be included in next agenda for reporting to oversight Committee.

OASIS E Prep: Building Blocks for Success-

HCA EDUCATION AND RESEARCH

Join us for a series of 4 webinars that will provide home health agencies with the tools needed to prepare for OASIS-E!

2022 is shaping up to be quite a year for home health agencies as Home Health Value Based Purchasing and OASIS E will require preparation that will consume already limited resources. Changes to OASIS have always increased stress for all organizational levels. Waiting until the end of the year to educate staff collides with the holiday season - a time that is very busy for agencies under normal circumstances.

It is important to keep perspective. Not every item in OASIS E is "new" as many of the current items remain in the updated tool. That being said, items related to the functional assessment have been a source of frustration for both clinicians and reviewers as they are a consistent area where corrections are needed.

Effectively preparing for OASIS E must include a focus on dealing with issues related to the "old" items in a way that reduces errors in 2022. This increases the ability of the organization to address the "new" items as implementation draws closer and minimize errors and corrections in 2023.

Session 1 - OASIS E Prep: Assessment of Function: M and GG
February 17th – 11:30 AM – 1:00 PM
Objectives:
- Define "safety" in the context of the OASIS items related to functional ability.
- Discuss strategies for improving the accuracy of OASIS data collection with respect to functional ability.
- Connect assessment of function using the M and GG OASIS items.

Session 2 – OASIS E Prep: HHVBP, Wounds and Cognition
March 17th - 11:30AM – 1:00PM
Objectives:
- Address data collection issues related to OASIS items used for HHVBP.
- Create consistency between the clinical assessment of wounds and the corresponding OASIS items
- Understand the identification of and care planning related to cognitive issues as captured in the OASIS document

Session 3 – OASIS E Prep: New Items Part 1
November 10th - 11:30AM – 1:00PM
- Summary - objectives coming later in 2022. Incorporate the assessment skills needed to collect accurate data for the items that are new in OASIS E.

Session 4 – OASIS E Prep: New Items Part 2
December 8th - 11:30AM – 1:00PM
- Summary - objectives coming later in 2022. Incorporate the assessment skills needed to collect accurate data for the items that are new in OASIS E.

Presenter: Cindy Krafft PT, MS, HCS-O

Cindy Krafft PT, MS, HCS-O is an owner of Kornetti & Krafft Health Care Solutions based in Florida. She brings more than 25 years of home health expertise that ranges from direct patient care to operational / management issues as well as a passion for understanding regulations.

For the past 15 years, Cindy has been a nationally recognized educator in the areas of documentation, regulation, therapy utilization and OASIS. She has and currently serves on multiple Technical Expert Panels with CMS Contractors working on clinical and payment reforms and bundled payment care initiatives.

REGISTER NOW!

Registration Fee
HCA Members: $260
Non-Members: $460

Approved by HCA as Member Price

This webinar is in partnership with the Ohio Council for Home Care & Hospice.

SCHEDULE "A"

AUTHORIZATION TO ATTEND MEETING OR CONVENTION

Check one:

- [x] In-State (Must be approved by Department Head, County Administrator & Committee Chair)
- [ ] Out-of-State (Must be approved by Department Head, County Administrator & Committee Chair)
- [x] On-Line (Must be approved by Department Head, County Administrator & Committee Chair)

The Health Services (Supervisory Committee) hereby authorizes Jolie Nhantka (Employee Name)

to attend NYS Breastfeeding Coalition Conference (Name of meeting or organization)

at PO Box 61 Delmar, NY 12054 (Address) on March 28th 2022 (Dates)

Meeting/Convention/Training Cost: $95 (for early bird registration) Mode of transportation to be used: N/A (County Vehicle or Mass Transportation)

If the mode of transportation is **not** a county vehicle or mass transportation, please explain:

This Conference is virtual

Proper documentation must be attached when submitting for approval.

(Please check documents attached)

- [ ] Notice of meeting/convention/training including cost.

Total Cost $ 95.00 (Include travel costs)

For Overnight Travel N/A

- [ ] Room rate $ _____ GSA* Rate $ _____
- [ ] Meal costs $ _____ GSA* per diem rate $ _____

*www.gsa.gov

Funding in Budget? [x] Y [ ] N

Budget Code: A.4083.444

Date: 2/10/22 — Department Head Signature

Date: 2/10/22 — County Administrator Signature

Date: 2/11/22 — E. Fresia approved by email — Committee Chair Signature

Please refer to the Warren County Travel Policy and County Vehicle Use Regulations for general policy guidelines.

****

Please check to request a fleet vehicle. [ ] REQUEST FOR USE OF FLEET VEHICLE

Filing Instructions:

1. Original with voucher to Auditor.
2. Copy to Buildings & Grounds if fleet vehicle is needed.
3. Copy to Purchasing with Purchase Order, if required.
4. Copy to Clerk of the Board if credit card will be used.
5. Copy of executed form needs to be included in next agenda for reporting to oversight Committee.

SCHEDULE "A"

AUTHORIZATION TO ATTEND MEETING OR CONVENTION

Check one:

☒ In-State (Must be approved by Department Head, County Administrator & Committee Chair)

☐ Out-of-State (Must be approved by Department Head, County Administrator & Committee Chair)

☒ On-Line (Must be approved by Department Head, County Administrator & Committee Chair)

The Health Services (Supervisory Committee) hereby authorizes Bethany Paquette (Employee Name)

to attend NYS Breastfeeding Coalition Conference
PO Box 61, Delmar 12054 (Name of meeting or organization)

at N/A (Address) on March 28th 2022 (Dates)

Meeting/Convention/Training Cost: $95 (for early Bird reg.) Mode of transportation to be used: N/A (County Vehicle or Mass Transportation)

If the mode of transportation is not a county vehicle or mass transportation, please explain:

This conference is virtual

Proper documentation must be attached when submitting for approval.
(Please check documents attached)

☐ Notice of meeting/convention/training including cost. Total Cost $ $95.00 (Include travel costs)

For Overnight Travel N/A

☐ Room rate $ ____ GSA* Rate $ ____ Funding in Budget? ☒ Y ☐ N

☐ Meal costs $ ____ GSA* per diem rate $ ____ Budget Code: A.4013.444

*www.gsa.gov

Date: 2/10/2022 [signature] Department Head Signature

Date: 2/10/22 [signature] County Administrator Signature

Date: 2/11/22 E. Frasier approved by email [initials] Committee Chair Signature

Please refer to the Warren County Travel Policy and County Vehicle Use Regulations for general policy guidelines.

****

Please check to request a fleet vehicle. ☐ **REQUEST FOR USE OF FLEET VEHICLE**

Filing Instructions:

1. Original with voucher to Auditor.
2. Copy to Buildings & Grounds if fleet vehicle is needed.
3. Copy to Purchasing with Purchase Order, if required.
4. Copy to Clerk of the Board if credit card will be used.
5. Copy of executed form needs to be included in next agenda for reporting to oversight Committee.

NY-WIC | Remedyforce Self Se | WIC - Outlook Web A

eventbrite.com/e/new-york-statewide-breastfeeding-coalition-annual-

Apps | My NY.gov | cicatelli trainings | New York State Con... | New York State Ir

New York Statewide Breastfeedin

Mon, Mar 28, 2022

Tickets

Early Bird Registration

$95.00

Sales end on Mar 5, 2022

Early bird registration ends on March 4, 202

Student/Intern or WIC Peer Cou

$80.00

Sales end on Mar 5, 2022

Student must be full time and must identify

counselors must list their agency.

Regular price

$120.00

Regular price registration

Late Registration

$150.00

MAR
28

New York Statewide Breastfeeding Coalition Annual Conference 2022

by New York Statewide Breastfeeding Coalition, Inc.

54 followers Follow

$80 – $150

$80 – $150 Tickets

Date and time

Mon, March 28, 2022
7:30 AM – 5:00 PM EDT
Add to calendar

Location

Online event

Refund policy

Contact the organizer to request a refund.
Eventbrite's fee is nonrefundable.

Join us for our 7th Annual Conference - Breastfeeding Through An Equity Lens- A Continuum of Care

About this event

Join us on March 28, 2022 for our Virtual Conference!

Breastfeeding Through an Equity Lens – Breastfeeding Through An Equity Lens- A Continuum of Care

Lens- A Continuum of Care

Save time and money this year! No travel or lodging expense! Once again, we are making this a very interactive event, with lots of opportunity for you to network and chat with presenters as well as other attendees. The conference will NOT be recorded.

An application for CERPs will be submitted to IBCLE.

AGENDA

7:30 am Pre-Conference Networking Meet & Greet

8:00 am Last minute Zoom instructions; Welcome to the Conference

8:15 am **Kangaroo Mother Care: Understanding Resilience – Why Preterm Babies Need Their Mothers**

Part 1: Introducing Nurturescience *Nils Bergman, MD, MPH, PhD*

9:45 am Networking/Break

10:00 am **Part 2: Scientific Rationale for Mother Kangaroo Care**

Nils Bergman, MD, MPH, PhD

11:30 am **Discussion/Q&A/Networking**

12:00 pm Lunch Break/Networking

12:30 pm Welcome back/prizes/announcements/sponsor info

1:00 pm **Baby-Friendly USA Updated Guidelines and NICU Toolkit: Evidence-based Practices that Impact Breastfeeding Disparities and Empower Mothers**

Eileen Fitzpatrick DrPH, MPH, RDN; Chief Executive Officer (CEO) Baby Friendly USA

1:45 pm **NYS Breastfeeding Support Through an Equity Lens: Panel Presentation**

Chloe Vital, CBS, Director – MidHudson Chocolate Milk

Robin Crouse , Health Educator, Indegenous Breastfeeding Counselor, Seneca Nation

Catherine Wightman, MS, IBCLC – The Transitions Care Management for Lactation in rural Western NYS

April Simmons, Breastfeeding Peer Counselor Supervisor CLC Anthony Jordan Health Center, Rochester; Refugee/Immigrant Health Center

2:45 pm *Discussion/Q & A*

3:00 pm *Networking Break/Prizes*

3:15 pm **Black Fatherhood & Disparities**

Kenn Harris, Executive Director & Engagement Lead, NICHQ

4:00 pm *Wrap Up/Take Away Messages*

4:15 pm *Meeting room open for networking/after party*

5:00 pm *Adjourn*

Please note that the above agenda is tentative- there may be some minor adjustments with start times of the sessions.

The Early Bird Rate will only be available through March 5, 2022.

Have a product or service to promote? Sponsorship opportunities are available to WHO Code compliant entities. Please email us at nysbcinc@gmail.com for more information.

If you are paying by check:

Please make your check payable to:

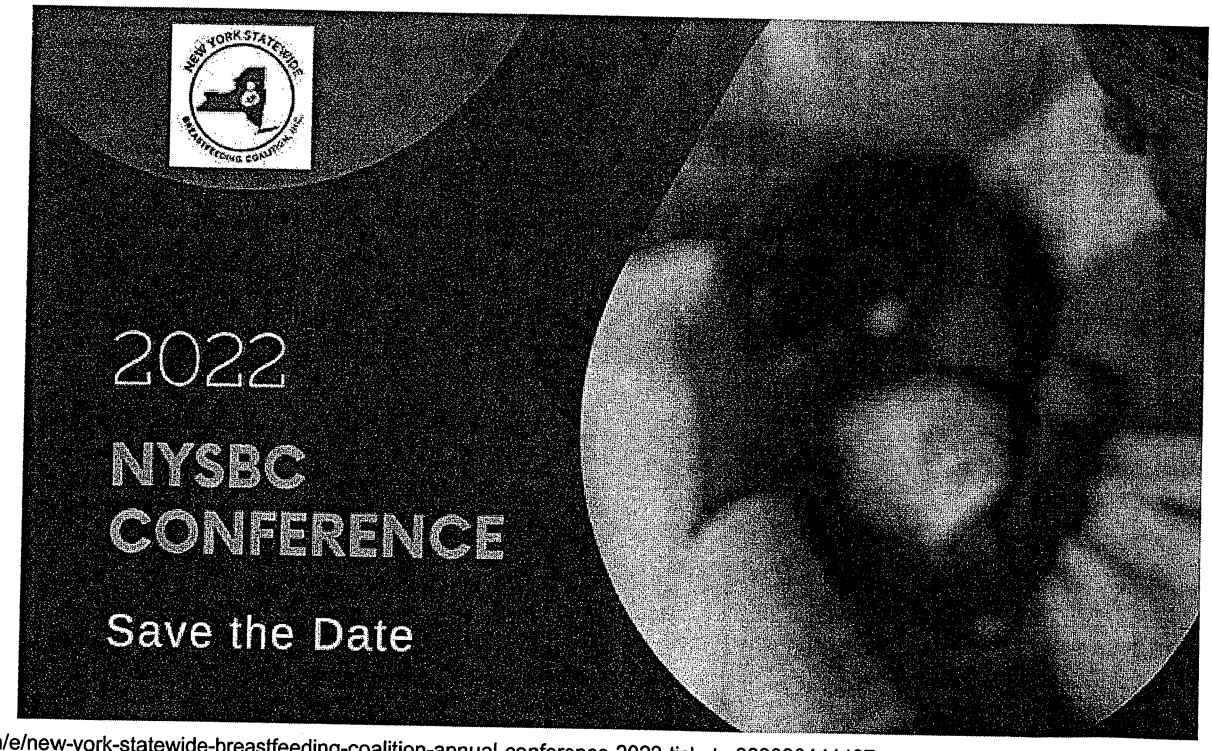
New York Statewide Breastfeeding Coalition, Inc. and mail to us at: PO Box 61, Delmar, NY 12054. **Please remember to identify who you are registering for the conference on your check!**

We are able to accept vouchers from county health departments. Please send us an email before you mail us your forms! nysbcinc@gmail.com

Cancellations received prior to March 25, 202 2 will be able to be refunded or your registration can be transferred to another person for this year's conference- please let us know who will be taking your place. Contact us at nysbcinc@gmail.com

No refunds after March 25, 2022.

A limited number of scholarships will be available to eligible registrants. Please email us at nysbcinc@gmail.com to inquire.



Tags

Online Events | Online Conferences | Online Health Conferences | #breastfeeding | #lactation | #disparities | #lactation_consultant | #nicu_breastfeeding | #nils_bergman

Share with friends

Date and time

Mon, March 28, 2022
7:30 AM – 5:00 PM EDT
Add to calendar

Location

Online event