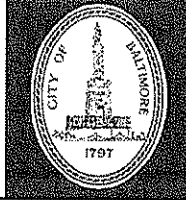

CITY of BALTIMORE
STEPHANIE RAWLINGS-BLAKE, Mayor



HEALTH DEPARTMENT

OXIRIS BARBOT, M.D., Commissioner
1001 East Fayette Street
Baltimore, Maryland 21202

28 June 2011

Hospital Emergency Departments
Hospital Infection Control Offices
Hospital Pharmacies

Dear Healthcare Provider:

Attached is the 2011 edition of Baltimore City Health Department's "Handling Potential Rabies Exposures in Baltimore City, Guidelines for Medical Providers". This publication explains the appropriate procedures to assess and treat persons potentially exposed to rabies-infected animals.

There have been no changes in the recommended protocols over the past year. However, please note last year's significant change in the vaccine schedule for rabies post-exposure prophylaxis. The Advisory Committee on Immunization Practices (ACIP) now recommends a reduced (4-dose) vaccine schedule for exposed persons who are not immunosuppressed. If post-exposure prophylaxis is indicated by risk assessment, rabies vaccine is to be administered on day 0, 3, 7, and 14.

Please take a moment to review the Guidelines and the revised ACIP recommendations included in the Guideline. Should you have any questions, please contact Pamela Somers or Irene Stadler of Field Health Services (410-396-7433 – Pamela.Somers@baltimorecity.gov / Irene.Stadler@baltimorecity.gov) or me (410-236-9285 / Anne.Bailowitz@baltimorecity.gov).

The Health Department looks forward to continuing its work with you, our hospital partners, in support of health for all Baltimore citizens.

Sincerely,

Anne Bailowitz, M.D., M.P.H.
Assistant Commissioner, Clinical Services

BALTIMORE CITY HEALTH DEPARTMENT

Guidelines for Handling Potential Rabies Exposures

Purpose: To support the investigation of, and prevent the spread of, human rabies by establishing a protocol which standardizes the post-exposure prophylaxis offered to at-risk citizens.

Authority:

In accordance with:

The Annotated Code of Maryland
Health – General Article
Title 18, Subtitle 2, Part IV
Title 18, Subtitle 3, Part III

The Code Of Maryland Regulations
10.06.02
Rabies

All animal contacts having the potential to transmit rabies which occur in Baltimore City and are treated by a medical provider, whether bite or non-bite, and *whether or not post-exposure prophylaxis is indicated, must be reported to the Baltimore City Health Department (BCHD) immediately, by telephone.* Additionally, all animal bites must be reported to the Baltimore City Police Department if the victim has not already done so.

One call reports an animal bite to the Bureau of Animal Control and to the Police Department:

Between 6:00 a.m. and 10:00 p.m.: Contact 311
All other hours: Contact 911

Please follow the detailed procedure on the following pages.

For assistance with these Guidelines,

Weekdays, during normal business hours (8:30 a.m. to 4:30 p.m.):

Contact the Baltimore City Health Department, Office of Field Health Services,
by dialing: (410) 396-7433.
Ask to speak with a supervisor regarding rabies.

Nights, weekends, and holidays:

Contact the Baltimore City Municipal Telephone Exchange by dialing (410) 396-3100.
Ask to have the Office of Field Health Services Supervisor On Call paged.

BALTIMORE CITY HEALTH DEPARTMENT
Guidelines for Handling Potential Rabies Exposures

Procedure:

1. Perform a risk assessment, to include:
 - A. Species of animal causing the exposure.
 - B. Immunization status of the victim and of the animal (if known).
 - C. Whether the exposure was "bite" or "non-bite". (See, MMWR 2008;57 RR-3:12)
 - D. Whether the exposure was provoked. (See, MMWR 2008;57 RR-3:15)
 - E. Whether the animal was captured and is therefore known to be available for quarantine or for sacrifice and testing.
2. Using the information gathered in the risk assessment, determine whether Post-Exposure Prophylaxis is necessary. (see, Algorithm for Rabies Post-Exposure Prophylaxis (PEP) in Maryland, on page 3.)
3. If PEP is indicated, determine whether rabies immune globulin (RIG) is indicated:
 - A. RIG *is* indicated for any person who has never received rabies vaccine (either pre-exposure or post-exposure) in another incident.
 - B. RIG is *not* indicated for any person with a history of pre-exposure vaccination with human diploid cell vaccine (HDCV, Imovax[®] Rabies, Sanofi Pasteur), purified chick embryo cell vaccine (PCECV, RabAvert[®], Novartis Vaccines and Diagnostics), or rabies vaccine adsorbed (RVA, Bioport Corporation); or of prior post-exposure prophylaxis with HDCV, PCECV, or RVA; or of previous vaccination with any other type of rabies vaccine and a documented history of antibody response to the prior vaccination.

If RIG is indicated, administer using a different syringe from the one used for the vaccine. If anatomically feasible, the full dose of RIG should be infiltrated around the wound(s). Administer any remaining volume IM at a site distant from vaccine administration.

4. Rabies vaccine is administered in the deltoid muscle for adults and older children. For younger children, the outer aspect of the thigh muscle (*vestus lateralis*) may be used.

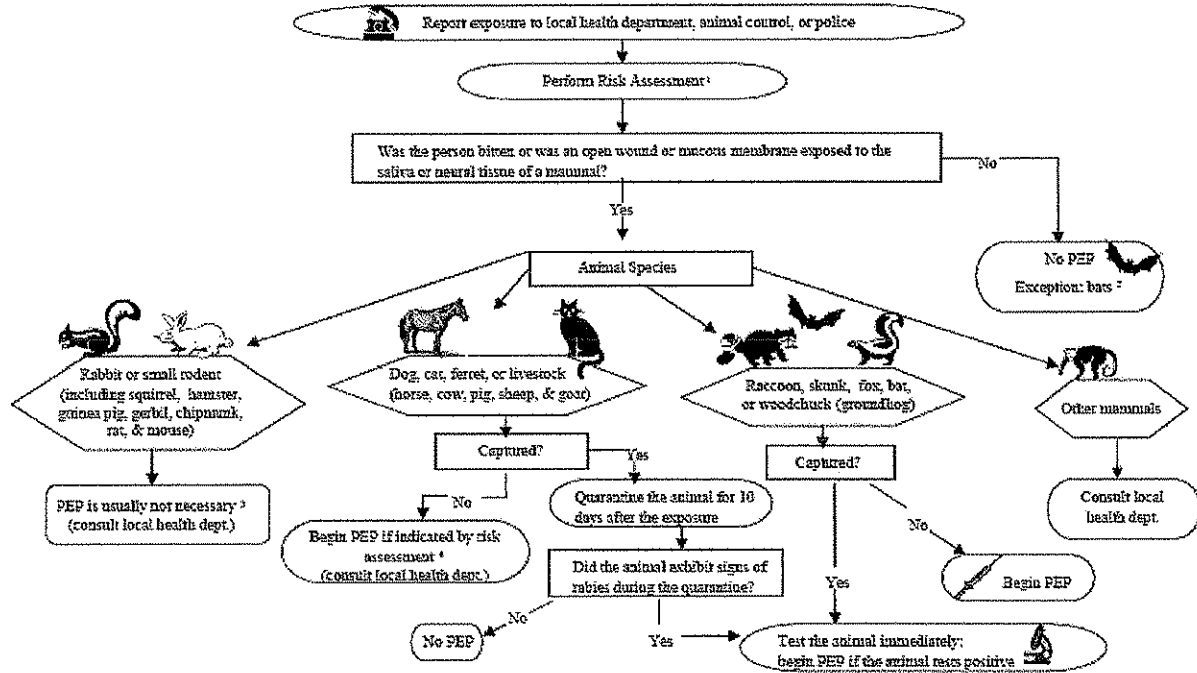
Rabies vaccine should never be administered in the gluteal area.

5. Follow-Up:

- A. **Uninsured patients:** The Baltimore City Health Department can provide follow-up care for those persons needing rabies prophylaxis who have no health insurance coverage. For follow-up doses, fax a referral form together with copy of the client's Emergency Department record the Office of Field Health Services at: (410) 366-8417.
- B. **Insured patients:** Insured patients should be referred to their primary care provider. Primary care providers or clinics having questions or needing assistance to obtain vaccine may contact Office of Field Health Services at: (410) 396-7433.

BALTIMORE CITY HEALTH DEPARTMENT
 Guidelines for Handling Potential Rabies Exposures

Algorithm for Rabies Postexposure Prophylaxis (PEP) in Maryland



1. Risk assessment includes species, immunization status, health status, type & circumstances of exposure (bite vs. nonbite, provoked vs. unprovoked), & availability for quarantine or testing.
2. PEP is recommended for all persons with bite, scratch, or mucous membrane exposure to a bat, unless the bat is available & tests negative for rabies. PEP might also be appropriate when there is reasonable probability that such exposure may have occurred. PEP should be considered for a person who has direct contact with a bat, unless the person is certain that no exposure occurred. When a bat is found indoors & there is no history of contact, the likely effectiveness of PEP must be balanced against the low risk such exposures appear to present. In this setting, PEP can be considered for persons who were in the same room as the bat & who might be unaware that a bite or direct contact had occurred (e.g., a sleeping person awakens to find a bat in the room or an adult witnesses a bat in the room with a previously unattended child, mentally disabled person, or intoxicated person) & rabies cannot be ruled out by testing the bat. PEP would not be warranted for other household members.
3. Rabbits & small rodents are *almost* never found to be infected with rabies & have not been known to transmit rabies to humans. Woodchucks (groundhogs) account for most cases of rabies in rodents.
4. While looking for the animal, begin PEP within 1 day for a cat exposure or 2 days for a dog, ferret, or livestock exposure; discontinue PEP if the animal is found & is either healthy & can be quarantined for 10 days after the exposure or is tested & found negative for rabies.
5. In some situations, it may be appropriate to initiate PEP before test results are available: consult your local health department.

Maryland Department of Health and Mental Hygiene, Office of Epidemiology and Disease Control Programs, Center for Veterinary Public Health 11/2005

BALTIMORE CITY HEALTH DEPARTMENT
Guidelines for Handling Potential Rabies Exposures

Animal Type to Postexposure Prophylaxis

Animal Type	Evaluation and Disposition of Animal	Postexposure Prophylaxis Recommendations
Dogs, cats, and ferrets	Healthy and available for 10 day observation	Persons should not begin vaccination unless animal develops clinical signs of rabies
	Rabid or suspected rabid	Immediately vaccinate
	Unknown (escaped)	Consult public health officials
Raccoons, skunks, foxes, and most other carnivores; Bats	Regarded as rabid unless animal is proven negative by laboratory test	Consider immediate vaccination
Livestock, horses, rodents, rabbits and hares, and other mammals	Consider individually	Consult public health officials. Bites of squirrels, hamsters, guinea pigs, gerbils, chipmunks, rats, mice, other small rodents, rabbits, and hares almost never require rabies postexposure prophylaxis.

MMWR 2008;57 RR-3:12

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.

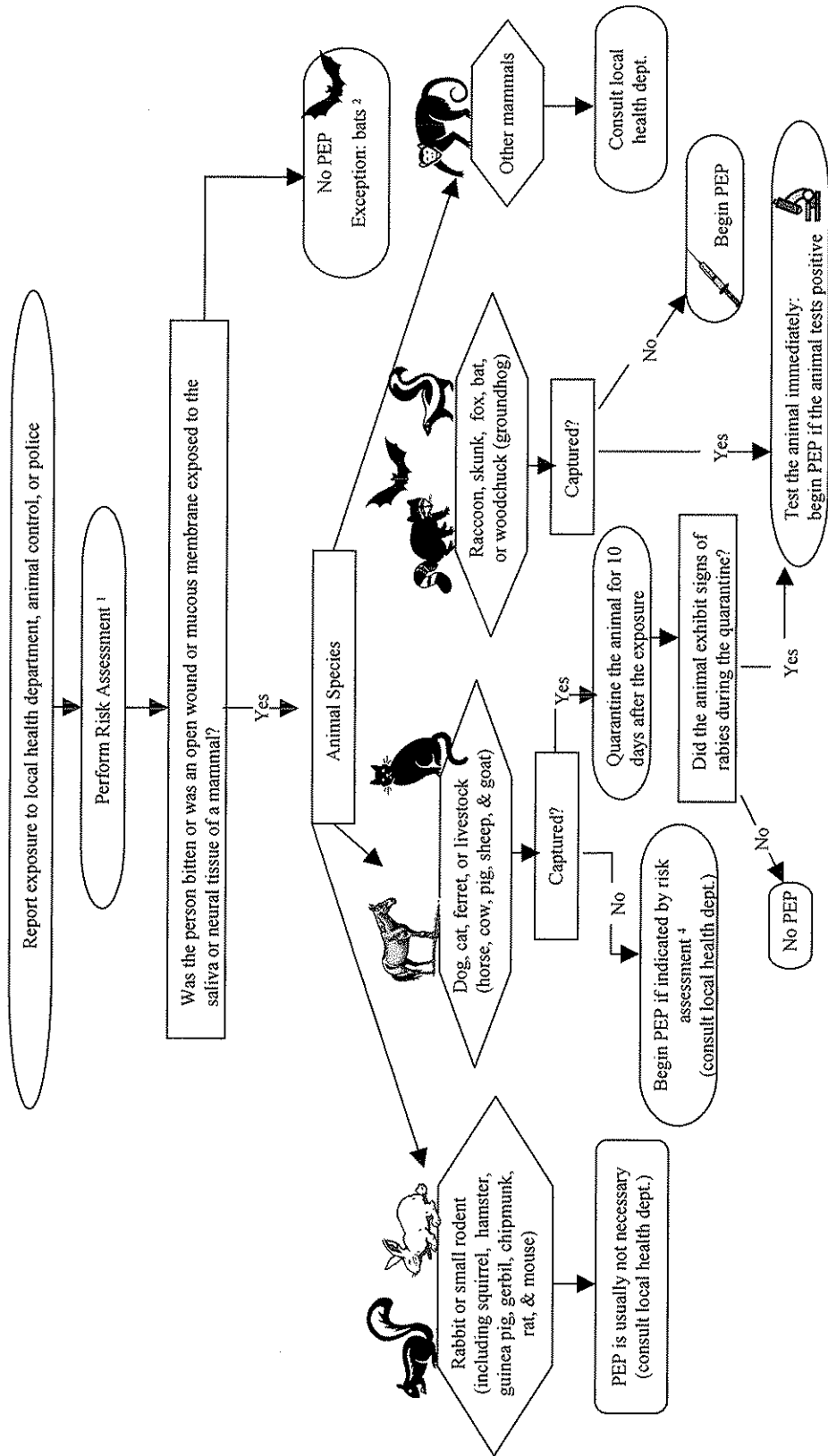
[‡] Day 0 is the day dose 1 of vaccine is administered.

[§] 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.

MMWR 2010;59 RR-2:6

Algorithm for Rabies Postexposure Prophylaxis (PEP) in Maryland



1. Risk assessment includes species, immunization status, health status, type & circumstances of exposure (bite vs. nonbite, provoked vs. unprovoked), & availability for quarantine or testing.
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**ANIMAL EXPOSURE REPORT
and
PROPHYLAXIS REFERRAL**

**BALTIMORE CITY HEALTH DEPARTMENT
FIELD HEALTH SERVICES
211 East 25th Street
Baltimore, Maryland 21218**

HOSPITAL/MEDICAL FACILITY EXPOSURE REPORT and REFERRAL

Date of Report _____ Name of Individual Completing this Report _____
Date of Exposure _____
Type of Animal _____ Address Where Incident Occurred _____

Victim Information:

Name of Victim _____ Sex: M [] F [] Date of Birth: _____

If Victim is a Minor:
Name of Parent or Guardian _____ Relationship: _____

Home Address _____ Zip Code: _____

Home Telephone Number _____ Work Telephone Number _____

PEP Initiated Y [] N [] Date Next Dose Due? _____ Was the patient admitted? Y [] N []

Is the patient insured? Y [] N [] Follow up to be provided by: Pt's PCP or Clinic [] Health Dept []

Police Notified? Y [] N [] Police Report Number: _____ or None []

311 Notified? Y [] N [] Case Number: _____

Is the animal known to the victim? Y [] N []

Body Part(s) Injured: _____

Briefly describe how incident occurred: _____

ATTACH A COPY OF THE MEDICAL RECORD PERTAINING TO THIS INCIDENT and

FAX TO: (410) 366-8417

Immediately Upon Discharge