

Philadelphia Department of Public Health
Division of Disease Control

Which Animal Bites Require Post-Exposure Prophylaxis?

Every animal bite must be individually evaluated to assess the possibility of rabies exposure. Consideration should include the species of animal involved, the condition of the animal, the circumstances of the encounter (provoked or unprovoked), the type of exposure and the vaccination status of the biting animal.

Health-care providers are required to report all animal bites to the Division of Disease Control at 215-685-6748. Disease Control personnel are available for rabies consultation 24 hours a day. Call 215-685-6748 from 8:30 AM - 5:00 PM on weekdays. After hours, call 215-686-1776 and ask for the Disease Control on-call staff.

Animal Species	Condition of Animal at Time of Contact	Recommended Post-Exposure Prophylaxis	Services Provided by Philadelphia Department of Public Health
Domestic Dog, Cat, or Ferret	<ul style="list-style-type: none"> ▪ Healthy and available for 10 days of observation <i>or</i> ▪ Provoked bite <i>or</i> ▪ Documented, current rabies vaccination 	<ul style="list-style-type: none"> ▪ None, unless animal develops signs of rabies during observation period. 	<ul style="list-style-type: none"> ▪ Follow-up by mail and telephone with person bitten ▪ Enforce animal quarantine ▪ Evaluate animal after quarantine period
	<ul style="list-style-type: none"> ▪ Rabid or suspected rabid animal or unprovoked attack <i>and</i> ▪ Animal available for sacrifice and examination. 	<ul style="list-style-type: none"> ▪ Initiate RIG and vaccination if animal examination is positive for rabies. ▪ No treatment is needed if examination is negative. 	<ul style="list-style-type: none"> ▪ Laboratory examination of brain▽ ▪ Follow-up with victim and health care provider
	<ul style="list-style-type: none"> ▪ Healthy animal not available for observation <i>or</i> ▪ Suspected rabid animal or unprovoked attack not available for sacrifice and examination 	<ul style="list-style-type: none"> ▪ Initiate RIG and vaccination. End treatment if animal later becomes available and found to be non-rabid. 	
Carnivorous Wild Mammal (Coyote, Fox, Raccoon, Skunk)♦ <i>or</i> Groundhog <i>or</i> Bat — Evaluate bat contact carefully. If a bite or other wound is possible (e.g. sleeping person, child involved), then treat as an exposure.	<ul style="list-style-type: none"> ▪ Animal available for sacrifice and examination 	<ul style="list-style-type: none"> ▪ If results of brain exam are pending, then wait for results. Otherwise, initiate RIG and vaccination. End treatment if animal is later found to be non-rabid. 	<ul style="list-style-type: none"> ▪ Laboratory examination of brain▽ ▪ Follow-up with victim and health care provider
	<ul style="list-style-type: none"> ▪ Animal not available for examination 	<ul style="list-style-type: none"> ▪ Initiate RIG and vaccination 	

▽ The Philadelphia Department of Public Health will perform immunofluorescence antibody (IFA) testing for rabies antigen on brain tissue when deemed appropriate by the Division of Disease Control (DDC). Consultation with DDC is necessary to arrange for such testing. Generally, the result of rabies testing is available within 2-3 business days (M-F) of laboratory receipt of an animal.

♦In general, hamsters, guinea pigs, gerbils, rats, mice, squirrels, rabbits, hares, and opossums in the City of Philadelphia do not carry or transmit rabies, and the Philadelphia Department of Public Health does not recommend rabies post-exposure prophylaxis for bites caused by these animals.

- To arrange for rabies fluorescent antibody testing of animals, or for medical consultation on the management of animal exposure incidents, contact Division of Disease Control (DDC) at 215-685-6748.
- For urgent after-hours consultations, call 215-686-1776 and ask for the Disease Control on-call staff.
- **Health care providers are required to report all animal bites to the DDC at 215-685-6748.**

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500 S. Broad Street Philadelphia, PA 19146 Phone: 215-685-6748 www.phila.gov/health/units/ddc/index.html

Recommended Post-Exposure Prophylaxis for Bites from Potentially Rabid Animals

1. Local Wound Care

This is the first and perhaps most important step in preventing rabies.

- Thoroughly clean the wound with soap and water.
- Irrigate with a virucidal agent such as povidone-iodine solution.
- Debride the wound, if appropriate.
- If clinically indicated, administer tetanus immunization and measures to prevent or control bacterial infections.
- The decision to suture large wounds should take into account cosmetic factors and the potential for bacterial infection.

2. Rabies Immune Globulin (RIG)

Rabies Immune Globulin (RIG, passive immunization) is recommended because it provides immediate antibodies that inactivate the virus. RIG should not be given to a patient who has previously completed a series of rabies vaccinations.

- Administer RIG along with the first dose of vaccine regardless of the time interval between exposure and initiation of treatment.
- The recommended RIG dose for all age groups is 20 IU per kg of body weight.
 - ◊ If anatomically feasible, thoroughly infiltrate the entire dose into and around the wound(s).
 - ◊ Administer any remaining volume intramuscularly at a site distant from the vaccine inoculation (e.g., gluteal region).
- If RIG is not immediately available, it may be administered up to 7 days following the first dose of vaccine.

3. Human Rabies Vaccine

Rabies vaccines (active immunization) stimulate the immune system to produce antibodies to inactivate the virus. With the current vaccine schedule, protective antibodies are not seen until about the seventh day after beginning the regimen. Therefore, it is necessary to administer passive immunization with RIG initially to provide protection during this interval. The first vaccine dose and RIG can be administered at the same time but never with the same syringe or in the same anatomic location.

- Administer a series of five 1ml doses intramuscularly in the deltoid region (or the anterolateral aspect of the thigh is acceptable in children). Vaccine failures have been reported when administered in the gluteal region.
- Give the first dose as soon as possible after exposure (unless animal rabies testing is pending). Give the other 4 doses on days 3, 7, 14 and 28 after the first dose. The first dose counts as day 0.
- The exception to this protocol is for those individuals who previously completed a series of rabies immunizations. In these cases RIG is not required and vaccine is administered only on days 0 and 3.

The combined approach of local wound care, RIG, and vaccine is essentially 100% effective prophylaxis against rabies. Routine post-vaccination serologic testing is not recommended unless warranted by individual circumstances (e.g., immunosuppressed patients).

Rabies biologics: Unites States, 2007

	Product Name	Manufacturer
Human Rabies Vaccine	Imovax® Rabies Human Diploid Cell Vaccine (HDCV)	Sanofi Pasteur Phone: (800) 822-2463 http://www.vaccineplace.com/products/
	RabAvert® Purified Chick Embryo Cell (PCEC)	Chiron Corporation Phone: (800) 244-7668 www.rabavert.com
Rabies Immune Globulin (RIG)	Imogam® Rabies-HT	Sanofi Pasteur Phone: (800) 822-2463 http://www.vaccineplace.com/products/
	BayRab™	Bayer Corporation Phone: (800) 288-8370 www.bayerbiologicalusa.com