



RABIES

PRE-EXPOSURE AND POST-EXPOSURE VACCINATIONS

Rabies is a fatal, viral disease capable of affecting ALL mammals including domestic pets, livestock and wildlife species. The most commonly infected wildlife species are raccoons, groundhogs, skunks, fox, and bats; however, other wildlife species are diagnosed as rabid each year.

The incubation period varies between 12 days and as long as 6 or 7 months. Although domestic animals will develop characteristic signs of encephalitis when infected with rabies, wildlife may show non-specific signs and recover from rabies. A baby raccoon admitted for rehabilitation in May 2006 was scheduled for release in January 2007. Just prior to the release date, the animal was observed behaving "differently". There were no signs of a bite or cut. The release date was postponed and within a few days the animal showed further symptoms of the disease. The animal was euthanized and test results were positive for rabies.

All rehabilitators, apprentices, subpermittees and volunteers working with wild mammals (regardless of species) should review the attached recommendations provided by the NJ Dept of Health and Senior Services (NJDHSS) regarding rabies pre-exposure vaccination and post-exposure prophylaxis (PEP).

NJDHSS recommendations:

- All individuals working closely with wildlife (mammals) receive pre-exposure vaccinations.
- If bitten, thoroughly cleanse the wound with soap and water
- Obtain prompt medical attention
- Report all bites or other rabies exposures to the local health department.

The rabies pre-exposure vaccination series consists of 3 vaccines on days 3, 7 and 21 or 28. Antibody titers should be checked every other year and be greater than 1:5 by RFFIT.

Pre-exposure vaccinations may be obtained through your family doctor, travel medicine organization, or an occupational health provider, if associated with employment.

Rabies PEP treatment:

- The PEP series for patients who have had prior pre-exposure vaccinations or the PEP series consists of 2 vaccines administered 3 days apart (no immune globulin).
- The PEP series for patients who have not had prior pre-exposure vaccinations or the PEP series consists of 5 vaccines administered on days 0, 3, 7, 14 and 28. Immune globulin should be given at the time of the first vaccination (day 0).

Instructions for submitting an animal suspected of rabies for laboratory testing are available from your local health department or from the NJDHSS at (609) 588-3121 between 8:00am and 5:00 pm.

Additional information that may be of interest include:

NJDHSS Appendix IV(pre-exposure) http://www.state.nj.us/health/cd/documents/appendixiv_rabies.pdf

NJDHSS Frequently Asked Questions: <http://www.state.nj.us/health/cd/documents/faq/rabies.pdf>

NJDHSS Guide to Handling Bats <http://www.state.nj.us/health/cd/documents/batexposure.pdf>

NJDHSS Directory to Local Health Departments <http://www.state.nj.us/health/lh/index.shtml>

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State of New Jersey
Department of Health and Social Services

APPENDIX IV
RABIES PRE-EXPOSURE IMMUNIZATION
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It is recommended that veterinarians, veterinary technicians, animal control officers, shelter workers, persons who will be preparing rabies specimens, and persons working closely with wildlife consider receiving rabies pre-exposure immunization.

Pre-exposure immunization consists of the administration of 1.0 ml human diploid cell vaccine (HDCV) or purified chick embryo cell culture (PCEC) intramuscularly on days 0, 7, and 21 or 28.

Persons who have received the complete post-exposure treatment series are considered pre-immunized for any future exposures.

If exposed to a rabid animal, pre-immunized individuals will need only two booster doses of vaccine (days 0 and 3) and no rabies immune globulin (RIG), as opposed to five doses of vaccine and RIG required for non-immunized individuals. Pre-immunized individuals should be sure to keep their proof of vaccination records for potential verification purposes in the event they are exposed to a rabid animal.

Pre-immunized individuals should have a serum sample tested for rabies antibody every 2 years; if the titer is less than complete neutralization at a 1:5 serum dilution by the rapid fluorescent focus inhibition test (RFFIT), the person should receive a single booster dose of vaccine.

Human rabies vaccines

There are two human rabies vaccines licensed in the United States that are available from pharmaceutical suppliers:

HDCV (IMOVAX) is manufactured by Sanofi Pasteur, (800) 822-2463,
<http://www.vaccineshoppe.com/products/>

PCEC (RabAvert) is manufactured by Novartis, (800) 244-7668,
<http://www.novartisvaccines.com/products/travel.shtml>

These companies will only ship these vaccines to human medical care providers.

Rabies RFFIT antibody serology testing is performed at the following locations:

1. Kansas State Veterinary Diagnostic Laboratory, Mossier Hall 0-245, 1800 Dennison Avenue, Manhattan, Kansas 66506, <http://www.vet.ksu.edu/depts/dmp/service/rabies/index.htm>, telephone: (785) 532-4483. The current cost: screen \$30 (\$25 each for 10 or more serums), endpoint \$35, animal serum \$45.
1. Atlanta Health Associates, Inc., 309 Pirkle Ferry Road, Suite D300, Cumming, Georgia 30040, <http://www.atlantahealth.net/>, telephone: (800) 717-5612, (770) 205-9091. The current cost: screen \$25 (\$20 each for 10 or more serums), endpoint \$40, animal serum \$45.
1. Maryland Department of Health and Mental Hygiene, Laboratories Administration, 201 West Preston, Baltimore, MD 21203, telephone: Dr. Robert Myers (410) 767-6178. Services limited to municipal and public employees. The current cost is \$66 for endpoint titer.

Preparing blood specimens for testing:

After centrifugation of blood collected in a red-top tube, transfer two ml of serum to an untreated, plastic, leak-proof container and refrigerate. Send the labeled specimen along with the name and vaccination history for each serum, as well as the name and address of the person to whom results should be sent, to one of the above laboratories. Contact the individual laboratories ahead of time for submission forms and to make arrangements for payment and result notification.