

## Recommendations on rabies post-prophylaxis (PEP) treatment – humans

The administration of rabies PEP is a medical urgency, not a medical emergency, but do not delay decisions. When documented or likely exposure has occurred, PEP should be administered regardless of the length of delay, provided that clinical signs of rabies are not present in the exposed person.

The local health department (LHD) and NDHHS only make recommendations about the advisability of PEP. The patient's physician has the final decision; but, during times of limited rabies biologics, NDHHS will follow CDC guidance in limiting the use of rabies biologics to events in which PEP is recommended.

The Advisory Committee on Immunization Practices (ACIP) provides the recommendations on the use of rabies PEP. The recommendations are reported in the CDC Morbidity and Mortality Weekly Report, [\*Human Rabies Prevention --- United States, 2008, Recommendations of the Advisory Committee on Immunization Practices.\*](#)

Rabies biologics are available only by prescription and are not provided by NDHHS. The LHD must refer clients to private physicians, internal or external clinics or hospitals for immediate treatment. Hospitals, especially the larger hospitals, across Nebraska carry Human Rabies Immune Globulin and Human Rabies Vaccine. PEP treatment is a simple, effective, and a relatively painless procedure. However, the financial costs associated with PEP are variable and might exceed \$3,000 per case.

Manufacturers of PEP products have patient assistance programs for the uninsured/underinsured. Medicaid or Medicare will likely cover treatment costs.

- Sanofi Pasteur (HRIG and vaccine): Sanofi Foundation Patient Assistance Program by telephone (866-801-5655) or <https://www.visitspconline.com/>.
- Novartis (vaccine only): Through [\*RX Hope\*](#) by telephone (800-589-0837) and instructions and request forms are available online.

### **Note: Pregnancy is not a contraindication to PEP.**

If PEP is started and laboratory results later show an animal is negative for rabies, PEP should be discontinued.

### Rabies immunizing products:

1. Human rabies immune globulin (HRIG):
  - Provides rapid passive immunity for a short time (half-life of 21 days).
  - Administered once at beginning of post-exposure prophylaxis to provide immediate antibodies until the patient responds to the vaccine by actively producing antibodies.
  - If not administered on day 0 (i.e., first day of vaccine dose given), HRIG can be administered up to and including day 7.
  - HRIG may partially suppress active production of antibodies; therefore, no more than the recommended dose should be given.
  - **Never administer HRIG in the same syringe as the vaccine or into the same anatomical site.**
  - **Never give HRIG to a person who has been previously vaccinated.**

2. Human diploid cell (HDCV) or purified chick embryo cell (PCECV) vaccine:
  - Induces active immunity which requires >10 days to develop and usually persists for >2 years.
  - Administered intramuscularly (IM) in the deltoid muscle, which is the only acceptable site of vaccination for adults and older children. For younger children the anterolateral aspect of the thigh is acceptable.
  - **Never give rabies vaccine in the gluteal muscle.**

## Rabies postexposure prophylaxis schedule – ACIP Recommendations 2010

**Note:** The 2010 ACIP recommendations for post-exposure prophylaxis do differ from current rabies vaccine label instructions. Refer to the appropriate [MMWR](#) for details.

1. Wound Treatment: Immediate and through cleansing with soap and water. If available, a virucidal agent such as povidine-iodine solution should be used to irrigate. Consider a tetanus vaccine booster. Antibiotic prophylaxis and primary wound closure depend on exposing animal, the wound(s) size and location and time interval since the bite. Avoid suturing, when possible.
2. Determine the patient's rabies vaccination status. (A complete pre- or post- exposure vaccination with HDCV, PCECV, or rabies vaccine adsorbed, or previous vaccination with any other type of rabies vaccine and documented antibody response to that vaccination is consider "previously vaccinated".)
3. For previously vaccinated patients:
  - a. HRIG: Do not administer.
  - b. Vaccine: 1.0 mL, IM, one each day on days 0 and 3\*.
4. For patients not previously vaccinated:
  - a. HRIG: Administer 20 IU/kg body weight. If anatomically feasible, the full dose should be infiltrated around the wound(s) and any remaining volume should be administered IM in the deltoid or quadriceps at an anatomical site distant from the vaccine administrations.
  - b. Vaccine: 1.0 mL, IM, one each day on days 0, 3, 7, and 14.\*<sup>π</sup>

---

### \* For deviations from recommended postexposure vaccination schedules:

- **Every attempt** should be made to adhere to the schedule.
- Once initiated, a delay of a few days for individual doses is unimportant. Resume as if on schedule maintaining the same interval between doses.
  - Example: Patient for a day 3 dose appears on day 6; give remaining doses on day 10, and day 17.
- The effect of longer lapses is unknown. For substantial deviations, contact the manufacturer to evaluate the need to restart.
  - When substantial deviations do occur in a series, assess immune status by performing serologic testing 7–14 days after the final dose.

<sup>π</sup> For patients with immunosuppression, vaccine should be administered using all 5 doses of vaccine on days 0, 3, 7, 14, and 28.