

## Managing Rabies Exposures in the Emergency Department, Public Health Clinic, and Your Practice: Guidelines and Recommendations for Rabies Vaccine

With the risk of exposure to rabies virus increasing in a number of states<sup>1</sup> and the consequences of a missed diagnosis or inadequate treatment potentially fatal, a standardized approach to patient management can help to keep your emergency department, public health clinic, or private practice prepared. The most recent guidelines on postexposure prophylaxis (PEP) from the United States Advisory Committee on Immunization Practices (ACIP)<sup>2</sup> are the best management tool available.

### PEP Overview

PEP consists of local wound treatment, the human diploid cell rabies vaccine, and human rabies immune globulin (HRIG). The PEP protocol can be divided into 2 categories<sup>2</sup>:

Patients who HAVE NOT been previously vaccinated	Patients who HAVE been previously vaccinated <sup>a</sup>
Local wound care	Local wound care
Administer HRIG on the same day as the first dose of vaccine (day 0) – Can be administered up to 7 days after the first dose of vaccine	No administration of HRIG
Administer rabies vaccine on days 0, 3, 7, and 14 <sup>b</sup>	Administer rabies vaccine on days 0 and 3
Immunocompromised patients receive a fifth dose of vaccine on day 28	

<sup>a</sup> Defined as any person with a history of preexposure vaccination with human diploid cell vaccine (HDCV), purified chick embryo cell vaccine (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.

<sup>b</sup> Endorsed by the American Academy of Pediatrics.<sup>3</sup>

HyperRAB S/D is made from human plasma. Products made from human plasma may contain infectious agents, such as viruses, and, theoretically, the Creutzfeldt-Jakob disease (CJD) agent that can cause disease. There is also the possibility that unknown infectious agents may be present in such products.

### Rabies Vaccine in PEP

As outlined in the ACIP guidelines, PREVIOUSLY UNVACCINATED patients should receive the first of 4 rabies vaccinations along with HRIG on day 0. The additional required rabies vaccinations in these patients MUST be administered on days 3, 7, and 14.<sup>2</sup>

- Any immunocompromised patient should return for a fifth dose of rabies vaccine on day 28.<sup>2</sup>
- PREVIOUSLY VACCINATED patients should receive only 2 doses of rabies vaccine, on day 0 and day 3.<sup>2</sup>
- HRIG should NOT be administered in patients who have previously been vaccinated for the rabies virus.<sup>2</sup>

**Please see Important Safety Information at the end of this article and HyperRAB® S/D (rabies immune globulin [human]) full Prescribing Information for complete prescribing details.**

# RABIES WATCH

## Discharge and Follow-up

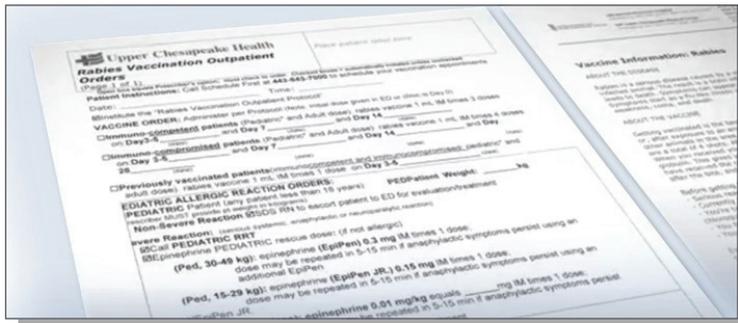
Because PEP requires that patients receive doses of rabies vaccine after the initial intervention, it's essential to consider the approach to discharge and follow-up for the additional required vaccine doses. **Patients should receive all vaccine doses to avoid negative outcomes.**

First, obtain reliable contact information before patients leave your facility. Ask for the home and work address, phone number, cell phone number, emergency contact, and the name of their primary care physician.

**Instruct patients that rabies is a fatal disease for which there is no cure. One vaccine shot is not enough, and the last vaccine dose is just as important as the first.**

## Practice Tips for Vaccination Follow-up

To encourage adherence to the vaccine protocol, consider the use of a discharge kit. Patients can be given details on scheduling follow-up appointments, as well as educational information about rabies and the risk of infection, before they leave for home.



## Who Should Receive Preexposure Vaccination?

People at higher risk of exposure to the rabies virus should be offered preexposure rabies vaccine.<sup>4</sup> The vaccine is recommended for people whose activities bring them into continuous or frequent contact with rabies virus or with possibly rabid animals (eg, veterinarians and their staff, animal control officers, laboratory workers exposed to rabies virus).<sup>4</sup> Preexposure vaccination should also be considered for international travelers and military personnel who are likely to come in contact with animals in parts of the world where rabies is common and immediate access to rabies biologics is limited (eg, Mexico, Afghanistan).<sup>4,5</sup>

## People at Higher Risk of Exposure to Rabies Virus<sup>4,5</sup>

Veterinarians and their staff	Veterinary students
Animal control and wildlife workers	Some international travelers
Rabies laboratory workers (research and diagnostic)	Some military personnel
Rabies biologics production workers	



# RABIES WATCH

## IMPORTANT SAFETY INFORMATION

Rabies vaccine and HyperRAB® S/D (rabies immune globulin [human]) should be given to all persons suspected of exposure to rabies with one exception: persons who have been previously immunized with rabies vaccine and have a confirmed adequate rabies antibody titer should receive only vaccine. HyperRAB S/D should be administered as promptly as possible after exposure, but can be administered up to the eighth day after the first dose of vaccine is given.

HyperRAB S/D should be given with caution to patients with a history of prior systemic allergic reactions following the administration of human immunoglobulin preparations.

The attending physician who wishes to administer HyperRAB S/D to persons with isolated immunoglobulin A (IgA) deficiency must weigh the benefits of immunization against the potential risks of hypersensitivity reactions. Such persons have increased potential for developing antibodies to IgA and could have anaphylactic reactions to subsequent administration of blood products that contain IgA.

As with all preparations administered by the intramuscular route, bleeding complications may be encountered in patients with thrombocytopenia or other bleeding disorders.

Soreness at the site of injection and mild temperature elevations may be observed at times. Sensitization to repeated injections has occurred occasionally in immunoglobulin-deficient patients. Angioneurotic edema, skin rash, nephrotic syndrome, and anaphylactic shock have rarely been reported after intramuscular injection so that a causal relationship between immunoglobulin and these reactions is not clear.

Administration of live virus vaccines (e.g., MMR) should be deferred for approximately 3 months after rabies immune globulin (human) administration.

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**Please see HyperRAB S/D full Prescribing Information for complete prescribing details.**

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For more information, go to [www.rabieswatch.com](http://www.rabieswatch.com)

## References

1. Dyer JL, Yager P, Orciari L, et al. Rabies surveillance in the United States during 2013. *J Am Vet Med Assoc.* 2014;245(10):1111-1123.
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**GRIFOLS**