



## PIC QUESTION OF THE WEEK: 6/02/08

Q: What are the current guidelines for rabies prophylaxis?

A: Rabies is an almost uniformly fatal viral disease transmitted by the bite of an infected animal. Its incubation period may range from days to years, but is usually several weeks to months. The disease is now rarely associated with the bite of a rabid dog. Bats are the most common source of rabies for humans and domestic animals in the United States. Raccoons, skunks, and foxes are also considered frequent transmitters of the disease. It is estimated that up to 40,000 individuals in this country receive postexposure rabies prophylaxis each year and the World Health Organization suggests the number may approach 40 million worldwide. The Centers for Disease Control and Prevention (CDC) has recently revised its previous (1999) recommendation on the prevention of human rabies. The accompanying table includes the most recent guidelines for postexposure rabies prophylaxis. Patient management is also dependent on the type and availability of the suspected animal. Thorough cleaning with soap and water followed by irrigation with a povidone-iodine solution can significantly reduce not only the risk of rabies but bacterial infection as well. Additional information on other aspects of rabies including pre-exposure prophylaxis, epidemiology, types of exposure, etc. is included in the CDC publication referenced below.

### **Rabies Postexposure Prophylaxis for Patients *Not Previously Vaccinated*\***

<u>Treatment</u>	<u>Regimen</u> <sup>#</sup>
Wound cleansing	Institute cleansing with soap and water immediately in all cases; if available, a povidone-iodine solution is recommended for wound irrigation
Rabies immune globulin	20 IU /kg infiltrated around the wound(s) with any remaining (RIG) volume given IM at a site distant from vaccine administration; do not administer in the same syringe as the vaccine
Vaccine	Human diploid cell vaccine (HDCV) or purified chick embryo cell vaccine (PCECV) – 1 ml IM (deltoid <sup>§</sup> ) on days 0, 3, 7, 14, and 28

\* Adapted from ACIP recommendation on Human Rabies Prevention – 2008. See entire guideline for suggested regimen for prophylaxis in *previously* vaccinated patients and other details of vaccine administration.

# Applicable to all age groups including children

§ Deltoid is only acceptable site for adults and older children; however, outer aspect of thigh may be used in younger children

### **Reference:**

- CDC. Human rabies prevention – United States, 2008; recommendations of the Advisory Committee on Immunization Practices. MMWR 2008;57(No.RR-3):1-28.

Photo by sethtex: used under Creative Commons Attribution-Non-Commercial License;  
<http://www.flickr.com/photos/sethandkaren/2372640047/> (accessed May 30, 2008)

Nicole L Woerschling and Raine L Zehner, Pharmacy Clerkship Students

The PIC Question of the Week is a publication of the Pharmaceutical Information Center, Mylan School of Pharmacy, Duquesne University, Pittsburgh, PA 15282 (412.396.4600).