

ACIP Provisional Recommendations for the Prevention of Human Rabies

Date of ACIP meeting and vote: June 24, 2009

Date of posting of provisional recommendations: July 10, 2009

On June 24, 2009, the ACIP approved new recommendations on the use of rabies vaccine for post-exposure prophylaxis for the prevention of human rabies.

A summary of the new provisional recommendations for the use of rabies vaccine follows:

Post-exposure Prophylaxis for Unvaccinated Persons:

Vaccine Use. A regimen of 4 one-mL vaccine doses of rabies vaccine (HDCV or PCECV) should be administered intramuscularly to previously unvaccinated persons with no immunosuppression. The first dose of the 4-dose course should be administered as soon as possible after exposure. This date is considered day 0 of the post-exposure prophylaxis series. Additional doses should then be administered on days 3, 7, and 14 after the first vaccination. Considerations for the site of the intramuscular vaccination remain unchanged.

Rabies Immune Globulin Use. The recommendations for use of immune globulin remain unchanged.

Post-exposure Prophylaxis for Previously Vaccinated Persons:

The recommendations for the post-exposure management of previously vaccinated individuals remain unchanged.

Post-Vaccination Serologic Testing:

No testing of healthy patients completing prophylaxis is necessary to document seroconversion, unless the person is immunosuppressed. When titers are obtained, specimens collected from 1 to 2 weeks after prophylaxis should completely neutralize challenge virus at a 1:5 serum dilution by the rapid fluorescent focus inhibition test (RFFIT).

Precautions - Immunosuppression:

Immunosuppression results from a wide variety of conditions. Primary or secondary immunodeficiencies may significantly reduce immune responses to vaccines. Given the large variety of immunocompromising conditions, as well as subsequent alterations in degrees of clinically significant immunodeficiencies, the evaluation of a potentially immunocompromised patient, as well as the decision about proper immunization of the immunocompromised patient, ultimately lies with the attending physician.

All rabies vaccines licensed in the U.S. are inactivated cell culture vaccines and as such can be administered safely to persons with altered immunocompetence. The effectiveness of such vaccinations and quality of elicited immune responses in immunocompromised patients could be suboptimal. Extensive monitoring of the immune response after rabies vaccination, specifically the determination of rabies virus-neutralizing antibodies, should be performed.

For persons with broadly defined immunosuppression, post-exposure prophylaxis should be administered using all 5 doses of vaccine, with the awareness that the immune response may still be inadequate. When administered to an immunosuppressed person, one or more serum samples should be tested for rabies virus neutralizing antibody by the RFFIT to ensure that an acceptable antibody response has developed after completing the series. A patient who fails to seroconvert with an acceptable antibody response after the fifth and last dose should be managed in consultation with their physician and appropriate public health officials.

The 2008 ACIP recommendations for the prevention of human rabies are otherwise unchanged, and are available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr57e507a1.htm>

This document can be found at:

<http://www.cdc.gov/vaccines/recs/provisional/downloads/rabies-July2009-508.pdf>