DATE: 08/24/09

RE: Updated Rabies Vaccination Schedule

The vaccination schedule for individuals exposed to rabies was re-evaluated by the Advisory Committee on Immunization Practices (ACIP) due to ongoing supply issues with the vaccine since 2007. As a result, the number of doses of rabies vaccine recommended subsequent to an animal bite or other exposure has been reduced from five to four. This change was made on the basis of a study demonstrating no significant difference in the protective effect of four versus five doses. Moreover, resultant antibody levels were equivalent among those receiving four versus five doses.

The changes to the recommendations are as follows:

Post-Exposure Prophylaxis of Unvaccinated, Immunocompetent Individuals

Administer four doses of rabies vaccine intramuscularly to previously unvaccinated, immunocompetent individuals. The first dose should be administered as soon after the exposure as possible (date of first dose is day 0). Subsequent doses should be administered on days 3, 7, and 14. Considerations on site of injection and recommendations for use of rabies immune globulin remain unchanged.

Post-Exposure Prophylaxis of Unvaccinated, Immunocompromised Individuals

All five doses of rabies vaccine should be administered intramuscularly to previously unvaccinated individuals who are immunocompromised (days 0, 3, 7, 14, and 28), with an understanding that the immune response may still be inadequate. Thus, for these individuals, one or more serum samples should be tested for rabies virus neutralizing antibody by the rapid fluorescent focus inhibition test (RFFIT) to ensure that an adequate antibody response has developed after completing the series. Specimens collected from one to two weeks after completion of the vaccination series should completely neutralize challenge virus at a 1:5 serum dilution.

Recommendations for previously vaccinated individuals remain unchanged.

Additional information:

ACIP Provisional Recommendations: Prevention of Human Rabies, July 10, 2009. Available at: http://www.cdc.gov/vaccines/recs/provisional/downloads/rabies-July2009-508.pdf

Human Rabies Prevention--United States, 2008: Recommendations of the Advisory Committee on Immunization Practices. MMWR, May 23, 2008; 57(RR03):1-26,28. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr57e507a1.htm