

March 24, 2010

TO: All NC Health Care Providers, Public Health Leaders
FROM: Carl Williams, Marilyn Haskell, Public Health Veterinarians

SUBJECT: Rabies Post Exposure Prophylaxis (PEP); New (2010) ACIP Recommendations

On June 24, 2009 the Advisory Committee on Immunization Practices (ACIP) voted in favor of accepting a recommendation from the ACIP rabies working group to reduce the number of rabies vaccine doses for postexposure prophylaxis (PEP), from 5 doses as recommended in the 2008 ACIP document on Human Rabies Prevention, to 4 doses administered on days 0, 3, 7 and 14. These recommendations became official when accepted by the CDC Director and published in the MMWR on March 18. See http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5902a1.htm?s_cid=rr5902a1_e. This memo seeks to provide some understanding and clarification for the issue. Below is a table depicting the new ACIP recommendations for rabies PEP.

Day à	0	3	7	14	28
PEP for Previously Unvaccinated Persons	1.0 ml vaccine IM (deltoid) & 20 IU/kg HRIG*	1.0 ml vaccine IM (deltoid)	1.0 ml vaccine IM (deltoid)	1.0 ml vaccine IM (deltoid)	No vaccine given**
PEP for Previously Vaccinated Persons	1.0 ml vaccine IM (deltoid) <u>HRIG is NOT administered</u>	1.0 ml vaccine IM (deltoid)	No vaccine given	No vaccine given	No vaccine given

NOTE: All animal bite wounds should be washed thoroughly with soap and water for 10-15 minutes.

* If anatomically feasible, the full dose of HRIG is infiltrated around and into any wounds. Any remaining volume is injected intramuscularly at a site distant from vaccine administration.

** For persons with immunosuppression (consult package insert), a fifth dose of vaccine should be administered on day 28

Why were these changes recommended?

The reduction in doses recommended for PEP was based in part on evidence from rabies virus pathogenesis data, experimental animal work, clinical studies, and epidemiologic surveillance. These studies indicated that 4 vaccine doses in combination with human rabies immune globulin (HRIG) elicited adequate immune responses (in healthy non-immune suppressed patients) and that a fifth dose of vaccine did not contribute to more favorable outcomes.

Should these changes be implemented immediately?

Yes. Per 10A NCAC 41A .0201 guidelines and recommended actions published by the Centers for Disease Control and Prevention are incorporated by reference as disease control measures.

What resources currently exist to help us understand this change?

A reference site to for the new recommendations is at http://www.cdc.gov/rabies/resources/acip_recommendations.html. After reviewing the information on the CDC sites, if you still have questions or need consultation, please contact the Veterinary Public Health program at 919-733-3410 during business hours and at 919-733-3419 after hours, on weekends and holidays.

Are the recommendations for pre-exposure immunization changed?

No, the schedule remains the same and consists of 3 doses of vaccine administered IM (deltoid) on days 0, 7, and 21 (or 28). As a reminder vaccine availability is good and there is no password requirement to obtain rabies vaccine.