University of Notre Dame Institutional Animal Care and Use Committee
Policy for Rabies Prophylaxis and Testing for Individuals Working with Wildlife

Purpose

Rabies among wildlife occurs throughout the continental United States. Although the incidence of rabies has been reduced through vaccination in the domestic dog population; wildlife remains the most important potential source of infection for both humans and domestic animals in the United States. Since 1980 about 58% of rabies diagnosed in humans has been associated with bat variants of the virus. With exposure risks still high in feral populations, the University of Notre Dame's Institutional Animal Care and Use Committee (IACUC) recommends that all persons working with bats, skunks and raccoons be protected against the rabies virus. The highest risk for inapparent exposures is for those persons working with rabies virus in research laboratories or vaccine production facilities.

Primary Vaccination

Documented preexposure prophylaxis or declination is required for those persons whose activities bring them into contact with bats, raccoons, skunks, or other species at risk for having rabies. There are several reasons for rabies prophylaxis. First, although vaccination does not eliminate the need for additional therapy after a rabies exposure, it does simplify the therapy by eliminating the need to administer Rabies Immunoglobulin (RIG) and reduces the number of doses of vaccine needed. Secondly, it might protect persons whose post exposure therapy is delayed. Finally it might provide protection to persons at risk for inapparent exposures to rabies. Vaccination must be performed only with FDA approved vaccines in accordance with the volumes, routes and intervals approved by the CDC. The approved primary vaccination schedule requires immunizations on days 0, 7, and 21 or 28 for all approved vaccines. The prophylaxis must be completed in advance of initiation of animal studies.

Booster Vaccination

The need for booster vaccination is determined by serum titer. A serum sample is tested every two years after the primary vaccination. If the titer falls below the minimum acceptable antibody level (1:5 serum dilutions) a preexposure booster dose of vaccine is needed. Booster immunizations are a single dose for all approved vaccines. The titer and/or booster prophylaxis must be completed in advance of initiation of studies.

Documentation

All persons listed on animal use protocols that potentially have contact with bats, skunks, and raccoons must submit proof of primary vaccination or documented declination (see appended form). If the primary vaccination is more than two years ago, a serum titer must be run. Documentation of protective serum titer levels will be accepted in the place of the primary vaccination. Should serum titer levels fall below 1:5 serum dilutions, booster vaccination documentation is required. For those working with rabies virus, a serum sample tested for rabies neutralizing antibody every 6 months is recommended.

References

This policy was developed based on the U.S. Department of Health and Human Services Centers for Disease Control and Prevention (CDC), Recommendations of the Advisory Committee on Immunization Practices (ACIP) on Human Rabies Prevention – United States 2008. MMWR May. 23, 2008, vol. 57, no. RR-3