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New Rabies Vaccine Available

At last, the long awaited Human Diploid Cell Rabies Vaccine has been licensed in the United States and is available from the Section of Communicable Disease Control.

Human Diploid Cell Rabies Vaccine (HDCV) is an inactivated virus vaccine prepared from fixed rabies virus grown in WI - 38 or MRC - 5 human diploid cell tissue culture. The new vaccine represents a distinct improvement over the duck embryo vaccine (DEV) currently used in the United States. The diploid vaccine has proven more immunogenic and less reactogenic in both experimental trials in this country and in post-licensure general use in Europe.

Initially the vaccine will be in short supply and will be available in Alaska only through the Division of Public Health, Section of Communicable Disease Control, Anchorage, or through the Virology-Rabies Unit, Fairbanks. Orders for the vaccine to the Merieux Company from individuals will not be accepted by the company. The Division of Public Health now has and will supply the vaccine free of charge when circumstances dictate its use. HDCV costs \$45.00 per dose, or \$225.00 per treatment.

HDCV will replace DEV as the vaccine of choice for all post-exposure rabies prophylaxis. Because the vaccine will initially be in short supply, pre-exposure rabies immunization will continue to be performed with DEV. Ultimately, HDCV can be expected to replace DEV for pre-exposure immunization. Under circumstances where HDCV is unavailable (hopefully rare), DEV can continue to be used for post-exposure treatment.

HDCV, when used for post-exposure prophylaxis, will require 5 doses 1 ml. each, given intramuscularly. The first dose should be given as soon as possible after the exposure; an additional dose should be given on each of days 3, 7, 14, and 28 after the first dose. A serum specimen for rabies antibody testing should be collected on day 28 or 2-3 weeks after the last dose.

HDCV does not change current recommendations for the use of Human Rabies Immune Globulin (HRIG). Post-exposure prophylaxis should always include both passively administered antibody (HRIG) and vaccine (HDCV) with one exception: individuals previously immunized with rabies vaccine and who have a documented adequate rabies antibody titer should receive only vaccine.

## LOCAL TREATMENT OF WOUNDS

Immediate and thorough washing of all bite wounds and scratches with soap and water is perhaps the most effective measure for preventing rabies. In experimental animals, local wound-cleansing has been shown to reduce markedly the likelihood of rabies.

Rabies vaccine and consultation can be obtained from John Middaugh, M.D. at 272-7534 (W); 333-9349 (H); or from Don Ritter at 479-7017 (W); 456-5974 (H). Detailed information on HDCV rabies vaccine will soon be available in MMWR, CDC, Atlanta, Georgia.

## PRE-EXPOSURE IMMUNIZATION: NEW ACCELERATED SCHEDULE

Duck Embryo Vaccine (DEV) will continue to be used for pre-exposure immunization against rabies until HDCV is in adequate supply. Because the currently recommended schedules for pre-exposure immunization are cumbersome, time consuming, and have only about an 80% success rate in producing demonstrable antibodies, the following accelerated schedule is strongly recommended to be used:

- A total of 5 doses of DEV, 1.0 ml. per dose, given subcutaneously on day 0, 2, 4, 6 and 8.
- Draw blood for rabies antibody titer on day 30. Antibody titers must be measured after all pre-exposure regimens to detect persons who do not respond so they may be given booster doses.

1. Nelson, K.E., "Purified Duck Embryo Rabies Vaccine. An Accelerated Schedule for Pre-exposure Against Rabies", Journal of the American Medical Association 238, pp. 218-220, 1977.