Yukon Immunization Program Manual

Section 8 - Biological Products

Rabies Vaccine

SECTION 8 – BIOLOGICAL PRODUCTS

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Rabies Vaccine Pre-exposure [Human Diploid Cell Vaccine (HDCV)] (Inactivated) IMOVAX® **Supplier: Sanofi Pasteur.**	
INDICATIONS	**PRE-EXPOSURE PROPHYLAXIS** The Yukon population at large and most travelers to epizootic areas, not in any of the higher risk groups below are at very low risk of rabies - no immunization necessary. **Recommended but not provided free to the following persons at risk of contact with the rabies virus:** **High Risk:** • Rabies research lab workers • Rabies biologicals production workers • Bat biologists **Moderate Risk:** • Rabies diagnostic lab workers • Spelunkers • Veterinarians and staff, and animal control workers in rabies epizootic areas • Wildlife biologists and wildlife workers • Hunters and trappers in high risk areas such as the far north **Low Risk:** • Vets and staff, and animal control and wildlife workers in areas of low rabies disease (enzootic) • Vet students and animal health tech students • Children and travelers visiting foreign epizootic areas for 1 month or more. Travelers to foreign epizootic areas trekking/hiking for any length of time, and far from a major medical center.
INITIAL SERIES ❶	**PRE-EXPOSURE PROPHYLAXIS**: **3 dose series:** • 1.0ml given IM per dose (2.5 IU): **1st dose on day 0, 2nd dose on day 7, 3rd dose any time from day 21 through 28**
ADMINISTRATION❷	**DO NOT GIVE RABIES VACCINE IN THE GLUTEAL REGION** While NACI considers the **IM** route of administration as the gold standard, in the event of a rabies vaccine shortage **or** an opportunity presents to immunize a group of up to six people at the same time, consideration may be given to using the **ID route** for pre-exposure immunization provided there is enough time to assess the neutralizing antibody level at least **2 weeks** after administration, so that the adequate protection can be ensured. **For ID administration** the dose volume is reduced to 0.1 mL. Rabies vaccine must be used promptly after reconstitution.

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Rabies Vaccine Pre-exposure [Human Diploid Cell Vaccine (HDCV)] (Inactivated) IMOVAX® **Supplier: Sanofi Pasteur**	
ADMINISTRATION	• IMOVAX® Rabies is pink to red in color following reconstitution. Also, it does not contain any preservative and should be used immediately after reconstitution or discarded. • For infants and children < 12 months of age, the site for immunization is the anterolateral thigh for IM injection. • For infants ≥12 months of age and adults, the preferred site is the deltoid muscle for IM injection.
SEROLOGICAL TESTING AND BOOSTER DOSES ❷	As required 1.0 ml **IM**. An acceptable antibody level is ≥ 0.5 IU/ml. **High risk:** test clients every 24 weeks and boost when level falls below 0.5 IU/ml. **Moderate risk:** test clients every 2 years and boost when level falls below 0.5 IU/ml. **Low risk:** booster only following subsequent exposure, or as determined by post-exposure serology.
CONTRAINDICATIONS	1. Persons with an anaphylactic reaction to a previous dose of rabies vaccine, IMOVAX® Rabies, any component of IMOVAX® Rabies, or to latex. Those with severe hypersensitivity to eggs should be immunized with IMOVAX®. 2. Severe allergic or neuroparalytic reactions during the course of a rabies vaccine series pose a serious dilemma. The risk of exposure to rabies must be carefully considered before a decision is made to discontinue rabies vaccine.
VACCINE COMPONENTS	**Imovax® Rabies** (Human Diploid Cell Vaccine or HDCV): **Potential allergens:** neomycin, phenol red. **Other components:** Human albumin
PRECAUTIONS	• Persons receiving high doses of steroids or immunosuppressive therapy should receive vaccine by the IM route and have a rabies antibody titre 7 – 14 days after completion to ensure an adequate response has developed. If titre is inadequate, give one booster dose and retest. • The intradermal route should not be used in a person on chloroquine or planning to start chloroquine within 4 weeks of series completion. • There are insufficient data regarding concurrent use of mefloquine with rabies immunization.

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Rabies Vaccine Pre-exposure [Human Diploid Cell Vaccine (HDCV)] (Inactivated) IMOVAX® **Supplier: Sanofi Pasteur**

ADVERSE EVENTS	**IMOVAX®Rabies**: **Local:** injection site pain, erythema, swelling, pruritus and induration. **Systemic:** headache, nausea, abdominal pain, myalgia, arthralgia, malaise, fever and dizziness. While earlier rabies vaccines (Semple and SMB rabies vaccine) were associated with Guillain-Barré Syndrome, the occurrence of this syndrome following use of the vaccines now used in North America is not above background rates.

❶ Whenever possible the immunization series should be completed with the same product. However, if this is not feasible, Imovax® and RabAvert® are interchangeable in terms of indications for use, immunogenicity, efficacy, and safety.

❷ An acceptable antibody level is ≥ 0.5 IU/mL. Results are available from: PHSA Laboratory telephone: 1-877-747-2522. Have serum sample taken and administer first dose of rabies vaccine while awaiting results. It is very likely the rabies antibody titre result will not be available by day 7: administer 3rd dose of rabies vaccine on day 7.

Rabies Post Exposure Prophylaxis

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Refer to Yukon Communicable Disease Guidelines, Section 7, Rabies, for further information available at: https://yukon.ca/en/find-out-about-communicable-disease-guidelines-health-professionals

Key documents/information that needs to be reviewed are within Section 7, Rabies and include:

- Rabies Risk Assessment Form
- Rabies Post-Exposure Prophylaxis (RPEP)
- Release of biologicals for RPEP
- Administration arrangements