Rabies Vaccine for POST-EXPOSURE Prophylaxis

**INDICATIONS:**
- **Post-Exposure Prophylaxis (PEP)** as determined by Medical Health Officer. Consultation is available with BCCDC.
- If a rabies vaccine series has been started or completed elsewhere and it was **not** given in accordance with current WHO standards, administer another full course of rabies vaccine. See [Communicable Disease Control Manual, Chapter 1: Rabies, Section 4.2.1](#).

**DOSES AND SCHEDULE:**

**INTRADERMAL ADMINISTRATION**

As of August 9, 2019, due to a national rabies vaccine shortage, the intradermal (ID)** administration of rabies vaccine is PREFERENTIALLY RECOMMENDED to optimize the use of the vaccine. See [Interim Direction for the use of rabies vaccine for post-exposure prophylaxis in BC](#) for further information. For information on ID administration, see [Appendix B: Administration of Biological Products](#).

<table>
<thead>
<tr>
<th>Patient</th>
<th>Day 0</th>
<th>Day 3</th>
<th>Day 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunocompetent</td>
<td>Two-site 0.1 mL ID (total 0.2 mL)</td>
<td>Two-site 0.1 mL ID (total 0.2 mL)</td>
<td>Two-site 0.1 mL ID (total 0.2 mL)</td>
</tr>
<tr>
<td>Immunocompromised*</td>
<td>Four-site 0.1 mL ID (total 0.4 mL)</td>
<td>Four-site 0.1 mL ID (total 0.4 mL)</td>
<td>Four-site 0.1 mL ID (total 0.4 mL)</td>
</tr>
<tr>
<td>Previously immunized</td>
<td>One-site 0.1 mL ID</td>
<td>One-site 0.1 mL ID</td>
<td>-</td>
</tr>
</tbody>
</table>

* Also includes those individuals on chloroquine or hydroxychloroquine.

** The preferred site for ID administration of rabies vaccine is the deltoid area of the arms; alternatively the anterolateral area of the thighs and suprascapular areas can be used as well. When 2 or more doses of vaccine are administered at the same visit, different sites/limbs should be used for each dose.

Individuals who have already initiated the rabies PEP vaccine series with an intramuscular (IM) regimen are recommended to complete the series with an ID regimen as follows:

<table>
<thead>
<tr>
<th>History of doses</th>
<th>Series completion with ID regimen (see dosage in above table)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One IM dose</td>
<td>ID series can be continued on days 3, 6 and 10</td>
</tr>
<tr>
<td>Two IM doses</td>
<td>ID series can be continued on days 7 and 14</td>
</tr>
<tr>
<td>Three IM doses</td>
<td>ID series can be continued on day 14</td>
</tr>
</tbody>
</table>

Once a vial is reconstituted, the vaccine should be used within 6 hours. Any remaining vaccine should be discarded.

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**A** If possible the series should be completed with the same product. If not feasible, IMOVAX® Rabies and RabAvert® are interchangeable in terms of indications for use, immunogenicity, efficacy, and safety.
Rabies Vaccine for POST-EXPOSURE Prophylaxis

**IMOVAX® Rabies**  Supplier: Sanofi Pasteur Limited

**RabAvert®**  Supplier: GlaxoSmithKline Inc.

**DOSES AND SCHEDULE (continued):**

**INTRAMUSCULAR ADMINISTRATION**

Unimmunized immunocompetent individuals and those who have previously completed a course of rabies pre or post-exposure prophylaxis using a non-WHO approved vaccine or schedule:

**4-dose schedule:**
- Dose 1: Give 1 mL IM on day 0 as soon as possible after exposure along with rabies immune globulin (Rablg) (see Part 4 – Biological Products, Immune globulins, Rabies Immune Globulin)
- Doses 2 through 4: Give as 1 mL IM on days 3, 7, and 14

Unimmunized immunocompromised persons and those on chloroquine:

**5-dose schedule:**
- Dose 1: Give 1 mL IM on day 0 as soon as possible after exposure along with Rablg (see Part 4 – Biological Products, Immune globulins, Rabies Immune Globulin)
- Doses 2 through 5: Give 1 mL IM on days 3, 7, 14, and 28

Individuals previously immunized with a full course of documented rabies pre or post-exposure vaccine using a WHO approved rabies vaccine and schedule (see Communicable Disease Control Manual, Chapter 1: Rabies, Section 4.5) or those with prior documented anti-rabies antibody level of ≥ 0.5 IU/mL:

**2-dose schedule:**
- Do not give Rablg
- Dose 1: Give 1 mL IM on day 0 as soon as possible after exposure
- Dose 2: Give 1 mL IM on day 3

**RPEP started in another country**

RPEP received in another country may or may not be adequate. In determining the validity of Rablg or rabies vaccine administered overseas, a case-by-case assessment must be made. For guidelines on assessment and continuation of RPEP started in another country, see Communicable Disease Control Manual, Chapter 1, Rabies: Section 4.2.1.

**ADMINISTRATION:**

- Both vaccines need to be reconstituted. Use the diluent provided with the vaccine. Following reconstitution IMOVAX® Rabies is a clear or slightly opalescent red to purplish suspension while RabAvert® is a clear to slightly opalescent colorless to slightly pink solution.
- Administer the entire contents of the reconstituted vaccine when administered IM.
- Neither vaccine contains any preservative and should be used immediately after reconstitution or discarded. However, when one vial is being used for multiple ID doses, the reconstituted vaccine can be used for up to 6 hours if stored at +2°C to +8°C.
- Rabies vaccine and Rablg must not be administered in the same anatomical site. Use separate needles and syringes for each product.
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IMOVAX® Rabies Supplier: Sanofi Pasteur Limited
RabAvert® Supplier: GlaxoSmithKline Inc.

SEROLOGICAL TESTING AND RE-VACCINATION: 
Those on high doses of steroids or immunosuppressed at the time of immunization should have serological testing for rabies antibody 7-14 days after series completion. If the rabies antibody titre is below 0.5 IU/mL a 2nd series of rabies vaccine should be given. If the titre remains below 0.5 IU/mL, the Medical Health Officer should be consulted for a risk assessment for further management.

CONTRAINDICATIONS:
1. There are no contraindications to rabies vaccine given for post-exposure purposes.
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.

PRODUCT COMPONENTS:
IMOVAX® Rabies (Human Diploid Cell Vaccine or HDCV):
Potential allergens: neomycin, phenol red.
Other components: human albumin.

RabAvert® (Purified Chick Embryo Cell Vaccine or PCECV):
Potential allergens: polygeline (processed bovine gelatin), chicken protein, ovalbumin, neomycin, chlortetracycline, amphotericin B.
Other components: human serum albumin, potassium glutamate, sodium EDTA.

PRECAUTIONS:
• Administer vaccine in an emergency room setting if history of an anaphylactic reaction to a previous dose of rabies vaccine or to any of the components of the vaccine.

SPECIAL CONSIDERATIONS:
• In the event of a rabies vaccine shortage, consideration may be given to using the ID route for post-exposure prophylaxis.
• If another vaccine (e.g., tetanus-containing vaccine) is being administered in the same limb as an ID dose of rabies vaccine, a separation of 2.5 cm (1 inch) between the vaccines is preferable so that local reactions are unlikely to overlap.

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A An acceptable antibody level is ≥ 0.5 IU/mL. Testing is conducted by the National Microbiology Laboratory. Results are available from PHSA Laboratory (telephone: 1-877-747-2522).
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**RabAvert®** Supplier: GlaxoSmithKline Inc.

**ADVERSE EVENTS:**

**IMOVAX® Rabies:**
- **Local:** pain, erythema, swelling, pruritus, induration.
- **Systemic:** headache, nausea, abdominal pain, myalgia, arthralgia, malaise, fever, dizziness.

**RabAvert®:**
- **Local:** pain, swelling, erythema, induration.
- **Systemic:** malaise, myalgia, arthralgia, headache, fever, fatigue, lymphadenopathy, nausea, rash.

While earlier rabies vaccines (Semple and SMB rabies vaccine) were associated with Guillain-Barré Syndrome, the occurrence of this syndrome following receipt of the vaccines currently used in North America is not above background rates.