Rabies Immune Globulin (Human)
Revision Date: October 25, 2019

Rationale for Update:
- Clarified recommended interval between live vaccines and administration of RIG.
- Updated to incorporate focus on infiltration of wound as per WHO guidelines. (May 2019)
- Incorporated increase in concentration of HyperRAB® product -150 IU/mL to 300 IU/mL. (May 2019)

Please consult the Product Monograph\(^1\,^2\) for further information about the vaccine.

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>IMOGAM® Rabies Pasteurized</th>
<th>HYPERRAB®</th>
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<tbody>
<tr>
<td>Sanofi Pasteur Limited</td>
<td>Grifols Therapeutics LLC. distributed by Grifols Canada Ltd.</td>
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</tbody>
</table>

Authorization and access
- Special authorization and access procedures must be followed.
  See Rabies Post-exposure - Authorizing and Obtaining Rabies Post-exposure Biologicals.

Off-license use
- None

Indications for use of provincially funded vaccine rabies immune globulin
- **Post-exposure:** Rabies PEP must be considered if potential human exposure to rabies virus has occurred and should be initiated as soon as possible after the exposure. However, if indicated based on risk assessment, rabies PEP should be offered to exposed individuals regardless of the time interval after exposure.\(^3\)

For disease information, assessment of exposure and reporting requirements refer to Rabies Prevention and Control Manual Guidance for Public Health and Veterinary Professionals \(^4\)

**Note:** Individuals from out of province requiring rabies PEP should be referred to the Alberta Health Immunization Program. The Nurse Consultant will send a referral to the appropriate jurisdiction to ensure follow-up is completed.

Dose
- **Post-exposure:**
  - 20 IU/kg (0.133 mL/kg) of body weight \(^2\)
  - **Note:** Concentration is 150 IU/mL\(^2\)

- **Post-exposure:**
  - 20 IU/kg (0.0665 mL/kg) of body weight \(^1\)
  - **Note:** Concentration is 300 IU/mL\(^1\)

  **Note:** The dose of rabies immune globulin (RIG) should not be exceeded because of possible interference of RIG with the immune response to rabies vaccine.\(^3\)

Route
- **Post-exposure:**
  - The most effective use of RIG is in the wound \(^5,^7\)
  - Infiltration into and around the wound(s) or at the site of exposure.\(^1,^2,^5\) Remainder of the dose given IM.\(^1,^2,^3,^6\)
### Notes:
- If anatomically feasible, the full dose should be infiltrated into the wound and surrounding area by a physician. Any remaining volume should be injected intramuscularly at an anatomical site distant from the vaccine administration.\(^1,2,3,6\)
- When more than one wound exists, each wound should be locally infiltrated with a portion of the RIG using a separate needle.\(^3\)
  - For HyperRAB® - If the wound covers a large area and the dose has insufficient volume to infiltrate the entire wound HyperRAB® may be diluted with an equal volume of dextrose, 5% (D5W) in water. Do not dilute with normal saline.\(^1\)
  - For Imogam® - the RIG can be diluted twofold to threefold in a solution of 0.9% sodium chloride in order to provide the full amount of RIG required for thorough infiltration of all wounds.\(^3\)
- RIG should be infiltrated whenever possible with the following exceptions:\(^6\)
  - If the site of the wound/exposure is unknown,\(^3,6\) or
  - If it is not anatomically feasible,\(^3,6\) or
  - If the opportunity to provide RIG would otherwise be missed.\(^6\)
  
  In these situations the entire dose should be administered intramuscularly.\(^3,6\)

### Schedule Post-exposure:
- RIG should be administered concurrently with the first dose of rabies vaccine using separate syringe/needle and at a different anatomical site.\(^3\)

### Notes:
- If RIG is not administered as recommended at the initiation of the post-exposure rabies vaccine series (day 0), it can be administered up to seven days after the first dose of vaccine is administered.\(^3\)
- Additional doses may interfere with maximum immunity from the vaccine.\(^8\) RIG should be administered only one time during rabies PEP.\(^7,8\)
- RIG is not indicated for individuals who have been appropriately immunized. See Biological Products - Rabies Vaccine.
- RIG is recommended for those individuals who have not been appropriately immunized. \(^3\) See Biological Products - Rabies Vaccine.
- The recommended interval between RIG and subsequent immunization with MMR, MMR-Var, or Varicella vaccines is four months.\(^3\)
- When it is necessary to administer RIG within 14 days after receiving MMR, MMR-Var, or Varicella vaccines, the vaccine should be repeated 4 months after the RIG administration. If RIG is given more than 14 days after the MMR, MMR-Var, or Varicella vaccines, the dose does not need to be repeated.\(^3\)

  See Assessment Expected prior to Vaccine Administration – Guidelines for interval between immune globulin and live vaccines.

### Contraindications
- Individuals who have previously completed rabies immunization and are known to have an adequate antibody titre (rapid fluorescence focus inhibition test result of 0.5 IU/mL or greater) should not receive RIG.

### Precautions
- Administer with caution to individuals with a history of prior systemic allergic reactions following the administration of human immune globulin preparations.\(^1,2\)
- Individuals with IgA deficiency have increased potential for developing antibodies to IgA and could have anaphylactic reactions to subsequent administration of blood products that contain IgA.\(^1,2\)
<table>
<thead>
<tr>
<th>Possible reactions</th>
<th>See product monograph.</th>
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<tbody>
<tr>
<td>Pregnancy</td>
<td>Pregnancy is not a contraindication to rabies PEP.¹,²,³</td>
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<td>Lactation</td>
<td>Breastfeeding is not a contraindication to rabies PEP.¹,²,³</td>
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<tr>
<td>Program Notes</td>
<td>1983 September – Introduced into program.</td>
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**References**