

**STEP 4 a: Administer RIG and Vaccine** on appropriate dates, body sites and correct volume

**Recommendations for Administration of Rabies Post Exposure Prophylaxis (Rabies PEP)**

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PEP includes **BOTH** Rabies Immune Globulin (RIG) and Rabies Vaccine

**Video** on HOW to administer Rabies Immune Globulin and Rabies Vaccine  
<https://www.youtube.com/watch?v=yCuTF3hVt-o&feature=youtu.be>  
 To speak with a VPD Nurse for assistance with the physical administration of Rabies PEP  
 M-F 8:30-4:30 1-877-721-7520 ext. 8806

**Administration of RABIES IMMUNE GLOBULIN (RIG) - HyperRab® OR ImoGam®**

Turn over for administration of Rabies VACCINE

- 1. Calculate Maximum RIG Volume based on weight of Client** (refer to **Dose Schedule**)
- 2. Apply Sparing Protocol** (determine maximum volume that can be administered into wound area- if applicable)
- 3. Order/Administer the lesser volume into wound location only. DISCUSS with SMDHU PHI**

**Dose Calculation for Maximum RIG volume based on weight of client:** NOTE: two different RIG products currently available: calculations will be based on product availability

- **For 1ml vial (300 IU/ml product)**= 20 IU/kg x (client weight in kg) ÷ 300 IU/ml= maximum volume (ml)
- **For 2ml vial (150 IU/ml product)**= 20 IU/kg x (client weight in kg) ÷ 150 IU/ml= maximum volume (ml)

**RIG** is only administered on **First Day (Day 0)** of PEP schedule at same time as first dose of Rabies Vaccine

Client Age	Administration Site			Max Vol per Site	Needle Size		Route	
	Ideal Location	Multiple Wound Sites	Unknown wound location (bat in room)		Length	Gauge		
	*RIG should be administered as close to wound location as possible * RIG should <b>never</b> be administered in the same site as the <b>vaccine</b> .							
				If it is necessary to use the same muscle to administer more than one injection, the distance separating the two injections should be 2.5 - 5 cm (1-2 inches)				
<b>Infant under 12 months</b>	Infiltrate as much RIG into the wound and surrounding area (IM) as anatomically possible. (Up to the maximum RIG volume).	Each wound location should be infiltrated with a portion of the RIG using a separate needle and syringe. RIG can be diluted twofold to threefold in a solution of 0.9% sodium chloride if necessary	Multiple IM sites may be needed. When using multiple injection sites, a separate needle and syringe should be used for each injection.	Ventrogluteal <sup>1</sup>	1 ml	7/8 "-1 "	25	IM
				Vastus lateralis	1 ml	7/8 "-1 "	25	
<b>Children 1 yr. – 4 yrs.</b>	DO NOT administer the excess remainder of RIG	(Up to the maximum RIG volume).	The decision regarding number of injections and maximum volume to be administered at each location should be based on the age and assessed muscle mass of the individual.	Ventrogluteal <sup>1</sup>	1 ml	1 "	22-25	IM
				Vastus lateralis	2 ml	1 "	22-25	
				Deltoid <sup>2</sup>	1 ml	1 "	22-25	IM
				Ventrogluteal <sup>1</sup>	3 ml	1 " - 1½"	20-25	
<b>Children 5 yr. – 18 yrs.</b>	This is a clinical decision made at the time according to size, depth and location of wound.	(Up to the maximum RIG volume).		Deltoid <sup>2</sup>	1 ml	1 "	22-25	IM
				Vastus lateralis	3 ml	1 " - 1½"	20-25	
				Ventrogluteal <sup>1</sup>	4 ml	1" – 1½"	20-22	
<b>Adults 19 yrs. +</b>				Deltoid <sup>2</sup>	2 ml	1" – 1½"	20-22	IM
				Vastus lateralis	5 ml	1" – 1½"	20-22	

1. The ventrogluteal muscle is the preferred site for administration of immune globulin for everyone 7 months of age and older when wound location is unknown.
2. One deltoid should be reserved for the administration of rabies **vaccine (only)**. The alternate deltoid may be used for RIG.

**Adverse Reactions** to HyperRab® or ImoGam®

- Local tenderness, soreness, stiffness of the muscles at the injection site – itching and swelling may occur
- Anaphylaxis is rare
- Fever, skin reactions, chills, nausea, vomiting, headache, malaise may occur

**SOURCES** <http://www.bccdc.ca/> [www.phac-aspc.gc.ca](http://www.phac-aspc.gc.ca) [www.novartis.ca](http://www.novartis.ca) [www.sanofipasteur.ca](http://www.sanofipasteur.ca) [www.fda.gov](http://www.fda.gov)

**STEP 4 b: Administer RIG and Vaccine** on appropriate dates, body sites and correct volume

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**Administration of RABIES VACCINE - RabAvert® OR ImoVax®**

Turn over for Administration of Rabies Immune Globulin

**Dose/Schedule:**

- **Immunocompetent people:**  
Four doses of 1.0 mL of Rabies vaccine, the first dose (on day 0) as soon as possible after exposure and additional doses on each of days 3, 7, and 14 after the first dose. **(Day 0, 3, 7 and 14)**
- **Immunocompromised people:** (includes those taking corticosteroids or other immunosuppressive agents, those with immunosuppressive illnesses) and those taking chloroquine and other antimalarial drugs: Five doses of 1.0 mL of Rabies vaccine. **(Day 0, 3, 7, 14 and 28)**
- **Previously Immunized Individual:** Two doses of 1.0 mL of Rabies vaccine. **(Day 0 and 3)**

**RabAvert®**

- Using longer of 2 needles provided, withdraw diluent
- Inject into vaccine – mix – avoid foaming
- White, freeze dried vaccine dissolves to clear or slightly opaque
- After reconstitution – unscrew syringe to equalize pressure
- Withdraw total amount into syringe and then change to smaller needle (provided)

**Imovax®:**

- Use only the supplied diluent – withdraw entire volume into the syringe, inject all the contents into the vial of lyophilized vaccine and gently swirl the contents until completely dissolved.  
(Refer to syringe size on opposite side of page)

**Administration Sites / Needle Size**

Client Age	Needle Length	Size (gauge)	Route	Max Vol per Site	Site <small>*Never administer into gluteal region * Vaccine should never be administered in the same site as the RIG.</small>
Infant under 12 months	7/8 "– 1 "	25	IM	1 ml	Vastus lateralis (Anterolateral thigh)
Children 1 yr. - 18 yrs.	1 "	25	IM	1 ml	Deltoid
Adults 19 yrs.+	1" – 1½"	25	IM	2 ml	Deltoid

**Contraindications**

- There is no contraindication to the use of rabies vaccine or RIG if indicated following exposure to a possibly rabid animal. Consultation should be sought regarding the administration of vaccine and immunoglobulin to individuals with a history of an allergy to any of the constituent.

**Adverse Reactions to the Rabies Vaccine**

**RabAvert®:**

- Very Common ≥10%: injection site pain and reaction
- Common >1 to <10%: dizziness, headache, malaise, arthralgia, fever, asthenia, fatigue, ILI, rash, myalgia, GI symptoms, IS erythema, lymphadenopathy
- Rare, less than 1 / 10,000 individuals: anaphylaxis

**ImoVax® Rabies:**

- Very Common ≥10%: headache, nausea, myalgia, malaise, injection site pain, erythema, induration and hematoma
- Common >1 to <10%: dizziness, abdominal pain, vomiting, diarrhea, arthralgia, fever, chills, allergic type reaction, IS pruritus, adenopathy