Rabies Vaccine and Immunoglobulin Shortages and Change to Rabies Immunoglobulin (RabIg) Vial Format and Formulation

Attention: Physicians, Emergency Departments, Nurse Practitioners, Infection Control Practitioners, Occupational Health Professionals, Walk-In Clinics/Urgent Care Clinics, Family Health Teams, Pharmacies, Central LHIN, NSM LHIN

Date: August 2, 2019

We have received notice from the Ministry of Health that there is a provincial supply shortage of publicly funded rabies vaccine and rabies immunoglobulin for post-exposure prophylaxis (PEP) in the management of potential human exposures to the rabies virus. Based on information provided, it is anticipated that the current provincial supply will not be replenished before November 2019 (Memo attached).

At this time, following the recent media reporting of a human rabies death in British Columbia, we have also experienced a substantial increase in reported animal bite exposures. With these challenges, we are requesting a thorough risk assessment be conducted for all reported exposures, and a consultation with public health for any instance where rabies vaccination may be indicated.

When determining the need for post exposure rabies immunization, the current Ministry of Health and Long-Term Care (MOHLTC) Management of Potential Rabies Exposures Guideline, 2019 is recommended as a resource.

For rabies vaccine and immunoglobulin, please contact the Rabies Coordinator at ext. 8894 or after hours at 1-888-225-7851.

What should health care practitioners do when a patient presents with a bat, wildlife or domestic animal exposure?

1. Please complete the Rabies and Animal Exposure Incident Report Form (below) to assist with the collection of required reporting information. All reported incidents will be investigated by a Public Health Inspector (PHI). All animal exposure incidents may be reported by faxing a copy of the completed Rabies and Animal Exposure Incident Report Form (page 3 of this document) through our Designated Rabies Fax line at 705-725-8132.

Note: Facial, neck or head bites from mammals are higher risk for transmission (with potential for a shorter incubation period) and direct contact with bats is also high risk. Such incidents should also be verbally reported at 705-721-7520 or 1-877-721-7520 ext. 8811 (Monday – Friday 8:30am – 4:30pm) or after hours at 1-888-225-7851 (evenings, weekends or holidays).

2. In instances where there is a bat exposure, please ask the patient if they have the bat available for testing. If so, please provide information about the status and location of the bat in question when reporting to the health unit. If
possible, bats should be safely captured (or retrieved if dead) and tested for rabies when there has been a human exposure. Such testing can help to avoid or reduce rabies vaccination for exposed patients. Extreme care should always be taken to ensure that there is no further exposure when captured or handled. In the event that a bat is captured, it should be submitted for rabies testing; SMDHU staff are available to facilitate such testing.

Unless exposure from a bat is to the head or neck region, rabies vaccine and immunoglobulin administration can be delayed for up to 48 hours until the rabies test result on the bat is obtained. If vaccination is initiated, it can be discontinued if the bat test is later found to be negative for rabies. Results are usually available within 48 hours, however, result times can occasionally take longer because of collection schedules, courier limitations and delays on weekends.

**Change to Rabies Immunoglobulin (RabIg)**

**Vial Format and Formulation**

The Ontario Government Pharmaceutical and Medical Supply Service (OGP MSS) has provided notice to all Public Health Units that a new Rabies Immunoglobulin (RabIg) product will be distributed in the near future. The new product will be a new 1mL vial format of HyperRAB® (manufactured by Grifols Therapeutics LLC).

It is important to note that the formulation for the 1mL vial format is different than the 2mL vial format that may be currently in your local stock. The new formulation will be distributed once stocks are depleted:

- 2 mL vials contain 150 IU/mL formulation
- 1 mL vials contain 300 IU/mL formulation **new formulation**

Both vial formats contain 300 IU, but the 1 mL format requires less volume to achieve the same dose.

Please use the following formula to determine the dose required: (See attached Dosage Schedule)

**For 150 IU/mL RabIg in 2 mL vials:**

\[
20 \text{ IU/kg} \times (\text{patient wt in kg}) \div 150 \text{ IU/mL} = \text{dose in mL}
\]

OR

\[
9.09 \text{ IU/lb} \times (\text{patient wt in lb}) \div 150 \text{ IU/mL} = \text{dose in mL}
\]

**For 300 IU/mL RabIg in 1 mL vials:**

\[
20 \text{ IU/kg} \times (\text{patient wt in kg}) \div 300 \text{ IU/mL} = \text{dose in mL}
\]

OR

\[
9.09 \text{ IU/lb} \times (\text{patient wt in lb}) \div 300 \text{ IU/mL} = \text{dose in mL}
\]

If you have any questions, please contact Rabies Coordinator at 705-721-7520 or 1-877-721-7520 ext. 8894 (Monday – Friday 8:30am – 4:30pm) or after hours at 1-888-225-7851 (evenings, weekends or holidays).
PRIOR to using ANY PEP from hospital inventory OR to request PEP delivery, you MUST speak to a SMDHU Public Health Inspector:
M-F 8:30-4:30 1-877-721-7520 ext. 8894  After Hours: 1-888-225-7851

STEP 3a. Determine Appropriate Dose/Schedule
If PEP is warranted immediately, and/or physician has decided to proceed with rabies PEP, choose appropriate does based on the following schedule

Rabies Post Exposure Prophylaxis (PEP) Dose Schedule

### Decision to Administer Rabies Post-Exposure Prophylaxis
- YES: Individual is Previously Immunized
- NO: Individual Immunocompromised or taking corticosteroids, immunosuppressive agents, chloroquine

### Documentation of complete course of pre-exposure or PEP with HDCV or PCECV with approved schedule
- YES
- NO

### Documentation of complete immunization with HDCV or PCECV according to unapproved schedule?
- YES
- NO

### Rabies anti-body titre testing before initiation of PEP
- YES: Titre > 0.5 IU/ml
- NO: Discontinue immunization after Day 3 dose of vaccine (Day 7, 14 not necessary)

#### Rabies anti-body titre testing before initiation of PEP

Titré > 0.5 IU/ml

**RIG Volume Based on Weight of Client**

**Dose Calculation:** 2 different products available:

1ml Vial 300 IU/ml:
- 20 IU/kg x (client wt in kg) ÷ 300 IU/ml = dose in ml

2ml Vial 150 IU/ml:
- 20 IU/kg x (client wt in kg) ÷ 150 IU/ml = dose in ml

Administered ALL RIG on first day of initiation of therapy (Day 0)
Infiltrate into wound and surrounding area (If anatomically feasible)
Remaining volume IM at site distant from site of vaccine administration.
DO NOT MIX RIG and Vaccine

### Weight of Client

<table>
<thead>
<tr>
<th>Weight of Client</th>
<th># of RIG vials required (or portion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 15 kg (≤ 33lbs)</td>
<td>1</td>
</tr>
<tr>
<td>&gt; 15-30 kg (33-66 lbs)</td>
<td>2</td>
</tr>
<tr>
<td>&gt; 30-45 kg (66-99 lbs)</td>
<td>3</td>
</tr>
<tr>
<td>&gt; 45-60 kg (99-132 lbs)</td>
<td>4</td>
</tr>
<tr>
<td>&gt; 60-75 kg (132-165 lbs)</td>
<td>5</td>
</tr>
<tr>
<td>&gt; 75-90 kg (165-198 lbs)</td>
<td>6</td>
</tr>
<tr>
<td>&gt; 90-105 kg (198-231 lbs)</td>
<td>7</td>
</tr>
<tr>
<td>&gt; 105-120 kg (231-264 lbs)</td>
<td>8</td>
</tr>
<tr>
<td>&gt; 120-135 kg (264-297 lbs)</td>
<td>9</td>
</tr>
</tbody>
</table>

#### Rabies Post-Exposure Prophylaxis

**Vaccine**

Administer IM into deltoid muscle in older children and adults and into vastus lateralis (anterolateral thigh) in infants

NEVER administer into gluteal region

Administer at different anatomical site from RIG.

**Preparations available for use in Canada:**
- RIG: IMOGAM ® and HYPERPAB ® S/D and Vaccine: IMOVAX ® (HDCV) and RabAvert ® (PCECV)
- HDCV= human diploid cell vaccine (Imovax ®)
- PCECV= purified chick embryo cell culture vaccine (RabAvert ®)

**SMDHU 403-k July 30, 2019**
Rabies and Animal Exposure Incident Report

IMMEDIATELY FAX all animal exposure incidents to the Simcoe Muskoka District Health Unit:

**FAX: 705-725-8132**

For suspicious animal exposures, and head, face, neck exposures: Phone: (705) or (877) 721-7520 ext. 8811
For the physician inquiries and release of rabies post-exposure prophylaxis: Phone: (705) or (877) 721-7520 ext. 8894

**AFTER HOURS, WEEKENDS AND HOLIDAYS:** 1-888-225-7851

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### A REPORT/INTAKE

<table>
<thead>
<tr>
<th>Date Reported to SMDHU: YYYY/MMM/DD</th>
<th>Reporting Location (Name of Hospital/Office/Police):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Person and phone number at Reporting Location for additional file information:</td>
<td>Ext:</td>
</tr>
</tbody>
</table>

### B PATIENT/VICTIM INFORMATION

<table>
<thead>
<tr>
<th>Name:</th>
<th>Legal Sex</th>
<th>Male ☐ Female ☐ X ☐</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Guardian Name (if patient is under 16yrs of age):</td>
<td>As found on health card</td>
<td></td>
</tr>
<tr>
<td>Date of Birth: YYYY/MMM/DD</td>
<td>Phone: (Home) (Other)</td>
<td></td>
</tr>
<tr>
<td>Permanent Address: 911# Street Name Apt/Unit# City</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary Address: 911# Street Name City</td>
<td>Dates Effective:</td>
<td></td>
</tr>
</tbody>
</table>

### C INCIDENT DETAILS

| Date of Incident: YYYY/MMM/DD |
| Details of Incident: |
| Body area affected: Bite ☐ Scratch ☐ Saliva ☐ Handling ☐ Other ☐: |
| Skin broken: Yes ☐ No ☐ |
| Family Physician: Phone or other contact info: |

### D ANIMAL OWNER INFORMATION (or person with custody of animal):

<table>
<thead>
<tr>
<th>Owner:</th>
<th>Phone: (Home) (Other)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address of Owner: 911# Street Name Apt/Unit# City</td>
<td></td>
</tr>
<tr>
<td>Current Location of Animal: Same as Owner: ☐ Other ☐: 911# Street Name Apt/Unit# City</td>
<td></td>
</tr>
<tr>
<td>Animal Species: Dog ☐ Cat ☐ Bat ☐ Other ☐:</td>
<td></td>
</tr>
<tr>
<td>Breed and Full Description:</td>
<td></td>
</tr>
</tbody>
</table>

Domestic Animals must be kept alive and available for Health Unit surveillance for 10 days to rule out risk of rabies.

Do NOT euthanize animal involved unless authorized by Health Unit Public Health Inspector.

The Health Unit does not remove healthy domestic animal from their owners.

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This personal information is collected under the authority of the Health and Protection and Promotion Act (1990) Reg. 557 Sec. 2. It will be used to conduct investigations and for the purposes of monitoring and surveillance of rabies activity. For further details concerning this collection, contact the SMDHU Privacy Officer at 705-721-7520 or 1-877-721-7520.

Form 401-a Revised April 2017