ANNEX 'A' - ATTACHMENT 9

Title: Rabies: Pre-placement, Periodic and Post-exposure	
Manual:	**Type:** Medical Directive
Section:	**Additional Sections:**
Developed by:	**Original Effective Date:** May 11, 2012
Approved by:	**Date Revised:** May 11, 2012
Cross Reference:	**Date Reviewed:** May 11, 2012

Order and/or Delegated Procedure:	**Appendix Attached:** ☐ Yes ☒ No **Title:**

This medical directive governs the administration of Imovax or RabAvert.

Recipient Patients:	**Appendix Attached:** ☐ Yes ☒ No **Title:**

Mandatory for employees, who by the nature of their work activities, are at risk of exposure to live rabies virus.

Authorized Implementers:	**Appendix Attached:** ☐ Yes ☒ No **Title:**

Health Care Professionals who possess the knowledge, skill and judgment to implement this medical directive. The implementer of this medical directive must be capable:

1. To implement and document a medical directive.
2. To be familiar with and understand this Rabies Medical Directive.
3. To fully explain the risks, benefits and alternatives to the procedure to the recipient.
4. To recognize and respond to a suspected allergic reaction post administration.

Indications:	**Appendix Attached:** ☐ Yes ☒ No **Title:**

Pre-placement: At start of employment or prior to start of employment.
Employees who have never been vaccinated against rabies should receive a full series of rabies vaccine as per the administration methods below.

Employees who have been vaccinated previously and who have a recent (within 1 month) rabies titre at or above 0.5 IU/ml do not require rabies vaccine and will go into the periodic surveillance protocol.

Employees who have been vaccinated previously or whose rabies vaccination status is uncertain, should have blood taken for a rabies titre. If the titre is at or above 0.5 IU/ml, no rabies booster is required and the employee will go onto the periodic surveillance protocol. If the titre is below 0.5 IU/ml, then one booster dose of rabies vaccine (1.0 ml IM) should be given and a titre repeated in 30 days. If the titre continues to be below 0.5 IU/ml, any further actions or decisions will be discussed with the AIM Physician and the CFIA OSH Representative.

Administration Methods

1. Rabies vaccine 1.0 ml intramuscular (IM) to deltoid of the arm. One dose of rabies vaccine 1.0 ml IM on days 0, 7 & 21 or 28 (total of 3 doses).
   - NOTE: In times of vaccine shortage, a vaccine sparing protocol may be implemented at the direction of AIM. In this case, rabies vaccine will be administered intradermally as follows: 0.1 ml to upper arm or thigh intradermally on days 0, 7, 21 or 28.
2. Serum titre at day 30 to 35. If below 0.5 IU/ml, a fourth booster dose of vaccine should be given.

Periodic (during course of employment):

Rabies Antibody Testing

Rabies antibody testing is the cornerstone of the periodic testing protocol. The following schedule of testing has been recommended:

1. One serum titre sample every six months for the following groups:
   - Persons working with live rabies virus e.g. laboratories, animal care research facilities.

2. One serum titre every two years for the following groups:
   - All other personnel who may be at risk of exposure to rabies.

Rabies Booster Vaccination

The Health Care Professional will review the antibody test results and recall employees whose titre falls below 0.5 IU/ml. A booster dose of 1.0 ml of rabies vaccine IM in the deltoid will be given when titre falls below 0.5 IU/ml.

Post-exposure: All exposures or suspected exposure to live rabies virus will be managed by Public Health. If an AIM Health Care Professional is consulted by the employee, they will be given the following treatment instructions:

1. Immediate washing/flushing and disinfection of the wound.
2. Establish rabies vaccination history.
3. Contact the local Public Health Department for advice regarding definitive treatment for rabies post exposure prophylaxis. If there is difficulty contacting Public Health, go immediately to the nearest hospital emergency department.

Contraindications & Precautions	**Appendix Attached** ☐ **Yes** ☒ **No** **Title:**

The medical directive for pre-exposure vaccination with rabies vaccine is contraindicated in adults who have:

- Known hypersensitivity to any of the vaccine components.
- History of severe blistering reaction or anaphylaxis following any vaccine in the past.
- A doctor must assess those who have a weakened immune system because of:
  - HIV/AIDS or another disease that affects the immune system;
  - treatment with drugs that affect the immune system, such as steroids;
  - cancer, or cancer treatment with radiation or drugs.
- The common cold is not a contra-indication to rabies vaccination.

Pregnant Women: The safety of rabies vaccines in pregnancy has not been established.
Rabies vaccine should be given to a pregnant woman only if clearly needed, where the benefits outweigh the risks.

Pre-exposure: In the absence of sufficient human data, postponement of pre-exposure vaccination is recommended. If there is a substantial risk of exposure to rabies, pre-exposure prophylaxis may be indicated during pregnancy, but this should be based on discussion between the employee and the AIM Medical Director.

Post-exposure: Because of the potential consequences of inadequately treated rabies exposure, and because there is no indication that fetal abnormalities have been associated with rabies vaccination, pregnancy is not considered a contraindication to post exposure prophylaxis.

Nursing Women: It is not known whether this vaccine is excreted in human milk. Caution must be exercised when pre-exposure vaccine is administered to a nursing mother. The US Advisory Committee on Immunization Practices (ACIP) states that inactivated vaccines administered to a lactating woman do not affect the safety of breast-feeding for mothers or infants.

Pre-exposure: In the absence of sufficient human data, postponement of pre-exposure vaccination is recommended. If there is a substantial risk of exposure to rabies, pre-exposure prophylaxis may be indicated during breast feeding.

Post-exposure: Because of the potential consequences of inadequately treated rabies, and because there is no indication that fetal abnormalities have been associated with rabies vaccination, breast feeding is not considered a contra-indication to post-exposure prophylaxis.

Reference: Product monograph for Imovax-Precautions to Consider: Pregnant Women. CPS 2010.

Consent:	**Appendix Attached:** ☒ **Yes** ☐ **No** **Title: Rabies Vaccination Information and Consent** **Title: Rabies Immunoglobulin Information and Consent**

Recipients of this medical directive must read, complete and sign before implementation can occur.
The implementer must then determine if the recipient is indicated for this medical directive.

This medical directive cannot be implemented until the recipient has provided informed consent for the proposed treatment by reading and signing CFIA's "Rabies Vaccination Information and Consent."
To give informed consent, recipient must be provided information that includes:

- The nature of the treatment;
- Expected benefits of the treatment;
- Material risks and adverse effects of the treatment;
- Alternative courses of treatment; and
- Likely consequences of not having the treatment.

Guidelines for Implementing the Order / Procedure:	**Appendix Attached:** ☐ Yes ☒ No **Title:**

1. Review or be familiar with the protocol
2. Screen recipient and confirm indications and assess contraindications.
3. If potential recipient meets indications, obtain and document informed consent on the consent confirming that the recipient understands the benefits and has had the opportunity to ask questions and receive responses regarding the side effects.
4. If potential recipient is contraindicated, inform potential recipient and document.
5. Implement medical directive as per policy.
6. Administer.
7. Monitor recipient for adverse reaction for a minimum of 15 minutes post administration.
8. Complete all documentation as indicated.

Documentation and Communication:	**Appendix Attached:** ☐ Yes ☒ No **Title:**

Document assessment findings and actions taken.

- Each document in the employee record must be clearly labeled with employee's full name in legible hand writing.
- Consent documentation shall include: time, date, medication, dose, route, site, lot number and signature of the Health Care Professional.
- Other documentation to include titre results and vaccination history.
- All of the above documents will be kept in the employee medical file by the Service Provider for the duration specified by law.

Review and Quality Monitoring Guidelines:	**Appendix Attached:** ☒ Yes ☐ No **Title: Adverse Report Form**

Health Care Professional staff identifying any untoward or unintended outcomes arising from implementation of orders under this directive shall document and report these to the Service Provider as soon as possible for appropriate disposition. If required, an Adverse Report Form is to be completed.

Administrative Approvals (as applicable):	**Appendix Attached:** ☐ Yes ☒ No **Title:**

Approving Physician(s)/Authorizer(s):	**Signature:**

Dr. Sol E. Sax, Medical Director, Workplace Health and Cost Solutions - A Division of AIM Health Group

References:	**Appendix Attached:** ☐ Yes ☒ No **Title:**

Canadian Immunization Guide 7th Edition (2006).
Canadian Centre for Occupational Health & Safety (2010).
Compendium of Pharmaceuticals & Specialities (2010). Product monographs: Imovax, RabAvert (2006).
Compendium of Pharmaceuticals & Specialities (2010). Product monograph: Imogam (2005)
Ministry of Health & Long Term Care (2009). Informed consent
World Health Organization Department of Communicable Disease (2010).