STANDARD GUIDELINE: Public Health Response to Animal Exposures

to Prevent Human Rabies

Program Area: Public Health-Healthy Living

Section: General

Reference Number: CLI.6210.SG.008

Approved by: Regional Lead – Community & Continuing Care

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#### **PURPOSE:**

To provide a standardized approach to the Public Health investigation and response to reported human exposure to animals.

All reports of animal exposure are investigated in accordance with the *Manitoba Health*Communicable Disease Protocol for Management of Human Rabies and Management of Animal
Exposures to Prevent Human Rabies.

#### **DEFINITIONS:**

**Animal Exposure:** one or more of the following exposures to potentially infective animals:

- > Bite: any penetration of the person's skin by the animal's teeth.
- Non-bite: a scratch (does not have to draw blood to be considered a potential exposure to rabies virus) or when saliva or other potentially infectious material (e.g., neural tissue) of the animal is introduced into fresh, open cuts in skin or onto mucous membranes of a person.

**Bat exposure:** a bite or non-bite exposure as defined above OR there has been direct contact with a bat AND a bite, scratch or saliva exposure into a wound or mucous membrane cannot be ruled out. In a child or anyone else who is unable to report an exposure due to mental incapacity (including under the influence of drugs or alcohol), any direct contact with a bat is considered a reason for an intervention, including contact through clothes as a history to rule out a bite, scratch or mucous membrane exposure may not be reliable.

**Inhalation of aerosolized virus:** inhalation of rabies virus by spelunkers exploring caves inhabited by infected bats or by laboratory technicians homogenizing tissues infected with rabies virus. The efficacy of prophylaxis after such exposures is unknown.

**Provoked Attack:** predicted normal animal reaction to a human action including, but not limited to, entering an unfamiliar compound guarded by a dog, interfering in an animal fight, taking offspring from its mother, taking food from an animal, surprising an animal that is sleeping. Provoked attacks are generally initiated by the animal perceiving human interference or human crossing over into their space.

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**Unprovoked Attack:** unpredicted animal reaction to a human action including, but not limited to, an animal crossing a neutral space to attack for unknown reason or being bitten by a pet without prior history of dominance aggression.

Rabies Post-Exposure Prophylaxis (RPEP): includes initial administration of rabies immune globulin and first dose of rabies vaccine in an Emergency Department (ED) with subsequent doses of rabies vaccine administered at a mutually determined location that could be either the Public Health office or ED dependent on day of the week the dose is required.

**Observation period:** period of time that the domestic animal involved in the human exposure is confined from other animals and humans to be observed, typically by the owner, for health and behaviour changes.

#### **IMPORTANT POINTS TO CONSIDER:**

Data shows that Southern Health-Santé Sud (SHSS) historically has high volume of reported animal exposures and high incidence of animals infected with rabies upon testing.

As per Communicable Disease Prioritization of Public Health Follow-up, rabies is listed as a <u>high</u> <u>priority disease</u> requiring initiation of investigation within one (1) business day of receiving referral/report.

The management of animal exposures to prevent human rabies can be a complex task requiring a multi-disciplinary team that may include Medical Officer of Health (MOH), Central Intake Clerk, Communicable Disease/Immunization Coordinators (CD/IC), Public Health Nurses (PHN), Animal Owner, Exposed Client, Clerks, Manitoba Rabies Central (MRC), animal control officers, by-law control officers, veterinarians, and Emergency Departments (ED).

# **PROCEDURE:**

- 1. Notification of an animal exposure can be received by Public Health-Healthy Living (PH-HL) in three ways:
  - ➤ PH-HL receives a *MHSU-7224 Report of Suspected Rabies Exposure* form from primary care provider (Emergency Department, Clinic, Health Links-Info Santé) and distributes to the appropriate PH-HL program.
  - ➤ PH-HL receives a verbal report of animal exposure from a person and documents on the MHSU-7224 Report of Suspected Rabies Exposure form and forwards it to Central Intake.
  - MRC forwards notification of a potential rabies-infected animal, for which testing has been initiated by Manitoba Agriculture, Food and Rural Development and requires confirmation of no human contact.
- 2. PH-HL contacts the person exposed to gather information about the incident.
- 3. PH-HL contacts the owner of the animal (if applicable) to advise of exposure and gather information about the animal to determine the risk of rabies exposure.

4. Public Health-Healthy Living (PH-HL) documents information from the form into the Animal Exposure Communicable Disease database.

## **OBSERVATION PERIOD:**

- If the domestic animal appears healthy and available, PH-HL advises the owner of the animal to observe their animal for the required observation period with instructions to contact a veterinarian immediately if animal exhibits signs of illness or unusual behaviour. It is the responsibility of PH-HL to follow up with the owner of the animal after the required observation period.
- 2. If the stray or ownerless animal appears healthy and available, the PH-HL arranges for a 10-day observation period if possible e.g. involve the local animal control or by-law officer if needed.

# **POST RABIES EXPOSURE PROPHALAXES (PREP):**

- 1. PH-HL review investigation. If in consultation with MOH it is determined that PREP is recommended, the PH-HL gains client consent and weight.
- 2. PH-HL connects with the chosen ED to advise of the PREP recommendation. This administration is considered day 0.
  - (Any subsequent dose of rabies vaccine (day 3, 7, or 14) are due on a non-public health work day, the CD/IC requests administration by ED for that dose(s).
- 3. PH-HL advises client(s) of details related to rabies prophylaxis administration e.g. location of Emergency Department, date/time of arrival of rabies immune globulin and rabies vaccine, number of injections, and explain to client that this prioritization is 'green' and therefore client may need to wait.
- 4. PH-HL makes plans for administration of subsequent doses of rabies vaccine which may include administration at Public Health office on a regular workday. Timing of doses is as per Protocol day 0, 3, 7, and 14. When series completed, PH-HL ensure series documented in Public Health Information Monitoring System (PHIMS).
- 5. If the client does not present to Emergency Department (ED) as planned, PH-HL attempts recontact by phone to offer rabies prophylaxis again.
- 6. If the animal is unobservable (i.e.: can not be found) or is unavailable for testing (i.e.: destroyed and body not retrievable), rabies prophylaxis is considered based on assessment of risk.

#### **SOURCE SAMPLE TESTING:**

- 1. If an animal (domestic or wild) is available for testing (dead or alive), PH-HL contacts MRC to arrange for pickup and testing of the animal.
- 2. If testing results are negative No prophylaxis required.
- 3. If testing results are positive Prophylaxis required, if not yet started.

## **REFERENCES:**

ORG.1810.PL.010.SD.08 Management of Reportable Diseases and Conditions Checklist

MB Health: Protocol for Management of Human Rabies and Management of Exposures to Animals to Prevent Human Rabies

MB Health: Report of Suspected Rabies Exposure

Clinical Notification of Reportable Diseases and Conditions

MB Health - Diseases & Conditions - Rabies

<u>Provincial Rabies Management Program - Rabies Surveillance Data</u>

Report of Suspected Rabies Exposure: Letter to Health Care Professionals

<u>Change in HyperRab Format - Update</u>