Northern Health Physicians

Partners in Wellness

Public Health Newsletter for Northern Health Physicians

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Rabies in BC

As bat season is approaching, we thought it would be useful to provide some information to local physicians around managing potential rabies exposures in Northern BC.

Rabies is essentially 100% fatal and 100% preventable. Rabies Post-Exposure Prophylaxis (RPEP) includes one dose of immune globulin and a four-dose series of rabies vaccine for previously unimmunized individuals and, should always be given promptly when a significant risk of rabies exposure is identified. However, many animal exposures in BC are low risk and do not require RPEP. This article reviews rabies risk assessment in BC.

My patient was bitten or scratched by an animal – now what?

1. Irrigate and treat the wound.
2. Provide a tetanus booster if needed.
3. Assess the risk of rabies exposure based on provincial guidelines, summarized below.
4. If you believe RPEP is indicated, or you are unsure, call the Medical Health Officer on call at 250-565-2000 to confirm the risk assessment and arrange RPEP.

Release of RPEP requires the approval of the local Medical Health Officer. A Medical Health Officer is available 24 hours a day at 250-565-2000 to assist with the risk assessment process and coordinate RPEP administration when indicated.

What are the scenarios where RPEP is recommended?

RPEP is generally recommended when:

- A significant exposure (such as a bite, scratch, or mucous membrane or broken skin exposed to the animal's saliva) cannot be ruled out;

AND,

- There is a non-negligible risk that the animal had rabies.

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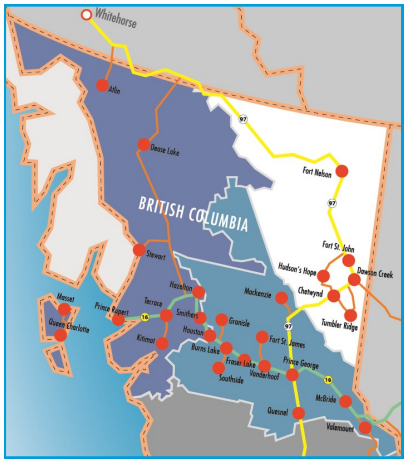
Notable Quotable:



Northwest

Atlin, Dease Lake, Houston, Hazelton, Masset, Kitimat, Port Clements, Prince Rupert, Smithers, Stewart, Terrace, the Village of Queen Charlotte

Northern Interior

Burns Lake, Fort St. James, Fraser Lake, Granisle, Mackenzie, McBride, Prince George, Quesnel, Valemount, Vanderhoof

Northeast

Chetwynd, Dawson Creek, Hudson's Hope, Fort Nelson, Fort St. John, Tumbler Ridge

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After hours calls to UHNBC Switchboard 250-565-2000 and ask for MHO on-call

northern health
the northern way of caring

Rabies in BC

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The risk of rabies in an animal is evaluated based on four elements:

Species. There are many different strains of rabies virus, and they are species-specific. Bats and terrestrial mammals (e.g. dogs, foxes, raccoons, skunks) are the main reservoirs. Rabies is extremely rare in small rodents (e.g. squirrels, mice, rats, hamsters).

Geography. Bat-variant rabies virus occurs worldwide; other strains are more limited in distribution. Asia and Africa have the highest burden of rabies in terrestrial mammals.

Signs of rabies in the animal, which are best interpreted by a veterinarian with expertise in this area. Signs may include abnormal gait, paralysis, erratic movement, hypersalivation, or excessive docility. Note that a brief but apparently unprovoked attack, by an otherwise physically well animal, is generally not considered a sign of rabies.

Test results, if the animal is available to be tested.

Usual recommendations are as follows:

Bats– RPEP usually recommended. Bat-variant rabies virus occurs worldwide and affects about 0.5% of bats in BC. There has only been one documented case of rabies in a human in BC history; this case was due to exposure to a bat.

Terrestrial mammals from BC-RPEP is usually recommended if:

- The animal has displayed signs of rabies, as assessed by a veterinarian; or,
- The animal has tested positive for rabies.

Non-bat strains of rabies have never been found to circulate in BC, and it is very rare for bat-variant rabies to "spill over" into other animals. There have been only 10 documented cases in history where a non-bat mammal from BC tested positive for bat-variant rabies. Although transmission of bat-variant rabies through other animals to humans is theoretically possible, no such cases have been reported (Brass 1994). In general, secondary hosts do not commonly transmit a rabies virus variant from a different species (CFIA 2011).

Terrestrial mammals from outside BC, including recently imported animals– The need for RPEP depends on the virus strains circulating in that part of the world. Outside BC, bats and terrestrials mammals (e.g. dogs, foxes, raccoons, skunks) may carry rabies virus.

For further details on how rabies risk is assessed, RPEP schedules and dosing, and other background, please see the BC Centre for Disease Control's recently revised rabies guidelines at http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%201%20-%20CDC/BCRabiesGuidelines.pdf

Submitted by: Dr. Raina Fumerton, MHO, NW HSDA

Medical Health Officers in Northern Health— *Who are we and what do we do?*

In response to inquiries from some of our clinician colleagues in Northern Health, the Medical Health Officer (MHO) team has created a brief overview of our roles and responsibilities. We hope you find this article informative.

1. *What are MHOs and what training do they have?*

Medical Health Officers (MHOs) are public health physicians who:

- are licensed to practice medicine in BC, and
- possess specialty training in Public Health and Preventive Medicine at either the Masters or Royal College Fellowship level, and
- hold an Order-in-Council appointment from the provincial government which bestows legislative authority for issues of public health importance.

2. *How many MHOs are there in Northern Health and how do I get a hold of them?*

There are three regional MHOs in the north—one for each Health Service Delivery Area (HSDA) and one Chief MHO. The MHO team provides 24/7 on call service:

- **Northwest HSDA MHO**: Dr. Raina Fumerton
- **Northern Interior HSDA MHO**: Dr. Andrew Gray
- **Northeast HSDA**: (position being cross-covered by MHO Team until filled)
- **Chief Medical Health Officer** for Northern Health: Dr. Sandra Allison

Dr. Ronald Chapman, VP Medicine (for on-call purposes)

Please contact your local HSDA MHO directly using the numbers listed on the right side of this page. After normal business hours, on weekends and Stat holidays, please call UHNBC switchboard in Prince George at 250-565-2000 and ask for the MHO on-call.

3. *What are the statutory responsibilities of the MHO?*

MHOs are named in and responsible for carrying out the legislated requirements of a number of pieces of legislation. Some of these include the *Public Health Act* and associated regulations, the *School Act*, the *Community Care and Assisted Living Act* and regulations, the *Drinking Water Protection Act* and regulations, the *Environmental Management Act* and regulations, the *Integrated Pest Management Act* and regulations, and others. The duties undertaken by Environmental Health Officers, Licensing Officers and Public Health Nurses

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Medical Health Officers in Northern Health— *Who are we and what do we do? Cont'd.*

4. *What are some of the other roles of the MHO?*

MHOs carry several other roles and responsibilities within Northern Health and in our communities:

Role	Responsibilities
Community Medicine Consultant	▪ Work collaboratively with the Northern Health Board of Directors, and with other agencies and boards in the community (e.g., Municipal Councils and School Boards, Mental Health, Social services, Water Boards, Environmental agencies, Alcohol and Drug programs and volunteer community groups) to assist in promoting health and wellness and preventing illness and injury. ▪ Provide evidence-based recommendations to physicians as well as to community agencies and Boards on a wide variety of health issues including communicable diseases, environmental issues, and complex health related social and behavioral issues.
Population Health	▪ Monitor and assess the health status of the community and make recommendations to the Northern Health Board for strategies to address identified community health issues. ▪ Collect data over a broad range of health issues, analyze trends and problems, interpret these issues, and prepare reports and public information on the significant health and health-related issues in northern communities.
Planning, Evaluation, and Program Development	▪ Assist the Board in evaluating the effectiveness of Health programs and in designing new programs to address emerging health issues. ▪ Develop reports that compare the performance of the health care system in their region with accepted standards or with other regions.
Advocacy	▪ Advocate on behalf of the public's health and to speak on behalf of marginalized members of the community and those at risk. ▪ Communicate with the public through media and other means and with NH Board members and elected officials on health issues affecting northern communities.

5. *What are some examples where clinicians might consult an MHO?*

The MHO group serves as a resource to clinicians for any public health issues or questions. Examples of common scenarios where a clinician might consult an MHO include:

- a patient who has had an environmental exposure (e.g. a chemical contaminant)
- communicable disease issues (e.g. measles, bacterial meningitis, blood and body fluids exposures…)
- animal/bat bites, to assess the need for zoonotic diseases including performing a risk assessment of the need for rabies post exposure prophylaxis
- MHOs are also called for unexpected increased presentations in syndromes (GI, respiratory), outbreaks in facilities, and concerns around drinking water and air quality.
- Questions on how to become more involved in public health promotion events in their local practice or community.
- Diagnostic decisions: i.e. what test do I need to perform in order to rule out or confirm "X" communicable disease? (common examples include measles/mumps/pertussis/Hepatitis A etc…)

6. *When should a Physician report a notifiable communicable disease to Public Health?*

As Medical Health Officers we rely heavily on our clinical colleagues to notify us of any urgent or emergent communicable disease issues as laboratory reports can take time to process and result in delays around public health follow up (e.g. contact tracing and chemo or immunoprophylaxis of close high risk contacts/ outbreak control and management efforts).

Physicians are requested to provide a report of any reportable communicable disease to your Medical Health Officer, by contacting Public Health Nursing at your local Health Unit for the following list of communicable diseases:

Reportable Communicable Diseases

- suspect bacterial meningitis or meningococcal disease
- severe respiratory illness from suspected infectious etiology and symptom onset is within 10 days of return from overseas travel
- high risk contacts, including baby < 1 year old and pregnant women in their 3rd trimester, of lab-confirmed or probable pertussis cases
- invasive Group A strep
- invasive Haemophilus influenza Type B
- diphtheria
- measles
- mumps
- suspect or known infectious respiratory tuberculosis
- hepatitis A
- suspect polio
- botulism
- suspect viral hemorrhagic fever e.g. Ebola
- smallpox or anthrax
- new or emerging infections e.g. SARS, MERS-CoV
- unexpectedly high numbers of a suspected communicable disease or suspect food-borne outbreaks
- contamination threat involving food, water or air
- possible human rabies exposure:
  - ➢ any bat exposure with physical contact.
  - ➢ dogs or cats - any bite outside North America, or any bites in BC by a dog or cat behaving abnormally suspicious of rabies.
  - ➢ any animal bite outside BC, or, in BC if unprovoked and abnormal animal behaviour.

NOTE - provoked bites from hand-feeding small mammals such as squirrels, rabbits, and rodents do not require rabies vaccine or rabies immune globulin.

Submitted by:
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Back issues of *NH Physicians, Partners in Wellness* newsletters and bulletins are located on the NH Physicians website:
http://physicians.northernhealth.ca/physicianResources/PublicHealth.aspx