

Date: 10 July 2018
To: South Zone Physicians
From: Medical Officers of Health – South Zone
RE: High Risk Animal Exposures and Tick Surveillance

HIGH RISK ANIMAL EXPOSURES

Public Health asks that all animal exposures in which the saliva or central nervous tissue of an animal could have come in contact with a human's broken skin or mucous membranes be reported to Public Health. Reporting allows Public Health to perform a risk assessment and determine the need for rabies post exposure prophylaxis and observation or testing of the animal.

High risk exposures, which include head or neck bites/scratches/mucous membrane exposures and any exposures from a wild animal (such as a bat, skunk, fox or coyote) should be reported to Environmental Public Health during both business hours and after hours at the numbers on the Animal Exposure Investigation Form (attached). Other exposures can be faxed, as Environmental Public Health follows up on animal exposures 7 days a week.

In Alberta, rabies in humans is very rare (with the last case occurring in 2007). However, animals in Alberta (particularly bats) do test positive for rabies every year.

Public Health rarely requires euthanizing domestic animals and instead most often institutes a 10 day home observation period - therefore it is crucially important to have contact information for the animal owner if possible. Public Health will help facilitate testing for wild animal samples if they are available.

Rabies management in humans consists of rabies immune globulin and a rabies vaccination series and, in high risk situations, should start as soon as possible. Rabies immunoglobulin may need to be infiltrated around the wound and Public Health will work with primary care to facilitate this step in rabies post exposure management. Any animal exposure received on the attached form will also be sent to Public Health to ensure that the patient is adequately protected against tetanus.

Please refer to SECTION II: Algorithms for Rabies Post-Exposure Prophylaxis, Page 11, at the link below in order to assist you to identify high risk animal exposures.

<https://open.alberta.ca/publications/rabies>

TICK SURVEILLANCE

Alberta has a **tick surveillance program** to assess the risk of Lyme disease in Alberta. As part of the surveillance strategy, Albertans have the ability to submit ticks for analysis, including ticks from the environment, companion animals and ticks from patients. Only *Ixodes* ticks are capable of carrying and transmitting *Borrelia burgdorferi*, the bacteria that causes Lyme disease. In Alberta in 2017:

- 48/2852 (1.6%) of all submitted ticks were positive for *B. burgdorferi* in Alberta.
- Surveillance data concludes there is no confirmed established *Ixodes* tick population in Alberta to act as a Lyme vector, but ongoing surveillance is crucial for establishing local risk.

1. Passive Surveillance

Ticks found in the environment, or self-removed from Alberta residents, can be submitted to local Alberta Health Services Environmental Public Health offices. These ticks will be analyzed by Alberta Agriculture and Rural Development, with results provided back to the individual who submitted the tick(s). Ticks removed from animals can also be submitted through the animal's vet.

2. Diagnostic Testing of Ticks

A tick found on a patient, and either brought to a physician office or removed at a clinic, can be sent to the ProvLab with the Bacteriology form. Please be sure to include any travel history for the patient. Submitted ticks will be speciated and, if the submitted tick is of a probable species type to carry Lyme disease (*Ixodes*), it will be further tested to see if it does indeed carry *Borrelia burgdorferi*.

If you do submit a tick to ProvLab for analysis, please follow the instructions below:

- Submit the tick in a sealed, non-glass container (ie medication bottle, pill vial, serum tube) in packaging that can withstand shipping (ie box or bubble envelope).
- Multiple ticks may be included in one container, IF the ticks were found on one person.
- Add a small piece of tissue, lightly moistened with water, to prevent the tick(s) from drying out. DO NOT put holes in the container.

An excellent resource on tick surveillance and Lyme disease can be found at:

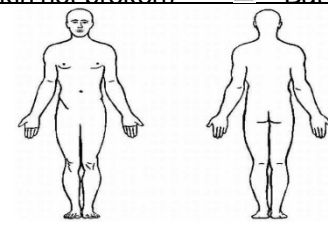
<http://www.health.alberta.ca/health-info/lyme-disease.html>

Please do not hesitate to contact the Medical Officer of Health if you would like more information or have questions.

ANIMAL EXPOSURE INVESTIGATION REPORT FORM

| | | | | | | |
|--|---|--|--------------------------------|---------------------------------|--|--|
| REPORTED TO PHI/CDC BY (NAME): | | | | | | |
| <input type="checkbox"/> Emergency/ Urgent care | <input type="checkbox"/> Health Link | <input type="checkbox"/> Physician's office | <input type="checkbox"/> Owner | <input type="checkbox"/> Victim | <input type="checkbox"/> Animal control | <input type="checkbox"/> Police <input type="checkbox"/> Other |
| Date: <u>yyyy/mm/dd</u> | | Time: <u>00:00hrs</u> | | Telephone #: _____ | | |

| | | | |
|------------------------------------|---|---------------------------------|---|
| CLIENT INFORMATION | | | <input type="checkbox"/> LOST TO FOLLOW-UP |
| Name: <i>(Last, first)</i> | | D.O.B. <u>yyyy/mm/dd</u> | Gender: |
| Relationship to Animal: | | | |
| <input type="checkbox"/> Owner | <input type="checkbox"/> Stranger | <input type="checkbox"/> Friend | <input type="checkbox"/> Relative |
| <input type="checkbox"/> Neighbour | <input type="checkbox"/> Animal Handler | <input type="checkbox"/> Other | |
| Address City Postal code | | PHN/ULI: | |
| Parent or Guardian: | | Telephone #: | |
| File #: | | Alternate Telephone #: | |

| | | | |
|-------------------------------------|---|---|--|
| INCIDENT INFORMATION | | | |
| Date of Incident: <u>yyyy/mm/dd</u> | Type of Exposure: | Type of Wound: | Method of exposure: |
| Address/Location of incident: | <input type="checkbox"/> Provoked | <input type="checkbox"/> Laceration | <input type="checkbox"/> Scratch |
| | <input type="checkbox"/> Unprovoked | <input type="checkbox"/> Puncture | <input type="checkbox"/> Bite |
| | <input type="checkbox"/> Unwitnessed | <input type="checkbox"/> Abrasion | <input type="checkbox"/> Saliva (lick or splash) |
| | <input type="checkbox"/> No Exposure | <input type="checkbox"/> None (skin not broken) | <input type="checkbox"/> Bat in house/Bat cave |
| Site of Exposure: | <input type="checkbox"/> Hand |  | |
| | <input type="checkbox"/> Arm | | |
| | <input type="checkbox"/> Trunk | | |
| | <input type="checkbox"/> Head/Neck | | |
| | <input type="checkbox"/> Foot | | |
| | <input type="checkbox"/> Leg | | |
| | <input type="checkbox"/> Mucosal Membrane | | |
| Description of Incident: | | | |
| _____ | | | |
| _____ | | | |

| | | |
|--|--------------|--------------------------------------|
| CLIENT TREATMENT INFORMATION | | |
| Attending Physician/Public Health Nurse: | Telephone #: | Date of Treatment: <u>yyyy/mm/dd</u> |

| | |
|---|--|
| TETANUS IMMUNIZATION ASSESSMENT | |
| Tetanus containing vaccine received: | |
| Following this exposure: | |
| <input type="checkbox"/> Yes Date: <u>yyyy/mm/dd</u> <input type="checkbox"/> No <input type="checkbox"/> Unknown (Lot#: _____) | |
| In the last 5 years: | |
| <input type="checkbox"/> Yes Date: <u>yyyy/mm/dd</u> <input type="checkbox"/> No <input type="checkbox"/> Unknown | |

| | | |
|-------------------------------------|--|---|
| ANIMAL AND OWNER INFORMATION | | <input type="checkbox"/> UNKNOWN |
| Name of Owner: <i>(last, first)</i> | | Telephone #: |
| Address Postal Code | | Alternate Telephone #: |

20-04-17

Fax completed form to Environmental Public Health (EPH) for follow up

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|--|-------------------------|---|
| Business Hours (M-F 8:00-16:30) | Fax 403-320-0145 | Phone 403-388-6689 |
| After Hours/On Call | Fax 403-320-0145 | On-call EPH phone 1-844-388-6691 |