

November 28<sup>th</sup>, 2012

Dear Nova Scotia MLA/MP:

**RE: *Lyme Disease in Nova Scotia***

Lyme Disease (LD) is an emerging disease in Nova Scotia and Canada that is generating considerable attention from the media, advocacy groups and communities. Given this situation, I felt it important that you had accurate and up-to-date information on LD in Nova Scotia and the provincial response plan.

LD is a bacterial illness that can be transmitted to humans through the bite of a blacklegged tick (deer tick). There are a number of tick species in Nova Scotia, but only the blacklegged tick can carry the bacteria that can cause LD. Not all blacklegged ticks carry the bacteria and the risk of acquiring LD remains low in the province. LD is readily treatable with appropriate antibiotics.

The Department of Health and Wellness (DHW) has an active LD response plan which includes an interdisciplinary committee (public health, veterinary medicine, wildlife biology) that provides evidence-based advice and guidance to the provincial government on the control of LD. Nova Scotia has multiple infectious disease and medical microbiologist experts in the province who deal with treatment and diagnosis of LD. DHW has a close working relationship with these clinical experts through an Infectious Disease Expert Group, which meets regularly to advise DHW on public health and infection control issues. We also work closely with our partners at the Public Health Agency of Canada and the National Microbiology Laboratory who provide evidence based recommendations for the prevention and surveillance of LD and ticks.

**Tick and Lyme Disease Surveillance**

Lyme disease is a notifiable disease under the Health Protection Act in Nova Scotia. Health care professionals are required to report cases of Lyme disease to Public Health when they diagnose clients clinically or with laboratory confirmation. In 2011, there were 54 confirmed cases of LD reported to Public Health, corresponding to an incidence rate of 5.8 cases per 100,000 population. Surveillance of both human cases and blacklegged ticks in the province enables DHW to keep abreast of the current state of Lyme disease in Nova Scotia.

Over the past few years, DHW together with the Department of Natural Resources and the Public Health Agency of Canada have been identifying and testing ticks collected in Nova Scotia. Analysis of this data has identified six areas where blacklegged ticks carrying the bacteria that can cause LD are known to be endemic (i.e. have become established as part of the local ecology). These endemic locations are areas in Yarmouth County, Shelburne County, Lunenburg County, Halifax County, Pictou County and most recently Queens County. These known endemic areas can be found on the Department of Health and Wellness website at <http://www.gov.ns.ca/hpp/cdpc/lyme.asp>

DHW has had a tick surveillance program in place since 2002, which included both passive (ticks being submitted by the public) and active plans. In the fall of 2011, DHW restructured its tick surveillance program to place an emphasis on active surveillance. Active surveillance involves 'in the field' work including small mammal testing and dragging vegetation to collect

ticks. We will continue with focused active surveillance to determine additional areas where ticks may be establishing.

It is expected the number of LD cases will increase over time as ticks become more densely populated and expand their geographical range when conditions permit. Climate change related to global warming is expected to contribute to the increase of LD in Nova Scotia and Canada.

### **Public Information**

DHW regularly provides consistent, evidence based information about LD and its prevention to the public. Strategies are implemented each year to provide Nova Scotians with information about the prevention of tick bites and to ensure health care providers have the most up to date clinical information. The DHW website is regularly updated plus we work closely with partners to disseminate information regarding LD to the public and stakeholders via various methods (letters via schools, residential letters, media releases, websites, signs in parks/campgrounds). DHW has also provided an advertorial for newspapers as well as news release each year. DHW regularly responds to multiple media requests and letters to government regarding LD.

Nova Scotians and visitors to the province can help prevent exposure to blacklegged ticks and LD by taking some simple precautions. This is especially important when in areas where there may be increased risk. Prevention messages can be found on the DHW website at:

<http://www.gov.ns.ca/hpp/cdpc/lyme.asp>

### **Information to Clinicians**

Webinars have been provided to health care providers in the last few years, addressing prevention, surveillance, diagnosis and treatment of LD. In addition, the DHW provides updates to physicians in the province via Doctors Nova Scotia. The Infectious Disease Expert Group has developed a document entitled “Statement for Managing Lyme Disease in Nova Scotia” which has been widely circulated to physicians in the province. This document is based on current evidence and follows the guidelines endorsed by the Infectious Disease Society of America.

### **Testing**

Laboratory testing for LD in Nova Scotia follows the guidelines established by the Public Health Agency of Canada and the Centre for Disease Control and Prevention in the United States. These guidelines have been endorsed by the Canadian Public Health Laboratories Network and the Infectious Diseases Society of America.

We are aware of the Canadian Lyme disease advocacy group, Can Lyme, who claim that the testing and treatment of LD is inadequate. However, the testing methods they promote, and the ones used by many private labs in the US, are not endorsed by infectious disease and laboratory experts.

### **Research**

DHW supports and partners with many researchers in the field of LD and tick surveillance. Research that DHW is aware of and supports includes the Public Health Agency of Canada’s study on identification of emerging endemic areas for the blacklegged tick and prediction of the further spread of LD. Two other research initiatives that DHW supports include the human seroprevalence study on LD and the Deer Treatment Study. We are aware that other

researchers initiate studies within the province with or without consultation or consideration of experts on the interdisciplinary committee.

If you have additional questions regarding LD, or if you would like to involve a regional Medical Officer of Health in any meetings with community or advocacy groups, please contact your local Public Health office which can be found through the following website:

<http://novascotia.ca/DHW/about/phs-offices.asp>

We appreciate your ongoing support and cooperation to help ensure Nova Scotians receive evidence-based information on LD.

Sincerely,

Robert Strang MD, MHSc., FRCPC  
Chief Medical Officer of Health

- c. Dr. Frank Atherton – Deputy Chief Medical Officer of Health, Health and Wellness  
Elaine Holmes, Director – Communicable Disease Prevention and Control, Health and Wellness  
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