

Nexus



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with the Health Care Community



Adult Female
Black-legged
Tick

Surveillance for Lyme Disease and Tick Populations to Continue in 2008

– Teresa Clow, CPHI (C), Public Health Inspector

The 1000 Islands Region is considered endemic for the Black Legged Tick (*Ixodes scapularis*). This tick is known to transmit Lyme Disease to humans when infected with a bacterium identified as *Borrelia burgdorferi* (Bb). There were only three human cases of Lyme Disease diagnosed and reported within Leeds, Grenville and Lanark in 2007, yet the potential exists for 2008 to be an active tick year. 846 ticks were submitted for testing in 2007, with test results indicating that 44 ticks were infected with *Borrelia burgdorferi* and 2 were found positive for HGA. Although the percentage of ticks that were positive was relatively low, the potential for exposure to Lyme Disease does exist.

The Ministry of Health has created a Vector-borne Disease unit, which oversees West Nile Virus and Lyme Disease control programs, and is supportive of surveillance for any new emerging vector-borne diseases that may affect the residents of Ontario. With changes in climate patterns, we continue to be vigilant of changing conditions that may be favourable for the establishment of other disease carrying species that may affect human health.

Once again this year the Health Unit is offering its services in facilitating tick identification and testing for Bb for humans. Should any of your patients seek medical attention following a tick bite, please keep the specimen for submission to the Public Health Lab. Specimens can be forwarded through the Health Unit for testing. There is no way to determine if a tick is positive for Bb other than through stringent testing at the Health Canada Lab in Winnipeg. Early identification and testing of ticks is instrumental when considering a diagnosis of Lyme Disease, as blood work is quite often not reliable in the early stages of disease. Patients who present with a rash or erythema migrans and flu-like symptoms and report having a tick exposure may be exhibiting early symptoms of Lyme Disease. The Ministry of Health and

Long Term Care recognizes a confirmed case of Lyme in an endemic area as isolation of *Borrelia burgdorferi* from a clinical specimen; OR erythema migrans observed by a physician; OR at least one clinically compatible late manifestation (neurologic, cardiac, or musculoskeletal) and laboratory evidence of Bb. A bull's eye rash in the area of a tick bite is indicative of Lyme Disease and would require treatment accordingly. Posters regarding Lyme Disease as well as tick recognition cards for your patients are available to your office free of charge.

The Health Unit will continue its passive surveillance program throughout Leeds, Grenville and Lanark with the assistance of local vets and the public. Ticks removed from animals will be accepted for identification in selected areas that have not been confirmed as being endemic.

For more information, contact the Health Action Line: 1-800-660-5853 ☼

A Note from the Medical Officer of Health

Health Care Providers should be aware that the Health Unit is available 24 hours per day, 7 days per week for consultation on public health issues of an urgent nature such as outbreaks, reportable diseases requiring immediate reporting and animal bites. The manager on call can be reached by calling the usual Brockville office number, 613-345-5685. Please do not send faxes as the manager is not in the office and will not see any faxes until the next working day. ☼

– Anne O. Carter, MD, MHSc, FRCPC

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A tick's size increases the longer it feeds.



nexus ('nek-sus) noun,
Latin: bond, tie; from
nectere - to bind : a
connection or link between things,
persons, or events esp. that is or is
part of a chain of causation

Source: Merriam-Webster's
Dictionary of Law, © 1996
Merriam-Webster, Inc.



SYNOPSIS

Mark Your Calendars!

Education Session - Alcohol & Cancer: Making the Link

Sponsored by the Regional Cancer Prevention and Screening Network for Southeastern Ontario, FOCUS Resource Centre, Peterborough Health Unit, KFLA Health Unit, Smiths Falls FOCUS Community Coalition

Two dates available:

KINGSTON	September 24, 2008
PETERBOROUGH	October 22, 2008

CME credits will be applied for.

Watch your mail for more information or contact:

Lucia Taggart, Project Coordinator,
Smiths Falls FOCUS Community Coalition
(613-283-2740) or

Julia Niblett, Conference Coordinator,
(613-384-4284) ❁

Health Professionals Survey ... It's now in your hands

In order to improve how we work with our partners, the Health Unit is conducting a short survey of local healthcare professionals. The surveys went out at the beginning of June, via mail & email.

If you haven't yet completed it - please take a few moments to fill it out. Your feedback is important to us. We'll report on the results in the Fall.

If you have not received your copy or have any questions, please contact:

Katie Higham,
Planning & Evaluation Consultant
613-345-5685 or
katie.higham@healthunit.org ❁

Practice Guidelines for Nutrition in Pregnancy and Infant Feeding Related to the Prevention of Atopic Disease among Infants

— Dianne Oickle, MSc, RD, Registered Dietitian/Public Health Nutritionist

When assessing an infant's "allergic risk", there are two levels to consider⁽¹⁾:

Low Risk means: Neither parent nor siblings have asthma or eczema or allergies (food, dust, pollen, cats, etc.)

High Risk means: One or both parents or siblings (1st degree relatives) have asthma or eczema or allergies (food, dust, pollen, cats, etc.)

GUIDELINES:

■ Nutrition in Pregnancy and Lactation

- No food restrictions for women during pregnancy or lactation, other than a mother's own food allergies, regardless of allergic risk of the fetus/infant ^(1, 2, 3).

■ Introduction of Complementary Foods for Infants at LOW Risk of Food Allergies ^(1, 2, 4, 5)

- Exclusive breastfeeding for 6 months
- After 6 months of age, no solid food restrictions.

Therefore, the following foods are safe to introduce after the age of 6 months: grains, vegetables, fruit, meat (beef, poultry, fish), meat alternatives, egg yolk, cow's milk products, soy, goat's milk, sesame, peanut, nuts, shellfish/seafood.

- After 1 year - egg white
- Although some researchers recommend the delay of egg white until after one year of age, some research⁽²⁾ suggests that there is no value in delaying any foods (including egg white) past the age of 6 months.

Although foods such as peanuts and other nuts are considered safe after six months of age for allergy reasons, there remains a **choking hazard**.

Regardless of allergy risk, **honey** should still be delayed until after 1 year of age to avoid risk of infant botulism⁽⁶⁾

■ Introduction of Complementary Foods for Infants at HIGH Risk of Food Allergies ^(1, 2)

Parents of an infant who is at high risk of food allergy should consult with their primary care provider and/or an allergy specialist regarding the introduction of

foods such as egg, milk products, fish, nuts, peanut, sesame, and shellfish.

■ Interim Advice for an Infant Without Access to a Primary Care Provider or Allergy Specialist

- Exclusive breastfeeding for 6 months
- After 6 months - grains, vegetables, fruit (no restrictions), meat (beef, poultry, pork, fish), milk products, egg, and meat alternatives (except peanut, nuts, sesame, shellfish)
- After 2 years - peanut, nuts, sesame, shellfish

■ Feeding of Infant Formula for Infants at HIGH Risk of Food Allergies ^(1, 2)

In infants who are not exclusively breastfed for 6 months:

- Extensively hydrolyzed formula, compared with formulas made with intact cow's milk proteins, may delay some allergic symptoms.
- There is insufficient evidence that **partially** hydrolyzed formulas have any advantage over formulas made with intact cow's milk protein in delaying allergic symptoms to recommend their use.
- There is no convincing evidence for the use of soy-based formula for the purpose of allergy prevention.

Full Health Unit guidelines are available at: www.healthunit.org/professionals ❁

References

1. Joneja J. Dealing with Food Allergies in Babies and Children. Boulder: Bull Publishing Company; 2007.
2. Greer FR, Sicherer SH, Burks AW. Effects of early nutritional interventions on the development of atopic disease in infants and children: The role of maternal dietary restriction, breastfeeding, timing of introduction of complementary foods, and hydrolyzed formulas. *Pediatrics* 2008; 121:183-91.
3. Kramer MS, Kakuma R. Maternal dietary antigen avoidance during pregnancy and/or lactation for preventing or treating atopic disease in the child. *Cochrane Database Systematic Review* 2006; 3: CD000133.
4. Halken S. Prevention of allergic disease in childhood: clinical and epidemiological aspects of primary and secondary allergy prevention. *Pediatr Allergy Immunol* 2004; 15 (Suppl.16):9-32.
5. Muraro A, Dreborg S, Halken S, et al. Dietary prevention of allergic diseases in infants and small children. Part III: Critical review of published peer-reviewed observational and interventional studies and final recommendations. *Pediatr Allergy Immunol* 2004; 15:291-307.
6. Canadian Pediatric Society, Dietitians of Canada, Health Canada. Nutrition for Healthy Term Infants. Minister of Public Works and Government Services Canada; 1998.

Folic Acid Supplementation in the Prevention of Neural Tube Defects (NTDs)

– Dianne Oickle, MSc, RD, Registered Dietitian/Public Health Nutritionist

Recent guidelines released by the Society of Obstetricians and Gynecologists of Canada (SOGC) ⁽¹⁾ in December 2007 have made expanded recommendations for folic acid supplementation in the prevention of NTDs. A summary of the strategies for NTD prevention presented by the SOGC are as follows:

<p>Category A</p> <p>Patients with low risk for delivery of a child with NTD, planned pregnancy, and good compliance</p>	<p>good diet of folate rich foods 2-3 months prior to pregnancy, throughout pregnancy, and 4-6 weeks postpartum or as long as breastfeeding continues</p> <ul style="list-style-type: none"> daily supplementation with a multivitamin containing 0.4-1.0 mg folic acid
<p>Category B</p> <p>Patients with increased risk for delivery of a child with NTD</p> <p>epilepsy, insulin dependent diabetes, obesity with BMI >35, family or personal history of NTDs, belonging to a high risk ethnic group (e.g., Sikh)</p>	<p>increased dietary intake of folate-rich foods 3 months pre-conception to 12 weeks post-conception</p> <ul style="list-style-type: none"> daily supplementation, with multivitamin containing folic acid plus additional folic acid supplementation up to 5 mg per day <p>12 weeks post-conception, throughout pregnancy, and 4-6 weeks postpartum or as long as breastfeeding continues</p> <ul style="list-style-type: none"> daily supplementation with multivitamin containing 0.4-1.0 mg folic acid
<p>Category C</p> <p>Patients who have a history of poor compliance with medications and additional lifestyle risks</p> <p>variable diet, no consistent contraception, and possible teratogenic substance use (alcohol, tobacco, recreational non-prescription drugs)</p>	<p>increased dietary intake of folate-rich foods 3 months pre-conception to 12 weeks post-conception</p> <ul style="list-style-type: none"> daily supplementation, with multivitamin containing folic acid plus additional folic acid supplementation up to 5 mg per day <p>12 weeks post-conception, throughout pregnancy, and 4-6 weeks postpartum or as long as breastfeeding continues</p> <ul style="list-style-type: none"> daily supplementation with multivitamin containing 0.4-1.0 mg folic acid

A statement from the Public Health Agency of Canada (PHAC) ⁽²⁾ issued in early 2008 has indicated that PHAC will continue to recommend that all women who could become pregnant take a daily multivitamin containing 0.4 mg of folic acid for 2-3 months prior to pregnancy, and throughout pregnancy and the postpartum period (similar to the SOGC Option A). Health Canada ⁽³⁾, in its online consultation for the development of National Nutrition Pregnancy Guidelines section on Nutrients of Special Concern for Folate, has also indicated that the proposed guidelines for folic acid supplementation be in line with the PHAC recommendations. Neither of these agencies appears to be making more specific recommendations for high-risk populations such as those of the SOGC guidelines.

Although PHAC and Health Canada make recommendations that do represent sound advice for a broader public health approach for the general population, it is important to make **targeted folic acid recommendations based on individual risk factors**. In doing so, however, the primary care practitioner needs to consider issues such as **feasibility of compliance**. It may not be practical to expect a woman who has a history of poor compliance with oral contraceptives, for example, in addition to other lifestyle risk factors to be compliant in taking multiple vitamin pills every day to prevent NTDs in an unexpected pregnancy. However, these women still need to be informed of their risk, and practitioners need to consider ways to help these high risk women to be more compliant with the recommendations.

It is also important to **clarify the recommendations** so that the recent SOGC guidelines are not misinterpreted. The recommendations are not that the entire female population needs to be taking 5 mg of folic acid preconceptionally in the event of an unplanned pregnancy, but only high risk women - i.e., the recommended intake needs to be based on individual risk factors. ❁

References

1. Wilson RD, Johnson JA, Wyatt P, Allen V, Gagnon A, Langlois S et al. Pre-conceptional vitamin/folic acid supplementation 2007: The use of folic acid in combination with a multivitamin supplement for the prevention of neural tube defects and other congenital anomalies. J Obstet Gynaecol Can. 2007 Dec;29(12):1003-13.
2. Public Health Agency of Canada. Folic acid and prevention of neural tube defects. [Online]. 2008 February 28 [cited 2008 May 1]; Available from: URL: <http://www.phac-aspc.gc.ca/fa-af/fa-af08-eng.php>
3. Health Canada. National Nutrition Pregnancy Guidelines DRAFT Nutrients of Special Concern for a Healthy Pregnancy: Folate. [Online]. 2008 April 7-May 11 consultation period [cited 2008 Apr 24]; Available from: URL:http://www.consultations.hc-sc.gc.ca/public-consult/consultations/past-anterieures/consultation_e.php?id=173

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- Communicable Disease
- Immunization/Vaccine Preventable Diseases
- Sexual Health
 - STI/AIDS

Health Protection

- Rabies
- Food Safety
- Safe Water
- West Nile Virus
- Emergency Response
- Health Hazard Investigation

Health Promotion

- Cancer Prevention (Breast, Cervical & Skin)
- Dental Health
- Injury Prevention
- Substance Abuse Prevention
- Chronic Disease Prevention
 - Healthy Eating
 - Healthy Weights
 - Physical Activity
 - Tobacco-Free Living

Family Health

- Child Health
 - Growth & Development
 - Parenting
 - Breastfeeding
 - Nutrition for Infants, Toddlers & Preschoolers
 - Healthy Babies/Healthy Children program
 - Family Abuse Prevention
- Reproductive Health
 - Preconception Health
 - Pregnancy

Disease Surveillance

- Information on the health status/health risks in our community
- Information from local, provincial & national health surveys

Other? _____

4. Is there any change to your contact information?

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