

PUBLIC HEALTH Notes

Working with you to protect and promote health and prevent disease



January – March 2009
Volume 19 (1)

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Dear Colleagues;

I have recently received several questions and comments regarding Lyme disease. I would like to present a very brief summary of some of the current knowledge about this disease with respect to Grey Bruce and some suggestions for improving our passive surveillance of the vector. Lyme disease has been a reportable disease in Ontario since 1988.

Entomology and Distribution

There are several types of ticks in Grey Bruce. *Ixodes scapularis*, a black legged tick a.k.a. the deer tick, can carry and transmit the bacteria *Borrelia burgdorferi* (Bb) which causes Lyme disease (LD) or Lyme borreliosis (LB). *Ixodes scapularis* has established populations in the Long Point Wildlife Refuge and the St. Lawrence Islands National Park. Some of these populations carry Bb. There are many areas in USA where well established tick populations are infected with Bb.

Migratory birds transport larvae and nymphs to new areas. Bird banding studies estimate as many as 150 million larvae and nymphs may be deposited in Canada each summer. Depending on the place of origin, up to 30% of these will carry Bb.

The *Ixodes* tick has a two-year life cycle:

Year one: Eggs laid in spring hatch into larvae that feed on small mammals (white-footed mouse) and birds during the summer and fall. Engorged larvae are dormant during winter.

Year two: In spring larvae molt into nymphs that feed on larger mammals (deer, pets, humans) and then molt again into adults. Adults appear in early fall and also feed on larger mammals. The female will feed and engorge over several days whereas the male does not engorge. It is not known if the male can transmit disease. The eggs will be laid again in spring.

To define an area as having an established tick population, all growth stages of the organism need to be present at the appropriate time of the year. The Grey Bruce area has an abundance of hosts for both immature and adult stages of the blacklegged tick. However, the tick favours 'Carolina forest' and presently our average ambient temperatures may not allow the tick to complete its life cycle. To date, we do not have any evidence of established *Ixodes scapularis* tick populations in Grey Bruce. On average, 1-2 ticks per year are submitted to Public Health for investigation; most are groundhog ticks. Only 2 blacklegged ticks have been submitted and identified in the past 8 years, none in recent years, and neither of these carried Bb. Larvae and

nymphs are small, difficult to find and they drop off their host after feeding rather than stay to be engorged. It is rare that a person would find these stages of ticks even though they may have been bitten.

Thus it is possible, although highly unlikely, that a person in Grey Bruce could be infected with Bb by an infected nymph dropped in by a migratory bird. Climate changes may allow the tick and its bacterial infection to establish in Grey Bruce. It is important for us to recognize when this happens.

The clinical assessment and laboratory diagnosis of Lyme disease

Early LB may be characterized by a skin lesion, erythema migrans, accompanied by flu-like symptoms, arthralgias, myalgias and fever. If untreated, the disease can progress to early disseminated LB with neurological and cardiac involvement. Late disseminated LB includes central and peripheral neurological manifestations and Lyme arthritis. The clinical symptoms that have been attributed to LB are variable, intermittent and non-specific making the clinical diagnosis very difficult to establish clearly.

The laboratory diagnosis of LB is challenging. The gold standard, bacterial culture, has low sensitivity as does PCR amplification of target bacterial genome sequences in clinical material. Enzyme linked immunosorbent assay (ELISA) used alone has limited specificity. Western blot is more specific but the interpretation of the test in a more liberal way leads to a more sensitive test but again loses specificity. Generally the two tests are used together; ELISA as the screen and Western blot to confirm. This practice still has specificity problems because of cross reactivity to other infectious agents. For these reasons, in a non-endemic area such as Grey Bruce there is low confidence that a positive result is a true positive rather than a false positive.

An additional concern is that the Bb populations are increasingly genetically diverse which may make the clinical presentation more variable and the performance of the serologic assays even less accurate.

Public Health Action

Public Health objectives associated with infectious disease include surveillance, risk management, policy development, risk communication and prevention. When considering LB, pertinent questions include:

- What surveillance methods are best used to identify new risk areas in a timely fashion?
- What preventative methods can and should be used?

The Grey Bruce situation has been discussed with Dr. Robin Lindsay, the PHAC entomologist in Winnipeg. Following the consultation, it was considered prudent to launch an awareness effort regarding personal protection from tick bites. Public Health strategies will include a preventative program and efforts to raise awareness of ticks in our area. We will be requesting people to submit to Public Health ticks that they find on themselves or animals. The specimens will be typed and if appropriate, tested for Bb. Local veterinarians will be requested to contribute any positive Bb that they receive from pet testing. In this regard, our passive surveillance system becomes a bit more active. If adult ticks are found in the late summer and early fall, a more active program of flagging for ticks and a small rodent serological survey would be undertaken. Lyme disease can be prevented by personal prevention methods. When walking in the woods, wear pants tucked into socks and light colored clothing. Walk in the center of the paths to avoid brush contact. Apply insect repellent products containing DEET. Check for ticks on your body, remove them safely and submit them for testing.

Excellent educational material is available on the Public Health Agency of Canada website at www.publichealth.gc.ca click on infectious disease, then on Lyme disease.

Together we build healthy communities.

Dr. Hazel Lynn
Medical Officer of Health

GREY BRUCE CANCER DATA

The Grey Bruce Health Unit recently released a comprehensive report *Cancer in Grey Bruce 1986 – 2004*. The report highlights the common, preventable and screenable cancers, including prostate, breast, lung, colon and cervical cancers.

Report Highlights:

- In Grey Bruce, cancers with the highest incidence among males were prostate, colorectal and lung. Among females, breast, colorectal and lung cancers were the leading types.
- Lung, colorectal and prostate cancer were the leading causes of cancer death in males. In females, breast, lung and colorectal cancer were the leading causes of cancer death.
- There is no significant difference in overall cancer incidence between Grey Bruce and Ontario. Males in Grey Bruce had a 4% lower mortality rate due to cancer than in Ontario, while mortality due to cancer in females in Grey Bruce did not show any statistical difference with Ontario.
- There were no significant differences between Grey Bruce and Ontario in cancer incidence or mortality for the following sites: esophagus, breast, testis, cervix, uterus, ovary, brain and nervous system, myeloma, leukemia.
- Grey Bruce had lower incidence and mortality rates compared to Ontario for the following cancer sites: lung, stomach, liver, pancreas, bladder kidney.
- Grey Bruce had higher rates compared to Ontario for the following cancer sites: colorectal, oral, prostate.

A full copy of this report or a copy of the Executive Summary is available by contacting the Public Health at aleffley@publichealthgreybruce.on.ca

Public Health reminds you to encourage positive health behaviours including smoking cessation, active lifestyle and healthy diet. Information about cancer screening including the Fecal Occult Blood Test or the Ontario Breast Screening Program and the Gardasil vaccine can be found on our website and is available upon request.

FLUORIDE SUPPLEMENTATION

The Grey Bruce Health Unit does not recommend the use of fluoride supplements. If a supplement is to be given, the family dentist should make the decision based on estimated daily fluoride intake per kilogram of body weight. This recommendation would follow the dentist's clinical examination and risk assessment to determine if the benefit of supplemental fluoride outweighs the risk of fluorosis.

Children are exposed to various sources of fluoride including water from municipal and private systems, fluoridated toothpaste, commercial foods and beverages. The increasing consumption of fluoride-containing products increases the risk of dental fluorosis. Due to the wide variety of products containing fluoride and the variable amounts of fluoride in each product, it is very difficult to accurately predict an individual's fluoride intake. This makes prescribing an appropriate dosage of fluoride supplement extremely challenging. Therefore fluoride supplementation should be the exception, not the rule.

Reference

Health Canada. (July 2008). *Fluoride and Human Health*. Retrieved January 2009 from <http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/environ/fluor-eng.php>

PNEUMOCOCCAL DISEASE RATES: IMMUNIZING HIGH RISK GROUPS

Reported cases of pneumococcal disease in Grey Bruce increased by 50% in 2008 from 2007. In the first two months of 2009, Public Health investigated nine reports of the disease. There is concern that rates of pneumococcal vaccination in some facilities and seniors' homes may be low or unknown.

Pneumococcal polysaccharide vaccine should be given to anyone 65 years of age and older regardless of medical condition and to all residents of nursing homes, homes for the aged and chronic care facilities or wards.

In addition to the above criteria, anyone two years of age and older with the following medical conditions should be vaccinated to protect against streptococcus pneumonia:

- Chronic respiratory or cardiac disease
- Cirrhosis or alcoholism
- Chronic renal disease or nephrotic syndrome
- Diabetes mellitus
- Asplenia, splenic dysfunction, sickle-cell disease and other sickle-cell haemoglobinopathies
- Chronic cerebral spinal fluid leak
- Primary immune deficiency
- HIV infection
- Other conditions associated with immunosuppression
- Solid organ transplant recipients
- Cochlear implant recipients

In November 2008 the Ontario Ministry of Health and Long-Term Care made the recommendation to offer pneumococcal vaccination to homeless persons as well, since they are likely to meet high-risk eligibility criteria for immunization.

References

Ministry of Health and Long-Term Care. (Letter dated November 26, 2008). *Streptococcus Pneumoniae and the new NACI Statement*.

Ministry of Health and Long-Term Care. (January 2009). *Publicly Funded Immunization Schedules for Ontario*.

Public Health Agency of Canada. (September 2008). National Advisory Council on Immunization. *Statement on the recommended use of pneumococcal 23-valent polysaccharide vaccine in homeless person and injection drug users*. Canada Communicable Disease Report, Volume 34.

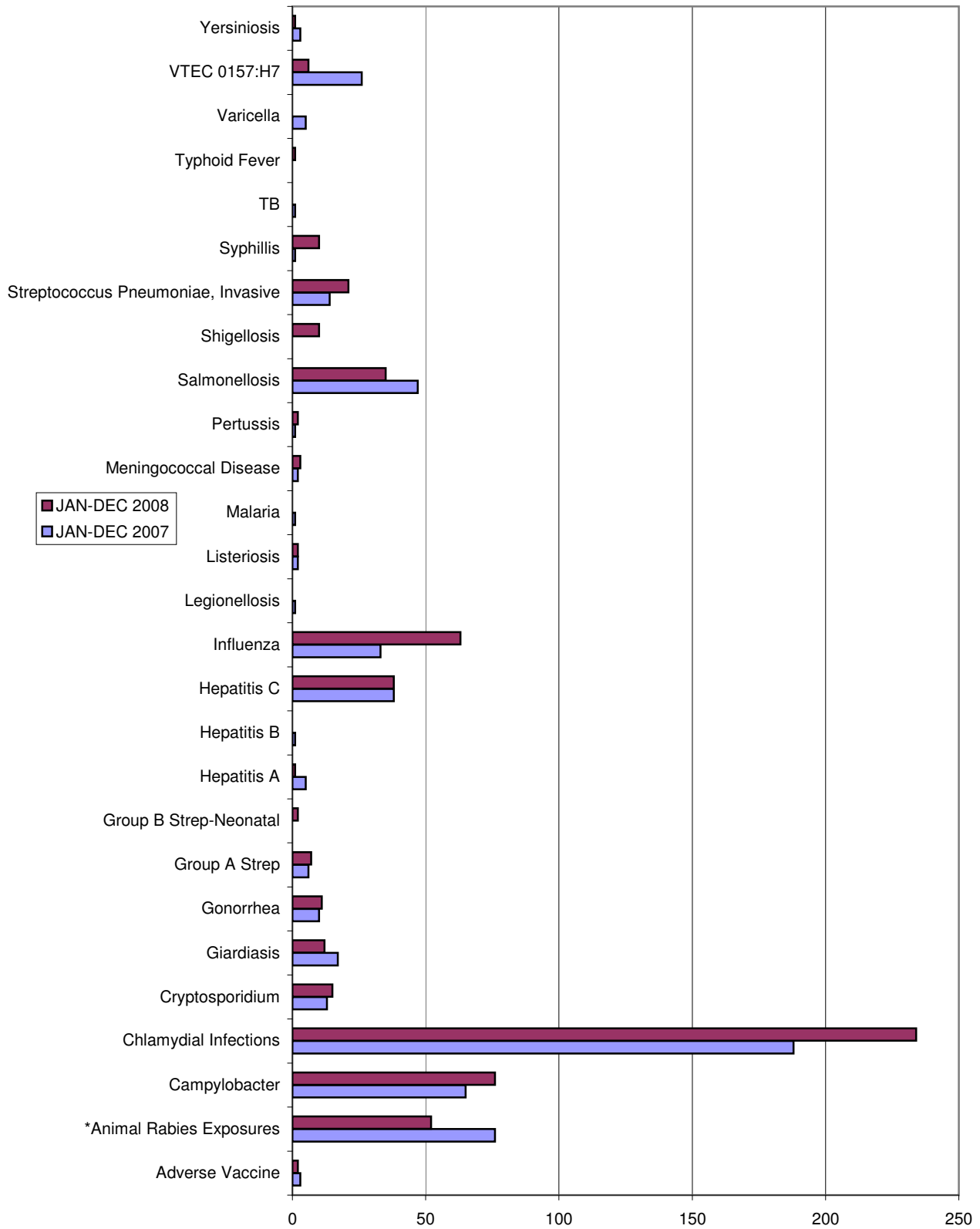


PUBLIC HEALTH *Notes*

Grey Bruce Health Unit

Reportable Disease Incidence

January-December 2007 versus January-December 2008



* Number of people who received rabies vaccine



2009 COMMUNITY IMMUNIZATION CLINICS

Publicly funded vaccines are available free of charge.
Other vaccines are available at a cost.

Clinics Are By Appointment At The Following Locations

Clinic Location	Phone #	Day and Time
Owen Sound Health Unit 101 17 th Street East	519-376-9420 1-800-263-3456	<p style="text-align: center;">Every Tuesday 9:00 a.m. to 3:20 p.m. (Wed. dates 9:00 to 11:10 a.m. only from Oct –March end)</p> <p> Jan. 6, 7, 13, 14, 20, 21, 27, 28 Feb. 3, 4, 10, 11, 17, 18, 24, 25 Mar. 3, 4, 10, 11, 17, 18, 24,25,31 April 7, 14, 21, 28 May 5, 12, 19, 26 June 2, 9, 16, 23, 30 July 7, 14, 21, 28 Aug. 4, 11, 18, 25 Sept. 1, 8, 15, 22, 29 Oct. 6, 7, 13, 14, 20, 21, 27, 28 Nov. 3, 4, 10, 17, 18, 24, 25 Dec. 1, 2, 8, 9, 15, 16, 22, 23, 29, 30 </p>
Walkerton Health Unit Bruce County Administration Building 30 Park Street	519-881-1920 1-800-263-3456 Ask switchboard for Walkerton Office	<p style="text-align: center;">1st Wednesday and 3rd Wednesday of each month 9:30 a.m. to 2:00 p.m.</p> <p> Jan. 7, 21 Feb. 4, 18 March 4, 18 April 1, 15 May 6, 20 June 3, 17 July 15 Aug. 5, 19 Sept. 2, 16 Oct. 7, 21 Nov. 4, 18 Dec. 2, 16 </p>
The Plex, Port Elgin 600 Tomlinson Drive	519-376-9420 1-800-263-3456 (Appointments booked with Owen Sound Office)	<p style="text-align: center;">2nd Wednesday of each month 10:30 a.m. to 2:00 p.m.</p> <p> Jan. 7 Feb. 11 March 11 April 8 May 13 June 10 July 8 Aug. 12 Sept. 9 Oct. 14 Nov. 12 (Thursday) Dec. 9 </p>

Travel information and advice are also available from the Health Unit.
For further information, contact the Grey Bruce Health Unit,
Vaccine Preventable Diseases Program.



GREY BRUCE
Health
SERVICES

ADDICTION TREATMENT SERVICES

ADDICTION TREATMENT SERVICES
P.O. Box 846, 495 9th Avenue East
Owen Sound, Ontario N4K 5W9
ATS Admin Fax #: (519) 376-7366

January 2009

Dear Sir/Madam:

I would like to update you on the Addiction Treatment Services (ATS) offered by Grey Bruce Health Services. Our programs include the Community Addiction Treatment Services (C.A.T.S.) – formerly known as the Addiction Day Treatment Program (ADTP) as well as the Withdrawal Management Services (WMS) – formerly known as the Detox.

Enclosed are copies of ATS program brochures. If you require additional copies, or have any questions on our addiction programs, please call me at 376-5666.

We welcome any referrals and look forward to working with you to assist any of your patients with a substance abuse problem.

Sincerely,

Mark Weston
Supervisor
Withdrawal Management Services
Grey Bruce Health Services

MW/kb

Enclosed: ATS brochure

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Addiction Day Treatment Program (ADTP)
Withdrawal Management Services (WMS)

Phone #: (519) 376-3999
Phone #: (519) 376-5666

Fax #: (519) 372-9403
Fax #: (519) 376-3664

Both the Community Addiction Treatment Services and Withdrawal Management Services are programs of the Mental Health Service Department of Grey Bruce Health Services.

Our services are offered to individuals free of charge. The Ministry of Health and Long Term Care for Ontario provides the funding for these programs.

A doctor's referral is not required for the services offered by Addiction Treatment Services. You may refer yourself, or be referred by another individual or service.

Our goal is to help. We welcome your call.

Recovery is the silver lining in the storm of addiction



Addiction Treatment Services

A.T.S.

495 9th Avenue East
P.O. Box 846
Owen Sound, ON N4K 5W9



Addiction Treatment Services

A.T.S.

495 9th Avenue East
P.O. Box 846
Owen Sound, ON N4K 5W9

WITHDRAWAL MANAGEMENT SERVICES

W.M.S.

TEL: 519.376.5666
FAX: 519.376.3664
EMAIL: wms@gbhs.on.ca

COMMUNITY ADDICTION TREATMENT SERVICES

C.A.T.S.

TEL: 519.376.3999
FAX: 519.372.9403

Addiction Treatment Services

A.T.S. provide services to persons 16 years of age and older, who have an addiction problem.

We Believe

- addiction may affect people of any age, gender, race or background.
- people are responsible for their use of drugs and/or alcohol.
- withdrawal is often the first step towards long-lasting change.
- a lack of coping skills and social supports, contribute to an addictive lifestyle.
- attending an addiction program is one step in the process of recovery.
- the support of family and friends is important in the process of recovery.

Ear Acupuncture: which we offer at A.T.S., assists with withdrawal from alcohol/drugs, cravings, relapse prevention, and stress management.

COMMUNITY ADDICTION TREATMENT SERVICES

What Services Does **C.A.T.S.** Offer?

Assessment: to determine the nature of the problem and the most appropriate treatment options.

Day Treatment Program: a group-based program focusing on relapse prevention through skills development. Each group member is also provided with individual counselling sessions.

Structured Relapse Prevention Group (S.R.P.G.): one evening a week to provide a supportive environment for group members' continued skill development in order to prevent relapse.

Outpatient Therapy: both individual and couples therapy are offered on an outpatient basis.

WITHDRAWAL MANAGEMENT SERVICES

What Services Does **W.M.S.** Offer?

Withdrawal Management: to provide support during withdrawal from substances.

Problem Recognition: to help clients examine their substance use behaviour, and to explore treatment options.

Assessment and Referral: to assess client needs and assist in making appropriate referrals.

Supportive Stabilization: to provide supportive housing while the client is attending the Day Treatment Program.

Groups: Morning Reflections and Introduction to Recovery groups are offered.

Relapse Prevention/Support: to assist clients, on an inpatient or outpatient basis, in dealing with substance abuse related situations.