



Happy Holidays from Your Friends at CICN

It is the season of joy, the season of peace, and the season of Norovirus. I will forever remember the fateful Christmas of 2001 when my dear brother arrived from Winnipeg with his lovely girlfriend and an incubating case of Norovirus. Both brother and girlfriend spent all of Christmas Day running between bed and bathroom in a frenzy of Norovirus symptoms, while I punctuated



Lise Blanchard, Colette Ouellet & Suzanne Rowland

the gift-opening extravaganza with the application of liberal doses of "Javex" solution in the shared bathroom. Despite my best efforts, my 92 year old Grandmother also was afflicted and had to spend most of her Boxing Day in the bathroom. Everyone survived the insult, transmission was halted after Grandma's case, and it made for a memorable Christmas, although perhaps not in the way one wishes to have it remembered!

So now, leading up to each Christmas season, I remind friends and family of preventive measures we can all take to avoid reliving the Ouellet's Christmas of 2001-- First and foremost, wash your hands well, and wash them often, especially before eating or preparing food! If you work in a

healthcare setting, eat only in designated areas, NOT in patient care areas (including the nursing station!). Ensure that those who are experiencing symptoms of Norovirus are appropriately isolated (In the workplace, staff go home; patients are managed on contact precautions. In your own home, dedicate a bathroom to those with symptoms). Stay healthy!

And while we are talking about staying healthy, make the smart choice and have your influenza vaccination. As I write this short note, we have not yet seen the inevitable influenza case within the Champlain region, but it is truly just a matter of time. Be good to yourself; protect yourself and those you love from influenza by choosing to be vaccinated at this time every year!

*From the staff of the Champlain Infection Control Network,
"Have a happy and healthy holiday season!"*

Colette Ouellet
Network Coordinator

Suzanne Rowland
Infection Control Consultant

Dr. Virginia Roth
Medical Co-Lead

Dr. Gary Garber
Medical Co-Lead

Lise Blanchard
Administrative Coordinator

In this issue:

Norovirus & Rotavirus	2 & 3
National Infection Control Week	4
Prenez Note!	4
CHICA & CICN Conference	5
Hand Washing Campaign	6
Funding Resources	7
Influenza Web Page	8
Asymptomatic Bacteriuria	8
Upcoming Events	9

Norovirus and Rotavirus..... Foul Weather Friends

Norovirus and Rotavirus infections generally make themselves known in the winter months in our part of the world. Each of these viruses cause short-lived enteric disease that includes vomiting, diarrhea, abdominal pain and sometimes fever. Although neither virus is a welcome presence in our lives, they do tend to run their course relatively quickly, and most healthy individuals will suffer no long term harm from infection. However, they are a curse in healthcare settings, and in extreme cases, and in the wrong host (particularly the elderly and very young), these infections can result in severe dehydration and electrolyte imbalance that requires hospitalization and can result in death.

Rotavirus is well known to affect children, with an estimated 35% of pediatric hospital admissions for gastroenteritis being caused by this organism. Typically, rotavirus infection requires an incubation period of 24 to 72 hours, and symptoms last from 4 to 6 days. Onset is generally quite sudden, with vomiting and fever, which lasts for about 2 days, followed by profuse diarrhea. The virus is actively shed in the feces between the 3rd and 8th day of illness, with viral concentrations of over 1,000 micro-organisms per gram of feces having been described. The virus is stable, with persistence being seen on inanimate surfaces for up to 10 days (including toys). The organism is primarily spread via contact, through a fecal-oral route. The potential for “aerosol” spread has been speculated, but there is no firm data to support this theory. Although adults can be infected, they are often asymptomatic. However, nosocomial outbreaks have been described in adult populations, with severe consequences in immunodeficient individuals and in the elderly. In these cases, a chronic symptomatic diarrhea with prolonged viral shedding may develop.

Noroviruses are very small viral agents that also cause nausea and vomiting with clustering of cases that affects all age-groups. Norovirus is an extremely hardy organism that can withstand freezing, heating, and many common disinfectants. It is also extremely infectious, with fewer than 100 viral particles considered a high enough “dose” to cause infection in a susceptible host. Like Rotavirus, it is primarily spread from person-to-person in a fecal-oral route, but unlike Rotavirus, the Norovirus has been found in vomitus as well as in feces. “Aerosol” transmission has been occasionally implicated. Incubation period for Norovirus is very short, from 18 to 48 hours. The duration of illness tends to also be quite short, averaging 2 days, with vomiting as the predominant symptom. Viral shedding is most apparent over the 24 to 48 hours after illness develops. Outbreaks are common, with secondary transmission a prominent feature of outbreak. Most outbreaks will terminate within 1 to 2 weeks, but efforts must be made to avoid sparking separate outbreaks in a confined setting such as a hospital, school, nursing home or cruise ship.

Outbreak control of Norovirus and Rotavirus infections is fully dependant on good hygiene practices, including strict cleaning and hand washing, prompt initiation of appropriate additional precautions, and use of cohorting when required. Exclusion of sick employees can be important in limiting the spread of nosocomial outbreaks. In the case of Norovirus, transmission has been seen from individuals who have recently been ill, and to limit this, individuals should be kept away from healthcare duties or kept on precautions (in the case of patients) for 48 hours after symptoms have resolved.

**	Rotavirus	Norovirus
Mode of transmission	Primarily Fecal-Oral (i.e. contaminated hands coming in direct contact with the oral cavity or with food that is then ingested). Some suggestion of aerosolized virus transmitted during vomiting. Also transmitted through contaminated food and drink, and contact with contaminated fomites.	
Susceptibility	Greatest between 6 and 24 months; by age 3, most people have acquired antibodies.	Susceptibility is widespread. Short term immunity (up to 14 weeks) has been demonstrated.
Incubation period	24-72 hours	24-48 hours (range of 10-50 hours)
Duration of symptoms	4-6 days	1-2 days
Period of communicability	During the acute stage (while symptomatic) and later while virus shedding continues	During acute stage and up to 48 hours after diarrhea stops

Norovirus and Rotavirus..... Foul Weather Friends

Prevention and Treatment:

- 1. Wash your hands frequently.**
 - a. Studies done with 70-90% alcohol hand gels have shown good efficacy against viruses similar to Norovirus.
 - b. It is very important to wash hands with soap and water if any visible soiling present.
 - c. Hand washing prior to eating or preparing food is critical as those lone virus particles remaining on your hands can result in infection!
- 2. Do not eat or drink in patient care areas, including nursing stations.**
 - a. As the Christmas season approaches, we see more and more sharing of open food in patient care areas. This is a well-documented method of outbreak stimulation, as contaminated food becomes a common vehicle for transporting Norovirus to a large group of people.
 - b. Avoid open containers of food anywhere when multiple hands are in contact (bowls of chips, bowls of nuts, sandwich trays etcetera).
- 3. Be sure that all surfaces are well cleaned after someone has vomited or had diarrhea.**
 - a. In hospital, if we suspect that a Norovirus outbreak is occurring, we recommend switching from standard cleaning products to a stabilized Hydrogen Peroxide Product, as this is known to be effective against Norovirus. At home, you may wish to use a Bleach solution of 1 part bleach to 10 parts water.
- 4. Report clusters of illness (respiratory illness or gastroenteritis) to your Infection Control staff and local Public Health Unit.**
 - a. The Infection Control or Public Health staff can help to advise on appropriate measures and determine when it is necessary to escalate to outbreak measures.
- 5. Patient Care Areas during an Outbreak:**
 - a. Any patient who develops Norovirus-like symptoms (nausea, vomiting, and diarrhea) should be placed on contact precautions. If there is profuse vomiting, droplet precautions are required. Send specimens for virology (small round virus-query Norwalk) culture and electron microscopy and Microbiology (C+S).
 - b. Staff who experience Norovirus-like symptoms should notify Occupational Health.
 - c. Staff assigned to outbreak units should avoid working on non-outbreak units unless they have been off the outbreak unit for 48 hours and are asymptomatic.
- 6. Restrict activity on outbreak units.**
 - a. It is recommended that common gatherings and use of conference rooms be halted during the outbreak.
 - b. Consider limiting visitors to immediate family only.

References:

Heymann, DL. Control of Communicable Diseases Manual (18th ed.) American Public Health Association, Washington 2004.

Mandell GL, Bennett JE, Dolin R. Principles and Practice of Infectious Diseases (6th ed). Elsevier. Philadelphia 2005.

Mayhall, CG. Hospital Epidemiology and Infection Control (3rd ed.) Lippincott Williams and Wilkins. Philadelphia 2004.



National Infection Control Week

National Infection Control Week was marked by a variety of events in the Champlain Infection Control Network region. Infection Control Professionals in Acute Care, Long Term Care and Public Health all celebrated the week using innovative ideas to highlight the many ways to promote the prevention and control of infections. At the Queensway Carleton Hospital in Ottawa, Infection Prevention and Control Practitioners all wore bright yellow T-shirts that had different infection control messages related to hand hygiene and other pertinent activities. The St Francis Memorial Hospital in Barry's Bay filled the display board in the lobby with messages giving prominence to the importance of receiving influenza immunization. Quizzes, draws and prizes were offered to participants. Long Term Care facilities got into the spirit of celebration also. St Patrick's Home of Ottawa set up a display in the front lobby using different media techniques such as Cough Etiquette DVD, the glow germ for "hands on" involvement and quizzes for all to participate in. Influenza vaccination was offered at the same time. In Winchester, the Dundas Manor booked extra staff to dedicate time to Infection Prevention and Control Week, with a focus on environmental cleaning and the Staff Influenza Vaccination Campaign. Ottawa Public Health provided display boards to Long Term Care facilities that promoted hand hygiene, the proper use of PPE etc... The list of initiatives can not be itemized in one short paragraph. The Champlain Infection Control Network congratulates all facilities in the region and celebrates your successes.



Left to right

Charlie Dickey, Christine Desjardine, Inez Landry,
Donna Perron & Marlene Taylor
Queensway Carleton Hospital Infection Prevention and
Control Team.

Prenez note !

“ Les bébites et nous en 2008 ”

**Symposium francophone
sur le contrôle et la prévention des infections**

Le 27 & 28 mars 2008

**Symposium situé à deux sites
Sudbury & Ottawa
Présenté par:**



RÉSEAUX RÉGIONAUX DE
CONTRÔLE DES INFECTIONS
Réseau de contrôle des infections de Champlain



RÉSEAUX RÉGIONAUX DE
CONTRÔLE DES INFECTIONS
Réseau de contrôle des infections du nord-est de l'Ontario



CHICA Ottawa Region partners with CICN

On November 1, 2007 the Champlain Infection Control Network Education Sub-Committee led by Dr. Pierre Soucie hosted an educational event for health professionals in the region. Topics covered included Influenza Facts and Fiction by Dr. Isra Levy; Latent and Active Tuberculosis by Dr. Edward Ellis; and Ca-MRSA by Dr. Virginia Roth. Over 100 registrants participated in the session. A variety of professionals including physicians, nurse practitioners, nurses, health inspectors, laboratory technologists and paramedics representing Long Term Care, Acute Care, Community Care and Public Health from across the Champlain region gave the session rave reviews.



- Excellent presentations. Very Good venue and excellent food.
- Very good presentation and informative. Well timed
- Excellent presentations, worked well with dinner.
- Very well presented and great information.

CHICA Ottawa Region, with support from the Champlain Infection Control Network held their bi-annual symposium on November 2, 2007 at the Hellenic Centre in Ottawa. Presentations included Infection Control and Patient Safety, Clinical Virology, Influenza Vaccination, Infection Control Core Competencies, Regional Trends-MRSA/VRE and a series of vignettes on Multi Drug Resistant Organisms. Attendance for the event surpassed 125 and a variety of health professionals from across the continuum of health care came from all areas of the Champlain region. Evaluations for the event were complimentary in all sections: topics and speakers, location and food, and opportunities for networking. *Congratulations to CHICA Ottawa Region for a superb event.*



Getting Ready! - Hand Washing Campaign



Getting Ready! Announcement of the 1st phase of Canada's Hand Hygiene Campaign

October 15, 2007

The Canadian Patient Safety Institute (CPSI) is pleased to announce the *Getting Ready* phase of Canada's Hand Hygiene campaign aimed at getting organizations ready to adopt and measure hand hygiene practices and compliance within their organizations. This multimodal strategy is based on the World Health Organization's challenge *Clean Care is Safer Care* initiative launched worldwide two years ago aimed at raising awareness that healthcare associated infections are an important priority for patient safety.

As part of this launch announcement, CPSI is pleased to confirm that the Ontario Ministry of Health and Long-Term Care (MoHLTC), who have just finished testing and evaluating a multi-faceted strategy aimed at improving healthcare provider hand hygiene, will be lending their expertise to Canada's Hand Hygiene Campaign to measure hand hygiene compliance. The MoHLTC strategy, developed in collaboration with provincial, national and international experts, has already shown a steady increase in hand hygiene compliance during its pilot phase.

CPSI is also pleased to announce that it is partnering with the MoHLTC to provide train-the-trainer sessions on the "four moments" of hand hygiene and a tool for participating sites to measure hand hygiene compliance. Health care providers and observers will be trained to understand the four key moments for hand hygiene that include:

- o Before contact with patient or patient environment
- o Before aseptic procedure
- o After exposure to body fluids
- o After contact with patient or patient environment

Ontario's observation and measurement tool and training program are local adaptations of the World Health Organization's strategy to simplify indications for hand hygiene. The train-the-trainer sessions will be offered beginning January 2008. Information on these sessions will be posted on the campaign website (www.handhygiene.ca) in December 2007.

CPSI is also extremely pleased to announce as part of the launch that it has signed a major agreement with 3M Infection Prevention, the international diversified technology company renowned for serving customers and communities with innovative products and services, to participate in the co-development of a human factor project that will include identifying where hand hygiene products should be located at point of care as well provide key tools for CEO and healthcare professional engagement in hand hygiene.

CPSI is also very happy to confirm its partnership with Discovery Campus, an innovative, interactive web community offering high-quality online Continuing Medical Education to healthcare professionals worldwide, in the production of an online learning module for healthcare professionals available for participating campaign sites. Another sponsor to the campaign is Hygiene-Technik Inc. who has been specializing in the design, development, and manufacturing of hand care dispensing systems for 40 years.

To join Canada's Hand Hygiene Campaign by *Getting Ready!* please register at www.handhygiene.ca.

Contact:
Chantal Backman
Project Manager
Canadian Patient Safety Institute
cbackman@cpsi-icsp.ca
Tel: 613-738-9130



www.handhygiene.ca

www.lavagedesmains.ca

Funding Resources

The RNFOO/Molson Canada SARS Memorial Fund providing grants to ICPs... it's NOT just for nurses...

The SARS memorial fund for Infection Control Practitioners is a tuition/certification/professional development reimbursement program funded by Molson Canada SARS Concert (2003) and supported by the Ontario Ministry of Health and Long Term Care.

RNFOO manages the SARS memorial fund, initiated in January 2005. The fund provides grants to Infection Control practitioners **from any discipline**.

To support them in advancing their knowledge to lead infection control practices within their healthcare settings. Grants can be applied to continuing education, certification/recertification and professional development.

The fund of \$175,000 is to be administered over three years, allowing for the allocation of approximately \$58,000 per year in support of individuals pursuing formal education and certification in the area of infection control.

See www.rnfoo.org for details.

http://www.rnfoo.org/awards_scholarships/2007/infection_control/SARSMemorialFund2007.htm

Virox National Conference Fund

Deadline for applications: February 1, 2008

The purpose of the National Education Conference Scholarship is to provide financial assistance to eligible infection control practitioners in the form of a scholarship to attend the CHICA-Canada annual national conference. Applicants are selected who: Have demonstrated an interest in infection control education.

Are eligible for financial assistance based on the criteria set out in the application

Have participated in the applicable local CHICA-Canada Chapter

The scholarship award is up to \$2,000.00 per recipient for expenses incurred at the conference. Eligibility criteria and policies are stated on the application forms below.

Applications must be submitted in writing no later than **February 1, 2008**, prior to the annual National CHICA-Canada Educational Conference.

Send applications to:

Secretary/Membership Director of CHICA-Canada
c/o CHICA-Canada

PO Box 46125 RPO Westdale, Winnipeg MB

R3R 3S3 Phone: (204) 897-5990 Toll-free: 1-866-999-7111 Fax: (204) 895-9595

Email: chicacanada@mts.net

For more information, visit: http://www.chica.org/opps_virox.html

Win your way to the next CHICA-Canada Conference!

ECOLAB Poster Contest

An Annual Poster Contest is sponsored by Ecolab and supported by a Chapter of CHICA-Canada to give ICPs an opportunity to put their creative talents to work in developing a poster which visually embodies the Infection Control Week Theme.

Theme for *Infection Control Week 2008* :

Antibiotic-Resistant Organisms – A Call to Action!

The winner of the Annual Poster Contest is announced at the annual CHICA-Canada Conference.

Winners receive full registration at the next CHICA-Canada conference

Deadline for submissions is January 31, 2008 Artistic talent is not required, the chosen concept for the poster will be developed for production by a graphic designer.

Go to www.chica.org for more details.

Thanks to Laurie Boyer, NEOICN, Infection Control Consultant for contributing this article.



About influenza
Why get vaccinated? How effective is the vaccine?
Are there side effects?

Influenza or a common cold?
Compared to the common cold, the symptoms of influenza are far more severe

Influenza by the numbers
...rates of infection...number of children hospitalized...economic costs...workdays lost...

Test your flu IQ
How well do you know the facts about influenza?

What the medical experts say
An audio-visual presentation on influenza by a neurologist and an infectious disease specialist

A smart choice. ✓
The right choice.

To treat or not to treat.....Asymptomatic Bacteriuria

Dr. Ian Davis, Medical Coordinator, Central East Infection Control Network

Asymptomatic bacteriuria (AB) is common in clinical practice. It is defined as bacteriuria in otherwise asymptomatic persons with 3×10^5 cfu/ml of the same bacterial strain in 2 consecutive voided urine specimens in women or 1 clean-catch voided specimen in men or 3×10^2 cfu/ml in catheterized persons.

It is most common in women and particularly associated with sexual activity with 4.6% of premenopausal married women. It is rare in young healthy men but does increase with age in both men and women where >20% of women > 80 yrs and 6% - 15% of men > 75 yrs have AB. Another common problem is bacteriuria associated with indwelling urethral catheters and occurs in 2% - 7% per day for short term catheters and $> 50\%$ in spinal cord injury patients managed by intermittent catheterization.

Patients in long-term care facilities are especially at risk with 25 - 50% of women and 15% - 40% of men affected.

The treatment of AB is a common dilemma. Recent guidelines from IDSA (Infectious Diseases Society of America) give recommendations when and when not to treat.

Most cases of AB in adults do not require antibiotic treatment. There are exceptions to this however. In pregnancy, AB is associated with increased risk of pyelonephritis, prematurity and infant of low birth weight which may be reduced if treated. Screening for AB is recommended at least once during the pregnancy usually in the 1st trimester (12-16 weeks) from a urine culture, as pyuria has a low sensitivity (50%). Urological procedures have been associated with an increased risk of bacteremia with AB and therefore screening for and treatment of AB, if present, prior to the procedure is indicated for transurethral resection of the prostate (TURP) or other urologic procedures likely to produce mucosal bleeding. There has been no benefit found in treating AB in catheterized, elderly, spinal cord injury or diabetic patients and therefore screening for AB is not indicated. Pyuria is commonly associated with AB and is not an indication for treatment.

In addition, inappropriate antibiotic use can be associated with significant negative outcomes including increased antimicrobial resistance, drug reactions and side effects such as *Clostridium difficile* associated diarrhea.

Nicolle et al. Infectious Diseases society of America Guidelines for the diagnosis and Treatment of Asymptomatic Bacteriuria in Adults. CID 2005; 40; pp. 643-654..

Smail et al. Antibiotics for Asymptomatic Bacteriuria in Pregnancy. Cochrane Database Systematic Review 2007; Apr 18;(2):CD000490.

Bachman et al. A Study of Various Tests to Detect Asymptomatic Urinary Tract Infections in an Obstetric Population. JAMA 1993; 270; 1971-1974.

U.S. Preventive Services Task Force (USPSTF). Screening for Asymptomatic Bacteriuria: Recommendation Statement. Agency for Healthcare Research and Quality (AHRQ); 2004 Feb 5.

Upcoming JANUARY, FEBRUARY AND MARCH

JANUARY 2008

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

FEBRUARY 2008

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	

MARCH 2008

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23/30	24/31	25	26	27	28	29

For Registration to any of these events

Please contact the CICN office at:

Local—613-761-4833

Toll free—866-833-8868

Email - lblanchard@cicn-rcic.on.ca

 CICN Office Closed

 CICN Events

 External Events

 Webber Teleclass

January & February 2008 Schedule of Events

January 10, 2008 1:30 to 2:30 p.m.

The Global Problem of Antimicrobial Resistance: What can the Public, Hospitals and Government Do?

Speaker: Dr. Elaine Larson, Columbia University

January 31, 2008 1:30 to 2:30 p.m.

Patient Empowerment & Measurement for Hand Hygiene

Speaker: Mary Anne McGukin, University of Pennsylvania

February 5, 2008 1:30 to 2:30 p.m.

Lessons from the Maidstone C.diff Outbreak

Speaker Christine Perry, United Bristol Healthcare Trust

February 20, 2008 1:30 to 2:30 p.m.

Climate change and Human Health

Speaker Prof. Peter Curson, University of Sydney

March 2008 Schedule of Events

March 6, 2008 1:30 to 2:30 p.m.

Novice—Microbiology 101

Speaker Jim Gauthier, Providence Continuing Care

March 13, 2008 1:30 to 2:30 p.m.

Novice—The Basics of Cleaning, Disinfections and Sterilization

Speaker Dr. Lynne Schulster, CDC

Novice—Outbreak Management

Speaker Dr. William Jarvis, Jason & Jarvis Consultants

March 27, 2008 1:30 to 2:30 p.m.

Novice—Surveillance Success

Speaker Dr. Mary Andrus, CDC

March 27 & 28, 2008—Francophone Conference

Presented by CICN & NEOICN

Office Hours: Monday to Friday—8:00 a.m. to 4:00 p.m.

Champlain Infection Control Network (CICN)

751 Parkdale Avenue, Suite 1406, Ottawa, ON K1Y 1J7

