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Bedpan processing methods: making an informed choice

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ABSTRACT

Background
Effective management of bedpans is a key component of hospital infection control. Several technologies are presently available to managers of health care facilities.

Objectives
To summarize current issues arising from the use of reusable bedpan washers, disposable bedpan macerators, and disposable hygienic bags, particularly regarding safety and effectiveness, work organization, costs and environmental impact.

Methods
Published studies were identified through PubMed (MEDLINE) and The Cochrane Library; other relevant documents (grey literature) were found using Internet search engines. Interviews were carried out with infection prevention and control staff in Quebec hospitals, and a cost analysis was performed.

Results
The scientific data on bedpan processing methods are limited. Guidelines and technical standards do not provide a consensus on the optimal technology. The use of washers (without sterilization) would be the least effective method when considering control of heat-resistant micro-organisms *(e.g. C. difficile)*. The interviews highlighted issues related to safe transport of soiled bedpans, processing bedpan supports when using macerators, implementation of procedures, and trade-offs between patient/staff safety and environmental impact, and between staff time and equipment purchasing costs.

Conclusions
Based on the available evidence, a single particular bedpan processing method cannot be recommended. The classification of bedpans as non-critical devices requiring low-level disinfection is questionable. To better prevent nosocomial *C. difficile* infections, sterilization of bedpans after patient discharge or use of disposable bedpans or hygienic bags should be considered. Context-specific cost and effectiveness estimates using complete field information are necessary to inform the choice of a single or multi-solution processing method.

KEY WORDS:
bedpan, washer, washer-disinfector, macerator, hygienic bags, infection control

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INTRODUCTION

In assuring the quality of hospital services, infection control is fundamental and effective processing of reusable medical devices is a key component. Processing involves cleaning, disinfecting and/or sterilizing soiled devices to make their reuse safe; the alternative to processing is to use disposable items. Bedpans are used in hospitals to collect the excreta of bedridden patients, and can be a source of nosocomial infection. The most frequent types of machines used in bedpan processing are washers (also known as washer-disinfectors) and macerators: the former process reusable plastic and stainless steel bedpans while the latter destroy disposable pulp bedpans, but require the use of reusable plastic bedpan supports. Disposable, oxo-biodegradable hygienic bags are relatively new devices that are being adopted by hospitals in some North American regions

including Quebec, as an alternative to conventional bedpans.

Bedpans are classified in Canadian and international practice guidelines as *non-critical* devices, that only come in contact with a patient's intact skin. According to this classification, the reuse of bedpans requires meticulous cleaning and low-level disinfection (1), although the safety of this processing approach has been questioned (2, 3). The Canadian Decontamination of Reusable Medical Devices standard CSA Z314.0-08 (4) simply states that waste containers should be emptied and rinsed at the point of use before they are transported to a designated processing area. According to the international standard ISO 15883-1, thermal disinfection at 80°C for one minute is the acceptable minimum for decontaminating non-critical devices that are not likely to contain high numbers of heat-resistant micro-organisms (5, 6). This international standard was adopted in Canada in 2009 (7, 8).

The present paper arises from a health technology assessment (HTA) prepared by the former Quebec Agency for Health Services and Technology Assessment (AETMIS, now INESSS) for the provincial Ministry of Health (9). HTA, which aims primarily to inform health care decision-makers, is a multidisciplinary process that examines the introduction, acquisition and use of medical devices, equipment, therapeutic and diagnostic procedures and methods of delivering and organizing services. The objective of this paper is to inform health care facilities about current issues arising from the use of the two main bedpan processing technologies, particularly regarding safety and effectiveness, work organization, costs and environmental impact. Hygienic bags are also briefly examined.

METHODS

The published scientific literature was searched using PubMed (MEDLINE) and The Cochrane Library in April 2008 and July 2010, with the following key words: bedpan, washer, washer-disinfector, washer-sterilizer, decontaminator, and macerator. Given the present scant literature, any type of study published since 1980 in English or French and addressing the two main technologies or their comparison was retrieved. Bibliographies of articles were also screened for relevant studies. Grey literature, which included clinical practice guidelines and technical standards, was identified in Nosobase (a database specializing in hospital hygiene and nosocomial infections) and on the Web, in April 2008 and March 2009. Manufacturers' websites were visited to identify different models and their characteristics (washers and macerators) and an alternative bedpan management option (hygienic bags).

A convenience sample of infection prevention and control practitioners at seven sites were interviewed: these represent different hospital settings of Quebec, including acute care facilities in rural regions (population density <400 persons/km^2) and university hospitals in metropolitan areas. The objective of the survey was to obtain a clearer picture of the practical issues associated with the use of bedpans in health care facilities, excluding any evaluation of procedures or staff. The interviewed experts were asked to describe their daily experiences and to discuss the following: former and present bedpan processing technology used and reason(s) for any change; processing procedures; their appraisal of available technologies; issues related to safety, work organization, costs and environmental impact; reasons for not selecting alternative processing methods; and any general comments on the use of bedpans. A written questionnaire was sent to participants who could not be interviewed on-site because of geographic distance.

Finally, a comparative cost analysis of bedpan washers, macerators and hygienic bags was performed using data provided by the interviewed experts or available from equipment specifications on manufacturers' websites. A partial analysis was applied to a hypothetical 400-bed hospital. Bedpans were assumed to be used by one-third of in-patients, at a rate of 4 bedpans daily per patient.

RESULTS

Literature review

The search strategy resulted in a small number of studies (n=9) generally of poor quality, and most at least a decade old. There were no comparative observational studies of washers and macerators presenting quantitative analysis (with respect to safety, for example). Two expert opinions and two surveys, which discussed issues related to the two main technologies, were published between 1980 and 1991 (10-13) but raised some points still relevant today. Two publications about washers included an industry-funded study of the effectiveness of a particular machine (14) and a letter to an editor (15). Hereafter, we summarize the three most objective studies, providing useful and comparative data about the effectiveness of washer methods or describing the role of macerators in an infection control initiative in Ontario, Canada. This section ends with a summary of our findings from recent clinical practice guidelines and technical standards.

In 1983, Nyström and colleagues demonstrated that bedpan washer disinfection was effective in eliminating virtually all micro-organisms (enterobacteria, enterococci and *Staphylococcus aureus*) from bedpans when the final rinse water temperature was above 85°C rather than below 70°C (16). The principal bacteria that survived in fairly large numbers were *Staphylococcus epidermidis* and Gram-positive (spore-forming) rods.

Alfa and colleagues (17) recently evaluated the efficacy of two hospital bedpan washer-disinfectors (WD) in inactivating *C. difficile* spores inoculated onto artificial test soils. The standard cleaning cycle of one WD, located on a ward, consisted of three short warm or cold-water washes and disinfection at 80°C for one minute, the latter being typical for a ward WD. The other WD, located in the Central Processing Department (CPD) had a longer cycle consisting of two hot-water washes for two minutes each, a rinse, a one-minute disinfection at 82°C, a final rinse and a drying phase for seven minutes at 116°C. *C. difficile* remained on plastic and stainless steel bedpans after the low-level disinfection on the ward whereas none was detected after the CPD process. Further investigation attributed the differential performance to the cumulative effect of multiple factors

associated with the CPD machine (hot-water rinsing, disinfection temperature, drying).

In 2005, a growing number of *C. difficile*–associated diarrhoea (CDAD) cases led the infection prevention and control service of a Toronto hospital to implement a multifaceted strategy, including the purchase and installation of a macerator system (18). The infection control team believed that using a spray wand to manually clean bedpans was a major contributing factor to the increase in cases of infection. As a result of the initiatives (including enhanced cleaning in rooms containing a patient diagnosed with CDAD), a gradual return to the baseline level of cases was observed. The authors did not explain why macerators were chosen rather than bedpan washers.

The Canadian practice guidelines identified in our literature search did not explicitly favour a specific bedpan processing technology (19, 20), although disposable bedpans were strongly recommended by a provincial body for the control of *C. difficile* infections (21). Among guidelines and technical standards from other countries, there is a lack of consensus about processing methods (22-27).

Experiences and perspectives of infection control practitioners in Quebec hospitals

Staff from seven Quebec hospitals were invited to participate in the survey and all agreed. The present bedpan processing methods differed across hospitals: conventional method (i.e., cleaning and disinfecting bedpans using a spray wand) at two sites, bedpan washers (two sites), macerators (one site), and hygienic bags (two sites).

The interviewed experts pointed out that the optimal use of washer-disinfectors would require more bedpans per patient and minimizing the pile-up of soiled bedpans between disinfection cycles. The ideal washer would be easy to operate by patient-care attendants, rapid, located near patient rooms, quiet and easily accessible. Interviewees believed washers should not be installed in patient rooms due to lack of alternatives in case of machine failure and inconvenience of maintenance. Many questioned the capability of washers to meet high disinfection standards, considering recent research findings.

Several challenges were raised about the use of macerators: safe transport of soiled disposable bedpans outside patient rooms, processing bedpan supports, need for increased storage space, machine failure caused by non-macerable items, and recurrent drain blockages or backflow due to the build-up of waste. At one hospital, the fact that the central processing department did not have the capability to process bedpan supports was an additional argument in favour of washers rather than macerators. Cost of disposable supplies and environmental issues were also mentioned.

Concerning disposable hygienic bags, the main disadvantages raised by the interviewed practitioners were recurring costs and impact of waste on the environment. Some believed, however, that the extra nursing time freed by

TABLE 1: General comparison of methods

Issues	Characteristics	Manual washing	Washers	Macerators	Hygienic bags
Safety and effectiveness	Requires handling of soiled bedpans	Yes	Limited	Limited	Limited
	Risk of cross-contamination between patients	Yes	Yes	Limited (risk applies only to bedpan supports)	No
	Risk of aerosol production and contamination of workplace	Yes	Limited	Limited	No
	Risk of mechanical failure	N/A	Yes	Yes	N/A
	Effective against heat-resistant micro-organisms	No	No	Yes for disposable bed-pans but bedpan sup-ports require processing	Yes
Work organization	Complex process	No	Yes	No	No
	Time saving overall (staff implications + processing time)	No	No	Yes	Yes
	Easy to implement in general	Yes	No	No	Yes
Environmental impact	Use of water and energy during processing	Limited	Yes	Yes	No
	Use of chemicals during processing	Possibly	Yes	Limited	No
	Use of energy to manufacture disposable items	No	No	Yes	Yes
	Large volume of waste produced	No	No	Yes	Yes

N/A: not applicable

using bags and the non-use of water or chemicals would greatly offset their purchasing costs. Although clearly aware of environmental issues, users of hygienic bags considered patient and staff safety as their primary concerns. They also believed the bags afford better control of the hazards of spore contamination and that spread of infection is minimal compared to a disposable pulp bedpan system. Finally, the need for training patient-care attendants on appropriate reprocessing procedures in general was highlighted.

In Table 1, we summarize the results gathered from the interviews and our literature review (including the expert opinions and surveys), in order to compare the characteristics of the three bedpan processing methods under review as well as conventional manual cleaning (with spray wands).

Cost analysis

This analysis was based on the assumption that an infection control team at a 400-bed hospital needed an initial overview of the acquisition and operating costs related to the three waste management methods before deciding on a system. The results (Table 2) indicate that the use of hygienic bags would generate the highest total annual costs, while washers would be the least expensive option. We also considered the cost savings associated with preventing nosocomial infections. The estimated average cost related to *C. difficile*-associated disease acquired during a hospital stay is $16,717 CAD (28). Macerators would thus need to prevent roughly eight additional hospital-acquired infections at the 400-bed facility, in our scenario, to justify their additional expenditure compared with the use of bedpan washers. This benefit would have to increase to 11 prevented cases of infection if hygienic bags were used.

Our analysis is limited because it did not consider some internal cost items, such as human resources, set-up and maintenance of infrastructure (e.g. plumbing, electricity, storage space), use of water, transport of bedpans or supports to processing machines or sterilization of reusable bedpans, and excluded external items (e.g. energy required to manufacture devices, waste management). A recent cost analysis (29) performed in Quebec used the model and data from our AETMIS report (9) to compare bedpan washers and hygienic bags in the context of a future academic hospital. This facility will have 770 beds in 29 wards and two bedpan washers per ward (thus, 48 additional machines compared to our scenario). The authors also estimated patient-care attendant time to carry bedpans from patient rooms to washers, and included sterilization of reusable bedpans and waste recycling costs. The estimated total annual costs associated with washers would be higher than with hygienic bags ($413,136 versus $319,481 CAD), mainly due to staff time (two minutes transport/bedpan/day, amounting to $297,406 CAD).

DISCUSSION

At present, the scientific evidence on bedpan processing methods is extremely limited, generally of poor quality and quite old. The relevance of older information is debatable given ongoing technological developments. However, our review also considered several recent studies, current clinical practice guidelines and technical standards, as well as a qualitative study of issues raised in Quebec hospital settings and a partial cost analysis. Although the survey included only seven sites and the cost analysis was limited to a medium-size hospital, this mixed methods approach allows us to make several relevant conclusions applicable to contemporary hospital infection control.

Historically, bedpans have been classified as non-critical devices requiring only low-level disinfection. Given the increasing importance of preventing and controlling nosocomial infections, the identification of bedpans as major sources of *C. difficile* contamination and more recent data and guidelines (2, 17, 30), a higher level of processing to eliminate bacterial spores seems to be required. It is estimated that one to three percent of adults are *C. difficile* carriers (31), and this percentage could rise to 25% among hospital in-patients (32). Bedpans dedicated to each patient and bedpan sterilization after patient discharge should therefore be considered, although we did not find any mandatory obligation of this practice in existing standards. To prevent *C. difficile* outbreaks, macerators for disposable bedpans or, better yet, disposable hygienic bags for all patients are safer methods, in principle, for limiting the risk of transmission by asymptomatic carriers compared to bedpan washers.

The use of washers or macerators in bedpan waste management poses a risk of workplace contamination. The problem of bedpan transport could be solved by installing modular bedpan-washer units or macerators in patient rooms. However, the current infrastructure of some health care facilities does not allow for this approach because of the limited number of single rooms, general lack of space, and the extent of retrofitting that would be required. In comparison, hygienic bags that are disposed in situ require little or no infrastructure, facilitating their implementation.

In general, a decision concerning infection prevention and control in hospitals must be based on minimizing risk. This involves limiting the handling, transport and processing delays of soiled supplies. Based on the current scientific literature, a single, particular bedpan processing method cannot be recommended. Several factors need to be considered, notably bedpan use requirements, underlying risk of infection and potential outbreaks, staff availability, possibility of infrastructure redesign, budget and environmental impact. Hospital decision-makers could contemplate multi-solution waste management scenarios that would allow a reasonable compromise among safety, work organization, costs and environmental issues.

We have aimed to present the most comprehensive contemporary analysis of bedpan-associated technologies and their role in infection prevention and control. A first set of conclusions deals with bedpan processing practice:

- Reusable bedpans must be disinfected after each use; soiled bedpans should not be collected on counters or allowed to dry.
- Manual bedpan cleaning and spray wands should not be used due to the

associated high risk of infection.
- To better prevent *C. difficile* infection, sterilization of bedpans between patients must be considered.
- Installation of modular bedpan-washer units or macerators in the washrooms of isolation rooms and in close proximity to other types of patient rooms should be considered to minimize workplace contamination and to facilitate monitoring of highly contaminated bedpans.
- Preventive maintenance and verification of the equipment's operational settings must be carried out on a regular basis.

Finally, the following conclusions apply to the choice of bedpan processing methods:

- The use of bedpan washers would be the least effective method (in the absence of additional bedpan sterilization) to control heat-resistant micro-organisms.
- Overall, disposable hygienic bags are the easiest to implement.
- Context-specific cost and effectiveness estimations using complete field information are necessary to compare processing methods in economic terms since hygienic bags do not necessarily represent the most expensive option.
- Bedpan washers are energy-intensive, while both macerators and particularly hygienic bags produce large amounts of waste.

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TABLE 2: Acquisition and operating costs by method for a hypothetical 400-bed hospital*

Cost item	Annual costs (Canadian $)		
	Washers‡	Macerators§	Hygienic bags
Reusable equipment†			
Machines (n=10 of each)	6,667	6,667	0
Reusable bedpans	1,584	0	0
Reusable supports for disposable bedpans	0	106	0
Subtotals – acquisition costs	8,251	6,773	0
Operating costs			
Maintenance	5,000	5,000	0
Disposable bedpans	0	113,705	0
Disposable protective covers	0	21,199	0
Hygienic bags	0	0	154,176
Disposable supports for hygienic bags	0	0	48,180
Electricity to run machines	894	236	0
Detergent	7,747	249	0
Rinse agent and descaler	2,708	86	0
Cleanser-deodorizer	0	4,818	0
Subtotals – operating costs	16,349	145,293	202,356
TOTAL ANNUAL COSTS	**24,600**	**152,066**	**202,356**

* Assuming that one-third of patients each use four bedpans daily.
† Costs were divided over the life span (assumed to be 15 years) of the equipment.
‡ Costs for sterilizing reusable bedpans were not included.
§ Acquisition and operating costs for one washer used to process disposable bedpan supports were included.

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C. difficile as a Cleaning Problem
New Deep Cleaning Process Beats Disinfection

PCS is proud to introduce our new MicroClean Deep Cleaning Process, which promises to change the industry's view on cleaning and disinfection. In a nutshell, removing bacteria beats trying to kill them.

Disinfectants works by killing bacteria and bacterial spores, and are required to meet high standards of killing or inactivating pathogens in order to become registered as hard surface disinfectants or sporicides. Deep cleaning works by physical removal of the same pathogens from environmental surfaces. Our new MicroClean process has been independently validated to physically remove soil, bacteria and bacterial spores to levels equal to or better than those that disinfectants are required to kill or inactivate.

MicroClean Deep Cleaning Process validation testing by independent third party laboratory demonstrated physical removal of 99.9999 % (a 'six log' reduction) of bacteria and bacterial spores in the presence of artificial soil, with all post cleaning tests having no reported colony growth. By contrast, when an international brand disinfecting bleach diluted 10 to 1 was wiped over the same surface for a soil and bacterial spore challenge, it was not able to completely remove all the spores or to achieve the required six log reduction of spores on all post application tests.

How can cleaning beat disinfection? We have known for a long time that hand washing following proper procedures is the most effective method of controlling the spread of bacterial spores such as C difficile. Hand washing works by physically removing bacteria and bacteria spores. We developed the MicroClean Deep Cleaning Process to create a process of physical removal similar to hand washing, but applicable to environmental surfaces. We accomplish it with a unique natural cleaning solution which acts synergistically when combined with new microfibre cleaning technology in a carefully ordered cleaning process.

The MicroClean Deep Cleaning Process

1. Application to surface

- MicroClean is diluted 20 parts water to 1 part cleaner. Spray or apply MicroClean to surface.

This step dissolves soil and loosens adhered bacteria, bacterial spores and soil.

2. Application of friction and removal / rinsing

- Take pre dampened PCS Microfibre cloth with a solution of MicroClean diluted 256 parts water with 1 part cleaner, and wipe surface in two directions, adding friction.

This step physically removes soil, bacteria and bacterial spores.

3. Thorough drying of surface

- Use a dry PCS microfibre cloth and wipe surfaces dry.

This step physically removes residual soil, bacteria and bacterial spores.

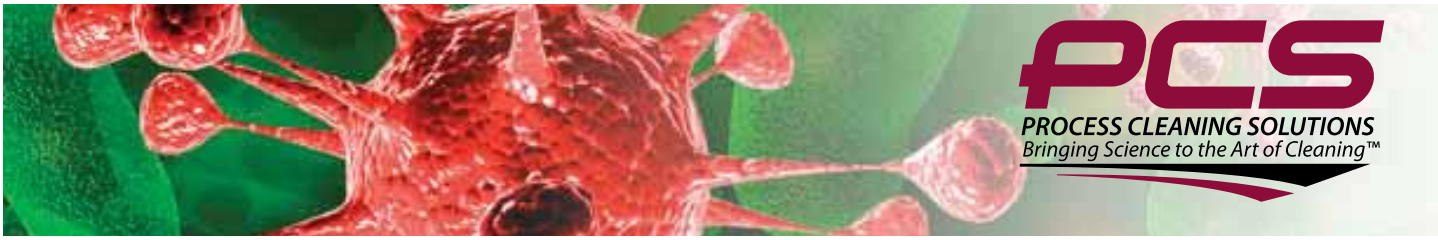
Summary

More thorough and complete cleaning of environmental surfaces is safer, more sustainable and ironically more effective than relying on application of disinfectants to provide complete environmental decontamination. Removing bacteria first always makes sense.

In the past, disinfectants have been misapplied and their role misunderstood, since they are more effective on surfaces that have already been thoroughly cleaned. In fact, application of disinfectants to incompletely cleaned surfaces leads to disinfection failures. Trying to kill bacteria on unclean surfaces makes no sense.

While in most circumstances effective deep cleaning is sufficient, in some circumstances disinfectants can be applied to surfaces as an added insurance, after employing the MicroClean Deep Cleaning Process. PCS has a variety of Health Canada approved environmental hard surface disinfectants containing sodium hypochlorite to select from for these situations.

PCS distribution partners provide staff training and implementation assistance.



Why the Hospital Disinfecting Spiral Hasn't Worked and How We Can Finally Fix the Problem

1. The Disinfection Game

The hospital disinfection game is a deceptively simple one. Bacteria occur naturally, and some cause disease. Humans try to kill the bacteria. The bacteria evolve to resist each method of killing. Humans create a more potent way of killing the bacteria. The bacteria evolve again. Coincidentally, many companies profit from the game by marketing new and more powerful products. Meanwhile, the humans are already losing, because during the process, 'superbugs' are harming people while the humans are busy designing better killing solutions. And the humans who apply these deadly products are at an ever-growing occupational health risk.

The situation health care facilities face seems to be a no-win situation. It is generally accepted that more frequent and thorough cleaning of the health care environment reduces the number of hospital-acquired infections. However, reliance on disinfecting to decontaminate the health care environment has encouraged poor cleaning practice, and outbreaks of hospital-acquired infections like C difficile are increasing rather than
decreasing.

2. The Switch to Sporicidals

Health facilities have responded by demanding more potent disinfectants. New products have been offered by industry with kill claims of astronomical proportion - 31 different pathogens in one minute for some bactericidal disinfectants, and five-minute claim for some sporicidal disinfectants.

Unfortunately, there is a limit to the cycle of increasing disinfectant toxicity to match pathogen resistance. In the effort to increase effectiveness, this approach has increased damage to human health, by stimulating the production of resistant bacterial strains, and by exposing cleaning staff to harmful materials. More potent disinfectants also cause physical damage to equipment and surfaces, which in turn makes cleaning more difficult.

Up until now, sporicidal disinfectants have been the last line of defense against pathogens. Before, this class of disinfectants was only used as a chemical sterilizing agent. In fact, the CDC 2008 guidelines recommended that such high-level disinfectants should not be used on environmental surfaces.

3. The Downside of Sporicidals

The emergence of spore forming bacteria as a major class of hospital acquired infections has stimulated many corporations to bring to market a variety of new disinfectants, some of which are registered to kill bacterial spores:

- *4.5 % hydrogen peroxide disinfectants*
- *Peracetic acid (hydrogen peroxide, acetic acid and a catalyst like sulfuric acid)*
- *5000 to 5500 parts per million of sodium hypochlorite.*

All of these chemicals have long-term occupational health issues. Reactive byproducts of high concentrations of these oxidizers can contaminate the indoor environment and pose real occupational health and safety issues for cleaning staff, medical staff and patients. The high chemical concentrations also damage many equipment and hospital surfaces. When the porosity of surfaces increase, they are far more difficult to clean, even with high-level sporicides.

When cleaning is inadequate, there is soil remaining on environmental surfaces that makes disinfecting less efficient. When live vegetative bacteria remain on surfaces, they are exposed to residual surfactant-based detergents and low-level disinfecting agents, both of which promote further sporilation and development of resistance.

4. A New Approach: Remove the Soil and Bacteria Completely During Cleaning

The irony is that the solution to the disinfecting spiral is dirt simple. Just remove all the dirt, and all the bacteria and spores with it. Clean well, and you don't have to disinfect.

But how is this possible? Disinfectants used in health care facilities need to reduce microbial contamination by between 99.99% (a '4-log' reduction) and 99.9999% (a '6-log' reduction) in a laboratory test. Can cleaning do this? Up until now, it couldn't.

Moore and Griffin in 2006 demonstrated that cleaning either with microfibre cloths alone or a general purpose cleaner with a cloth reduced the aerobic plate counts only by between a .5 and a 2.5 log reduction. This translates as incomplete removal of microbial contamination. In fact, that's why the disinfecting spiral began.

Here's where the good news starts: things have changed. Process Cleaning Solutions (PCS) has developed a new cleaning process that does rival disinfecting for reducing bacteria and spore counts on environmental surfaces. It is now physically possible for health care facilities to clean in a way that physically removes pathogenic bacteria and bacterial spores to a standard equal to or better than that which disinfectants are required to meet for registration with Health Canada. In other words, physical removal has finally trumped disinfecting. The disinfecting spiral, with all its downsides, can stop.

5. The PCS MicroClean Deep Cleaning Process: The Benefits

Currently health care facilities have accumulated soils, chemical residues and entrenched pathogens, all of which PCS's new MicroClean Deep Cleaning Process can remove without causing occupational health issues or causing damage to surfaces. This new process is suitable both for day-to-day cleaning and for hospital wide deep cleaning, patient discharge cleaning, and washroom cleaning, in all isolation rooms, and wherever a very high level of cleanliness is required. PCS MicroClean Deep Cleaning Process is safe to use on any surface not damaged by water.

The process uses a combination of simple but rigorous cleaning procedures, and PCS MicroClean, which is a non hazardous natural cleaning agent designed and certified to be used around the most sensitive amongst us. It contains buffered lactic acid, sodium citrate and salt/ sodium chloride, along with a benign food colourant. It presents no occupational health hazards in either wiping or spray application.

Hospital Cleaning Staff can be easily trained to apply the simple three-step PCS process:

1. Application to surface
   - MicroClean is diluted 20 parts water to 1 part cleaner.
   - Spray or apply MicroClean to surface.
   - This step dissolves soil and loosens adhered bacteria, bacterial spores and soil.

2. Application of friction and removal / rinsing
   - Take pre-dampened PCS Microfibre cloth with a solution of MicroClean diluted 256 parts water with 1 part cleaner, and wipe surface in two directions, adding friction.
   - This step physically removes soil, bacteria and bacterial spores.

3. Thorough drying of surface
   - Use a dry PCS microfibre cloth and wipe surfaces dry.
   - This step physically removes residual soil, bacteria and bacterial spores.

6. The PCS MicroClean Deep Cleaning Process: The Proof

The new PCS MicroClean Deep Cleaning Process has demonstrated the ability to physically remove 99.9999 % of dried bacteria, bacterial spores and artificial soil (a 6-log reduction – the same standard required for disinfecting).

Results from independent third party testing validated that PCS MicroClean Deep Cleaning Process met or exceeded the same design requirements in terms of physically removing equivalent numbers of mixed microbial bacteria and bacterial spores, as disinfectants would be required to kill or inactivate for registration application with Health Canada.

In fact, PCS MicroClean Deep Cleaning Process achieved a seven-log reduction of dried mixed vegetative bacteria Escherichia coli, Staphylococcus aureaus, Pseudomonas aeruginosa with BSA artificial soil challenge, with no detectable colonies on all post cleaning tests. The process achieved a six-log reduction of dried Bacillus subtilus spores with BSA artificial soil challenge, with no detectable colonies on all post cleaning test. As a comparison, surfaces where wiped with a ten to one dilution of an international brand of disinfecting bleach solution. The bleach solution did not achieve the required six-log reduction of Bacillus subtilus spores on all post application tests, and colonies were still detected in post application tests.

PCS MicroClean is independently certified by Ecologo certification for its environmental sustainability and suitability for use by and around individuals with chemical sensitivities (CCD 146 I) and is certified by the Envirodesic ™ Certification Program for maximum indoor air quality and suitability for use around chemically sensitive individuals.

PCS also has a large selection of Health Canada registered bleach-based disinfectants, many of which are registered for use at lower and safer concentrations, that if desired may be applied after the PCS Deep Cleaning Process as insurance or simply to comply with existing guidelines.

7. Summary: Cleaning with PCS MicroClean Deep Cleaning Process Trumps Disinfecting

PCS MicroClean Deep Cleaning Process is a new approach to very thorough cleaning of environmental surfaces. It can achieve physical removal of bacterial and bacterial spore populations to levels equal to or better than the number required for disinfectants to kill or inactivate for registration with Health Canada. PCS MicroClean Deep Cleaning Process can effectively decontaminate environmental surfaces in health care facilities, making them safe to use and handle. PCS MicroClean Deep Cleaning Process leads the way to safer, more effective and sustainable cleaning of our health care facilities.

The impact of a standardized protocol on the quality of wound dressing procedures in hospitalized patients

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ABSTRACT

Study purpose
A standardized wound dressing protocol was developed in order to reduce procedural inconsistency and improve infection control practice during dressing changes.

Sample/setting
Forty dressing procedures (20 surgical wounds plus 20 chronic wounds) were audited on adult acute care wards before and after institution of a standardized wound dressing protocol in a 400-bed tertiary care teaching hospital.

Methods
Sequential pre- and post- intervention audit.

Results
The implementation of a standardized wound dressing protocol was associated with a significant improvement in subsequent procedural consistency. Utilization of a sterile forceps technique increased from 22.5% (9/40) to 45% (18/40) p=0.033. This was associated with a significant improvement in hand hygiene which increased from 60% (21/35) to 91% (31/34) p=0.0027. Observed post-interventional trends included more consistent use of sterile saline/water for wound cleansing, less jewellery on the hands of the caregiver and less contamination events. The intervention was not associated with a change in the duration or cost of wound dressing performance.

Implications for practice
The adoption of a standardized wound dressing procedure was associated with improvement in both technical consistency and infection control practice without increasing cost or procedure duration.

KEY WORDS:
wound, dressings, hand hygiene, quality improvement, infection control

INTRODUCTION

Wound dressings are essential medical procedures performed for both acute surgical wounds and chronic nonsurgical wounds. The vast majority of these dressing changes are carried out by nurses. The goals of wound dressings are multifaceted; they include promotion of wound healing, prevention of secondary infection, exudate control and patient comfort (1).

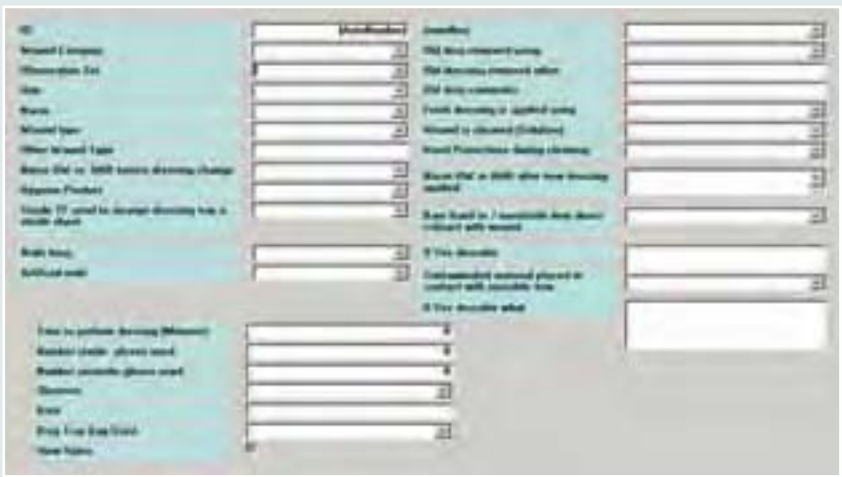
Wound dressing technique can be broadly classified as clean or aseptic. Clean technique, generally carried out with non-sterile gloves, is characterized by an attempt to ensure that the wound, dressings, and dressing change field are free of any visible contamination or soiling. Sterile technique restricts all contact with the wound, dressings, and dressing change field to sterile materials. This can be done using sterile gloves, or a no-touch technique whereby dressings are manipulated using sterile forceps.

Although there have been some preliminary studies exploring the safety of clean dressing technique, sterile technique is currently considered to be the gold-standard for dressing changes in hospitalized patients (2,3). No-touch technique (sterile forceps) procedure has the potential advantage of decreasing cost compared to a sterile glove technique, while maintaining the traditional standard of care, although this has never been proven (4). Because multiple dressing techniques are described in the literature, and taught in training programs, wide variations exist in the current practice of wound care (5). A recent survey found gross

inconsistencies in the use of sterile versus non-sterile dressings depending on not only type of wound but also the type of institution in which the dressing change takes place (5). While poorly studied, this variation is likely to increase cost and dressing time. In addition, variation in technique may encourage breaks in infection control practices (ICP) such as inconsistent hand-hygiene or wound contamination. Adherence to quality post-operative wound care has been associated with a reduction in the incidence of surgical wound infection (6). Breakdown in ICP has been implicated in the high rate of nosocomial acquisition of antibiotic-resistant organisms and subsequent wound infection in patients hospitalized with wounds (7,8).

We perceived that there was a need to optimize performance of wound dressing procedures at our hospital, therefore a standardized procedure for dressing changes was developed using a no touch sterile technique. An audit of dressing change technique before and after implementation of the standardized protocol was carried out.

APPENDIX A: Wound dressing audit tool



APPENDIX B: Hospital wound dressing protocol

The following protocol will apply as a routine for wound dressing management:

1. Wash hands vigorously with soap and water or use alcohol hand rinse
2. Open sterile dressing tray.
   - Use sterile transfer forceps to arrange dressing tray on its sterile sheet.
   - Transfer forceps should be used to remove the two metal forceps and sterile scissors from the tray.
   - Put on non-sterile gloves.
   - Remove the dressing from the patient.
   - Discard transfer forceps, gloves and soiled dressing into the garbage.
3. No-touch technique with sterile forceps (without gloves) can be used for most dressing changes. (Note: Sterile gloves only to be used for complex dressings where hand contact with wound is likely to occur.)
4. To cleanse wound, open a new bottle/ampule of sterile saline and pour into reservoir on dressing tray. Note: use of disinfectant solutions for wound cleansing is strongly discouraged.
5. Using no-touch technique, use the sterile metal forceps to cleanse wound with a small amount of sterile saline using sterile gauze and then discard in the garbage with forceps.
6. Apply dressing to wound.
7. Discard tray in garbage.
8. Apply tape if necessary to hold dressing in place.
9. Wash hands with soap and water or use alcohol hand rinse.
10. Chart performance of dressing and status of wound.

METHODS

Study population and methodology

Forty patients were audited during the time of their dressing changes before and after implementation of our protocol (Wound Dressing Audit Tool, Appendix A). In each audit, half of the patients included had acute surgical wounds, the other half had chronic nonsurgical wounds. Inclusion criteria were all patients 18 years or older with an acute or chronic wound, admitted on general medical, surgical, or family practice floors. Burn patients as well as patients receiving negative pressure wound therapy were excluded. The protocol was reviewed and accepted by the hospital research ethics board.

Patients meeting inclusion criteria were randomly selected for inclusion, utilizing a computer-generated random numbers table. A random dressing change event was audited, in person, by one study nurse.

After the first audit, a standardized wound dressing protocol was developed by a multidisciplinary team. This protocol was taught to nursing staff through workplace in-services and information posters placed on medical, family practice and surgical floors. A 10-minute online presentation was developed using video and power point format published to an Adobe Breeze© server for internal use and a CD for portable use.

The standardized protocol for wound dressing changes is included in full (Appendix B). It emphasizes hand hygiene before and after the dressing change, use of sterile forceps technique, and sterile saline for wound cleansing.

Outcomes

Primary outcomes pre-specified for this study included the number of breaks in basic infection control procedure (contamination events, described in Results below) during the dressing

change and adherence to a sterile forceps technique. Measured variables addressing this outcome included hand hygiene before and after dressing change, jewellery worn during dressing change, contamination of the field or reusable clean items (ex. tape) during the dressing change, use of sterile gloves, and use of sterile forceps. Pre-specified secondary outcomes include dressing time and cost, before and after protocol implementation. Approximate cost was calculated by quantifying the cost of all non-reusable items (all gloves and dressing trays excluding cleaning solution cost) used in the dressing change and the cost of labour. The mean cost of RN time was calculated using payroll records with measurement of salary and benefits.

Statistical analysis

Continuous variables were compared using student's t-test. Means were computed with standard deviation and 95% confidence intervals were calculated. Categorical variables were measured using chi-square testing or Fisher's exact test. Statistical analysis was carried out using SPSS statistical software (Microsoft Excel) after variables were entered into a computer data base.

RESULTS

Twenty surgical wound and 20 chronic wound dressing changes were audited by a trained observer before our protocol was implemented during the period of January 23 to March 6, 2008. A period of protocol dissemination and education occurred during fall, 2009. A second audit of 20 surgical and 20 chronic wounds was undertaken between January 20 and March 5, 2010. Patient and caregiver demographics were similar between the two audits (Table 1).

In the first audit, nurses cleansed their hands 21 times out of 35 (60%) before a dressing change took place, compared to 31 out of 34 (91%) in the second audit ($p = 0.0027$). In the remainder of dressing changes (5 and 6 in audits 1 and 2, respectively) it was unknown whether hand hygiene had occurred before the dressing change. Hands were cleansed after the dressing change in 32 out of 38 (84.2%) times in audit 1, compared to 35 out of 40 (87.5%) in audit 2 ($p = 0.68$).

The nurse wore jewellery during 52.5% (21/40) of procedures in the first audit and 32.5% (13/40) p=0.070 during the second. Artificial nails were not observed in either audit, and long nails were observed during dressing change in one event out of 40 (2.5%) during both audit 1 and 2.

The dressing removal procedure involved a significant break in infection control (use of bare hands) in 11/40 (27.5%) instances in the first audit compared to 6/40(15%) p=0.27, in the second. Sterile glove use, considered an unnecessary practice for dressing removal, decreased from 6/40 (15%) to 0/40 (0%) p=0.025 (Figure 1).

The methodology of wound cleansing also became more consistent with a sterile forceps technique between audit 1 (6/40, 15%) and audit 2 (17/40, 42.5%) p=0.012 (Figure 2).

Sterile water or saline were used for wound cleansing in 24/40 (60%) of instances in the first audit and 31/40 (77.5%) p=0.091 during the second audit.

Overall, nurses in audit 2 were more likely to use sterile forceps to apply the new dressing (45% (18/40), compared to 22.5% (9/40) in audit 1; $p = 0.033$) (Figure 3). Despite the fact that glove use is unnecessary when applying a sterile dressing by no-touch technique, gloves were still used with forceps in 6/9 (67%) instances in audit 1 and 10/18 (55%) in audit 2. Sterile gloves were employed more often in the first audit (32/40, 80%) versus 23/40, 57.5%) p=0.03 during the second. A total of 46 sterile gloves were utilized during the first audit (mean = 1.15 ± 0.92 per dressing change) compared to 25 pairs during the second (mean = 0.63 ± 0.59 per dressing change).

Contamination events were defined in two ways. During audit 1, wounds were contaminated by a non-sterile item 4 times, compared to 2 times during audit 2. A separate contamination event occurred when a reusable object (i.e. scissors or dressing tape) was contaminated by a wound. This happened 4 times in audit 1 and once in audit 2. Together, contamination occurred eight times out of 40 (20%) in the first audit compared to three times (7.5%) in the second ($p = 0.104$).

The average time taken for a

FIGURE 1: Observed dressing removal technique before and after implementation of a standardized wound dressing protocol

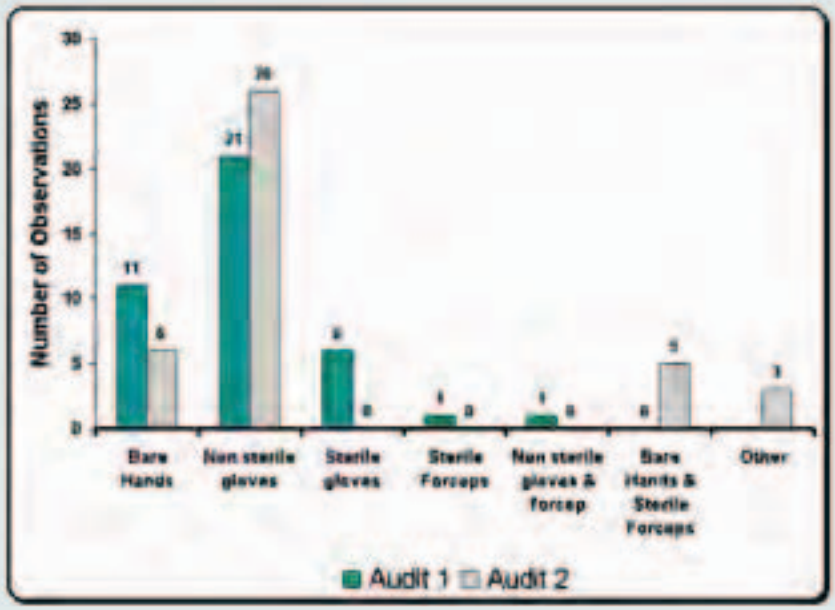


FIGURE 2: Observed method of wound cleansing before and after implementation of a standardized wound dressing protocol

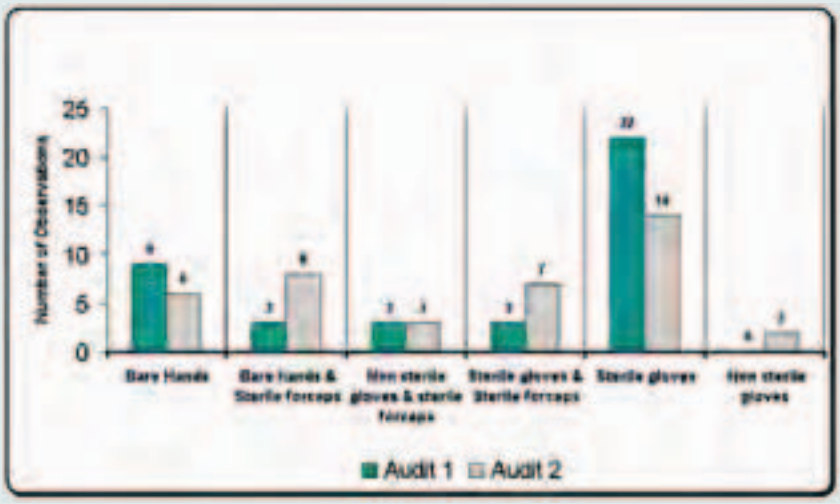
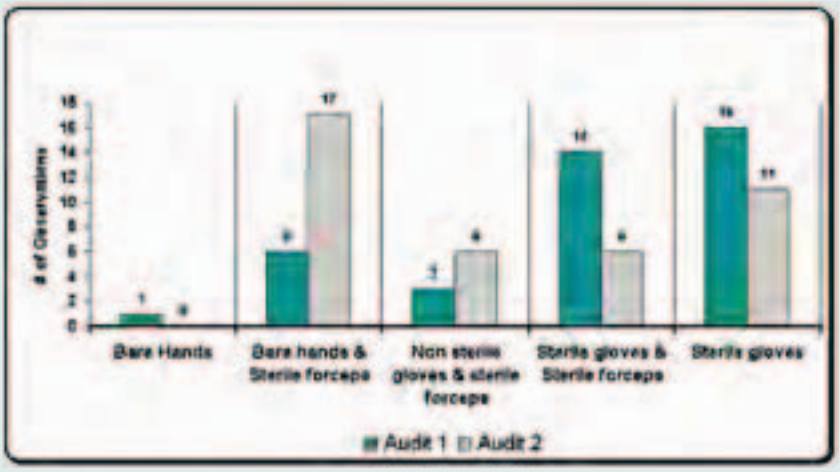


FIGURE 3: Observed method of dressing application before and after implementation of a standardized wound dressing protocol



dressing change during the first audit was 13.6 minutes (± 2.2), which was not significantly different from the 15.0 minutes taken in the second audit (± 1.6). The estimated average cost for dressing changes in the first audit was $13.70 (± 1.78) and $14.48 (± 1.21) p=0.48 during the second audit (Table 2).

DISCUSSION

This small, randomized, hospital-based pre-and post-intervention audit confirms previous research, demonstrating that wound dressing technique varies widely, even within institutions (9). This variation may be related to the fact that there are different types of acceptable sterile wound dressing procedures, the use of clean technique is undergoing consideration as a potential alternative procedure and many institutions do not have a specific established dressing protocol. A sterile forceps technique was chosen because sterile dressing changes are still considered the standard of care for hospitals, the technique is simple and easily learned as a basic minimum standard, and can be easily modified to sterile glove technique when necessary.

This intervention was associated with an improvement in the consistency of dressing change technique at our institution, which was best demonstrated by increased sterile forceps use during dressing changes with concomitant decrease in the unnecessary use of sterile gloves.

The solution used for wound cleaning also trended towards becoming more uniform during the second audit, however, our numbers are small, and this difference did not meet statistical significance.

The second major finding in this audit is that hand hygiene improved significantly between the two time points. This reflected an overall increase in adherence to ICP, which included a trend toward decreased contamination of a clean wound or reusable item with dirty objects, and reduced jewellery wear. These observations are of consequence, as it has been shown in previous studies that eroded ICP are associated with an increased risk of nosocomial wound infection (6,7).

This study did not demonstrate decreased wound dressing time or cost, however, it should be noted that a confounding variable was introduced between the first and second audits. There was a change in the wound dressing kits at our hospital to include much larger basins for the cleaning solution to be deposited in, as well as smaller forceps. The comments from nursing staff indicated that the new kits were more unwieldy to use and resulted in longer time taken to perform the dressing change.

There were a number of drawbacks to our design. This was not a randomized controlled trial; rather, we utilized a sequential before-and-after study design. This design represents two serial cohorts over time, and thus there is no control group. Any differences observed between the two time periods could be influenced by multiple confounding factors, and therefore can not be attributed to the applied intervention. Furthermore, all audits are prone to the Hawthorne Effect,

TABLE 1: Demographic profile of 40 dressing audits

	Audit 1	Audit 2
Number of patients	40	40
Patient age mean (SD)	68.6 (±14.7)	67.7 (±16.1)
Patient gender male (%)	23 (56)	21 (52)
Wound type		
Surgical intact	12	18
Surgical dehisced/open	8	2
Diabetic foot ulcer	1	3
Venous leg ulcer	4	3
Pressure ulcer	9	5
Other	6	9
Provider performing dressing		
RN	36	36
LPN	2	3
Student	2	1

TABLE 2: Total cost of wound dressing changes before and after implementation of a standardized wound dressing protocol

Cost for 40 dressing changes	Audit 1	Audit 2
Salary	$408.30 (545 min)	$440.43 (601 min)
Dressing tray	40 x $2.67=$106.80	40 x $2.67=$106.80
Sterile gloves	$25.30	$13.75
Nonsterile gloves	$3.00	$3.36
Total	$543.40	$554.34

where subjects change their practice because they are being studied (10). This could tend to affect both time periods equally as the same observer was used for all audits. This would have multiple potential effects including prolonging the duration of procedure performance and improving ICP performance. Breaks in infection control would therefore be minimized. Despite this, significant breaks in ICP were still observed, particularly in the first audit. The principal benefit of this design is that it is a more typical representation of hospital care than observed under the unnatural experimental conditions of a prospective randomized controlled trial.

Despite the fact that this was a small quality improvement project, significant improvement in dressing technique was observed between the two time points. This would support the future design of an appropriately powered study with a control group and a defined follow-up period.

It is important for hospitals to review their current wound dressing protocols, and to look for ways in which to reduce the gross variability in practice that currently exists. This preliminary work suggests that standardization of wound dressing performance may be associated with concurrent improvement in infection control practice. Hopefully, this success may serve as a model on which other institutions might build future policy.

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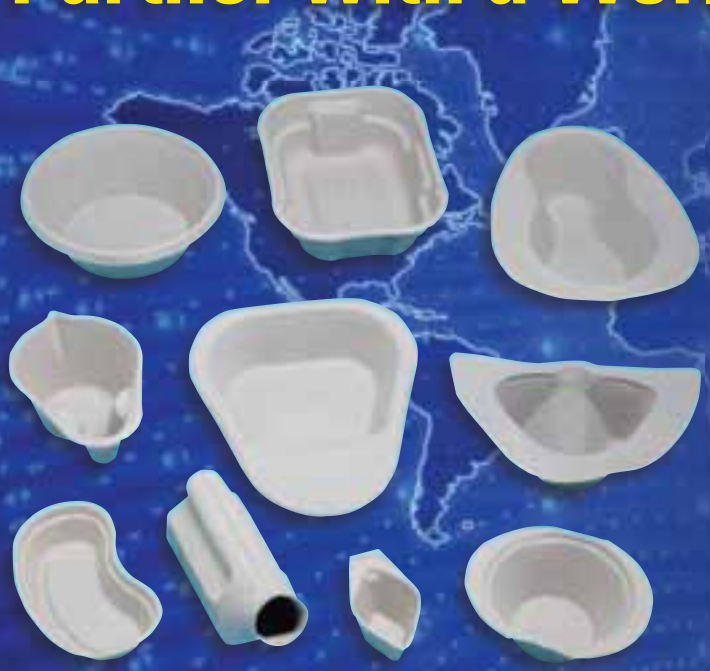

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Cerebrospinal fluid shunt-associated infections in Canadian acute-care hospitals participating in the Canadian Nosocomial Infection Surveillance Program: 2006 to 2008 results

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ABSTRACT

Introduction

The Canadian Nosocomial Infection Surveillance Program (CNISP) has conducted ongoing prospective surveillance of cerebrospinal fluid shunt (CSF) infections since 2006 to determine the incidence and microbiologic epidemiology of CSF shunt-associated infections among Canadian hospitals participating in CNISP.

Methods

From 2006 to 2008 data were collected on adult and pediatric patients with a positive CSF culture and at least one of the following: temperature ≥38º C, neurological signs or symptoms, abdominal signs or symptoms, or signs or symptoms of shunt malfunction or obstruction in the 12 months following device placement or revision. Demographics, microbiology and surgery data were collected using a standardized questionnaire and were reported to CNISP annually.

Results

From 2006 to 2008, 1,036 CSF shunt procedures were performed of which 57 met criteria for infection; for an overall rate of 5.5 infections per 100 procedures (95% CI, 4.23-7.12). The rate of infection among adults remained constant over the three years (p=0.1), whereas the rate of infection in the pediatric population increased significantly from 3.9 to 7.7 infections per 100 procedures (p=0.04). The most prevalent organisms in all age groups were coagulase-negative Staphylococci (41%) followed by *staphylococcus aureus* (21%).

Discussion

An increased frequency of CSF shunt-associated infections was observed in the pediatric population. This may have been due to changes in the patient population, or an artifact due to the small number of cases. If this trend continues, further investigation of risk factors in this age group is necessary. CNISP will continue to monitor CSF shunt-associated infections among adults and children admitted to hospitals participating in this surveillance program.

KEY WORDS: Cerebrospinal fluid shunt, bacterial infections, sentinel surveillance, Canada/epidemiology

INTRODUCTION

Cerebrospinal fluid (CSF) shunt placement is a surgical treatment for hydrocephalus, a condition in which excess CSF fluid accumulates because of dysfunctional reabsorption or blocked drainage (1). Infections associated with CSF shunt surgery represent a severe complication with high morbidity and substantial mortality (2,3). The National Healthcare Safety Network in the United States reported pooled mean rates of 4.04 to 5.93 cases of infection per 100 procedures, depending on the risk category (4).

A prospective cohort study of CSF shunt-associated infections was conducted from 2000 to 2002 by the Canadian Nosocomial Infection Surveillance Program (CNISP) in 21 acute care hospitals across eight provinces. This study found an overall rate of 4.10 infections per 100 procedures and a rate of

FIGURE 1: CSF shunt-associated infections per 100 procedures, 2006-2008 (n=57)

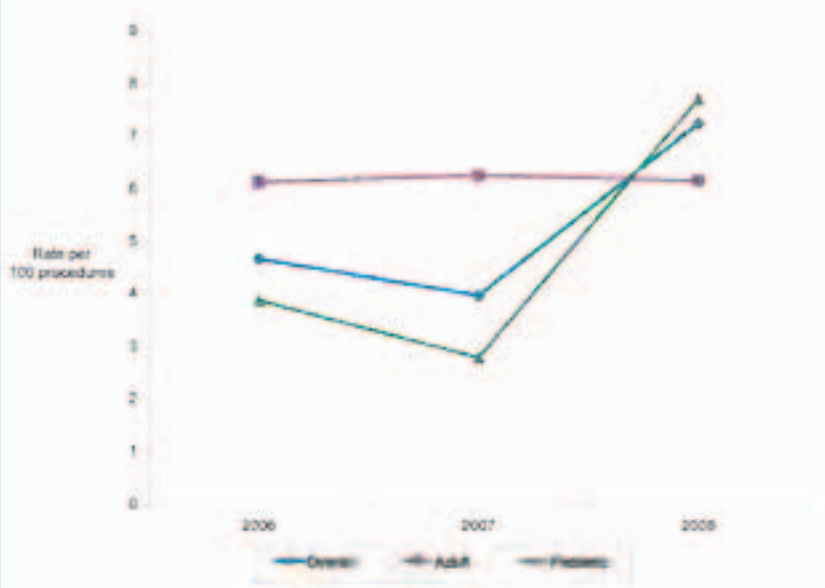

TABLE 1: Number of CSF shunt-associated infections and rate per 100 procedures, 2006-2008 (n=57)

Year	Adult		Pediatric		Overall	
	No.	Rate (95% CI)	No.	Rate (95% CI)	No.	Rate (95% CI)
2006	6	6.1 (2.51-13.37)	7	3.9 (1.71-8.12)	13	4.7 (2.61-8.03)
2007	7	6.3 (2.51-13.37)	6	2.8 (1.13-6.23)	13	4.0 (2.22-6.85)
2008	8	6.2 (2.98-12.16)	23	7.7 (5.04-11.97)	31	7.2 (5.04-10.21)
Overall	21	6.2 (3.96-9.43)	36	5.2 (3.70-7.16)	57	5.5 (4.23-7.12)

4.85 for children and 3.24 for adults (5). In 2006 surveillance resumed, with four Canadian hospitals participating in 2006 and six hospitals participating in 2007 and 2008. The objectives of the surveillance were to 1) determine the number of infections occurring in the first year after initial placement of a CSF shunt and 2) to describe the microbiologic epidemiology of CSF shunt infections in all patients admitted to hospitals participating in CNISP. We report here the results of that surveillance period.

METHODS

CNISP is collaboration between the Canadian Hospital Epidemiology Committee, which is a subcommittee of the Association of Medical Microbiology and Infectious Diseases Canada, and the Public Health Agency of Canada. Six hospitals participated during this surveillance period, and included one adult, three pediatric and two mixed (adult/pediatric) hospitals.

Patients eligible for inclusion included all persons undergoing surgical placement, revision or manipulation of an internalized CSF shunting device. Patients with transcutaneous or external shunting devices or non-shunting devices (e.g. Ommaya reservoir) were excluded, as were patients whose CSF was culture-positive (bacterial or fungal) at the time of shunt surgery.

A case of CSF shunt-associated infection was defined as a patient with a positive culture of the CSF and at least one of the following: temperature $\geq$38º C, neurological signs or symptoms, abdominal signs or symptoms, or signs or symptoms of shunt malfunction or obstruction in the 12 months following device placement or revision in the same hospital. Microbiology laboratory results were reviewed regularly by infection control practitioners to identify patients with positive CSF cultures and their records were reviewed to determine if a shunt was in place. Following the identification of an infection, the patient chart was reviewed for the following data: age and sex of the patient, isolated pathogen(s), date of positive CSF culture, date of surgery, type of surgery and type of CSF shunt. The above data were collected on a standardized data collection tool and sent to the Public Health Agency of Canada for data entry and analysis. Infections were reported based on the date of surgery and not the date of positive culture. Annual rates were calculated as the number of CSF shunt-associated infections per 100 shunt surgery procedures (insertions and revisions). The chi square test was used to analyze linear trends in incidence rates and 95% confidence intervals (CI) were calculated. All the analyses were two-tailed and differences were considered to be significant at a *P*-value <0.05. Data were analysed using Stata (version 11.0, StataCorp, Texas, USA).

RESULTS

From 2006 to 2008, there were 1,036 shunt procedures performed in six hospitals across five provinces. Over half (67%, n=696) of the procedures were performed on pediatric patients (aged 18 years or less). Of the 57 CSF shunt-associated infections reported, 63% (n=36) were in children. The age of the cases ranged from one month to 84 years with a median of 13 years. Approximately a third of the cases (33%) were less than one year of age. Male and female cases were evenly distributed across all age groups.

Overall, there were 5.5 cases of infection per 100 procedures (95% CI, 4.23-7.12). The rate of infection among adults remained constant over the three years (p=0.1), whereas the rate of infection in the pediatric population increased significantly from 3.9 to 7.7 infections per 100 proced-

ures (p=0.04). The overall rates of infection in adults and children observed over the three-year period were not different (6.2 vs. 5.2 infections/100 procedures, p=0.6) (Figure 1). However, shunt infections occurred sooner after surgery for children than for adults (mean interval, 63 vs. 81 days; p=0.005).

Of the 57 infections reported, 56% occurred following procedures in which the device was revised (rather than newly inserted). No significant differences in infection rates for shunt revisions or new insertions were observed (Figure 2). Overall the most common organisms were coagulase-negative staphylococci (41%) and *Staphylococcus aureus* (21%). More than one organism was detected in 10 (18%) cases (Table 2). Of the 57 infections identified among adults and children, the device most commonly associated with infection was the ventriculoperitoneal shunt (91%, n=52).

FIGURE 2: CSF shunt-associated infections per 100 procedures, by surgery type, 2006-2008 (n=57)

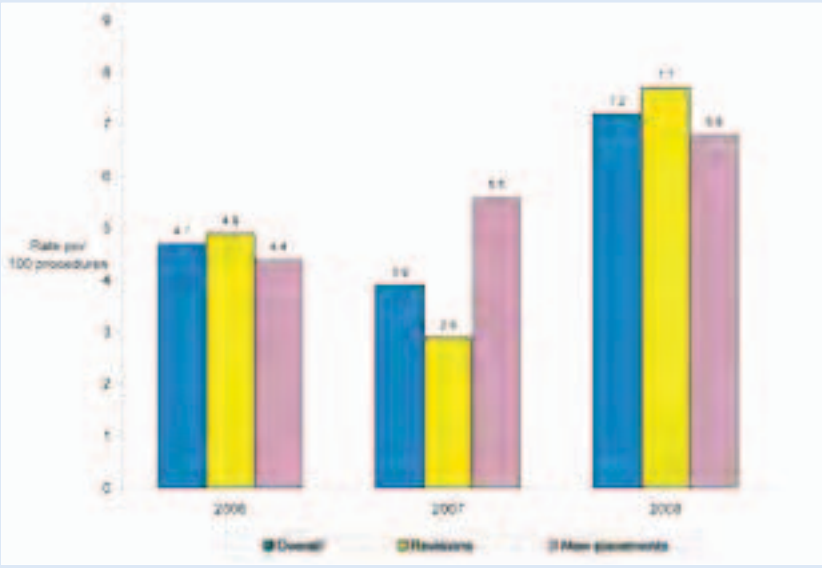

TABLE 2: Proportion of CSF shunt-associated infections by organism, 2006-2008 (n=67)

Organism	Adult % (n)	Pediatric % (n)	Total % (n)
Coagulase-negative staphylococci	54 (14)	44 (18)	48 (32)
Staphylococcus aureus	15 (4)	24 (10)	21 (14)
Propionibacterium species	4 (1)	7 (3)	6 (4)
Corynebacterium species	0 (0)	5 (2)	3 (2)
Escherichia coli	4 (1)	2 (1)	3 (2)
Pseudomonas aeruginosa	4 (1)	2 (1)	3 (2)
Haemophilus influenzae	4 (1)	0 (0)	1 (1)
Alpha haemolytic streptococci	0 (0)	2 (1)	1 (1)
Other *	15 (4)	12 (5)	13 (9)

*Other pathogens include: *Enterococcus* sp, *Proteus mirabilis*, *Micrococcus* sp, *Enterobacter cloacae*, *Ureaplasma parvum* and *Leuconostoc* sp

DISCUSSION

This report summarizes the incidence and microbiologic epidemiology of CSF shunt-associated infections reported from 2006 to 2008 among six hospitals participating in CNISP. A significant increase in the rate of infection among pediatric patients was observed in 2008. This may have been due to changes in the patient population, or an artifact due to the small number of cases from a few centers. Our earlier study involved a larger number of hospitals and was more likely to be generalizeable to other Canadian settings. However, this increase in pediatric CSF shunt-associated infections requires monitoring, and further investigation of specific risk factors in this age group may be warranted.

No significant changes in the combined rates, or the overall pediatric rate between the 2000-2002 study and the current 2006-2008 surveillance data were observed. The most common pathogens identified in this study were similar to previous reports, in which commensal flora predominate (2,5,6). A major limitation of the current surveillance is the limited number of participating hospitals. Nevertheless, participation in CSF shunt-associated infection surveillance has been increasing among CNISP hospitals which will allow for further analysis in the future. Given the increase in rates of CSF shunt-associated infections in the pediatric population, CNISP will continue to monitor CSF shunt-associated infections and aim to increase participation among CNISP pediatric hospitals.

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CHICA-CANADA NEWS

Inside:





Let me **count the ways**

Donna Wiens, RN, BN, CIC
Présidente, CHICA-Canada

Professional associations are usually not-for-profit organizations seeking to further a particular profession, the interests of individuals in that profession, and the public interest. That is an accurate description of CHICA-Canada and its role to serve members across the nation who share an interest in infection prevention and control, including the public.

In 2009, during the strategic planning event, the leadership of CHICA, including the board of directors, chapter presidents, and staff, defined the ways in which the association would perform its mandate from 2010-2015. I distinctly remember participants saying things like, "How can we accomplish this?"; "Who is going to do all this work?" while others reinforced, "This is where we need to go," and "We need to work together to move forward." You can find the complete plan in the Members Only area of the website, drop down under Communications from MSO.

Just 18 months into the five-year plan, let me count the many new ways in which the plan has been advanced so far:

Goal One: Raise the profile of the association and its activities

- reviewed draft standards before publication by Public Health Agency of Canada
- achieved status as associate member of Canadian Nurses Association
- endorsed Novice ICP courses
- developed monthly e-newsletter
- held teleclasses for chapter presidents and treasurers
- increased scientific content in the *Canadian Journal of Infection Control*

Goal Two: Enhance the mix of products and services

- ensured that CHICA-Canada's logo is recognizable on all products and ensured that chapter names align with CHICA-Canada
- facilitated website renewal and expansion
- facilitated major redevelopment of the audit toolkit series
- encouraged the use of CHICA CHAT (formerly CHICA Connections) as a discussion board

Goal Three: Expand the association's education initiatives

- prepared policies and developed the infrastructure for the delivery of the CHICA-Canada online novice ICP course
- collaborating with APIC and CBIC on ICP core competency document
- facilitated and promoted ICP education – see the comprehensive summary by Gerry Hansen in her "School's not out" article, Summer 2011, page 135

Goal Four: Expand and develop the membership base

- developed membership base which is now over 1700 strong and rising, with growing corporate membership and focus on targeted groups for recruitment
- developed chapter representation, increasing number of chapters (now 22 with the addition of CHICA-Simcoe-Muskoka in 2011)
- facilitated board member visits to chapters
- initiated recognition of extraordinary achievement of members through the Champions of Infection Control

Goal Five: Provide national and international leadership

- updated the board orientation manual
- facilitated communication with other

organizations (ever expanding list, most recently the Operating Room Nurses Association of Canada and the First Nations and Inuit Health Branch)
- provided representation on national committees and boards (Accreditation Canada advisory board, Canadian Standards Association Steering Committee, Public Health Agency Infection Control Steering Committee and others)
- collaborated on national and international projects (Antibiotic Awareness Day, WHO Hand Hygiene day, International Infection Prevention Week, and others)
- enhanced industry partnerships and sponsorship of CHICA projects and education (audit toolkit, Roadshows, conference attendance, etc).

Despite this progress, other initiatives are moving forward at a slower pace:
- ESBL tool kit revitalization (proposed for 2012)
- standard IPAC orientation program
- IPAC program audit tool (proposed for 2012) and national standards for IPAC programs
- national ICP mentorship program
- chapter organizational manual (to be drafted in fall 2011 and circulated to chapters by year end)
- mechanism for recognition of member developed educational tools (for Board discussion, fall 2011); and other initiatives which would support and enhance your practice.

What we have achieved together since the strategic plan was put in place comes with a price, of course. We have enhanced the administrative staff structure, contracted specialty services such as a webpage designer, and expert staff for the novice ICP course. We have recruited many volunteers and worked those volunteers very hard. Of particular note are the hundreds of volunteer hours which continue to go into the work on the development and review of the audit tools by the Program & Projects and Standards and Guidelines committees.

Future work to achieve the strategies laid out in the strategic plan will require continued investment in our professional association, dedicated member volunteers and ongoing evaluation of what is being accomplished. The aim, of course, is for you to see value in your CHICA-Canada membership and for us to be able to count new ways each year in which the strategic plan is being achieved.

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Déjà plusieurs réalisations à notre actif

Donna Wiens, RN, BN, CIC
Présidente, CHICA-Canada

Les associations professionnelles sont habituellement des organismes sans but lucratif qui cherchent à promouvoir une profession en particulier, les intérêts des gens qui exercent cette profession ainsi que l'intérêt du public. Voilà une bonne description de CHICA-Canada et de son rôle, à savoir : servir les membres de tout le pays qui s'intéressent à la prévention et au contrôle des infections, y compris le public.

En 2009, au cours de l'activité de planification stratégique, les dirigeants de CHICA, y compris le conseil d'administration, les présidents des sections régionales et des membres du personnel, ont défini les moyens par lesquels l'Association allait accomplir son mandat au cours de la période 2010-2015. Je me rappelle très bien des propos que tenaient certains des participants : « Comment pouvons-nous concrétiser ceci? » « Qui va s'occuper d'accomplir toutes ces tâches? » Pendant ce temps, d'autres renchérissaient : « voilà la direction que nous devons prendre » et « nous devons travailler ensemble pour avancer ». Vous pouvez consulter le plan stratégique détaillé dans la section du site Web réservée aux membres, sous « Communications from MSO ».

Laissez-moi vous énumérer les nombreuses nouvelles réalisations qui témoignent de nos avancées à l'égard du plan quinquennal, à peine 18 mois après le début de sa mise en œuvre :

Premier objectif : bonifier le profil de l'Association et ses activités

- Révision de propositions de normes avant publication par l'Agence de la santé publique du Canada
- Obtention du statut de membre adhérent de l'Association des infirmières et infirmiers du Canada
- Reconnaissance de certains cours en prévention et contrôle des infections (PCI) pour débutants
- Conception d'un bulletin électronique mensuel
- Tenue de cours à distance pour les présidents et les trésoriers des sections régionales
- Augmentation du contenu scientifique de la *Revue canadienne de prévention des infections*

Deuxième objectif : améliorer l'éventail de produits et services offerts

- Uniformisation de l'emploi du logo de CHICA-Canada sur tous les produits, de sorte qu'il soit bien visible, et alignement des noms de sections régionales sur celui de CHICA-Canada
- Appui au renouvellement de l'information et à l'enrichissement du site Web
- Appui à la refonte de la trousse d'outils de vérification
- Encouragement à recourir à l'outil « CHICA CHAT » (auparavant « CHICA Connections ») comme forum de discussion

Troisième objectif : multiplier les initiatives de formation offertes par l'Association

- Rédaction de politiques et élaboration d'une infrastructure pour la prestation du cours en ligne de CHICA-Canada sur la PCI s'adressant aux débutants
- Collaboration avec les organismes APIC et CBIC pour la préparation du document sur les compétences fondamentales
- Collaboration à la préparation d'activités de formation en PCI et promotion de ces activités – voir le sommaire très complet dans l'article de Gerry Hansen publié dans le numéro de l'été 2011, page 135, sous le titre *School's not out*

Quatrième objectif : accroître le nombre de membres

- Recrutement de membres : le nombre s'élève maintenant à 1700 et continue de croître, tout comme le nombre de membres affaires; recrutement axé sur des groupes ciblés
- Représentation accrue des sections régionales, augmentation du nombre de sections (maintenant 22, depuis l'ajout de CHICA-Simcoe-Muskoka en 2011)
- Collaboration à l'organisation de visites de membres du conseil auprès des sections régionales
- Reconnaissance des réalisations extraordinaires des membres grâce aux prix de Champions de la prévention et du contrôle des infections

Cinquième objectif : assurer un leadership sur la scène nationale et à l'international

- Mise à jour du manuel d'orientation des membres du conseil d'administration
- Collaboration aux communications avec d'autres organismes (liste qui s'allonge sans cesse – ajouts récents : l'Association des infirmières et infirmiers de salles d'opération du Canada et la Direction générale de la santé des Premières nations et des Inuits)
- Représentation auprès de comités et de conseils nationaux (comité consultatif d'Agrément Canada, comité directeur de l'Association canadienne de normalisation, comité directeur de l'Agence de santé publique du Canada chargé de l'élaboration du guide de prévention des infections, etc.)
- Collaboration à des projets nationaux et internationaux (journée de sensibilisation aux antibiotiques, journée de l'OMS sur l'hygiène des mains, semaine internationale de prévention des infections, etc.)
- Amélioration des partenariats avec les entreprises et des commandites de ces dernières pour des projets et des formations CHICA (trousse d'outils de vérification, tournées de conférences, présence au congrès, etc.)

Parallèlement à ces réussites à notre actif, d'autres initiatives progressent plus lentement :

- Revitalisation de la trousse d'outils BLSE (proposition pour 2012)
- Programme standard d'orientation en matière de prévention des infections
- Outil de vérification de programme (proposition pour 2012) et normes nationales pour les programmes de prévention des infections
- Programme national de mentorat en PCI
- Guide organisationnel à l'intention des sections régionales (rédaction à l'automne 2011 et diffusion auprès des sections régionales d'ici la fin de l'année)
- Mécanisme de reconnaissance des outils de formation mis au point par les membres (à l'ordre du jour d'une réunion du conseil d'administration, cet automne, pour discussion) et autres initiatives pouvant soutenir ou appuyer la pratique de nos membres

Il va de soi que ce que nous avons accompli ensemble depuis la mise en route du plan stratégique ne s'est pas fait sans un certain coût. Nous avons élargi l'équipe de personnel administratif, confié des services spéciaux à des contractuels (notamment, une personne spécialisée dans la conception de pages Web) et recouru à des experts pour la préparation du cours en PCI pour débutants. Nous avons recruté de nombreux bénévoles, que nous avons abondamment sollicités. Soulignons particulièrement les centaines d'heures de bénévolat qui continuent d'être consacrées à la rédaction et à la révision des outils de vérification par notre comité responsable des programmes et des projets et par celui chargé des normes et des lignes directrices.

Les prochaines démarches pour donner suite aux stratégies définies dans le plan stratégique exigeront des investissements continus de la part de notre association professionnelle et la participation de bénévoles assidus. Nous devrons aussi toujours réévaluer ce que nous accomplissons, au fur et à mesure. L'objectif, bien sûr, demeure que vous continuiez de constater la valeur de votre appartenance à CHICA-Canada et que nous puissions chaque année citer de nouvelles réalisations qui témoignent de nos avancées à l'égard du plan stratégique.

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Hard decisions

Gerry Hansen, BA
Executive Director, CHICA-Canada

At the 2011 AGM, members voted to increase CHICA-Canada Individual membership fees by $70.00. The new fees, including pro-rated Institutional and Student/Silver fees, effective January 1, 2012, will be:

Individual	$195.00
Institutional	$273.00 (first representative); each additional representative - $117.00
Student/Silver	$117.00

Memberships expiring December 31, 2011 will renew at the new fee schedule. The fees will include one complimentary chapter membership and one complimentary interest group membership.

The membership increase decision is the result of discussion and hard decisions made by the board of directors and the CHICA-Canada membership. It was an emergency measure recommended by our auditor in order to substantially reverse financial losses and balance the books by the end of 2012. The auditor's recommendation came just days prior to the conference when the 2010 audit was completed.

According to the Canadian Revenue Agency Guidelines, a not-for-profit/charitable organization may maintain an operating budget enough to cover expenses for one year. Funds in access of a one-year operating budget must have a project allocation. In the past, excess funds generated by a particularly successful conference have been allocated toward special projects, e.g. Novice Practitioner Day, Online Registration Development, Distance Education Development and Research Awards. To maintain our charitable status and to ensure viability of the organization moving forward, CHICA needs to be self-sufficient without reliance on revenue from our conferences. The only other source of ongoing income is our membership fees.

Why is a membership fee increase necessary?

1. The cost of doing business has increased as has CHICA's need for additional staff, and to fulfill its mandate as a professional association. The last fee increase was in 2004. Membership fees have not kept up to date as the cost of business increased. Investigation shows that the increased fee will be comparable to the membership fee of other similar organizations.
2. Following the Strategic Planning that occurred in 2009 the association has been actively involved in meeting the objectives. While achieved in large part by volunteers, there is still a substantial initial start-up cost for these initiatives. Examples include development and initial formatting of the Audit Toolkit; re-development of the distance education course for Novice ICPs; online conference registration and membership fee payments, and increasing CHICA's profile through committee work and advisory committee participation. See President Donna Wiens' description of just a few of these exciting new initiatives in her message (page 188).
3. Deficiency of revenues over expenditures in 2009 ($87,076) and 2010 ($209,643). For further details see Financial Statements posted to CHICA website (2010 Annual Report).

How are we funded?

Our main source of revenue is membership fees from Individual and Institutional members, as well as from Corporate Member fees. In addition, we are the recipient of sponsorship by industry of various projects and initiatives. The annual conference usually brings in a net profit but the amount of that revenue varies year by year and our auditor's recommendation is that conference profits cannot be assumed nor included in the operating budget. See Director of Finance Judi Linden's review of revenue (page 198).

What are our operating expenses?

See Director of Finance Judi Linden's review of expenses on page 199. In summary, we fund two full-time staff

"To maintain our charitable status and to ensure viability of the organization moving forward, CHICA needs to be self-sufficient without reliance on revenue from our conferences. The only other source of ongoing income is our membership fees."

members, the web designer, and part-time distance education administrator, facilitators, instructors and coordinators. We support communication for meetings of the board, standing committees, chapter presidents, chapter treasurers, and interest groups. We have expenses in supporting representatives to external committees and meetings with other organizations and agencies.

As a fairly small organization, we depend greatly on the goodwill and service of our member volunteers. They give their time to serve on committees, represent CHICA on expert groups, participate in education development, and development of resources for practice (e.g. audit tools).

Who is accountable?

The board of directors is ultimately responsible for the strategic plan and welfare of the association. The executive director is responsible for carrying out the administration of the organization, including national conferences. In November 2010, seeing a potential loss in the 2010 audit, the board took immediate steps to reduce association expenses. Among these were:

1. **Reduction of travel**. Travel restrictions were put into place which reduced CHICA representation at many national and international meetings and events. This included APIC, IPS, IFIC, CFID, and reduction in multiple meeting commitments. In addition, the use of the national travel agency was eliminated with the exception of international or complicated travel arrangements. Seat selection, extra baggage, and change fees are no longer reimbursed by CHICA.
2. **Reduction of meeting schedules**. The two-day board meeting at the annual conference was reduced to one day and was scheduled during the conference to reduce accommodation expenses. The board will continue to have a two-day meeting in November. The meeting has been held in Toronto for the past several years for fiscal reasons as the majority of board members have been eastern-based. The annual meeting of chapter presidents was moved to Sunday which reduced accommodation costs for our chapter presidents.
3. **Reduction of meetings of Scientific Program Committees**. Prior to November 2010, the Scientific Program Committees met in person twice during their planning phases. This has been reduced to one in-person meeting with all other meetings held by conference call and email.
4. **Communication**. It has been recommended that the board, committees and interest groups use Skype whenever possible. When Skype is not possible, the CHICA Conference call line can still be used. Stricter regulations about the use of the conference line will be developed, without restricting the sustainability of our important committees and interest groups.
5. **GST/HST**. The addition of GST/HST to membership fees would result in a 100% refund by the Canada Revenue Agency (CRA) of GST/HST paid on expenses. Noting that this would also result in a further significant cost to members, the board decided not to charge GST/HST on membership fees. (Note: GST/HST is charged on product sales and conference fees, as dictated by the CRA.)

> "The board of directors and staff thank the members of CHICA-Canada for their support of their professional organization."

The board has also discussed the following additional expense reductions:

1. **Interest groups.** The board is adamant in its objective to continue to support the sustainability of interest groups and has been doing so by providing a conference call line for interest groups as well as meeting space during the annual conference. Stricter regulations regarding the use of the conference call line and the facilitation of meeting space at the annual meeting will be discussed with the chairs of interest groups in the fall of 2011.
2. **Conferences.** The board has discussed various conference expense reductions and revenue generation. More information will be published with the 2012 National Education Conference registration brochure (online December 2011).

How will the financial processes change?

Moving forward, the board plans changes to the financial reporting system which in the past has experienced a delay in reports to the board and the ability for the board to make corrective decisions. The association will be treated as a business with its fiscal health being given a better standard of care.

What are CHICA's objectives?

CHICA-Canada has never wavered from its mandate to provide professional representation at all levels of government and with its external partners through committees and advisory panels, to increase the profile of ICPs and CHICA-Canada, to provide a resource of education and practice tools for ICPs and other healthcare workers, and to maintain a networking and communication vehicle for members, chapters, committees, and interest groups.

The board of directors and staff thank the members of CHICA-Canada for their support of their professional organization. We will recover from this financial emergency and will become stronger and more productive than ever.

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CHICA-Canada
Summary of 2010 Revenue and Expenses

Judi Linden, RN, BN, COHN(C), CIC, Director of Finance

In order to provide an illustration of how CHICA-Canada currently allocates revenue and expenses, I am providing charts of revenue and expenses taken from the 2010 Audited Financial Statements. Every effort has been made by the board of directors to eliminate any duplicated costs and to decrease the operating budget where ever possible in 2011. For further detail please refer to the Audited Financial Statements posted to the CHICA website (2010 Annual Report).

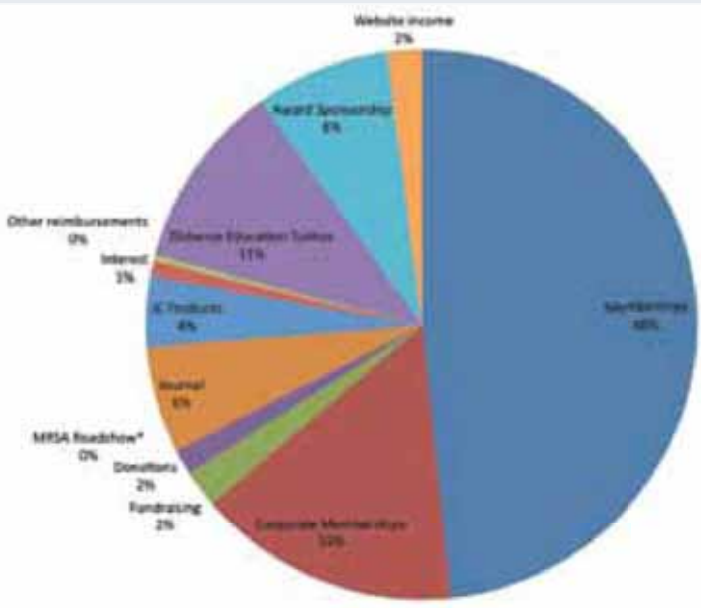
Revenue

Membership fees: Individual, Institutional, Silver and Student annual membership fees, less the $25 per chapter member paid to the chapter of choice.
Corporate memberships: Companies that support CHICA-Canada through an additional membership fee (non-voting).
Fundraising: Funds raised for special projects (Note: Funding for Routine Practices E-Learning Tool reported in 2011 financial statements), Chapter Presidents Fund and General Operating Fund.
Donations: Donations raised for 2010 Run for IFIC and CURE Foundation.
***MRSA Roadshow**: Funds for the MRSA Roadshow were received in 2009. No Roadshows/Webinars were held in 2010.
Journal: Commission from the sale of advertising in the quarterly journal, the annual Member and Source Guide, and the e-newsletter.
Infection control (IC) products: Sale of DVDs, toolkits, posters, non-member audit tools.
Interest: Bank interest.
Other reimbursements: Education Endorsement application fee.
Distance education tuition: 2009-2010 and 2010-2011 Sessions. Additional tuition was reported in the 2009 audited financial statements and will also be reported in the 2011 audited financial statements.
Award sponsorship: Virox Technologies Partnership scholarship ($20,000); Ecolab Poster Contest ($2,000).
Website income: Employment postings.
2010 Conference: Revenue from the 2010 Conference. An additional $5,000 was recorded in the 2011 financial statements.
Research fund: Funds allocated to the *Clostridium difficile* Research Fund were generated in 2008 and held in a separate fund. See Expenses for allocation.

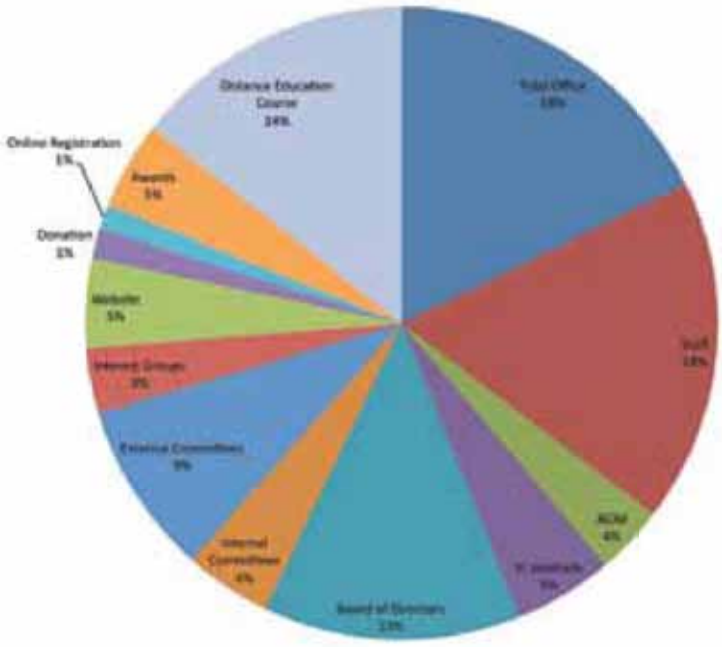
Expenses

Membership services office – total: Accounting, audit, credit card fees, bank fees, insurance (Directors & Officers Errors and Omissions General Liability, Travel Accident), communication (telephone, conference line, fax, internet), printing, office supplies, postage, courier costs, legal fees, translation.
Staff: Executive Director, Conference Planner, Executive Administrative Assistant, Conference Assistant, travel, professional memberships.
Annual General Meeting: Translation of annual report, meeting notices and documents, AGM Breakfast, meeting audio-visual.
Infection control (IC) products: Purchase of DVDs for re-sale, production of audit tool CDs, printing of posters, marketing.
Board of directors: Fall board meeting, spring meeting during the conference, chapter visits, travel and communication.
Internal committees: Includes standing committees i.e., Membership, Programs & Projects, Education, Standards & Guidelines, Corporate Relations Committee, Nominating Committee, communication and travel.

Revenue 2010	
Memberships	$134,294
Corporate Memberships	$42,862
Fundraising	$6,202
Donations	$4,143
MRSA Roadshow*	
Journal	$17,380
IC Products	$11,497
Interest	$2,345
Other reimbursements	$1,000
Distance Education Tuition	$30,458
Award Sponsorship	$22,000
Website income	$5,680
2010 Conference	$507,017
Research Fund*	
Total Revenue	**$784,877**



Expenditures 2010	
Audit, legal	$14,812
Credit card fees	$21,064
Insurance	$3,508
Office	$32,821
Translation	$4,179
Total Office	$76,384
Staff	$75,470
AGM	$15,236
IC products	$21,720
Board of Directors	$56,632
Internal Committees	$18,998
External Committees	$38,207
Interest Groups	$14,330
Website	$19,696
Donation	$6,318
On-line Registration	$5,420
Awards	$19,416
Distance Education Course	$62,024
Research Grant	$42,500
2010 Conference	$522,170
Total Expensitures	**$994,521**



External committees: Expenses associated with representation at meetings/committees such as those with Public Health Agency of Canada, Accreditation Canada, Certification Board of Infection Control, APIC, IPS, International Federation of Infection Control, and other committees such as NACI.
Interest groups: Teleconferencing, meetings at conference.
Website: Recent re-design and re-launch; Website Designer, Webmaster.
Donation: Donation to IFIC from Run for IFIC (sponsors and additional CHICA donation) and CURE Foundation.
Online registration: costs associated with on-line program and maintenance contract.
Awards: Awarding of Virox Scholarship and Ecolab Poster Contest funds.
Distance Education Course: Course administrator, curriculum development, instructors, facilitators, practicum coordinator, blackboard, communication.
Research grant: Awarding of *Clostridium difficile* Research Grant.
2010 Conference: Expenses related to the 2010 conference.

Faced with ongoing financial challenges in 2011, the continued growth of CHICA-Canada as an organization, and in order to maintain services to members, consultation with our financial experts has shown the only option is for a membership fee increase.

The board of directors thanks the members of CHICA-Canada for their support. Any questions on this report can be directed to *chicacanada@mts.net*.

The Operating Room Nurses Association of Canada (ORNAC) appoints a new president

The Operating Room Nurses Association of Canada (ORNAC) announces the appointment of Karen Frenette, RN, BN, MN, CPN(C) as their new president. Karen spent six years on the ORNAC board of directors; she was the chair of the Research Committee and two years as the president-elect where she contributed to strategic planning and decision making for the future of ORNAC. Karen previously served as the president of the New Brunswick Operating Room Nurses Association (NBORN). Karen will work toward supporting patient safety in perioperative care, enabling best practice and establishing effective perioperative teams.

"Karen brings a wealth of perioperative experience to her role as the new president of ORNAC," said ORNAC's executive director, Catherine Harley. "She has been in the frontline clinically, administratively and from an educational standpoint. She understands the issues and what needs to be done to get results."

Karen has demonstrated experience as a perioperative staff nurse, perioperative educator, clinical coordinator, and is presently the nurse manager of the Surgical Suite in Chaleur Regional Hospital in Bathurst, NB. In addition, Karen is also a part-time instructor with the University of New Brunswick, Faculty of Nursing (Bathurst campus).

Officially formed in 1983, ORNAC is an Associate member of the Canadian Nurses Association (CNA) and the national voice for 12,000 perioperative registered nurses. The organization has a volunteer board of directors representing every province. ORNAC works to promote excellence by supporting the highest standards of operating room nursing practice and collaborates with Accreditation Canada and the Canadian Patient Safety Institute with initiatives for Safer Healthcare Now and colleagues internationally. For further information, please visit *www.ornac.ca*.

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Terrie B. Lee, RN, MS, MPH, CIC
2011 Certification Board of Infection Control and Epidemiology, Inc. (CBIC) President

Staying up-to-date on the latest developments and best infection prevention practices is critical to the success of all infection prevention programs, regardless of practice setting. In order to continue the forward momentum of your advancement and education, it's important to consider taking the CBIC certification exam to earn the CIC® designation. This credential demonstrates the commitment to meeting established standards, ensuring patient safety, and maintaining excellence in the practice of infection prevention.

Does certification make a difference?

Yes! At the June APIC Conference in Baltimore, some presented abstracts described the results of the *Prevention of Nosocomial Infections and Cost-Effectiveness Refined (P-NICER)* and *Changing Role of the Infection Preventionist* studies, which are being conducted by Columbia University School of Nursing's Patricia Stone, RN, PhD, MPH and others. In one abstract entitled *Certification in Infection Control Matters*, Monika Pogorzelska, Stone and Larson described the use of infection control policies aimed at reducing MRSA in California hospitals and also assessed the relationship between infection control policies, structural characteristics and rates of MRSA bloodstream infections (BSIs). It's important to note that one finding of this study indicated that the presence of a *certified* infection control director was a significant predictor of lower MRSA BSI rates. It certainly comes as no surprise that certified infection preventionists (IPs) are equipped to face the most challenging infection prevention issues to ensure the safety of patients, employees and visitors.

Canadian contributions

Many Canadian contributions to the process of infection prevention and control certification are worth highlighting. CHICA-Canada has always been supportive of the certification process, and this was again demonstrated this summer when the CHICA-HANDIC chapter was recognized with the CIC Chapter Achievement Award. Chapter President, Risa Cashmore, was presented with the award at the conference in Toronto, for having the chapter with the highest percentage of newly certified CICs. Risa and her chapter colleagues have demonstrated model practices for promoting certification and for engaging candidates in the process; we are grateful for their energy and commitment.

At the CBIC board level, there are two Canadian members. Kathy McGhie, RN, BScN, CIC, has been a member of CBIC for four years, and is currently the Chair of CBIC's Marketing Committee. Kathryn N. Suh, MD, FRCPC, CIC, is the only physician member of CBIC, and is from the Ottawa Hospital. She also has been a member of CBIC for four years, and is currently the co-chair of the Test Committee, which she will lead in 2012. The CBIC Test Committee also has another Canadian member: Suzanne Pelletier. Suzanne is serving her first year as a member of the committee. All of these individuals have served in their CBIC duties with true passion for the certification process. As such, they have represented Canada well, and we look for similar participation for the future.

Strategic planning

The CBIC board recently engaged a consultant to assist in the review and revision of its strategic plan. The assessment activities were aimed to answer the questions: Where are we today? Where do we want to be in the future? What will it take (resources, etc.) to make it happen? Many CHICA-Canada members participated in the information gathering phases of this endeavor, and the CBIC board thanks each of you who provided input.

The board then participated in a strategic planning retreat with its stakeholders from APIC, CHICA-Canada and its testing company to analyze the information obtained and to determine the necessary actions to take. As a result of this process, CBIC identified the following goal areas:

- Certification, maintenance of certification, testing, and research
- Partner and regulatory relationships
- Marketing, communications, and publications
- Recruitment, retention, and community
- Governance and management

The CBIC board will be hard at work to create strategic initiatives associated with these goals and action plans. We'll keep all ICPs informed about the continuing progress and the future direction of CBIC activities.

If you have any questions or concerns, please contact us by email: *info@cbic.org* or by phone: 414-918-9796. You can also email me directly: *tlee@cbic.org*.

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[1]CDC. Guidelines for Environmental Infection Control in Healthcare Facilities, June 6, 2003/52 (RR 10): 1-42 II. Cleaning spills of blood and body substances

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CHICA-HANDIC recent events

2010 CIC Chapter Achievement Award

The CHICA-HANDIC Chapter was delighted to receive this award at the CHICA-Canada conference in Toronto, for the chapter with the highest percentage of members who obtained their Certification in Infection Control (CIC) over the past year. Congratulations to all our members who worked hard to obtain their CIC and for those who recertified. The Certification Board in Infection Control contacted our chapter regarding our strategies to support writing the CIC. Our strategies include:

Ensuring certification is a standing agenda item, where newly certified members and those who have re-certified since the last meeting are celebrated and their accomplishments recorded in the meeting minutes.

- Requesting the CHICA-HANDIC secretary be notified of successful certificants.
- Circulating a list to attendees at our meeting(s) to capture their certification dates.
- Keeping members informed of upcoming study groups through the Regional Infection Control Networks of Ontario (RICN) for Public Health Ontario.
- Including a regular question-and-answer session at each meeting.
- Supporting each other.

Our summer meeting

Our chapter met July 29 for our annual summer meeting, which is more relaxed and offers opportunities for networking.

L-R: Manuela Lopes (Hamilton Public Health), Stefanie Ralph (Central South Infection Control Network), Tamara Johnson (St. Joe's Villa), Virginia Tirilis (Central South Infection Control Network).

posterdocuments.com

CHICA-Canada is partnering for a one-year trial period with *posterdocuments.com* to provide an archival service for posters presented at the 2011 and 2012 National Education Conferences. The site extends the reach of poster presentations and allows those registrants who may not have had opportunity to view all the posters to do so following the conference. If you have any questions, or want to find out more about submitting your poster please contact *staff@posterdocuments.com*. There is a direct link to the posterdocuments webpage from *www.chica.org*.

Tamara Johnson, the new Director of Clinical Operations at St. Joseph's Villa Long-Term Care Home, where we have our regular meetings, donned an apron and cooked us breakfast (watch out "Colin and Justin"!). We had our business meeting, enjoyed Chinese food for lunch, and then networked instead of having the usual educational session.

Save the date

The next CHICA-HANDIC Annual Infection Control Day is planned for **June 7, 2012.** Plans are already under way and the 2012 Education sub-committee is being formed. The first meeting will be in September. We hope our next educational day will be even bigger and better than last year.

CHICA-HANDIC meets every February, April, July, September and November. Here we are at our April chapter meeting. Our educational session was a review of our 3M submission and we watched an excellent video *Mr. Hasit*, by Cheryl Collins, ICP – Macassa Lodge (and CHICA-HANDIC secretary extraordinaire).

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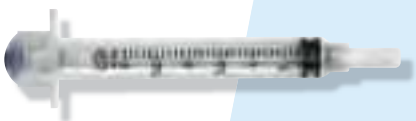

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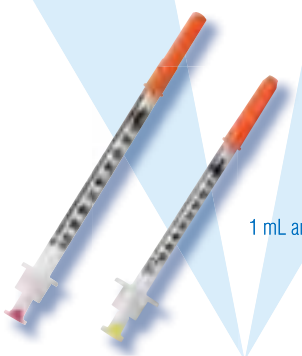

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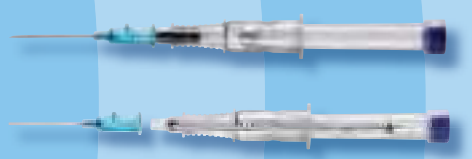

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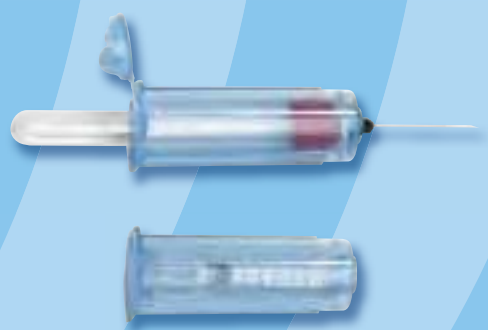

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CHICA-CANADA **board of directors elections**

The following candidates for the CHICA-Canada Board of Directors have been elected by acclimation. Each term is effective January 1, 2012.

Director of Finance (three-year term)
Judi Linden, RN, BN, COHN(C), CIC
Regional Health Authority – Central Manitoba Inc.
Portage la Prairie, Manitoba

Physician Director (three-year term)
Michael Gardam, MSc, MD, CM, FRCPC
University Health Network
Toronto, Ontario

There are three nominees for the position of President-elect (one-year term, followed by the positions of President and Past President (one-year term each). An election will be held online at *www.chica.org*. Profiles of the candidates follow. Instructions for voting are below.

BRUCE GAMAGE, RN, BSN, CIC is Manager, Provincial Infection Control Network – BC. He has been in infection prevention and control for 14 years and a member of CHICA-Canada for 14 years. In his position he reports to the co-directors of PICNet and provides overall management and coordination of the PICNet Management Office. He is responsible for facilitating a provincial program focused on the prevention and control of healthcare associated infections. He oversees network operations including coordination of all committees, groups and projects including financial and contract management. In addition, he is the media spokesperson for issues related to infection prevention and control. Decisions made by the manager have the potential to impact multiple organizations provincially as PICNet initiatives impact on policies and practices of organizations across the spectrum of healthcare in British Columbia. Mr. Gamage obtained his bachelor of science (microbiology) and bachelor of science in nursing from the University of British Columbia. He successfully completed certification in infection control and epidemiology (CIC) in 1999 and has recertified in 2004 and 2009. Mr. Gamage is a member of CHICA British Columbia, having held the position of president in 2000-2001. He has co-chaired the CHICA-Canada Network of Network Interest group since 2007. He previously served on the CHICA-Canada board of directors in 2001-2006 as Director of Programs & Projects.

Philosophy: *With a background in both microbiology and critical care nursing and certification as an infection control professional, I have a wealth of experience in the practice of infection prevention and control. In the past four years I have honed my communication and networking skills to provide strong, province-wide leadership as manager of the Provincial Infection Control Network of British Columbia. Working with the broader infection prevention and control community, I am committed to bringing excellence in infection prevention and control principles, resources and education to all of the diverse areas across the continuum of healthcare. I look forward to the opportunity to expand my contributions to CHICA-Canada both nationally and internationally.*

ISABELLE LANGMAN, RN, CIC is Network Coordinator at Public Health Ontario – Regional Infection Control Network – Northeastern Ontario. She has been in infection prevention and control for 10 years, and has been a CHICA-Canada member for nine years. Having held her position as Network Coordinator for five years, Ms. Langman works directly with the Ministry of Health and Long Term Care and has fostered formal relationships with acute care, non-acute care, and community care. She has collaborated with other networks to develop standardized tools and educational initiatives and has lead the development of a number of provincial RICN projects. Prior to joining the Network, she was at Sudbury Regional Hospital in Infection Control and Intensive Care/Med/Surg unit. She graduated from Cambrian College of Applied Arts and Technologies in 1991 with a bilingual nursing program diploma and completed the leadership and management course from McMaster University in 2009. She is currently president-elect of CHICA Northeastern Ontario chapter, having previously held the position of president in 2007 and 2008. She is a member of the CHICA-Canada Routine Practices E-Learning Module Development Team, a member of the ESBL Toolkit Review Committee and is a member of the CHICA-Canada Education committee and the Pediatric Interest Group.

Philosophy: *It is with great pleasure that I let my name stand for the President Elect position (2012). For many years, I have become more involved in CHICA-Canada and CHICA-NEO activities, committee and interest group memberships, etc. I have come to appreciate the many efforts this association puts forth and the support it provides to many who otherwise have no other access to direct, credible and scientifically*

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accurate infection prevention and control (IPAC) information. It is my intention to assist with that continuous support; to be accessible, creative, resourceful, and respectful. It is my wish to continue spreading the word about CHICA-Canada and its attributes and continue the great work that has been set forth while embracing national and international social and cultural differences.

TERI MURDUFF, RN, BScN, CIC is Infection Control Consultant at Lakeridge Health in Oshawa, Ontario. She has held been in infection prevention and control for nine years and has also been a member of CHICA-Canada for nine years. She is one of eight ICPs whose portfolio encompasses one acute care campus as well as maternal child and orthopedic surgical programs for another campus. She participates in surgical site surveillance for total knee replacements and is active in providing education and consultation at all campuses. Previously, Ms. Murduff was at the University Health Network in Toronto and was an Infection Control Consultant with the Public Health Ontario – Regional Infection Control Network – Central East.

Since graduating from Niagara College in 1982 with a diploma in nursing, Ms. Murduff has expanded her nursing career to include 15 years in the Operating Room, two years as the educator of the Sterile Processing Department and part-time instructor at Centennial College for the Sterile Supply Processing Program. She completed a bachelor of science in nursing (*cum laude*) at Atkinson College/York University and became certified in infection control in 2004, recertifying in 2009.

Ms. Murduff is past president of the CHICA Central East Ontario chapter and the current chapter webmaster. She is a member of the CHICA-Canada Pediatrics Interest Group.

Philosophy: *CHICA and CHICA chapter members are committed to promoting best practices in infection prevention and control; however, we must not lose sight that infection prevention and control remains to be everyone's responsibility. CHICA and ICPs must continue to seek partnerships and support all efforts to improve and sustain hand hygiene, routine practices and antibiotic stewardship. In doing so we must ensure that messages are straightforward and personal. Many of our non-ICP colleagues have great ideas and we must acknowledge and embrace those ideas to facilitate change. I am a lifelong learner. I am confident in my IPAC knowledge and always willing to share that knowledge, contribute feedback and mentor all healthcare colleagues. I have demonstrated commitment at the CHICA chapter level and look forward to the opportunity of serving on the CHICA board of directors.*

ONLINE VOTING INSTRUCTIONS

1. Go to the Members Area of *www.chica.org*. You must use the 2011 user name and password to access the Members Area.
2. Click on 2011 Elections.
3. Insert your CHICA-Canada Membership Number where requested.*
4. The position to be filled on the Board of CHICA-Canada is:
   One (1) President-elect
   Click beside the candidate of your choice.
   • Bruce Gamage • Isabelle Langman • Teri Murduff
5. SUBMIT your vote.

* Scrutineers will not know who has voted; the membership number is to assist technical support to ensure there is no duplicate voting and to send out reminders to vote. If you do not have your CHICA-Canada membership number, please contact CHICA-Canada.

The deadline for voting is 6:00 p.m. Central Time, Wednesday, October 26, 2011.

An announcement of election results will be broadcast and posted to *www.chica.org* on Friday, October 28, 2011.

If you require a printed ballot, please inform CHICA-Canada at *chicacanada@mts.net* no later than October 14, 2011.

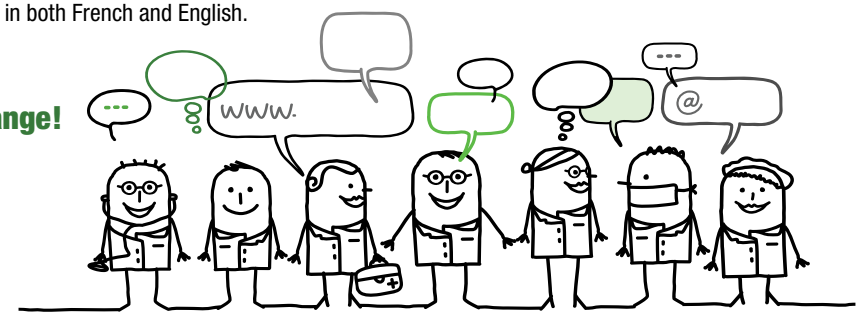
MEDIA RELEASE

A media release is provided to assist with any National Infection Control Week activities that may require a media release in your area. Add the local contact information at the bottom of the release. Available in both French and English.

Infection Control – Are you IN?
Get INvolved, provide INput, INitiate change!

National Infection Control Week
October 17-21, 2011

http://www.chica.org/news_icweek.php



NEW PUBLICATIONS

INFECTION CONTROL GUIDELINE FOR FLEXIBLE GASTROINTESTINAL ENDOSCOPY AND FLEXIBLE BRONCHOSCOPY

The Centre for Communicable Diseases and Infection Control (CCDIC) at the Public Health Agency of Canada (PHAC) has recently developed a new publication: *Infection Control Guideline for Flexible Gastrointestinal Endoscopy and Flexible Bronchoscopy*.

The guideline incorporates the most recent scientific evidence and will replace a section of the existing *Hand Washing, Cleaning, Disinfection and Sterilization in Health Care* guidelines (1998) currently posted on the PHAC website. This guideline was created in collaboration with a multidisciplinary team of experts, including CCDIC's Infection Control Steering Committee, a multi-disciplinary group of physicians, nurses, infection control practitioners and occupational health professionals from across Canada, and with feedback from a broad range of stakeholders and professional associations interested in endoscopic procedures across Canada.

The primary objective for developing PGPHPD guidelines at the national level is to provide baseline recommendations in support of provincial/territorial governments' efforts to monitor, prevent and control healthcare associated infections. The guidelines assist healthcare organizations and providers in developing and implementing infection prevention and control policies and programs. For more information on the guidelines, refer to: *www.phac-aspc.gc.ca/nois-sinp/guide/pubs-eng.php*.

Annex F: Prevention and Control of Influenza during a Pandemic for All Healthcare Settings has been posted to the Public Health Agency of Canada website. *http://www.phac-aspc.gc.ca/cpip-pclcpi/annf/index-eng.php* • *http://www.phac-aspc.gc.ca/cpip-pclcpi/annf/index-fra.php*

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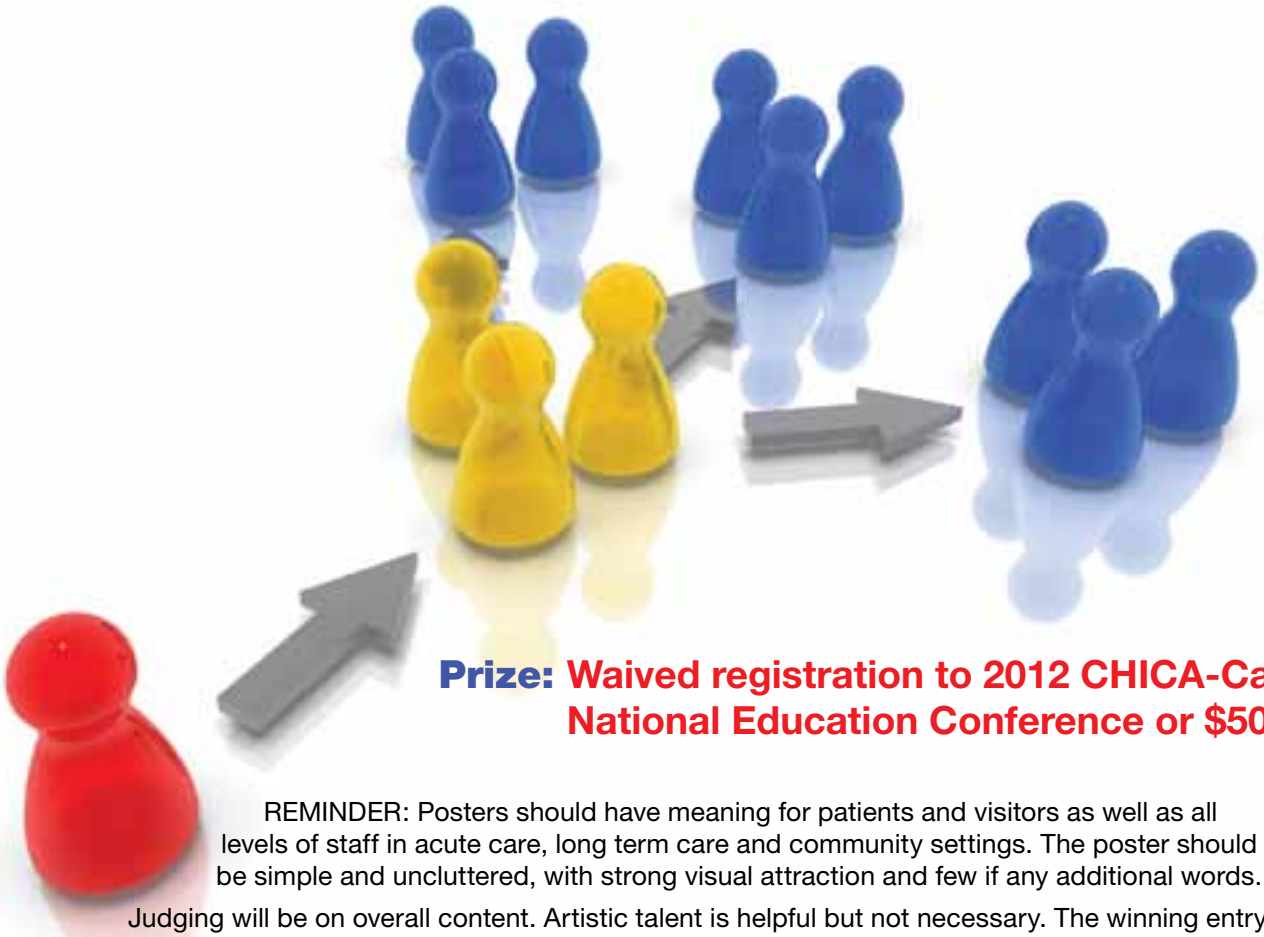
2012 ECOLAB® POSTER CONTEST

An annual poster contest is sponsored by Ecolab and supported by a chapter of CHICA-Canada to give infection prevention and control professionals (ICPs) an opportunity to put their creative talents to work in developing a poster which visualizes the Infection Control Week theme.

YOU ARE INVITED to design a poster that will be used for Infection Control Week 2012 using the following theme:

Spread Knowledge, Not Infection



Prize: Waived registration to 2012 CHICA-Canada National Education Conference or $500.

REMINDER: Posters should have meaning for patients and visitors as well as all levels of staff in acute care, long term care and community settings. The poster should be simple and uncluttered, with strong visual attraction and few if any additional words.

Judging will be on overall content. Artistic talent is helpful but not necessary. The winning entry will be submitted to a graphic designer for final production. Your entry will become the property of CHICA-Canada.

HOST CHAPTER: CHICA New Brunswick/Prince Edward Island

Send submissions to:

Submissions will only be accepted by email.
chicacanada@mts.net or *chicacanada@mymts.net*

Submission format:

Electronic file in Word or PDF format only.

File size: must print out to 8.5”x11.0” paper

Name, address and telephone number must be included in the covering email. DO NOT include identifiers in the poster submission.

DEADLINE: January 31, 2012

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1. Statistics Canada. The Daily. 2008 Jan 14. [cited 20 May 2011]; Available from: http://www.statcan.gc.ca/daily-quotidien/080114/dq080114b-eng.htm
2. Sankaran K, Chien LY, Walker R, et al. Variations in mortality rates among Canadian neonatal intensive care units. CMAJ. 2002 Jan 22;166(2):173-8.
3. Handling of expressed breast milk (EBM) in acute care facilities. CHICA-Canada Position Statement. 2006 October.

Antibiotic Awareness Week

November 14-20, 2011

CHICA-Canada is among several organizations working together to promote the prudent use of antimicrobials through the use of educational resources for professionals and the public.

An ongoing Canadian initiative, *AntibioticAwareness.ca* is coordinated by numerous health-related organizations across the country. These groups partnered last year to promote the first Antibiotic Awareness Day in Canada. This year, that promotion will extend to a week of activities during Antibiotic Awareness Week, which runs November 14-20, 2011.

Antibiotic Awareness resources available on the *AntibioticAwareness.ca* website include factsheets on AMR in food animal production, hospitals and community settings, and northern and remote communities. A "prescription pad" for doctors to give directly to patients seeking antibiotics is also available. For patients, there is advice on knowing when to see a doctor, the use of over-the-counter medications, and what to do to keep children healthy.

During Antibiotic Awareness Week, the website will also feature live webcasts of Canadian experts discussing the latest information on antibiotic resistance and public health. Visit *AntibioticAwareness.ca* for more information.

Canadian partners joining to recognize the threat of AMR through *AntibioticAwareness.ca* include:

- National Collaborating Centre for Infectious Diseases (NCCID)
- Association of Medical Microbiology and Infectious Disease (AMMI) Canada
- Community and Hospital Infection Control Association (CHICA) Canada
- Canadian Foundation for Infectious Diseases (CFID)
- Canadian Paediatric Society (CPS)
- Do Bugs Need Drugs (DBND)
- Canadian Institute of Public Health Inspectors (CIPHI)
- Canadian Public Health Association (CPHA)
- Canadian Pharmacists Association (CPhA)
- Canadian Association for Clinical Microbiology and Infectious Diseases (CACMID).

For more information or to get involved, contact Renée Barclay, Communications Coordinator at NCCID. Tel. 204-949-0309 or email *rbarclay@icid.com*.

SAVE THE DATE

ANTIBIOTIC AWARENESS WEEK November 14-20, 2011

Antibiotic resistance is an issue health practitioners around the world face daily. Numerous health-related organizations have partnered for the second Canadian Antibiotic Awareness Day on November 18 in an effort to promote the prudent use of antibiotics and fight the threat of antibiotic-resistant bacteria. Many activities will be held during Antibiotic Awareness Week, Nov. 14-20, 2011.

Visit *AntibioticAwareness.ca*

MARQUEZ VOS AGENDAS

SEMAINE DE SENSIBILISATION AUX ANTIBIOTIQUES DU CANADA – du 14 au 20 novembre, 2011

La résistance aux antibiotiques est une question à laquelle s'affrontent quotidiennement les praticiens du milieu de la santé du monde entier. De nombreux organismes liés au domaine de la santé ont agi de concert pour marquer la deuxième Journée de sensibilisation aux antibiotiques du Canada, le 18 novembre, dans le but de promouvoir l'utilisation mesurée des antibiotiques et de lutter contre la menace représentée par les bactéries résistantes aux antibiotiques. Beaucoup d'activités seront tenus pendant la semaine du 14 au 20 novembre, 2011.

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DISTANCE EDUCATION **GRADUATES**

CHICA-Canada congratulates the recent graduates of its newly revised Distance Education Online Novice Infection Prevention and Control Course. This course, having been successfully offered at the University of Calgary under the direction of Dr. Betty Ann Henderson, was thoroughly revised and redeveloped. The following group of graduates is the first class to have successfully completed the course with its updated content and new format: six modules and practicum. The revised format also provides CHICA-Canada members with the opportunity to share their expertise in the roles of coordinators, instructors and discussion facilitators. Many thanks go to the faculty of the course, and to the families and colleagues of the students, for making it all possible for the students to strengthen their knowledge and skills. We know that they are ready and eager to apply them to practice.

Congratulations and best wishes to:
Celia Ambery, Squamish, BC
Melisa Avaness, Richmond Hill, ON
Cindy Bateman, Nanaimo, BC
Lindy Brant, Upper Sackville, NS
Janet Demers, Iron Bridge, ON
Tina Dunlop, Lakeshore, ON
Andrea Fisher, Ottawa, ON
Kristie Harding, Victoria, BC
Dave Jackson, London, ON
Tracy Livingston, Dungannon, ON
Kaitlin Loudon, Ajax, ON
Roberta McCombie, Calgary, AB
Robyn Mitchell, Montreal, QC
Lorilee Noel, St. John's, NL
Michelle Reddin, Riverview, NB
Shelly Rempel, Steinbach, MB
Ruth Savoie, Port Colborne, ON
Wanda Sawa, West St. Paul, MB
Mark Scott, Grande Prairie, AB
Karen Simms, St. Anthony, NL
Kathy Wachon, Mississagua, ON
Kimberly Wainwright, Winnipeg, MB
Sherri Williams, Oshawa, ON
Joni Wilson, Peterborough, ON

2010-2011 Faculty:
Donna Moralejo, RN, PhD, Course Professor
Karen Dobbin-Williams, RN, BN, MN, Course Coordinator
Leslie Forrester, BA(Hons), MA, MScEpid, Instructor
Michael Gardam, MD, CM, MSc FRCPC, Instructor
Sharon Wilson, RN, BScN, CIC, Instructor
Sue Lafferty, RN, BScN, CIC, Instructor
Tina Stacey-Works, MLT, CIC, Facilitator
Laura Fraser, RN, BScN, CIC, Facilitator
Anne Augustin, MLT, CIC, Facilitator

For more information on upcoming course offerings, see CHICA-Canada Educational Opportunities on the CHICA website *(http://www.chica.org)*.

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1. Heller J. New sterilization system cuts repair costs for rigid scopes. Materials Manage Health Care. 1996;9(5).

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PHAC UPDATE: Renewal of CCDIC's organizational structure

The Centre for Communicable Diseases and Infection Control (CCDIC), PHAC, has undertaken a renewal and reorganization of its internal organizational structure as part of its ongoing strategic and operational planning efforts.

This renewal is needed to align CCDIC's operational focus and thinking with the mandate and key outcomes contained in our centre's logic model. We are moving from a disease-specific model to one that focuses on essential public health functions.

The new organizational structure, which took effect on June 22, 2011, involves the creation of four divisions with the following mandates:

1. **Surveillance and Epidemiology Division** (Chris Archibald, Director): to design and implement communicable disease surveillance and epidemiology initiatives and programs which contribute to national communicable disease surveillance and epidemiology capacity in Canada.
2. **Professional Guidelines and Public Health Practice Division** (Tom Wong, Director): to enhance the practices of public health professionals and clinicians to contribute to the prevention and control of communicable diseases in Canada.
3. **Programs and Partnerships Division** (Marc-André Gaudreau, A/Director): to enhance the capacity of stakeholders to contribute to the prevention and control of communicable diseases in Canada.
4. **Strategic Issues and Integrated Management Division** (Marsha Hay Snyder, Director): to manage issues of strategic importance and deliver services to support integrated management of CCDIC.

In addition, Steven Sternthal, Executive Director, will advise on issues of strategic importance to CCDIC, provide overall financial management, and provide business support services to the four new divisions.

These divisions were created with the goal of maximizing scientific, community and policy synergies in addressing specific communicable diseases in Canada.

We will ensure that you are provided with any relevant information going forward. Should you have any immediate questions or concerns, please don't hesitate to contact Steven Sternthal (613-960-2565) or me.

Sincerely,

Howard Njoo, MD, MHSc, FRCPC
Director General
Centre for Communicable Diseases and Infection Control
Public Health Agency of Canada
613-948-6799
fax: 613-954-4556

Changements à la structure organisationnelle du CLMTI

Le Centre de la lutte contre les maladies transmissibles et les infections (CLMTI) a entrepris le renouvellement et la réorganisation de sa structure organisationnelle dans le cadre de ses efforts continus de planification stratégique et opérationnelle.

Ce renouvellement est nécessaire pour harmoniser les objectifs opérationnels et le raisonnement du CLMTI avec le mandat et les résultats contenus dans le modèle logique du Centre. Nous passons d'un modèle propre à chaque maladie à un modèle axé sur les fonctions de santé publique essentielles.

La nouvelle structure organisationnelle, entrée en vigueur le 22 juin 2011, comprend l'établissement de quatre divisions dotées des mandats suivants :

1. **Division de la surveillance et de l'épidémiologie** (Chris Archibald, directeur) : Concevoir et mettre en œuvre les initiatives et les programmes de surveillance des maladies transmissibles et d'épidémiologie qui contribuent à la capacité nationale de surveillance des maladies transmissibles et d'épidémiologie au Canada;
2. **Division des lignes directrices professionnelles et des pratiques de santé publique** (Tom Wong, directeur) : Améliorer les pratiques des professionnels de la santé publique et des cliniciens pour contribuer à la prévention et au contrôle des maladies transmissibles au Canada;
3. **Division des programmes et des partenariats** (Marc-André Gaudreau, directeur intérimaire) : Améliorer la capacité des intervenants à contribuer à la prévention et au contrôle des maladies transmissibles au Canada;
4 **Division des enjeux stratégiques et de la gestion intégrée** (Marsha Hay Snyder, directrice) : Gérer les enjeux d'importance stratégique et fournir des services à l'appui de la gestion intégrée du CLMTI.

De plus, Steven Sternthal, Directeur exécutif, conseillera sur les enjeux d'importance stratégique pour le Centre, assurera la gestion financière globale des ressources du CLMTI, et offrira des services de soutien opérationnels aux quatre nouvelles divisions.

Ces divisions ont été établies dans le but de maximiser les synergies scientifiques, communautaires et politiques et de s'assurer de la normalisation des approches utilisées pour combattre des maladies transmissibles précises au Canada.

Nous nous assurerons que vous recevrez tout autre renseignement pertinent. Si vous avez des questions ou des préoccupations immédiates, n'hésitez pas à communiquer avec moi ou Steven Sternthal (613-960-2565).

Veuillez agréer mes salutations distinguées.

Howard Njoo MD, MHSc, FRCPC
Directeur général
Centre de la lutte contre les maladies transmissibles et les infections
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June 16-21, 2012, Saskatoon, SK

See the Preliminary Program at *www.chica.org*.

Registration brochure to be posted in December 2011 and distributed in January 2012.

2012 Host Chapter

– CHICA Saskatchewan Professionals in Infection Prevention and Control (CHICA SASKPIC)

CONFERENCE HOTELS

Deadline date for reservations: May 12, 2012

Mention Community and Hospital Infection Control Association when making reservations.

Plus 5% GST, 5% PST and 2% Destination Marketing Fee

Rates to be confirmed November 2011

Hotel	Rate	Reservations	Website
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Delta Bessborough	$209.00 Single/ Double	1-306-244-5521 1-800-268-1133	*www.deltahotels.com/en/hotels/saskatchewan/delta-bessborough*
Radisson Hotel Saskatoon	$154.00 Corner Queen $149.00 Queen/Queen	1-306-665-3322 1-800-333-3333	*www.radisson.com/saskatoon-hotel-sk-s7k6x6/sksaskat*
Sheraton Cavalier Saskatoon	$199.00 Single/ Double	1-306-652-6770 1-800-325-3535	*www.sheratoncavaliersaskatoon.com*

YOU COULD WIN FREE HOTEL ACCOMMODATION!

The Hilton Garden Inn, the Sheraton Cavalier, the Delta Bessborough, and the Radisson Hotel Saskatoon have been chosen as the guest hotels for the CHICA-Canada National Education Conference (Saskatoon, June 16-21, 2012). If you register at any of the designated guest hotels before the deadline of May 12, 2012 and complete your stay, you will qualify to WIN the cost of your stay FREE (maximum three nights)!

The winner will be randomly chosen from the hotel guest lists of those who have stayed at one of the guest hotels for the conference. The winner will be announced at the Closing Ceremonies, June 21, 2012.

The winner will have their room and taxes PAID, for a maximum of three nights' accommodation. The cost for up to three nights at one of the official conference hotels will be credited to the credit card used to book the stay. This prize is not transferrable.

This prize applies only to the winner's stay at the one of the four guest hotels for the duration of the conference and does not apply to any coupon for a future stay at any of the hotel brands.

GOOD LUCK!

CALL FOR ABSTRACTS

Abstracts are to be submitted online through *www.chica.org*. Abstract guidelines available in Preliminary Program, *www.chica.org*.
Deadline for submission: February 24, 2012

SPECIAL EVENT

Saskatoon Western Development Museum
A Walk Through Boomtown
Wednesday, June 20 2012
6:00-11:30 p.m. (to be confirmed)

Cash bars/light refreshments in Boomtown
BBQ dinner: family style
Entertainment: dancing
Buses to leave all four hotel sites, starting at 6:00 p.m., returning at approx.11:30 p.m.
Special event fee TBA.

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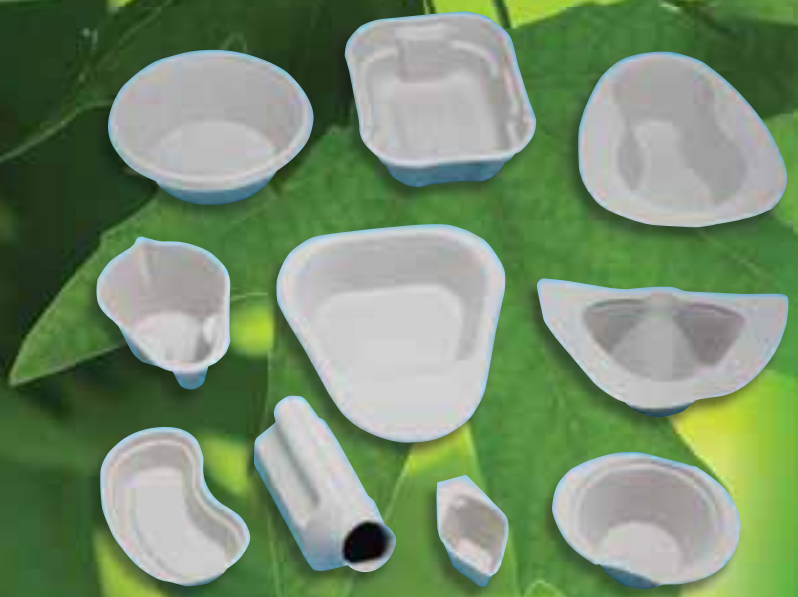

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Peel Public Health, Brampton, Ontario

Marilyn Weinmaster, RN, BScN, CIC
Regina Qu'Appelle Health Region
Wascana Rehabilitation Centre
Regina, Saskatchewan

OTHER SESSION CHAIRS
Cleaning, Disinfection & Sterilization Day
Nicole Kenny, BSc, Assoc. Chem
Virox Technologies Inc.
Oakville, Ontario

Alexis Silverman, RN, BA, BScN, CIC
Peel Public Health
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Pediatrics Half Day
In collaboration with Pediatrics Interest Group
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Health Sciences Centre
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Louise Holmes, RN, BScN, CIC
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Long Term Care Half Day
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7th Annual Run for IFIC
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2012 VIROX TECHNOLOGIES SCHOLARSHIP

Through the financial support of Virox Technologies and their 2011 Partners Deb Canada, Diversey (JohnsonDiversey), Steris and Webber Training, 19 CHICA-Canada members were awarded scholarships to attend the 2011 CHICA National Education Conference in Toronto. CHICA-Canada and its members thank the 2011 Virox Technologies Partnership for their initiative to make the national education conference accessible to those who may not have otherwise been able to attend.

In partnership with CHICA-Canada, Virox Technologies will again provide scholarships to assist CHICA-Canada members with attending the 2012 National Education Conference in Saskatoon (June 16-21, 2012). The 2012 Virox Technologies Scholarship application will be available November 1, 2011 on *www.chica.org*.

VIROX™ TECHNOLOGIES INC.

CHICA-CANADA

The deadline for applications is January 31, 2012.

2012 CHAMPIONS OF INFECTION PREVENTION AND CONTROL

In collaboration with 3M Canada, CHICA-Canada has developed the prestigious Champions of Infection Prevention and Control Award. The 2011 recipients were Pat Piaskowski and Marion Yetman who received their awards at the 2011 conference. Applications are being accepted for the 2012 Champions of Infection Prevention and Control Award. This award will acknowledge the extraordinary accomplishments of the front line Champions of Infection Prevention and Control. The Award will recognize CHICA-Canada members who work beyond what is expected as part of their employment, tirelessly, and creatively, to reduce infection, raise awareness, and improve the health of Canadians. Awards will be presented at the 2012 National Education Conference in Saskatoon. The deadline for the 2011 nominations is **March 1, 2012**.

Award criteria and nomination form will be posted to *www.chica.org* by November 1, 2011.

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CHICA-CANADA

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NOTICE
PUBLIC HEALTH AGENCY OF CANADA

Call for nominees to the Steering Committee on Infection Prevention and Control Guidelines

The Public Health Agency of Canada (PHAC) is seeking to fill four voluntary positions on the Steering Committee on Infection Prevention and Control Guidelines; one infectious diseases physician, and three infection control professionals – one currently working in an acute care setting, one currently working in public health, and one currently working as a generalist in infection prevention and control.

The Steering Committee is a multi-disciplinary committee that serves as an advisory body to guide the development and maintenance of the Agency's Infection Prevention and Control Guidelines Series. In addition, it provides the agency with timely advice and recommendations on current and emerging infection prevention and control issues in settings where health care is provided.

Specific activities of the Steering Committee include advising on the review and revision of existing infection prevention and control guidelines and on the development of new guidance documents; providing line-by-line review of the guidelines in revision and other documents as required; advising on the development of educational strategies and tools to accompany the guidelines as required; engaging in discussion with provincial and territorial experts to facilitate the development and implementation of infection control guidelines and policy considerations; and participating in the ad hoc development of policies, guiding documents and other publications regarding infection prevention and control as needed by PHAC.

Appointments will be for a term of up to four years and committee members are expected to participate in all Steering Committee activities, serve on at least one guideline development working group and attend the annual Steering Committee meeting. Travel expenses and accommodation for the Steering Committee meetings are covered by PHAC, in accordance with Treasury Board policies and directives.

If you believe you have the qualifications and are interested in being considered for an appointed position to the Steering Committee on Infection Prevention and Control Guidelines, please forward your CV along with a cover letter by **October 31, 2011** to Ms. Kathy Dunn, Manager, Infection Prevention and Control Program at *kathleen.dunn@phac-aspc.gc.ca*.

All applications will be reviewed by PHAC in consultation with the Chair of the Steering Committee on Infection Prevention and Control Guidelines in accordance with selection criteria, membership expertise, and representation required for current and future guidance documents in development.

This journal would not be possible without the advertising support of the following companies and organizations. Please think of them when you require a product or service. You can also access the electronic version at *www.chica.org*.

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