

# The Canadian Journal of **INFECTION CONTROL**

## Revue canadienne de **PRÉVENTION DES INFECTIONS**

The official journal of Infection Prevention and Control Canada • Prévention et contrôle des infections Canada

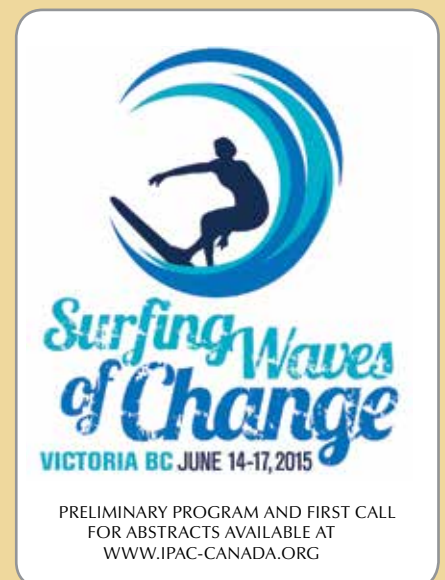
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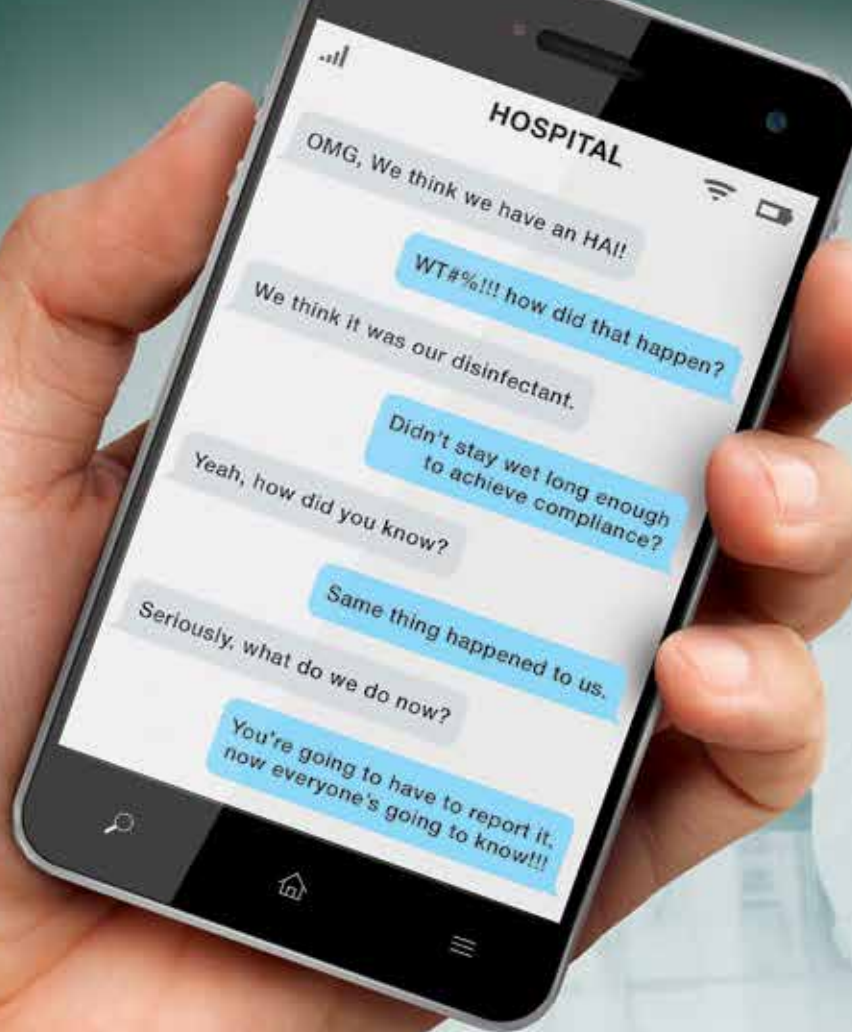
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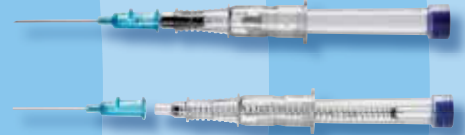
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# The Canadian Journal of INFECTION CONTROL

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The official journal of Infection Prevention and Control Canada • Prévention et contrôle des infections Canada

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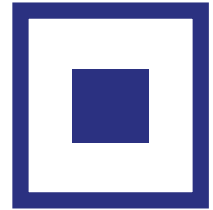
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## Transitions

**F**rom Pat Piaskowski: As I approach retirement and the end of my term as *CJIC* Editor in Chief, I have taken the time to reflect on the past 13 years.

Taking on the role of *CJIC* Editor in Chief was a new and exciting challenge to work with the IPAC Canada Editorial Board, IPAC Canada Executive Director Gerry Hansen, and the great staff at Craig Kelman and Associates. Most importantly, this role offered the opportunity to work with IPAC Canada members and authors across Canada and around the world. This has truly demonstrated the global reach of *CJIC* and the similarities and the differences in infection prevention and control (IPAC) practices and issues.

Things have changed in IPAC but have also remained the same. The organisms

have changed along with the challenges in preventing and controlling them, but what remains the same is the incredible tenacity, creativity and courage of infection control professionals who deal with these challenges. The quality manuscripts in past and present issues of *CJIC* demonstrate this on a regular basis.

It has been a true pleasure to be a part of *CJIC* evolving and improving over time and now it is time to hand over the baton to a new Editor in Chief who in turn will continue the progress.

**From Chingiz Amirov:** I look forward to taking on the role of *CJIC* Editor in Chief, starting September 1, 2014 and working with the enthusiastic journal team. I would like to thank Pat for her tremendous contributions to Canada's foremost infection prevention and control

scientific periodical. Pat has done an outstanding job during her tenure at *CJIC*. I am taking over a journal in great shape and with excellent perspectives for further development.

*CJIC* has a solid foundation on which to build and achieve new heights. We have a growing pipeline of manuscript submissions, increasing quality of publications, and a steady revenue stream. Together with the expert members of the Editorial Board, supportive publisher, and IPAC Canada, we will outline a roadmap for *CJIC*'s development for the next three to five years. This roadmap will be aligned with IPAC Canada's Strategic Plan and will list key developmental milestones to be achieved. This is an exciting journey, and I look forward to getting started. ✳

"It has been a true pleasure to be a part of *CJIC* evolving and improving over time and now it is time to hand over the baton to a new Editor in Chief who in turn will continue the progress."



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# Influences on family physician antibiotic prescribing for uncomplicated urinary tract infections

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## ABSTRACT

### Objective

Suboptimal antibiotic prescribing for urinary tract infections (UTIs) contributes to antimicrobial resistance, resulting in decreased antibiotic efficacy, prolonged patient morbidity, and increased health-care costs. Identifying factors which influence inappropriate antibiotic prescribing will help to develop programs to improve treatment of UTIs.

### Methods

As part of an educational program to improve the treatment of UTIs, family physicians in southeastern Ontario completed an online survey which assessed demographic and practice setting information, treatment of six patient-based UTI scenarios, continuing education sources and system and patient-specific influences on prescribing for UTIs.

### Results

58 physicians completed the survey portion of the educational program. In the UTI scenarios, only 25.9% (15 of 58) of respondents appropriately treated a UTI in pregnancy with cephalexin or nitrofurantoin. 70.7% (41 of 58) of respondents appropriately managed a case of asymptomatic bacteruria and 62.1% (36 of 58) treated a TMP/SMX resistant mild pyelonephritis with a fluoroquinolone. Patients having frequent UTIs and patients self-identifying symptoms as similar to past UTIs were moderately or very influential in the initiation of empiric therapy in 66.7% (38 of 57) and 56.9% (33 of 58) of respondents respectively. Antibiotic allergies, urine culture and sensitivities, and patient co-morbidities were moderately or very influential in the selection of antibiotics in 98.3% (57 of 58), 94.8% (55 of 58), and 87.7% (50 of 57) of respondents respectively.

### Conclusion

Areas of inappropriate prescribing were identified along with factors which influence the initiation and selection of antibiotics for UTIs. Increasing physician awareness of these areas using targeted educational interventions may reduce inappropriate prescribing.

## INTRODUCTION

Urinary tract infections (UTIs) are commonly seen in family practice and suboptimal antibiotic prescribing for UTIs is a worldwide problem (1-3). Inappropriate prescribing for UTIs contributes to antimicrobial resistance (4-5), decreased antibiotic efficacy (5-6), prolonged patient morbidity (6-7), and increased healthcare costs (6-8).

Few studies have examined factors which influence antibiotic decisions for community acquired UTIs (4,9). The treatment of UTIs and probable influences on antibiotic decisions for UTIs in the community setting were assessed. The study will aid in the development of interventions to improve antibiotic treatment of UTIs and potentially decrease antimicrobial resistance and associated healthcare costs.

## METHODS

The Balanced Antibiotic Selection in Cystitis (BASIC) educational program involved physicians who practiced family medicine in southeastern Ontario, worked at least three days per week in the community, and did not limit their practice to a certain area (e.g., psychotherapy). In 2011, an online survey covering a wide range of factors thought to influence antibiotic prescribing was part of the educational program (<https://www.research.net/s/UTI>). The survey was pilot tested by six family physicians. Demographic and practice setting information such as Canadian

College of Family Physicians (CCFP) certification, practice type, involvement in student training, and percentage of UTIs treated empirically with antibiotic therapy were collected. The influence of patient-related factors, such as requesting antibiotics and fear of patient complaints and system-related factors, such as lack of timely laboratory services were examined. Satisfaction with current antibiotic knowledge, sources for continuing education and non-antimicrobial recommendations were also assessed.

The survey included six scenarios depicting various UTI presentations followed by nine antibiotic and three non-antibiotic treatment choices (analgesics, hydration, cranberry juice or tablets), as well as the options "Do not treat at this time" and "Other antimicrobial." Physicians could indicate multiple treatment options. Respondents' antibiotic recommendations were compared to the recommendations of the Ontario Anti-infective Guidelines for Community-acquired Infections (10).

Physicians were contacted by mail and addresses were obtained from the College of Physicians and Surgeons of Ontario member database. Second and third invitations to participate were mailed to non-responders at four-week intervals. The Continuing Health Education Department at Queen's University awarded CCFP education credits to participants.

## RESULTS

58 family physicians participated in the BASIC educational program from a pool of 413 physicians who potentially met the eligibility requirements to participate in the BASIC educational program. Participants had a mean age of 47.3 (SD 11.0) years and practiced family medicine for 17.6 (SD 11.4) years. Most respondents had CCFP certification (48 of 58, 82.8%) and were involved in teaching medical students (39 of 58, 67.2%). The majority of respondents practiced in a partnership or group setting (45 of 57, 77.6%) and 13.8% (8 of 58) were in solo practice. Physicians saw 24.9 (SD 7.7) patients per day, and encountered 4.6 (SD 4.3) patients per week with a UTI. Physicians reported initiating empiric antibiotic therapy for UTIs 80.0% (SD 16.9%) of the time.

### Physician recommendations for patient-based UTI scenarios

Physicians generally made appropriate antibiotic treatment decisions for UTI scenarios, with a mean score of 4.3 (SD 1.6) out of 6 and a range of 3 to 6 (Table 1). In Case #1, potential acute uncomplicated UTI, most (53 of 58, 91.4%) respondents appropriately opted to not treat the patient or recommended non-antibiotic measures. In Case #2, UTI in pregnancy, only 25.9% (15 of 58) of respondents appropriately treated the patient with cephalexin or nitrofurantoin, while 69.0% (40 of 58) prescribed amoxicillin. In Case #3, asymptomatic bacteruria, 70.7% (41 of 58) appropriately opted to not treat or recommended non-antibiotic measures. Almost all (56 of 58, 96%) respondents appropriately recommended cephalexin, ciprofloxacin, or levofloxacin for a patient with persistent acute uncomplicated UTI resistant to TMP/SMX and amoxicillin in Case #4. In Case #5, acute uncomplicated UTI, 86.2% (50 of 58) of respondents appropriately prescribed TMP, TMP/SMX, or nitrofurantoin. In Case #6, mild pyelonephritis resistant to TMP/SMX, 62.1% (36 of 58) appropriately prescribed a fluoroquinolone.

### Patient and antibiotic characteristics influences on physicians' antibiotic prescribing

In deciding whether to initiate antibiotic therapy, two-thirds of respondents were moderately or very influenced by patients having frequent UTIs (38 of 57, 66.7%) and 56.9% (33 of 58) by patients self-identifying symptoms consistent with past UTIs (Table 2). Few respondents were influenced by patients requesting antibiotics (6 of 58, 10.3%) and fear of patient complaints (0 of 58, 0.0%).

When selecting which antibiotic to prescribe, almost all respondents were moderately or very influenced by patient allergies (57 of 58, 98.3%) (Table 2). A sizable portion of physicians were influenced by urine culture and sensitivity results (55 of 58, 94.8%) and patient co-morbidities (50 of 57, 87.7%).

### Non-antibiotic recommendations for UTIs

The majority of respondents (45 of 58, 77.6%) often or always recommended hydration therapy. A third of the respondents (19 of 58, 32.8%) often or always recommended cranberry juice or tablets. A fifth of respondents (13 of 58, 22.4%) often or always recommended non-prescription analgesics. No respondents often or always recommended complimentary alternative medicines such as Uva Ursi, Buchu, and Cantharis.

### Influences of information sources on antibiotic prescribing for UTIs

A strong majority of respondents (48 of 58, 82.8%) were moderately or very influenced by the Anti-infective Guidelines for Community-acquired Infections (10) and more than half (31 of 58, 53.4%) by clinical guidelines produced by medical sources (Table 3). One-half of respondents were influenced by university-sponsored CME programs (28 of 58, 48.3%), 43.1% (25 of 58) by professional meetings/conferences, and 42.9% (24 of 56) by peer-reviewed journals. No physicians reported being moderately or very influenced by pharmaceutical advertisements, pharmaceutical-company-sponsored presentations and meetings, and pharmaceutical sales representatives.

### Satisfaction with knowledge and treatment of UTIs

The majority of respondents were moderately or very satisfied with their knowledge of the interpretation of UTI lab reports (53 of 58, 91.4%), the effectiveness of various antibiotics for UTIs (46 of 57, 80.7%), which antibiotic to use for different UTIs (45 of 58, 77.6%), and the accuracy of clinical diagnosis of UTIs (44 of 58, 75.9%).

### Physician comments on inappropriate prescribing

Patient pressure was thought by 40% (22 of 55) of respondents to be an important factor when antimicrobials were inappropriately prescribed for UTIs in family practice. Time pressure was cited by one quarter of respondents (15 of 55, 27.3%).

**TABLE 1: Respondent Treatment Recommendations for Patient-based Scenarios**

| Case Summaries                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Treatment Options |            |            |               |                |               |              |         |              |                     |            |           |                         |                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------|------------|---------------|----------------|---------------|--------------|---------|--------------|---------------------|------------|-----------|-------------------------|---------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Amoxicillin       | Amoxi/Clav | Cephalexin | Ciprofloxacin | Nitrofurantoin | Norfloxacacin | Levofloxacin | TMP/SMX | Trimethoprim | Other Antimicrobial | Analgesics | Hydration | Cranberry Juice/Tablets | Do not treat at this time |
| <p><b>Case #1. Mild urinary symptoms, potential acute uncomplicated UTI:</b> Mary is a 35-year-old female who presents to her family physician with mild pain upon urination as her only symptom. She describes the pain as burning and rates it as 2 out of 10 on a pain scale. Urine dipstick tests for leukocyte esterase and nitrites are both negative. She is otherwise healthy with no drug allergies. Urine cultures have been ordered and are currently pending.</p>                                                                                                                                                                                                                                                                                                                                                    | 0                 | 0          | 0          | 0             | 4              | 0             | 0            | 1       | 0            | 0                   | 9          | 34        | 25                      | 37*                       |
| <p><b>Case #2. UTI in Pregnancy:</b> Jessica is a 29-year-old female who is 8 months pregnant. She presents to her family physician with a mild fever and burning pain upon urination, which started two days ago. A subsequent urine dipstick test is positive for leukocyte esterase and nitrites. A urine sample is sent off to the laboratory for culture. She is otherwise healthy with no drug allergies.</p>                                                                                                                                                                                                                                                                                                                                                                                                              | 40                | 0          | 8*         | 0             | 11*            | 0             | 0            | 1       | 1            | 0                   | 4          | 25        | 7                       | 0                         |
| <p><b>Case #3. Asymptomatic Bacteruria in a Female:</b> Martha is a 65-year-old retired teacher who visits her family physician for an annual physical examination. Martha suffered a stroke one year ago left her wheelchair bound. She lives with her daughter who helps her with dressing, eating, bathing and transfers – she has no problems with urine or bowel incontinence. She takes clopidogrel 75mg, hydrochlorothiazide 25mg daily and atorvastatin 20mg daily. The physical exam is unremarkable and the patient does not have any complaints or concerns. Routine bloodwork is ordered along with a urine sample for culture. Results of the urine culture revealed significant growth of E. coli, susceptible to all antibiotics. Urine dipstick tests for leukocyte esterase and nitrites are both negative.</p> | 5                 | 0          | 0          | 0             | 7              | 0             | 0            | 5       | 0            | 0                   | 1          | 16        | 9                       | 36*                       |
| <p><b>Case #4. Persistent Acute Uncomplicated UTI resistant to TMP/SMX and amoxicillin:</b> Linda is a 25-year-old university student who presents to her family physician with persistent urinary symptoms. Urine dipstick tests for leukocyte esterase and nitrites were positive, and she was subsequently diagnosed with an uncomplicated UTI five days ago and treated empirically with TMP/SMX. Subsequent urine culture results revealed significant growth of Proteus mirabilis, found to be resistant to amoxicillin and TMP/SMX and sensitive to cephalexin, ciprofloxacin and levofloxacin. She is otherwise healthy with no drug allergies.</p>                                                                                                                                                                      | 0                 | 0          | 23*        | 32*           | 2              | 2             | 5*           | 0       | 0            | 0                   | 6          | 23        | 9                       | 1                         |
| <p><b>Case #5. Acute Uncomplicated UTI:</b> Joanne is 59 years old and presents to her family physician with a three-day history of burning upon urination. She recognizes this as a urinary tract infection as she has experienced identical symptoms two years ago. She is otherwise healthy with no drug allergies. Urinalysis is positive for leukocytes and nitrites, and the urine culture is positive for E. coli that is sensitive to all antibiotics.</p>                                                                                                                                                                                                                                                                                                                                                               | 7                 | 0          | 1          | 1             | 35*            | 1             | 0            | 21*     | 2*           | 0                   | 8          | 26        | 12                      | 0                         |
| <p><b>Case #6. Mild Pyelonephritis in a Female:</b> Emily is a 45-year-old who presents to her family physician with a 3 day history of dysuria and urgency accompanied with new onset flank pain, chills, and a low grade fever. She does not report any nausea or vomiting. A urine dipstick test is positive for leukocyte esterase and nitrites. Urine cultures are positive for E.coli found to be resistant to TMP/SMX and susceptible to all other antibiotics. Her past medical history is unremarkable and she is otherwise healthy.</p>                                                                                                                                                                                                                                                                                | 5                 | 4          | 2          | 32*           | 12             | 5*            | 4*           | 0       | 0            | 0                   | 21         | 34        | 9                       | 0                         |

Amoxi/Clav: Amoxicillin/Clavulanate, TMP/SMX: Trimethoprim/Sulfamethoxazole

\* Refers to the most appropriate antibiotic choice(s) based on the recommendations made by the Anti-infective Guidelines for Community-acquired Infections<sup>14</sup>

## DISCUSSION

In general, family physicians in this study treated acute uncomplicated urinary tract infections appropriately. The proportion of physicians opting to treat with fluoroquinolones was low in comparison to two retrospective studies (1,11). There were specific situations; however, where UTIs were treated sub-optimally. Two-thirds of physicians elected to treat UTI in pregnancy with amoxicillin instead of cephalexin or nitrofurantoin, when amoxicillin is not recommended as a first line therapy unless urine sensitivity results confirm susceptibility (10,12). Almost a third of physicians initiated antibiotic therapy for asymptomatic bacteruria despite evidence showing no improvement in outcomes (10,13). A fifth of physicians selected nitrofurantoin for treating pyelonephritis, an antibiotic which demonstrates poor tissue penetration and is an inappropriate choice (14). Physicians' treatment practices for UTIs would benefit from educational interventions which target these identified problem areas.

Patients with frequent UTIs and who self-identified symptoms as a UTI were influential factors in physicians' decision to initiate empiric therapy. The accuracy of UTI self-diagnosis has been validated; women with recurrent cystitis could as accurately self-diagnose UTIs as physicians (16). Patient pressure, defined as an action aimed at altering physician behavior, was assessed by measuring the influence of patient requesting antibiotics and fear of patient complaints. These did not appear to be influential factors in the treatment of UTIs; however, a sizable minority of physicians made comments that patient pressure was an important factor in inappropriate prescribing. Patient pressure has been found in other studies to be a factor in inappropriate antibiotic prescribing, particularly in instances where clinical need is uncertain (17).

“Antibiotic allergies, urine culture results and patient-comorbidities were the most influential patient-specific factors in selecting therapy.”

**TABLE 2.** Patient and antibiotic characteristics influences on antibiotic decisions for UTIs

|                                                             | Not Influential | Slightly Influential | Somewhat Influential | Moderately Influential | Very Influential |
|-------------------------------------------------------------|-----------------|----------------------|----------------------|------------------------|------------------|
| <b>Influences on initiating empiric therapy</b>             |                 |                      |                      |                        |                  |
| Patient has frequent UTIs (n=57)                            | 1               | 5                    | 13                   | 25                     | 13               |
| Patient identifies symptoms as similar to a past UTI (n=58) | 0               | 6                    | 19                   | 25                     | 8                |
| Lack of timely laboratory services (n=58)                   | 19              | 11                   | 12                   | 10                     | 6                |
| To prevent secondary complications (n=58)                   | 7               | 16                   | 20                   | 13                     | 2                |
| Patient requests antibiotics (n=58)                         | 20              | 21                   | 11                   | 5                      | 1                |
| Fear of patient complaints (n=58)                           | 38              | 16                   | 4                    | 0                      | 0                |
| <b>Antibiotic-specific influences on selecting therapy</b>  |                 |                      |                      |                        |                  |
| Selection for drug resistant organisms (n=52)               | 1               | 4                    | 15                   | 14                     | 18               |
| Cost of Antibiotic (n=58)                                   | 0               | 9                    | 17                   | 21                     | 11               |
| Local Bacterial Resistance Patterns (n=58)                  | 8               | 9                    | 16                   | 14                     | 11               |
| Antibiotic with a short duration of therapy (n=58)          | 5               | 10                   | 16                   | 17                     | 10               |
| Antibiotic with broad spectrum of coverage (n=58)           | 9               | 11                   | 22                   | 9                      | 7                |
| <b>Patient-specific influences on selecting therapy</b>     |                 |                      |                      |                        |                  |
| Antibiotic Allergies (n=58)                                 | 0               | 0                    | 1                    | 2                      | 55               |
| Urine Culture and Sensitivity Results (n=58)                | 0               | 0                    | 3                    | 7                      | 48               |
| Patient Co-morbidities (n=57)                               | 0               | 1                    | 6                    | 22                     | 28               |
| Antibiotic Tolerance (non-allergic adverse effect) (n=53)   | 0               | 5                    | 11                   | 20                     | 17               |
| Patient's Insurance Coverage (n=58)                         | 7               | 10                   | 15                   | 11                     | 15               |
| Antibiotic was effective for patient before (n=58)          | 7               | 4                    | 19                   | 17                     | 11               |

Selection for drug-resistant organisms was the most important antibiotic-specific factor in selecting therapy for UTIs. This may be an indication of the increased awareness of the ecologic impact of inappropriate prescribing. Antibiotics with short durations of therapy and broad spectrums of coverage were reported by respondents to be the least influential factors in antibiotic selection which supports this interpretation.

Antibiotic allergies, urine culture results and patient-comorbidities were the most influential patient-specific

factors in selecting therapy. Factors which did not intrinsically affect antibiotic effectiveness (insurance coverage and past antibiotic effectiveness) were the least influential which supports the notion that physicians are utilizing appropriate clinical factors to guide antibiotic selection.

Medical information sources such as clinical guidelines published by medical sources and university-sponsored CME were reported as the most influential sources in guiding antibiotic use for UTIs while pharmaceutical sources were thought to have little influence. Interventions to address inappropriate prescribing for UTIs could be channeled most effectively to family physicians through medical and university sources.

A third of physicians recommended cranberry juice or tablets for the treatment of UTIs. Cranberries are reputed to be efficacious in the prevention of UTIs, but the effectiveness for treatment of UTIs is unproven (19).

**TABLE 3.** Influences of information sources on antibiotic prescribing for UTIs

|                                                                                      | Not Influential | Slightly Influential | Somewhat Influential | Moderately Influential | Very Influential |
|--------------------------------------------------------------------------------------|-----------------|----------------------|----------------------|------------------------|------------------|
| <b>Medical Sources</b>                                                               |                 |                      |                      |                        |                  |
| Anti-infective Guidelines for Community Acquired Infections in Ontario (n=58)        | 1               | 0                    | 9                    | 18                     | 30               |
| Clinical guidelines produced by medical sources (n=58)                               | 4               | 7                    | 16                   | 17                     | 14               |
| University-sponsored CME programs (n=58)                                             | 8               | 8                    | 14                   | 20                     | 8                |
| Peer-Reviewed Medical journals (n=56)                                                | 5               | 5                    | 22                   | 16                     | 8                |
| Medical texts (printed or electronic) (n=58)                                         | 9               | 14                   | 15                   | 13                     | 7                |
| Professional meetings/conferences (n=58)                                             | 4               | 12                   | 17                   | 19                     | 6                |
| Specialty consultations (n=58)                                                       | 7               | 11                   | 17                   | 18                     | 5                |
| Your peers (n=58)                                                                    | 6               | 15                   | 20                   | 13                     | 4                |
| Community pharmacists/Drug information centre newsletters (e.g. DIRC, LonDIS) (n=58) | 31              | 13                   | 8                    | 4                      | 2                |
| Hospital-sponsored rounds/presentations (n=58)                                       | 29              | 12                   | 7                    | 8                      | 2                |
| Compendium of Pharmaceutical Specialties (CPS) (n=58)                                | 21              | 20                   | 11                   | 6                      | 0                |
| Non Peer-Reviewed Medical newsletters (n=58)                                         | 36              | 13                   | 7                    | 2                      | 0                |
| <b>Pharmaceutical Sources</b>                                                        |                 |                      |                      |                        |                  |
| Pharmaceutical-company-sponsored presentations/meetings (n=58)                       | 36              | 14                   | 8                    | 0                      | 0                |
| Pharmaceutical company educational material (n=58)                                   | 37              | 17                   | 3                    | 1                      | 0                |
| Pharmaceutical advertisements (n=58)                                                 | 37              | 19                   | 2                    | 0                      | 0                |
| Pharmaceutical sales representatives (n=58)                                          | 40              | 16                   | 2                    | 0                      | 0                |

A social desirability response bias may have been present given the self-report nature of the survey. Respondents identities were known to the researchers and respondent responses may have been modulated as a result.

## CONCLUSION

Influences on family physician antibiotic prescribing for uncomplicated UTIs in the community setting were assessed using an online survey which included patient based scenarios. In general, the treatment of asymptomatic bacteruria, lack of awareness of local resistance patterns and antibiotic profiles were contributors to inappropriate prescribing. Frequent UTIs and patients self-identifying symptoms as similar to prior UTIs were most influential in the initiation of empiric antibiotic therapy. Patient allergies, co-morbidities and

urine culture results were most influential in the selection of antibiotics. Clinical guidelines and university-sponsored CME programs were the most influential sources on prescribing for UTIs. The utilization of trusted and influential educational sources could be reasonably expected to improve family physician antibiotic treatment for UTIs.

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# The prevalence of MRSA on inanimate objects in a hospital-based family medicine unit

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## ABSTRACT

### Introduction

The prevalence of hospital and community-acquired methicillin-resistant *Staphylococcus aureus* (MRSA) is on the rise (1,2).

### Methods

This was a cross-sectional prevalence study investigating MRSA on inanimate objects and was conducted in an urban academic family medicine unit in a tertiary care level hospital. Cultures were obtained twice, using sterile swabs, from 20 items in the family medicine unit that were frequently handled by both patients and staff.

### Results

Of the 40 samples collected, none were positive for MRSA growth.

### Conclusion

The 0% prevalence of MRSA suggests that it is not commonly found on inanimate objects in a hospital based family medicine practice. Transmission of MRSA from inanimate objects to patients in the family medicine unit appears to be unlikely. Results of our study indicate the importance of hand hygiene, as person-to-person transmission remains a more likely point of contact for MRSA (2).

### KEY WORDS:

Methicillin-resistant *Staphylococcus aureus*, family medicine, infection control, fomite, inanimate object, transmission, MRSA.

## INTRODUCTION

It has been well established that the prevalence of hospital and community-acquired types of methicillin-resistant *Staphylococcus aureus* (MRSA) is on the rise (1,2).

In the Canadian context the first report of CA-MRSA was in 1990 (3). Overall incidence of MRSA infection and colonization has increased seventeen-

fold in Canadian hospitals from 1995-2007 (4).

Current controversies exist in the literature and among family medicine physicians of the importance that should be placed specifically on CA-MRSA as an emerging pathogen in the community setting in terms of patients presenting to medical settings for care. The spread of MRSA to community settings has shifted the deadly hospital-bug to the home. A number of studies have examined this shift and shown increased rates of infection in paediatric populations, football players, and rugby players among others (5,6).

Evidence suggests that approximately one third of normal individuals carry the bacteria chronically in their anterior nares, 50% of the population are intermittent carriers and about 20% of people do not seem to become carriers (5).

A recent study in the United States of America found a prevalence of 2.5% MRSA on inanimate objects associated with a tertiary level Emergency Department (7). Our literature review found no research on the prevalence of MRSA on inanimate objects in a family medicine unit attached to a major hospital and we queried the prevalence that would be found.

## METHODOLOGY

This was a cross-sectional prevalence study investigating MRSA on inanimate objects and was conducted in an urban academic family medicine unit attached to a tertiary care level hospital. The department treats approximately 21,895 patients annually. Sterile swabs were taken from 20 items in the family medicine unit that are frequently handled by both patients and staff. Two iterations of swabbing were undertaken on two different days in January 2012 for a total of 40 swabs. The first was collected on a weekday and the second was collected over a weekend when the

unit was closed. The objects chosen to be swabbed were identified a priori and are listed in Table 1. Objects were chosen in relation to their frequent contact and exposure to medical practitioners and patients in both waiting areas and patient care areas.

All objects were swabbed in the same manner by the two investigators. Two drops of 0.9% normal saline were placed onto each item from sterile plastic containers. A sterile M40 Transystem™ swab (Copan, Italy) was used to spread the saline on the object and the swabs were then labelled with a unique identifier and description. All swabs were analyzed in the Regina Qu'appelle Health Region Laboratory. Trained laboratory staff screened the swabs for the presence of MRSA. Any isolates found were to be sent to the Saskatchewan Disease Control Laboratory for spa typing. This was chosen because it is more discriminatory than pulsed field gel electrophoresis but

still would allow us to assign isolates to the Canadian MRSA types if they were found.

A selective chromogenic medium used primarily for the isolation of MRSA was utilized. Room temperature agar was inoculated with the swabs and allowed to incubate at 35°C for 24 hours. At this time, the plates were examined for growth. If no growth was noted, plates were re-incubated for an additional 24 hours and re-examined.

Over the course of the month a total of 40 samples were taken. This was done in order to partially control for variation in the hygiene practices of staff working in the unit and to allow for differences in effectiveness of janitorial staff. No information about the length of time between use of the objects and swabbing is known.

This project was deemed to be exempt from the requirement for research ethical approval.

of cleaning and sanitation on the unit. Sound infection control and standard precautions are essential for limiting the spread of MRSA and other organisms. Negative results reinforce the importance of proper hand hygiene and sanitation protocols.

## RESEARCH

Previous research into this area is limited. There have been many studies examining the prevalence of patients colonized with MRSA, but very few quantifying MRSA-contaminated objects. A study in California in 2011 examining the prevalence of MRSA on inanimate objects in a busy emergency department found the organism in 2.5% of samples taken (7). Other studies have looked into the prevalence of MRSA in Portuguese public buses (11), a UK animal hospital (12), and a student exercise facility in Texas (13). Until now, no one has taken samples from a hospital-based family medicine unit.

It is important for additional studies to investigate the prevalence of MRSA and other pathogens found in different departments of the hospital in order to better equip hospitals for infection control. The potential areas of contamination need to be identified before they can be addressed. Future research should be carried out in multiple centres and include how frequently objects are handled as well as the elapsed time between cleaning, handling, and swabbing. This introductory study is a beginning step into the identification and control of pathogens in the hospital-based family medicine unit.

## LIMITATIONS

There are limitations to this study, the first being limited sample size. A convenience sample of only 20 objects was taken which does not represent all the potential fomites in the family medicine unit. There may have been objects that were contaminated but were not swabbed and perhaps a greater number of samples would have yielded different

**TABLE 1. List of objects swabbed**

|                                         |
|-----------------------------------------|
| Entrance door handle                    |
| Water fountain handle                   |
| Waiting room chair handle               |
| Procedure room chair handle             |
| Children's play area                    |
| Patient washroom door handle            |
| Patient sink handles                    |
| Front desk surface                      |
| Blood pressure cuff                     |
| Examination room inside door handle (2) |
| Otoscope                                |
| Treatment room bed                      |
| Patient weigh scale                     |
| Exam room entrance handle               |
| Examination room patient bench          |
| Chair handle in exam room               |
| Computer keyboard and mouse             |
| Phone                                   |
| Hand sanitization station               |

## RESULTS

Of the 40 samples collected, none were positive for MRSA growth. The prevalence of MRSA in this study was therefore 0% among the samples obtained.

## DISCUSSION

Although MRSA is understood to be prevalent in hospitals, it was not found in the hospital-based family medicine unit. This was surprising, as environmental surfaces may play an important role in the transmission of MRSA (8). As well, it has been shown that MRSA is frequently found on the gloves of nurses touching surfaces near colonized patients (9,10). No studies have thus far been undertaken in a hospital-based family medicine unit, which means there is no other existing study to which to directly compare these results.

It is possible that the absence of MRSA in the family medicine unit is an indication of the high standards

*“The spread of MRSA to community settings has shifted the deadly hospital-bug to the home.”*

“The results of our study indicate that it is vital to emphasize the importance of hand hygiene, as person-to-person transmission remains a much more likely point of contact for MRSA.”

results. The swabs were taken on two separate days and at random times. It is possible that differences between the cleaning habits of the staff working at different times may have altered the results. As well, the temporal relationship between when each object was handled, cleaned, and swabbed was not quantified which could have had an impact on results. In addition, both sample collections took place when the unit was closed: once on a weekday evening, and once on a weekend. It is unclear how long MRSA is able to survive on surfaces (8); perhaps taking samples during the day when the unit was full of patients would have affected the outcome.

The swabs were collected by two individuals following the same sampling technique. Greater consistency could perhaps have been achieved by employing only one sampler. Normal saline was added to the samples before swabbing. This follows institutional laboratory guidelines, but the positive or negative effect of the normal saline on the yield of MRSA cultures is unknown. The laboratory followed strict standards in the treating of the cultures which limited the amount of processing errors.

## CONCLUSION

Although prevalent in hospitals and patients, the presence of MRSA on inanimate objects in a family medicine unit has not been demonstrated. The prevalence of 0% MRSA suggests that this antibiotic resistant pathogen is not commonly found on inanimate objects in a hospital based family medicine practice. It also suggests that the current cleaning practices in our site are adequate. Transmission of MRSA from inanimate objects to patients in the family medicine unit appears to

be unlikely. The results of our study indicate that it is vital to emphasize the importance of hand hygiene, as person-to-person transmission remains a much more likely point of contact for MRSA (2).

## ACKNOWLEDGEMENTS

Paul N. Levett, PhD, (D)ABMM, FCCM, FAAM, Assistant Clinical Director, Saskatchewan Disease Control Laboratory; Johan Delport, RQHR, RQHR Library Staff, RQHR Laboratory Staff.

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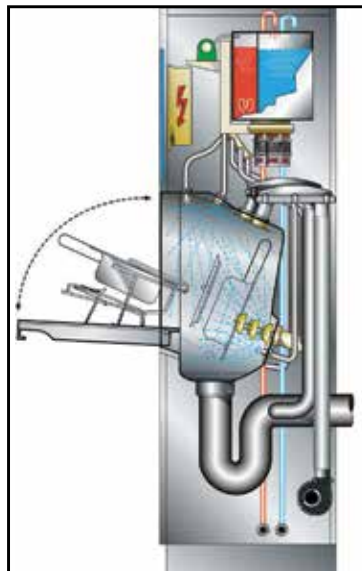
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# Cosmetic fractional laser **use and infection control**

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## ABSTRACT

With an aging population comes the search for the fountain of youth. Great advancement has been made in the cosmetic and dermatological industries including new advanced forms of minimally invasive cosmetic procedures. Laser skin resurfacing is one form of MICP, and can treat a variety of conditions including scarring, wrinkles and pigment discoloration. However, laser skin treatment also brings to light issues of safety, infection control and appropriate medical delegation for professionals using this equipment. With the potential for exposure to infection from using laser-based devices, it is important that infection control professionals understand infection control procedures with respect to the equipment. Further appropriate attention should be given to the delegation of cosmetic laser equipment to trained professionals. This article will explore infection control in the cosmetic laser practice and highlights the importance of appropriate medical delegation.

### KEY WORDS:

Infection control, laser fractionation, medical delegation

Cosmetic procedures are increasingly being used to hide unwanted scars and blemishes in order to rejuvenate skin for those seeking the fountain of youth or suffering from self-esteem problems. Laser skin treatment is considered a part of a spectrum of treatments known as, “Minimally Invasive Cosmetic Procedures” (MICP), which also includes

cosmetic procedures such as botox and laser hair treatment (1). This article focuses specifically on cosmetic laser treatments used to resurfacing skin. Infection control best practices have been created with lower frequency lasers used to remove unwanted hair but do not address cosmetic fractional lasers. Of particular concern with cosmetic laser skin treatments are best practices within the area of infection control. However, these procedures may also pose unwanted side effects, which may be temporary or in some cases require further medical treatment (2).

Historically, ablative lasers were used which employed the use of carbon dioxide CO<sub>2</sub>, and a laser wavelength of 16900 nm which targeted water within lipid cells located in areas where “wrinkled” skin or trauma from other operations occurred (3, 4). The ablative laser was typically used to treat signs of aging including wrinkles and blemishes. As the technology improved CO<sub>2</sub> lasers were introduced which have a lower wavelength of 10600um, and ultimately posed less side effects including scarring, and burning. Therefore CO<sub>2</sub> lasers allow for cosmetic procedures to be performed with minimal impact on melanin and haemoglobin (5, 6). This particular laser is currently used in scarring treatment by dermatologists and plastic surgery specialists and further has been used even in cases of vitiligo and other skin disorders (7).

More recent technological developments in laser treatment of skin include using ablative/non-ablative fractional based technology. This technology was

“Of particular concern with cosmetic laser skin treatments are best practices within the area of infection control.”

“While there are many lasers currently on the market available for use by medical professionals, the concept of medical delegation of equipment to technicians and other beauty-based professionals is contentious.”

introduced to the market and purported to have even fewer side effects and functions using an erbium-doped yttrium aluminum garnet (1000-1500 nm wavelength Er:YAG). This laser has provided dermatologists and delegated medical professionals with the ability to use lower wavelength frequency lasers on patients, with even less side effects than other lasers. As such, limited damage has been observed in clinical studies to the superficial skin. Depth of penetration of epithelium was 1-3 $\mu$ m/cm<sup>3</sup> for this particular laser.

While there are many lasers currently on the market available for use by medical professionals, the concept of medical delegation of equipment to technicians and other beauty-based professionals is contentious. The training for these particular devices warrants special education and should only be performed by trained professionals (1). While side effects may be low for both ablative CO<sub>2</sub> and fractional ablative treatments studies have shown that three to four percent of patients may experience conditions such as herpes zoster outbreaks (1.07%), contact dermatitis (4.6%) and acne eruption (3.48%) and erythema (1.07%)(2).

Current dermatological recommendations for patients with herpes include antiviral and antibacterial prophylaxis until re-epithelialisation is complete (typically two weeks). Further for prevention of secondary Candida or fungal infections physicians may prescribe antifungal medication (3). Postoperative care should include care of edema, exudates and skin sloughing. Aggressive cases of methicillin-resistant *Staphylococcus aureus* (MRSA) have also been noted post procedure (8). Dressings

should be accompanied with either corticosteroid administration or topical antibiotics. Petrolatum ointments are preferred.

With new technology comes the challenge of regulation, delegation and mitigation of risk. In a recent statement the Canadian Dermatology Association strongly encouraged that medically delegated staff and those with sufficient training be able to purchase and use such equipment (9). Further to this, qualified dermatologists should administer the machinery and follow strict pre/post operative care, since there may be bacterial and viral infection of the skin. Education and consultation should include information about skin type and a detailed screening for disease, including detailed questionnaires (10).

New medical recommendations for provincial governments should be aimed at protecting the public with respect to these types of minimally invasive cosmetic procedures. Current regulations and guidelines by federal and provincial authorities require modification to address such technologies and infection control procedures accordingly. This includes Health Canada's (Public Health Agency of Canada) documentation on laser safety, and provincial best practices guidelines. Further standard guidelines on delegation and training institutions as well as certified courses should be included. In light of the potential for infectious disease and pre/post operative administration of medications, policies should be in place for medical delegation if not being administered by a physician.

Special thanks to Linda Cleroux and the Infection Control team of the Eastern Ontario Health Unit.

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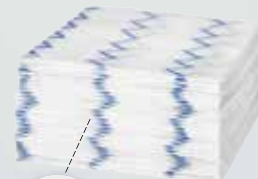
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Bruce Gamage, RN, BSN, CIC

President, IPAC Canada

## Antibiotic resistance: We have met the enemy and he is us...

**M**ost of the antibiotics we use today, from penicillins to carbapenems, were originally created by microbes living in soil. For billions of years these microbes have been waging war on each other – soil microbes producing antibiotics and bacteria evolving to become resistant. Humans became involved in this battle with the discovery of penicillin by Fleming in 1928 and moving into industrial-scale production in the 1940s. Since that time, we have been caught in a race against evolution; new antibiotics are developed and, within a few years of them coming to market, bacteria begin to develop resistance.

Some countries have been more successful in the battle (e.g., Scandinavia and the Netherlands) through enacting strict policies that control the use of antibiotics. In most countries, the use of antibiotics is poorly controlled and resistance rates continue to climb. Many organizations have called for stricter controls, but despite this, unregulated use of antibiotics continues on a massive scale.

In North America, it is estimated that nearly 80% of the antibiotics used are in farm animals. The use of antibiotics for whatever purpose over time creates an environment that allows drug-resistant strains of bacteria to flourish. Despite wide

acceptance of this principle, enormous quantities of antibiotics are routinely fed to livestock and poultry, not to treat disease, but to promote faster growth and prevent infections related to raising animals in overcrowded, unsanitary conditions. Thirty years after the Food and Drug Administration in the US warned that the use of antibiotics in agriculture threatens human health, the majority of these drugs continue to be routinely given to animals that are not sick.

Practitioners in both human and animal health, including physicians, pharmacists, veterinarians and farmers contribute to the overuse of antibiotics. All have a part to play in using them more wisely. If we continue to overuse antibiotics, more and more people will suffer from serious infections for which these vital drugs no longer offer effective treatment. According to the World Health Organization (WHO) this is no longer a future threat – it is happening now! In order to curtail this disaster we need to act aggressively to stop the needless use of antibiotics in both agriculture and human medicine. However, changing practices in any setting is challenging. The governments of countries that are major producers and consumers of antibiotics need to introduce legislation and regulations that promote improved practice.

The WHO, CDC Atlanta, the Public Health Agency of Canada, and scientists from around the world are now calling for immediate action to address this issue. This is not new. In the 25 years that I have been working in healthcare, we have known about this problem, but so little has been done. We have been relying on people to do the right thing. That hasn't worked.

IPAC-Canada represents over 1600 healthcare professionals involved in the field of infection prevention and control. Collectively we constitute a strong political voice calling for both our federal and provincial politicians to take strong action to address the misuse of antibiotics.

As a first step, the use of antibiotics as growth promoters in animal husbandry must be banned. As with human medicine, antibiotics should only be used in animals to treat bacterial infections. Antibiotics should only be administered to an animal under the supervision of a veterinarian. Legislative loopholes that allow the unrestricted importation and use of antibiotics by farmers need to be closed.

I encourage each member of IPAC-Canada to send a letter to their federal Member of Parliament and provincial representative requesting that direct action be taken to change legislation and regulations that allow these practices. ✳

"I encourage each member of IPAC-Canada to send a letter to their federal Member of Parliament and provincial representative."

A template for these letters is available for use by our members at [www.ipac-canada.org](http://www.ipac-canada.org) (Headlines).



Bruce Gamage, RN, BSN, CIC

Président, IPAC Canada

## Résistance aux antibiotiques : l'ennemi... c'est nous!

La plupart des antibiotiques en usage aujourd'hui, de la pénicilline aux carbapénèmes, ont été créés par des microbes qui vivent dans le sol. Depuis des milliards d'années, ces microbes se font la guerre : ceux qui peuplent le sol produisent des antibiotiques tandis que les bactéries évoluent de manière à leur résister sans cesse. L'être humain est apparu sur le champ de bataille en 1928, quand Fleming a découvert la pénicilline, produite à l'échelle industrielle dès les années 1940. Puis, nous nous sommes engagés dans une course contre l'évolution : nous mettons au point de nouveaux antibiotiques, auxquels les bactéries commencent à résister quelques années à peine après leur arrivée sur le marché.

Certains pays (Scandinavie et Pays-Bas) comptent plus de victoires que d'autres, grâce à des politiques rigoureuses sur l'usage des antibiotiques. Presque partout, en revanche, leur emploi est peu surveillé et la résistance se développe à un rythme croissant. Nombre d'organisations appellent à des contrôles plus stricts,

mais en vain : l'usage non réglementé se poursuit à grande échelle.

On estime que 80 p. 100 des antibiotiques utilisés en Amérique du Nord sont destinés aux animaux d'élevage. Mais peu importe le type d'usage, s'il est continu, il crée avec le temps les conditions propices à la prolifération de bactéries résistantes. C'est un principe bien connu, mais on n'en continue pas moins d'administrer régulièrement d'énormes quantités d'antibiotiques au bétail et à la volaille, non pas pour traiter des maladies, mais pour accélérer la croissance et prévenir les infections qui menacent les animaux élevés dans des milieux surpeuplés et de mauvaises conditions sanitaires. Il y a trente ans déjà, la Food and Drug Administration des États-Unis avertissait de la menace que représente l'usage des antibiotiques en agriculture pour la santé humaine. Or, la majeure partie de ces produits sont encore couramment administrés à des animaux qui ne sont pas malades.

Les praticiens de la santé humaine et animale – médecins, pharmaciens, vétérinaires et agriculteurs – contribuent

à l'emploi abusif des antibiotiques. Tous ont donc un rôle à jouer pour assurer un usage plus modéré, sans quoi nous serons toujours plus nombreux à souffrir d'infections graves, contre lesquelles ces médicaments essentiels n'offriront plus de traitement efficace. Selon l'Organisation mondiale de la santé (OMS), ce n'est plus une menace, mais une réalité! Pour circonscrire le désastre, il faut agir avec vigueur et mettre fin à l'usage inutile d'antibiotiques en agriculture et en médecine. Peu importe le contexte, il n'est jamais facile de changer une pratique établie. Il faut que les gouvernements des pays où il se produit et se consomme le plus d'antibiotiques légifèrent à cette fin.

L'OMS, le Center for Disease Control des États-Unis, l'Agence de la santé publique du Canada et des scientifiques de partout au monde demandent une intervention immédiate. Hélas, ce n'est pas nouveau. Le problème est connu depuis mon arrivée dans le domaine de la santé il y a 25 ans, mais les mesures prises ne suffisent pas, tant s'en faut. Nous attendons des gens qu'ils fassent le nécessaire... sans succès.



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Prévention et contrôle des infections (PCI) Canada représente plus de 1600 professionnels de la santé spécialistes du domaine. Ensemble, nos voix sont assez fortes pour convaincre les gouvernements fédéral et provinciaux de prendre des mesures strictes pour faire cesser l'usage des antibiotiques à mauvais escient.

Pour commencer, il est impératif d'en interdire l'usage comme stimulateur de croissance dans les élevages. Tout comme en santé humaine, les antibiotiques ne

devraient être prescrits que comme traitement antibactérien et ne devraient être administrés aux animaux que sur ordonnance d'un vétérinaire. Il faut en outre colmater les brèches législatives qui permettent leur importation et leur utilisation par les agriculteurs.

J'invite donc tous les membres de PCI Canada à solliciter de leurs députés fédéraux et provinciaux une intervention directe pour que soient modifiés les lois et les règlements qui permettent ces pratiques. ❁

Nos membres trouveront un modèle de lettre sur notre site Web, à l'adresse [www.ipac-canada.org](http://www.ipac-canada.org), sous l'onglet « Headlines »

## AMMI Canada Awards

The Association of Medical Microbiology and Infectious Disease (AMMI) Canada is pleased to announce the recipients of the 2013 AMMI Canada Awards, presented during the AMMI Canada – CACMID Annual Conference in April 2014.

**Dr. Anita Rachlis** of Toronto received the AMMI Canada Distinguished Service Award in recognition of her three decades of contributions to the care of patients with HIV infection and the education of students and colleagues in the field of infectious diseases. Dr. Rachlis' accomplishments include her involvement in AMMI Canada as the first Chair of the Education/Continuing Professional Development Committee, member of the Canadian Institutes of Health Research HIV/AIDS Research Advisory Committee, Canadian HIV Trials Network investigator, and recognized teaching excellence.

**Dr. Donald Low** (1945-2013) of Toronto received the 2013 AMMI Canada Lifetime Achievement Award for accomplishments in microbiology and infectious diseases. He was recognized for his research on antimicrobial-resistant pneumococci and invasive group A streptococci, with more than 380 published papers. He was Medical Director at the Ontario Public Health Laboratory and Microbiologist-in-Chief for the Department of Microbiology at Mount Sinai Hospital and University Health Network in Toronto. He was known for his public role in fighting the SARS epidemic. Dr. Low served as President of the Canadian Infectious Disease Society, a predecessor to AMMI Canada.

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Gerry Hansen, BA

Executive Director, IPAC Canada

## Canadian Anti Spam Legislation (CASL) and how it affects IPAC Canada

Canada's Anti Spam Legislation came into effect July 1, 2014. It is designed to prohibit the sending of unsolicited commercial electronic messages to recipients who have not consented to being sent such messages. The purpose is to encourage participation in commercial activity while providing adequate safeguards against unwanted spam. Commercial messages might include offers to purchase or sell goods and products; offers to provide a business, investment or gaming opportunity; or advertisements and promotions.

The sender must obtain either express consent (opt-in) or implied consent from the recipient before a message is sent. Implied consent may apply where there is an existing business relationship, approved existing non-business relationship (e.g., a not for profit organization such as IPAC Canada), the recipient has previously published an email address or provided an e-mail address to the sender, and the message is relevant to the recipient's business, role, function or duties.

In addition, messages must contain an unsubscribe (opt-out) mechanism that will allow the recipient to opt out from receiving further messages and specifying where this indication can be sent. You will note that the opt-out or unsubscribe process is included with IPAC Canada e-broadcasts, the monthly e-newsletter, on the membership application form, and on conference registration forms, both paper and online.

There are various requirements prescribed for identification of the sender and person/company on whose behalf the message is sent. These are in subsection 6(2) of the Act and include information that identifies the sender

and person/company on whose behalf the message is being sent, information enabling the recipient to readily contact one of these persons, and the unsubscribe mechanism.

As an example, recent e-broadcasts sent out by IPAC Canada on behalf of another person or company include the Multiview message re the availability of complimentary recorded sessions for 2014 conference delegates, and information around Stop! Clean Your Hands Day and Patient Safety Week hosted by the Canadian Patient Safety Institute. The monthly IPAC Canada e-newsletter is sent out by Craig Kelman & Associates, the publisher of the journal and the newsletter.

It is important for members to know that messages sent out by IPAC Canada or its authorized partners are selected based on their transfer of knowledge around guidelines or services that could inform or enhance practice. As mentioned above, typically these messages include:

- Announcements specific to IPAC Canada business including conferences
- The monthly e-newsletter
- Request for participation in an IPAC Chat question
- Surveys or other information that have been deemed to be appropriate to the practice of infection prevention and control, such as the Certification Board of Infection Control
- Announcement of standards and guidelines ready for review by the profession or finalized and posted,

such as those developed by the Public Health Agency of Canada or the Canadian Standards Association

- Announcements of education opportunities or events hosted by other organizations, such as the Canadian Patient Safety Institute or the World Health Organization

There are instances where our industry partners have access to member email addresses. These opportunities are monitored and part of our governance policies. Corporate Members of IPAC Canada have access to one list per year that includes both mail and email addresses. (The list of current Corporate Members is contained on the masthead of this journal.) Conference sponsors and exhibitors have access to a preconference listing of attendees and a post conference listing of attendees. One email may be sent out preconference and one email post conference. In all authorized cases, the vendor must also comply with the CASL requirements.

The purpose of implementation of the CASL is not to prohibit business but to provide information and opportunities relevant to the profession in an unobtrusive and satisfactory manner. If you have any concerns about our anti-spam policies, please do contact me at any time.

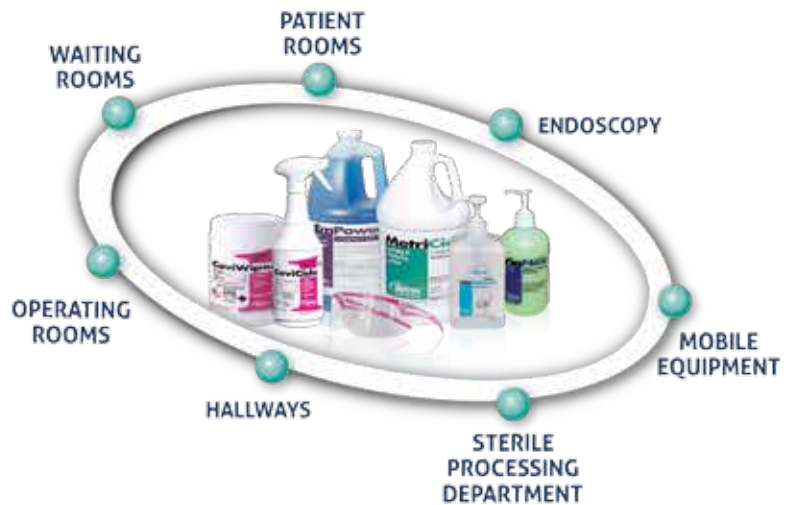
#### References:

1. Brian Bowman, Pitblado Law, Winnipeg (November 2012)
2. Canadian Society of Association Executives ([www.csae.com](http://www.csae.com))

The 2013 CHICA Canada Annual Report (English and French) has been posted to [http://www.ipac-canada.org/inside\\_annual\\_report.php](http://www.ipac-canada.org/inside_annual_report.php)

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# Bring in a new member

## Win a complimentary 2015-2016 membership

Membership has its benefits. The IPAC Canada website ([www.ipac-canada.org](http://www.ipac-canada.org)) has so much information on the benefits of being a member. The member resource guide for finding other IPAC Canada members, links to infection control sites, audit tools ... the list is extensive. Tell another infection prevention and control professional (ICP), tell an ID physician, tell your Medical Laboratory Technologist, tell

Environmental Services, tell EMS, tell your designate, and tell your director about the benefits of joining our national organization.

If that person joins IPAC by May 1, 2015, both you and the new IPAC Canada member will be eligible to win a complimentary 2015-2016 membership (value \$202). You are eligible for the draw with every new IPAC Canada member that you get to sign up. Should the winning

members have already paid their 2015-2016 membership, a refund will be made to the person or the institution which has paid the fee.

Send in this form no later than May 1, 2015. An announcement of the winners of this offer will be made at the 2014 conference. Membership applications can be found at [http://www.ipac-canada.org/about\\_join.php](http://www.ipac-canada.org/about_join.php).\*

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## CIC Graduates

New and recertified CICs from a variety of healthcare settings have spent hours studying, digesting facts, and reading current literature. This information and life experience, along with successful completion of the CIC<sup>®</sup> examination, ensure the infection prevention and control professional deserves to place a CIC<sup>®</sup> after their name.

Congratulations to the following January-April 2013 graduates who were inadvertently missed in previous announcements.

|                                          |                     |                                            |                   |                                    |                    |
|------------------------------------------|---------------------|--------------------------------------------|-------------------|------------------------------------|--------------------|
| Candace Friedman, MT, BS, MPH, CIC       | Ann Arbor, MI       | Manjiti K. Blake, BN MHS GNC(C) CIC        | Winnipeg, MB      | Louise V. Collins, CIC             | Toronto, ON        |
| Craig H. Gilliam, BSMT, CIC              | Little Rock, AR     | Jennifer Blue, CIC                         | Burlington, ON    | Ruth E. Collins, RN, CIC           | Mississauga, ON    |
| Salah Qutaishat, PhD, CIC                | Marshfield, WI      | Seema Boodoosingh, CIC                     | Etobicoke, ON     | Sandra G. Comand, CIC, MLT, ART    | Ancaster, ON       |
| Linda L. Schuh, RN, BSN, CIC             | Longview, WA        | Nora L. Boyd, RN, Med, CIC                 | Windsor, ON       | Sharon Connell, CIC                | Little Britain, ON |
| Linda D. Rothwell, RN, BN, CIC           | Hamilton            | Laurie D. Boyer, CIC                       | North Bay, ON     | Susan A. Cooper, MLT, CIC          | Kingston, ON       |
| Maureen Anne Acomb, CIC                  | Markham, ON         | Joann P. Braithwaite, RN, BAA, CPHI, CIC   | Toronto, ON       | Melody C. Cordoviz, CIC            | Edmonton, AB       |
| Nalini Agnihotri, CIC                    | Burlington, ON      | Faye E. Brekelmans, CIC                    | Thamesford, ON    | Carla L. Corpus, RN, CIC           | Toronto, ON        |
| Chada N. Al-Rawahi, CIC                  | Vancouver, BC       | Rhonda Brenton, RN, CIC                    | Grand Bank, NL    | Debbie A. Cosgrove-Swan, RN, CIC   | Kamloops, BC       |
| Doreen N. Alexander, RN, BScN, CIC       | Ajax, ON            | Alice P. Brink, CIC                        | Oshawa, ON        | Timothy N. Cronsberry, CIC         | St Marys, ON       |
| Mirza Z. Ali, CIC                        | Ajax, ON            | Natalie A. Bruce, CIC                      | Ottawa, ON        | Alisa P. Cuff, CIC                 | Lewisporte, NL     |
| Nemat Aliyev, CIC                        | St Albert, AB       | Marie A. Bruneau, CIC                      | Chelsea, QC       | James H. Curtin, CIC               | Delta, BC          |
| Kimberley M. Allain, RN, CIC             | Hammonds Plains, NS | Rena C. Burkholder, CIC                    | Guelph, ON        | Charmaine M. D'Souza, CIC          | Scarborough, ON    |
| Myonne Mc Allan, CIC                     | Cobourg, ON         | Pamela J. Burns, CIC                       | Lombardy, ON      | Lorraine Dales, RN, MN, CIC        | Toronto, ON        |
| Susan Sharon Allard, CIC                 | St Ann's, ON        | Violet Rose Burton, CIC                    | Codette, SK       | Simona Marcella Dalgleish, CIC     | Caledonia, ON      |
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| Dana K. Anderson, RN, CIC                | Belleville, ON      | Mary Cameron-Lane, CIC                     | Richmond, BC      | Michele C. de Jonge, RN, BScN, CIC | Almonte, ON        |
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 Lorna L. Morgan, CIC ..... London, ON  
 Catherine Elizabeth Morris, CIC ..... Toronto, ON  
 Rita D. Moryski, RN, CIC ..... Lethbridge, AB  
 Christine A. Mousa, RN, CIC ..... London, ON  
 Karen Ruth Mulvey, CIC ..... Fergus, ON  
 Teri A. Murdoff, CIC ..... Port Perry, ON  
 Barbara Nancekivell, CIC ..... Dorchester, ON  
 Vedia G. Nankooingh, CIC ..... Toronto, ON  
 Alice A. Newman, CIC ..... London, ON  
 Jessica C. Ng, MSc, CIC ..... Toronto, ON  
 Evelyn L. Niro, CIC ..... Nelson, BC  
 Sandina M. Noble, CIC ..... Mississauga, ON  
 Sharon E. O'Grady, CIC ..... Toronto, ON  
 Christopher Okeahialam, MSc, CIC ..... Toronto, ON  
 Karen Oleksyn, CIC ..... West St. Paul, MB  
 Cindy L. O'Neill, CIC ..... Burlington, ON  
 Karen M. O'Regan, CIC ..... Perth Andover, NB  
 Mary-Catherine Orvidas, CIC ..... Dundas, ON  
 Joan Osbourne-Townsend, CIC ..... Mississauga, ON  
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 Denise Ouellet, CIC ..... Monoton, NB  
 Karlene M. Panko, CPHI(C), CIC ..... Swift Current, SK  
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 Suzanne Plourde, CIC ..... Toronto, ON  
 Kathleen Poole, RN, CIC ..... Kingston, ON  
 Brenda J. Prouse, CIC ..... Tillsonburg, ON  
 Helen L. Purnell, CIC ..... Edmonton, AB  
 Joy E. Pyett, CIC ..... Coldstream, BC  
 Geetha Raghukumar, CIC ..... Toronto, ON  
 Maria Ralph, CIC ..... Hamilton, ON  
 B. Lee Ramage, BScN, CIC, COHN(O) ..... Dunnville, ON  
 Patricia Rawling, RN, BScN, CIC ..... Greenwood, NS  
 Paige E. Reason, MPH, CIC ..... Toronto, ON  
 Elaine F. Reddick, CIC ..... London, ON  
 Coleen A. Reising, CIC ..... Sicamous, BC  
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 Norma Joyce Richards, CIC ..... Rockwood, ON  
 Yvonne M. Richardson, RN, CIC ..... Strathroy, ON  
 Jill C. Richmond, CIC ..... Guelph, ON  
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 Erin A. Roberts, RN, BScN, CIC ..... Edmonton, AB  
 Ramona Rodriguez, MSc(A), CIC ..... Kirkland, QC  
 Darlene A. Rojek, CIC ..... Windsor, ON  
 Donna M. Ronayne, RN, CIC ..... Clarenville, NL  
 Michael N. Rotstein, RN, BScN, BHA, CIC ..... Toronto, ON  
 Leesa S. Round, CIC ..... London, ON  
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 Eileen Skowarchuk, RN, MHS, CIC ..... Flin Flon, MB  
 Brenda J. Smith, CIC ..... Brampton, ON  
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 Jane E. Stafford, RN, BN, CIC ..... Fredericton, NB  
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Faith Stoll, CIC ..... Yarmouth, NS  
 Laurie Streitenberger, RN, BSc, CIC ..... Toronto, ON  
 Cara M. Sudoma, CIC ..... Whitby, ON  
 Kathryn N. Suh, MD, FRCP(C), CIC ..... Ottawa, ON  
 Ann M. Sutcliffe, CIC ..... Sudbury, ON  
 Brenda Caroline Tanner, CIC ..... Elmwood, ON  
 Marlene P. Taylor, CIC ..... Nepean, ON  
 Brenda Temple, CIC ..... Saskatoon, SK  
 Joanne L. Tench, CIC ..... Trail, BC  
 Angela D. Thorton, CIC ..... Toronto, ON  
 Genevieve M. Thompson-Kirkpatrick, CIC ..... Winnipeg, MB  
 Virginia M. Tirilis, CIC ..... Dundas, ON  
 Nancy Todd-Giordano, CIC ..... Nepean, ON  
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 Carol A. Turner, CIC ..... Wallaceburg, ON  
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 Debbie Valickis, CIC ..... Mississauga, ON  
 Catherine Van Arkel, CIC ..... Dresden, ON  
 Tammy P. Van Der Kloet, CIC ..... Athens, ON  
 Kyla Van Dusen, RN, CIC ..... Whitby, ON  
 Elizabeth A. Van Horne, CIC ..... Mississauga, ON  
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 Victoria L. Willet, CIC ..... Sault Ste. Marie, ON  
 Victoria R. Williams, CIC ..... Toronto, ON  
 Aurora O. Wilson, RN, BScN, MN, CIC ..... Pickering, ON  
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 Amber-Leah H. Wolfe, CIC ..... Edmonton, AB  
 Jimmy Wong, CIC ..... Toronto, ON  
 Cathy Anne Wood, CIC ..... Keswick, ON  
 Samantha J. Woolsey, CIC ..... Sherwood Park, AB  
 Josefa A. Yeassa, CIC ..... New Market, ON  
 Marion M. Yetman, CIC ..... St. John's, NL  
 Katharine A. Young, CIC ..... Edmonton, AB  
 Rebecca Yu-Liu, CIC ..... Whitby, ON  
 Josephine C. Okoli, CIC ..... Doha

The May-October 2013 graduates were listed in the spring 2014 journal. In addition, we sincerely congratulate the graduates from November 2013-June 2014.

Joanna Bossy, RN, CIC ..... London, ON  
 Kimberly R. Burrows, CIC ..... Lloydminster, AB  
 Patricia L. Byers, RN, CIC ..... Callander, ON  
 Jennifer M. Chadney, RN, BScN, CIC ..... Saskatoon, SK  
 Debbie Dawe, RN, BN, CIC ..... Bay Roberts, NL  
 Andrea R. Fisher, RN, CIC ..... Orleans, ON  
 Maria A. Hollands, RN, CIC ..... Newmarket, ON  
 Suzanne L. Hyderman, BScN, CIC ..... West Kelowna, BC  
 Masoud Khodadami, MD, MPH, CIC ..... Saskatoon, SK  
 Angie S. Macdonald, RN, BScN, OHN, CIC ..... Woodlawn, ON  
 Valerie Hang T. Nguyen, CPHI(C), CIC ..... St. John's, NL  
 Sharon M. O'Reilly, RN, BN, CIC ..... London's, NL  
 Donna Penney, RN, BSN, CIC ..... Mount Pearl, NL  
 Janice L. Pitcho, CIC ..... Calgary, AB  
 Kimberly Presta, RN, ICP, ENCC, CIC ..... Brampton, ON  
 Karrie L. Rambridge, BA, BScOT, CIC ..... Saskatoon, SK  
 Laurie E. Rodnick, RN, CIC ..... Midland, ON  
 Jodi C. Rutley, RN, CIC; North ..... Battleford, SK  
 Erin D. Shields, CIC; Aweres ..... Township, ON  
 Lyudmyla Sidey, CIC ..... Burlington, ON  
 Baljinder Sidhu, RN, BScN, CIC ..... Surrey, BC  
 Kelly A. B Smith, BSc RN BN CIC ..... Conception Bay South, NL  
 Jaysree R. Somani, MTL, BHA, CIC ..... Pickering, ON  
 Kimberly A. Staikos, BScN, CIC ..... London, ON  
 Melissa Zambrano, CIC ..... Mississauga, ON  
 Maureen Anne Acomb, CIC ..... Markham, ON  
 Gail J. Barwise, CIC ..... Charlotteville, PE  
 Manjit K. Blake, BN, MHS, GNCI(C), CIC ..... Winnipeg, MB  
 Faye E. Brekelmans, CIC ..... Thamesford, ON  
 Abraham Charumoottil, BSc MTL MBA CIC ..... Thornhill, ON  
 Anne Chong-Grant, CIC ..... Whitby, ON  
 Maureen E. Cividino, MD, CCFP DOHS, CIC ..... Dundas, ON  
 Deborah I. Cock, CIC ..... Coleodon, ON  
 Timothy N. Cronsbey, CIC ..... St. Marys, ON  
 Miranda A. Dreesen, RN, CIC ..... Orillia, ON  
 Susan L. Dolan, CIC ..... Welland, ON  
 Lola C. Gushue, BN, RN, CIC ..... Gander, NL  
 Joanne L. Habib, CIC ..... St. Catharines, ON  
 Catherine M. Harlton-Strezov, CIC ..... Richmond Hill, ON  
 Andrea Rosalind Iacurri, CIC ..... Hamilton, ON  
 Lucie Imbiscuso, CIC ..... Acton, ON  
 Allana M. Ivany, CIC ..... Wellington, NS  
 Shvon K. Konink, CIC ..... Cornwall, ON  
 Catherine Elizabeth Morris, RN, BScN, CIC ..... Etobicoke, ON  
 Karen L. Pauling-Shepard, CIC ..... Calgary, AB  
 Silvana Perna, CIC ..... Lachine, QC  
 Zoran Pikula, CIC ..... Toronto, ON  
 Jill C. Richmond, RN, CIC ..... Guelph, ON  
 Leesa S. Round, CIC ..... London, ON  
 Natasha Salt, CIC ..... Etobicoke, ON  
 Mary Lu Sample, CIC ..... Perth, ON  
 Josee Shymanski, CIC ..... Ottawa, ON  
 Brenda J. Smith, CIC ..... Brampton, ON  
 Danielle R. Steinman, MHS, CPHI(C), CIC ..... Toronto, ON  
 Brenda Caroline Tanner, CIC ..... Elmwood, ON  
 Marlene P. Taylor, CIC ..... Nepean, ON  
 Virginia M. Tirilis, CIC ..... Dundas, ON  
 Isabelle Tremblay, CIC ..... Calgary, AB  
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flowcharts, checklists, and samples provide the framework to interface with healthcare facilities and local public health preparedness plans.

The revised toolkit CD is available for purchase by contacting IPAC Canada. Cost to members: \$50 plus 5% GST; Non-Members: \$75 plus 5% GST.

Thank you to the Task Group that has dedicated themselves to revision of the toolkit according to current best practices. We would like to acknowledge the committee: Candace Friedman (Chair), Madeleine Ashcroft, Sandra Callery, Judi Linden, Pat Piaskowski. \*

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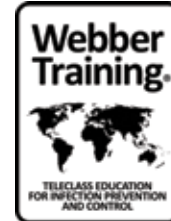
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## 2014 National Education Conference **award winners**

The 2014 conference in Halifax was a great success. The education sessions were challenging and thought-provoking. Exhibitors were enthusiastic and welcoming. The special events were fun and unique. Overall it was a tremendous event. There were award winners and prize winners.

Following is a list of our winners:

- **2013 Editorial Award:** Transporting clinical specimens in the community – are you complying with Canadian and provincial/territorial regulations for packaging and transportation of clinical specimens in the community/public health setting” (Linda Lovatt, RN, BScN, CIC, CACE; Risa Cashmore, RN, BSc, CIC, CCHN(C), Winter 2013)
- **CIC Chapter Achievement Award:** IPAC Greater Toronto Area (GTA)
- **3M Chapter Achievement Award:** IPAC Newfoundland Labrador
- **2014 Ecolab Poster Contest:** David Ryding, Public Health Ontario, South Eastern Ontario Infection Control Network. The winning poster can be downloaded by members for free at [http://www.ipac-canada.org/Members/members\\_posters.php](http://www.ipac-canada.org/Members/members_posters.php). Bulk orders will be accepted until August 15.

Bulk order form available at <http://www.ipac-canada.org/pdf/2014%20Bulk%20Order%20Form.pdf>

- **Best First Time Abstract:** WASTE NOT, WANT NOT: QUALITY IMPROVEMENT IN INFECTION PREVENTION AND CONTROL. Vydia Nankooosingh, Melisa Avanes, Alfred Ng, Mirza Ali, Danka Varda, Ronny Leung, Murtuza Diwan, Zahir Hirji. The Scarborough Hospital, Scarborough, ON, Canada
  - **Best Poster Award:** Bal Sidhu, Danielle Richards, Thomas Kind and Azra Sharma for their poster: Automated Microbiology Lab Notifications of MTB Orders Resulting in Timely Implementation of Airborne Precautions. The prize of \$500 is donated by 3M.
  - **Best Oral Presentation Award:** Helen Evans for her presentation Let’s Go Viral! PICNet’s Infection Control Workshop in a Box. The prize of \$500 is donated by 3M.
  - **Things That Make You Go Hmmm:** PreHospital Care Concurrent Session, Kathleen Poole (Scenario #7). See the session presentation at [http://www.ipac-canada.org/conf/14\\_presentations.php](http://www.ipac-canada.org/conf/14_presentations.php)
  - **Winner of Three Free Hotel Nights:** Brenda Dyck
  - **Winners of Exhibit Prizes:**
    - Samsung tablet: Michael Tsang
    - FitBit: Nicki Gill
    - Nova Scotia: The book of everything – Arla Altwasser
    - Nova Scotia: The book of everything – Jacqueline Carter
    - Future Shop \$100 gift certificate: Adeline Griffin
  - There were five winners of complimentary books by Crane Wood Stookey: *Keeping Your People in the Boat*
  - There were 20 winners of complimentary books by Nina Spencer: *Lessons Learned from Climbing Kilimanjaro*
- Congratulations to our award and prize winners. Thank you to everyone who made the 2014 conference one of the most memorable! ❁



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## 2014 Moira Walker Memorial Award for International Service: **Sandra Callery**

The Moira Walker Memorial Award for International Service is named for Moira Walker, a Past President and Honourary Member of IPAC Canada, and former Honorary Secretary of the International Federation of Infection Control. Moira encouraged and engaged Infection Prevention and Control Professionals to support their international colleagues through education and facilitation of infection prevention and control projects. This award is in Moira's memory and honours an IPAC Member who has demonstrated extraordinary service in international regions.

The winner of the 2014 Moira Walker Memorial Award for International Service is Sandra Callery. She was nominated for her contributions representing IPAC Canada (formerly as CHICA-Canada) on the International Infection Control Council (I2C2), her work in Asia on behalf of the Canadian Department of Foreign Affairs, and her international educational activities.

The I2C2 was comprised of infection prevention and control organizations in the United States, Canada and the United Kingdom: Association for Professionals in Infection Control and Epidemiology, CHICA-Canada, and the Infection Control Nurses Association. The objective was to gain value by having representatives from these countries work on projects together. Sandra was a member of I2C2 from 2003-2011. She worked on projects related to ESBL, Emergencies and Disasters, and *C. difficile*. These initiatives reached infection prevention and control specialists worldwide. The resources developed have assisted individuals in their own facilities to reduce infections,

raise awareness, and improve the health of patients. The success of I2C2 is demonstrated by the sale of the toolkits and use of recommendations from the *C. difficile* conference.

Because of Sandra's knowledge and skills developed during the SARS outbreak in Ontario, she was chosen on behalf of the Canadian Department of Foreign Affairs to be part of a four-person delegation to Mainland China, Hong Kong and Taiwan. The purpose was to share experiences regarding SARS management.

Sandra has encouraged and nurtured infection prevention and control practitioners from around the globe through lectures, publications, evaluations and certification. She was a consultant to Comprehensive Care International for the Children's Cancer Hospital in Cairo, Egypt for three years. She was a member of the teaching faculty for the first Middle Eastern conference and educational workshop on infection prevention and control in Riyadh, Saudi Arabia. She served on the Certification Board of Infection Control and Epidemiology. Sandra was a presenter at a Problem Based Learning Program for Nurse Educators (international delegation) sponsored by the Institute for Nurse Educators, McMaster University. She has published for an international audience in IFIC's Basic Concepts of Infection Control and Joint Commission International's Best Practices in Infection Prevention and Control: An International Perspective.

Sandra's award was presented at the 2014 Opening Ceremonies. Sandra gave an overview of her international initiatives at the Tuesday morning, Champions of Infection Prevention and Control Breakfast. ❁



"Sandra has encouraged and nurtured infection prevention and control practitioners from around the globe through lectures, publications, evaluations and certification."



## Three fabulous ladies honoured in Halifax

IPAC Canada Acting President Suzanne Rhodenizer Rose honoured three of our finest IPAC Canada members at the 2014 Opening Ceremonies. These three “fabulous ladies” have been moving IPAC Canada, or previously CHICA Canada forward, nationally and internationally.

Carol Goldman was President of CHICA Canada in 1982 and 1983. She was named an Honourary Member in 2001. During Carol’s presidency, entry to practice courses started in Ottawa, jointly sponsored by the Laboratory Centre for Disease Control (LCDC), CHICA-Canada and the University of Ottawa. Several new chapters received their charter. The CHICA board approved the Certification Board of Infection Control (CBIC) exam as valid certification for ICPs in Canada. In 2006, she was elected as Honorary Secretary of the International Federation of Infection Control. As a member of the IFIC Board, Carol has been instrumental in writing the policies that now govern IFIC. Carol leaves behind a legacy of management, promotion, great humour and welcoming attitude that will forever affect IFIC and IPAC Canada. Carol sent the following message for her friends at IPAC Canada:



You have to know that your support and recognition of IFIC has been outstanding. Every year without fail IPAC Canada’s donations and chapter contributions demonstrates your commitment to IFIC’s scholarship fund. Your support has provided the opportunity for a delegate from a low resourced region to attend an IFIC conference every year. These donations from IPAC Canada now are formally acknowledged in an IPAC Canada named scholarship. Also, we have inspired (finally, I might add) some of our sister societies to set up IFIC Runs who have a long way to go to attain the standards that we have established. A few years ago the IFIC conference planning committee established Member Society Sessions where Member Societies are invited to sponsor and present at the conference. And, as always, IPAC Canada immediately grabbed the gauntlet and our expertise has shone through and is always a hit!

Pat Piaskowski is the current Clinical Editor of the Canadian Journal of Infection Control. During her time as President of CHICA Canada in 1997, Pat saw the journal transferred to a new publisher, which resulted in a major revenue-producing opportunity for the association. The first membership directory was published. An influenza campaign, known as Immunize on the Hill, was held in Ottawa during National Infection Control Week 1997. Moira Walker was appointed as CHICA Canada’s representative to IFIC and became the first Canadian Honorary Secretary. Pat was appointed Clinical Editor in 2002. Through her vision, the journal increased distribution and the number of scientific article submissions has increased significantly. In 1998, in Quebec, Pat was part of the nucleus of the International Council of Infection Control, known as I2C2. She was then instrumental in the development of consensus conferences and toolkits. Pat was named an Honourary Member of CHICA Canada in 2013. Pat has indicated that she will retire from her Clinical Editor position as of September 2014. She will be missed.



Mary Leblanc is also a Past President of CHICA Canada and an Honourary Member. During her presidency in 1985-1986, members voted to expand the mandate of CHICA to include the community. The Association name was altered to Community and Hospital Infection Control Association-Canada (CHICA)-Canada. The newsletter was discontinued and replaced with a professional journal, the CHICA Journal, published by the Canadian Hospital Association. In 1986, the journal name was changed to Infection Control Canada. Mary has held the position of Archivist of the association for many years. Through her dedication and love of the association, a complete history was created in 2001, in collaboration with Carol Whyman. The history of the association continues to be recorded and updated in the annual directory. It was also Mary who created the tagline for the former CHICA Canada: Working Together for Better Health Care. It is Mary’s vision that our association and colleagues continue to work together with the ultimate goal of better healthcare for patients and staff. ❁



## Election Results

Election for three board positions was held at the 2014 Annual General Meeting. The following have been elected to board positions effective May 28, 2014:



Secretary (three-year term)  
**Marilyn Weinmaster, RN, BScN, CIC**  
Regina, SK



Director (three-year term)  
**Barbara Catt, RN, BScN, MEd, CIC**  
Toronto, ON



Director (three-year term)  
**Ramona Rodrigues,**  
RN, BSc, MSc(A), CIC, CNS  
Montréal, Québec

Profiles of the newest board members appeared in the spring 2014 issue of the *Canadian Journal of Infection Control*.

## Virox Technologies Inc. announces the Syed A. Sattar African Scholarship

Virox Technologies Inc. in partnership with ICAN (Infection Control Africa Network) has established a scholarship fund in honour of Dr. Syed A. Sattar.

In recognition of Dr. Sattar's highly notable scientific career spanning nearly five decades, Virox, along with his friends and colleagues in the Canadian infection prevention and control community, were honoured to announce the creation of the scholarship on May 25 at the IPAC 2014 National Conference.

Dr. Syed A. Sattar's research into the influence of environmental factors on the fate of human pathogens has evolved into hundreds of published papers, several books and book chapters, and scores of addresses to scientific

meetings on four continents. He was singularly instrumental in the creation and evolution of the Teleclass Education Lecture Series that now reaches into tens of thousands of hospitals in almost every country on the globe. He is a preeminent authority and trusted advisor to many governments and standard-setting agencies, and his work forms the basis of national and international standards. In the course of Sattar's remarkable career he has received numerous fellowships, awards, and honours.

The Syed A. Sattar African Scholarship award will enable a deserving recipient from an African country, to attend the annual conference of the Infection Control Africa Network.

For more information on Dr. Sattar's Scholarship Fund please visit: <http://www.icanetwork.co.za/conferences/bursaries-and-scholarships/> 🍁



Dr. Syed Sattar receives acknowledgement of the Syed Sattar Scholarship from Nicole Kenny of Virox Technologies Inc.



Linda Lovatt and Risa Cashmore, winners of the 2013 Editorial award, with Pat Piaskowski, Clinical Editor.



2014 IPAC Canada Chapter Presidents.



2014 Virox Technologies Scholarship winners.



2014 SealedAir Diversey Education Bursary winners.



Sandra Gallery, Pat Piaskowski and Mary LeBlanc.



Mirza Ali, President of IPAC GTA, accepts the 2014 CIC Chapter Achievement Award from Marilyn Weinmaster.



International Guests: Kathy Suh, CBIC; Kathie McGhie, CBIC; Gary Thirkell, IPS; Jenny Mayfield, APIC; Claire Boardman, Australia.



David Ryder (Center) receives the 2014 Ecolab Poster Contest award from Mandy Deeves, Programs & Projects; and Doug Hons, Ecolab.



Pictured at the Champions of Infection Prevention and Control Breakfast: Candace Friedman, Pat Piaskowski, Sandra Gallery and Patsy Rawding.



Members of IPAC Newfoundland Labrador celebrate their 2014 3M Chapter Achievement Award.



Sandra Gallery received the Moira Walker Memorial Award from Acting President Suzanne Rhodenizer Rose.

Photos by Alex MacAulay Photography, Halifax





## 9th Run or Walk for IFIC



Despite Halifax's brisk weather and challenging hills, the 9th Run or Walk for IFIC was another successful fundraiser for the IPAC Canada Scholarship. The scholarship supports under-resourced country representatives to attend the annual International Federation of Infection Control conference. Sixty runners and walkers raised \$4,889.00 (at time of printing) for the scholarship. The individual winners of the day were:

|                                |                  |               |
|--------------------------------|------------------|---------------|
| 1st male runner                | Jacin Lapointe   | Cornwall, ON  |
| 1st female runner              | Bronwen Edgar    | Toronto, ON   |
| Fastest walker                 | Bal Sidhu        | Vancouver, BC |
| Most sponsors                  | Jim Gauthier     | Kingston, ON  |
| Chapter with the most sponsors | IPAC Nova Scotia |               |



Our sincerest thanks go to organizer Tanya MacNeil and the volunteers from IPAC Nova Scotia. We also thank DebMed and Diversey for their sponsorship of the run and breakfast.

Watch for information about the 10th Run or Walk for IFIC which will be held in Victoria on Monday, June 15, 2015. Come and celebrate the 10th anniversary of this internationally recognized success story. ❁

# PREVENTION

• A Port in Any Storm •





# PREVENTION

*• A Port in Any Storm •*

2014 IPAC Canada Conference  
Halifax, Nova Scotia  
May 25 - 28, 2014



# IPAC-CSO Chapter

IPAC-CSO is one of the oldest IPAC-Canada chapters. We'd like to share some of our events and activities with you.

## New name, new logo

With the new name and rebranding of our national association IPAC Canada, our Chapter felt that it was timely for us to consider a revised chapter name to better reflect the geographical region that our members represent. Formerly known as CHICA-HANDIC, our chapter membership chose Central South Ontario, or IPAC-CSO. Many thanks go to May Griffiths-Turner for her winning logo design and to Oksana Zaporzan for her work on the logos.

## "We Have The Whole World In Our Clean Hands"



Over 200 healthcare workers attended our 18th annual education day on May 8, 2014. Our Chapter President Mary-Catharine Orvidas was our master of ceremonies. She led us through a very informative day filled with world-renowned speakers. We were delighted to have Dr. Allison McGeer present on MERS-CoV and other novel emerging viruses. Dr. McGeer helped us to understand the global and local implication of these ever evolving pathogens. Debbie Demizio shared excellent information on the management of *ESBL* and *CPE: Mutants, Migrants and Masterminds*. Dr. Dominik Mertz provided a *Global Perspective on Tuberculosis* and left us with a valuable

review of the revised Canadian Tuberculosis Standards. Nicole Kenny charted the course for *Sustainable Health Facility Care*, and cut through the green hype to help us develop practical approaches. Dr. Martha Fulford truly kept us on the edge of our seats with fascinating case studies. Virginia Tirilis and Andrea Iacurti provided updates on PHO-Central South. We ended the day with our motivational speaker, Linda Pickard who presented on the 3 Cs: *Character, Charisma and Confidence* and gave us tips on how to inspire others, communicate more effectively and increase our confidence at work.

IPAC-CSO would like to thank our industry partners and vendors for once again making our annual Education Day a huge success. We are grateful to the IPAC-CSO community for supporting this Chapter event. Patricia Luis and Oksana Zaporzan deserve special mention for their contributions.

## HYGEIA Award

This award was first established in 2008 and is based on the following criteria:



- Promotion and appreciation for, and awareness of, the field of IPAC [Earth]
- Creativity and innovation [Water]
- Enthusiasm for the field of IPAC [Fire]
- Communication [Air]
- Excellence in performance [Star Quality]

This year we had two recipients of the award! Cindy O'Neill, Manager Infection Prevention and Control at Hamilton Health Sciences, and Cheryl Collins, ICP at City of Hamilton, Long-Term Care Homes, Macassa Lodge & Wentworth Lodge. They were both presented with the award at our education day. See our chapter website for more details about this award.

## Out-of-the-Box Award

Our chapter is also proud to announce our Out-of-the-Box Award, which went to Connie Gittens-Webber, Cindy O'Neill, Cindy Rogers, Barb Jennings, Cheryl Munro and the McMaster Paediatric ICU for their PICU Healthy Hands Initiative. This innovative and successful initiative was undertaken to improve hand hygiene in their Pediatric unit. Congratulations, and well done! This award was founded by retired ICP practitioner, Diane Thornley, and recognizes outstanding creativity in the management and resolution of a particular infection prevention and control issue or in the development and initiation of an innovative or ingenious educational project.

We look forward to our 2015 Annual Education Day, and co-hosting IPAC National Education Day in Niagara Falls 2016. Hope to see you there! 🍁

"We look forward to our 2015 Annual Education Day, and co-hosting IPAC National Education Day in Niagara Falls 2016. Hope to see you there!"

# 2014 Virox Technologies Scholarship

Through the financial support of Virox Technologies, 16 IPAC Canada members were awarded scholarships to attend the 2014 IPAC Canada National Education conference in Halifax. IPAC Canada and its members thank Virox Technologies for their initiative to make the national education conference accessible to those who may not have otherwise been able to attend.



- Asha Sheikh, ON
- Sherry Palmer, ON
- Kate Hoogenboom, ON
- Kim Rafuse, NS
- Michael Rotstein, ON
- Jodi-Lynn Black, ON
- Melissa Avanes, ON
- Yasmin Chagla, ON
- Nancy Peddle, ON
- Sally MacInnis, ON
- Anne Bialachowski, ON
- Merlee Steele-Rodway, NL
- Natalie Marcello, ON
- Heidi Pitfield, ON
- Jacqueline Hlagi, BC
- Heather Candon, ON

In partnership with IPAC Canada, Virox Technologies will again provide scholarships to assist IPAC Canada members with attending the 2015 National Education conference in Victoria (June 14-17, 2015). The 2015 Virox Technologies Scholarship online application will be launched in September 2014. The deadline for applications is January 31, 2015. \*

## 2014 Diversey Bursary winners

IPAC Canada and Diversey Inc. have collaborated on the establishment of the Diversey Education Bursary. The objective of the bursary is to provide financial assistance to eligible IPAC Canada members to attend continuing professional education programs. With the need for increased funding for IPAC Canada members to attend or participate in educational events, the sponsorship of this bursary by Diversey Inc. enhances IPAC Canada's ability to support its members in attendance at the annual conference, at a chapter educational event, or as a student at one of the distance education courses supported or endorsed by IPAC Canada.

Through the support of the Diversey Education Bursary, six IPAC Canada members received conference or tuition fees in 2014:

- Andrea Neil, BC
- Brenda Temple, SK
- Roberta Gullage, ON
- Donna Perron, ON
- Jennifer Chadney, SK
- Loretta Erhardt, SK



The 2015 Diversey Education Bursary will be online in September 2014. The deadline date for applications is January 31, 2015. \*

## Be an author for IPAC Canada

Contact Pat Piaskowski, Clinical Editor, at  
[pat.piaskowski@oahpp.ca](mailto:pat.piaskowski@oahpp.ca)

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