



**Infection Prevention & Control
Annual Report**

2007 - 2008

Contents

Executive Summary.....	3
Infection Control Team Members	3
Professional Development.....	5
Monitoring Practices	6
Surveillance	7
Preventing & Managing Outbreaks	9
Policies & Procedures	9
Structure	9
What are we going to do in 2008/2009?.....	13

Executive Summary

The safety of patients, staff, physicians and visitors is of paramount importance to Interior Health. A key element of our safety culture is the prevention and control of infection. We are striving to implement a full program of infection prevention measures including Accreditation Canada Required Organization Practice. In this report are the accomplishments of Infection Prevention and Control with a look ahead to the coming year. We welcome your feedback and comments on both this report and our current infection control activities.

The overarching goal of Infection Prevention and Control is to prevent infections from occurring in patients, residents, clients, visitors, physicians and employees. If, for whatever reason, an individual with an infection is in a facility or program, the goal of Infection Prevention and Control is to prevent the infectious agent from spreading to others.

Key improvements to monitoring of infection control practices and improving safety for patients have been made. It is our intention to do everything possible to reduce the risk of infections. In this report, we will give you information on what we are doing to help prevent infections.

Infection Control Team Members

The infection prevention and control team who is responsible for the day-to-day management of infection prevention measures include:

J. de Heer	Leader, Infection Prevention & Control
Dr. P. Riben	Interior Health Physician Leader

Infection Prevention & Control Practitioner representatives from each Health Services Area (Most of the Infection Control Practitioners remain in the Acute Care setting and have responsibilities to Residential Service and possibly Home and Community Care in their geographic areas.)

- Thompson/Cariboo/Shuswap
 - D. Cosgrove-Swan 250-314-2693
 - K. Leslie 250-554-2323 local 2530
 - M. Miller 250-395-7624
 - Coleen Reiswig 250-833-3636 local 259
- Okanagan North
 - J. Pyett 250-503-3704
 - E. Lavoie 250-558-1376
 - J. Mori 250-558-1304
- Okanagan Central
 - W. Lutz 250-862-4314
 - T. Lanier 250-862-4474
 - M. Blackburn 250-712-6981
 - A. Neil 250-712-6966
 - N. Gill 250-712-6971
- Okanagan South
 - B. Duncan 250-492-4000 local 2325
 - L. Schwartz 250-492-4000 local 2324

- Kootenay Boundary
 - E. Nicol 250-354-2375
 - J. Tench 250-368-3311 local 2354
- East Kootenay
 - E. Chan 250-417-6177
 - L. Lehman 250-489-6421

Professional Development

The Infection Prevention and Control program is committed to preparing the novice Infection Prevention & Control Practitioner write the certification for infection control exam as well as assisting existing practitioners in remaining current. All Infection Prevention & Control Practitioners in Interior Health are expected to have their Certification in Infection Control (CIC) or be eligible to write the certification exam. A new Infection Prevention & Control Practitioner must obtain their Certification in Infection Control following two years of practice in Infection Prevention and Control. To meet this commitment there have been, and will continue to be, ongoing education sessions with the Interior Health Infection Control Leader and/or Physician Leader. Four new practitioners attained their CIC.

Infection Prevention & Control Practitioners are given the opportunity to attend national conferences. Several Infection Prevention & Control Practitioners took advantage of this opportunity. The information obtained at these conferences is shared at the monthly Infection Prevention & Control meeting.

As part of Interior Health's goal to strengthen the Infection Prevention & Control team workshops on change management and team building were provided.

Interior Health Infection Prevention & Control Practitioners are encouraged to participate in the Provincial Infection Control Network (PICNet). Interior Health is represented at all PICNet's working groups.

As staff should be familiar with the elements of their organization's infection prevention and control program the Infection Prevention & Control Practitioners provide ongoing staff education to the facilities they are responsible for. This education is done to reinforce current best practices and when new emerging issues arise. The Physician Leader provides education to physicians as required an as emerging issues become known.

Monitoring Practices

Ongoing audits of acute and residential care facilities to ensure appropriate infection prevention and control practices are being followed continue as scheduled.

Several Infection Prevention & Control Practitioners were involved in conducting the sterile processing audits in various facilities.

Kelowna General Hospital (Kelowna B.C., Canada) and the local Infection Prevention & Control office collaborated in a surgical site infection pilot project with Vancouver Coastal Health Authority (Vancouver, B.C. Canada). The pilot was meant to capture surgical site infections identified in a health care facility as well as post discharge. This project will provide information as infection prevention & control moves toward provincial reporting.

Continuing work is done on SAFER Healthcare Now in collaboration with practitioners at their respective sites.

The Infection Control Practitioners are participating in ongoing hand hygiene audits and questionnaires.

Hand Hygiene Initiative

If every caregiver reliably practiced simple hand hygiene when leaving the bedside of each patient and before touching the next patient, there would be an immediate and profound reduction in the spread of resistant bacteria. During National Infection Control Week, October 15 -19, 2007 the Interior Health Hand Hygiene Initiative was introduced in all acute and residential care sites. The Community Care component of this initiative will follow in 2008. The Hand Hygiene Initiative Team is a working group of IH Infection Prevention and Control Practitioners (ICPs) and representatives from IH Communications and Health Promotion and IH Research Department. The goal for this initiative is “to increase the hand hygiene compliance of all IH employees and reduce the incidence of health care associated infections (HAIs)”. In conjunction with the IH Hand Hygiene Initiative, *Bayer Healthcare “Clean Hands for Life”* campaign was introduced at Kelowna General Hospital (KGH) and Royal Inland Hospital (RIH), the two tertiary care sites who were solicited to implement Bayer’s strategies prior to confirming the IH initiatives. In order to amalgamate these two hand hygiene initiatives, data collection on hand hygiene practices was done simultaneously across all sites, using the same data collection tools and analysis methodologies.

Baseline data on hand hygiene practices were collected through an observational tool and an employee questionnaire. ICP’s observed hand hygiene practices and documented opportunities taken (hand hygiene performed) and missed opportunities (hand hygiene not performed). The employee questionnaire asked questions about availability of hand hygiene products and policies and encouraged input regarding strategies to improve hand hygiene practices. The East Kootenay HSA did not participate in data collection due to limited human resources.

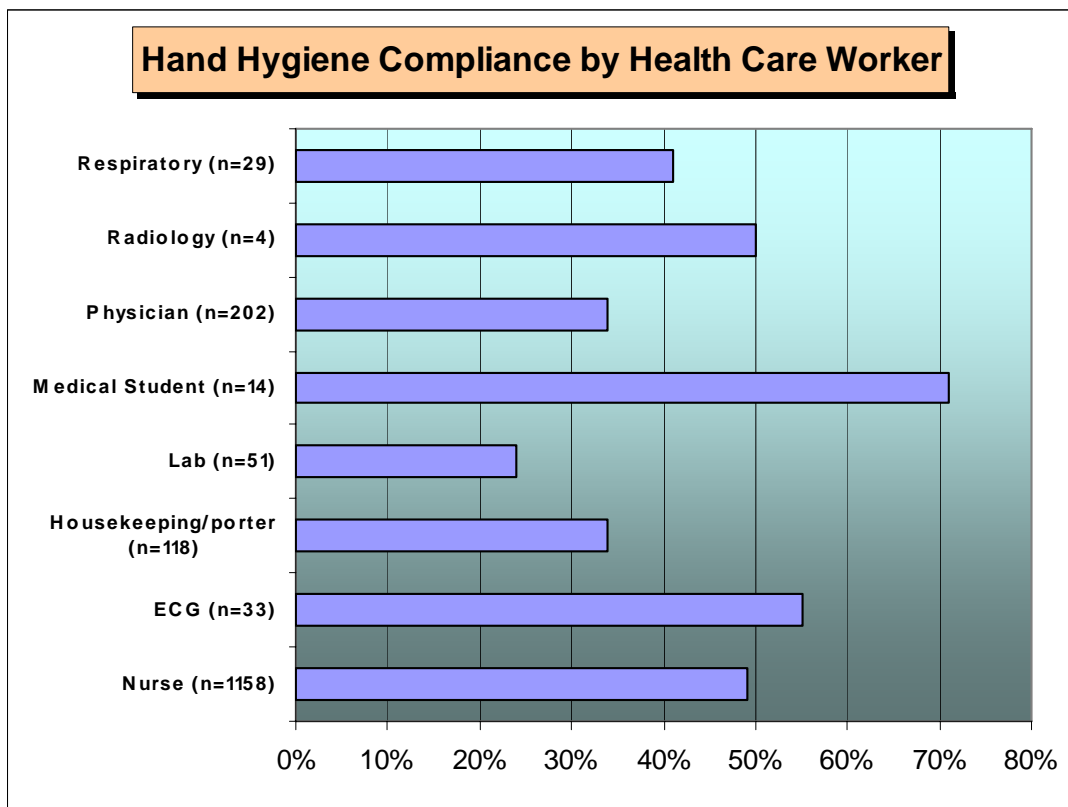
Over 1600 opportunities to carry out hand hygiene were observed using the data collection tool. Of these opportunities, **45% had appropriate hand hygiene performed** and **55% did not**. There is no data available as yet summarizing the employee questionnaire results.

Strategies to improve hand hygiene compliance to a minimum of 60% include:

- Employee educational sessions twice weekly using ten minute power point presentations
Poster board presentations may be provided in areas difficult to access. All education to be completed by May 2008.
- New posters to be created by the IH Hand Hygiene Initiative Team and mounted in all areas and removal of previous hand hygiene posters by July 2008.
- Hand hygiene observation audits will be completed in March and August 2008 using the same methodologies as the first audit.
- Ongoing hand hygiene messages to be shared with employees via newsletters & email.

Hand Hygiene Compliance Rates

(September 2007)



n (sample):1609

Range: 17% - 83%

Surveillance

Surveillance is the ongoing and systematic method of collecting, consolidating and analyzing data regarding the distribution and determinants of a given disease or event. This is followed by dissemination of that information to those who can improve the outcome.

A standardized surveillance program is in the process of being implemented throughout Interior Health (QME). A training/reference manual has been developed for this program. This manual

will be updated as required. All Infection Prevention & Control Practitioners are being provided training prior to implementation as well as training will be available as needed. Information obtained from the surveillance data may and can be used in the planning, implementation, and evaluation of infection prevention & control practice.

The information produced by the surveillance program will be used to monitor the frequency of infections within a facility over time. Deviation from established patterns will be examined.

Quality Management Enterprise (QME), developed by Picis, is the surveillance tool that is being used by Interior Health. QME will automate Interior Health's surveillance documentation providing up-to-date clinical information at the point of care across the continuum of care. The QME was scheduled for April 2007, however due to circumstances beyond the project's control work did not commence with a full complement of staff until August 2007.

Despite software and other external and internal issues the pilot in Penticton commenced January 2008 with go live at other sites commencing February 2008. Full implementation is expected by the end of June 2008. As of March 31, 2008 the QME surveillance includes Surgical Site Infections (SSIs), *Clostridium difficile* (CDAD) and Healthcare Acquired Pneumonia/Ventilator Acquired Pneumonia (HAP/VAP).

Nosocomial *Clostridium difficile*

The incidence of Nosocomial *Clostridium difficile* associated disease, defined as the onset of symptoms (diarrhea) at least three days following admission to the health care facility and within 30 days of discharge plus the presence of *Clostridium difficile* toxin in the stool, was examined over a 24 week period in the first half of 2006. Across Interior Health 265 persons developed Nosocomial *Clostridium difficile*. The total number of patient days for this frame was 369,908 for a rate of 7.16 per 10,000 admissions.

Antibiotic Resistant Organisms (AROs) -

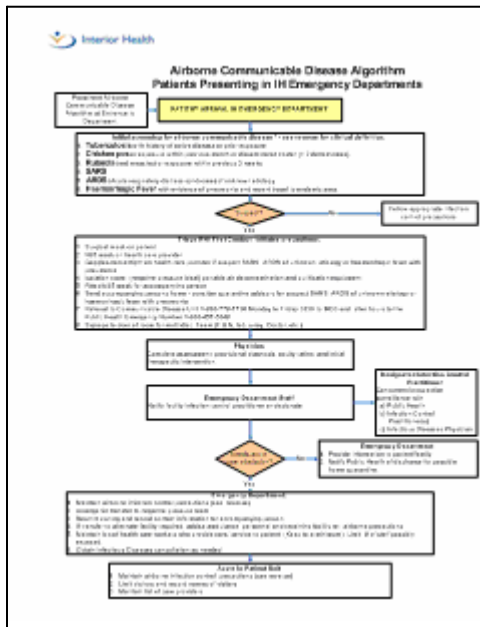
We are using the Canadian Nosocomial Infection Surveillance Program definition which is consistent with the provincial practice. Patients that are found to be positive are placed on appropriate infection control precautions.

Manual surveillance is being conducted concurrently with QME until such time as complete confidence in the electronic system is attained. Robust reports are expected after a full year of data has been collected.

To date the focus has been on the acute care sector. The Home and Community care piece of the surveillance project has been deferred to 2008/2009 fiscal.

We continue to work towards ensuring preoperative antibiotics are given at the correct time.

Preventing & Managing Outbreaks



Though all attempts to prevent infections are taken, from time to time they do occur. The Infection Prevention and Control Practitioners are trained to manage outbreak situations. Standard forms are used as tools to control outbreaks.

Infection Control Practitioners work in conjunction with Medical Health Officers and Communicable Disease Unit in outbreak situations. The Infection Control Practitioners throughout Interior Health are on call weekends as well as statutory holidays. In addition to providing instructions to the facility (as per the outbreak guidelines in the Infection Prevention and Control Manual), they provide updates of the outbreaks that have started on the weekend to the Medical Health Officer.

Policies & Procedures

Continued standardization of policies and procedures is a priority with Infection Prevention & Control. The Interior Health Infection Prevention & Control standardized manual includes the best practices in this industry. It is reviewed and updated on yearly basis to ensure the most up to date information is available as the prevention and control of health care associated infections requires continual development of proactive measures and intervention strategies aimed at reducing the spread of infection and combating existing infections. The manual is accessible in hard copy at all Interior Health acute and residential care facilities and all private facilities. It is also available on the Interior Health website as well as the Internet.

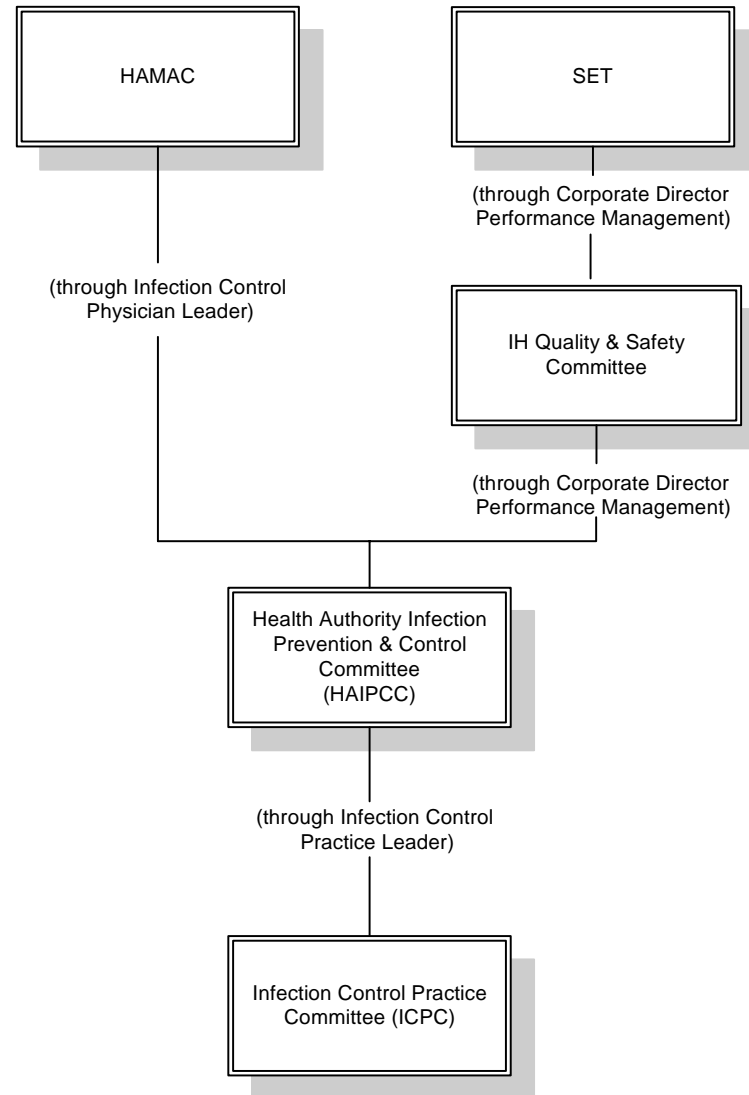
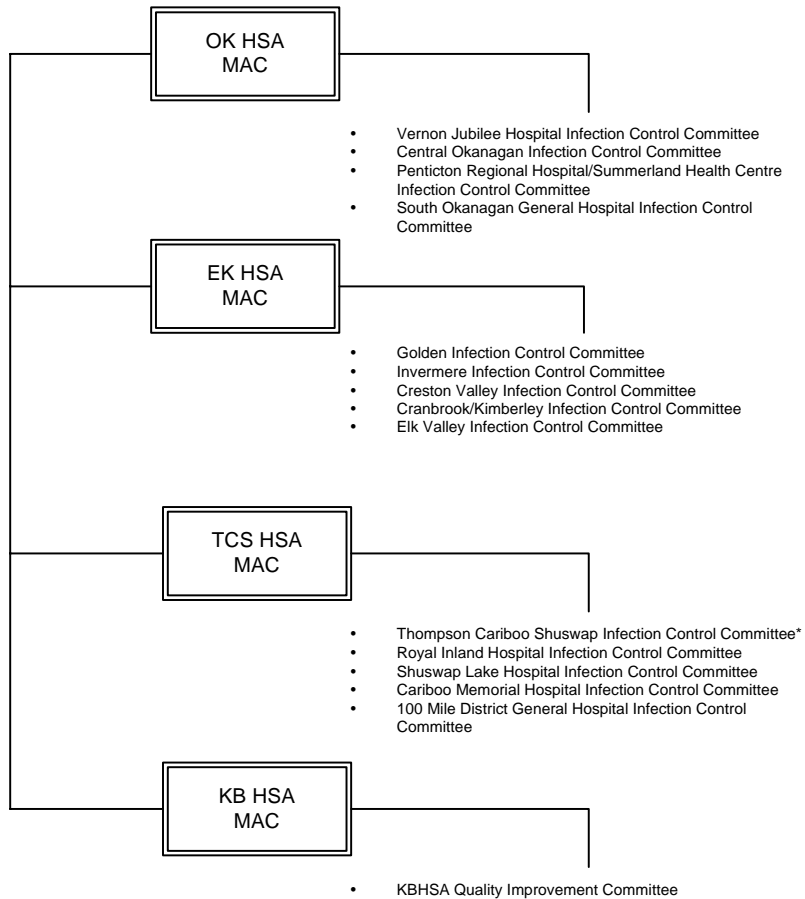
Structure

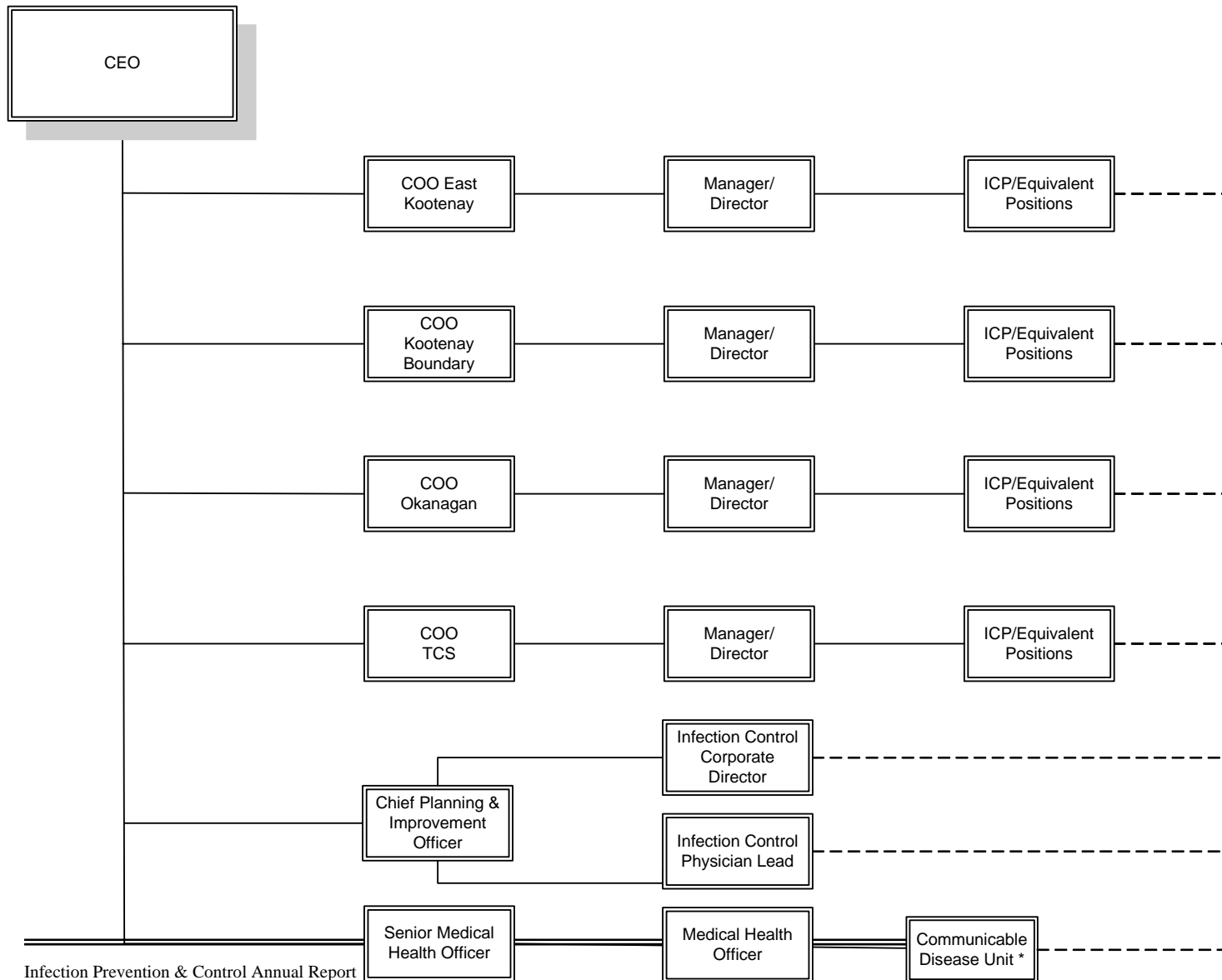
Within Interior Health the direct reporting of the Infection Prevention & Control Practitioners and equivalent positions is through managers or directors within the health service areas under the direction of the geographical Chief Operating Officers.

The Infection Control Leader and Physician Leader for Infection Prevention and Control report directly to the Chief Planning and Improvement Officer.

Infection Prevention & Control crosses sectors, departments, and communities. For this reason there is an extensive network of committees responsible for Infection Prevention and Control. The Health Authority Infection Prevention and Control Committee (HAIPCC) has dual reporting. Through the Physician Leader recommendations are reported to the Health Authority Medical Advisory Committee. Through the Chief Planning & Improvement Officer recommendations are

reported to the IH Quality and Safety Committee and to the Senior Executive Team. For purposes of practice, the Infection Prevention and Control Practice Committee reports recommendations through the Infection Control Practice Leader to the HAIPCC. For purposes of communication and quality, minutes from the fifteen sites and community Infection Prevention and Control committees are reviewed by the HAIPCC.





What are we going to do in 2008/2009?

In addition to the day-to-day activities that take place constantly to reduce the infection risk, such as daily rounds of ward the Infection Prevention & Control Practitioners will be involved in:

- The QME Surveillance project which includes completing the implementation of the residential & community care component
- The implementation of SAFER Healthcare Now bundle at select sites
- The Interior Health Hand Hygiene Initiative Part II, which will focus on the ICU at 6 major sites.
- The sterile processing re-audit process.

The Infection Prevention & Control program will also be:

- Posting an educator position to assist in developing training material for new practitioners as well as assist in training of new practitioners.
- Recruiting physician lead/expertise at the health service area level.
- Recruiting physician lead/expertise at the Interior Health level.