

Elizabeth A. Henderson, BSc, RT, MSc, PhD

Professor, Department of Community Health Sciences

Director, IPC Surveillance, Infection Prevention and Control, Alberta Health Services



RESEARCH INTERESTS AND ACTIVITIES

Key Words: healthcare epidemiology and infection control; surveillance, on-line learning, infection control professional and health care worker education, web-based surveillance

Dr. Henderson's research is in the area of infection control and healthcare epidemiology focusing on the use of different methodologies and technologies to enhance surveillance programs and on training Infection Control Professionals in Canada especially using on-line learning and educating health care workers on infection control practices. Her role as Director, IPC Surveillance for Alberta Health Services Infection Control Program involves three inter-related functions: (1) service [*surveillance, outbreak investigations, consultation and planning*]; (2) education, and (3) research. Her focus has been on investigating a variety of surveillance techniques used to monitoring infection control and infectious diseases and exploring innovative ways of using technology to streamline surveillance and increase data integrity including developing and implementing local, provincial and national web-based data systems.

RESEARCH IN PROGRESS

<u>ROLE</u>	<u>FUNDING AGENCY</u>	<u>TITLE</u>	<u>2010/11 ALLOCATION</u>
Principal Investigator	Canadian Hospital Epidemiology Committee	<i>Canadian Hospital Epidemiology</i>	20,000
Co-Principal Investigator	Canadian Institutes of Health Research	<i>2009 Pan-Canadian Influenza Research Network (PICRN)</i>	90,000

PUBLICATIONS

Peer-Reviewed Journal Articles

Wilkinson K, Gravel D, Taylor G, McGeer A, Simor A, Suh K, Moore D, Kelly S, Boyd D, Mulvey M, Mounchili A, Miller M and the Canadian Nosocomial Infection (including **Henderson EA**). Surveillance program infection prevention and control practices related to Clostridium Difficile Infection (CDI) within Canadian acute and long-term care institutions. *American Journal of Infection Control* 2011;39(3):177-82.

Simor AE, Louie L, Watt C, Gravel D, Mulvey M, Campbell J, McGeer A, Bryce E, Loeb M, Matlow A, and the Canadian Nosocomial Infection Surveillance Program (including **Henderson EA**). Antimicrobial susceptibilities of healthcare-associated and community-associated strains of Methicillin-Resistant Staphylococcus aureus (MRSA) from hospitalized patients in Canada, 1995-2008. *Antimicrobial Agents and Chemotherapy* 2010;54(5):2265-8.

Boyd WD, Gravel D, Hutchinson J, McGeer A, Moore D, Simor A, Suh K, Taylor G, Miller M, Mulvey MR, and the Canadian Nosocomial Infection Surveillance Program(including **Henderson EA**). Molecular characterization of moxifloxacin resistance from Canadian clostridium difficile clinical isolates. *Diagnostic Microbiology and Infectious Diseases* 2010;66(4):419-24.

Forrester L, Collet JC, Mitchell R, Pelude L, **Henderson EA**, Vayalunkal J, Leduc S, Ghahreman S, Weir C, Gravel D, the CNISP Data Quality Working Group, and Canadian Nosocomial Infection Surveillance Program. How reliable are national surveillance data? Findings from an audit of Canadian methicillin-resistant Staphylococcus aureus surveillance data. *American Journal of Infection Control* 2011;3:1-7

GRADUATE STUDENT SUPERVISION

Joseph Kaunda, MSc student, Department of Community Health Sciences

Thesis Topic: To investigate the effectiveness of an FID/electronic exciter system in assessing compliance and duration of hand hygiene practice; and to explore the hand hygiene beliefs of nurses in Unit 36 of the Foothills Medical Centre

Craig Pearce, MSc student, Department of Community Health Sciences

Thesis Topic: Measuring the effectiveness of terminal cleaning by housekeepers at the Foothills Medical Centre

Jenine Leal, MSc student, Department of Community Health Sciences (Co-Supervisor) (completed November 2010)

Thesis Topic: The validation of a novel surveillance system for monitoring bloodstream infections in the Calgary Health Region

Joseph Kim, MSc Student, Department of Community Health Sciences

Thesis Topic: Comprehensive strategy to decolonize methicillin-resistant staphylococcus aureus in the outpatient setting: A randomized controlled study

Kathryn Linton, MSc Student, Department of Community Health Sciences

Thesis Topic: The impact of ventilator-associated pneumonia among pre-hospital intubated patients

Kimberly Simmonds, PhD Student, Department of Community Health Sciences (Supervisor – December 2010; Co-Supervisor – December 2010 – 2011)

Thesis Topic: Modelling of admission screening for methicillin-resistant *staphylococcus aureus* (MRSA)

Gwynne Rees, PhD Student, Department of Community Health Sciences

Thesis Topic: To be determined