

Happenings

Skills Enhancement: Strengthening Public Health Practice in Canada

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Public health in Canada has recently had intense media attention related to such threats as SARS, avian flu, a potential flu pandemic, contaminated drinking water in Walkerton, Ontario, and North Battleford, Saskatchewan, and preventable chronic conditions including heart disease, cancer, diabetes, and obesity. These issues have highlighted the importance of public health and the need to strengthen the Canadian public health system. There are resounding calls for a renewal of public health in order to build capacity in the Canadian public health workforce (Underwood, 2004). In addition to the concerns expressed in the mass media and in policy reports, federal/provincial/territorial committees and professional organizations are recommending a strengthening of public health systems locally, provincially, and nationally (Campbell, 2004; National Advisory Committee on SARS and Public Health, 2003; Ontario Expert Panel on SARS and Infectious Disease Control, 2004). The Public Health Agency of Canada has been established to strengthen the system nationally. Fundamental to the development of public health capacity is an adequate supply of public health professionals with the knowledge, skills, abilities, and supports to do their jobs (National Advisory Committee on SARS and Public Health; Underwood).

As a leader in public health, the Public Health Agency of Canada, through its online continuing education program, Skills Enhancement for Public Health, offers public health practitioners across Canada an opportunity to develop the skills necessary to carry out effective public health and health surveillance. The application of these skills will result in sound evidence-based decision-making and planning to protect and maintain the health of the public.

What Is the Skills Enhancement for Public Health Program?

The Skills Enhancement program offers continuing education opportunities for Canadian public health practitioners, including public health

nurses, inspectors/environmental health officers, nutritionists, health promoters, program managers, and dental hygienists. Its aim is to help practitioners increase their skills in epidemiology, surveillance, information management, needs-based planning, and surveillance database and tool use.

The format is a series of online modules in both English and French. The content is relevant, timely, and specific to Canadian public health. This online distance program is flexible and more affordable than traditional continuing education programs.

Currently five modules are available. A mandatory *Orientation to Online Learning Module* serves as an introduction to the Web-based environment and online learning. Other modules are as follows:

Module 1: Basic Epidemiological Concepts — historical development of epidemiology, use of epidemiology in public health, causation, association, epidemiological triad, surveillance, and ethics

Module 2: Measurement of Health Status — frequency, rates, proportions, ratios, incidence, prevalence, and sources of data

Module 3: Descriptive Epidemiological Methods — study design, confounders, descriptive epidemiology, and basic outbreak investigation

Module 4: Epidemiology of Chronic Diseases — overview of chronic diseases, methods and tools used in chronic disease epidemiology, data sources, the burden and impact of chronic diseases, common risk factors, and control and prevention measures

Learners are placed on a team of 12 to 15 public health practitioners from across Canada. They have access to an online facilitator who is an experienced frontline public health practitioner with content and facilitation training. Facilitators are available to answer content-related questions, encourage discussion, provide feedback on exercises, and guide learners through the material. There are a variety of mechanisms to support the facilitators, including an online training module, a facilitator's Web site, technical and administrative support, face-to-face workshops, and resources on best practices.

A number of modules are currently being developed. The following will soon be available:

Introduction to Surveillance

Outbreak Investigation and Management

Other modules under development include the following:

Basic Biostatistics

Survey Methods

Principles and Practices of Public Health

Introduction to Information Management

Communicating Data Effectively

Applied Epidemiology: Injuries

Evidence-Based Planning

The Skills Enhancement for Public Health program serves to strengthen the Canadian public health system by focusing on increasing public health skills overall, including prevention and health promotion. Future modules will be based on broad public health core competencies that will influence and define future public health research, policy, education, and practice.

Enrolment in the program has been increasing steadily. Since the launch of the first module in May 2002, over 1,500 frontline public health practitioners from across Canada have taken one or more of the modules. More than half of the learners have been nurses: public health nurses, community health nurses, clinical nurse specialists, and program managers.

What Are the Benefits?

Participation in the Skills Enhancement for Public Health program offers benefits to both the learners and their organizations. Learners increase their surveillance and public health expertise and become more confident in their evidence-based decision-making abilities. They have access to a wider range of information and resources, including Help Desk support for technical assistance and online facilitator support for content-related issues. Learners enhance their skills in critical thinking, use of data, computing, and online application and their opportunities to network with colleagues across Canada. The course is flexible and accessible: all that is required is an Internet connection and a browser. Learners who complete the modules receive a certificate from the Public Health Agency of Canada. The program has been endorsed by numerous organizations, including the Canadian Public Health Association, the Community Health Nurses Association of Canada, and the Royal College of Physicians and Surgeons. The Skills Enhancement for Public Health program is working with universities across the country to develop strategies to support postsecondary studies in public health at both the graduate and undergraduate levels.

Well-trained staff members are obviously of great benefit to their employers. The module content equips employees with basic public health tools, as well as enhancing their skills in using data and data sources to interpret the health status of the community. Organizations benefit from staff with superior decision-making and planning abilities and with a basic understanding of epidemiology and surveillance princi-

ples as well as public health concepts. Participation in the program is central to the creation of a network of trained personnel and to the building of public health human resource capacity.

The benefits for facilitators are numerous, including an opportunity to network with their counterparts from across Canada and learn new concepts and skills in online facilitation and Web-based learning.

The high quality of this program is a result of partnerships developed between several universities and key public health organizations across Canada. These include the Canadian Public Health Association; the Canadian Nurses Association; the Community Health Nurses Association of Canada; the Ontario Public Health Association; Public Health Research, Education and Development (in Ontario); the Canadian Institute of Public Health Inspectors; the Alberta Dental Hygienists' Association; and provincial epidemiology associations in Ontario and Saskatchewan.

Resources

Several resources are available to help public health departments and health authorities create supportive environments for this continuing education initiative:

The Art and Science of Evidence-Based Decision Making: http://www.phac-aspc.gc.ca/csc-ccs/pdf/epidemiology_e.pdf

Towards Effective Community-Based Action: Using Epidemiological Skills in Public Health Surveillance for Local Public Health Practice: http://www.phac-aspc.gc.ca/csc-ccs/sehs-acss/esphs_e.html

Practical Tips for Implementation of the Skills Enhancement for Health Surveillance Modules: A Handbook for Frontline Managers and Administrators (available upon request)

Putting Skills into Practice: Factors Influencing Individual and Organizational Change (available upon request)

How to Negotiate Time with Your Employer to Participate in the Skills Enhancement for Health Surveillance Modules: http://www.phac-aspc.gc.ca/csc-ccs/sehs-acss/esphs_e.html

Health Surveillance: An Important Tool to Protect and Promote the Health of the Public (under development)

Nurturing Change and New Ways of Learning in Canada's Public Health System (under development)

As in other health-related fields, knowledge and practices in the field of nursing are continually evolving. As the burden of public health threats in Canada increases, nurse clinicians, administrators, researchers, and

academics will be required to increase their skill sets and knowledge base accordingly. The acquisition and use of health information is critical to all domains of nursing. The Skills Enhancement for Public Health program is one tool to help public health professionals become expert in and use health information.

More information can be found on the program's Web site: <http://healthsurv.net/skills>. The Skills Enhancement for Public Health program can be contacted at health_surveillance@phac-aspc.gc.ca or 1-877-430-9995 (toll free).

References

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Authors' Note

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