

## CORE PUBLIC HEALTH COMPETENCIES

2.6.a Identification of core public health competencies that all MPH or equivalent professional masters degree students are expected to achieve through their courses of study.

The Core Competencies developed for the Master's Degree in Public Health programs in the Faculty of Health Sciences refer to the essential knowledge and skills required for the successful application and practice of public health. In most cases the competencies transcend the boundaries of specific disciplines. They provide the building blocks for effective public health practice, and, for undergraduates, constitute the fundamentals of a public health approach or perspective.

We have organized our core competencies into *four broad categories*: basic population and public health sciences; fundamentals of public health practice; the population and public health perspective; and the organization of population and public health systems and services. The definitions of these categories are as follows:

**Basic Population Health Sciences:** Students will acquire the required foundation level knowledge, thinking skills and perspectives necessary for competent entry-level public health practice. This includes knowledge about the health status of populations, inequities in health, the determinants of health and illness, strategies for health promotion, disease and injury prevention, and health protection. The basic population health sciences include epidemiology, biostatistics, the social and health policy sciences, and environmental public health.

*[Core competencies 1-5]*

**Fundamentals of Public Health Practice:** Students will integrate the core concepts and evidence generated by the basic population health sciences to inform decision-making regarding health policies and programs. Effective practice entails the ability to identify and justify program and policy options, design public health programs, identify and work with institutional and community partners, and to communicate effectively with diverse stakeholders.

*[Core competencies 6-8]*

**The Population Health Perspective:** Students will know and apply the fundamentals of a population health

- Population Health: Health policy and planning for health care delivery, health promotion and disease prevention, and applied methods for assessing population health.
- Social Inequities and Health: Critical and reflexive research and practice that addresses health inequities related to poverty, racism, colonialism, sexism and other forms of structural inequality.

**Table 2.6.a. – Core Competencies – All Concentrations**

*Basic Population Health Sciences: Students will acquire the required foundation level knowledge, thinking skills and perspectives necessary for competent entry-level public health practice. This includes knowledge about the health status of populations, inequities in health, the determinants of health and illness, strategies for health promotion, disease and injury prevention, and health protectio*

- Apply basic informatics techniques with vital statistics and population and public health records in the description of population health characteristics and in population health research and evaluation.
- Interpret results of statistical analyses found in population and public health literature.
- Perform common statistical analyses with a computer software package and interpret the results.

CC3. *Methods of Population and Public Health Assessment, Diagnosis, and Analysis:* Determine population and public health concerns through analysis and diagnosis of communities and populations using a variety of quantitative and qualitative methodologies.

**Course-level Learning Objectives:**

- Describe the components and methods of effective disease surveillance systems and existing disease reporting networks
- Describe the components of effective infectious disease emergency preparedness response systems
- Distinguish high-risk, population-based, and other approaches to improve population health and health equity.
- Be able to conduct a population or community health assessment through the use of relevant/appropriate data/information sources.
- Critically assess different approaches to prevent and control disease taking into account contextual factors
- Differentiate between qualitative and quantitative methods of data collection in relation to their strengths, limitations, and appropriate uses, and emphases on reliability and validity.
- Recognize how data both elucidate a



CC8. Policy and Program Planning, Implementation, and Evaluation: Identify

CC11. *Gender, Culture, and Social Location*: Explain how gender, culture and diverse markers of social location are related to health outcomes; access to and delivery of health services; and program planning.

**Course-Level Learning Objectives:**

- Recognize how gender, ethnicity, race, class and other markers of social location are related to health outcomes.
- Apply the basic concepts, skills, and strategies required for community engagement and empowerment among diverse communities.
- Develop and adapt policies and program delivery that are responsive to diverse populations and groups.

The Organization of Population and Public Health Systems and Services: Students will be able to identify and explain the organization of the population and public health system, both in Canada, as well as in a more global context. This involves understanding the interdependencies of health systems, ranging from the tertiary services characteristic of health care to institutions that promote and protect health through policy, regulation, surveillance, and community-level programming.

CC12.

**SPECIALTY AREA COMPETENCIES**

**Table 2.6.c.i – Core Competencies Specific to the MPH Concentration in Environmental and Occupational Health (Stream will not be offered until 2010)**

EOHC1. Identify route(s) of and factors that influence exposure of humans to environmental toxicants and apply to formulating appropriate exposure reduction strategies.

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policies, structural adjustment programs and the role of international institutions such as the World Bank, International Monetary Fund, and the World Trade Organization on the performance and accessibility of health systems.

**Table 2.6.c.iii – Core Competencies Specific to the MPH Concentration in Population Health (Stream has been offered since 2005)**

PH1. Develop additional expertise in methods of population health data collection and analysis, including one or more of the following: demographic methods for public health, epidemiological methods, intermediate biostatistics, and other areas as identified.

PH2. Develop additional expertise in areas of population and public health applications, including one or more of the following: health promotion, program planning and evaluation, advocacy and communication, and population health policy.

PH3. Develop a broad approach to population and public health practice by taking additional specialization courses offered in the Faculty of Health Sciences.