



MPH Epidemiology Practicum Guidelines

The overall goal of the MPH program is to provide students with a base of knowledge and skills in epidemiological methods and public health that will enable them to pursue professional careers or doctoral studies. Professional careers would include jobs in applied public health settings, such as epidemiologist positions in public health departments, research associate positions in epidemiological research units or program monitoring and evaluation roles in non-governmental organizations.

Practica are important parts of the MPH curriculum. Their overall objective is to provide students with supervised experience in an approved community practice and/or epidemiological research setting where students can:

1. apply the knowledge and skills learned in courses;
2. develop practical skills in public health and epidemiology;
3. achieve competencies best learned in work experiences;
4. explore the kinds of jobs/additional studies that they may take up upon completion of the MPH program;
5. prepare further for doctoral studies.

Two types of practicum placements are available.

- The objective of the research-based practicum is to provide students with supervised research experience in academic and research institutions, to integrate course work and further develop research skills. They also offer a chance to explore the kinds of jobs that students may take on completion of the degree, and to inform students of options for further academic training (e.g., the PhD).
- The objective of the public health practice-based practicum is to provide students with supervised field experience in community health agencies in Canada, to integrate course work and further develop practical skills. They also offer a chance to explore the kinds of jobs that students may take up upon completion of the degree.

Minimum requirements:

A minimum of one practicum placement will be completed by all students, with the option to take additional practicum offerings to reach or go beyond the total number of course credits required for the program. Students may take field placement and research practica in various combinations (e.g., two independent field or research practica, or one of each).

Regular practicum placements:

Students usually complete a 12 – 16 week practicum in their first summer, between May 1 and August 31. The exact dates are negotiated with the practicum supervisor. A 12 week second practicum is often completed in the winter term of year 2, from January 1 to March 30th (see second practicum on page X). For each practicum, a learning contract, interim evaluation and final evaluation must be submitted (see details below).

Capstone Project:

Students who wish a more intensive and longer-term research- or practice-based experience may register for multiple practicum placements with the same supervisor/agency and treat the sequence of practicum placements as a Master's Capstone Project. Students are expected to develop a practicum plan with the supervisor over the planned series of practica, equalling a minimum of 3.0 credits (through a combination of CHL6010Y/CHL6011H and CHL6020Y/CHL6021H practicum course entries. The plan will include appropriate and evaluable objectives associated with each of the individual practica in the sequence. By the end of the last practicum in the sequence, the student will have prepared a final report or paper, the Capstone Project report. The report may take a number of different forms, including a peer-reviewable research publication, a health status report, or a grant application. The report must be presented orally in a public forum, and revised by the student, based on feedback received on the written component and oral presentation, as part of the final practicum.

General Requirements/Conditions for Practica

All practica (including Capstone project) must be supervised by an epidemiologist with at least a master's qualification in community health and epidemiology or epidemiology, or equivalent training and experience.

Before students begin a practicum placement/capstone project, a learning contract must be created and submitted by the student (using the template available from the course website). The contract will outline the:

- specific educational objectives for the student while on placement

- final deliverable product
- title of the primary supervisor and complete contact information
- the setting and the work space (e.g. provision of computer workstation, phone, access to internet and data files, etc.)
- financial arrangements for the practicum.

Evidence that the supervisor concurs with the details of this contract must also be submitted.

In return for providing practicum training experiences, the host agency and supervisor receive benefit from the work done by students, including an agreed upon 'deliverable', generally a report. In many instances, this report will be the basis of a draft document for publication.

Although the provision of a stipend is not required by the program, agencies are encouraged to pay students for work performed, if at all possible. As a guide, a minimum stipend of \$500 per week of full-time work is currently suggested. This should be pro-rated to \$300 a week for 3-day per week practica.

Students who are also Community Medicine residents must ensure that arrangements for practica are consistent with the requirements of their Royal College Program.

Specific Objectives and Conditions

Practicum I

Practicum I is mandatory for all students not completing the capstone project. For full-time students it normally takes place in the summer after the first two semesters of course work. The following required courses must be completed before practicum I can be done: Introduction to Public Health, Epidemiology 1, Biostatistics 1, Public Health Policy, Public Health Research Skills, Epidemiology 2, Biostatistics 2, Scientific Overviews, and Health Trends and Surveillance.

Practicum I must be 12 or 16 weeks in duration. The practicum itself earns 1.5–2.0 credits (a 12 week practicum earns 1.5 credits and a 16 week practicum earns 2.0 credits) and the co-requisite seminar earns 0.5 credits. For students who are registered full-time, Practicum I must be done on a full-time basis. No course work is normally taken during Practicum I. It can only be done with agreement of the practicum supervisor and program director.

For part-time students, the total time spent in the practicum placement must equal 12 weeks or 16 weeks of full-time work, but it can occur at any point in the program, provided the required courses (see above) have been completed.

The first practicum is designed to build on the first two semesters of required academic work, which emphasize basic knowledge and skills in epidemiology and public health practice. The project must include, as a main component, the epidemiological and statistical analysis of primary or secondary data. A significant component of interpretation of epidemiological data is also required. Practicum projects could involve work on a community health status report, a specific health needs assessment, a research project or an outbreak investigation.

The specific objectives of Practicum I are to:

- Identify the information and sources of information necessary for the characterization and epidemiological study of a public health problem.
- Acquire in-depth knowledge on specific health issues encountered during the practicum, as well as general knowledge of current health problems in Canada and strategies for their prevention and control.
- Apply the basic principles and skills learned in the required courses to the problem. Opportunities to critically appraise epidemiological studies or other opportunities to apply epidemiological principles are also expected.
- Gain experience using commonly available statistical/database computer packages such as STATA, SAS, SPSS and Epi-Info.
- Communicate health information to lay and/or professional audiences in written formats. The writing and layout of a report or a part thereof, and/or the preparation of other documents pertaining to work conducted during the practicum normally will fulfill this objective. In addition, each student is normally expected to make an oral presentation to an appropriate audience in the practicum setting. (Later, in the Seminar in Applied Epidemiology, a formal presentation will be made at the University of Toronto as a co-requisite part of the Practicum I experience).
- Understand the structure, roles, and functioning of the agency/organization in which the practicum occurs. This should include the roles of various professionals and staff, and, in particular, the role of an epidemiologist working within such an agency.

Practicum I must be done in Canada. Rare exceptions may be made with the permission of the Program Director. Applied settings suitable for practicum I include: public health departments; district health planning agencies, regional health authorities; provincial and federal government settings and applied research units. Suitable research settings include: hospital-affiliated research units; applied research institutes; university-based research units, and provincial agency-based research units.

Fall practicum and Second practicum placements

A fall practicum or second practicum placement is optional, aiming to provide students with additional research or field experience. It is normally not started until Practicum I has been completed and the practicum report has been delivered to the Program Leader.

Fall practicum consists of two main types.

1. Practicum 1 extensions. Where a student has completed at 12 or 16 week practicum placement (final evaluation and practicum 1 report has been submitted) and wishes to extend that work with the same supervisor and on a related project, the equivalent of a 4 week practicum (1.5 days per week for 12 weeks) can be completed (0.5 credits). A new learning contract must be submitted and approved.
2. Part time fall practicum. A student can arrange for a part time practicum placement at 3 days a week for 13 weeks of the fall term. This practicum occurs after the practicum 1 report and final evaluation have been submitted. This practicum normally counts for 1.0 credits.

It should be noted that credit cannot be given for the same educational objectives so students must submit a learning contract that contains different learning objectives than were specified in previous practicum placements. The only exception is the Capstone Project where the objectives span the length of the project.

Second (winter) practicum: Normally, it is 12 weeks in duration and if taken on a full-time basis earns 1.5 credits. A 16 week practicum can be done but students are warned that this may preclude them graduating in June since the deadline for submitting the list of graduating students usually occurs around April 15th and no extensions to this deadline can be given.

With the permission of the practicum supervisor one half-credit course may be taken concurrently. The program director must be informed if a decision is made to take a course along with the second practicum.

As with the fall practicum, the educational objectives for the second practicum must be substantively different from those set out for first practicum and fall practicum (if taken) because credit cannot be given twice for demonstrating and practicing the same skills. Sample objectives for the second practicum include the following. Although all may not be achievable in any particular practicum, at least two of these objectives should be realized.

- To gain experience with different types of evaluation research design and to understand the process for implementing an evaluation plan.
- To gain experience in survey development and management.

- To develop an epidemiological research proposal.
- To identify, measure, value and compare the costs and consequences of alternative health promotion and disease prevention programs.
- To participate in the process of public policy formulation within public health agencies settings, including the analysis of policy situations from a political perspective.
- To understand the analytical process of issue identification, analysis, alternative options and option evaluation.
- To gain skills and experience in the area of qualitative research.
- To gain skills and experience in advanced data analysis techniques.

Students can continue with the same practicum supervisor or choose a different practicum supervisor as fits their academic plan. If the student wishes a more detailed study in one area, working with one supervisor is encouraged. For students who wish to have a variety of experiences, working with different supervisors and in different settings is encouraged.

Global health:

For those students in the global health program, it is recommended that they complete their global health placement as a second practicum in the second winter term. Students who wish to avail themselves of this opportunity should submit funding proposals early in the second semester (one year ahead of time). This advanced planning is required due to the time required to process such funding applications.

Please note:

1. Each practicum will be registered separately. It is unacceptable to fail to meet the educational objectives of first practicum and simply transfer these objectives to a subsequent practicum. For example, students who fail to complete the pre-specified data analyses in the first practicum, cannot transfer the work and related educational objectives to second or fall practicum. Each practicum must stand on its own as a complete unit of work, and, as noted earlier, the first practicum must be completed before a second practicum can begin.
2. It is the responsibility of each student to enroll appropriately for the practicum in ROSI. If a student has difficulty enrolling for a practicum placement, they should contact the graduate office for assistance. Incorrect enrolments (such as not enrolling for the practicum extension to make it 16 versus 12 weeks) need to be corrected as soon as possible.

3. Part time students may have a very different schedule of practicum placements based on their schedule. The usual formula is to calculate equivalency of work based on the number of days of a practicum (e.g. 20 weeks at 3 days per week = 30 weeks at 2 days per week = 60 days of practicum experience = 12 weeks at 5 days per week = 1.5 credits).