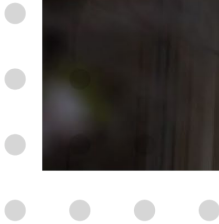




**HARVARD**  
**T.H. CHAN**

**SCHOOL OF PUBLIC HEALTH**  
Powerful ideas for a healthier world



# **2022-2023**

## **MPH Curriculum Guide**

---

**CLINICAL EFFECTIVENESS**  
**45-Credit Program**  
*(On-Campus / Summer Focused)*

## TABLE OF CONTENTS

---

MPH-45 LEADERSHIP AND ADMINISTRATION .....	1
HARVARD CHAN ESSENTIAL RESOURCES FOR STUDENTS.....	2
CLINICAL EFFECTIVENESS POLICIES AND PROCESSES.....	3
MASTER OF PUBLIC HEALTH: PROGRAM OVERVIEW .....	6
CLINICAL EFFECTIVENESS FIELD OF STUDY OVERVIEW.....	7
CLINICAL EFFECTIVENESS DEGREE REQUIREMENTS .....	9
MPH-45 CLINICAL EFFECTIVENESS – ACADEMIC YEAR CURRICULUM.....	10
MPH-45 CLINICAL EFFECTIVENESS – SUMMER-ONLY CURRICULUM.....	15
ONLINE MPH-EPI ELECTIVE COURSES .....	19

While every effort has been made to ensure that the information contained in this guide is accurate at the time of publication, the Harvard T.H. Chan School of Public Health reserves the right to make changes, at any time, regarding the curriculum, degree requirements, course offerings, policies, or any other information contained herein. This version of the MPH-45 Curriculum Guide (published on August 18, 2022) only pertains to students in the Clinical Effectiveness field of study matriculating in summer or fall 2022.

## MPH-45 LEADERSHIP AND ADMINISTRATION

The master of public health program is a school-wide degree program governed by the *MPH Steering Committee* and supported by the *Office of Educational Programs* and the academic department(s) related to each of the fields of study.

<b>MPH PROGRAM LEADERSHIP AND ADMINISTRATION – OFFICE OF EDUCATIONAL PROGRAMS</b>		
<b>Murray Mittleman</b>	Faculty Director, MPH Program	<a href="mailto:mmittlem@hsph.harvard.edu">mmittlem@hsph.harvard.edu</a> Kresge 505
<b>Anne Occhipinti</b>	Assistant Dean for Professional Education	<a href="mailto:aocchipi@hsph.harvard.edu">aocchipi@hsph.harvard.edu</a> Kresge G-29
<b>Emily Davies</b>	Assistant Director, MPH Program	<a href="mailto:edavies@hsph.harvard.edu">edavies@hsph.harvard.edu</a>
<b>Megan Kerin</b>	Academic Program Manager	<a href="mailto:mkerin@hsph.harvard.edu">mkerin@hsph.harvard.edu</a>
<b>Ying-Ju Lai</b>	Educational Programs Project Manager	<a href="mailto:ylai@hsph.harvard.edu">ylai@hsph.harvard.edu</a>
<b>Stephanie Lemoine</b>	Assistant Director, MPH-EPI Program	<a href="mailto:slemoine@hsph.harvard.edu">slemoine@hsph.harvard.edu</a>
<b>Tracy Morgan</b>	MPH Program Assistant	<a href="mailto:tamorgan@hsph.harvard.edu">tamorgan@hsph.harvard.edu</a>
<b>Nkwanzu Sabiti</b>	Senior MPH Program Coordinator	<a href="mailto:nsabiti@hsph.harvard.edu">nsabiti@hsph.harvard.edu</a>
<b>MPH-45 FIELD OF STUDY LEADERSHIP AND ADMINISTRATION</b>		
	Field of Study Leader	Academic Administrator(s)
<b>Clinical Effectiveness (CLE)</b>	Heather Baer <a href="mailto:hbaer@bwh.harvard.edu">hbaer@bwh.harvard.edu</a>	Emily Davies and Nkwanzu Sabiti <a href="mailto:mph@hsph.harvard.edu">mph@hsph.harvard.edu</a>
<b>Epidemiology (EPI) (Online/On-Campus)</b>	Heather Baer <a href="mailto:hbaer@bwh.harvard.edu">hbaer@bwh.harvard.edu</a>	Stephanie Lemoine <a href="mailto:slemoine@hsph.harvard.edu">slemoine@hsph.harvard.edu</a> Elizabeth Rowell <a href="mailto:erowell@hsph.harvard.edu">erowell@hsph.harvard.edu</a>
<b>Generalist (GEN) (Online)</b>	Bonnie Blanchfield <a href="mailto:bblanchfield@hsph.harvard.edu">bblanchfield@hsph.harvard.edu</a>	Megan Kerin <a href="mailto:mkerin@hsph.harvard.edu">mkerin@hsph.harvard.edu</a>
<b>Global Health (GH)</b>	Ana Langer <a href="mailto:alanger@hsph.harvard.edu">alanger@hsph.harvard.edu</a>	Allison Conary <a href="mailto:aconary@hsph.harvard.edu">aconary@hsph.harvard.edu</a> Barbara Heil <a href="mailto:bheil@hsph.harvard.edu">bheil@hsph.harvard.edu</a>
<b>Health Management (HM)</b>	Bonnie Blanchfield <a href="mailto:bblanchfield@hsph.harvard.edu">bblanchfield@hsph.harvard.edu</a>	Jennifer Moltoni <a href="mailto:jmoltoni@hsph.harvard.edu">jmoltoni@hsph.harvard.edu</a>
<b>Health Policy (HP)</b>	David Hemenway <a href="mailto:hemenway@hsph.harvard.edu">hemenway@hsph.harvard.edu</a>	
<b>Health &amp; Social Behavior (HSB)</b>	Vaughan Rees <a href="mailto:vrees@hsph.harvard.edu">vrees@hsph.harvard.edu</a>	Teresa Bellone <a href="mailto:tbellone@hsph.harvard.edu">tbellone@hsph.harvard.edu</a> Daniel Choi <a href="mailto:danielchoi@hsph.harvard.edu">danielchoi@hsph.harvard.edu</a> Whitney Waddell <a href="mailto:wwaddell@hsph.harvard.edu">wwaddell@hsph.harvard.edu</a>
<b>Occupational &amp; Environmental Health (OEH)</b>	Stefanos Kales <a href="mailto:skales@hsph.harvard.edu">skales@hsph.harvard.edu</a>	Barbara Zuckerman <a href="mailto:bzuckerm@hsph.harvard.edu">bzuckerm@hsph.harvard.edu</a>
<b>Quantitative Methods (QM)</b>	Murray Mittleman <a href="mailto:mmittlem@hsph.harvard.edu">mmittlem@hsph.harvard.edu</a>	Emily Davies and Nkwanzu Sabiti <a href="mailto:mph@hsph.harvard.edu">mph@hsph.harvard.edu</a>

## HARVARD CHAN ESSENTIAL RESOURCES FOR STUDENTS

---

### MPH PROGRAM OFFICE – OFFICE OF EDUCATIONAL PROGRAMS (MPH-OEP OFFICE)

[hsph.me/mph-program-team](https://hsph.me/mph-program-team)

677 Huntington Avenue, Kresge G-29  
Boston, MA 02115

[mph@hsph.harvard.edu](mailto:mph@hsph.harvard.edu)

617-432-0090

- **MPH Program Head Signature (for General Petitions and other *forms*):**  
Emily Davies, Kresge G-29 or [mph@hsph.harvard.edu](mailto:mph@hsph.harvard.edu)
- **MPH Public Health Core Contact:** Ying-Ju Lai ([ylai@hsph.harvard.edu](mailto:ylai@hsph.harvard.edu))
- **ID 100 Waivers:** [ID100@hsph.harvard.edu](mailto:ID100@hsph.harvard.edu)
- **Field of Study Waiver and Substitution Requests:** MPH-OEP Office ([mph@hsph.harvard.edu](mailto:mph@hsph.harvard.edu)), Field of Study Leader, and Academic Administrator(s)

### REGISTRAR'S OFFICE || [hsph.me/registrar](https://hsph.me/registrar)

Kresge G-4 Suite

[registrar@hsph.harvard.edu](mailto:registrar@hsph.harvard.edu)

617-432-1032

- **Academic Calendar:** [hsph.me/academic-calendar](https://hsph.me/academic-calendar)
- **Harvard Course Catalog:** <https://courses.harvard.edu>
- **Student Handbook:** [hsph.me/student-handbook](https://hsph.me/student-handbook)
- **Student Knowledge Center:** [hsph.me/knowledge-center](https://hsph.me/knowledge-center) (information about course enrollment, cross-registration, etc.)

### OFFICE OF CAREER & PROFESSIONAL DEVELOPMENT || [hsph.me/careers](https://hsph.me/careers)

Kresge G-4 Suite

[careers@hsph.harvard.edu](mailto:careers@hsph.harvard.edu)

### OFFICE OF DIVERSITY & INCLUSION || [hsph.me/diversity](https://hsph.me/diversity)

Kresge G-4 Suite

[odi@hsph.harvard.edu](mailto:odi@hsph.harvard.edu)

### OFFICE OF FINANCIAL AID || [hsph.me/fin-aid-office](https://hsph.me/fin-aid-office)

Kresge G-4 Suite

[financialaid@hsph.harvard.edu](mailto:financialaid@hsph.harvard.edu)

### OFFICE OF REGULATORY AFFAIRS & RESEARCH COMPLIANCE || [hsph.me/HLC\\_IRB](https://hsph.me/HLC_IRB)

- Institutional Review Board (IRB) contact

### OFFICE FOR STUDENT AFFAIRS || [hsph.me/student-affairs](https://hsph.me/student-affairs)

Kresge G-4 Suite

[studentaffairs@hsph.harvard.edu](mailto:studentaffairs@hsph.harvard.edu)

- **Housing Resources:** [hsph.me/housing](https://hsph.me/housing)
- **Student Support Services:** [hsph.me/support-services](https://hsph.me/support-services)

### OFFICE FOR ALUMNI AFFAIRS || [hsph.me/alumni-office](https://hsph.me/alumni-office)

90 Smith Street, Fourth Floor

[alumni@hsph.harvard.edu](mailto:alumni@hsph.harvard.edu)

## CLINICAL EFFECTIVENESS POLICIES AND PROCESSES

---

### ACADEMIC DEADLINES & HARVARD EMAIL

Students are responsible for knowing and meeting all deadlines and regularly reading their Harvard email. The School's academic calendar is posted on the Registrar's Office website ([hsph.me/academic-calendar](https://hsph.harvard.edu/academic-calendar)).

### TRANSFER CREDITS, WAIVERS, & SUBSTITUTIONS

The Harvard Chan School does not accept transfer credits from other academic institutions. However, students who have taken equivalent courses at another School of Public Health may petition to waive or substitute a requirement. If a waiver or substitution is approved, the MPH-45 student must still fulfill the 45 credit minimum requirement in order to graduate. For questions about waiving or substituting a required course, visit [hsph.me/mph-waivers](https://hsph.harvard.edu/mph-waivers) or contact the MPH-OEP Office ([mph@hsph.harvard.edu](mailto:mph@hsph.harvard.edu)).

Students who have previously earned credits as a non-degree Program in Clinical Effectiveness (PCE) student will have those credits automatically transferred to their degree program after matriculation. If students want to transfer other non-degree credits earned at the Harvard Chan School in a separate semester, they must submit a Non-Degree Credit Transfer Form ([hsph.me/registrar-forms](https://hsph.harvard.edu/registrar-forms)). Students may petition to transfer a maximum of 20 non-degree Harvard Chan credits for academic credit towards their degree program. To understand the financial implications of transferring non-degree credits into the degree program, visit the [Non-Degree Transfer Credits](#) page on the Student Billing website.

### FIELD OF STUDY & PROGRAM CHANGES

For questions about either changing your field of study or changing your program from academic year CLE to summer-only CLE or vice versa, contact the MPH-OEP Office ([mph@hsph.harvard.edu](mailto:mph@hsph.harvard.edu)). It is very important to be aware of which program option (academic year or summer-only) you have selected because there are some differences in the program, particularly with regard to fulfilling the field of study requirements and the practicum. If you have not selected the correct option for your needs, please contact the MPH-OEP Office as soon as possible. Students may make a change early in the program but cannot switch back and forth. Students interested in making a change in program will also want to consult both the Registrar's Office ([registrar@hsph.harvard.edu](mailto:registrar@hsph.harvard.edu)) and the Office of Financial Aid ([financialaid@hsph.harvard.edu](mailto:financialaid@hsph.harvard.edu)) to discuss any financial implications.

### IMPORTANT ENROLLMENT POLICY FOR INTERNATIONAL STUDENTS

Academic year (residential) international students who are on a student visa must enroll in a minimum of 15 credits per fall and spring semester, including a minimum of 11.25 credits of in-person courses per semester. One way for students to determine their in-person course credits is to look at "instruction mode" in the course listings in the Harvard Course Catalog (<https://my.harvard.edu>).

## **STUDENT STATUS (FULL-TIME, PART-TIME, & HALF-TIME)**

For definitions of full-time, part-time, and half-time status for academic year (residential) and summer-only students, see the Harvard Chan School Student Handbook ([hsph.me/student-handbook](https://hsph.harvard.edu/student-handbook)). Adjusting your student status may affect your student health insurance, billing, graduation date, student loans, grants, scholarships, and/or student visa (if applicable). Therefore, students considering changing their student status may want to contact:

1. MPH-OEP Office – [mph@hsph.harvard.edu](mailto:mph@hsph.harvard.edu)
2. Registrar's Office – [registrar@hsph.harvard.edu](mailto:registrar@hsph.harvard.edu)
3. Office of Financial Aid – [financialaid@hsph.harvard.edu](mailto:financialaid@hsph.harvard.edu)
4. Harvard International Office (Elizabeth Capuano) – [elizabeth\\_capuano@harvard.edu](mailto:elizabeth_capuano@harvard.edu)

## **HARVARD CHAN SEMESTER-BASED SYSTEM**

The Harvard Chan School uses a semester-based system. For more information, see [hsph.me/navigating-your-field-of-study](https://hsph.me/navigating-your-field-of-study).

## **ENROLLING IN ONLY ONE SESSION IN A SEMESTER**

Academic year (residential) students planning to only enroll in Fall 2 or Spring 2 courses must still enroll in those courses by the Fall/Fall 1 or Spring/Spring 1 add/drop deadlines, respectively, or otherwise risk being withdrawn from degree candidacy. Students who enroll in Winter Session courses are considered enrolled for the spring semester.

Summer-only students planning to only enroll in Summer 2 courses must still enroll in those courses by the Summer/Summer 1 add/drop deadline or otherwise risk being withdrawn from degree candidacy. Students in their first summer of the degree program are expected to be enrolled for both Summer 1 and Summer 2 sessions.

## **LEAVE OF ABSENCE**

Students who are unable to enroll in ANY credits in a specific semester must apply for a leave of absence or risk being withdrawn from degree candidacy. If planning to take a leave, students should contact the MPH-OEP Office. The student will need to complete a Leave of Absence Petition ([hsph.me/registrar-forms](https://hsph.me/registrar-forms)).

## **BILLING & ENROLLMENT**

For questions about tuition or student billing, visit the Student Billing website ([hsph.me/student-billing](https://hsph.me/student-billing)) or contact the Registrar's Office ([hsph.me/registrar](https://hsph.me/registrar)). To discuss your student status and implications for credit load minimums and maximums, contact the Registrar's Office ([registrar@hsph.harvard.edu](mailto:registrar@hsph.harvard.edu)). A course materials fee may apply for some courses. Where applicable, a maximum estimated course materials fee can be found in the Harvard Course Catalog (<https://my.harvard.edu>). Course materials fees are billed following the add/drop period each term and are not included in tuition. For more information on course materials fees, see [hsph.me/curriculum-center/for-students](https://hsph.me/curriculum-center/for-students).

### **Academic Year Full-Time Students**

MPH-45 students are required to complete a minimum of 45 credits in a one-year program. Therefore, students are generally advised to register for approximately 22.5–25 credits per semester.

### **Academic Year Part-Time Students**

Part-time students in the MPH-45 program typically complete the degree over two to three years (maximum of three years). Part-time students should prioritize required courses during their first year.

- International students who are on a student visa may not be part-time. If you have questions regarding your student visa, please speak with the Harvard International Office (HIO) ([elizabeth\\_capuano@harvard.edu](mailto:elizabeth_capuano@harvard.edu)) and with the Registrar's Office ([hsph.me/registrar](https://hsph.me/registrar)).

### **Summer-Only Students**

Summer-only students in the MPH-45 program typically complete the degree in 2 ½-3 summers (maximum of three summers). Summer-only students who take online courses and/or Winter Session courses may be able to reduce their time to degree to two summers, but this is not guaranteed. Note that this does not result in a reduction in tuition for the program.

## MASTER OF PUBLIC HEALTH: PROGRAM OVERVIEW

---

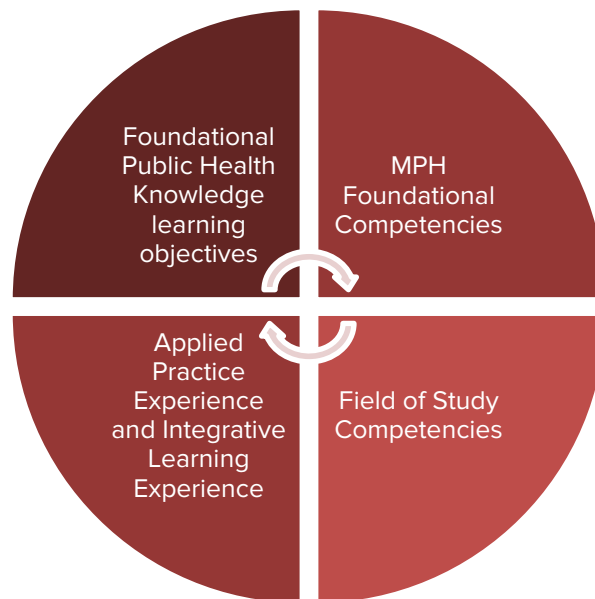
The MPH degree is the most widely recognized professional credential for leadership in public health. The MPH curriculum emphasizes active, student-directed learning, problem solving, and the acquisition of skills essential to the practice of public health. The program is organized around the Foundational Public Health Knowledge learning objectives, the MPH Foundational Competencies, the Applied Practice Experience, and the Integrative Learning Experience laid out by the Council on Education for Public Health (CEPH). Students pursue a career-oriented field of study. Each field of study has defined five distinct competencies that enhance the 12 Foundational Public Health Knowledge learning objectives and the 22 MPH Foundational Competencies.

### HARVARD CHAN'S COMPETENCY AND APPLICATION-BASED MPH CURRICULUM

The MPH public health core curriculum is developed in accordance with the Council on Education for Public Health's 12 Foundational Public Health Knowledge learning objectives and 22 MPH Foundational Competencies required of all students receiving an MPH degree at accredited institutions. To learn more, visit [hsph.me/mph-competencies](https://hsph.me/mph-competencies).

The Foundational Public Health Knowledge learning objectives and the MPH Foundational Competencies are primarily met through the Harvard Chan MPH public health core curriculum, the Applied Practice Experience, and the Integrative Learning Experience.

### The Harvard Chan MPH Degree





## CLINICAL EFFECTIVENESS FIELD OF STUDY OVERVIEW

---

The **Clinical Effectiveness (CLE) field of study** is focused on identifying the most appropriate, ethical, and cost-effective means of providing health care through prevention, early detection, and treatment. With this focus, the field of study is designed to provide the analytical and quantitative training necessary to evaluate the impact of clinical practices, decisions, and interventions. Major areas of professional interest within this field include clinical epidemiology and biostatistics, cost-effectiveness analysis, medical decision analysis, health services research, quality improvement in health care, and measurement of health-related quality of life. Along with the broad perspective on general aspects of public health that the program offers, this training provides a basis for identifying the health policy implications and public health benefits of clinical investigations. The field of study prepares students for clinical research responsibilities and for leadership roles in evaluating and improving all aspects of health care delivery. Most graduates hold positions in academic medicine. *Limited to clinicians who enroll initially in the Program in Clinical Effectiveness ([hsph.me/clinical-effectiveness](https://hsph.me/clinical-effectiveness)).*

### CURRICULUM

The curriculum for the Clinical Effectiveness field of study consists of the required MPH public health core curriculum as well as introductory courses in clinical epidemiology and biostatistics, which students take during the Program in Clinical Effectiveness. Students also take more advanced coursework in relevant areas such as epidemiology and biostatistics, health services research, quality improvement, and decision sciences. Students must also complete an approved Applied Practice Experience and an Integrative Learning Experience which usually involves an applied research project. Students also have credits available for elective courses.

### FIELD OF STUDY COMPETENCIES

- Develop a comprehensive understanding of the role of epidemiology and biostatistics in providing a quantitative approach for examining the effectiveness of clinical decisions and interventions
- Critically evaluate the methods and results of observational and experimental studies that are designed to examine the effectiveness of clinical decisions and interventions, such as cohort studies, case-control studies, quasi-experimental studies, and randomized controlled trials
- Design and conduct valid and efficient studies in specific areas that are relevant to clinical effectiveness research, such as clinical epidemiology, health services research, comparative effectiveness research, and quality improvement
- Calculate and interpret epidemiologic measures of frequency and association that are used in studies designed to examine the effectiveness of clinical decisions and interventions
- Apply appropriate biostatistical techniques, using computer software packages, to analyze and interpret data from studies that are designed to examine the effectiveness of clinical decisions and interventions, including crude analyses, stratified analyses, and regression methods

## NAVIGATING YOUR FIELD OF STUDY

This guide provides detailed information for the Clinical Effectiveness field of study, including the policies and processes for all CLE students, as well as those only applicable to academic year or summer-only CLE students. This guide also includes an **overview**, the field of study **competencies**, and the field of study **curriculum** that is designed to help students achieve those competencies.

A section of the MPH-OEP website ([hsph.me/mph-online-curriculum-guide](https://hsph.me/mph-online-curriculum-guide)) is designed to supplement the MPH Curriculum Guide and provides students with additional details on **required, recommended, and/or suggested elective courses** for some fields of study. (This version of the MPH-45 Curriculum Guide only features the Clinical Effectiveness field of study. To view curricula for the other MPH-45 fields of study, visit [hsph.me/mph-curr-guide](https://hsph.me/mph-curr-guide).) Students are encouraged to carefully review the field of study requirements and consult with their faculty advisor to choose elective courses best suited to their needs.

## ADVISING

Your assigned academic advisor can be found in [my.harvard](https://my.harvard). The MPH-OEP Office is a good resource for questions regarding the MPH public health core curriculum and graduation. Faculty advisors, field of study leaders, departmental faculty with specific areas of expertise, and academic administrators can all serve as advisors in unofficial capacities too. For more resources on planning your program, visit [hsph.me/navigating-your-field-of-study](https://hsph.me/navigating-your-field-of-study).

## INTERDISCIPLINARY CONCENTRATIONS

To learn more, visit [hsph.me/interdisciplinary-concentrations](https://hsph.me/interdisciplinary-concentrations) (only open to academic year students).

## TRACKING YOUR DEGREE PROGRESS

The MPH-OEP Office offers degree audit sheets for the Clinical Effectiveness field of study ([hsph.me/mph-degree-tracking](https://hsph.me/mph-degree-tracking)).

## GRADUATION

Completion of the MPH public health core curriculum and field of study requirements for the MPH degree is monitored by the MPH-OEP Office. It is the student's responsibility to proactively reach out to the MPH-OEP Office, field of study leader, and/or academic administrator(s) if any concerns arise.

## CLINICAL EFFECTIVENESS DEGREE REQUIREMENTS

---

### DEGREE REQUIREMENTS FOR ALL CLE STUDENTS

- **45 credits** minimum
  - Minimum of **32.5 ordinal credits**
  - No more than **12.5 pass/fail credits** (some required courses and all independent studies are P/F only)
- Successful completion of all courses required by your field of study
- Applied Practice Experience
- Integrative Learning Experience
- Cumulative grade point average of at least 2.7

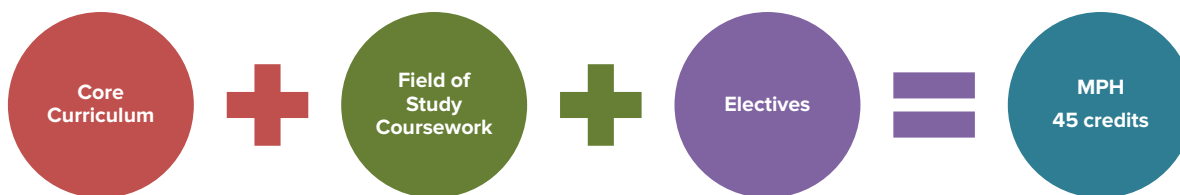
### PROGRAM POLICIES FOR ACADEMIC YEAR CLE STUDENTS

- Can take a maximum of **27.5 credits** in fall and spring semesters
- Can take a maximum of **15 credits** in summer term
- Limited to a maximum of **3.75 credits from the list of online MPH-EPI courses** (see p. 19) **in any semester** with a maximum of **10 credits from the list of online MPH-EPI courses overall** out of the required 45 credits for the MPH degree
- All full-time MPH students are expected to participate in a **Winter Session** activity that furthers their educational goals and is approved by the MPH-OEP Office. Any credits taken during Winter Session count towards your spring semester credit totals. To learn more, visit [hsph.me/mph-winter-session](https://hsph.me/mph-winter-session)

### PROGRAM POLICIES FOR SUMMER-ONLY CLE STUDENTS

- Can take a maximum of **15 credits** in summer term. (EPI 947 practicum credits count towards this maximum)
- Limited to a maximum of **5 credits from the list of online MPH-EPI courses** (see p. 19) **in any semester** with a maximum of **10 credits from the list of online MPH-EPI courses overall** out of the required 45 credits for the MPH degree
- Can take up to **5 credits** of Winter Session coursework per term ([hsph.me/mph-winter-session](https://hsph.me/mph-winter-session))
- Can take **2.5–7.5 practicum credits** (EPI 947) in any semester of the program
- Registering for only practicum credits (EPI 947) in summer term:
  - **Summer-only degree students are required to enroll in on-campus courses during the summer term.** If a student wants to enroll in only their practicum and no other on-campus summer courses, they may do so if the student is in their final semester, and this is the last remaining requirement to complete their degree. Students will be required to submit the Final Summer Practicum Intent Form ([hsph.me/registrar-forms](https://hsph.me/registrar-forms)) to the Registrar's Office before the add/drop deadline for the applicable summer term.
  - If a student is not able to enroll in on-campus courses during the summer term and does not meet the criteria above, they will be required to submit a Leave of Absence Petition ([hsph.me/registrar-forms](https://hsph.me/registrar-forms)).

## MPH-45 CLINICAL EFFECTIVENESS – ACADEMIC YEAR CURRICULUM



### MPH PUBLIC HEALTH CORE CURRICULUM

The MPH public health core curriculum is comprised of:

- **Biostatistics and Epidemiology Core** course(s);
- **ID 100: *Foundations for Public Health***, a school-wide, pre-matriculation course that provides foundational public health knowledge;
- **MPH 101–MPH 105**, five courses that cover other foundational public health competencies.

In general, full-time MPH-45 students are expected to complete the MPH public health core curriculum by the end of the fall semester. Part-time MPH students are strongly encouraged to complete at least part of the MPH public health core curriculum in their first year to ensure early grounding in the foundational principles of public health. No waivers or substitutions will be allowed for MPH 101–MPH 105.

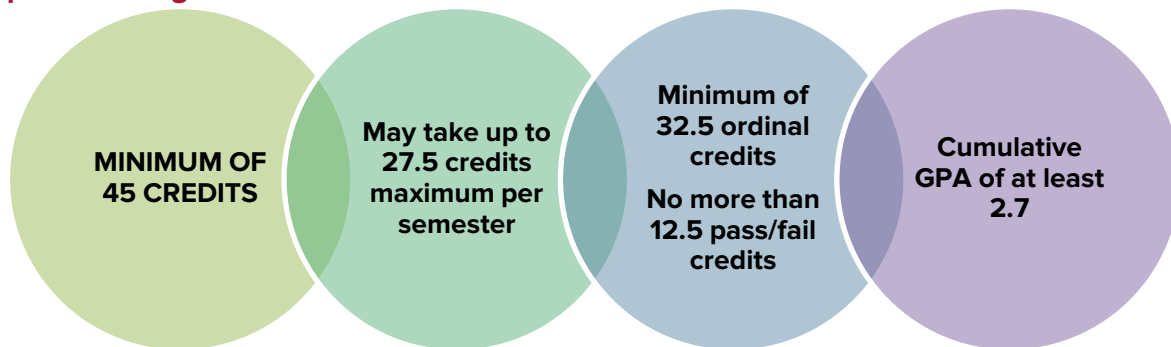
<b>ACADEMIC YEAR CLINICAL EFFECTIVENESS CORE REQUIREMENTS</b>			
Course Number	Title	Semester	Credits
<b>Biostatistics and Epidemiology Core (10 credits)</b>			
BST 206	Introductory Statistics for Medical Research	Summer 1	2.5
BST 207 or BST 208	Statistics for Medical Research	Summer 2	2.5
EPI 208	Introduction to Clinical Epidemiology	Summer	5.0

Course Number	Title	Semester	Credits	Course Format/Notes
<b>MPH Public Health Core (6.25 credits)</b>				
<i>ID 100 is a fully online and asynchronous summer-based course required of all Harvard Chan students. While students will be given access to the ID 100 course materials via <a href="#">Canvas</a> in July, each student will still need to formally enroll in ID 100 via <a href="#">my.harvard</a> during the fall enrollment period.</i>				
ID 100	Foundations for Public Health	Summer into Fall 1	1.0 (Pass/Fail Only)	Asynchronous, self-paced, online course. Takes approx. 10–12 hours total and must be completed by Sunday, August 21, 2022.  <b>Must be completed in first year of program.</b>
<i>Academic year CLE students have some flexibility when choosing which terms to complete the <b>MPH 101–MPH 105</b> core courses; see options below (subject to change for new students entering in the 2023-2024 academic year).</i>				
<i>Note: academic year CLE students must enroll in either section 1 or 2 of the fall offerings of MPH 102, MPH 103, and MPH 104 since those sections involve an in-person component. The fall fully online section of the MPH core courses are not open to academic year CLE students.</i>				
MPH 101	Qualitative Methods for Public Health: A Brief Introduction	Summer or Fall 2	0.25 (Pass/Fail Only)	Asynchronous, self-paced, online course. Takes approx. 8–10 hours total.  <b>Must be completed in first year of program.</b>
MPH 102	Health Systems	Summer or Fall 1 or Winter Session	1.25	Asynchronous online course with set deadlines for completion of each module. Synchronous in-person sessions also are required for the Fall 1 section.
MPH 103	Leadership and Communication	Fall 2 or Winter Session	1.25	Asynchronous online course with set deadlines for completion of each module. Synchronous in-person sessions also are required for the Fall 2 section.
MPH 104	Social, Behavioral, and Structural Determinants of Health	Summer or Fall 1 or Winter Session	1.25	Asynchronous online course with set deadlines for completion of each module. Synchronous in-person sessions also are required for the Fall 1 section.
MPH 105	Public Health Policy and Politics	Fall 2	1.25	Synchronous online course that meets weekly.

## ACADEMIC YEAR CLINICAL EFFECTIVENESS FIELD OF STUDY REQUIREMENTS

Course Number	Title	Semester	Credits
<b>Regression (2.5–5 credits)</b>			
<i>Choose <b>one</b> of the approved courses below.</i>			
BST 210	Applied Regression Analysis	Fall or Spring	5.0
BST 213	Applied Regression for Clinical Research	Fall	5.0
BST 215	Linear and Longitudinal Regression	Summer 2 or Spring (ONLINE)	2.5
EPI 236	Analytical Clinical Epidemiology	Summer 1	5.0
<b>Upper-Level CLE Coursework (5 credits)</b>			
<i>Upper-level CLE courses are defined as any courses beyond the introductory level that provide students with analytic and/or quantitative skills for evaluating clinical/public health issues.</i>			
Varies	Take <b>5 credits</b> from the list of approved courses ( <a href="https://hsph.me/CLE-upper-level">hsph.me/CLE-upper-level</a> ).		5.0
<b>Applied Practice Experience and Integrative Learning Experience (2.5 credits)</b>			
<i>Two semesters required; 1.25 credits per semester for a total of 2.5 credits of EPI 946.</i>			
EPI 946F	Applied Practice and Integrative Learning Experience for CLE (Academic Year)	Fall	1.25
EPI 946S	Applied Practice and Integrative Learning Experience for CLE (Academic Year)	Spring	1.25
<b>ELECTIVES (16.25–18.75 credits)</b>			
<i>To view a sample list of cross-registration electives, visit <a href="https://hsph.me/mpg-cross-reg">hsph.me/mpg-cross-reg</a></i>			
			<b>TOTAL 45 CREDITS</b>

### Important Program Reminders



## **APPLIED PRACTICE EXPERIENCE AND INTEGRATIVE LEARNING EXPERIENCE**

Each field of study in the MPH program requires 1) an **Applied Practice Experience (APE)** (“Practicum”), and 2) an **Integrative Learning Experience (ILE)**, which are components of a practice course or seminar course for each field of study. All MPH students at accredited Schools of Public Health in the U.S. must complete these two degree requirements.

Detailed information about the applied practice experience and the integrative learning experience is posted on the [MPH in Clinical Effectiveness – Practicum](#) site. In addition, a brief overview is included below.

EPI 946 satisfies the Applied Practice Experience and the Integrative Learning Experience that is required for academic year Clinical Effectiveness students. It involves two main components: 1) working on a supervised project to integrate and apply the skills and competencies learned in coursework to address a clinical or public health problem of interest, and 2) participating in a weekly seminar course (EPI 946) for two semesters, in which students present their practicum projects to faculty and other students.

### **Applied Practice Experience**

The objectives of the practicum are to help students integrate, synthesize, and apply the knowledge and competencies from program coursework to a real-world public health problem or issue; explore a substantive public health topic that is of interest to the student and to an external organization; and enhance the skills needed to function in a professional public health setting.

For Clinical Effectiveness students, the Applied Practice Experience, referred to as the practicum, typically will involve conducting an applied research project, but it could also pertain to any applied aspect of health care. The practicum may include aspects of biostatistics, epidemiology, decision sciences, or other quantitative aspects of public health. Students are required to submit two Applied Practice Experience products from their practicum work, demonstrating a total of five competencies (three foundational and two field of study-specific competencies).

Students will formulate a research question and hypothesis, develop an analysis plan, conduct the statistical analysis, and summarize the findings in a presentation. Students may develop a project using data from their home institutions, from mentors/collaborators at other institutions, from publicly available databases, or from other sources. In some cases, students may collect their own data (e.g., by developing and administering a survey), although primary data collection is not a requirement.

Each student will be required to complete a brief planning survey about their practicum in the fall of their first year. In addition, each student will be required to submit a Learning Agreement, which is a brief outline of the proposed project, prior to beginning their practicum. Full-time students who are completing the degree in one academic year should aim to identify their practicum topic by the end of Fall 1. Part-time students who are completing the degree in two or more academic years should aim to identify their practicum topic by the end of their first year. Students usually identify their own topic for the practicum, but any student who is unsure of an appropriate topic should meet with the

CLE field of study leader early in their program to discuss potential topics. The CLE field of study leader must approve the practicum topic and the Learning Agreement.

### **Integrative Learning Experience**

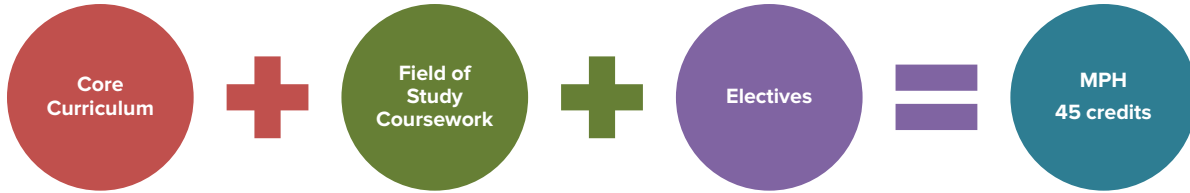
Students are required to attend two semesters of EPI 946 (usually in the second or third year if students are doing the degree part-time). In addition, each student must do a formal presentation of the results of their practicum project during the EPI 946 seminar (usually during their second semester of the course) or, in special cases, at another seminar that is approved by the CLE field of study leader. Students who cannot attend EPI 946 on a regular basis due to extenuating circumstances must discuss alternative options with and obtain approval from the CLE field of study leader (although please note that approval is not guaranteed).

### **For More Details**

Prior CLE practice sites and recent project abstracts: [hsph.me/mpg-prior-practice](https://hsph.me/mpg-prior-practice)  
MPH in Clinical Effectiveness – Practicum website: [hsph.me/CLE-practicum](https://hsph.me/CLE-practicum)



## MPH-45 CLINICAL EFFECTIVENESS – SUMMER-ONLY CURRICULUM



### MPH PUBLIC HEALTH CORE CURRICULUM

The MPH public health core curriculum is comprised of:

- **Biostatistics and Epidemiology Core** course(s);
- **ID 100: *Foundations for Public Health***, a school-wide, pre-matriculation course that provides foundational public health knowledge;
- **MPH 101–MPH 105**, five courses that cover other foundational public health competencies.

Summer-only CLE students have some flexibility when choosing which terms to complete the MPH 101–MPH 105 core courses (see table on next page). No waivers or substitutions will be allowed for MPH 101–MPH 105.

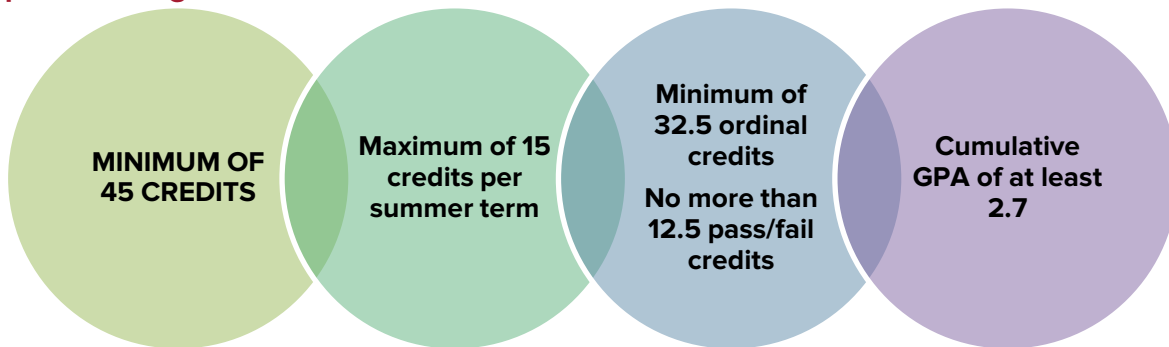
(Please note that “summer-only” CLE will be renamed as “summer-focused” starting in the 2023-2024 academic year.)

<b>SUMMER-ONLY CLINICAL EFFECTIVENESS CORE REQUIREMENTS</b>			
Course Number	Title	Semester	Credits
<b>Biostatistics and Epidemiology Core (10 credits)</b>			
BST 206	Introductory Statistics for Medical Research	Summer 1	2.5
BST 207 or BST 208	Statistics for Medical Research	Summer 2	2.5
EPI 208	Introduction to Clinical Epidemiology	Summer	5.0

Course Number	Title	Semester	Credits	Course Format/Notes
<b>MPH Public Health Core (6.25 credits)</b>				
<i>ID 100 is a fully online and asynchronous summer-based course required of all Harvard Chan students. While students will be given access to the ID 100 course materials via <a href="#">Canvas</a> in July, each student will still need to formally enroll in ID 100 via <a href="#">my.harvard</a> during the fall enrollment period.</i>				
ID 100	Foundations for Public Health	Summer into Fall 1	1.0 (Pass/Fail Only)	Asynchronous, self-paced, online course. Takes approx. 10–12 hours total and must be completed by Sunday, August 21, 2022.  <b>Must be completed in first year of program.</b>
<i>Summer-only CLE students have some flexibility when choosing which terms to complete the MPH 101–MPH 105 core courses; see options below.</i>				
MPH 101	Qualitative Methods for Public Health: A Brief Introduction	Summer or Fall 2	0.25 (Pass/Fail Only)	Asynchronous, self-paced, online course. Takes approx. 8–10 hours total.  <b>Must be completed in first year of program.</b>
MPH 102	Health Systems	Summer or Fall 1 or Winter Session	1.25	Asynchronous online course with set deadlines for completion of each module.
MPH 103	Leadership and Communication	Fall 2 or Winter Session	1.25	Asynchronous online course with set deadlines for completion of each module.
MPH 104	Social, Behavioral, and Structural Determinants of Health	Summer or Fall 1 or Winter Session	1.25	Asynchronous online course with set deadlines for completion of each module.
MPH 105	Public Health Policy and Politics	Fall 2	1.25	Synchronous online course that meets weekly

<b>SUMMER-ONLY CLINICAL EFFECTIVENESS FIELD OF STUDY REQUIREMENTS</b>			
Course Number	Title	Semester	Credits
<b>Regression (2.5–5 credits)</b> <i>Choose <u>one</u> of the approved courses below.</i>			
BST 215	Linear and Longitudinal Regression	Summer 2 or Spring (ONLINE)	2.5
EPI 236	Analytical Clinical Epidemiology	Summer 1	5.0
<b>Upper-Level CLE Coursework (5 credits)</b> <i>Highly recommended (but not required) for summer-only CLE.</i>			
Varies	Take <b>5 credits</b> from the list of approved courses ( <a href="https://hsph.me/CLE-upper-level">hsph.me/CLE-upper-level</a> ).		5.0
<b>Applied Practice Experience and Integrative Learning Experience (2.5–7.5 credits)</b> <i>Credit load and semester is determined with practice course instructor.</i>			
EPI 947	Applied Practice and Integrative Learning Experience for CLE (Summer-Only)	Any	2.5–7.5
<b>ELECTIVES (16.25–23.75 credits)</b>			
			<b>TOTAL 45 CREDITS</b>

**Important Program Reminders**



## **APPLIED PRACTICE EXPERIENCE AND INTEGRATIVE LEARNING EXPERIENCE**

Each field of study in the MPH program requires 1) an **Applied Practice Experience (APE)** (“Practicum”), and 2) an **Integrative Learning Experience (ILE)**, which are components of a practice course or seminar course for each field of study. All MPH students at accredited Schools of Public Health in the U.S. must complete these two degree requirements.

Detailed information about the applied practice experience and the integrative learning experience is posted on the [MPH in Clinical Effectiveness – Practicum](#) site. In addition, a brief overview is included below.

### **Applied Practice Experience**

The objectives of the practicum are to help students integrate, synthesize, and apply the knowledge and competencies from program coursework to a real-world public health problem or issue; explore a substantive public health topic that is of interest to the student and to an external organization; and enhance the skills needed to function in a professional public health setting.

For Clinical Effectiveness students, the Applied Practice Experience, referred to as the practicum, typically will involve conducting an applied research project, but it could also pertain to any applied aspect of health care. The practicum may include aspects of biostatistics, epidemiology, decision sciences, or other quantitative aspects of public health. Students are required to submit two Applied Practice Experience products from their practicum work, demonstrating a total of five competencies (three foundational and two field of study-specific competencies).

Summer-only CLE students develop a practicum at their home institution under the supervision of a local mentor and a member of the faculty at the Harvard Chan School. The CLE field of study leader can serve as the student’s Harvard faculty mentor, in some cases, or can help identify another appropriate faculty mentor if needed. Each student will be required to complete a brief planning survey about their practicum in the fall of their first year. In addition, each student will be required to submit a Learning Agreement, which is a brief outline of the proposed project, prior to beginning their practicum (typically by the end of their second summer for summer-only CLE students). The CLE field of study leader must approve the practicum topic and the Learning Agreement.

### **Integrative Learning Experience**

To meet the Integrative Learning Experience requirement, students usually will write a paper suitable for publication, a grant proposal, or a technical report, which integrates and builds upon the learnings from their practicum. This exercise will culminate with a presentation typically in the final summer of the student’s program, although summer-only CLE students can enroll for EPI 947 practicum credits and present their MPH practica during any period of the year. However, please note that students cannot register for EPI 947 until they have submitted their Learning Agreement and it has been approved by the CLE field of study leader. In addition, EPI 947 can only be taken as pass/fail.

### **For More Details**

Prior CLE practice sites and recent project abstracts: [hsph.me/mph-prior-practice](https://hsph.me/mph-prior-practice)  
MPH in Clinical Effectiveness – Practicum website: [hsph.me/CLE-practicum](https://hsph.me/CLE-practicum)

## ONLINE MPH-EPI ELECTIVE COURSES

Academic year (residential) and summer-only MPH students may enroll in the following online MPH-EPI elective courses on a space-available basis. The courses listed below are part of the Harvard Chan School’s hybrid MPH in Epidemiology (MPH-EPI) program.

Priority enrollment goes to MPH-EPI students and to students in the fully online MPH Generalist (MPH-GEN) program. Residential and summer-only MPH students will only be able to enroll in these courses if there is available space. (Also, some courses may not be open to residential students; see “class notes” in the course listings in the [Harvard Course Catalog](#).)

For the MPH program’s policy on credit limits for residential and summer-only MPH students interested in enrolling in the online MPH-EPI elective courses listed below, please see p. 9.

<b>ONLINE MPH-EPI ELECTIVE COURSE OPTIONS</b>			
<b>Course Number</b>	<b>Title</b>	<b>Credits</b>	<b>Semester</b>
<b>Fall Options</b>			
EPI 526	Analysis of Publicly Available Databases for Epidemiologic and Health Services Research	2.5	Fall
EPI 527	Design and Conduct of Trials in Preventive Medicine	2.5	Fall
EPI 528	Systematic Review and Meta-Analysis	2.5	Fall
EPI 529	Applications of Epidemiology	1.25	Fall
HPM 559	Introduction to Qualitative Research Methods for Public Health	2.5	Fall
<b>Spring Options</b>			
BST 215	Linear and Longitudinal Regression	2.5	Spring
EPI 288	Introduction to Machine Learning and Risk Prediction	2.5	Spring
EPI 529	Applications of Epidemiology	1.25	Spring
EPI 530	Introduction to Infectious Disease Modeling	1.25	Spring 1
HPM 506	Practical Scientific Methods for Improving Health and Health Care	2.5	Spring
RDS 202	Decision Science for Public Health	2.5	Spring