

# PUBLIC HEALTH (MPH)

How will you improve population health? As a public health professional, you can change lives by promoting and protecting the health and well-being of people and their communities locally, regionally, nationally, and globally.

The Master of Public Health program prepares students to promote health equity. We prepare future public health leaders through a competency-based and flexible community- engaged curriculum.

The Master of Public Health program is ideal for individuals seeking leadership careers in the diverse and growing field of public health.

## Accreditation

Loyola's BSPH and MPH programs are accredited by the Council on Education for Public Health (CEPH). CEPH accreditation provides assurance that the program has been evaluated and met accepted standards established by and with the public health profession. For question on accreditation, contact the MPH Program Director, Ruth Kafenszok (rkafens@luc.edu).

## Related Programs

### Certificate

- Health Informatics Certificate (<https://catalog.luc.edu/graduate-professional/health-sciences/health-informatics-certificate/>)
- Public Health Certificate (<https://catalog.luc.edu/graduate-professional/health-sciences/public-health-certificate/>)

### Combined

- Medicine/Public Health (MD/MPH) (<https://catalog.luc.edu/graduate-professional/dual-degree-programs/medicine-public-health-md-mph/>)

## Curriculum

Offered in-person, online, or hybrid, Loyola's MPH is a 42-credit curriculum. Online courses include both synchronous and asynchronous components. We offer concentrations in four study tracks: Epidemiology, Policy and Management, Global Health Equity, and Biostatistics. The curriculum includes six core courses, concentration-specific courses, electives, and applied practice and integrative learning experiences.

### Online Learning

Convenient and rigorous, the online program is geared to working professionals, non-traditional students, and individuals who need a more flexible learning format. Loyola University Chicago faculty with expertise in Public Health, Public Health Policy and Management, Environmental Health, Bioethics, Epidemiology, and Biostatistics teach in this program. The vast resources of Loyola's Parkinson School and the Health Science Campus, along with the combined knowledge and experience of distinguished faculty from medicine, social work, bioethics, health policy and law, will help you take on many opportunities and challenges.

Code	Title	Hours
<b>MPH Core Courses</b>		
MPBH 400	Determinants of Population Health	3
MPBH 402	Public Health Practice and Management	3
MPBH 403	Introduction to Epidemiology	3

MPBH 404 or MPBH 409	Biostatistics for Health and Biological Science Biostatistics I	3
MPBH 407	Public Health Policy: Concepts and Practice	3
MPBH 499	Public Health in Action	3
<b>MPH Track-Specific Curricula</b> <sup>1</sup>		<b>15-18</b>
<b>MPH Electives</b>		<b>3-6</b>
Select two of the following: <sup>2</sup>		
MPBH 413	The Epidemiology of Obesity: An Energy Balance Perspective	
MPBH 426	Infectious Disease Epidemiology	
MPBH 432	Health Impact Assessment	
MPBH 495	Special Topics	
<b>Applied Practice Experience</b>		<b>1</b>
MPBH 410	MPH Practicum	
<b>Integrated Learning Experience</b>		<b>2</b>
MPBH 411	MPH Capstone	
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Selected courses from other schools/programs may satisfy MPH elective requirements. Students in the Biostatistics track will take six (6) track courses instead of five (5).

<sup>2</sup> Selected courses from other schools/programs may satisfy MPH elective requirements. Students in the Biostatistics track will take only one elective.

## MPH Track-Specific Curricula (15-18 credit hours)

### Epidemiology

This hybrid program combines online and evening classes. Epidemiology is the basic science of public health: it helps us understand the causes of and solutions to diseases. This track equips students to design, conduct, analyze, and interpret population health research, while they learn the basic principles of all public health disciplines.

Code	Title	Hours
MPBH 412	Intro to Statistical Computing for Public Health	2
MPBH 421	Biostatistics II	3
MPBH 423	Intermediate Epidemiology	3
MPBH 427	Advanced Statistical Methods	1
MPBH 431	Grant Writing	3
Select one Research Methods Course from the following:		3
MPBH 413	The Epidemiology of Obesity: An Energy Balance Perspective	
MPBH 414	Introduction to Global Health	
MPBH 433	Clinical Trials	
MPBH 434	Systematic Review and Meta-Analysis	
ENVS 480	Introduction to Geographic Information Systems	
<b>Total Hours</b>		<b>15</b>

### Global Health Equity

This concentration is a hybrid program of online and evening classes. Study the health of global populations with the ultimate goal of identifying and eliminating structures and practices of inequity and injustice to advance health equity for individuals and populations.

Code	Title	Hours
MPBH 414	Introduction to Global Health	3
MPBH 417	Global Maternal & Child Health	3
MPBH 422	Population Health Planning & Management	3
MPBH 431	Grant Writing	3
Select one of the following: <sup>1</sup>		3
BEHL 407	Social Determinants of Health and Bioethics	
BEHL 432	Global Bioethics	
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> Students may choose an elective course not on this list with Track Director approval.

### Public Health Policy and Management

This concentration can be completed entirely online, and also can be taken with in-person courses. This curriculum studies the organization, structure, and delivery of health-related services, and associated population health outcomes. Students may customize their academic focus in either public health policy, administration, or both.

Code	Title	Hours
MPBH 416	Health Services Research Methods	3
MPBH 425	Policy Analysis	3
Select one of the following:		3
BEHL 402	Justice & Health Care	
BEHL 404	Biomedical Ethics and Law	
BEHL 407	Social Determinants of Health and Bioethics	
BEHL 411	Systems Ethics Frameworks	
BEHL 412	Organizational Ethics I: Business, Professionalism, and Justice	
BEHL 432	Global Bioethics	
Select two of the following:		6
<i>Policy-oriented</i>		
MPBH 420	Public Health Law: Theories and Cases	
MPBH 424	Health Economics and Healthcare Financing	
<i>Management-oriented</i>		
CMAN 533	Fiscal Management in Health Care Organizations	
MPBH 422	Population Health Planning & Management	
<b>Total Hours</b>		<b>15</b>

### Biostatistics

This track aims to equip students with advanced skills in statistical techniques and data analysis, with a particular emphasis on harnessing digital data for public health innovation. By integrating modern analytical methodologies tailored specifically to the digital data landscape of the public health domain, this track enhances the program's relevance and ensures our graduates are well-prepared to lead in the data-driven public health landscape.

Students in the Biostatistics track require the same 6 core MPH courses as the other three existing tracks as well as the Applied Practice Experience and Capstone Experience. They also select one elective course.

Code	Title	Hours
<b>Track Requirements</b>		
MPBH 412	Intro to Statistical Computing for Public Health	2

MPBH 421	Biostatistics II	3
MPBH 427	Advanced Statistical Methods	1
MPBH 449	Biostatistics for Public Health Interventions	3
MPBH 450	Biostatistics for Electronic Health Record (EHR) Data	3
MPBH 460	Public Health Data Visualization and Reporting	3
<i>Electives</i>		
Select one of the following:		3
ENVS 480	Introduction to Geographic Information Systems	
HIDS 411	Clinical Data Science	
MPBH 431	Grant Writing	
MPBH 433	Clinical Trials	
MPBH 434	Systematic Review and Meta-Analysis	
<b>Total Hours</b>		<b>18</b>

### Applied Practice Experience (1 credit)

Also known as the MPH practicum, it provides the student with practical experience in a public health setting, requiring the student to apply and integrate skills and knowledge learned in courses. The applied practice experience (APE) must be 210 hours or more. Students must apply five program competencies to their APE and produce at least two deliverables, which will become part of their portfolio. Examples of APE sites include MRSA Research Center, North Shore Mosquito Abatement District, Summer Field Research in Ghana, Health and Medicine Policy Research Group, American Cancer Society, American Diabetes Association, Chicago Department of Public Health, and Mount Sinai Hospital.

### Integrated Learning Experience (2 credits)

The integrated learning experience is a student-led capstone project culminating with a presentation and written manuscript. The project should demonstrate student's ability to apply acquired skills and competencies to a public health problem that simulates a professional practice experience. Depending on their interests, some students may analyze data collected during their practicum to help complete their capstone.

### Dual Degrees and Other Programs

The needs of the public health workforce are diverse and ever-changing. Our students are diverse and pursue public health graduate studies at different points in their careers, from undergraduate through practicing nurses and physicians. To meet these needs, the Department of Public Health Sciences offers six additional programs:

- Five-Year Bachelor/MPH Degree
  - Environmental Science BA or BS/MPH
  - Health Care Administration BS/MPH
  - Public Health BS/MPH
- Doctor of Medicine/ Master of Public Health (MD/MPH)
- Master of Social Work/Master of Public Health (MSW/MPH)
- MS in Clinical Research Methods and Epidemiology (CRME)
- Public Health Certificate

**Note:** Students entering the program may wish to pursue careers that may require licensure (e.g. Registered Environmental Health Specialist) or certification (e.g. Certified in Public Health or Certified Professional in Food Safety) upon or before employment. Loyola University Chicago cannot guarantee that the Master of Public Health

will prepare students to meet the unique requirements for licensure or certification in their specific location and/or area of expertise. Students should check with their local licensing or certifying authority to determine what requirements are necessary.

- Interprofessional Practice: Perform effectively on interprofessional teams.
- Systems Thinking: Apply systems thinking tools to a public health issue.

## Graduate & Professional Standards and Regulations

Students in graduate and professional programs can find their Academic Policies in Graduate and Professional Academic Standards and Regulations (<https://catalog.luc.edu/academic-standards-regulations/graduate-professional/>) under their school. Any additional University Policies supersede school policies.

## Learning Outcomes

You will graduate with public health competencies in the areas of quantitative and qualitative data collection, evidence-based approaches, public health and health care systems, planning and management, policy, leadership, communication, interprofessional practice, and systems thinking. More specifically, **public health foundational competencies** attained through the MPH curriculum include:

- Evidence-based Approaches to Public Health: Apply epidemiological methods to the breadth of settings and situations in public health practice; Select quantitative and qualitative data collection methods appropriate for a given public health context; Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate; and Interpret results of data analysis for public health research, policy or practice.
- Public Health & Health Care Systems: Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings; and Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels.
- Planning & Management to Promote Health: Assess population needs, assets and capacities that affect communities' health; Apply awareness of cultural values and practices to the design or implementation of public health policies or programs; Design a population-based policy, program, project or intervention; Explain basic principles and tools of budget and resource management; and Select methods to evaluate public health programs.
- Policy in Public Health: Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence; Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes; Advocate for political, social or economic policies and programs that will improve health in diverse populations; and Evaluate policies for their impact on public health and health equity.
- Leadership: Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making; and Apply negotiation and mediation skills to address organizational or community challenges.
- Communication: Select communication strategies for different audiences and sectors; Communicate audience-appropriate public health content, both in writing and through oral presentation; and Describe the importance of cultural competence in communicating public health content.