

# Master of Public Health, MPH

The Master of Public Health (MPH) is recognized as the primary professional degree in public health. The objective of Iowa's MPH program is to provide education and practical training in public health to students who will be leaders in their respective communities. The program is appropriate for individuals who already have professional experience and/or training in public health as well as for those whose expertise lies outside of public health.

Students may earn the Master of Public Health (MPH) as a single degree, or they may pursue one of several combined degree programs. The College of Public Health offers combined MPH/professional degree programs with the Carver College of Medicine and the Colleges of Law and Pharmacy. It also offers two programs in collaboration with the College of Veterinary Medicine at Iowa State University. See "MPH/DVM (Iowa State University)" and descriptions of the combined degree programs under Combined Programs [p. ] in this section of the catalog.

Undergraduate students can pursue an MPH degree in the following subprograms: community and behavioral health, epidemiology, health data science, occupational and environmental health, or policy. Undergraduate students work with their undergraduate advisor and the College of Public Health Undergraduate to Graduate (U2G) coordinator to determine eligibility. In addition, the College of Public Health collaborates with other private colleges in Iowa to offer bachelor's degrees and Master of Public Health programs for undergraduate students who would like to earn an MPH degree.

The Master of Public Health program is offered by the College of Public Health; the degree is awarded by the Graduate College.

## Learning Outcomes

For further information regarding MPH subprogram learning outcomes, visit MPH Programs of Study on the Master of Public Health website.

## MPH Foundational Public Health Knowledge

### Profession and Science of Public Health

Students will be able to:

- explain public health history, philosophy, and values;
- identify the core functions of public health and the 10 essential services;
- explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health;
- list major causes and trends of morbidity and mortality in the United States or other communities relevant to the school, with attention to disparities among populations, e.g., socioeconomic, ethnic, gender, racial, etc.;
- discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.; and
- explain the critical importance of evidence in advancing public health knowledge.

## Factors Related to Human Health

Students will be able to:

- explain the effects of environmental factors on a population's health;
- explain biological and genetic factors that affect a population's health;
- explain behavioral and psychological factors that affect a population's health;
- explain the cultural, social, political, and economic determinants of health and how the determinants relate to population health and health inequities;
- explain how globalization affects global burdens of disease; and
- explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health).

## MPH Foundational Competencies

### Evidence-Based Approaches to Public Health

Students will be able to:

- apply epidemiological methods to 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 and Health Care Systems

Students will be able to:

- 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 systemic levels.

### Planning and Management to Promote Health

Students will be able to:

- assess population needs, assets, and capacities that affect communities' health;
- apply awareness of cultural values and practices to the design, implementation, or critique 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

Students will be able to:

- discuss the policy-making process, including the roles of ethics and evidence;

- propose strategies to identify relevant communities and individuals 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**

Students will be able to:

- apply leadership and/or management principles to address a relevant issue; and
- apply negotiation and mediation skills to address organizational or community challenges.

## **Communication**

Students will be able to:

- select communication strategies for different audiences and sectors;
- communicate audience-appropriate public health content, both in writing and through oral presentation to a non-academic, non-peer audience with attention to factors such as literacy and health literacy; and
- describe the importance of cultural humility in communicating public health content.

## **Interprofessional and/or Intersectoral Practice**

Students will be able to integrate perspectives from other sectors and/or professions to promote and advance population health.

## **Systems Thinking**

Students will be able to apply a systems-thinking tool to visually represent a public health issue in a format other than a standard narrative.