

# MPH Competencies



## Department of Public Health Website Links

All MPH students are required to complete *at least two products* that demonstrate *at least three foundational and two concentration competencies* during their Applied Practice Experience (APEX).

### [Foundational Competencies](#)

[Concentration: Community Health Education](#)

[Concentration: Epidemiology](#)

[Concentration: Health Policy and Management](#)

[Concentration: Veterinary Public Health](#)

## Foundational Competencies

### Evidence-based Approaches to Public Health

1. Apply epidemiological methods to the breadth of settings and situations in public health practice.
2. Select quantitative and qualitative data collection methods appropriate for a given public health context.
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming, and software, as appropriate.
4. Interpret results of data analysis for public health research, policy, or practice.

### Public Health & Health Care Systems

5. Compare the organization, structure, and function of health care, public health, and regulatory systems across national and international settings.
6. 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**

7. Assess population needs, assets, and capacities that affect communities' health.
8. Apply awareness of cultural values and practices to the design, implementation, or critique of public health policies or programs.
9. Design a population-based policy, program, project, or intervention.
10. Explain basic principles and tools of budget and resource management.
11. Select methods to evaluate public health programs.

## **Policy in Public Health**

12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence.
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes.
14. Advocate for political, social, or economic policies and programs that will improve health in diverse populations.
15. Evaluate policies for their impact on public health and health equity.

## **Leadership**

16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making.
17. Apply negotiation and mediation skills to address organizational or community challenges.

## **Communication**

18. Select communication strategies for different audiences and sectors.
19. Communicate audience-appropriate (i.e., non-academic, non-peer audience) public health content, both in writing and through oral presentation.
20. Describe the importance of cultural competence in communicating public health content.

## **Interprofessional Practice**

21. Perform effectively on interprofessional teams.

## **Systems Thinking**

22. Apply systems thinking tools to a public health issue.

*\*These competencies are informed by the traditional public health core knowledge areas (biostatistics, epidemiology, social and behavioral sciences, health services administration and environmental health sciences) as well as cross-cutting and emerging public health areas. They are in compliance with the most recent criteria established by The Council on Education for Public Health (CEPH).*

## Community Health Education (CHE) Competencies

1. Demonstrates how fundamental social causes of health and disease produce differences in health and health inequity in specific health outcomes.
2. Identifies strategies designed to reduce structural bias and social inequities that produce health disparities.
3. Designs health education communications for specific public health issues and target audiences using appropriate channels and technologies.
4. Applies ethical principles to public health program planning, research, or implementation.
5. Prepares a high-quality program grant proposal.

## Epidemiology Competencies

1. Selects appropriate study design(s) to investigate a public health concern given the strengths, limitations, and feasibility of the design(s).
2. Critiques epidemiologic scientific literature.
3. Applies epidemiologic methods to develop models predicting disease or exposure.
4. Demonstrates proficiency in intermediate epidemiologic methods and principles.
5. Conducts a reproducible data analysis project.

## Health Policy and Management (HPM) Competencies

1. Apply the policy-making process to improve population health.
2. Apply the principles of evidence-based public health in practice or policy formulation.
3. Apply appropriate strategic management approaches to improve the performance of healthcare organizations.
4. Apply quality improvement or performance management concepts to organizational planning and management.
5. Assess the value of existing or proposed programs, services or policies using financial management measures.

## Veterinary Public Health (VPH) Competencies

1. Assess health related benefits and/or risks to individuals and communities associated with zoonotic or emerging diseases, the human-animal bond, foodborne illness and/or injuries associated with animals.
2. Communicate health benefits and/or risks to individuals and communities associated with zoonotic or emerging diseases, the human-animal bond, foodborne illness and/or injuries associated with animals.
3. Apply techniques of surveillance, recognition, prevention, control and/or management of infectious diseases, including zoonotic or emerging diseases, food borne illnesses, and/or potential bio or agroterrorism agents.
4. Evaluate programs and/or policy that aim to improve human health by fostering the human-animal bond or by reducing foodborne illness, zoonotic or emerging diseases, or hazards associated with animals.
5. Describe the role of the federal government in ensuring the safety of foods of animal origin.