

OHSU-PSU School of Public Health MPH Program Competencies

Each MPH program has its own program-specific competencies. Click on your program to see your MPH program's competencies:

- [Biostatistics](#)
- [Environmental Systems and Human Health](#)
- [Epidemiology](#)
- [Health Promotion](#)
- [Health Management and Policy](#)
- [Public Health Practice](#)

Biostatistics

1. Apply appropriate principles of research design and population-based concepts to assess health problems.
2. Apply appropriate descriptive and inferential statistical methods to analyze risk determinants of disease and health conditions.
3. Apply descriptive and inferential statistical methods that are appropriate to the different study designs used in public health research.
4. Interpret and summarize results and communicate them to lay and professional audiences, in the context of proper public health principles and concepts.
5. Evaluate strengths and weaknesses of alternative research designs and analytic methods, and critically review and assess statistical analyses presented in public health literature.
6. Apply basic ethical principles pertaining to the collection, maintenance, use, and dissemination of public health data.
7. Identify cultural dimensions of conducting research, including culturally sensitive recruitment of study participants, and develop strategies for interpretation of data in the larger cultural context.

Environmental Systems & Human Health

1. Communicate the relationship between environmental systems and human health, particularly in response to a changing climate.
2. Analyze how environmental hazards (chemical, physical and biological) interact with natural and built systems, including the mechanisms of their adverse effects on humans.
3. Assess and interpret relevant literature in the area of public health and environmental hazards.
4. Evaluate the risk of environmental exposures to human populations through the incorporation of exposure, toxicological, and other relevant data into risk assessment methodology.
5. Discuss how federal and state regulatory programs, guidelines and authorities impact environmental and occupational health issues.
6. Apply ethical principles that govern the practice of environmental risk assessment, management, and communication.
7. Specify approaches for assessing, preventing and controlling environmental and occupational hazards that pose risks to human health and safety.
8. Integrate, synthesize and apply theory to practice in the context of a research study, policy consequences, or environmental exposure.
9. Explain the general mechanisms of toxicity in eliciting a human health effect in response to various environmental and occupational exposures.

Epidemiology

1. Apply population-based concepts of epidemiology and risk determination to the assessment of health problems.
2. Apply evidence-based knowledge of health determinants to public health issues.
3. Apply and interpret a variety of statistical methods commonly used in medical and public health research.
4. Propose and test a research hypothesis.
5. Identify ethical principles problems that arise in public health policy decisions.
6. Apply knowledge of cultural dimensions in conducting research, including culturally sensitive recruitment of study participants, and develop strategies for interpretation of data in the larger cultural context.
7. Integrate and apply relevant literature in epidemiology to public health issues and policy.
8. Communicate public health principles and concepts through various strategies across multiple sectors of the community.

Health Promotion

1. Apply theory in the development, implementation, and evaluation of health promotion interventions, programs, and policies.
2. Develop interventions and programs to effect change at multiple levels, including individual, community, organization, and policy.
3. Design and implement strategies to promote health.
4. Solicit and integrate input from community and organization stakeholders.
5. Design and deliver health communication messages.
6. Evaluate and interpret results from program evaluations and other research.
7. Define health problems, frame hypotheses, design research procedures, and outline methods of analysis.
8. Apply ethical principles that govern the practice of public health promotion.
9. Demonstrate cultural competency in health promotion among all social and cultural communities.

Health Management & Policy

1. Demonstrate effective verbal, written and interpersonal communication skills.
2. Demonstrate ethical, social, and cultural competency.
3. Engage with, and integrate the knowledge and experience of other health professions, stakeholders, and communities.
4. Demonstrate critical and self-reflective thinking.
5. Apply theory to practice to design, implement, manage, and evaluate organizational performance and health policy.
6. Apply policy process knowledge and advocacy techniques to develop and implement policies that advance health.
7. Select and apply appropriate methods to analyze, evaluate, and manage health system programs and services.
8. Demonstrate professionalism and leadership skills.

Public Health Practice

1. Assess, analyze, and synthesize the health status of vulnerable populations.
2. Identify, develop and manage interventions to promote and protect the health of populations at risk.
3. Lead and participate in inter-professional efforts to address health inequities with community partners.
4. Conduct, participate in or apply research, which improves the health of a population.
5. Assess and integrate cultural beliefs and practices into public health interventions.
6. Develop and plan interventions utilizing principles of health systems organization and health care finance to address health disparities.
7. Apply program planning and quality improvement principles in the development, management, and/or evaluation of population health services.
8. Demonstrate basic skills in the development of a grant proposal.
9. Employ techniques to manage human, fiscal, and other public health resources.