

## Foundational Public Health Knowledge

### Profession & Science of Public Health

1. Explain public health history, philosophy and values
2. Identify the core functions of public health and the 10 Essential Services<sup>11</sup>
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
6. Explain the critical importance of evidence in advancing public health knowledge

### Factors Related to Human Health

7. Explain effects of environmental factors on a population's health
8. Explain biological and genetic factors that affect a population's health
9. Explain behavioral and psychological factors that affect a population's health
10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
11. Explain how globalization affects global burdens of disease
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One 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 or implementation 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

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

### Communication

3. Select communication strategies for different audiences and sectors
4. Communicate audience-appropriate public health content, both in writing and through oral presentation
5. Describe the importance of cultural competence in communicating public health content

### Interprofessional Practice

6. Perform effectively on interprofessional teams

### Systems Thinking

7. Apply systems thinking tools to a public health issue

## Concentration Competencies

### MPH Health Promotion and Community Health Concentration Competencies

- HPCHCC1: Demonstrate a critical understanding of multidisciplinary theories/frameworks utilized in health promotion research and practice
- HPCHCC2: Employ theoretical knowledge and methodological skills in health promotion program planning, implementation, monitoring, and evaluation
- HPCHCC3: Conduct rigorous quantitative and qualitative research for health promotion
- HPCHCC4: Use participatory approaches in community mobilization to advocate for health
- HPCHCC5: Promote social justice and equity in health promotion research, practice, and policy
- HPCHCC6: Integrate health promotion theory and methods into analyzing emerging public health issues

### MPH Health Management and Policy Concentration Competencies

- HMPCC1: Assess how the structure, organization, delivery, and financing of health care systems affect system performance in terms of efficiency, quality, equity, and effectiveness
- HMPCC2: Apply systems thinking approaches to improve healthcare organizations' performance and responsiveness
- HMPCC3: Apply quality tools and concepts to evaluate and improve performance in health care organizations
- HMPCC4: Apply the principles of planning, budgeting, management and evaluation in healthcare related programs and projects
- HMPCC5: Analyze relevant financial data for efficient management of healthcare programs and organizations
- HMPCC7: Utilize health information systems and data analytics to support evidence based decision making at the organizational and system levels
- HMPCC8: Apply public policy principles, frameworks and tools to understand health problems and priorities
- HMPCC9: Evaluate policy options to address health challenges including economic, legal and political implications
- HMPCC10: Utilize knowledge translation strategies and tools to communicate effectively and influence health policy and system decision making

MPH Epidemiology and Biostatistics Concentration Competencies

- EBCC1: Discuss the extent, distribution and determinants of common and emerging communicable and non-communicable diseases, and mental health disorders of local, regional and global importance
- EBCC2: Discuss prevention and control strategies/programs for common and emerging communicable and non-communicable diseases and mental health disorders
- EBCC3: Design epidemiological studies to investigate public health research questions
- EBCC4: Demonstrate ability to write software codes in order to manage and analyze health data through the use of multiple statistical software
- EBCC5: Apply inferential statistics and advanced statistical approaches such as regression modelling to analyze complex health related data
- EBCC6: Interpret and communicate statistical findings in oral and written format
- EBCC7: Review, synthesize and communicate published epidemiological findings in oral and written format
- EBCC8: Appraise the quality of epidemiological evidence by evaluating studies for bias and other sources of systematic errors
- EBCC9: Analyze Health related data using advanced statistical techniques and software packages