**MPH Competency Inventory**

**MPH Foundational Competencies**

MPH-1: Apply epidemiological methods to the breadth of settings and situations in public health practice

MPH-2: Select quantitative and qualitative data collection methods appropriate for a given public health context

MPH-3: Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate

MPH-4: Interpret results of data analysis for public health research, policy or practice

MPH-5: Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings

MPH-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

MPH-7: Assess population needs, assets and capacities that affect communities’ health

MPH-8: Apply awareness of cultural values and practices to the design or implementation of public health policies or programs

MPH-9: Design a population-based policy, program, project or intervention

MPH-10: Explain basic principles and tools of budget and resource management

MPH-11: Select methods to evaluate public health programs

MPH-12: Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence

MPH-13: Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes

MPH-14: Advocate for political, social or economic policies and programs that will improve health in diverse populations

MPH-15: Evaluate policies for their impact on public health and health equity

MPH-16: Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making

MPH-17: Apply negotiation and mediation skills to address organizational or community challenges

MPH-18: Select communication strategies for different audiences and sectors

MPH-19: Communicate audience-appropriate public health content, both in writing and through oral presentation

MPH-20: Describe the importance of cultural competence in communicating public health content

MPH-21: Perform effectively on interprofessional teams

MPH-22: Apply systems thinking tools to a public health issue

**Major-Specific Competencies (Advanced Public Health Competencies)**

**Biostatistics Competencies:**

MS-B1. Use appropriate statistical methods and models to analyze data from the public health, biomedical, or bioinformatics arena.

MS-B2. Demonstrate the correct use of probability distributions and theory of statistical inference within biostatistics and public health.

MS-B3. Outline a statistical analysis strategy to appropriately answer a research question.

MS-B4. Use multiple statistical software packages to analyze data to answer public health research questions.

**Environmental Health Competencies:**

MPH-O1. Conduct a risk characterization of an environmental hazard.

MPH-O2. Critically evaluate information and data in the peer-reviewed literature related to environmental health sciences, considering the quality and suitability of literature and data.

MPH-O3. Describe regulatory programs, including effectiveness, in the context of legislative authorities that deal with environmental health issues at the local, state, federal, or international levels.

MPH-O4. Evaluate the function, structure and financing of environmental programs.

MPH-O5. Demonstrate effective risk communication that incorporates the principles of risk perception.

**Epidemiology Competencies:**

MPH-E1. Apply data collection and data management skills for an epidemiologic study.

MPH-E2. Demonstrate the application of epidemiology for informing etiologic research, public health surveillance, or screening programs.

MPH-E3. Evaluate a public health problem in terms of magnitude, person, place and time, and exposure-outcome relationships.

MPH-E4. Apply basic ethical principles pertaining to the collection and management of epidemiologic information.

MPH-E5. Appropriately interpret measures of disease frequency and association, taking into account the impact of bias and error on results and conclusions.
MPH Competency Inventory

Health Promotion and Behavioral Sciences

Health Promotion/Health Education Competencies:
MPH-H1. Conduct a needs assessment in partnership with stakeholders to address a public health issue.
MPH-H2. Explain how social or behavioral sciences theories are operationalized in health promotion interventions.
MPH-H3. Apply a systematic planning framework to plan a theory and evidence-based health promotion intervention.
MPH-H4. Apply a systematic planning framework to plan the adoption and implementation of a health promotion intervention.
MPH-H5 Describe a plan to evaluate a health promotion intervention.

Health Promotion/Health Education– Dietetic Internship Competencies:
MPH-DI1. Use the Evidence Analyses Process (EAP) to review a nutrition topic and develop a nutrition focused public health intervention.
MPH-DI2. Develop a public health nutrition intervention activity based on community nutrition-related needs, assets and capacities.
MPH-DI3. Communicate patient or client cases using professional nutrition standards.
MPH-DI4. Demonstrate the ability to conduct nutrition-focused physical assessments.
MPH-DI5. Implement evidence and theory based nutrition interventions.

Management, Policy and Community Health

Community Health Practice Competencies:
MPH-C1. Compare and contrast program-planning models used by national public health organizations.
MPH-C2. Describe the interconnectedness of governmental and non-profit systems in influencing a public health problem.
MPH-C3. Collaborate with community-based organizations on social justice initiatives to enhance self-reflection when working with diverse communities.
MPH-C4. Examine the role of leadership in public health practice.
MPH-C5. Describe the mechanisms and pathways through which economic or social determinants affect health and how these determinants are measured at individual or societal levels.

Healthcare Management Competencies:
MPH-M1. (TL) Team Leadership: Collaborates with others to complete team-based assignments within healthcare organizations, adapting when needed to maximize organizational and personal success.
MPH-M3. (AT) Analytical Thinking: Evaluates and analyzes quality, safety and financial performance measures to support managerial decision making in healthcare organizations.
MPH-M4. (EP) Ethics & Professionalism: Synthesizes knowledge and skills needed to excel professionally with high ethical standards and uses these skills while making a meaningful contribution to the field.
MPH-M5. (OM) Organizational Management: Selects, integrates and evaluates organizational resources to provide high-quality customer-oriented health services responsive to the ever-changing political landscape.

Health Services Organization Competencies:
MPH-S1. Demonstrate understanding of microeconomic theory in a market system and how to apply those concepts to understand the economics of the healthcare system and market failure in the US.
MPH-S2. Review and critically evaluate scientific studies that estimate the effectiveness, efficiency, and equity of health policy alternatives.
MPH-S3. Prepare a detailed policy analysis plan to assess alternative policies for improving the effectiveness, efficiency and equity of health services.
MPH-S4. Describe the internal and external validity strengths and limitations of health policy evaluations and the degree to which results are useful to decision-makers.
MPH-S5. Critically evaluate peer-reviewed published manuscripts in the area of health economics or health services research to identify potential study questions.