

## **MPH Competencies for Students Who Enrolled Prior to Fall 2018**

### **1. Knowledge Base: Be competent to identify, assess, understand and apply the current state of public health knowledge to a given public health concern.**

- a) Identify multilevel factors that influence the health and well-being of populations
- b) Discuss strengths and limitations of domestic and international public health systems
- c) Discuss current public health issues and controversies
- d) Identify a public health problem with a defined population deserving of further study
- e) Compare the pros and cons of individual, community-based & environmental or policy interventions
- f) Contrast prevention with disease management approaches
- g) Identify the role of cultural, social & behavioral factors, among others, in determining disease expression, disease prevention, health promoting behavior and access to care
- h) Explain and apply fundamental biostatistical and epidemiological methods
- i) Discuss environmental factors including biological, physical, chemical and social factors that affect the health of a community
- j) Identify and discuss social and cultural issues relating to policies, research and interventions in public health and preventive medicine contexts
- k) Describe, identify and apply principles of screening data in intervention programs
- l) Discuss ethical issues related to public health problems and the potential approaches to ameliorate these problems.

### **2. Research: Be competent to design and carry out a health services or health policy research or epidemiological study or intervention study, analyze results, draw appropriate conclusions, and report results.**

- a) Identify data sources relevant to the investigation of a public health problem
- b) For a specific public health problem, contrast generalizability and limitations of data from different sources
- c) State a public health research problem in terms of a research hypothesis
- d) Apply current statistical and epidemiological methods in the analysis of a given data-set
- e) Discuss various public health surveillance systems
- f) Explain the limitations of statistical analyses within a public health context
- g) Read and critique public health research literature.
- h) Discuss research, statistical and epidemiological methods that can be applied to the research design and analysis of a particular public health problem.
- i) Demonstrate an understanding of rigorous qualitative research methods and their utility in public

health research

j) Discuss issues related to ethical/human concerns in research

**3. Community Service and Intervention: Be competent to recognize and describe a public health problem; and to design, implement, monitor, and evaluate a program or intervention intended to manage, control, or solve that problem. Be competent to identify community service opportunities, and to develop and maintain effective linkages with organizations and agencies in the community**

a) Design an intervention/study to investigate a public health problem, and/or decrease risks for disease and/or promote wellness

b) Develop a plan to monitor and evaluate the reach, fidelity, quality, impact and outcome of public health intervention and/or community health programs.

c) Develop process and impact/outcome evaluation measures to monitor and evaluate public health interventions/programs.

d) Define a population, to include demographic, geographic, social and behavioral characteristics among others

e) Assess the health status of a community/specific population in order to establish priorities for intervention and establish measurable health objectives for those interventions

f) Design a formative research plan to inform the development of public health interventions

g) Design a public health program that incorporates community health action/participation

h) Discuss several behavioral change theories and how they can be applied to intervention design and implementation

i) State comprehensive policy options for a particular public health issue and articulate the health, fiscal, administrative, legal, social, and political implications of each policy option

j) State the feasibility and expected outcomes of each policy option, and decide on an appropriate course of action

k) Apply an understanding of cultural diversity to addressing public health problems

l) Perform public health service in community settings

m) Compare and contrast multi-level approaches (intrapersonal, interpersonal, organizational, community, societal, etc.) to improve a public health problem

n) Identify crucial stakeholders for the planning, implementation and evaluation of public health interventions, programs and policies.

o) Apply ethical principles to the planning, implementation and evaluation of public health programs.

p) Use evidence-based approaches in the development and evaluation of public health interventions.

**4. Communication and Advocacy: Be competent to organize and communicate information pertaining to a public health problem or condition, including policy implications, priorities and recommended course of action**

- a) Translate data into evidence-based public health recommendations, interventions, and policies
- b) Present accurate, clear and concise programmatic and scientific information to health professionals, decision-makers, and lay audiences, using the media, in oral and written forms
- c) Identify and collaborate with community leaders and public and private partners to promote health and prevent disease and disability
- d) Write a clear and concise policy statement on a selected public health issue
- e) Advocate for a public health position to further public or institutional courses of action
- f) Demonstrate written and oral communication skills that express sensitivity to diverse socioeconomic, cultural, demographic subgroups
- g) Deliver oral presentations that effectively disseminate information and convey knowledge

**5. Information Management/Informatics: Be competent to manage and affect information including data, reference materials, etc. using computer technology and library resources**

- a) Use computers for specific applications relevant to preventive medicine and public health, including the use of data management, epidemiological and graphics packages
- b) Access public health data-sets and references using the Internet and library resources
- c) Demonstrate proficiency with a statistical computing package
- d) Use a computer to prepare a formal presentation
- e) Construct and manage a database
- f) Clean and organize collected data