

MPH 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

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 public health content, both in writing and through oral presentation
20. Describe the importance of cultural competence in communicating public health content

Interprofessional Practice (Required by CEPH, and pre-selected in Practicum Portal for all practicums)

21. Perform effectively on interprofessional teams

Systems Thinking

22. Apply systems thinking tools to a public health issue

Functional Certificate Competencies

Community Assessment, Program Design, Implementation, and Evaluation

23. Plan and conduct systematic community health needs assessments, integrating multiple sources of data and community and stakeholder input.
24. Synthesize the published evidence base with information identified through community needs assessment to create a comprehensive public health intervention plan which responds appropriately and effectively to key identified priorities.
25. Formulate an implementation and sustainability plan designed to engage community members, policy makers, practitioners, funders and researchers.
26. Design a program evaluation, including formative, process and impact evaluation, and be able to articulate a plan for evaluation using a standard logic model.
27. Apply strategies for equitable, collaborative partnerships with communities, based on common recognition of sources of structured social privilege and disadvantage and a shared goal of seeking to expand community assets and power to improve health outcomes.

Design and Conduct of Public Health Research

28. Evaluate relative strengths and weaknesses of various study designs to address a specific public health research question.
29. Identify methodological and practical issues involved with planning and implementing a public health research study.
30. Access and analyze publicly available public health data sets, such as the CDC's Behavioral Risk Factor Surveillance System.
31. Identify, conduct, and interpret an appropriate statistical analysis for a given public health research question and study design.
32. Interpret and communicate the results, strengths, and limitations of a public health research article in both technical and non-technical terms.

Environmental Hazard Assessment

33. Collect and analyze environmental data and articulate the characteristics of major chemical, physical, and biological hazards.
34. Interpret measured or modeled concentrations or doses of hazards compared with risk-based and non-risk based criteria and guidelines.
35. Evaluate the influence of susceptibility based on a hazards' biological mode of action, and vulnerability on health risks for major environmental determinants of human disease.
36. Identify defensible intervention and prevention strategies to improve health through reduction in exposures to environmental hazards.
37. Critically assess articles related to environmental impacts on health, analyzing the strength and validity of the hypothesis, study design and methods, results, conclusions, and public health significance of primary research studies.

Epidemiology and Biostatistics

38. Calculate and apply appropriate epidemiologic and statistical measures to draw valid inferences and summaries from public health data.
39. Evaluate the strengths and limitations of epidemiologic and statistical reports from public health studies.

40. Analyze key sources of public health data, reflecting comprehension of the basic ethical and legal principles pertaining to the collection, maintenance, analysis, and dissemination of epidemiologic and public health information.
41. Synthesize the results of epidemiologic and statistical analyses to craft public health messages in written/oral presentations for both public health professionals and external audiences.
42. Demonstrate the application of epidemiology and biostatistics for informing etiologic research, planning and evaluation of interventions, public health surveillance, or health policy.

Healthcare Management (CAHME)

43. Applies planning/management tools and techniques to achieve project completion (eg Gantt chart, project charter).
44. Analyzes healthcare data to identify strategies for improvement.
45. Seeks input from appropriate stakeholders to meet goals and expectations.
46. Improves one's own performance continuously based on feedback from others.
47. Demonstrates understanding of his/her role within the organization.
48. Understands and navigates the dynamics of conflict.
49. Presents in a clear and professional manner in formal and informal situations.
50. Writes in a clear, logical and grammatically correct manner.
51. Demonstrates conduct consistent with ethical standards.

Health Policy and Law

52. Critically evaluate health policy issues at multiple levels of government (local, state, and national) both domestically and globally, with special attention to political, social, economic, and organizational factors.
53. Appraise and defend the effectiveness, efficiency, and equity of health policies.
54. Develop policy proposals that recognize legal and political constraints.
55. Determine the factors influencing successful policy implementation.
56. Articulate and justify policy and legal analyses to diverse audiences through written and/or oral deliverables.

Health Communication and Promotion

57. Design a strategic plan for an intervention and communications strategy that is theory-driven, science-based, audience-centered, practicable, and evaluable.
58. Apply a range of appropriate communication venues to support public health goals based on analysis and evaluation of alternative venues.
59. Create effective materials and messages using strategies and tools tailored to diverse audiences, including those with lower health literacy.
60. Develop an evaluation plan for a communication strategy.
61. Demonstrate professional oral presentation skills to inform and persuade diverse audiences.

Global Health Program Design, Monitoring, and Evaluation

62. Design monitoring and evaluation plans for public health programs.
63. Utilize formative, process, and outcome evaluations.
64. Differentiate between qualitative and quantitative evaluation methods in relation to their strengths, limitations, appropriate uses, with an emphasis on reliability and validity.
65. Apply analytic methods to evaluate the impacts and costs of public health programs and policies.

66. Support the use of data from monitoring and evaluation projects in informing evidence based decision making for the development of new programs and continuous quality improvement efforts.

Program Management

67. Supervise and support program staff to ensure activities are aligned with overarching goals and on track to meet specific objectives.
68. Demonstrate skills in budget management, including projecting costs, providing justifications, managing and containing costs, and implementing transparent financial management systems.
69. Create monitoring plans to assess leadership and employee accountability, and review plans for management of projects, stakeholders and suppliers.
70. Analyze program outcomes to identify the needed changes and ensure that monitoring systems are in place to enable program evaluation.
71. Propose solutions to a variety of program challenges related to human resources, information technology, operating procedures, monitoring and evaluation, and quality improvement.