

Milken Institute School of Public Health

THE GEORGE WASHINGTON UNIVERSITY

MPH Foundational/Core Competencies
&
Department of Biostatistics and Bioinformatics
Program/Track-specific Competencies

MPH Foundational/Core Competencies:

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
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
7. Assess population needs, assets, and capacities that affect communities' health
8. Apply awareness of cultural values and practices to the design, implementation, or critique 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
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
16. Apply principles of leadership and/or management principles to address a relevant issue.
17. Apply negotiation and mediation skills to address organizational or community challenges
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
21. Integrate perspectives from other sectors and/or professions to promote and advance population health
22. Apply a systems thinking tool to visually represent a public health issue in a format other than standard narrative

Department of Biostatistics and Bioinformatics Program/Track-specific Competencies:

1. Apply basic principles of biostatistics to contribute to the design, planning, and conduct of public health and biomedical studies.
2. Manage databases from public health and biomedical studies using statistical software, e.g., SAS®.
3. Analyze data by applying methodological concepts and interpret the results from public health and biomedical studies.
4. Communicate results from statistical analysis in layman's terms as a member of a multidisciplinary research team on public health or biomedical studies.
5. Identify and apply basic ethical principles pertaining to data confidentiality and interpretation of statistical results derived from public health and biomedical data.