

Programmatic Competencies for the MPH in Epidemiology

In addition to the core competencies developed in the core MPH curriculum, MPH in Epidemiology graduates should be able to:

- Demonstrate a working knowledge of the major public health issues related to communicable and non-communicable diseases;
- Describe the pathophysiology and natural history of diseases that are major causes of morbidity and mortality;
- Critically review and summarize epidemiologic literature;
- Demonstrate understanding of the potential effects of biases and confounding factors in epidemiologic studies and methods for addressing them in the design and execution of studies;
- Identify and evaluate demographic, behavioral, social and environmental factors that influence the distribution of disease in populations;
- Serve as a member of a team or group in identifying public health questions and selecting appropriate study designs and methods to address those questions;
- Identify and access sources of data such as vital statistics disease registries, national surveys and medical records;
- Demonstrate knowledge of how these data are collected and their role in surveillance and disease prevention;
- Assist in the design and administration of instruments for collection of epidemiological data for the purposes of surveillance or research;
- Use computer software for database set up and management;
- Generate descriptive statistics and graphics to summarize epidemiological data;
- Analyze epidemiological data using basic statistical tests and measures of association;
- Give oral presentations and produce written reports on topics relevant to public health;
- Demonstrate knowledge of some of the most prominent ethical issues in the field of epidemiology.