

EPIDEMIOLOGY PROGRAM COMPETENCIES

Epidemiology MPH Competencies

MPH-EPI 1: Describe the historical context of epidemiology.

MPH-EPI 2: Describe public health concerns in terms of magnitude, people affected, time, and location.

MPH-EPI 3: Apply basic terminology and definitions of epidemiology.

MPH-EPI 4: Formulate analytic approach using appropriate epidemiologic measure and generate conclusions.

MPH-EPI 5: Explain the importance of epidemiology for informing scientific and ethical principles of public health concerns.

MPH-EPI 6: Explain ethical principles pertaining to the collection, maintenance, use, and dissemination of epidemiologic data.

MPH-EPI 7: Evaluate the strengths and limitations of epidemiologic reports.

MPH-EPI 8: Describe the principles and limitations of public health screening programs.

Epidemiology MSPH Applied Competencies

MSPH-EPI 1: Develop an applied epidemiology research project that a research committee can review for scientific validity and feasibility.

MSPH-EPI 2: Conduct an applied epidemiology research project under the guidance of senior investigators.

MSPH-EPI 3: Write a manuscript reporting research background, methods, results, discussion, and conclusions to be presented to a research committee.

MSPH-EPI 4: Explain the principles of designing intervention studies.

MSPH-EPI 5: Demonstrate the ability to manage and analyze epidemiologic data.

Epidemiology Clinical & Translational Science

MSPH-EPI 1: Develop a clinical and translational research project that a research committee can review for scientific validity and feasibility.

MSPH-EPI 2: Conduct a clinical and translational research project under the guidance of senior investigators.

MSPH-EPI 3: Write a manuscript reporting research background, methods, results, discussion, and conclusions to be presented to a research committee.

MSPH-EPI 4: Explain the principles of designing observational studies relevant to clinical and translational research.

MSPH-EPI 5: Demonstrate the ability to manage and analyze epidemiologic data relevant to clinical and translational research.

Epidemiology MSPH Pharmacoepidemiology & Comparative Effectiveness Research

MSPH-EPI 1: Develop a pharmacoepidemiology & comparative effectiveness research project that a research committee can review for scientific validity and feasibility.

MSPH-EPI 2: Conduct a pharmacoepidemiology & comparative effectiveness research project under the guidance of senior investigators.

MSPH-EPI 3: Write a manuscript reporting research background, methods, results, discussion, and conclusions to be presented to a research committee.

MSPH-EPI 4: Explain the principles of designing observational studies relevant to pharmacoepidemiology & comparative effectiveness research.

MSPH-EPI 5: Describe the principles, goals, and conduct of pharmacoepidemiology and comparative effectiveness research.

Epidemiology PHD

PHD-EPI 1: Critique epidemiologic studies and reports, with regard to design choice, precision, bias, confounding, and ethical issues.

PHD-EPI 2: Demonstrate expertise in the statistical basis for the analysis of epidemiologic data.

PHD-EPI 3: Write the design, methods, and results of an epidemiologic study.

PHD-EPI 4: Demonstrate ability to teach epidemiologic concepts to master's and undergraduate-level students.

PHD-EPI 5: Formulate novel and innovative study questions and hypotheses and test them using epidemiological methods.

PHD-EPI 6: Develop a dissertation research proposal with detailed background, study design, data collection plan and analyses for carrying out an epidemiologic study.

PHD-EPI 7: Conduct a dissertation research project from design through analysis and interpretation, with oral presentation of results and preparation of a publishable manuscript(s).