

The Graduate Certificate in Maternal and Child Health Health Epidemiology addresses the following Maternal and Child Health Competencies*

A. SCIENTIFIC BASIS

MCH Professionals should have knowledge and understanding of:

1. The major domestic and international causes of mortality and morbidity within MCH populations including differences between the United States and other developed and less developed countries.
2. The normal patterns of individual and family growth and development from an intergenerational and lifespan perspective.
3. The determinants of health and illness, and concomitant theories including biological, behavioral and socio-cultural influences such as racism, sexism, and economic disparity, as well as protective factors.

MCH Professionals should be able to demonstrate the following skills:

9. Identify the scientific underpinnings and determine the validity of evidence for interventions addressing MCH problems.
12. Recognize different strengths, needs, values, and practices of diverse cultural, racial, ethnic, and socioeconomic groups and determine how these factors affect health status, health behaviors, and program design.

B. METHODOLOGICAL/ANALYTICAL SKILLS

MCH Professionals should have knowledge and understanding of:

1. Research design, sampling, basic descriptive and inferential statistics, and validity/reliability assessment of measures.
6. Principles and key features of community assessment, program design, implementation, and evaluation.

MCH Professionals should be able to demonstrate the following skills:

7. Prepare and interpret data from vital statistics, censuses, surveys, service utilization, and other relevant reports on the health of MCH populations, and have the ability to detect meaningful inferences from data and the translation of data into information.
8. Apply appropriate qualitative methods to understand maternal and child health status.
9. Ability to conceptualize and appropriately use data and statistical/epidemiological methods for problem and asset identification, assessment, program planning, implementation, and evaluation.
10. Formulate hypotheses or research questions, develop and implement a analytic strategy.

C. MANAGEMENT AND COMMUNICATION SKILLS

MCH Professionals should have knowledge and understanding of:

6. The processes, organization, and administration of quality management techniques in maternal and child health programs and agencies, including an understanding of the appropriate use, analysis, and interpretation of quality improvement data as it applies to employees, clients, and management.

MCH Professionals should be able to demonstrate the following skills:

7. Apply knowledge of management and organizational theories and practices to the development, planning, staffing, administration, and evaluation of public health programs, including the implementation of strategies promoting integrated service systems for MCH populations.
11. Develop the background and significance section of a grant application and/or develop the rationale for a program or intervention, incorporating scientific,

methodological, and practice knowledge and skills as appropriate.

D. POLICY AND ADVOCACY SKILLS

MCH Professionals should have knowledge and understanding of:

1. The historical development and scientific basis of MCH public policies and practices in the United States for federal, state, and local agencies and programs serving maternal and child health populations.

MCH Professionals should be able to demonstrate the following skills:

9. Place a maternal and child health program within the historical and current context of related programs.

13. Develop a plan to implement a policy, including goals, outcome and process objectives, implementation steps and evaluation plan.

E. VALUES AND ETHICS IN MCH PUBLIC HEALTH PRACTICE

MCH Professionals should have knowledge and understanding of:

2. The principles and issues involved in the ethical and sensitive conduct of practice and research within MCH populations, and in the organization and delivery of public health services within communities and governmental agencies; including the ethical and confidential collection of data and its management, analysis, and dissemination.

4. Ethical conduct in practice, program management, research, and data collection and storage.

6. Ability to build partnerships within MCH communities and constituencies to foster community empowerment, reciprocal learning and involvement in design, implementation, and research aspects of MCH programs and systems.

*Developed by the Association of Teachers of Maternal and Child Health in collaboration with the MCH Council of the Association of Schools of Public Health and endorsed by the Association of Maternal and Child Health Programs (adopted 11/93; revised 6-7-96, 8/99; revisions approved by ATMCH membership 2/01).

The Program also addresses School wide Core Public Health Competencies and Learning Experiences

Domain: Biostatistics

MPH 9. Understand analysis of basic experimental designs and apply descriptive and inferential methodologies according to the type of study design for answering a particular research question.

MPH 11. Interpret results of statistical analysis in public health studies.

Domain: Epidemiology

MPH 20. Identify key sources of epidemiologic data.

MPH 28. Describe goals and process of screening, and define/interpret the screening measures' sensitivity, specificity, & positive predictive value.

Domain: Social & Behavior Science

MPH 33. Identify basic theories, concepts & models from a range of social & behavioral disciplines that are used in public health research & practice.

MPH 34. Identify the causes of social and behavioral factors that affect health of individuals and populations.

MPH 37. Describe steps and procedures for the planning, implementation and evaluation of public health programs, policies and interventions.

Domain: Health Services Administration

MPH 53. Apply research principles to understanding health policy problems and policy issues.