

Approved 4/16/08; Modified 4/30/08(PH621 change for CPH)
Revised 3/20/09

**UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE
MASTER OF PUBLIC HEALTH PROGRAM**

CONCENTRATIONS & REQUIREMENTS

The MPH Program at the University of Maryland School of Medicine is a two concentration program that emphasizes the development of public health skills in core and concentration courses that are skills based. The MPH degree requires 42 credit hours, including 17 credits from core courses and a six-credit supervised project, the Capstone Experience. In addition, each concentration has specific course requirements that are described on the following pages. Students can select electives to facilitate tailoring their program of study to their academic interests and career goals.

The MPH concentration in **Epidemiology** is designed for students who desire quantitative research skills in epidemiologic study design and data analysis. The Academic Director for the Epidemiology Concentration is Dr. Laura Hungerford, DVM, PhD, MPH.

The MPH Concentration in **Community & Population Health** is designed to prepare students to apply the conceptual and methodological approaches of the social and behavioral sciences to public health practice and research. The Academic Director for the Community & Population Health Concentration is Dr. Renee Royak-Schaler, PhD, MEd.

MPH Concentration in Epidemiology

The MPH concentration in Epidemiology is designed for students who desire quantitative research skills in epidemiologic study design and data analysis. The Epidemiology concentration provides skills in risk factor analysis, specifically understanding the distribution, characteristics, causes, risk factors, and prevention of disease, disability, and mortality in the population. Students will be trained in ecological approaches to public health, including strategies for understanding and assessing the impact of political, socioeconomic, cultural, and behavioral factors on population health.

Upon graduation, MPH students in the Epidemiology concentration will be able to:

1. Select the most appropriate and efficient design for a specific research problem.
2. Articulate appropriate research questions and hypotheses to investigate public health problems.
3. Select measurement instruments appropriate for a research question.
4. Demonstrate familiarity with evidence-based principles of data management
5. Identify potential sources of bias, describe the direction and magnitudes of bias and its effect on measures of association, and develop strategies for reducing bias.
6. Identify variables that are potential confounders with respect to an association of interest.
7. Use statistical software packages to conduct descriptive analyses and examine bivariate associations.
8. Estimate measures of disease occurrence and of association and associated confidence intervals.
9. Use advanced statistical methods such as logistic regression, survival analysis, and proportional hazards models.
10. Draw appropriate inferences based on results of analysis.
11. Be prepared to participate in the implementation and management of a clinical trial.

Required Core Courses	(23 Credits)	Course Number	Credits
Principles of Epidemiology		PH/PREV 600	3
Principles of Biostatistics		PH/PREV 620	3
Environmental/Occupational Health		PH/PREV 668	3
Introduction to the Health System, Policy, & Management		PH/PREV 648	3
Foundations of Public Health		PH/PREV 610	3
Public Health Ethics		PH/PREV 623	2
Supervised Project (Capstone)		PH 789	6
		Subtotal	23

Required Concentration Courses	(10 credits)	Course Number	Credits
Clinical Trials/Experimental Epidemiology		PREV 803	3
Observational Studies in Epidemiology		PREV 659	3
Statistical Methods in Epidemiology		PREV 720	4

Electives (9 credits)

Select your electives from the courses listed on pages 5-6. You can also select your electives from the required courses for the other concentration, i.e. you can select PREV 758 (Health Survey Research Methods) as an elective, even though it is a required course for the Community & Population Health Concentration. Other elective courses may be selected, but must be approved by the student's advisor and the MPH Curriculum Committee.

MPH Concentration in Community & Population Health (CPH)

Approved by the Social & Behavioral Sciences Steering Committee 11/17/05

Approved by the MPH Steering Committee 12/07/05

Modified and Approved by the MPH Steering Committee 6/06/07

The MPH Concentration in Community & Population Health (CPH) is designed to prepare students to apply the conceptual and methodological approaches of the social and behavioral sciences to public health practice and research. This concentration will focus on developing an understanding of the influence of the political, economic, socio-cultural and behavioral contexts and processes on population health. Particular attention will be given to examining the root causes of disparities in disease risk, access and utilization of preventive and health care services, and health outcomes. A major goal of this concentration is to train students in the skills and knowledge needed to apply mixed methods (qualitative and quantitative) approaches in designing, implementing, and evaluating public health programs and translation of public health approaches to health policy.

Upon graduation, MPH students in the Community & Population Health concentration will be able to:

1. Recognize and assess the social, biological, psychological, and behavioral factors that affect the health of individuals and populations.
2. Identify and assess the individual, family, organizational, community, and societal level factors that are associated with the onset and solution of public health problems.
3. Comprehend the basic theories, concepts and models from the social and behavioral sciences that are used to address health issues at the individual, family, organizational, community, and population levels in public health research and practice.
4. Integrate and apply qualitative and quantitative mixed research methods for understanding phenomena in population health, and developing and evaluating public health assessments and interventions.
5. Develop community partnerships for the planning, implementation and evaluation of health promotion programs.
6. Employ the steps and procedures of planning social and behavioral assessments, interventions, and policies.
7. Advocate for the use of social and behavioral science approaches to address public health issues.
8. Use the basic concepts, skills, and methods involved in culturally appropriate community engagement and empowerment with diverse communities.
9. Identify key stakeholders for the planning, implementation and evaluation of health promotion programs.
10. Apply social justice and human rights principles when addressing community needs.

Required Core Courses	(23 Credits)	Course Number	Credits
Principles of Epidemiology <i>or</i>		PH/PREV 600 <i>or</i>	3
Epidemiologic Assessment Strategies		NURS 671	
Biostatistical Methods <i>or</i>		PH/PREV 621 <i>or</i>	3
Principles of Biostatistics (<i>substituted only with permission of instructor</i>)		PH/PREV 620	
Environmental/Occupational Health		PH/PREV 668	3
Introduction to the Health System, Policy, & Management		PH/PREV 648	3
Foundations of Public Health		PH/PREV 610	3
Public Health Ethics		PH/PREV 623	2
Supervised Project (Capstone)		PH 789	<u>6</u>
		Subtotal	23

Required Concentration Courses	(9 credits)	Course Number	Credits
Health Survey Research Methods		PREV 758	3
Program Planning and Evaluation in Community/Public Health		NURS 732	3
Community-based Participatory Research: Theory & Methods		PREV 625	3

Electives **(10 credits)**

Select your electives from the courses listed on pages 5-6. You can also select your electives from the required courses for the other concentration, i.e. you can select PREV 659 (Observational Studies in Epidemiology) as an elective, even though it is a required course for the Epidemiology Concentration. Other elective courses may be selected, but must be approved by the student's advisor and the MPH Curriculum Committee.

Electives	Course Number	Credits
Advanced Quantitative Methods	PREV 702	2
Advanced Topics in Pharmacoepidemiology	PHSR/PREV 722	1
Advanced Toxicology I	TOXI 601	3
Applied Epidemiology	PREV 601	2
Applied Social Psychology (UMBC)	PSYC 656	3
Biostatistical Computing	PREV 619	2
Chronic Disease Epidemiology	PREV 716	3
Community Organization	SWOA 704	3
Comparative Social Policy	SOWK 720	3
Context of Health Care	PHAR 522	2
Disease Modeling in Epidemiology	PREV 611	3
Economic Issues in Aging	GERO 742	3
Environmental Health	NURS 730	3
Epidemiology of Aging	PREV/GERO 681	3
Ethical issues in International Research	PREV 638	3
Ethics of Globalization	PREV 640	1
Exposure, Risk and Public Health	TOXI 611	2
Genetic Epidemiology	PREV 711	3
Global Health: Critical Issues	PREV 664	3
Health & International Human Rights Seminar	LAW 564	3
Health Law Seminar: Food and Drug Law	LAW 586	3
Health Promotion Disease Prevention	NURS 630	2
Independent Study	PREV 789	1
Infectious Disease Epidemiology	PREV 749	3
Injury Epidemiology & Prevention	PREV 715	2
Interdisciplinary Seminar in Environmental Health	NURS 750	1
Introduction to Health Behavior Theory	PHSR 620	3
Issues in Aging Policy	GERO/SOCY 672	3
Managing Public Organizations (UMBC)	PUBL 613	3
Medication Safety in Health Care	PHMY 502	2
Molecular Epidemiology	PREV 780	3
Molecular Epidemiology of Infectious Diseases	PREV 631	3
Multicultural Practice in Organizations and Communities	SOWK 764	3
Nature of Health and Illness	SOWK 765	3
Pharmacoepidemiology	PHSR 704/PREV 705	3
Pharmacy, Drugs, and the Health Care System	PHSR 610	3
Populations at Risk in Community/Public Health	NURS 761	3
Principles of Health Education and Health Promotion	PHSR 670/PREV 650	3
Qualitative Ethnocultural Research	SOWK 783	3

Electives	Course Number	Credits
Qualitative Research Methods in Social Work	SOWK 826	3
Regression Analysis	PREV 721	2
Research Informatics: Data Management in Research	PREV 706	2
Research Methods I	PHSR 701	3
Society, Health and Social Justice	NURS 769	3
Sociocultural Gerontology	GERO 700	3
Sociology of Mental Health and Illness (UMBC)	SOCY 658	3
Survival Analysis	PREV 723	2
Theory and Practice of Policy Analysis (UMBC)	PUBL 603	3
Toxicology Seminar	TOXI 618	1