

**University of South Florida, College of Public Health
Department of Global Health**

MSPH: Global Communicable Diseases

The Global Communicable diseases (GCD) program provides an opportunity for science-oriented students with an interest in communicable diseases to receive specialized training in the recognition, identification, diagnosis, surveillance, control, and prevention of public health problems related to communicable diseases throughout the world, with particular emphasis on the problems of Florida and underdeveloped nations. Several course offerings and areas of emphasis focusing on infection control have been added to this program to allow public health practitioners to expand their knowledge of infection control practices and procedures, particularly in hospital settings. Preference for admission is given to students with a background or demonstrated skills in the biological sciences. Prerequisites for some of these courses may be required.

The MSPH program is designed for students who seek a more individualized, research-oriented program than that provided by the MPH degree. This program provides an intense research and technical program of study for science-oriented students with an interest in communicable diseases or global health. Individualized courses of study are determined for students with the cooperation of an advisory committee, which allows students to receive specialized training in the recognition, identification, diagnosis, surveillance, control, and prevention of public health problems related to communicable diseases and/or issues impacting global health. This degree program focuses on preparing students to fulfill leadership and research roles in solving or containing public health problems throughout the world with particular emphasis on the problems of resource poor regions. The MSPH culminates with an independent thesis requirement which requires a substantial on-campus time commitment on the part of the student. The thesis work involves extensive one on one interaction between the student, their thesis advisor and their thesis committee.

Competencies: In addition to the Masters of Science in Public Health (MSPH) degree competencies, graduates with a concentration in Global Communicable Diseases will:

1. Interpret the natural history of disease-causing parasites, bacteria, viruses, fungi, and other organisms of major public health concern, as well as the disease processes and clinical manifestations caused by those infectious organisms;
2. Identify the appropriate diagnosis, epidemiology, surveillance, control, treatment and prevention of communicable diseases;
3. Describe the natural human defenses, the appropriate use of diagnostic techniques and serological surveillance, and the role of preventive interventions and treatments such as vaccines and antibiotics against communicable diseases;
4. Apply principles of immunology, molecular biology and other essential biological sciences disciplines in the laboratory settings for research and the diagnosis, surveillance, control, treatment, and prevention of communicable diseases; and
5. Prepare and present information about communicable diseases to other members of health-related professions and to members of the public in a professional and effective manner.
6. Explain factors such as biology, ecology and dynamics of arthropod vector populations that affect transmission of specific communicable diseases such as malaria and dengue
7. Recognize the roles of the laboratory in the Public Health system and have a thorough understanding of the complexity and inter-connectivity of all levels of laboratory services
8. Analyze data collected through MSPH thesis studies, interpret the findings, and successfully defend an MSPH thesis ;

Association between courses and the competencies for
MSPH with a Global Communicable Diseases Concentration

Courses	Competencies							
	1	2	3	4	5	6	7	8
Required Research Methods Courses								
PHC 6051 Biostatistics II				√	√			√
PHC 6934 Introduction to Quantitative Laboratory Research Methods		√		√	√		√	√
TBD: An additional research course related to focus area								
Suggested concentration courses (18 credits)								
PHC 6251 Disease Surveillance and Monitoring		√	√					√
PHC 6510 Emerging Infectious Diseases	√	√	√	√	√	√	√	√
PHC 6560 The Public Health Laboratory System	√	√	√		√	√	√	
PHC 6511 Public Health Immunology	√	√	√	√	√			
PHC 6512 Vectors of Human Diseases	√	√	√	√	√	√		
PHC 6513 Public Health Parasitology	√	√	√	√	√	√	√	√
PHC 6517 Infectious Disease Prevention Strategies		√	√	√	√			
PHC 6314 Infection Control Program Design					√			√
PHC 6514 Infectious Disease Control in Developing Countries	√	√	√			√		
PHC 6562 Microbiology for Healthcare workers	√	√	√	√	√	√	√	√
PHC 6934 Laboratory Techniques in Public Health		√	√	√			√	√
PHC 6934- Virology	√	√	√	√	√	√	√	√
PHC7122-Vaccinology	√	√	√	√	√		√	√
PHC7931-Current Topics in GH Infectious Diseases	√	√	√	√	√	√	√	√
PHC 6934 Tools of Research: Laboratory Rotations		√		√			√	