

Boston University School of Public Health

Chronic and Non-communicable Diseases (Updated 10/14/2021)

Chronic diseases—such as heart disease, cancer, stroke, asthma, diabetes, and Alzheimer's disease—are responsible for a large majority of the deaths in the United States and a rapidly rising share of deaths in developing countries. In addition to their effect on mortality, these conditions have an enormous impact on disability, quality of life, health care costs, and lost productivity, and are also a major contributor to health disparities. The certificate is designed to provide graduates with the knowledge and skills needed to address a broad range of challenges posed by these conditions, including identification of their causes; design, implementation and evaluation of programs to prevent their occurrence, and also to extend life and improve quality of life once they occur; and organization of the medical care system so that it focuses first on prevention, and also provides access to high-quality and efficient treatment and management.

Upon graduation, students will be able to:

- Identify the major known determinants of chronic disease and their distribution by country, community, and key demographic characteristics.
- Assess how the organization, delivery, and financing of health services in the U.S. and globally influence the provision of health care aimed at the prevention, management, and treatment of chronic disease.
- Analyze the factors that influence public health's approach to addressing chronic disease, including health impact; availability of health data; political, economic, and cultural influences; and feasibility.
- Apply systematic approaches to develop, implement, and evaluate programs to prevent the occurrence of chronic disease and to improve quality of life for persons with these conditions.
- Demonstrate professional knowledge and skills in chronic disease for effective practice in the selected functional certificate.

Course Requirements

- PH 780: Chronic Disease: a public health perspective (2)
- Choose 10 additional credits from the following:

Community-Based Prevention Focus

- PH 757: Chronic Disease Prevention (4)
- MC 770: Children with Special Health Care Needs (4)
- SB 800: Obesity Epidemic (4)

Environmental Health Focus

- EH 730: Methods in Environmental Health (4)
- EH 705: Toxicology (2)
- EH 707: Physiology (2)
- EH 757: Environmental Epidemiology (4)
- EH 804: Exposure Assessment (4)

Global Health Focus

- **GH 880**: Confronting Non-Communicable Diseases in the Developing World (4)
- GH 888: Seminar on Global Health Policy Issues (2)
- **GH 891:** Global Pharmaceutical Policy: At the Intersection of Process and Politics (2)
- PH 740: Pharmaceuticals in Public Health (4)

Epidemiology Focus

- EP 740: Introduction to the Epidemiology of Aging (2)
- EP 748: Drug Epidemiology (4)
- EP 752: Cancer Epidemiology (4)
- EP 758: Nutritional Epidemiology (4)
- EP 762: Clinical Epidemiology (4)
- EP 775: Social Epidemiology (4)
- EP 790: Mental Health Epidemiology (2)

Policy & Management Focus

- PM 755: Health Care Delivery Systems: Issues and Innovations (4)
- PM 832: Operations Management in Health Care (4)

Career Paths

Graduates are well-suited to take on roles in a variety of settings, including health departments and other government agencies, academic research, health delivery systems, insurers, foundations and health-focused nonprofit organizations, international NGOs, and health-related business and consulting firms. Possible job titles include: Community Needs Assessment Program/Project Manager/Program Coordinator/Program Associate, Health Educator, Evaluation Specialist, Analyst, Community-Benefits Coordinator, Consultant, Technical Advisor, Research Associate, Quality Improvement Analyst, Survey Associate, Patient Navigator, Case Manager, Organizer and Advocate

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