

PUBHLTH 600-0100
Introduction to Global Health
Autumn 2009
Credits: 2 Call Number: Lec 28973
Building/Room: Smith Laboratory/Room 1042

Instructor: Mary Ellen Wewers, Ph.D., M.P.H.
Professor
Room 3156 Smith Laboratory
174 West 18th Avenue
Columbus OH 43210
E-mail: wewers.1@osu.edu
Telephone: (614) 292-3137

Office Hours: Wednesdays 2:30-3:30 and by appointment

Course Description: This course will offer students an opportunity to deepen their knowledge and interest in the global health field. The purposes of this survey course are to provide an overview of current and emerging global health issues and their determinants; raise students' awareness of health issues that transcend national borders and culture and that require multi-national and multi-sectoral action; describe interventions and programs being implemented by major governmental and non-governmental organizations to address key problems areas across the world; discuss different guiding philosophies behind specific health interventions; and identify factors that may impact the success or failure of an intervention.

Learning Objectives

Upon completion of this course, the student will be able to:

- Describe worldwide patterns of leading causes of morbidity and mortality and identify priorities for investment in global health;
- Discuss the concept and significance of demographic and epidemiologic transitions; explain and describe major factors contributing to communicable and chronic diseases incidence worldwide;
- Recognize/understand the role of political, social, economic, environmental and cultural factors as contributors to current global health issues;
- Recognize ethical and human rights considerations in the field of global health;
- Identify key governmental and non-governmental players in international health, and discuss barriers and possible approaches to solving diverse key global health issues.

Required material

1. All required course readings will be available on Carmen www.carmen.osu.edu

2. Textbook:

Merson, M.H., Black, R.E., Mills, A. J. (Eds.). *International public health: Diseases, programs, systems, and policies*. (2nd Ed). Jones and Bartlett Publishers, Inc: Sudbury, MA. 2006. ISBN-13:978-0-7637-2967-7

Expectations

You are expected to read materials assigned before each class. You are expected to attend each lecture and actively participate in class discussion.

Course evaluation and grading

Attendance and class participation: 20 points

Midterm exam: 30 points

Final Paper: 50 points

Total score: 100 points

Final Paper

A five page (maximum) final paper is required. The paper should include: 1) a *brief* overview of a global health threat with a description of its prevalence and area(s) of the world that are at increased risk; 2) critical analysis of social, behavioral and biological factors that contribute to the existing or emerging threat; 3) a potential evidence-based strategy to reduce the threat; 4) existing challenges to implementation of the proposed strategy; and 5) references (not included in five page limit). The paper format includes one-inch margins (all around) and Arial 11 font. The paper is due **Wednesday December 9, 2009 by 5:00 PM**.

Grading Scale

A 93-100%	B+ 87-89%	C+ 77-79%	D+ 67-69%
A- 90-92%	B 83-86%	C 73-76%	D 63-66
	B- 80-82%	C- 70-72 %	F <63

Academic misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term 'academic misconduct' includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct (http://studentaffairs.osu.edu/info_for_students/csc/asp).

Disability services

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office of Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>

Course Outline

• Wednesday Sept 23

Course introduction: the global burden of disease and its major determinants

Introduction to the course with a general overview of the distribution of disease & mortality worldwide; environmental, demographic and socioeconomic factors influencing world's health; trends and measurements of disease burden

Readings

Merson MH et al. (2006). Chapter 1: Measures of Health and Disease in Populations. pp 1-38.

Murray CJ, and Lopez AD. (1997). Global mortality, disability, and the contribution of risk factors: Global Burden of Disease Study. *Lancet*, 349:1436-1442.

The Millennium goals: <http://www.un.org/millenniumgoals/bkqd.shtml>

• Wednesday Sept 30

Communicable Diseases: epidemiology, risk factors and control

Focus on malaria, HIV/AIDS, tuberculosis - Agents, methods of transmission, control and prevention; challenges and on-going efforts to control these major communicable diseases

Readings

Merson MH et al. (2006). Chapter 4: Infectious Diseases. pp. 147-151; 152-164.

Farmer P. (2001). The major infectious diseases in the world: to treat or not to treat? *New England Journal of Medicine*, 345: 208-210.

Harries AD, Hargreaves NJ, Kemp J, Jindani A, Enarson DA, Maher D and Salaniponi FM. (2001). Deaths from tuberculosis in sub-Saharan Africa countries with a high prevalence of HIV-1. *Lancet*, 357: 1519-1523

Kim JY. & Farmer P. (2006). AIDS in 2006 - Moving toward one world, one hope? *New England Journal of Medicine*, 355: 645-647

Potts M, Halperin DT, Kirby D, Swidler A, Marseille E et al. Reassessing HIV prevention. *Science*, 320: 749-750.

• Wednesday Oct 7

Chronic Diseases: epidemiology, risk factors and control worldwide, chronic diseases in developing countries

Focus on epidemiologic trends, risk factors, major conditions, economic impact, health inequalities, and policy

Readings

Merson MH et al. (2006). Chapter 6: Chronic Diseases and Risks. pp. 273-313.

Anderson GF. & Chu E. (2007). Expanding priorities: Confronting chronic diseases in countries with low-income. *New England Journal of Medicine*, 356:209-211.

Boutayeb A. (2006). The double burden of communicable and non-communicable diseases in developing countries. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 100: 191-199.

• **Wednesday Oct 14**

Chronic Disease Exemplar: "What are the global challenges in cancer?"

Readings

Love RR. Defining a global research agenda for breast cancer. (2008). *Cancer*, 113 (8 suppl): 2366-2371.

**Note: Public Health Seminar Wednesday October 14, 2009
10:00-11:00 AM Fifth Floor Prior Health Sciences Library
Patrick Kelley, MD, DrPH
Director, Board on Global Health, Institute of Medicine
Topic: To be announced**

• **Wednesday October 21**

Midterm Examination

Women's Health and Child Survival.

Importance of women's health to global health; causes and effects of the most prominent causes of illness, disability and death for mothers, babies and children; existing programmatic interventions addressing these problems

Readings

Merson MH et al. (2006). Chapter 3: Reproductive Health. pp. 71-114.

Additional readings to be announced

• **Wednesday Oct 28**

Environmental Threats

Focus on principles of sustainable access to safe drinking water; reduction in loss of environmental resources including clean air and land conservation; forces of climate change

Readings

Merson MH et al. (2006). Chapter 9: Environmental Health. pp. 393-438.

Liang S, Yang C, Zhong B, & Qiu D. (2006). Re-emerging schistosomiasis in hilly and mountainous areas of Sichuan, China. *Bulletin of World Health Organization*. 84: 139-144.

• **Wednesday Nov 4**

Nutrition

Focus on food security and malnutrition, examination of causal factors, detection, prevention and mitigation of famine

Readings

Merson MH et al. (2006). Chapter 5: Nutrition. pp. 187-239.

Baqui AH, Black RE, El Afrifee S, Yunus M, Chakraborty J. et al. (2002). Effect of zinc supplementation started during diarrhea on morbidity and mortality in Bangladeshi children: Community randomized trial. *British Medical Journal*, 325, 1059-1065.

Caballero, B. (2005). A nutrition paradox – Underweight and obesity in developing countries. *New England Journal of Medicine*. 352, 15, 1514-1516.

- **Wednesday Nov 18**

- **Unintentional Injuries and Violence**

Focus on global burden of injuries, risk factors for injuries and violence and prevention strategies

- **Readings**

Merson MH et al. (2006). Chapter 7; Unintentional Injuries and Violence. pp. 323-347.

Delgado, J., Ramirez-Cardich, M.E., Gilman, R.H., Lavarello, R., Dahodwala, et al. (2002). Risk factors for burns in children: Crowding, poverty and poor maternal education. *Injury Prevention*, 8, 38-41.

Mock, C., Quansah, R., Krishnan, R., Arreola-Risa, C., & Rivara, F. (2004). Strengthening the prevention and care of injuries worldwide. *Lancet*, 363, 2172-2179.

- **Wednesday Dec 2**

- **Comparing health care systems and delivery around the world**

- **Readings**

Merson MH et al. Chapter 13: Health and the Economy. pp. 601-638.

Anderson GF, Reinhardt UE, Hussey PS, Petrosyan V. (2003), It's the prices, stupid: Why the United States is so different from other countries. *Health Affairs*, 22, 89-105.

- **Course Evaluation**