

Public Health Preparedness & Emergency Response

*Center for Infectious Diseases & Emergency Readiness
UC Berkeley School of Public Health
Syllabus for PH 257B, CC# 76219, 3 units
Fall 2009, Modified 2009-08-30*

Core faculty

Tomás Aragón, MD, DrPH, UCB SPH CIDER
Michael Petrie, EMT-P, MBA, MS, UCB SPH CIDER
Howard Backer, MD, MPH, CHHS & CDPH
Wayne Enanoria, PhD, MPH, UCB SPH CIDER
Harvey Kayman, MD, MPH, CDPH, Immunization Branch
Linda Neuhauser, DrPH, UCB SPH CIDER & Health Research for Action
Donata Nilsen, MPH, DrPH graduate student, UCB SPH CIDER
Rick Kreuzter, MD, Environmental Health Investigations Branch (to be scheduled)

Schedule (Lecturer 10am-11:30am; Students: 11:30am-12pm)

| Date | Wk | Topics | Lecturer |
|-------------|-----------|---|--------------------|
| 09/01/09 | 1 | Introduction to emergency management systems | Michael Petrie |
| 09/08/09 | 2 | Overview and the role of public health in disasters | Tomás Aragón |
| 09/15/09 | 3 | Natural disasters and intentional mass threats | Tomás Aragón |
| 09/22/09 | 4 | Community Emergency Response Teams (CERTs) | Donata Nilsen |
| 09/29/09 | 5 | Public health emergency incident management system (invited) | M. Petrie & E. Pan |
| 10/06/09 | 6 | Public health ethics in disaster preparedness and response | Harvey Kayman |
| 10/13/09 | 7 | Disaster preparedness for vulnerable populations (invited) | Ana-Marie Jones |
| 10/20/09 | 8 | Mass care, emergency assistance, housing, and human services | Howard Backer |
| 10/27/09 | 9 | Infectious disease emergency preparedness & response | Tomás Aragón |
| 11/03/09 | 10 | Post-disaster sampling, surveys, and rapid health assessments | Wayne Enanoria |
| 11/10/09 | 11 | Homeland Security Exercise & Evaluation Program | Michael Petrie |
| 11/17/09 | 12 | Public health crisis risk communication | Linda Neuhauser |
| 11/24/09 | 13 | Essentials of emergency project management (EPM) | Tomás Aragón |
| 12/01/09 | 14 | Student project presentations | Students |
| 12/08/09 | 15 | Final Exam & Turn in term project/paper | |

* Environmental health emergency preparedness & response (includes climate change)

* Disaster mental health first aid (tbd); Crisis leadership (tbd); public health emergency law (tbd)

Course description

This one semester course is an intensive introduction to public health emergency preparedness and response, and cover the following topic areas: the role of public health in disasters; natural disasters and severe weather; intentional mass threats (CBRNE); biosurveillance: detecting and monitoring public health threat; post-disaster sampling, surveys, and rapid needs assessments; public health emergency incident management system; emergency operations planning and exercises; infectious disease emergency readiness; environmental health emergency readiness; mental health emergency readiness; special needs and vulnerable populations; public health crisis leadership and risk communication; conducting outbreaks investigations; disaster medicine and mass casualty care; and personal and community disaster preparedness

Target audience

This course is intended for public health graduate students, public health practitioners (health officers, deputy health officers, epidemiologists, public health nurses, environment health specialists, bioterrorism coordinators, emergency management specialists), and physicians.

Course prerequisites

Completion of one semester of graduate public health curriculum, or in public health practice.

Course objectives

By the end of this course participants will be able to

- Describe the role of public health before, during, and after public health emergencies
- Describe the major public health threats from natural, accidental, and intentional causes
- Describe the practical aspects of personal, community, and infrastructure preparedness
- Describe the core competencies in bioterrorism and emergency readiness for all public health workers
- Describe the five major management functions of the incident command system
- Describe the essential components of public health emergency project management
- Describe the essentials of public health preparedness and response, including infectious diseases, outbreak investigation, environmental health, mental health, special needs and vulnerable populations, and emergency operations planning and exercises

Course format

Lecture, discussion, and student presentations.

Course enrollment and fee

UC Berkeley students should register for Public Health 257B, CCN 76219. CIDER follows the UC Berkeley academic calendar. Non-registered students who want to receive academic credit will need to register and pay the UC Extension fee (see <http://www.unex.berkeley.edu/info/concur.php>).

Course credit/Grading

For registered UC Berkeley/Extension students: Units: 3; Grading: Letter or S/U. Grading will be based on personal preparedness kits (see A below), student project (see B below), student presentation (see C below), and final exam (open book; last day of class). Satisfactory (S) or Passed (P) is at a minimum level of B.

Course location and schedule

Schedule: Tuesdays, 10am-12pm; Location: 127 Dwinelle Hall

Student requirements

A. Personal disaster preparedness plan and kit (5%)

Visit <http://www.72hours.org>

- Make a plan (required)
- Build a kit (get started)
- Get involved (see Term Project)

B. Term project (35%)

Students must complete one of the following:

- Community Health Emergency Response Training Module, or
- Assessment of disaster preparedness plans for a community-based organization, or
- Participation in and evaluation of a disaster emergency operations exercise, or
- Prepare and pilot test a post-disaster epidemiologic rapid health assessment, or
- Complete and critically evaluate a Community Emergency Response Team (CERT) training
- Complete a project relevant to disaster preparedness for vulnerable populations

C. Public Health Emergency Student MMWRs (10%)

Present, analyze, and discuss (10 min) public health emergency preparedness or response aspects of a current or recent event. Distribute 1 or 2 readings one week before your presentation.

D. Final exam (50%)

Open book final exam will be given on the last day of class. It will be multiple choice and short answers, and will be based on lectures, slides, and assigned readings.

Readings

See required/recommended reading list at course site: <http://www.medepi.com> (select “Public Health Preparedness & Emergency Response”)