Environmental Health Disasters and What They Can Teach Us


Department of Environmental Health
Division of Epidemiology
The University of Cincinnati College of Medicine
Autumn Semester, 2016

Course Numbers:
BE/PH 8010

Time:
Mondays, 1:20 – 2:50 PM

Location:
Room G-17, Kettering Laboratory, Environmental Health Complex

Instructor:
Dr. Kim N. Dietrich
Professor of Environmental Health and Epidemiology
The University of Cincinnati College of Medicine
kim.dietrich@uc.edu

Office Hours: By appointment.
Scope:

This course will encompass events as diverse and over time as the Great Smog in London, the International Spanish Influenza Epidemic, Hiroshima and Nagasaki Atomic Bomb Attacks, Bhopal Leak of Methyl Isocyanate, Chernobyl Nuclear Reactor Accidents, Minamata and Niigata Methyl Mercury Poisoning Disasters, the Aral Sea, the Chinese Dome of Sickening and Fatal Air Pollution, and Fatal Lead Poisoning of Infants and Young Children in Nigeria due to Artisanal Gold Mining.

Methodology:

This course will use film documentaries, assigned readings, internet-assisted learning, and lecture to stimulate written and oral discussion about environmental health disasters of mostly anthropogenic origin. Students will be inspired to develop their own platform presentations on past, current, or impending environmental health disasters.

Warning:

Some of the images that you will be exposed to in this course may be disturbing.

Requirements:

- Class attendance
- Assigned readings/internet assisted learning
- Class participation
- Brief weekly written summary of each documentary presentation, lecture (if applicable), and reading(s). Each summary should include an opinion from the writer of the key environmental and public health lessons learned from the particular historical incident. Please submit your written summaries to kim.dietrich@uc.edu or bring them to class.
- Platform presentation of 15 minutes on a past, current or potential environmental health disaster or crisis and efforts necessary for prevention or remediation. Presentation will be followed by 5-10 minutes of class discussion. Presentation must include a bibliography and printed copy of all power point slides with notes for class distribution. Please turn in a preliminary outline of your presentation by October 3rd.
Week 1: *(August 22nd)*, An Introduction to Environmental Health Disasters: Definitions, Events and Discussion.

**Journal/Internet Resources:**


Week 2: *(August 29th)*, Environmental ‘Capitalism’: Bhopal and Union Carbide).

**Documentaries:**

1.) BBC, One Night in Bhopal

**Journal/Internet Resources:**


Week 3: *(September 5th)*, Holiday, Labor Day).


**Documentaries:**

1.) The Dried Up Aral Sea Disaster.
2.) The Shrinking of the Aral Sea: One of the Worst Environmental Disasters.
3.) The Battle of Chernobyl.

**Journal/Internet Resources:**


Week 6: (September 26th, Hiroshima, Nagasaki and the Atomic Bomb as an Environmental Health Disaster). Guest lecturer: Dr. C. Ralph Buncher, Professor Emeritus, Department of Environmental Health.

Documentaries:

1.) HIROSHIMA: BBC History of World War II.

Journal Readings:


Week 7: (October 3rd, The Spanish Influenza Epidemic: A Lost Memory of an Environmental and Public Health Disaster). Preliminary outline of student presentation due.

Documentaries:

1.) Influenza, 1918.

Journal Readings/Internet Resources:


Documentaries:

1.) The Great Smog of London – Parts I, II, and III.
2.) Under the Dome: Environmental Pollution in China

Journal Readings/Internet Resources:


[https://www.youtube.com/watch?v=T6X2uwIqGQM](https://www.youtube.com/watch?v=T6X2uwIqGQM)

Week 10: (October 24th, The Johnstown Flood: An Unnatural Disaster).

**Documentaries:**
1.) The Johnstown Flood: The Most Devastating Disaster of its Time (Guggenheim).
2.) Johnstown Flood (Bussler):

**Journal Readings/Internet Resources:**

Weeks 11-12: (October 31st - November 7th, Minamata and Niigata: A Signal Event in Environmental and Developmental Toxicology).

**Documentaries:**
1.) Minamata Disease: Keeping the Tragedy in Mind.
2.) Minamata: The Victims and Their World.

**Journal Readings/Internet Resources:**


Week 13: (November 14th, Fatal Lead Poisoning Epidemic: Nigeria’s Artisanal Gold Mining Disaster).

**Documentaries:**
1.) Zamfara Lead Poisoning (Part 1, Rudnicki).
**Journal Readings/Internet Resources:**


**Week 14: (November 21st, Student Presentations).**

**Week 15: (November 28th, Student Presentations).**

**Syllabus revised 8/14/2016**