I. Course Description

This course provides a close examination of how human behavior affects the development and spread of so-called “artificial epidemics,” primarily covering non-communicable diseases affecting adults. Diseases and conditions will be examined in order to discern the epidemiology of the disease and how cultural influences can impact both the rise of diseases as public health issues and their subsequent decline in incidence with a view toward prevention of future outbreaks. The course is designed with a flipped classroom; students will review materials in advance of the class session and come prepared to share and discuss the week’s topic in class. Thus there is an exceptional long reading list each week and only 1 hour of classroom, rather than 90 minutes, per week in this ½ unit class.

II. Course Objectives:

The course will allow students to understand underlying causes for the growth in prevalence of diseases and societal impacts of epidemics. The course will provide us with a relevant history of public health events, and the reaction to these events by authorities, physicians, and the general public. Students will have the opportunity to:

1. Acquire and review relevant literature pertaining to disease epidemics, in order to understand epidemic characteristics and management
2. Define an epidemic, and identify the response from various stakeholders to these epidemics
3. List major effects of each epidemic (e.g. death toll, economic/disability costs), why these effects are so substantial, and what long-term impact these effects have had
4. Describe research methods used to study epidemics
5. Explain underlying cultural influences that have driven the growth of each respective disease/condition to epidemic proportions
6. Explain changes in culture as a result of these epidemics, including the effects of the epidemics on human behavior and public policy.

III. Grading Policies:

Course grades will be based upon:

Critical review of assigned material on a weekly basis and participation in discussion in the tutorial session. (30%, 3 points for each class discussion)
Weekly short (2-3 page) commentary on the week’s assignment answering one or more of the questions* shown below (40%, 5 points for each of 8 commentaries)
Final project (30%)

As a final project, students will select a disease not previously covered in the course and create a folder of relevant sources (media, case reports, scientific research, etc.) to be used as teaching aids in subsequent classes.

*Questions to be considered for each “Epidemic”

1. What is/was the impact of the epidemic on society? (Including health/death toll, disability/economic costs, etc.)
2. What are the underlying risk factors for the disease in question? How were these risk factors identified (i.e. by what research methods)? Why did these researchers focus on this particular epidemic?
3. What changes in culture might have lead to this epidemic (including, for example, the context of contemporary population dynamics, politics, economic situation, environment, and human behavior)?
4. Is the disorder in question still a problem today? If so, why does it remain? If not, what cultural influences have contributed to the decline in its incidence?
5. Can an epidemic of this disease reoccur (or become worse)? What has been done/should be done to prevent this kind of epidemic?
7. Who were the investigators of these epidemics and what role did their prior experiences play in the elucidation of the possible causes of the epidemic?

IV. Course Workload

Weekly attendance and participation in discussion, weekly preparation of cases, weekly writing assignments, final project.

V. Course Evaluation

The MPH Program administers web-based course evaluations to students for each course near the end of the quarter. Your completion of both the unit (course) and faculty evaluation components is required; failure to complete either of the evaluations will result in an incomplete grade until the evaluations are submitted. You will be sent the web link and instructions via
email later in the quarter. You will have about two weeks to complete the evaluations before grades are submitted.

VI. Academic Integrity

Every Northwestern faculty member and student belongs to a community of scholars where academic integrity is a fundamental commitment. The Program in Public Health abides by the standards of academic conduct, procedures, and sanctions as set forth by The Graduate School at Northwestern University. Students and faculty are responsible for knowledge of the information provided by The Graduate School on their Web page at http://www.tgs.northwestern.edu/about/policies/academic-integrity.html

Academic misconduct includes, but is not limited to
1. Receiving or giving unauthorized aid on examinations or homework
2. Plagiarism
3. Fabrication
4. Falsification or manipulation of academic records
5. Aiding or abetting any of the above

The PPH follows The Graduate School’s procedure for evaluating alleged academic misconduct, as outlined on the TGS website. Faculty reserve the right to use the “TurnItIn” that is part of the Course Management System to evaluate student assignments. Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site. Information about this tool can be found at http://lmsblog.it.northwestern.edu/2014/09/29/turnitin-for-canvas/

VII. Course Outline

Week 1: Introduction to the course
Week 2: Lead Poisoning
Week 3: Jake Leg
Week 4: Parkinson’s Dementia Complex of Guam
Week 5: Lung Cancer
Week 6: Coronary Artery Disease
Week 7: Carpal Tunnel Syndrome
Week 8: Heat Wave Deaths
Week 9: HPV-positive head and neck cancers
Week 10: Student presentations of “new” epidemics
VIII. Course Materials (available to students for review on Canvas)

Week 1: Introduction


Week 2: Occupational Lead Poisoning


No author. Adult blood lead epidemiology and surveillance. JAMA 1993;269:1373.


Week 3: Jake Leg

Baum D. Jake Leg How the blues diagnoses a medical mystery. The New Yorker 2003, September 15, 50-57.


No author. Jamaica ginger legislation – A new California law. 1931;34:378-379


Musical selections inspired by Jake Leg: https://www.youtube.com/playlist?list=PLkj9ptRXVJ3XK2yAJ_rh_wFGPOv1G5Mna

Week 4: Parkinsonism-Dementia Complex of Guam


Monmaney T. This obscure malady. The New Yorker, October 29, 1990, pp 85-113.


THE ILLNESS & THE ODYSSEY a film by Berry Minott (may be available for viewing)
Week 5: Lung Cancer


Orday EB. The Etiquette of To-day New York: George Sully and Company 1920 pp 156, 171-172.

Week 6: Cardiovascular Disease


Video Interview with Jeremiah Stamler, MD, the Father of Preventive Cardiology
https://www.youtube.com/watch?v=QL8nvKMoNdo
Week 7: Carpal Tunnel Syndrome


OSHA, US Department of Labor. Success with Ergonomics. (undated report from perhaps 2002 describing a decrease in injury claims and costs associated with CTD-related repetitive strain injuries in the insurance industry.)


Surgical repair of carpal tunnel syndrome [URL: https://www.youtube.com/watch?v=4vYiqeeUWNU]
Week 8: Heat Wave


Kiernan L, Zielinski G. Casualties of heat just like most of us. Chicago Tribune, July 23, 2000, Sec. 1, p 1,6.


Royko M. Killer heat wave or a media event? Chicago Tribune, July 18, 1995, Sec. 1, p 3.


Schreuder C, Gorner P. Coroners don’t always agree on when heat kills. Chicago Tribune, July 18, 1995, Sec. 1, p 1, 6.


CBS TV 6 pm news, special report on the heat wave, July 1995
https://www.youtube.com/watch?v=ICWJsgeFue4
**Week 9: HPV-positive Head and Neck Cancer**


Sanders SA, Reinisch JM. Would you say you “had sex” if…? JAMA 1999;281:275-277.


Szabo L. Treatment for throat cancers like Dimon’s improving. USA Today July 2, 2014. [http://usat.ly/1lzkAyA](http://usat.ly/1lzkAyA)

