INJURY AND VIOLENCE AS PUBLIC HEALTH PROBLEMS
SPRING 2009
HBHE 725 / MHCH 725 / EPID 695

SCHOOL OF PUBLIC HEALTH
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Tuesdays and Thursdays
11:00-12:15 p.m.
School of Public Health

Instructors:

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Department of Pediatrics
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Assistant:
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Jonathan Kotch, MD, MPH
Professor
Department of Maternal and Child Health
Office: 428 Rosenau
Phone: 966-5976
Email: jonathan_kotch@unc.edu

Office hours by appointment

Course Description:
This course considers the causes and consequences of traumatic injury within and dilemmas in injury research and prevention. Injuries associated with transportation, violence, and the home and occupational environments are included. This is a three-credit course.

Prerequisites:
Graduate status and EPID 600 (160) or equivalent or permission of instructor.

Teaching Objectives:
Through varied instructional strategies including lectures, large group discussion, small group problem-solving and individual presentations, we aim to:
1. Provide a conceptual framework within which to consider injury and violence as public health and social problems;
2. Examine injury and violence occurrence and prevention in terms of biological, psychological, socio-cultural, and political elements;
3. Present the epidemiology of major injury and violence problems;
4. Examine critically alternative interventions for injury and violence prevention and the effectiveness of various prevention strategies; and
5. Stimulate interest in the field of injury and violence prevention.

Learning Objectives:
As a result of completing the readings and engaging in critical thinking in activities both in class and out of class, students will be able to:

1. Identify and describe, in epidemiologic terms, the nature and magnitude of major injury and violence problems;
2. Give examples of the major biological, psychological, socio-cultural, and political aspects of injury and violence;
3. Critically evaluate types and effectiveness of alternative approaches to injury and violence prevention; and
4. Design, conduct and present the results of a small-scale injury research study.

Course Expectations and Requirements:

A. Required:
   All course readings are accessible through the Blackboard site for this course: Spring 2009 INJ & VIOL/PH PRBL.HBHE 725.001.

B. Optional books and recommended readings:
   A number of books are recommended for review by students. However, none are required. In addition, students are encouraged to review: www.safetylit.org to learn about newly published papers in the field. All these resources can be a source of ideas and background.

   World Health Organization Reports (see http://www.who.int/en/)
   World Report on Traffic Safety
   World Report on Violence and Health
   World Report on Violence Against Children.

C. Reading Assignments:
   All required reading assignments are listed in the syllabus that follows. There will be some additions noted throughout the semester. You are expected to read the assigned readings before each class session and come prepared to engage in critical discussion of the readings. Recommended readings are suggested for those who want to dig deeper on a specific topic.
**Written and Oral Assignments and Due Dates:**

There will be several short written assignment and two presentations as noted:

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<thead>
<tr>
<th>DATE</th>
<th>WRITTEN OR ORAL ASSIGNMENT</th>
<th>Nature of assignment</th>
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<tbody>
<tr>
<td>Tuesday 2/3/00</td>
<td>Exercise 1 : Haddon Models(2-3 pages)</td>
<td>Written</td>
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<tr>
<td>Thursday, 2/12/09</td>
<td>Topic statement for research project (not graded)</td>
<td>Written</td>
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<tr>
<td>Thursday, 2/26/09 or Tuesday, 3/3/09</td>
<td>Exercise 2: Organizational Report Written: 3-4 page summary Oral: ~10 minutes, plus discussion</td>
<td>Written &amp; Oral</td>
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<tr>
<td>Tuesday, 4/21/09 or Thursday, 4/23/09</td>
<td>Research project presentation (10-15 minutes)</td>
<td>Oral</td>
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<tr>
<td>Monday, 4/27/09</td>
<td>Final paper (due by 5 PM)</td>
<td>Written</td>
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**E. Final Project:**

Each student will be expected to design, conduct and report a small scale research project examining an interesting question on some aspect of injury or violence. Students will be given more detailed guidelines and instructions for the project and will be asked to submit a topic outline on February 12. This non-graded outline will enable instructors to help students develop a successful project suited to their interests and research background, staying within a reasonable scope and properly addressing human subjects issues, if any. Students are encouraged to think about topics early and discuss their ideas with faculty. Faculty are also willing to help suggest ideas for projects.

Each student will present his/her paper in class during one of the designated sessions (4/21 or 4/23).

**Papers must be turned in by Monday, April 27 at 5:00 PM.** Students turning papers in late will receive a grade of incomplete. There will be NO exceptions without prior approval of the course directors based on significant and documented circumstances. A late paper will result in a grade of Incomplete, which, if not completed, automatically becomes an F at the end of spring semester 2010.

**D. Class Participation:**

All students are expected to participate actively in the learning process. This requires attending class sessions on time, completing the readings prior to class, preparing for class discussions and completing all assignments on time.

We have structured the class to incorporate varied instructional methods including lectures, small group discussions, individual presentations and larger group discussion. As part of these activities, students will critique research and interventions, discuss policy issues in injury control, query investigators and develop ideas about how to address specific injury problems.

**E. Grading:**

There will be no final examination.

Adequate performance, which includes attendance, good participation and on-time and satisfactory completion of papers, results in a “P” and generally is the norm for this class. A grade of an “H” reflects performance that is clearly above the minimal requirements.

**Criteria for grading:** Grading in this class is, by definition, subjective. However, the following factors are considered:

- **Papers:** Logic of arguments; clarity of expression; scholarliness of approach, including appropriate use of references; extent to which the paper addresses the topic of the assignment. Proper grammar is expected. However, students for whom English is not their first language will be given lenience. Note that while the web is an appropriate source for some types of information (e.g., about governmental organizations), it is not
considered an appropriate source for all types of information and should not replace the kind of information gleaned from peer-reviewed papers or books.

Discussion: Thoughtfulness of comments, demonstrating evidence of careful preparation and understanding of material; demonstration of ability to understand, appreciate, and critique alternative viewpoints; demonstration of active listening as well as participation; asking insightful questions; helping to move the discussion along and keep it on track; being on time. Quality of discussion is much more highly valued than quantity, but everyone is expected to contribute.

Grade computation: Grading is done on a seven point scale with the total grade computed based on weights for each assignment. The seven point scale is: H=6; H-=5; P+=4; P=3; P-=2; L=1; F=0.

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<tr>
<th>% OF GRADE</th>
<th>ASSIGNMENT</th>
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<tbody>
<tr>
<td>20%</td>
<td>Haddon Exercise (Exercise #1)</td>
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<tr>
<td>20%</td>
<td>Organizational Report (Exercise #2)</td>
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<td></td>
<td>10% Oral presentation</td>
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<td>10% Written report</td>
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<tr>
<td>15%</td>
<td>Class discussion</td>
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<td>45%</td>
<td>Final Project</td>
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<td></td>
<td>15% Oral presentation</td>
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<td>30% Final paper</td>
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Syllabus

Injury and Violence as Public Health Problems
HBHE 725/ MHCH 725 /EPID 695

SPRING 2009

Session 1:  Tuesday, January 13: Introduction and Overview of the Injury Problem in the U.S.
GOAL: To introduce the course and the topic.
INSTRUCTORS:  Carol Runyan, MPH, PhD
and Jonathan Kotch, MD, MPH
FORMAT: Lecture & Discussion

Session 2:  Thursday, January 15: Injury: An International Perspective
GOAL: To examine international issues in injury control.
INSTRUCTOR: Andrés Villaveces, MD, PhD, MPH
Research Assistant Professor, Department of Epidemiology
FORMAT: Lecture & Discussion

REQUIRED READINGS:


Summary of the report available at: http://whqlibdoc.who.int/hq/2008/WHO_NMH_VIP08.01_eng.pdf

Session 3:  Tuesday, January 20: The Consumer Product Safety Commission – an example of regulatory approach to injury control
GOAL: To consider regulatory approach to injury control.
INSTRUCTOR: Robert Adler, JD
Professor of Strategy and Entrepreneurship, Kenan-Flagler Business School
FORMAT: Lecture & Discussion

REQUIRED READINGS:

Session 4:  Thursday, January 22: Approaches to Injury Control
GOAL: To complete the overview of the injury problem and opportunities for intervention.
INSTRUCTOR: Carol Runyan, MPH, PhD
FORMAT: Lecture & Discussion

REQUIRED READINGS:

**RECOMMENDED READINGS:**


**Session 5: Tuesday, January 27 – Interventions I: Haddon Matrix and Countermeasures**

**GOAL:** To provide experience in applying the Haddon Matrix and Haddon countermeasures.

**INSTRUCTORS:** Carol Runyan, MPH, PhD

**FORMAT:** Lecture & Discussion

**RECOMMENDED READINGS:**


**RECOMMENDED READINGS:**


Session 6: Thursday, January 29: Designing/evaluating effective interventions  
GOAL: To consider issues associated with designing successful interventions and evaluations  
INSTRUCTORS: Carol Runyan, MPH, PhD  
FORMAT: Lecture & Discussion  

REQUIRED READINGS:  


RECOMMENDED READINGS:  
CDC Evaluation Work Group: http://www.cdc.gov/eval/resources.htm#logic%20model  

February 3: Haddon exercise due in class  

Session 7: Tuesday, February 3: Policy as an Intervention -- Firearms  
GOAL: To examine the value dilemmas inherent in making policies to prevent injuries, using firearms as an example.  
INSTRUCTOR: Jonathan Kotch, MD, MPH  
FORMAT: Lecture & Discussion  
REQUIRED READINGS: TBD  

Session 8: Thursday, February 5: Injury Intervention Critique  
GOAL: To critically evaluate injury intervention studies.  
INSTRUCTORS: Carol Runyan, MPH, PhD  
FORMAT: Article Critique  
REQUIRED READINGS:  


**Session 9:  Tuesday, February 10: Alcohol Policy**

**GOAL:** To examine the role of alcohol in injury and violence and consider policy strategies as preventive interventions.

**INSTRUCTOR:** Barbara Alvarez Martin, MPH
Research Associate
Department of Social Sciences and Health Policy
Wake Forest University School of Medicine

**FORMAT:** Lecture & Discussion

**REQUIRED READINGS:**


**February 12: Final Project Topic Statement -- due in class**
**Session 10: Thursday, February 12: Injury surveillance and data systems**

**GOAL:** To examine issues in measuring injury exposure and outcome.

**INSTRUCTOR:** Carol Runyan, PhD

**FORMAT:** Lecture

**REQUIRED READINGS:**


**RECOMMENDED READING:**


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**Session 11: Tuesday, February 15: Death Investigation**

**GOAL:** To provide an overview of the methods of forensic pathology in investigating in deaths.

**INSTRUCTOR:** John Butts, MD

Chief Medical Examiner and Associate Professor, UNC Department of Pathology

**FORMAT:** Lecture & Discussion

**REQUIRED READINGS:** TBD

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**Session 12: Thursday, February 19: Homicide**

**GOAL:** To examine the epidemiology, investigation, and prevention of homicide.

**INSTRUCTOR:** Joel Rosch, PhD

Research Scientist

Policy Liaison, Child and Health Policy Initiative

Duke University

Center for Child and Family Policy

Terry Sanford Institute of Public Policy

**FORMAT:** Lecture & Article Critique

**REQUIRED READINGS:**


http://jama.ama-assn.org/cgi/content/full/294/5/598?maxtoshow=&HITS=10&hi <http://jama.ama-assn.org/cgi/content/full/294/5/598?maxtoshow=&HITS=10&hi>
**Session 13: Tuesday, February 24: Occupational injury**

**GOAL:** To provide an overview of the problem of injuries in occupational settings.

**INSTRUCTOR:** Carol Runyan, MPH, PhD

**FORMAT:** Lecture/Discussion

**REQUIRED READINGS:**


**RECOMMENDED READINGS:**


**Session 14: Thursday, February 26: STUDENT REPORTS**

**Session 15: Tuesday, March 3: STUDENT REPORTS**

**Session 16: Thursday, March 5: Child Maltreatment**

**GOAL:** To examine the epidemiology and conceptual frameworks for understanding child abuse and neglect.

**INSTRUCTOR:** Jonathan Kotch, MD, MPH

**FORMAT:** Lecture & Discussion

**PROPOSAL** Methods outline (strongly advised, critiqued, but not graded)

**REQUIRED READINGS:** TBD

**RECOMMENDED READINGS:** TBD

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**NO CLASS**

**SPRING BREAK:** Tuesday, March 10 & Thursday, March 12
**Session 17: Tuesday, March 17: Sports Injury**

GOAL: To examine the epidemiology of sports injury and consider evidence on intervention strategies.

INSTRUCTORS: **Kevin Guskiewicz, PhD, PE, ATC**  
Professor and Chair, Department of Exercise and Sport Science  
Director, Sports Medicine Research Laboratory  
**Steve Marshall, PhD**  
Associate Professor, Department of Epidemiology

FORMAT: Lecture & Discussion

**REQUIRED READINGS:** TBD

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**Session 18: Thursday, March 19: Suicide**

GOAL: To examine the epidemiology and prevention of suicide.

INSTRUCTOR: **David Goldston, PhD**  
Associate Professor  
Department of Psychiatry and Behavioral Sciences  
Duke University

FORMAT: Lecture & Article Critique

**REQUIRED READINGS:** TBD  
**RECOMMENDED READINGS:** TBD

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**Session 19: Tuesday, March 24: Falls**

GOAL: To examine the patterns of fall-related injury and intervention approaches.

INSTRUCTORS: **Susan Blalock, PhD**, Associate Professor of Pharmacy  
**Carri Casteel, PhD**, Research Assistant Professor of Epidemiology

FORMAT: Lecture and discussion

**REQUIRED READINGS:**


**RECOMMENDED READINGS:**


**Session 20: Thursday, March 26: Violence against Women**

**GOAL:** To consider the epidemiology and prevention of violence against women

**INSTRUCTOR:** Beth Moracco, PhD, Research Associate Professor  
Department of Health Behavior and Health Education

**FORMAT:** Lecture & Article Critique

**REQUIRED READINGS:** TBD

**Session 21: Tuesday, March 31: Motor Vehicle Occupant Injury**

**GOALS:**
A. To examine the patterns of motor vehicle crash occurrence and consider crash dynamics.
B. To review the epidemiology of injuries involving motor vehicle crashes in the context of both cross-sectional and trend analysis.
C. To consider strategies for preventing crashes and injuries.

**INSTRUCTOR:** Forrest Council, PhD  
Senior Scientist, Highway Safety Research Center

**FORMAT:** Lecture & Discussion

**REQUIRED READINGS:**


**RECOMMENDED READINGS:**


**Session 22: Thursday, April 2: Pedestrian Injury**

**GOAL:** To examine the epidemiology and prevention of pedestrian injuries.

**INSTRUCTOR:** Charlie Zegeer, MS  
Staff Associate  
UNC Highway Safety Research Center

**FORMAT:** Lecture

**REQUIRED READINGS:**


Session 23: Tuesday, April 7: Adolescent driving
GOAL: To examine the epidemiology and prevention of teen driving-related injury.
INSTRUCTORS: Arthur Goodwin, MS
Staff Associate
UNC Highway Safety Research Center

FORMAT: Lecture/video/discussion
REQUIRED READINGS: TBD

Session 24: Thursday, April 9: Fires and Burns
GOAL: To examine the epidemiology and prevention of injuries associated with fires and burns.
INSTRUCTOR: Carol Runyan, PhD
Ernest Grant, RN, MSN
Nursing Education Clinician II
Burn Outreach
N. C. Jaycee Burn Center
UNC Healthcare

FORMAT: Video, Lecture & Discussion
REQUIRED READINGS:


RECOMMENDED READINGS:


Session 25: Tuesday, April 14: Unintentional Poisoning
GOAL: To examine the epidemiology of poisoning in the US.
INSTRUCTOR: Kay Sanford, MPH, Private consultant
Nabarun Dasgupta, MS, Doctoral student, Department of Epidemiology

FORMAT: Lecture & Discussion
REQUIRED READINGS:
FDA Public Health Advisory: Methadone Use for Pain Control May Result in Death and Life-Threatening Changes in Breathing and Heart Beat, November 2006. Available at: http://www.fda.gov/CDER/drug/advisory/methadone.htm


**RECOMMENDED READINGS:**


**Session 26: Thursday, April 16: Drowning**

**GOAL:** To examine the epidemiology and prevention of drowning.

**INSTRUCTOR:** Carol Runyan, MPH, PhD

**FORMAT:** Lecture/Discussion

**REQUIRED READINGS:**


RECOMMENDED READINGS:


Session 27: Tuesday, April 21: STUDENT RESEARCH PROJECT PRESENTATIONS
Session 28: Thursday, April 23: STUDENT RESEARCH PROJECT PRESENTATIONS

FINAL PAPER DUE Monday, April 27, 2009, 5:00 P.M (Submit 2 copies)
No late papers accepted without prior approval.
Approval only for dire and documented circumstances