Epidemiology for Nursing Research and Practice
NUR 59900
ONLINE COURSE

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Instructor’s Contact Information
Email: dblack@purdue.edu
Phone: 765-743-4001 (8 am – 5 pm weekdays)
Office hours: By Appointment, via email, or phone

Course Information
Course Number: NUR 59900
Semester/Year: Summer 2014, Modules 2/3
Meeting Days: Monday, Wednesday, and Friday
Online through Blackboard Learn
June 16 – July 7, 2014
Final Exam: July 14 – 16, 2014

Prerequisites
STAT 301, IE 330, STAT 503, STAT 511, or equivalent.

Minimum Passing Grade
C-

Volunteer Trained Peer Helpers
There are Trained Peer Helpers for this course. As a prerequisite to serving as a Peer Helper, each individual has been certified by the University in the handling and protection of private student information protected by the Family Educational Rights and Privacy Act (“FERPA”) educational information. The Peer Helpers fully understand their legal and ethical obligation to protect the confidentiality of student data. Their email addresses will be posted to Blackboard.
Qualifications of Trained Peer Helpers:
- Taken the course the semester before and received a grade no lower than an A-
- Have exceptional verbal and written communication skills
- As a prerequisite to serving as a Peer Helpers, each individual has been certified by the University in the handling and protection of private student information protected by the Family Educational Rights and Privacy Act ("FERPA") educational information. The Peer Helpers fully understand their legal and ethical obligation to protect the confidentiality of student data. Complete the FERPA (Family Educational Rights and Privacy Act) certification at https://www.purdue.edu/webcert and provided a copy of their certification to the instructor
- Signed and provided to the instructor a copy of the Confidentiality Agreement for Trained Peer Helpers (in the textbook after this syllabus)
- Received individual instruction from the instructor about the importance of maintaining confidentiality
- Commit not to share under any circumstances information about you with anyone other than the instructor or the other Trained Peer Helpers

Duties of Trained Peer Helpers may include:
- Course planning
- Tutoring
- Lead help sessions
- Review exams, quizzes, and homeworks
- Peer-mentoring, for example by answering questions during office hours or by email
- Carrying out other duties similar to these

Duties will not include:
- Serve as independent instructors for courses
- Present course content that has not been authorized by the faculty course instructor
- Assign and submit official course grades

Teaching Assistants (TA)

TAs serve the same functions and meet the same requirements as volunteer trained peer helpers. The only difference is that the TA is assigned by and receives a stipend from the Department/School.

Class Structure

This course is an online course via YouTube and Blackboard Learn (https://mycourses.purdue.edu). All lectures are recorded and can be watched as you follow along in the course manual. Links and the password will be provided via Blackboard Learn.

Homework and answers are in the manual that you will purchase through Lulu.com. The citation for the manual is in the reading list below. This is the primary book needed for the course.
Quizzes are given M, W, and F online on Blackboard Learn (https://mycourses.purdue.edu). They are available only on the days of each online lecture on M, W, and F. One course exam is administered at the end of the course and details are provided below about when the exam will be administered. The courses focus on descriptive and analytic epidemiology.

**Course Goals and Learning Objectives**

Students successfully completing this course will be equipped to meet the core competencies associated with a Master of Public Health Degree. NUR 59900 aims to address the following content domains and competencies outlined by the Association of Schools of Public Health (ASPH, Edition 2.3, May 2007):

Domain A. Biostatistics
Domain C. Epidemiology

At the conclusion of this course, students will be able to:

**Biostatistics**
- A.9. – Interpret results of statistical analyses found in public health studies (and in any medically related study where epidemiological statistics are reported).
- A.10. – Develop written and oral presentations based on statistical analyses for both health professionals and educated lay audiences. (You will not be responsible for this competency because of the size of the class, the material covered, and the course being online.)

**Epidemiology**
- C.1. – Identify key sources of data for epidemiological purposes.
- C.2. – Identify the principles and limitations of public health/medical screening programs (Descriptive Epidemiology).
- C.3. – Describe a public health/nursing problem in terms of magnitude, person, place, and time (Descriptive Epidemiology).
- C.4. – Explain the importance of epidemiology for informing scientific, ethical, economic, and political discussions of health issues.
- C.5. – Comprehend basic, ethical, and legal principles pertaining to the collection, use, and dissemination of epidemiological data. (Purdue University’s Institutional Review Board is also a good source of information, see http://www.purdue.edu/research/vpr/rschadmin/integrity/index.php)
- C.6. – Apply the basic terminology and definitions of epidemiology.
- C.7. – Calculate basic epidemiology measures/statistics (Analytic Epidemiology).
- C.8. – Communicate epidemiologic information to lay and professional audiences by understanding the meaning of a constant and know which constant to use under a given circumstance.
- C.9. – Draw appropriate inferences and conclusions from epidemiologic data based on the descriptive information presented and/or the epidemiological measure/statistic used.
- C.10. – Evaluate the strengths and limitations of epidemiologic reports and recognize when incorrect terminology is used and erroneous conclusions are drawn, which is commonplace.

**Course Description**
Epidemiology is the cornerstone of many disciplines. NUR 59900 is a methods course, which is requisite for many health-related fields. The course is designed to teach thinking and problem-solving skills. It is not designed to teach you what to think, but rather, how to think. The course may/will require memorization of formulas and ample study time as you would expect would be required from any 3-unit course. Memorization is not the main emphasis. The focus is the application of information and concepts. The tasks mentioned provide a foundation pertaining to the skills you will need to answer examination and quiz questions, and will encourage thinking, problem solving, synthesizing information, and application of principles and information. Additional study and completing daily quizzes, and practice problem (homework assignments) are required and are necessary to complete the course successfully.

The course focuses on the introduction and application of basic/rudimentary terms and epidemiologic descriptive and analytic statistics, and drawing cogent and valid conclusions. A fundamental understanding is provided too of the nature of epidemiologic study as it relates to human morbidity, mortality, and injury (disability). Examples of other topics to be presented include the utility of public health, vital statistics, concepts of disease transmission, types of epidemiological studies, surveillance/screening tests, causality, etc. (see topic outline). Speculation is that epidemiology will be a required course for all entering college students across the nation. Epidemiology has universal application and is discussed daily in the news and routinely by government agencies. Paid positions are available to students after successfully completing this single course. There are a variety of places where positions are posted including local and state health department and the Centers for Disease Control and Prevention. The nearest office of the CDC to West Lafayette is in Chicago, IL.

This is a medical course (physicians are able to pass their medical boards in epidemiology by taking the course or via private tutoring) so it is unwise to underestimate the course’s difficulty. Epidemiology is the outgrowth of statistics and early work of Florence Nightingale and medical infectious disease pioneers such as John Snow. Do NOT deceive yourself into thinking the course is simple. Above average quantitative skills are advantageous. The principles taught often provide sufficient background to publish articles in various fields.

Instructor’s Philosophy

I prize and respect students, especially nurses! I consider it an honor and privilege to instruct some of the brightest minds in the country/world. I believe students in his course will make significant contributions to society and will be or are already leaders and supervisors with great responsibilities. I realize that the students I teach will make the world a better place to live and inventions and changes will come from those I’ve had the pleasure to instruct to help improve quality of life.

My commitment to students is to teach the material as simply as possible. I want students to learn and thoroughly understand the material. I loathe assigning low course grades. I recognize that grading influences future opportunities and poor grades may eliminate key opportunities. I know it is important for students to meet me halfway through their study efforts and attention to detail, doing all they can to learn the materials, as well as to seek help early if struggling and not comprehending. I have taught this or similar courses approximately 110 times on campus during the course of my career. I am familiar with the subject matter. Slides are updated routinely and current events relevant to epidemiology are presented to attest to the relevance and utility of epidemiology. From time-to-time, there may be slight variations between the slides in the course manual and the presentations used in class due to these updates.

I want students to succeed! However, success is not a confirmation of the intelligence quotient. It seems some have an affinity for the topic and others do not. Getting help early from the instructor, a volunteer trained peer helper, early or hiring a tutor is excellent way to get when you need it. If you do not have an affinity for the topic, it simply means that you must work longer and harder to succeed and may need more input from others.
Important University and Course Policies

It is imperative that you follow the policies listed in the syllabus and reviewed in the first lectures. At least 1 of the first 2 lectures will be devoted to policies. You will be quizzed on the lecture about policies and the syllabus. There will be a Student Information Sheet quiz on Blackboard Learn Thursday of the first week. Complete it online and you will be given full points. Questions about course policies should be directed to the instructor.

The syllabus will be used to answer questions pertaining to policies. You will be able to anticipate answers in advance if you study the policies. Many problems and student complaints/disappointments are due to being unaware of policies that are already explained in the syllabus. One way to avoid uncomfortable situations and feelings of unfair treatment, frustration, or favoritism is to publish policies in advance. We want to meet your expectations and for you to feel comfortable, respected, and equitably treated. One way to do that is for you to know what is expected of you. The purpose for having and following policies is civility, equity, and so you will not be surprised about requirements of the class or those of the University.

All decisions about class conduct are based on university policies, which will be followed to protect student rights. Classroom Behavior: Students at Purdue University are expected to be at all times in compliance with the Campus Code of Conduct. Failure to abide with this code will not be tolerated in this course.

Communications

We take pride in answering student emails promptly. Generally, you will receive a response within 4 hours during the business day, but sometimes because of extenuating circumstances, it will take 24-48 hours to reply. Students should email comments about medical or personal problems hampering studying, taking quizzes, or the examination to the instructor and copy the TA. The best communication method is by telephone (see the beginning of the syllabus for contact information and the timeframe to call). All information provided is confidential.

Resolving Conflicts

If you have concerns about the materials presented, course objectives, lecture materials, or any other class related issues, contact me. Normally, every issue can be resolved.

Optional Help Sessions

Help sessions are optional and are held at the request of the class. If students do not request a help session, none will be offered. Attendance at help sessions is optional/voluntary. You do not have to attend, but it is advisable. No attendance is taken at help sessions. Help sessions are directed by student questions. The information covered is what students ask questions about. Questions may pertain to slides, assignments, and homework or any other topics students wish to address (e.g., length of exam, how the exam will be administered, psychometrics, grading policies, etc.). Help sessions will be conducted via Audio/Video conference call. The session will last as long as students have questions. Help sessions will held electronically at the time when the class would otherwise meet regularly. Let the Instructor and TA know if you would like a help session.
Instructions for accessing the help session will be provided via email or Blackboard Learn, *if a help session is requested.* It is impossible to accommodate everyone’s schedule. We will consider any day and time including weekends.

**Let Professor Black know if you would like a help session. If nobody requests a help session, one will not be held.**

### Getting Help

GET HELP IMMEDIATELY!! DO NOT WAIT IF YOU ARE HAVING PROBLEMS! INFORMATION WILL NOT MAGICALLY COME TO YOU THROUGH OSMOSIS.

THERE ARE ABSOLUTELY NO EXTRA CREDIT OPPORTUNITIES. AFTER THE EXAMINATION OR BEFORE FINAL GRADES ARE SUBMITTED, THERE ARE NO EXCEPTIONS TO THE RULE FOR EXTRA CREDIT AND GRADES WILL NOT BE CHANGED FOR ANY REASON WHATSOEVER (UNLESS THERE IS A COMPUTATIONAL OR CLERICAL ERROR ON OUR PART, WHICH IS RARE BECAUSE SCORING AND GRADE COMPULATIONS ARE COMPLETED VIA COMPUTER). IF WE GIVE SPECIAL CONSIDERATION TO ONE PERSON, WE HAVE TO DO THE SAME FOR EVERYONE WHICH NEGATES THE REASON FOR DEVELOPING A GRADING STANDARD IN THE FIRST PLACE.

You will have the volunteer trained peer helpers as well as myself for help. Please consult us.

### Helping Yourself

Study before and after each lecture and listen intently about what you might be confused about. Take notes on the slides in your manual while you listen to the lecture. Make note cards. I recommend the supplemental books. If you need clarification about a definition of a term, use the Index (not the Table of Contents). There are other practice problems in these books and answers. The books are provided as reference materials. Chapter reading assignments are not provided because the course does not operate that way. The course is taught by topic, not by chapter. On occasion, an entire chapter will apply, normally not. The course is taught using a medical school model, where slides and notes are the primary focus of testing. There is no focus on incidentally or information in footnotes. There is plenty to learn that is presented in the slides.

If you think you are going to have trouble in the course, buy all the books. The books also should be in at Hicks Undergraduate Library on the Purdue Campus at West Lafayette and probably are available through other university libraries near you.

### Academic Dishonesty
Purdue prohibits "dishonesty in connection with any University activity. Cheating, plagiarism, or knowingly furnishing false information to the University are examples of dishonesty" [Part 5, Section III-B-2-a, University Regulations]. Furthermore, the University Senate has stipulated that the commitment of acts of cheating, lying, and deceit in any of their diverse forms (such as the use of substitutes for taking examinations or asking a person to take the exam with you, the use of illegal cribs, plagiarism, copying or supplying/sharing answers during an examination by any means (e.g., email, text message, and telephone) is dishonest and will not be tolerated. Moreover, knowingly to aid and abet, directly or indirectly, other parties in committing dishonest acts is in itself dishonest [University Senate Document 72-18, December 15, 1972]. See http://www.purdue.edu/odos/aboutodos/academicintegrity.php for more information.

Your computer will be locked down during quizzes and the exam so files may not be opened and computer programs such as a calculator cannot be accessed.

Examples of academic dishonesty include, but are not limited to
- Giving or receiving answers by use of signals during an exam.
- Copying with or without the other person’s knowledge during an exam.
- Completing quizzes or exams for another student.
- Using programmable devices to answer test questions.
- Using electronic means as a help line to receive answers.

Use of Copyrighted Materials

Among the materials that may be protected by copyright law are the lectures, notes, transcripts, and other material presented in class or as part of the course. Always assume the materials presented by an instructor are protected by copyright. Students enrolled in Purdue University courses are permitted and encouraged to take notes, which they may use for individual/group study or for other non-commercial purposes reasonably arising from enrollment in the course or the University generally.

Notes taken in class are, however, generally considered derivative works of the instructor’s presentations and materials, and they are thus subject to the instructor’s copyright in such presentations and materials. No individual is permitted to sell or otherwise barter notes, either to other students or to any commercial concern, for a course without the express written permission of the course instructor. Dr. Black has chosen not to grant such permission.

Attendance

Class attendance policy. Attendance is taken by completing exams and quizzes. Quizzes will be given on M, W, and F and only available on Blackboard Learn. You will have 20 minutes to complete the quiz. The quiz will not be available to you again. The quizzes will become available at 12:01 AM and must be completed by 11:59 PM on M, W, and F. You will have a 12-hour window to take quizzes and exams.

You ARE expected to watch every lecture. There are no makeups for quizzes or the exam. You are allowed to miss 1 quiz with no penalty to your attendance grade. You will still get a zero (0) on the quiz or exam. After the 2nd absence demonstrated by not taking a quiz or exam, your attendance grade drops to 2.5%. After the 3rd absence, your attendance grade drops to 0%. The only exceptions to this are excused absences with proper documentation verified by the Office of the Dean of Students.
Your lowest quiz score will be dropped before final grades are calculated. Dropping this quiz will not affect your attendance grade.

**Examination and Quiz Policy.** When conflicts or absences can be anticipated (e.g., religious observances) that interfere with completing the exam or quizzes, the student should inform the instructor of the situation as far in advance as possible. For unanticipated or emergency absences when advance notification to an instructor is not possible (e.g., death of a spouse or child), the student should contact the instructor as soon as possible by email or phone.

Information about the University's Grief Absence Policy:

Purdue University recognizes that a time of bereavement is very difficult for a student. The University, therefore, provides the following rights to students facing the loss of a family member through the Grief Absence Policy for Students (GAPS). GAPS Policy: Students will be excused for funeral leave and given the opportunity to earn equivalent credit and to demonstrate evidence of meeting the learning outcomes for misses of assignments or assessments in the event of the death of a member of the student's family. **It is very important** that you contact the Office of the Dean of Students at 765-494-1747 to report absences under this policy.

**Emergencies and Health**

In the event of a major campus emergency, course requirements, deadlines, and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances (e.g., shouting, bad weather, etc.) beyond the instructor's control. Relevant changes to this course will be posted on the course website or can be obtained by contacting the instructor or volunteer trained peer helper via email or phone.

**Reading Email**

*You are required to read your @purdue.edu email daily.*

**Students with Disabilities**

Purdue University is required to respond to the needs of the students with disabilities as outlined in both the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 through the provision of auxiliary aids and services that allow a student with a disability to fully access and participate in the programs, services, and activities at Purdue University.

If you have a disability that requires special academic accommodation, please contact me by email or telephone **before the class begins** in order to discuss any adjustments. It is the student's responsibility to notify the Disability Resource Center (http://www.purdue.edu/drc) of an impairment/condition that may require accommodations and/or modifications to aid learning.

**Harassment**

Harassment will not be tolerated and will not be part of this course. Harassment is defined in Purdue University's *Anti-Harassment (III.C.1) policy*: http://www.purdue.edu/policies/ethics/iii1.html. Use of the term Harassment includes all forms of harassment, including Racial Harassment and Sexual Harassment.

**Sexual Harassment**
A. Any act of Sexual Violence.
B. Any act of Sexual Exploitation.
C. Any unwelcome sexual advance, request for sexual favors or other written, verbal or physical conduct of a sexual nature when:
   1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, education, or participation in a University activity;
   2. Submission to, or rejection of, such conduct by an individual is used as the basis for, or a factor in, decisions affecting that individual's employment, education, or participation in a University activity; or
   3. Such conduct has the purpose or effect of unreasonably interfering with an individual's employment or academic performance or creating an intimidating, offensive, or hostile environment for that individual's employment, education, or participation in a University activity.

**Resolving Conflicts**

If you have concerns about the materials presented, course objectives, lecture materials, or any other class related issues, talk to us. Normally, every issue can be resolved, if the parties involved are willing and motivated.

**Missed or Late Work**

Missed or late work **will not be accepted**. No quizzes or exams may be made up except under the GAPS policy outlined above. If you have a schedule conflict due to other activities or course field trips, please let Dr. Black know **as soon as possible**.

**Examinations**

The electronic exam taken on computer will test the application of concepts beyond what is required or expected in completing homework, assignments, and quizzes. As indicated previously, the exam is a test of knowledge and application and is not simply a test of memorization. **Relying strictly on memory is ineffective in this course.** You must think and apply confidently what you have learned. The course requires higher-order reasoning and cognitive processes expected of a graduate student at a Big 10 university.

Homework, assignments, and quiz answers will not be discussed, but feel free to contact me or a voluntary trained peer helper to receive assistance.

**Number of Examinations**

One (1) **cumulative** examination will be administered during the course. Examination questions will be objective: true/false, multiple choice, multiple answer, matching, and problems. The test will cover lecture materials, homework, assignments, and quizzes. It is a take-home exam completed online through Blackboard Learn. You may use any notes or books, but may not ask anybody questions except for the instructor to clarify instructions.

**Equipping Yourself for Examinations**
**Study materials.** PowerPoint is used to present lecture materials (see **Required Text**). Book 1 is available at Lulu.com. Use Book 1 as you listen to and view the lectures. It is advisable and recommended that you take notes next to the slides.

**Tips for success on examinations.** Study, do problems in the back of the Lulu.com book and complete those in textbooks that have answers and review quizzes, to test your knowledge by completing homeworks before the test.

**Examination day.** All students must take exams on the day of the exam online. The date of the exam will be on 1 week after the online course is completed. You will be reminded about when the exam will be administered and you will have 3 days to complete it. It will become available at 12:01 AM on July 14th and must be submitted no later than 11:59 PM on Wednesday, July 16th.

**Grade determination.** The highest score sets the curve, not the total number of possible points. Non-differentiating items will be eliminated after reviewing a computer generated item analysis. Your score on quizzes and exams may change slightly if the item analysis does not detect a problem with the question, but we do.

**Quizzes and homework.** Due to the compressed nature of this course, there will be quizzes 3 times/weeks. Homework assignments are in the back of the Lulu.com book along with answers, but will not be scored. Answers will be reviewed during help sessions, if students bring questions to the help session moderator’s attention.

**GRADING SCALE**

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**Basis for Grades:**

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<tr>
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<td>Quizzes</td>
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**Required Text and Tools**

**Note:** Available only on Lulu.com.


A 4-function calculator
A computer meeting these minimum requirements:
- Windows: 8, 7, Vista, XP
- Mac: OS X 10.6 or higher
- Internet Explorer (Windows) or Safari (Mac) must function properly on the computer
- Adobe Flash Player
- A reliable broadband Internet connection

Most ITaP labs should meet these requirements. The LAMB 122 lab is not an ITaP lab and should not be used for exams or quizzes. The computers in the Purdue School of Nursing Graduate Room (JNSN B19) and offices also are not ITaP computers.

**Respondus Lockdown Browser.** Links for this program will be posted to Blackboard Learn. You will not be able to take quizzes or exams without this program. No makeups and a zero (0) will be recorded.

**Supplemental Readings (Optional Textbooks)**

Note: The books below are available on Amazon.com and you should be able to review them at most university libraries.


**Which Books to Purchase**

Buy all of them if you are having difficulty in the course. These books are all EXCELLENT reference guides, independent of the field employment you select for your life’s career.

**For Your Information: Other Public Health Books by the Instructor**


I. Epidemiology, History and Definitions
   A. What is Epidemiology and Why is it Important?
      1. Human Population (Magnitude, Person, Place, Time)
      2. Distribution of Disease
      3. Disease Cycles
         a) Sporadic
         b) Endemic
         c) Epidemic
         d) Pandemic
         e) Holoendemic
         f) Hyperendemic
      4. Determinants
      5. Prevention of Disease
         a) Primary
         b) Secondary
         c) Tertiary
   B. History
      1. Medicine
         a) Infectious Disease Epidemiology
         b) Snow and Cholera
         c) Pasteur/Koch
         d) Graunt
      2. Behavioral Epidemiology
      3. Leading Causes of Death
   C. Objectives of an Epidemiological Investigation
      1. Steps in Studying Disease Etiology

II. Incidences of Morbidity and Mortality
   A. Incidences of Morbidity
      1. Duration, Incidence, and Types of Prevalence: For example”
         Point Prevalence
         Period Prevalence
         Lifetime Prevalence
   B. Rates, Ratios, and Proportions
C. Mortality Indices
   1. Crude Rates (Birth and Death)
      Category-Specific Rates
      Birth Mortality Rates (Infant, Neonatal, and Maternal)
      Cause Specific Rate
      Cause-Fatality Rate
      Proportionate Mortality Rate (PMR)
D. Adjustments-Standardize Mortality Ratio (SMR)
   1. Direct Method
   2. Indirect Method

III. Sources of Health Data
A. Investigating Outbreaks
   1. Direct and Indirect Transmission
   2. Case
      a) Index
      b) Primary
      c) Secondary
   3. Incubation vs. Duration
B. Demography
   1. Age and Sex
   2. Sex Ratio, Sex Specific Death Rate
   3. Life Expectancy
C. Problems with Data Collection
   1. Survey
   2. Interview Survey
   3. Hospital Data Problems
   4. Morbidity Report Problems
      a) Under-numeration
      b) Misreporting
   5. Sources of Mortality Data

IV. Competency: Key Sources of Data for Epidemiological Purposes
A. U.S. Census Bureau
B. CDC
C. Secondary Data Sources
D. Additional Data Sources
V. Methods of Surveillance
   A. Surveillance
   B. Screening
      1. When to Screen
      2. When not to Screen
   C. Sensitivity and Specificity
      1. Positive Predicated Value
      2. Negative Predicated Value
   D. Repeat Screenings
   E. Relationships

VI. Study Designs
   A. Types of Study Designs: Observational and Experimental
      1. Experimental
         a) Community
         b) Clinical
      2. Observational
         a) Case-control
         b) Cross-Sectional
         c) Historical Prospective
         d) Prospective/Longitudinal

VII. Assessing Risk
   A. Direct Measure of Risk (Prospective)
      1. Absolute Risk
      2. Attributable Risk
      3. Preventive Risk
      4. Relative Risk
   B. Indirect Measure of Risk (Retrospective and Cross-Sectional)
      1. Odds Ratio
      2. Matched Sample

VIII. Epidemiological Studies Related to Casualties
   A. Causality
   B. Confounding Variables
   C. Error
      1. Random
      2. Systematic
D. Bradford Hills Criteria

1. Strength of Association
2. Dose-Response Relationship (Biological Gradient)
3. Temporal Relationship
4. Specificity of Association
5. Consistency of Association
6. Biological Plausibility
7. Coherence
8. Experimentation to Rule Alternative Explanations
9. Analogy