Module 1: Population Health: Assessment, Indicators, and Measures (3 Weeks)

LiveMeeting: Course Introduction and Welcome
Debra Irwin, PhD, MSPH, will host this optional online LiveMeeting. Come learn about the course topics and meet the faculty.

Lectures
1. Introduction to Public Health Surveillance
2. Population Health Information Overview
3. Population Health and Community Health Assessment
4. Population Health Indicators and Summary Measures

Required Readings
1. History of Public Health Surveillance
2. Disease Surveillance at the State and Local Levels
3. Public Health Surveillance
4. Surveillance: The Sentinel Health Event Approach

Part of Group Project (Icebreaker) Due
Introduce yourself on the discussion forum. Get to know your group’s other members.

Case Studies Due
1. Overview of Public Health Surveillance
2. Finding Information on Community Health

Submit your case studies via the Assignments tab in Sakai.

Group Project (Person, Place and Event Mystery) Due
Your team should have agreed on a group name by now and completed this group project. One person from your group should submit your group project via the Assignments tab in Sakai.

Module 1 Quiz Due
Take and submit the quiz via the Tests & Quizzes tab in Sakai.

Group Project Peer Evaluations Due
Module 2: Information Systems (3 Weeks)

Lectures
1. Information Systems Overview
2. Types of Health Information Systems in the United States
3. Evaluating Public Health Surveillance Systems
4. Overview and Evaluation of NC DETECT: Syndromic Surveillance in North Carolina

Required Readings
1. Updated Guidelines for Evaluating Public Health Surveillance Systems
2. Framework for Evaluating Public Health Surveillance Systems for Early Detection of Outbreaks
3. Public Health Surveillance Systems

Group Project Begins (Evaluation of the WHO / International Union Against Tuberculosis and Lung Disease (IUATLD) Global Project on Drug Resistance Surveillance)
*Note that this group project begins in module 2 but is due in module 3.*

Case Studies Due
1. CDC WONDER and the WHO’s Global Health Atlas
2. Canadian Criteria for Surveillance

Submit your case studies via the Assignments tab in Sakai.

Module 2 Quiz Due
Take and submit the quiz via the Tests & Quizzes tab in Sakai.

Midterm Quiz

Midterm Quiz (Evaluating a Surveillance System) Due

Module 3: Types of Surveillance (3 Weeks)

Group Project Due (Evaluation of the WHO / International Union Against Tuberculosis and Lung Disease (IUATLD) Global Project on Drug Resistance Surveillance)
*This group project began in module 2. One person from your group should submit your group project via the Assignments tab in Sakai.*

Group Project Peer Evaluations Due (Evaluation of the WHO / International Union Against Tuberculosis and Lung Disease (IUATLD))

Student Evaluation of TA Due

Lectures
1. Chronic Disease Surveillance
2. Occupational and Environmental Surveillance
3. Infectious Disease Surveillance

Required Readings
1. National Surveillance of Vaccine-Preventable Diseases
3. Surveillance of Occupational Illness and Injury
4. Chronic Disease Surveillance
5. Challenges to Global Surveillance and Response to Infectious Disease Outbreaks of International Importance

Recommended Readings
1. Introduction: *ERIC Notebook* Series on Cancer
2. Measuring Cancer: Cancer Registries and Cancer Surveillance
### Group Project (Analysis and Communication of Results) Begins

Please note that this group project begins in Module 3 but is due in Module 4.

#### Case Studies Due
- 1. Chlamydia
- 2. Variables from National Surveillance Systems
- 3. Coal Worker Pneumoconiosis in the United States

Submit your case studies via the Assignments tab in Sakai.

#### Module 3 Quiz Due
Take and submit the quiz via the Tests & Quizzes tab in Sakai.

#### Individual Component of Group Project (Analysis and Communication of Results) Due
This individual component is a quiz. Take and submit the quiz via the Tests & Quizzes tab.

### Module 4: Analysis and Communication of Results (3 Weeks)

#### Lectures
1. Data Analysis and Interpretation I
2. Data Analysis and Interpretation II
3. Communicating Information for Action
4. Federal Public Health Surveillance and Analysis of Surveillance Data
5. Surveillance Systems: Using and Presenting Surveillance Data

#### Required Readings
1. Emerging Infectious Diseases: Review of State and Federal Disease Surveillance Efforts
2. Surveillance of Acquired Immunodeficiency Syndrome (AIDS)

#### Case Studies Due
- 1. Global HIV/AIDS
- 2. Colon (Colorectal) Cancer Prevention

Submit your case studies via the Assignments tab in Sakai.

#### Group Project (Analysis and Communication of Results) Due
This group project began in module 3. One person from your group should submit your group project via the Assignments tab in Sakai.

#### Module 4 Quiz Due
Take and submit the quiz via the Tests & Quizzes tab in Sakai.

#### Group Project Peer Evaluations Due

### Module 5: Special Topics in Surveillance (2 Weeks)

#### Lectures
1. Syndromic Surveillance in North Carolina
2. An Introduction to Geographic Information Systems (GIS)
3. Infectious Disease Surveillance and Outbreak Investigation Using Geographic Information Systems (GIS)
4. Using NC DETECT for Surveillance of Influenza-Like Illness and Influenza
5. Comparison of Global Health Surveillance Systems

#### Required Readings
1. System Descriptions: New York City Syndromic Surveillance Systems
2. North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT)
4. Mapping for Surveillance and Outbreak Investigation
5. Rapid Needs Assessments and GIS

#### Module 5 Quiz Due
Take and submit the quiz via the Tests & Quizzes tab in Sakai.

#### No Group Project for this Module
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**Final Project (3.5 Weeks)**

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<td>Please note that this project requires significant effort and constitutes a major portion of your grade. Begin work well before the due date to ensure you have adequate time to complete the project. Complete and submit the final project via the Tests &amp; Quizzes tab on Sakai.</td>
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