Session 3: Descriptive and Analytic Epidemiology
Session Overview

Summary
This session is an introduction to epidemiologic studies, terms, and study designs. Descriptive epidemiology is presented as a way to assess the *who, what, when, and where* of a health event, while analytic epidemiology answers the questions of *why* and *how*. Topics include key elements of descriptive epidemiology, calculations of incidence and prevalence, types of analytic study designs, measures of association, and tests of statistical significance. Scenarios and graphical examples are used to illustrate the principles presented.

Intended Audience
Non-epidemiologists who collaborate or work with epidemiologists

Running Time

Running Times
Part 1: 25 minutes of lecture
   20 minutes for pre-test, post-test, and evaluation
Part 2: 15 minutes of lecture
   20 minutes for pre-test, post-test, and evaluation
Part 3: 20 minutes of lecture
   20 minutes for pre-test, post-test, and evaluation
Optional Discussion: 15 minutes (approximate)

Learning Objectives
• Define descriptive epidemiology
• Calculate incidence and prevalence
• List examples of the use of descriptive data
• Define analytic epidemiology
• List 3 types of observational study designs
• Interpret risk ratios and odds ratios
• Describe how a statistical test is used