

Learning Objectives for NCHS Statistical Workshop on Tracking Health Indicators

Overall Learning Objectives

- Review selected major analytical issues
- Review selected common statistical, demographic, and epidemiological methods used in public health research
- Increase understanding of the limitations and difficulties associated with measuring, analyzing, and interpreting public health data

Module 1 - Introduction to Healthy People 2010

- Identify the key components of Healthy People 2010
- Learn about Healthy People 2010 statistical and data resources, and where to access them

Module 2 - Major Health Data Systems

- Become familiar with the content and design of selected major public health surveys and datasets
- Understand the major advantages and disadvantages of using data from these health surveys and datasets
- Learn what types of public-use data are available on the internet and where to access them

Module 3 - Variability and Data Suppression

- Understand the importance of sampling variability and random variation
- Learn how to compute, compare, and interpret confidence intervals for rare and common events
- Understand the three main reasons for data suppression in Healthy People 2010

Module 4 - Race/Ethnicity Classification

- Understand the new federal standard for collecting and reporting race/ethnicity data and its implications for HP2010
- Become familiar with data interpretation issues related to race/ethnicity classification

Module 5 - Age Adjustment

- Understand the rationale for age adjustment
- Learn how to compute age-adjusted rates
- Recognize when age-adjusted rates should or should not be used

Module 6 - Mortality Data

- Understand what information comes from the certificate of death and how it is translated into mortality data
- Become familiar with ICD-10 and data issues related to change from ICD-9
- Be able to compute and interpret life tables and summary measures of health

Module 7 - Measuring Health Disparities

- Become familiar with the two main types of statistics (absolute and relative) used in disparity analyses and identify the advantages/disadvantages of each type
- Become familiar with the various reference points used to measure disparity and identify the relative strengths and weaknesses of each type
- Learn how to calculate and interpret some of the common pair-wise and summary statistics used in disparity analyses
- Understand how disparity is defined and measured in Healthy People 2010

Module 8 - Small Area Estimation

- Understand the purpose and basic methodology of small area estimation
- Identify situations in which small area estimation would (and would not) be appropriate for generating small area data
- Learn what types of data are needed at each geographic level to use the synthetic estimation method
- Identify the strengths and limitations of the synthetic estimation method

Module 9 - Data Availability via Websites

- Identify several cross-cutting data systems on the web
- Become familiar with analytic tools and visual display options provided by each data system