

**Center for Disease Control's National Center for Health Statistics  
Workshop on Tracking Health Indicators**

**Take Away Points**

June 23 & 24<sup>th</sup>

Sponsored by the Allegany/Western Steuben Rural Health Network

**Introduction to Healthy People 2010**

- Healthy People 2010 is the latest series of national health promotion objectives that began in 1979
- HP2010 measures are used to support a variety of Federal, State, and local health planning and promotion initiatives
  - Steps to a HealthierUS
  - National Healthcare Quality & Disparities Reports
  - State/local HP2010 plans
- DATA2010 is a valuable resource for up-to-date data and information on the HP2010 objectives

**Major Health Data Systems**

- A number of health data systems can be used to measure a broad assortment of health-related issues.
- Ability to provide race and ethnic group-specific estimates and data on socioeconomic status vary by data system depending on survey sampling scheme and data collection methodology.
- Choice of dataset should be based on population or topic of interest and consider the strengths and limitations of the dataset.

**Variability**

- Variability affects data from all sources

**Type of source**                      **Primary concern**

|                         |                  |
|-------------------------|------------------|
| Sample survey           | Sampling error   |
| Population count system | Random variation |

- Data may be suppressed for a variety of reasons
  - Statistically unreliable
  - Poor data quality
  - To protect confidentiality
- The specific criteria for suppression vary by data system

### **Small Area Estimation**

- Small area estimation is a method used to produce estimates for small geographic areas when
  - No direct health data are available
  - Direct data are available but are unstable
- All small area estimation methods rely on the assumption that people with similar characteristics in the study and referent populations have the *same* rates of health behaviors/outcomes
- The validity of a small area estimate depends on the reasonableness of this assumption

### **Age Adjustment**

- Age adjustment is a technique used to compare rates in two populations by eliminating the differential influence of age.
- Comparisons can only be made between statistics calculated using the **same** standard population.
- 2000 projected US population is the most widely used standard population.

### **Race/Ethnicity Classification**

- The 1997 OMB Federal standards include five race categories and the option of selecting multiple races.
- The change in classification can create discontinuities in trends by race.
- Due to misclassification, under/over reporting, and missing data, data systems vary in the precision of racial/ethnic-specific estimates.

### **Mortality Data**

- Information on the demographic characteristics of the decedent and the cause of death is derived from entries on the death certificate.
- Cause of death data can be displayed as underlying or multiple cause of death
- ICD-10 contains more detailed categories than ICD-9, and trends across the versions can be evaluated using the comparability ratios.
- Life expectancy refers to the average number of years a hypothetical cohort can expect to live, if a given set of age-specific death rates applies throughout their life course.

### **Measuring Health Disparity**

- When measuring health disparities, a number of issues need to be considered:
  - Reference point
  - Adverse vs. favorable outcome
  - Absolute vs. relative statistic
  - Pair-wise vs. summary statistic
- No “best” analytic approach or statistic for measuring health disparities
- The approach and statistics used depend on the *data* and the *researcher’s goals*

**Web Available Data**

- There are numerous publicly-available data sets which have online data analysis capabilities, ranging from pre-formulated tables to user-designed regression models.
- Certain browser tools, such as Beyond 20/20, give you the ability to choose graphic formats.
- DATA2010 is an excellent resource for up-to-date data and information on the Healthy People 2010 objectives and other health indicators