



## National Health and Nutrition Examination Survey

### About NCHS

The CDC's National Center for Health Statistics (NCHS) is the nation's principal health statistics agency, providing data to identify and address health issues. NCHS compiles statistical information to help guide public health and health policy decisions.

Collaborating with other public and private health partners, NCHS employs a variety of data collection mechanisms to obtain accurate information from multiple sources. This process provides a broad perspective to help us understand the population's health, influences on health, and health outcomes.

### National Health and Nutrition Examination Survey (NHANES)

The NHANES is NCHS' most in-depth and logistically complex survey, designed to assess the health and nutritional status of Americans. This comprehensive survey combines personal interviews with standardized physical examinations, diagnostic procedures, and lab tests on approximately 5,000 persons each year.

#### Diseases, medical conditions, health indicators studied:

Obesity	Hearing loss
Oral health	Diabetes
Physical activity	Sexual behavior
Nutrition	Kidney disease

Cardiovascular disease  
Cognitive functioning  
Environmental exposures  
Infectious diseases  
Reproductive history  
Respiratory health  
Sexually transmitted diseases  
Supplements and medications

### Why is NHANES unique?

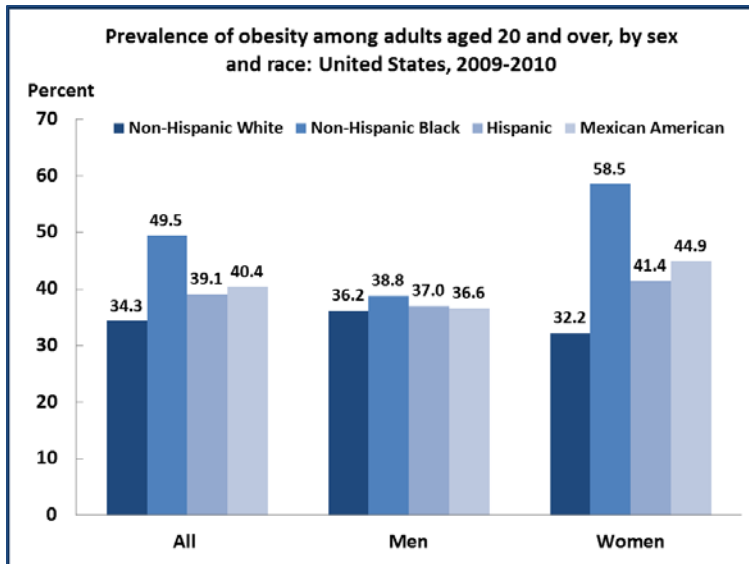
- Annually, NHANES examines a nationally representative sample of 5,000 individuals of all ages. To produce reliable statistics, NHANES oversamples African Americans, Asian Americans, Hispanics, and persons over age 60.
- Inclusion of an examination component allows the survey to provide an objective assessment of the prevalence of both diagnosed and undiagnosed medical conditions in the U.S.
- The physical exams are conducted in Mobile Examination Centers that travel to 15 U.S. sites annually, allowing trained specialists to work in quality controlled settings.
- Findings from this survey are used to determine the prevalence of major diseases and risk factors for diseases.
- The data produce national references for such measurements as height, weight, and blood pressure.
- NHANES serves as the data collection mechanism for a joint Health and Human Services/U.S. Department of Agriculture effort to monitor the diet and nutritional status of Americans, providing information needed for food policy and dietary guidelines.
- The data can be linked to Medicare and National Death Index records to permit studies of disease outcomes.

#### Methods of data collection:

- Home-based interviews
- Mobile Examination Centers
  - Physical exams
  - Standardized dental exams
  - Physiological measurements
  - Laboratory tests on blood and urine

## Examples of NHANES Data

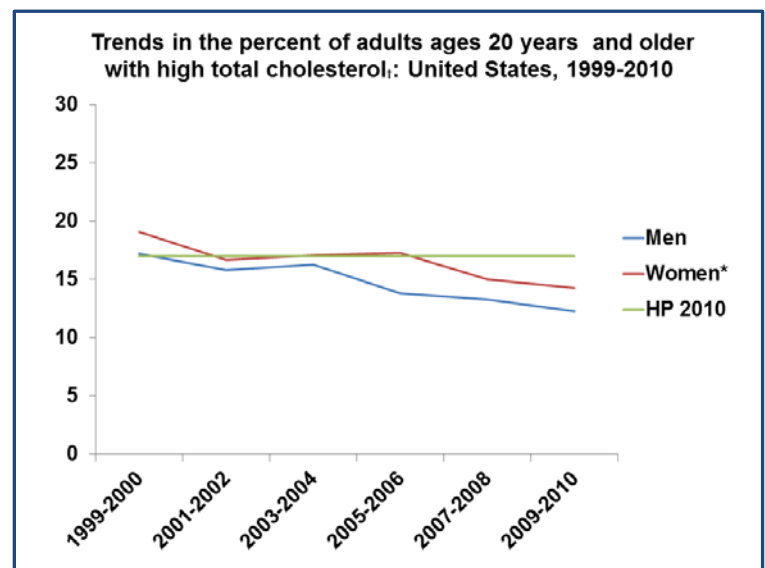
### Obesity



Source: National Health and Nutrition Examination Survey, 2009-2010.

### Cholesterol

- From 1999-2000 to 2009-2010, the prevalence of high total cholesterol ( $\geq 240$  mg/dL) of adults 20 years and older declined from 18.3 to 13.4 percent. A decrease was also observed in both men (17.2 percent during 1999-2000 compared to 12.2 percent during 2009-2010) and women (19.1 percent during 1999-2000 compared to 14.3 percent during 2009-2010).
- The Healthy People 2010 objective to reduce the proportion of adults age 20 and older with high cholesterol ( $\geq 240$  mg/dL) to 17 percent has been achieved for both men and women.



† A serum total cholesterol level greater than or equal to 240 mg/dL

\*Significant decreasing trend ( $p < 0.005$ ).

NOTE: HP 2010 = Healthy People 2010 Objective (17%).

Source: CDC/NCHS, National Health and Nutrition Examination Survey, 1999-2010.

## Challenges and Future Opportunities

- Maintaining survey response rates in light of a survey population that is increasingly difficult to reach in the household.
- Institution of an ongoing program of research, development and testing of new measurement approaches for use in health examination surveys. As health issues and biomedical science advance, there is a continuing need to develop new components of NHANES and related surveys to ensure that needed information can be collected using state of the art methods.

For further information about NCHS and its programs, visit us at <http://www.cdc.gov/nchs> or call the Office of Planning, Budget and Legislation at 301-458-4100.

For further information on NHANES, visit their website at <http://www.cdc.gov/nchs/nhanes.htm>