



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 multiple perspectives to help us understand the populations' health, influences on health, and health outcomes.

National Health and Nutrition Examination Survey (NHANES)

The NHANES is NCHS's 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 and dental examinations, diagnostic procedures, and lab tests in approximately 5,000 persons each year.

The survey provides information related to:

- Diseases
- Health Risk Factors
- Genetics and Health
- Diet and Nutritional Health Status
- Oral Health
- Environmental Exposures
- Obesity and Physical Fitness

Why is NHANES unique?

- The survey results provide an objective assessment of health status through personal interviews, standardized physical and dental exams, and laboratory tests.
- The results provide information on a broad range of health topics that can be related to a variety of risk factors, and medical and personal information collected in the survey.
- Annually, a nationally representative sample of 5,000 individuals, newborns and older, are examined. Persons currently over sampled include African Americans, Mexican Americans, adolescents, persons over 60 and older, pregnant women and low-income whites.
- The physical and dental exams are conducted in Mobile Examination Centers that travel to 15 U.S. sites annually, allowing trained specialists to work in quality controlled settings.
- The data can be linked to Medicare and National Death Index records to permit studies of disease outcomes.
- 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.

Methods for data collection:

- Home-based interviews
- Mobile Examination Centers
 - Physical medical exams
 - Standardized dental exams
 - Physiological measurements
 - Laboratory tests on Blood and Urine

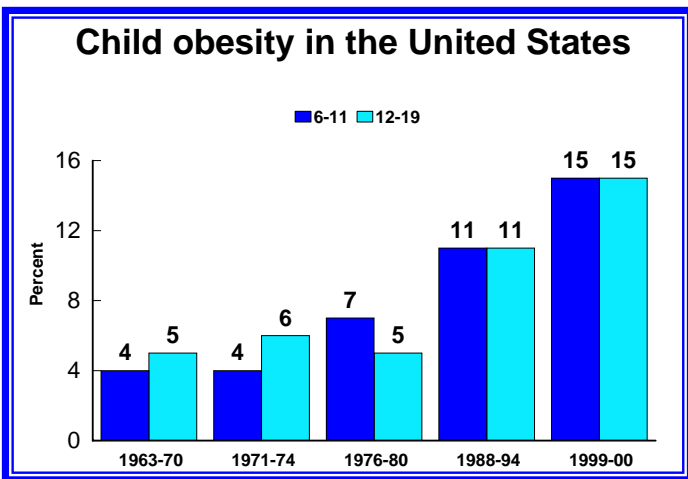
Diseases, medical conditions, health indicators studied:

Anemia
 Immunizations
 Hearing loss
 Obesity
 Balance
 Sexual Behavior
 Skin Diseases
 Kidney Disease

Mental health
 Nutrition
 Oral Health
 Osteoporosis
 Physical Fitness
 Vision
 Diabetes

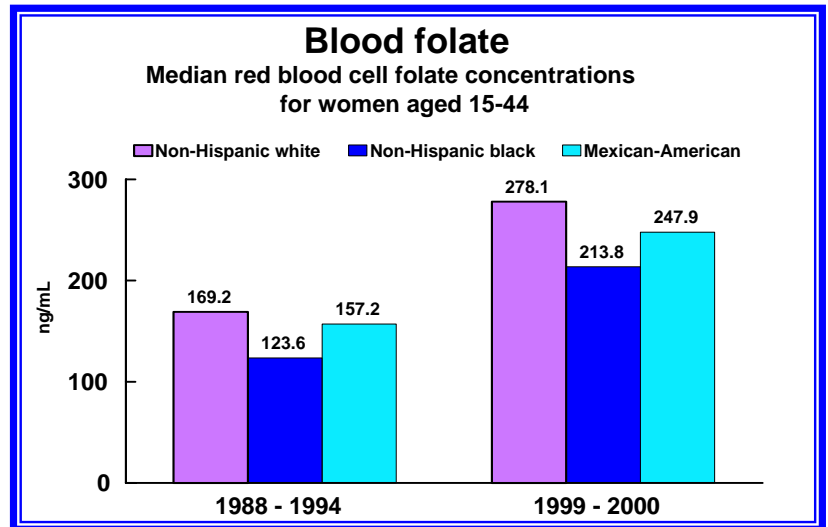
Infectious Diseases
 Cardiovascular Disease
 Lower Extremity Disease
 Environmental Exposure
 Sexually Transmitted Diseases
 Reproductive History
 Cognitive Functioning
 Supplements and Medications

Examples of NHANES Data:



Source: NHANESIII (1988-94) and NHANES (1999-2000).

- The percent of overweight children and adolescents increased from the 1960s to the 1990s.
- The percent of overweight children (6-11 years of age) increased from 4 percent in 1963-70 to 15 percent in 1999.
- The percent of overweight adolescents (12-19 years of age) increased from 5 percent in 1963-70 to 15 percent in 1999-00.



Source: NHANES III (1988-94) and NHANES (1999-2000).

- Results from NHANES 1999-2000, which was conducted after the implementation of food fortification and educational efforts to increase folate consumption, indicate these public health efforts have been effective in increasing folate status among U.S. women of childbearing age. Consumption of adequate quantities of folate in this population is essential in preventing neural tube defects such as spina bifida and anencephaly.
- Red blood cell (RBC) folate concentrations increased for all racial/ethnic groups. In NHANES 1999 – 2000, the highest RBC folate concentrations occurred among non-Hispanic white women, and were lowest among non-Hispanic black women.

Other recent findings include:

- In 1999-2000, an estimated 64 percent of U.S. adults were either overweight or obese. This represents a prevalence that is approximately 8 percent higher than in 1988-1994.

Other recent findings include (continued):

- Estimates from 1988-1994 show that approximately 5.1 percent of the adult population had diagnosed diabetes, while an additional 2.7 percent has previously undiagnosed diabetes.
- The 2000 CDC growth charts are based primarily on data gathered through NHANES. These charts are used to assess and compare a child's growth to a nationally representative reference population for clinical evaluation.
- Data from 1999 show more than a 75 percent decline in levels of exposure to secondhand smoke from the 1988-94 NHANES.

Challenges and Future Opportunities

- Identify an ongoing, sustained funding base for NHNES field operations.
- Institute 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.
- Meet data needs at the state and local levels through smaller scale, targeted examinations – “Community Health and Nutrition Examination Surveys.” These surveys can provide important insights for state public health programs into the health status, risk factor, and environmental issues of communities.
- Meet needs for more detail on racial and ethnic subpopulations through the use of the Community HANES mechanism, efficiently filling data gaps with definitive, objectively measured data on populations for which only limited data are currently available.

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>.