

# National Health and Nutrition Examination Survey

## Overview





## Introduction/Background

The National Health and Nutrition Examination Survey (NHANES) is the most in-depth survey designed to evaluate the health and nutritional status of adults and children in the United States. This survey combines information from interviews and physical examinations. NHANES is run by the National Center for Health Statistics (NCHS), part of the Centers for Disease Control and Prevention (CDC).

The first NHANES program began in the early 1960s. Since 1999, the survey has examined about 5,000 people in 15 different counties across the country each year. The NHANES sample is selected to represent the entire U.S. population.

NHANES data are needed to understand and improve health in the United States. NHANES plays a critical role in:

- Determining the prevalence and risk factors of major diseases
- Assessing the nutritional status and its association with health promotion and disease prevention
- Serving as the basis for national standards for measurements such as height, weight, and blood pressure
- Identifying the prevalence of undiagnosed diseases such as diabetes.

## Survey Content

The NHANES interviews include demographic, socioeconomic, dietary, and health questions.

NHANES looks at different risk factors such as a person's lifestyle, physical characteristics, heredity, or environment that may increase the chances of developing a certain disease or condition.

The survey studies obesity, diabetes, hypertension and cholesterol, nutrition and dietary intake, as well as smoking, alcohol consumption, sexual practices, drug use, physical fitness and activity, and other factors critical to health.

The examination consists of medical and physical measurements and laboratory tests performed by highly trained medical personnel. Body measurements are included for everyone and blood pressure is measured for those 8 years and older. All but the very young have a blood sample drawn. Additional examinations such as a body composition scan and liver ultrasound are given depending on the age of the participant.



## Survey Operations

Health interviews are conducted by telephone. Health measurements are performed in specially designed and equipped mobile centers, which travel to locations throughout the country. NHANES team consists of highly trained medical and health personnel. Many of the study staff are bilingual in English and Spanish.

In each location, local health and government officials are notified of the upcoming survey. Selected households in the study area receive a letter to introduce the survey. Local media may feature stories about the survey.

NHANES is designed to help and encourage participation. Transportation is provided to and from the mobile centers and the costs of childcare or care of an adult, if needed.

Each participant will receive a token of thanks for his or her time and a report of his or her medical findings. All information collected in the survey is kept confidential. Privacy is protected by public laws.

Assurance of Confidentiality – We take your privacy very seriously. All information that relates to or describes identifiable characteristics of individuals, a practice, or an establishment will be used only for statistical purposes. NCHS staff, contractors, and agents will not disclose or release responses in identifiable form without the consent of the individual or establishment in accordance with section 308(d) of the Public Health Service Act (42 U.S.C. 242m) and the Confidential Information Protection and Statistical Efficiency Act of 2018 (Title III of the Foundations for Evidence-Based Policymaking Act of 2018 (Pub. L. No. 115-435, 132 Stat. 5529 § 302)). In accordance with CIPSEA, every NCHS employee, contractor, and agent has taken an oath and is subject to a jail term of up to five years, a fine of up to \$250,000, or both if he or she willfully discloses ANY identifiable information about you.

## Uses of the Data

Information from NHANES is made available through a series of publications and articles in scientific and technical journals. For data users and researchers throughout the world, NHANES survey data are available on the internet.

Research organizations, universities, health care providers, and educators benefit from survey information. Primary data users are the federal agencies that collaborated in the design and development of the survey.

The National Institutes of Health, the Food and Drug Administration, and Centers for Disease Control and Prevention are among the agencies that rely upon NHANES to provide data essential for the implementation and evaluation of program activities.

The U.S. Department of Agriculture and NCHS collaborate in planning and reporting dietary and nutrition information from the survey. NHANES' partnership with the U.S. Environmental Protection Agency allows continued study of the many important environmental influences on health.

NHANES' record of important accomplishments is made possible by the hundreds of thousands of Americans who have participated.

- NHANES data help produce national references for such measurements as height and weight (pediatric growth charts) and blood pressure. The pediatric growth charts are updated using the latest NHANES statistics.
- National programs to reduce hypertension and cholesterol levels continue to depend on NHANES data to steer education and prevention programs toward those at risk and to measure success in the risk factors associated with heart disease, the nation's number one cause of death.

## Recent NHANES findings

Undiagnosed Type 2 diabetes: NHANES data have shown that 3 out of 10 people in the U.S. have diabetes but had not been previously diagnosed by a doctor.

Fast Food Consumption: In survey years 2013-2016, 4 out 10 adults said they ate fast food on a given day. Poor diet and low physical activity can lead to overweight and obesity, which are risk factors for the development of different diseases.

Obesity Rates: NHANES data from 2017-2018 showed that about 4 out of 10 adults in the U.S. were obese. Adult obesity is associated with increased risk of several health conditions, including diabetes, hypertension, high cholesterol,

cardiovascular disease, stroke, arthritis, and certain cancers.

Oral Care in Children: Toothpaste and toothbrushing data from NHANES showed that 8 of 10 children ages 3-15 started brushing later than recommended and that 3 out of 10 children ages 3-15 years old brushed their teeth only once a day.

These are just a few examples of how survey findings have been used. Results of NHANES benefit people in the United States in important ways. With reliable health data of the population, government agencies and private sector organizations can establish policies and plan research, education, and health promotion programs.

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For more information about the National Health and Nutrition Examination Survey, you may visit the NHANES website at: [www.cdc.gov/NHANES](http://www.cdc.gov/NHANES)

