The Latest Data and Reports from

The National Health and Nutrition Examination Survey (NHANES)

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Acting NHANES Director

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NCHS Webinar
National Center for Health Statistics (NCHS)

• It is the designated Federal statistical agency for health

• Its mission is to provide statistical information that will guide actions and policies to improve the health of the American people

• It monitors the nation’s health by collecting, analyzing, and disseminating health data to identify health problems, risk factors, & disease patterns
NCHS Data Systems

- National Vital Statistics System
- National Health Interview Survey
- National Health and Nutrition Examination Survey
- National Health Care Surveys
The National Health and Nutrition Examination Survey (NHANES)
The Mission of NHANES

To provide timely and objectively measured health and nutrition information that can guide actions and policies to improve the health of the Nation
NHANES Objectives

- Estimate the percentage of persons in the US population with selected health conditions (chronic and infectious diseases)
- Monitor trends in the prevalence, awareness, treatment and control of selected diseases and conditions
- Estimate prevalence and trends in environmental exposures
- Study the relationships among diet, nutrition and health
- Establish and maintain a biospecimen program
## History of NHANES

<table>
<thead>
<tr>
<th>Survey</th>
<th>Dates</th>
<th>Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHES I</td>
<td>1960 – 62</td>
<td>18 – 79 years</td>
</tr>
<tr>
<td>NHES II</td>
<td>1963 – 65</td>
<td>6 – 11 years</td>
</tr>
<tr>
<td>NHES III</td>
<td>1966 – 70</td>
<td>12 – 17 years</td>
</tr>
<tr>
<td>NHANES I</td>
<td>1971 – 75</td>
<td>1 – 74 years</td>
</tr>
<tr>
<td>NHANES II</td>
<td>1976 – 80</td>
<td>6 months – 74 years</td>
</tr>
<tr>
<td>HHANES</td>
<td>1982 – 84</td>
<td>6 months – 74 years</td>
</tr>
<tr>
<td>NHANES III</td>
<td>1988 – 94</td>
<td>2 months +</td>
</tr>
</tbody>
</table>
# History of NHANES

<table>
<thead>
<tr>
<th>Survey</th>
<th>Dates</th>
<th>Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHANES</td>
<td>1999 - 2000</td>
<td>All ages</td>
</tr>
<tr>
<td>NHANES</td>
<td>2001 - 2002</td>
<td>All ages</td>
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<tr>
<td>NHANES</td>
<td>2003 – 2004</td>
<td>All ages</td>
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<td>2004 – 2006</td>
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<td>NHANES</td>
<td>2007 -2008</td>
<td>All ages</td>
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<td>2009 – 2010</td>
<td>All ages</td>
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<td>2015 – 2016</td>
<td>All ages</td>
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<tr>
<td>NHANES</td>
<td>2017 – 2018</td>
<td>All ages</td>
</tr>
<tr>
<td>NHANES</td>
<td>2019 – 2020</td>
<td>All ages</td>
</tr>
</tbody>
</table>
NHANES Sample

- Nationally representative
- Civilian, non-institutionalized US population
- 5,000 individuals examined annually
- Oversampled groups:
  - Non-Hispanic blacks
  - Non-Hispanic Asians
  - Hispanics
  - 80+ years of age
  - Low income whites
NHANES Survey Design

Stage 1
Counties

Stage 2
Segments

Stage 3
Households

Stage 4
Participants
NHANES Components

- In-person home interview

- Health examinations in mobile exam centers (MEC)
  - Physical exam measurements
  - Specialized testing
  - Private interviews
  - Biospecimen collection
  - Dietary assessment
Data Release Process

- QC
- Editing/cleanup
- Weighting
- Data preparation
- Documentation
- Confidentiality review

• Public data released in 2-year cycles
Over 1,300 data files have been publicly released since the first continuous NHANES data release.
NHANES 2017-18
Data Release

• Included over 50 questionnaire, examination, and laboratory data files
• As of May 1, over 1/3 of all 2017-18 data have been released
• Another 27% are in process for release
What's New

April 2020

Publications

- Hypertension Prevalence Among Adults Aged 18 and Over: United States, 2017–2018

Data Release

- Feritin (FERTIN_J 2017-2018)
- Preventive Aspirin Use (RXASA_J 2017-2018)

Updated Data

The 2001-2002 surplus serum folate dataset was updated to correct a calibration bias in the serum folic acid determination. Please refer to the analytic notes in the documentation accompanying the datasets for more details.

- Folate – Folic acid & 5-methyltetrahydrofolate – Serum (Surplus) (SSFA_B_R 2001-2002)

2015-2016 Oral Health – Dentition dataset were updated with additional data on secondary restoration codes that were collected on teeth had untreated dental caries and had an existing restoration. Updates were made to both the data file as well as the documentation.

- Oral Health – Dentition (OHXODEN_J 2015-2016)

March 2020

Publications

- Prevalence and Trends in Hepatitis B Virus Infection in the United States, 2015–2018
NHANES Questionnaires, Datasets, and Related Documentation

Survey Methods
- Plan & Operations
- Sample Design
- Estimation & Weighting Procedures
- Analytic Guidelines

Search Variables
- Simple keyword search for Continuous NHANES (1999 and on) variables

Continuous NHANES

<table>
<thead>
<tr>
<th>NHANES</th>
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<th>NHANES</th>
<th>NHANES</th>
</tr>
</thead>
</table>

Prior to 1999

- NHANES III
  Conducted from 1988-1994, the third National Health and Nutrition Examination

- Hispanic NHANES
  During 1982-1984, NHANES temporarily shifted to a population-specific survey. The
# NHANES 2017–2018 Examination Data

- [NHANES 2017-2018 Examination Variable List](#)
- [Procedure Manuals](#)
- [2017–2018 Examination Data Overview](#)
- [SAS Universal Viewer](#)

<table>
<thead>
<tr>
<th>Data File Name</th>
<th>Doc File</th>
<th>Data File</th>
<th>Date Published</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Pressure</td>
<td>BPX [Doc]</td>
<td>BPX [Data XPT - 1.4 MB]</td>
<td>February 2020</td>
</tr>
<tr>
<td>Liver Ultrasound Transient Elastography</td>
<td>LUX [Doc]</td>
<td>LUX [Data XPT - 677.8 KB]</td>
<td>March 2020</td>
</tr>
<tr>
<td>Oral Health - Recommendation of Care</td>
<td>OHXREF [Doc]</td>
<td>OHXREF [Data XPT - 786.7 KB]</td>
<td>February 2020</td>
</tr>
</tbody>
</table>
NHANES 2017–2018 Limited Access Data

These datasets are not released to the public. However, secure, on-site access is granted through NCHS’s Research Data Center (RDC) to guarantee the confidentiality of the survey participants. The documents below are provided to help analysts determine if these NHANES datasets contain variables relevant to their analyses before submitting an application to use the RDC.

- NHANES 2017-2018 Limited Access Variable List
- Questionnaire Instruments
- Laboratory Methods
- SAS Universal Viewer

<table>
<thead>
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<th>Doc File</th>
<th>Data File</th>
<th>Date Published</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Use - Youth</td>
<td>DUQY_J_R Doc</td>
<td>RDC Only</td>
<td>February 2020</td>
</tr>
<tr>
<td>Mental Health - Depression Screener - Youth</td>
<td>DPOY_J_R Doc</td>
<td>RDC Only</td>
<td>February 2020</td>
</tr>
<tr>
<td>Reproductive Health - Women 12 Years and Older</td>
<td>RHQ_J_R Doc</td>
<td>RDC Only</td>
<td>February 2020</td>
</tr>
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</table>
Attention:

All National Center for Health Statistics RDCs are closed.

NCHS researchers may not enter any NCHS or FSRDC facility until they are informed that the facility has reopened. We will continue to accept and review new proposals and amendments. Please direct all RDC related questions to rdca@cdc.gov.

Research Data Center (RDC)

The National Center for Health Statistics (NCHS) operates the Research Data Center (RDC) to allow researchers access to restricted-use data. The RDC is responsible for protecting the confidentiality of survey respondents, study subjects, or institutions while providing access to the restricted-use data for statistical purposes. For access to the restricted-use data, researchers must submit a research proposal outlining the need for restricted-use data. The proposal provides a framework for NCHS to identify potential disclosure risks and how the data will be used.

1. Preparing for Proposal Submission
   1. Restricted Data
   2. Access Modes
   3. The Proposal Process

2. Accessing Restricted Data
   1. Confidentiality
   2. Approved Projects; Next Steps
   3. Publishing Guidelines
Preparing for Proposal Submission

The Proposal Process outlined below provides the primary steps that lead to the NCHS Review Committee decision for proposal approval.

To access restricted-use data through the RDC, you must submit a proposal. The NCHS Review Committee will review your proposal using the following criteria:

1. A well-defined research question that addresses a public health concern.
2. Explanation of what restricted-use variables are needed to complete the project and why.
3. The disclosure risk associated with:
   - the requested restricted-use variables
   - the requested mode of access
   - analytic plan (this includes statistical methods) and
   - the nature and composition of your planned output.

The RDC does not review the proposal for scientific merit.

Once the RDC receives your proposal, the RDC Director will assign an RDC Analyst to work with you. The RDC Analyst is your primary contact for the duration of your project. At any time, if you have questions, please contact your RDC Analyst.

Your RDC Analyst will help you with the following:

- Facilitates review of your proposal
- Creates your analytic data set
- Accepts payment
- Accepts your NCHS Confidentiality required paperwork
- Provides your dataset to the RDC location described in your proposal
- Reviews your output for disclosure risk
- Provides your approved output to you

The Proposal Process

Step 1: Determine a need for restricted-use data. Restricted Data

Step 2: Determine a preferred location of access. Location of Access

Step 3: Draft your research proposal. The Proposal

Step 4: Submit your proposal (using the Proposal Format, include page numbers) as one document to rdca@cdc.gov
NHANES Survey Methods and Analytic Guidelines

Plan and Operations
Reports on survey planning and field operations

Sample Design
Reports on survey sample design, sample selection, sampling rates

Estimation and Weighting
Reports on methods for calculating weights and variance estimation

Analytic Guidelines
Reports on guidelines for analyzing NHANES data

Response Rates and Population Totals
Survey response rates (screening, interview, and exam) and U.S. population

Other Resources
Other resources for Analysts

Plan and Operations

<table>
<thead>
<tr>
<th>Description</th>
<th>Documentation</th>
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</tr>
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</table>

Sample Design

<table>
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Who uses the NHANES data?

- Federal Agencies
- Academic Institutions
- Industry
- General Public
- Policy Makers
Where are the NHANES data reported?

- Scientific Journals
- National News Outlets
- Local News Outlets
- Government Publications
How many NHANES publications have there been?

- Over 7000 publications using NHANES data (based on PubMed)
Various types of NCHS Publications
Various types of NCHS Publications

NCHS Data Brief

- Short reports (8 pages with up to 5 simple figures) on a current health or health care topic
- Intended for general public, and policy/programmatic audiences
Various types of NCHS Publications

National Health Statistics Reports

- Longer reports on analysis of a health topic, data evaluation, or methods or measurement research
Various types of NCHS Publications
Vital and Health Statistic Series

- Technical Reports
- Series 1 provide details on survey programs and collection procedures
- Series 2 provide data evaluation and methods research
- Series 3 provide statistics derived from analytical and epidemiological studies
Various types of NCHS Publications

Health E-Stats

- Very short (<500 words)
- On a health topic or methods or measurement issues
Latest NHANES 2017-2018 Data Briefs
Obesity among adults

https://www.cdc.gov/nchs/products/databriefs/db360.htm
Obesity among adults
https://www.cdc.gov/nchs/products/databriefs/db360.htm

• Obesity is associated with serious health risks.
• Severe obesity further increases the risk of obesity-related complications, such as coronary heart disease and end-stage renal disease.
• A significantly increasing trend in obesity was observed from 1999–2000 through 2015–2016.
• This report provides the most recent national data on obesity and severe obesity prevalence among US adults.
Obesity among adults
https://www.cdc.gov/nchs/products/databriefs/db360.htm

- NHANES 2017-18 data for prevalence estimates; 1999-2000 through 2017-18 to evaluate trends
- Estimates are based on measured height and weight collected from participants during examination at the mobile examination center (MEC)
- Obesity = BMI ≥ 30 kg/m²; severe obesity = BMI ≥ 40 kg/m²
- Analysis used examination sample weights
- Estimates were age adjusted using the direct method to the 2000 projected U.S. Census population
Figure 1. Prevalence of obesity among adults aged 20 and over, by sex and age: United States, 2017–2018

NOTES: Estimates for adults aged 20 and over were age adjusted by the direct method to the 2000 U.S. Census population using the age groups 20–39, 40–59, and 60 and over. Crude estimates are 42.5% for total, 43.0% for men, and 42.1% for women.
Access data table for Figure 1 at: https://www.cdc.gov/nchs/data/databriefs/db360_tables-508.pdf#1.
Figure 3. Age-adjusted prevalence of severe obesity among adults aged 20 and over, by sex, age, and race and Hispanic origin: United States, 2017–2018

- Total: 9.2%
- Men: 6.9%
- Women: 11.5%
- 20–39: 9.1%
- 40–59: 11.5%
- 60 and over: 5.8%
- Non-Hispanic white: 9.3%
- Non-Hispanic black: 13.8%
- Non-Hispanic Asian: 42.0%
- Hispanic: 7.9%

Notes:
1. Significantly different from men.
2. Significantly different from adults aged 20–39.
4. Significantly different from all other race and Hispanic-origin groups.

NOTES: Estimates for adults aged 20 and over were age adjusted by the direct method to the 2000 U.S. Census population using the age groups 20–39, 40–59, and 60 and over. Crude estimates are 9.0% for total, 6.8% for men, and 11.1% for women. Access data table for Figure 3 at: https://www.cdc.gov/nchs/data/databriefs/d360_tables-508.pdf#3.

Figure 4. Trends in age-adjusted obesity and severe obesity prevalence among adults aged 20 and over: United States, 1999–2000 through 2017–2018

NOTES: Estimates were age adjusted by the direct method to the 2000 U.S. Census population using the age groups 20–39, 40–59, and 60 and over. Access data table for Figure 4 at: [https://www.cdc.gov/nchs/data/databriefs/db369_tables-508.pdf#4](https://www.cdc.gov/nchs/data/databriefs/db369_tables-508.pdf#4)

Obesity among adults
https://www.cdc.gov/nchs/products/databriefs/db360.htm

- Monitoring the prevalence of obesity and severe obesity is relevant for public health programs.
- Healthy People 2020 has established a goal of lowering the percentage of adults with obesity to no more than 30.5%.
- Based on the latest NHANES data from 2017-18, the prevalence of obesity among US adults has moved further away from this goal.
Hepatitis B among adults

https://www.cdc.gov/nchs/products/databriefs/db361.htm
Hepatitis B among adults
https://www.cdc.gov/nchs/products/databriefs/db361.htm

• Hepatitis B virus (HBV) is a type of viral hepatitis transmitted through sexual contact, contaminated blood, or infected mother to newborn.

• HBV may cause liver infection

• Vaccination to high-risk groups in 1982; Universal vaccination of newborns in 1991

• This report provides the most recent national data on the prevalence HBV infection and hepatitis B vaccination among U.S. adults
Hepatitis B among adults
https://www.cdc.gov/nchs/products/databriefs/db361.htm

- NHANES 2015-18 data for prevalence estimates; 1999-2000 through 2017-18 to evaluate trends
- Estimates are based on the laboratory testing of blood samples collected from participants during examination at the mobile examination center.
- Presence of antibody to hepatitis B antigen were used to define infection and vaccination.
- Analysis used examination sample weights
- Estimates were age adjusted using the direct method to the 2000 projected U.S. Census population.
Figure 1. Age-adjusted prevalence of past or present hepatitis B virus infection among adults aged 18 and over, by sex, race and Hispanic origin, and U.S. birth status: United States, 2015–2018

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>4.3</td>
</tr>
<tr>
<td>Men</td>
<td>5.3</td>
</tr>
<tr>
<td>Women</td>
<td>3.4</td>
</tr>
<tr>
<td>Non-Hispanic white</td>
<td>2.1</td>
</tr>
<tr>
<td>Non-Hispanic black</td>
<td>10.8</td>
</tr>
<tr>
<td>Non-Hispanic Asian</td>
<td>3.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>21.1</td>
</tr>
<tr>
<td>Non-U.S. born</td>
<td>11.9</td>
</tr>
<tr>
<td>U.S. born</td>
<td>2.5</td>
</tr>
</tbody>
</table>

NOTES: The presence of antibody to hepatitis B core antigen is evidence of past or present infection. Percentages are age adjusted by the direct method to the 2000 projected U.S. population using age groups 20–29, 30–39, 40–49, 50–59, and 60 and over. U.S. born includes persons born within the 50 United States and the District of Columbia. Access data table.
Figure 2. Age-adjusted prevalence of serologic evidence of hepatitis B vaccination among adults aged 18 and over, by sex, race and Hispanic origin, and U.S. birth status: United States, 2015–2018

- Total population: 25.2%
- Men: 22.0%
- Women: 28.1%
- Non-Hispanic white: 26.6%
- Non-Hispanic black: 23.2%
- Non-Hispanic Asian: 31.4%
- Hispanic: 19.9%
- Non-U.S. born: 23.4%
- U.S. born: 26.0%

NOTES: The presence of antibody to hepatitis B surface antigen but absence of antibody to hepatitis B core antigen is evidence of hepatitis B vaccination. Percentages are age adjusted by the direct method to the 2000 projected U.S. population using age groups 20–29, 30–39, 40–49, 50–59, and 60 and over. U.S. born includes persons born within the 50 United States and the District of Columbia. Access data table for Figure 2 at: https://www.cdc.gov/nchs/data/
Figure 3. Trends in the age-adjusted prevalence of past or present hepatitis B virus infection among adults aged 18 and over: United States, 1999–2018

1Significant linear decline over time for any past or present hepatitis B virus infection ($p < 0.05$).

NOTES: All values meet National Center for Health Statistics presentation standards. The presence of antibody to hepatitis B core antigen is evidence of past or present infection. Percentages are age adjusted by the direct method to the 2000 projected U.S. population using age groups 20–29, 30–39, 40–49, 50–59, and 60
Figure 4. Trends in the age-adjusted prevalence of serologic evidence of hepatitis B vaccination among adults aged 18 and over: United States, 1999–2018

1Significant linear increase over time for hepatitis B virus vaccination (p < 0.05).

NOTES: The presence of antibody to hepatitis B surface antigen but absence of antibody to hepatitis B core antigen is evidence of hepatitis B vaccination. Percentages are age adjusted by the direct method to the 2000 projected U.S. population using age groups 20–29, 30–39, 40–49, 50–59, and 60 and over.
Total Cholesterol and High-Density Lipoprotein (HDL) Cholesterol among Adults

https://www.cdc.gov/nchs/data/databriefs/db363-h.pdf
High total cholesterol and low high-density lipoprotein cholesterol are independent and modifiable risk factors for coronary heart disease.


This report presents the most recent national data on the prevalence of high total cholesterol and low HDL-C among U.S. adults.
Total and High-Density Lipoprotein (HDL) Cholesterol in Adults
https://www.cdc.gov/nchs/data/databriefs/db363-h.pdf

• Estimates are based on the laboratory testing of blood samples collected from participant during their examination at the mobile examination center.
• High total cholesterol: serum total cholesterol ≥ 240 mg/dL
• Low HDL cholesterol: serum HDL-C < 40 mg/dL
• Analysis used examination sample weights.
• Estimates were age adjusted using the direct method to the 2000 projected U.S. Census population.
Figure 1. Prevalence of high total cholesterol among adults aged 20 and over, by sex, age, and race and Hispanic origin: United States, 2015–2018

1Significantly different from adults aged 20–39.
2Significantly different from adults aged 60 and over.

NOTES: High total cholesterol is 240 mg/dL or more. All estimates except those by age were age adjusted by the direct method to the projected 2000 U.S. Census population using the age groups 20–39, 40–59, and 60 and over. Crude estimates are 11.5% for total, 10.3% for men, and 12.8% for women. Access data table for Figure 1 at: https://www.cdc.gov/nchs/data/databriefs/db353-tables-508.pdf#1.

Figure 2. Prevalence of low high-density lipoprotein cholesterol among adults aged 20 and over, by sex and age: United States, 2015–2018

1Significantly different from adults aged 60 and over.
2Significantly different from women of the same age group.
3Significant decreasing linear trend.

NOTES: Low high-density lipoprotein cholesterol is less than 40 mg/dL. Estimates for the “20 and over” category were age adjusted by the direct method to the projected 2000 U.S. Census population using the age groups 20–39, 40–59, and 60 and over. Crude estimates are 17.1% for total, 26.0% for men, and 8.2% for women. Access data table for Figure 2 at: https://www.cdc.gov/nchs/data/databriefs/db363-tables-508.pdf#2.

Figure 3. Age-adjusted prevalence of low high-density lipoprotein cholesterol among adults aged 20 and over, by sex and race and Hispanic origin: United States, 2015–2018

NOTES: Low high-density lipoprotein cholesterol is less than 40 mg/dL. All estimates were age adjusted by the direct method to the projected 2000 U.S. Census population using the age groups 20–39, 40–59, and 60 and over. Access data table for Figure 3 at: https://www.cdc.gov/nchs/data/databriefs/db363-tables-508.pdf#3.
Figure 4. Trends in age-adjusted prevalence of high total cholesterol and low high-density lipoprotein cholesterol among adults aged 20 and over: United States, 1999–2000 through 2017–2018

- High total cholesterol\(^3\)
  - 1999–2000: 18.3%
  - 2001–2002: 16.5%
  - 2003–2004: 16.8%
  - 2005–2006: 15.7%
  - 2007–2008: 14.3%
  - 2009–2010: 13.4%
  - 2011–2012: 12.9%
  - 2013–2014: 11.0%
  - 2015–2016: 12.4%
  - 2017–2018: 10.5%

- Low high-density lipoprotein cholesterol\(^1,2\)
  - 2007–2008: 22.2%
  - 2009–2010: 21.3%
  - 2011–2012: 17.4%
  - 2013–2014: 19.9%
  - 2015–2016: 18.4%
  - 2017–2018: 16.0%

\(^1\)Percentages prior to 2007–2008 are not presented due to changes in laboratories and methods.

Notes:
- High total cholesterol is 240 mg/dL or more. Low high-density lipoprotein cholesterol is less than 40 mg/dL. All estimates were age adjusted by the direct method to the projected 2000 U.S. Census population using the age groups 20–39, 40–59, and 60 and over. Access data table for Figure 4 at: https://www.cdc.gov/nchs/data/databriefs/db363-tables-508.pdf#4.

Total and High-Density Lipoprotein (HDL) Cholesterol in Adults
https://www.cdc.gov/nchs/data/databriefs/db363-h.pdf

• Healthy People 2020 has established a goal of lowering the percentage of adults with high total cholesterol to no more than 13.5%.

• During 2015–2018, the overall prevalence in both men and women met this goal.
Hypertension among adults

https://www.cdc.gov/nchs/products/databriefs/db360.htm
Hypertension among adults
https://www.cdc.gov/nchs/products/databriefs/db360.htm

• Hypertension is a major risk factor for cardiovascular disease.
• Lowering blood pressure has been shown to decrease the incidences of stroke, heart attack, and heart failure.
• This report provides the most recent national data on the prevalence of hypertension among U.S. adults
Hypertension among adults
https://www.cdc.gov/nchs/products/databriefs/db360.htm

• NHANES 2017-18 data for prevalence estimates; 1999-2000 through 2017-18 to evaluate trends

• Estimates are based on blood pressure measurements of participants obtained by trained physicians during a single exam visit to the mobile examination center.

• Hypertension was defined as BP ≥ 130/80 mmHg or currently taking medication to lower high blood pressure

• Analysis used examination sample weights

• Estimates were age adjusted using the direct method to the 2000 projected U.S. Census population
Figure 1. Prevalence of hypertension among adults aged 18 and over, by sex and age:
United States, 2017–2018

<table>
<thead>
<tr>
<th></th>
<th>18 and over</th>
<th>18–39</th>
<th>40–59</th>
<th>60 and over</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All</strong></td>
<td>45.4</td>
<td>54.5</td>
<td>74.5</td>
<td>73.9</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td>151.0</td>
<td>159.4</td>
<td>75.2</td>
<td>73.9</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>39.7</td>
<td>49.9</td>
<td>73.9</td>
<td>73.9</td>
</tr>
</tbody>
</table>

1 Significantly different from women within the same age group.
2 Significant increasing trend by age.

NOTES: Hypertension is defined as systolic blood pressure greater than or equal to 130 mmHg or diastolic blood pressure greater than or equal to 80 mmHg, or currently taking medication to lower blood pressure. Estimates for age group 18 and over are age adjusted by the direct method to the U.S. Census 2000 population using age groups 18–39, 40–59, and 60 and over. Crude estimates are 48.2% for all persons, 52.5% for men, and 44.0% for women. Access data table for Figure 1 at: https://www.cdc.gov/nchs/data/databriefs/db364-tables-508.pdf#1.

Figure 2. Age-adjusted prevalence of hypertension among adults aged 18 and over, by sex and race and Hispanic origin: United States, 2017–2018

1Significantly different from non-Hispanic white.
2Significantly different from non-Hispanic black.
3Significantly different from Hispanic.

NOTES: Hypertension is defined as systolic blood pressure greater than or equal to 130 mmHg or diastolic blood pressure greater than or equal to 80 mmHg, or currently taking medication to lower blood pressure. All estimates are age adjusted by the direct method to the U.S. Census 2000 population using age groups 18–39, 40–69, and 60 and over. Access data table for Figure 2 at: https://www.cdc.gov/nchs/data/databriefs/db364-tables-508.pdf#2.
Figure 4. Age-adjusted trend in hypertension prevalence among adults aged 18 and over, by sex. United States, 1999–2018

1Significant quadratic trend from 1999 through 2018.

NOTES: Hypertension is defined as systolic blood pressure greater than or equal to 130 mmHg or diastolic blood pressure greater than or equal to 80 mmHg, or currently taking medication to lower blood pressure. All estimates are age adjusted by the direct method to the U.S. Census 2000 population using age groups 18–39, 40–59, and 60 and over. Access data table for Figure 4 at: https://www.cdc.gov/nchs/data/databriefs/db364-cases-508.pdf#4.

Planning for new Data Briefs and other publications

• Using data from 2017-2018 and early survey cycles
  – Dental caries based on 2017-18 oral health data
  – Pain medications based on 2017-18 and early prescription medication data

• Using upcoming 2017-2018 data release
  – Possible publications based on dietary intake data
NHANES 2019-2020
NHANES 2020 Data Collection

- All 2020 data collection was suspended on March 16 due to COVID-19.
- NHANES mobile exam center (MEC) trailers are now parked in Maryland.
- We will resume field operations as soon as prudent from public health and logistical perspectives.
NHANES assistance with COVID-19 Response

- Deployment of NHANES staff
  - Contact tracing, Quarantine station, FEMA National Response Coordination Center (NRCC)
- Trailers / trucks for COVID-19 testing
  - CLIA certified labs
  - Offered use to DOH in NY, MD, and DC
  - 4/24 we transferred our truck to DC’s Dept of Forensic Sciences, DOH for mobile testing of DC residents
- Serology testing for SARS-CoV-2
- Burden estimates for severe obesity and other health conditions
NHANES moving forward

• Continue with the data QC, editing, and release of earlier NHANES cycles
• Continue with NHANES publications
• Planning for our return to data collection
• Planning for a new 2023 survey design and data collection period
Thank you
Questions?

• Please submit your questions via the chat window in the Skype application
• The facilitator will address questions as time allows.
• Questions not answered may be forwarded to paoquery@cdc.gov

https://www.cdc.gov/nchs
https://www.cdc.gov/nchs/nhanes