Table 22. Hypertension among adults aged 20 and over, by selected characteristics: United States, selected years 1988-1994 through 2013-2016
Excel version (with more data years and standard errors when available): https://www.cdc.gov/nchs/hus/contents2018.htm\#Table_022.
[Data are based on interviews and physical examinations of a sample of the civilian noninstitutionalized population]

| Sex, age, race and Hispanic origin, ${ }^{1}$ and percent of poverty level | Hypertension ${ }^{2,3}$ (systolic pressure of at least 140 mm Hg or diastolic pressure of at least 90 mm Hg or taking antihypertensive medication) |  |  |  | Uncontrolled high blood pressure (systolic pressure of at least 140 mm Hg or diastolic pressure of at least 90 mm Hg ) among persons with hypertension ${ }^{4}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1988- \\ 1994 \end{gathered}$ | $\begin{gathered} 1999- \\ 2002 \end{gathered}$ | $\begin{gathered} 2009- \\ 2012 \end{gathered}$ | $\begin{gathered} 2013- \\ 2016 \end{gathered}$ | $\begin{gathered} 1988- \\ 1994 \end{gathered}$ | $\begin{gathered} 1999- \\ 2002 \end{gathered}$ | $\begin{gathered} 2009- \\ 2012 \end{gathered}$ | $\begin{gathered} 2013- \\ 2016 \end{gathered}$ |
| 20 years and over, age-adjusted ${ }^{5}$ | Percent of population |  |  |  |  |  |  |  |
| Both sexes ${ }^{6}$ | 25.5 | 30.0 | 30.0 | 30.5 | 77.2 | 70.6 | 55.1 | 55.4 |
| Male | 26.4 | 28.8 | 30.6 | 31.5 | 83.2 | 73.3 | 62.0 | 60.9 |
| Female | 24.4 | 30.6 | 29.3 | 29.3 | 68.5 | 61.8 | 44.7 | 46.7 |
| Not Hispanic or Latino: |  |  |  |  |  |  |  |  |
| White only | 24.4 | 28.3 | 28.6 | 29.2 | 76.6 | 69.1 | 52.4 | 51.9 |
| White only, male | 25.6 | 27.6 | 29.6 | 31.1 | 82.6 | 70.3 | 58.7 | 57.5 |
| White only, female | 23.0 | 28.5 | 27.5 | 27.0 | 67.0 | 63.6 | 42.8 | 37.1 |
| Black or African American only | 38.1 | 42.3 | 43.4 | 42.4 | 77.5 | 71.5 | 56.8 | 61.2 |
| Black or African American only, male | 37.5 | 40.6 | 42.5 | 41.8 | 84.0 | 74.3 | 68.9 | 65.3 |
| Black or African American only, female | 38.3 | 43.5 | 44.2 | 42.9 | 71.1 | 67.2 | 46.8 | 57.7 |
| Asian only | -- | -- | --- | 27.0 | --- | --- | -- | 68.8 |
| Asian only, male | --- | --- | --- | 30.2 | --- | --- | --- | 73.5 |
| Asian only, female | --- | --- |  | 24.4 | --- | --- | --- | 61.3 |
| Hispanic or Latino | --- | --- | 28.1 | 29.0 | --- | --- | 61.5 | 59.7 |
| Hispanic or Latino, male | --- | --- | 28.3 | 27.9 | --- | --- | 71.2 | 69.3 |
| Hispanic or Latina, female | --- | --- | 27.6 | 29.8 | --- | --- | 43.1 | 45.6 |
| Mexican origin | 26.1 | 27.6 | 28.3 | 29.1 | 85.7 | 84.1 | 66.7 | 60.8 |
| Mexican origin, male | 26.9 | 26.8 | 27.3 | 27.9 | 87.9 | 89.5 | 76.4 | 69.6 |
| Mexican origin, female | 25.0 | 27.9 | 29.3 | 30.1 | 77.6 | 71.5 | 47.1 | 44.8 |
| Percent of poverty level: ${ }^{7}$ |  |  |  |  |  |  |  |  |
| Below 100\% | 31.7 | 33.9 | 33.4 | 35.2 | 75.0 | 71.2 | 56.3 | 55.4 |
| 100\%-199\% | 26.6 | 33.5 | 33.1 | 33.7 | 76.0 | 73.4 | 57.6 | 59.0 |
| 200\%-399\% | 24.7 | 30.2 | 30.6 | 30.9 | 76.2 | 67.8 | 51.5 | 53.8 |
| 400\% or more | 22.6 | 26.4 | 27.3 | 26.7 | 81.5 | 70.3 | 60.2 | 52.7 |

Table 22. Hypertension among adults aged 20 and over, by selected characteristics: United States, selected years 1988-1994 through 2013-2016
Excel version (with more data years and standard errors when available): https://www.cdc.gov/nchs/hus/contents2018.htm\#Table_022.
[Data are based on interviews and physical examinations of a sample of the civilian noninstitutionalized population]

| Sex, age, race and Hispanic origin, ${ }^{1}$ and percent of poverty level | Hypertension ${ }^{2,3}$ (systolic pressure of at least 140 mm Hg or diastolic pressure of at least 90 mm Hg or taking antihypertensive medication) |  |  |  | Uncontrolled high blood pressure (systolic pressure of at least 140 mm Hg or diastolic pressure of at least 90 mm Hg ) among persons with hypertension ${ }^{4}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1988- \\ 1994 \end{gathered}$ | $\begin{gathered} 1999- \\ 2002 \end{gathered}$ | $\begin{gathered} 2009- \\ 2012 \end{gathered}$ | $\begin{gathered} 2013- \\ 2016 \end{gathered}$ | $\begin{gathered} 1988- \\ 1994 \end{gathered}$ | $\begin{gathered} 1999- \\ 2002 \end{gathered}$ | $\begin{gathered} 2009- \\ 2012 \end{gathered}$ | $\begin{gathered} 2013- \\ 2016 \end{gathered}$ |
| 20 years and over, crude | Percent of population |  |  |  |  |  |  |  |
| Both sexes ${ }^{6}$ | 24.1 | 30.2 | 32.2 | 33.4 | 73.9 | 67.3 | 47.4 | 48.8 |
| Male | 23.8 | 27.6 | 31.6 | 33.1 | 79.3 | 67.1 | 50.7 | 52.0 |
| Female | 24.4 | 32.7 | 32.8 | 33.6 | 68.8 | 67.4 | 44.2 | 45.9 |
| Not Hispanic or Latino: |  |  |  |  |  |  |  |  |
| White only | 24.4 | 30.6 | 33.4 | 34.7 | 72.7 | 65.5 | 44.8 | 45.8 |
| White only, male | 24.3 | 28.3 | 33.1 | 35.1 | 78.0 | 64.0 | 47.2 | 48.4 |
| White only, female | 24.6 | 32.8 | 33.7 | 34.3 | 67.8 | 66.9 | 42.6 | 43.3 |
| Black or African American only | 31.8 | 39.1 | 42.4 | 42.4 | 75.9 | 69.1 | 52.1 | 54.7 |
| Black or African American only, male | 31.1 | 35.9 | 39.9 | 40.5 | 83.3 | 71.3 | 60.5 | 58.8 |
| Black or African American only, female | 32.5 | 41.9 | 44.5 | 44.0 | 70.0 | 67.5 | 45.8 | 51.4 |
| Asian only | -- | -- | --- | 25.9 | --- | --- | -- | 60.2 |
| Asian only, male | --- | --- | --- | 27.8 | --- | --- | --- | 64.5 |
| Asian only, female | --- | --- | --- | 24.2 | --- | --- | --- | 55.9 |
| Hispanic or Latino | --- | -- - | 21.2 | 23.5 | --- | --- | 56.9 | 54.3 |
| Hispanic or Latino, male |  | --- | 20.3 | 21.9 | --- | --- | 62.6 | 59.7 |
| Hispanic or Latina, female | --- | --- | 22.2 | 25.2 | --- | --- | 51.1 | 49.5 |
| Mexican origin | 16.2 | 17.5 | 20.4 | 23.4 | 83.8 | 80.9 | 61.6 | 55.5 |
| Mexican origin, male | 16.4 | 16.5 | 19.1 | 22.3 | 86.5 | 86.9 | 69.8 | 62.2 |
| Mexican origin, female | 15.9 | 18.8 | 22.0 | 24.6 | 80.6 | 74.5 | 52.8 | 48.9 |
| Percent of poverty level: ${ }^{7}$ |  |  |  |  |  |  |  |  |
| Below 100\% | 25.7 | 30.3 | 27.3 | 32.4 | 74.0 | 71.3 | 54.8 | 50.7 |
| 100\%-199\% | 26.7 | 34.8 | 35.3 | 36.6 | 75.1 | 70.7 | 49.8 | 50.1 |
| 200\%-399\% | 22.4 | 29.9 | 33.4 | 33.5 | 73.4 | 64.4 | 45.7 | 47.5 |
| 400\% or more | 22.0 | 26.8 | 31.5 | 31.0 | 74.3 | 63.8 | 43.1 | 46.4 |

Table 22. Hypertension among adults aged 20 and over, by selected characteristics: United States, selected years 1988-1994 through 2013-2016
Excel version (with more data years and standard errors when available): https://www.cdc.gov/nchs/hus/contents2018.htm\#Table_022. [Data are based on interviews and physical examinations of a sample of the civilian noninstitutionalized population]

| Sex, age, race and Hispanic origin, ${ }^{1}$ and percent of poverty level | Hypertension ${ }^{2,3}$ (systolic pressure of at least 140 mm Hg or diastolic pressure of at least 90 mm Hg and/or taking antihypertensive medication) |  |  |  | Uncontrolled high blood pressure (systolic pressure of at least 140 mm Hg or diastolic pressure of at least 90 mm Hg ) among persons with hypertension ${ }^{4}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1988- \\ 1994 \end{gathered}$ | $\begin{gathered} 1999- \\ 2002 \end{gathered}$ | $\begin{gathered} 2009- \\ 2012 \end{gathered}$ | $\begin{gathered} 2013- \\ 2016 \end{gathered}$ | $\begin{gathered} 1988- \\ 1994 \end{gathered}$ | $\begin{gathered} 1999- \\ 2002 \end{gathered}$ | $\begin{gathered} 2009- \\ 2012 \end{gathered}$ | $\begin{gathered} 2013- \\ 2016 \end{gathered}$ |
| Male | Percent of population |  |  |  |  |  |  |  |
| 20-44 years | 10.9 | 12.1 | 11.2 | 12.8 | 90.5 | 79.7 | 70.3 | 70.0 |
| 20-34 years | 7.1 | *8.1 | 5.8 | 7.7 | 92.6 | 89.9 | 88.4 | 76.2 |
| 35-44 years | 17.1 | 17.1 | 19.1 | 21.6 | 89.0 | 73.3 | 62.0 | 66.2 |
| 45-64 years | 34.2 | 36.4 | 42.2 | 43.7 | 73.1 | 61.4 | 50.2 | 49.6 |
| 45-54 years | 29.2 | 31.0 | 33.6 | 35.8 | 76.2 | 66.4 | 47.7 | 55.4 |
| 55-64 years | 40.6 | 45.0 | 51.9 | 52.2 | 70.3 | 55.9 | 52.0 | 45.3 |
| 65-74 years | 54.4 | 59.6 | 61.7 | 61.1 | 74.3 | 59.1 | 36.9 | 43.1 |
| 75 years and over | 60.4 | 69.0 | 75.1 | 67.4 | 82.5 | 74.3 | 48.9 | 50.3 |
| Female |  |  |  |  |  |  |  |  |
| 20-44 years | 6.5 | 8.3 | 8.7 | 9.4 | 63.4 | 58.3 | 46.5 | 39.4 |
| 20-34 years | 2.9 | *2.7 | 3.9 | 3.5 | 82.2 | 56.9 | 49.0 | * |
| 35-44 years | 11.2 | 15.1 | 15.5 | 17.7 | 56.8 | 58.6 | 45.5 | 34.5 |
| 45-64 years | 32.8 | 40.0 | 39.5 | 38.8 | 62.1 | 60.5 | 36.5 | 39.3 |
| 45-54 years | 23.9 | 31.8 | 29.5 | 27.6 | 58.5 | 61.1 | 36.2 | 45.2 |
| 55-64 years | 42.6 | 53.9 | 51.0 | 51.2 | 64.3 | 60.0 | 36.8 | 35.8 |
| 65-74 years | 56.2 | 72.7 | 66.7 | 67.4 | 68.7 | 73.5 | 45.4 | 46.3 |
| 75 years and over | 73.6 | 83.1 | 79.3 | 78.7 | 81.9 | 78.1 | 57.8 | 62.0 |

-     -         - Data not available.
* Estimates are considered unreliable. Starting with 2013-2016 data, the reliability of survey percentage estimates was assessed using new multistep National Center for Health Statistics data presentation standards for proportions. Prior to 2013-2016 data, the reliability of estimates was evaluated based on relative standard errors (RSE). Data preceded by an asterisk have an RSE of $20 \%-30 \%$. Data not shown have an RSE greater than $30 \%$. For more information, see Appendix II, Data presentation standards for proportions; Relative standard error (RSE).
${ }^{1}$ Persons of Hispanic and Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race, or if they reported more than one race, identified one race as best representing their race. See Appendix II, Hispanic origin; Race.
${ }^{2}$ Hypertension is defined as having measured high blood pressure or taking antihypertensive medication. High blood pressure is defined as having measured systolic pressure of at least 140 mm Hg or diastolic pressure of at least 90 mm Hg . Those with high blood pressure also may be taking prescribed medicine for high blood pressure. Those taking antihypertensive medication may not have measured high blood pressure but are still classified as having hypertension. Pregnant women were excluded. In 2017, a revised set of practice guidelines for defining high blood pressure was released but has not been widely adopted. Therefore, the high blood pressure cutoffs used to define hypertension and uncontrolled high blood pressure in Health, United States continue to use the original definition of $140 \mathrm{~mm} \mathrm{Hg} / 90 \mathrm{~mm} \mathrm{Hg}$. For more information, including a comparison of high blood pressure estimates based on the current and revised definitions, see Appendix II, Hypertension; Table VI.
${ }^{3}$ Respondents were asked, "Are you now taking prescribed medicine for your high blood pressure?"
${ }^{4}$ Uncontrolled high blood pressure among persons with hypertension is defined as having measured high blood pressure among those with measured high blood pressure or reporting taking antihypertensive medication. High blood pressure is defined as having measured systolic pressure of at least 140 mm Hg or diastolic pressure of at least 90 mm Hg. Pregnant women were excluded. In 2017, a revised set of practice guidelines for defining high blood pressure was released but has not been widely adopted. Therefore, the high blood pressure cutoffs used to define hypertension and uncontrolled high blood pressure in Health, United States continue to use the original definition of $140 \mathrm{~mm} \mathrm{Hg} / 90 \mathrm{~mm} \mathrm{Hg}$. For more information, including a comparison of high blood pressure estimates based on the current and revised definitions, see Appendix II, Hypertension; Table VI.
${ }^{5}$ Estimates are age-adjusted to the year 2000 standard population using five age groups: 20-34 years, $35-44$ years, $45-54$ years, $55-64$ years, and 65 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See Appendix II, Age adjustment.
${ }^{6}$ Includes persons of all races and Hispanic origins, not just those shown separately
${ }^{7}$ Percent of poverty level was calculated by dividing family income by the U.S. Department of Health and Human Services' poverty guideline specific to family size, as well as the appropriate year, and state. Persons with unknown percent of poverty level are excluded ( $7 \%$ in 2013-2016). See Appendix II, Family income; Poverty.
NOTES: Percentages are based on the average of blood pressure measurements taken. In 2013-2016, 87\% of participants had three systolic or diastolic blood pressure readings. Estimates exclude pregnant women. Standard errors are available in the spreadsheet version of this table. Data for additional years are available. See the Excel spreadsheet on the Health, United States website at: https://www.cdc.gov/nchs/hus.htm

SOURCE: NCHS, National Health and Nutrition Examination Survey. See Appendix I, National Health and Nutrition Examination Survey (NHANES).

