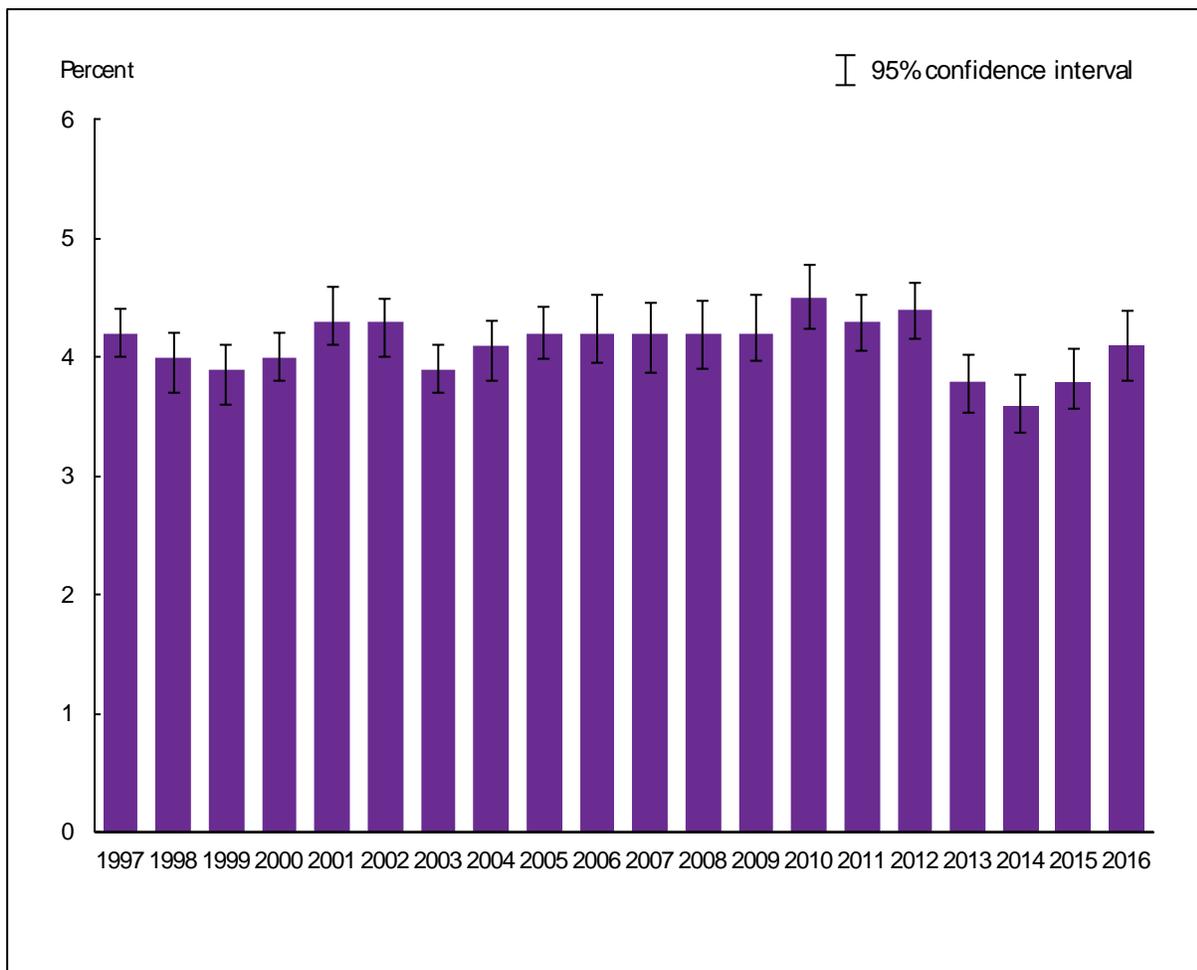


Asthma

Figure 15.1. Percentage of persons of all ages who experienced an asthma episode in the past 12 months: United States, 1997–2016

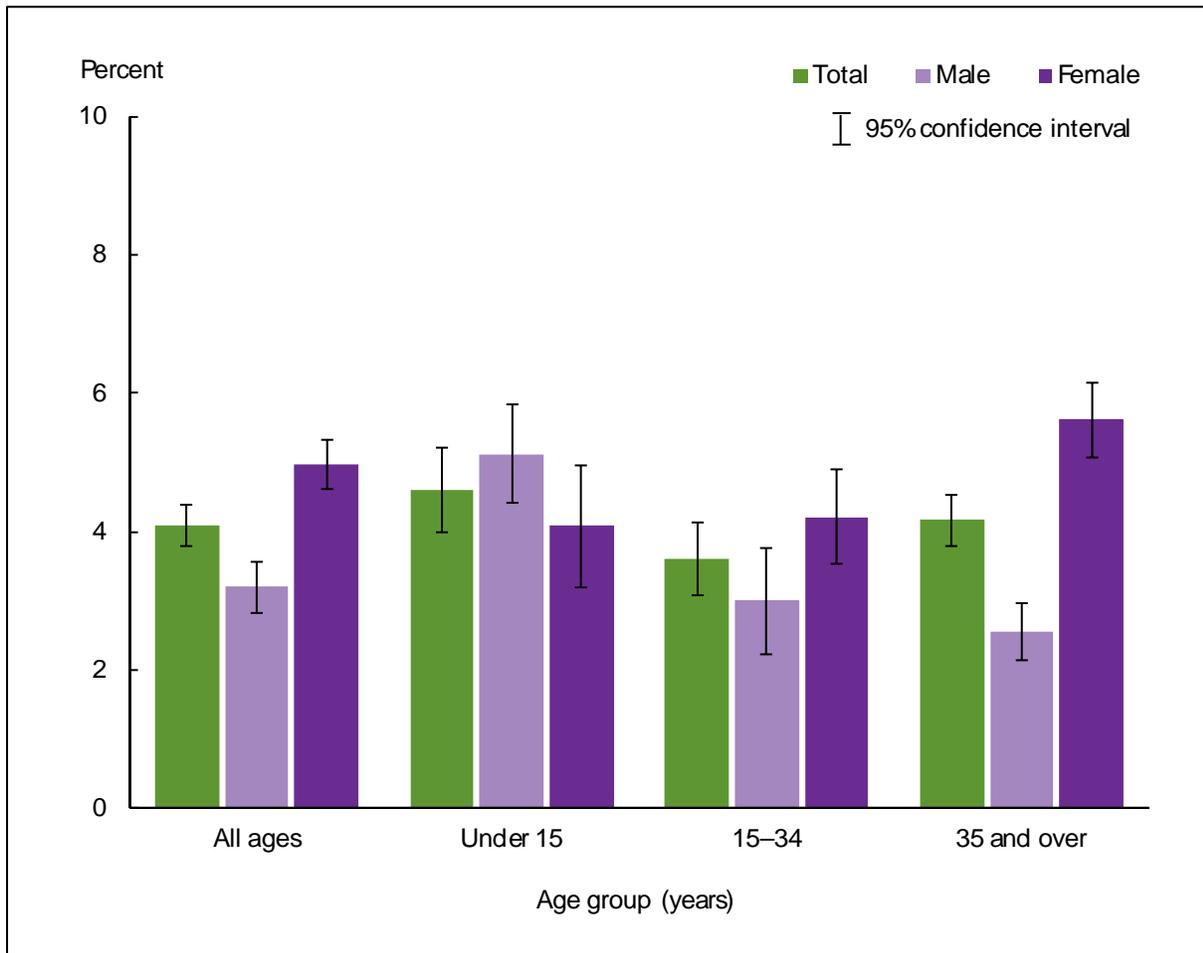


NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Information on an episode of asthma or asthma attack during the past 12 months is self-reported by adults aged 18 and over. For children under age 18 years, the information is collected from an adult family member, usually a parent, who is knowledgeable about the child's health. The analyses exclude people with unknown asthma episode status (about 0.1% of respondents each year). See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 1997–2016, combined Sample Adult and Sample Child Core components.

- For 2016, the percentage of persons of all ages who experienced an asthma episode in the past 12 months was 4.1% (95% confidence interval = 3.80%–4.39%), which was not significantly different from the 2015 estimate of 3.8%.
- From 1997–2016, no clear trend was observed in the percentage of persons of all ages who experienced an asthma episode in the past 12 months.

Figure 15.2. Percentage of persons of all ages who experienced an asthma episode in the past 12 months, by age group and sex: United States, 2016

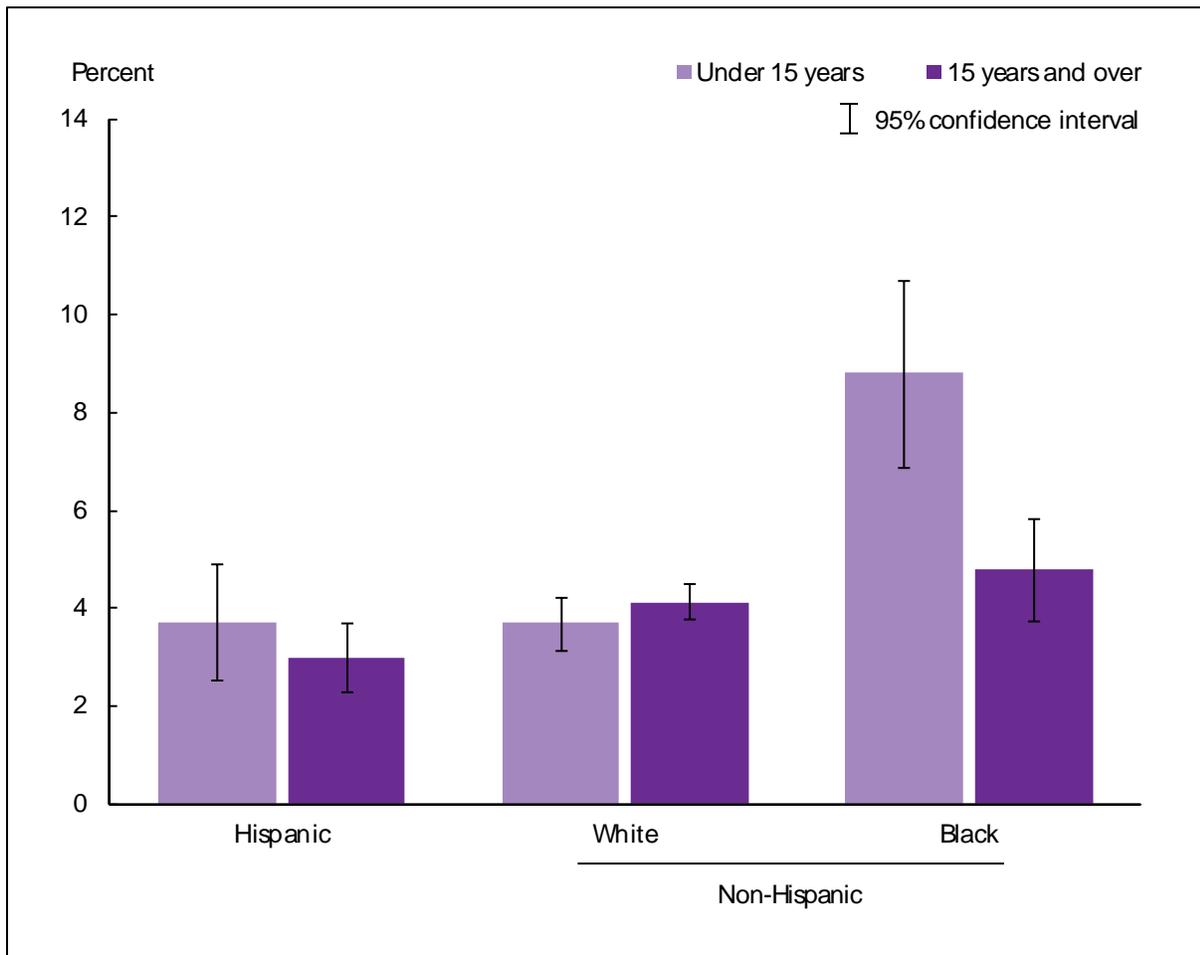


NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Information on an episode of asthma or asthma attack during the past 12 months is self-reported by adults aged 18 and over. For children under age 18 years, the information is collected from an adult family member, usually a parent, who is knowledgeable about the child's health. The analyses exclude the 0.1% of persons with unknown asthma episode status. See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 2016, combined Sample Adult and Sample Child Core components.

- For males, the percentage of persons who had an asthma episode in the past 12 months was higher among children under age 15 years (5.1%) than among persons aged 15-34 (3.0%) and 35 and over (2.6%).
- For females, the percentage of persons who had an asthma episode in the past 12 months was lower among children under age 15 years (4.1%) and those aged 15-34 (4.2%) than among persons aged 35 and over (5.6%).
- For persons of all ages and those 15-34, and 35 and over, the percentage of persons who had an asthma episode in the past 12 months was higher among females than among males. For children under age 15 years, the percentage of boys who had an asthma episode in the past 12 months was higher than, but not significantly different from, the percentage of girls who had an asthma episode in the past 12 months.

Figure 15.3. Sex-adjusted percentage of persons of all ages who experienced an asthma episode in the past 12 months, by age group and race and ethnicity: United States, 2016

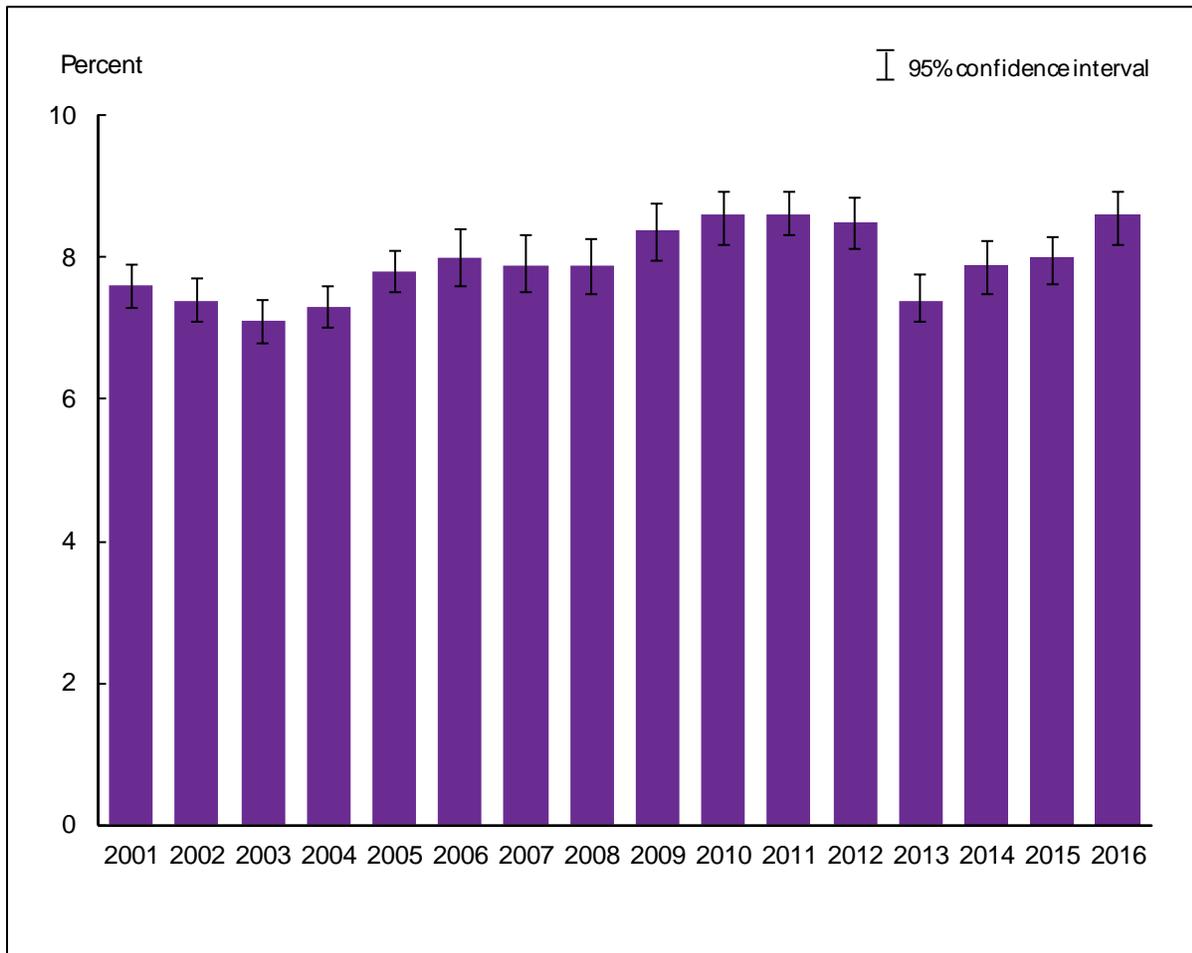


NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Information on an episode of asthma or asthma attack during the past 12 months is self-reported by adults aged 18 and over. For children under age 18 years, the information is collected from an adult family member, usually a parent, who is knowledgeable about the child's health. The analyses exclude the less than 0.1% of persons with unknown asthma episode status. Additional estimates of asthma episodes in the past 12 months among persons with current asthma are provided in the Data table for Figure 15.3. See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 2016, combined Sample Adult and Sample Child Core components.

- For children under age 15 years, the sex-adjusted percentage by race and ethnicity who had an asthma episode in the past 12 months was 3.7% for Hispanic children, 3.7% for non-Hispanic white children, and 8.8% for non-Hispanic black children.
- For persons aged 15 and over, the sex-adjusted percentage who had an asthma episode in the past 12 months was 3.0% for Hispanic persons, 4.1% for non-Hispanic white persons, and 4.8% for non-Hispanic black persons.
- After adjustment for sex, non-Hispanic black children under age 15 were more than twice as likely as Hispanic children and non-Hispanic white children to have had an asthma episode in the past 12 months.
- After adjustment for sex, Hispanic persons aged 15 and over were less likely to have had an asthma episode in the past 12 months compared with non-Hispanic black persons and non-Hispanic white persons aged 15 and over.

Figure 15.4. Prevalence of current asthma among persons of all ages: United States, 2001–2016

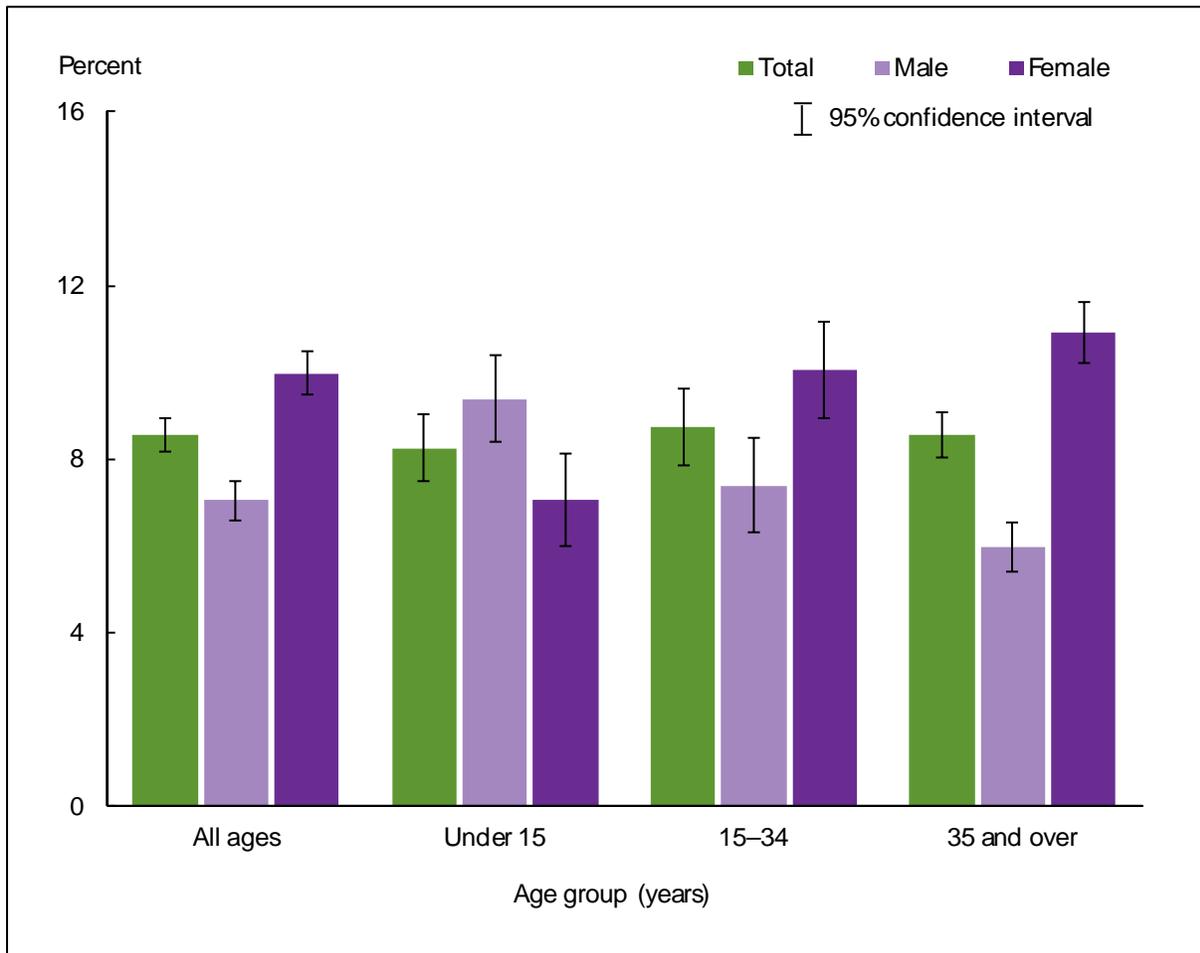


NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Beginning in 2001, respondents were asked about current asthma in addition to the question regarding asthma episodes. Information on current asthma is self-reported by adults aged 18 and over. For children under age 18 years, the information is collected from an adult family member, usually a parent, who is knowledgeable about the child's health. The analyses exclude persons with unknown current asthma status (about 0.2% of respondents each year). See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 2001–2016, combined Sample Adult and Sample Child Core components.

- For 2016, 8.6% (95% confidence interval = 8.17%–8.94%) of persons of all ages currently had asthma. This was higher than the 2015 estimate of 8.0%.
- The prevalence of current asthma decreased, from 7.6% in 2001 to 7.1% in 2003, and then increased to 8.6% in 2010. There was no significant difference in the prevalence of current asthma from 2010 to 2012.
- The prevalence of current asthma decreased, from 8.5% in 2012 to 7.4% in 2013, and then increased to 8.6% in 2016.

Figure 15.5. Prevalence of current asthma among persons of all ages, by age group and sex: United States, 2016

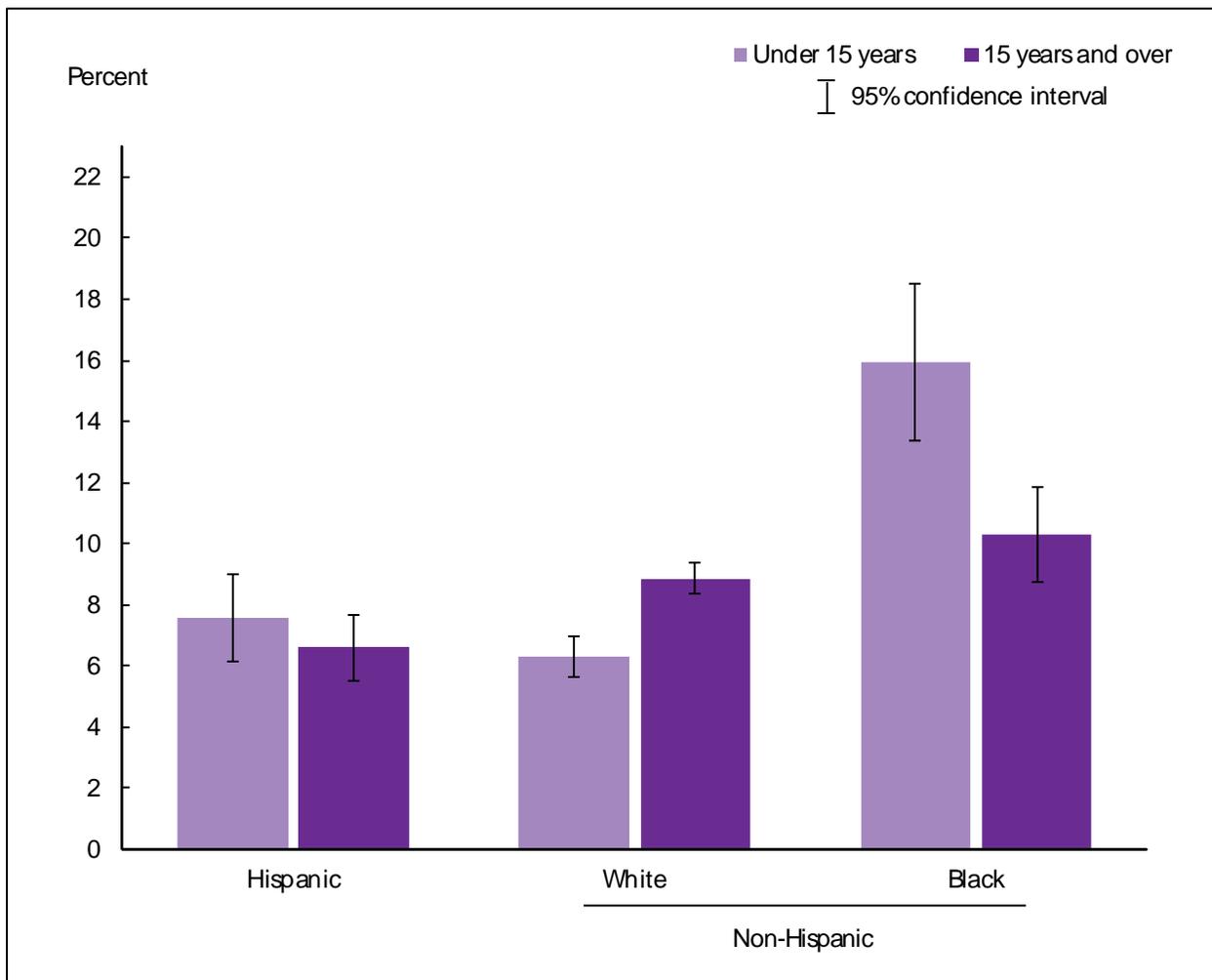


NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Information on current asthma is self-reported by adults aged 18 and over. For children under age 18 years, the information is collected from an adult family member, usually a parent, who is knowledgeable about the child's health. The analyses exclude the 0.2% of persons with unknown current asthma status. See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 2016, combined Sample Adult and Sample Child Core components.

- For males, those under age 15 years (9.4%) were more likely to currently have asthma compared with males aged 15-34 (7.4%) and 35 and over (6.0%).
- For females, those under age 15 years (7.1%) were less likely to currently have asthma compared with females aged 15-34 (10.1%) and those 35 and over (10.9%).
- For persons of all ages, and for persons aged 15-34 and 35 and over, the prevalence of current asthma was higher among females than males. For children under age 15, the prevalence of current asthma was higher among boys than girls.

Figure 15.6. Sex-adjusted prevalence of current asthma among persons of all ages, by age group and race and ethnicity: United States, 2016



NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Information on current asthma is self-reported by adults aged 18 and over. For children under age 18 years, the information is collected from an adult family member, usually a parent, who is knowledgeable about the child's health. The analyses exclude the 0.2% of persons with unknown current asthma status. See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 2016, combined Sample Adult and Sample Child Core components.

- For children under age 15 years, the sex-adjusted prevalence of current asthma was higher among non-Hispanic black children (15.9%) compared with Hispanic children (7.6%) and non-Hispanic white children (6.3%). For Hispanic children the sex-adjusted prevalence of current asthma was higher than, but not significantly different from, the sex-adjusted prevalence among non-Hispanic white children.
- For persons aged 15 and over, the sex-adjusted prevalence of current asthma was lower among Hispanic persons (6.6%) compared with non-Hispanic white persons (8.9%) and non-Hispanic black persons (10.3%).

Data tables for Figures 15.1–15.6:

Data table for Figure 15.1. Percentage of persons of all ages who experienced an asthma episode in the past 12 months: United States, 1997–2016

| Year | Crude ¹ percent (95% confidence interval) | Age-adjusted ² percent (95% confidence interval) |
|------|--|---|
| 1997 | 4.2 (4.0–4.4) | 4.2 (3.9–4.4) |
| 1998 | 4.0 (3.7–4.2) | 3.9 (3.7–4.2) |
| 1999 | 3.9 (3.6–4.1) | 3.9 (3.6–4.1) |
| 2000 | 4.0 (3.8–4.2) | 4.0 (3.8–4.2) |
| 2001 | 4.3 (4.1–4.6) | 4.3 (4.1–4.5) |
| 2002 | 4.3 (4.0–4.5) | 4.3 (4.0–4.5) |
| 2003 | 3.9 (3.7–4.1) | 3.9 (3.7–4.1) |
| 2004 | 4.1 (3.8–4.3) | 4.1 (3.8–4.3) |
| 2005 | 4.2 (3.99–4.43) | 4.2 (4.00–4.44) |
| 2006 | 4.2 (3.96–4.52) | 4.3 (3.98–4.54) |
| 2007 | 4.2 (3.87–4.46) | 4.2 (3.88–4.47) |
| 2008 | 4.2 (3.91–4.48) | 4.2 (3.93–4.50) |
| 2009 | 4.2 (3.97–4.52) | 4.3 (3.99–4.54) |
| 2010 | 4.5 (4.24–4.77) | 4.5 (4.25–4.78) |
| 2011 | 4.3 (4.06–4.52) | 4.3 (4.08–4.54) |
| 2012 | 4.4 (4.15–4.63) | 4.4 (4.17–4.65) |
| 2013 | 3.8 (3.53–4.02) | 3.8 (3.55–4.04) |
| 2014 | 3.6 (3.36–3.85) | 3.6 (3.37–3.88) |
| 2015 | 3.8 (3.57–4.07) | 3.8 (3.58–4.08) |
| 2016 | 4.1 (3.80–4.39) | 4.1 (3.81–4.40) |

¹Crude estimates are presented.

²Estimates are age-adjusted using the projected 2000 U.S. population as the standard population and three age groups: 0–14, 15–34, and 35 and over.

NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Beginning with 2012 data, the National Health Interview Survey transitioned to weights derived from the 2010 census. For 2003–2011 data, weights were derived from the 2000 census. In this Early Release, estimates for 2000–2002 were recalculated using weights derived from the 2000 census. For 1997–1999 data, weights were derived from the 1990 census. See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 1997–2016, combined Sample Adult and Sample Child Core components.

Data table for Figure 15.2. Percentage of persons of all ages who experienced an asthma episode in the past 12 months, by age group and sex: United States, 2016

| Age (years) and sex | Percent | 95% confidence interval |
|---|---------|-------------------------|
| Under 15, total | 4.6 | 3.99–5.22 |
| Under 15, male | 5.1 | 4.41–5.83 |
| Under 15, female | 4.1 | 3.19–4.96 |
| 15–34 , total | 3.6 | 3.08–4.12 |
| 15–34 , male | 3.0 | 2.21–3.77 |
| 15–34 , female | 4.2 | 3.53–4.89 |
| 35 and over, total | 4.2 | 3.80–4.53 |
| 35 and over, male | 2.6 | 2.15–2.97 |
| 35 and over, female | 5.6 | 5.08–6.16 |
| All ages (crude ¹), total | 4.1 | 3.80–4.39 |
| All ages (crude ¹), male | 3.2 | 2.82–3.57 |
| All ages (crude ¹), female | 5.0 | 4.61–5.31 |
| All ages (age-adjusted ²), total | 4.1 | 3.81–4.40 |
| All ages (age-adjusted ²), male | 3.2 | 2.86–3.60 |
| All ages (age-adjusted ²), female | 4.9 | 4.55–5.25 |

¹Crude estimates are presented.

²Estimates are age-adjusted using the projected 2000 U.S. population as the standard population and three age groups: 0–14, 15–34, and 35 and over.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

DATA SOURCE: NCHS, National Health Interview Survey, 2016, combined Sample Adult and Sample Child Core components.

Data table for Figure 15.3. Sex-adjusted percentage of persons of all ages who experienced an asthma episode in the past 12 months, by age group and race and ethnicity: United States, 2016

| Age (years) and race and ethnicity | All persons | All persons with current asthma |
|---|---|---------------------------------|
| | Sex-adjusted percent ¹ (95% confidence interval) | |
| Under 15, Hispanic or Latino | 3.7 (2.50–4.91) | 48.0 (35.24–60.66) |
| Under 15, not Hispanic or Latino, single race, white | 3.7 (3.11–4.22) | 58.4 (50.87–65.91) |
| Under 15, not Hispanic or Latino, single race, black | 8.8 (6.86–10.77) | 55.3 (47.67–62.93) |
| 15 and over, Hispanic or Latino | 3.0 (2.26–3.67) | 44.1 (34.59–53.70) |
| 15 and over, not Hispanic or Latino, single race, white | 4.1 (3.77–4.50) | 45.7 (42.42–49.07) |
| 15 and over, not Hispanic or Latino, single race, black | 4.8 (3.73–5.82) | 46.0 (39.55–52.51) |

¹Estimates for all persons are presented. Estimates are sex-adjusted using the projected 2000 U.S. population as the standard population.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

DATA SOURCE: NCHS, National Health Interview Survey, 2016, combined Sample Adult and Sample Child Core components.

Data table for Figure 15.4. Prevalence of current asthma among persons of all ages: United States, 2001–2016

| Year | Crude ¹ percent (95% confidence interval) | Age-adjusted ² percent (95% confidence interval) |
|------|--|---|
| 2001 | 7.6 (7.3–7.9) | 7.6 (7.3–7.9) |
| 2002 | 7.4 (7.1–7.7) | 7.4 (7.1–7.7) |
| 2003 | 7.1 (6.8–7.4) | 7.1 (6.8–7.4) |
| 2004 | 7.3 (7.0–7.6) | 7.3 (7.1–7.7) |
| 2005 | 7.8 (7.50–8.10) | 7.8 (7.51–8.11) |
| 2006 | 8.0 (7.61–8.41) | 8.0 (7.62–8.43) |
| 2007 | 7.9 (7.50–8.31) | 7.9 (7.51–8.33) |
| 2008 | 7.9 (7.48–8.27) | 7.9 (7.51–8.30) |
| 2009 | 8.4 (7.97–8.76) | 8.4 (7.99–8.78) |
| 2010 | 8.6 (8.19–8.94) | 8.6 (8.20–8.95) |
| 2011 | 8.6 (8.31–8.93) | 8.6 (8.32–8.95) |
| 2012 | 8.5 (8.12–8.86) | 8.5 (8.15–8.88) |
| 2013 | 7.4 (7.09–7.76) | 7.4 (7.11–7.77) |
| 2014 | 7.9 (7.49–8.24) | 7.9 (7.52–8.27) |
| 2015 | 8.0 (7.62–8.30) | 8.0 (7.63–8.32) |
| 2016 | 8.6 (8.17–8.94) | 8.5 (8.17–8.93) |

¹Crude estimates are presented.

²Estimates are age-adjusted using the projected 2000 U.S. population as the standard population and three age groups: 0–14, 15–34, and 35 and over.

NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Beginning with 2012 data, the National Health Interview Survey transitioned to weights derived from the 2010 census. For 2003–2011 data, weights were derived from the 2000 census. In this Early Release, estimates for 2000–2002 were recalculated using weights derived from the 2000 census. For 1997–1999 data, weights were derived from the 1990 census. See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 2001–2016, combined Sample Adult and Sample Child Core components.

Data table for Figure 15.5. Prevalence of current asthma among persons of all ages, by age group and sex: United States, 2016

| Age (years) and sex | Percent | 95% confidence interval |
|---|---------|-------------------------|
| Under 15, total | 8.3 | 7.49–9.03 |
| Under 15, male | 9.4 | 8.39–10.40 |
| Under 15, female | 7.1 | 6.02–8.14 |
| 15–34 , total | 8.7 | 7.86–9.61 |
| 15–34 , male | 7.4 | 6.33–8.48 |
| 15–34 , female | 10.1 | 8.97–11.18 |
| 35 and over, total | 8.6 | 8.05–9.09 |
| 35 and over, male | 6.0 | 5.40–6.56 |
| 35 and over, female | 10.9 | 10.21–11.62 |
| All ages (crude ¹), total | 8.6 | 8.17–8.94 |
| All ages (crude ¹), male | 7.1 | 6.61–7.50 |
| All ages (crude ¹), female | 10.0 | 9.50–10.47 |
| All ages (age-adjusted ²), total | 8.5 | 8.17–8.93 |
| All ages (age-adjusted ²), male | 7.1 | 6.66–7.55 |
| All ages (age-adjusted ²), female | 9.9 | 9.39–10.34 |

¹Crude estimates are presented.

²Estimates are age-adjusted using the projected 2000 U.S. population as the standard population and three age groups: 0–14, 15–34, and 35 and over.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

DATA SOURCE: NCHS, National Health Interview Survey, 2016, combined Sample Adult and Sample Child Core components.

Data table for Figure 15.6. Sex-adjusted prevalence of current asthma among persons of all ages, by age group and race and ethnicity: United States, 2016

| Age (years) and race and ethnicity | Percent ¹ | 95% confidence interval |
|---|----------------------|-------------------------|
| Under 15, Hispanic or Latino | 7.6 | 6.12–9.00 |
| Under 15, not Hispanic or Latino, single race, white | 6.3 | 5.62–6.97 |
| Under 15, not Hispanic or Latino, single race, black | 15.9 | 13.37–18.48 |
| 15 and over, Hispanic or Latino | 6.6 | 5.54–7.67 |
| 15 and over, not Hispanic or Latino, single race, white | 8.9 | 8.36–9.37 |
| 15 and over, not Hispanic or Latino, single race, black | 10.3 | 8.76–11.86 |

¹Estimates are sex-adjusted using the projected 2000 U.S. population as the standard population.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

DATA SOURCE: NCHS, National Health Interview Survey, 2016, combined Sample Adult and Sample Child Core components.