

Overview

- An estimated 30,000² children in grades 6 through 12, or 10.4% of middle and high school students, in Connecticut reported having an episode of asthma or asthma attack in the past 12 months. The prevalence of asthma episodes or attacks is significantly higher among females (12.7%) than among males (8.1%)—*Table 1*.
- Each year in Connecticut, about 1,200 children under the age of 18 years are hospitalized and 8,000 visit the emergency department for asthma-related problems.³
- For students overall, between 2011 and 2015, the prevalence of having an asthma attack or episode decreased from 11.6% to 10.4%, and a significant decrease occurred among students in grade 9 (14.9% to 9.5%)⁴—*Table 1*.

2015 Connecticut Estimates

Percentage of middle and high school students who reported an episode of asthma or asthma attack in the past 12 months: (*Table 1*)

Overall

- 10.4% of students
- Represents about 30,000 middle and high school-aged youth

By Sex

- 8.1% of males
- 12.7% of females

By Race/Ethnicity

- 10.6% of non-Hispanic whites
- 12.4% of non-Hispanic blacks
- 10.2% of Hispanics
- 5.4% of non-Hispanic Asians

Key Points:

- Approximately 1 in 10 CT middle and high school students reported an episode of asthma or asthma attack in the past year.
- Females are significantly more likely than males to have suffered an episode of asthma or asthma attack.
- Among middle and high school students, by race/ethnicity, the prevalence of asthma episodes or attacks is significantly lower among non-Hispanic Asians.
- Data suggest that exposure to secondhand smoke significantly increases the prevalence of asthma episodes or attacks among students.



By Grade

- 8.8% in grade 6
- 11.3% in grade 7
- 12.4% in grade 8
- 9.5% in grade 9
- 9.3% in grade 10
- 11.5% in grade 11
- 9.3% in grade 12

- By race/ethnicity, non-Hispanic Asian (5.4%) students were significantly less likely than non-Hispanic white (10.6%), non-Hispanic black (12.4%), and Hispanic (10.2%) students to have reported having had an asthma episode or attack during the past 12 months.
- Current cigarette smokers (17.7%) were significantly more likely than never smokers (10.0%) to have reported having an episode of asthma or asthma attack in the past 12 months.
- Students with no recent exposure to secondhand smoke and who do not live with a smoker (7.5%) are significantly less likely than students recently exposed to secondhand smoke (12.8%) or who live with a cigarette smoker (11.8%) to have reported having an asthma episode or attack during the past year.

Table 1: Prevalence of Episodes of Asthma or Asthma Attacks in the Past 12 Months Among CT Middle and High School Students; 2011-2015

	2011		2013		2015	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Overall	11.6	(10.7-12.4)	10.5	(9.4-11.5)	10.4	(9.8-10.9)
Sex						
Male	10.0	(8.6-11.5)	8.7	(6.6-10.9)	8.1	(7.1-9.2)
Female	13.1	(11.7-14.4)	12.3	(10.1-14.8)	12.7	(11.6-13.8)
Grade						
6	11.2	(8.4-14.0)	8.7	(6.6-10.9)	8.8	(6.4-11.2)
7	10.2	(7.5-12.9)	12.4	(10.1-14.8)	11.3	(9.1-13.6)
8	12.1	(9.7-14.6)	10.1	(8.2-11.9)	12.4	(10.2-14.7)
9	14.9	(12.4-17.3)	11.0	(9.0-13.0)	9.5	(7.4-11.6)
10	9.7	(7.6-11.9)	11.0	(8.0-14.0)	9.3	(6.6-12.0)
11	12.7	(10.1-15.3)	10.8	(7.4-14.3)	11.5	(8.5-14.4)
12	9.9	(7.1-12.7)	9.2	(6.8-11.7)	9.3	(6.5-12.1)
Race/Ethnicity						
Non-Hispanic White	11.4	(10.2-12.6)	10.4	(9.1-11.6)	10.6	(9.6-11.6)
Non-Hispanic Black	12.7	(9.6-15.7)	10.3	(7.8-12.9)	12.4	(9.0-15.7)
Hispanic	11.9	(9.6-14.2)	12.0	(9.5-14.5)	10.2	(8.4-12.0)
Non-Hispanic Asian	—*	—	5.3	(2.7-8.0)	5.4	(3.2-7.6)
Non-Hispanic Other Race**	—*	—	—*	—	—*	—
Smoking Status[†]						
Never Cigarette Smoker	11.4	(10.1-12.7)	9.7	(8.6-10.7)	10.0	(9.3-10.7)
Ever Cigarette Smoker	12.3	(9.9-14.7)	13.1	(10.0-16.3)	13.0	(10.6-15.3)
Current Cigarette Smoker	12.4	(8.5-16.4)	14.8	(9.6-20.0)	17.7	(11.5-24.0)
Secondhand Smoke Exposure						
No SHS/No Smoker at Home [‡]	9.5	(8.1-10.8)	7.9	(6.6-9.2)	7.5	(6.3-8.6)
Exposed to SHS in Past 7 Days	13.4	(11.6-15.3)	12.8	(11.2-14.4)	12.8	(11.7-14.0)
Live with Cigarette Smoker	13.4	(12.1-14.8)	12.1	(9.8-14.3)	11.8	(10.4-13.1)

Data Source: 2011-2015 Connecticut Youth Tobacco Survey

[†]Estimate not presented because relative standard error >30%

**Other race includes native Hawaiian or other Pacific Islander

[‡]Never cigarette smoker is defined as having never smoked a cigarette, even one or two puffs; ever cigarette smoker is having smoked cigarettes during their life, even one or two puffs; current cigarette smoker is having smoked cigarettes on 1 or more of the past 30 days.

[‡]No secondhand smoke exposure in the past 7 days and do not live with a cigarette smoker

- Recent secondhand tobacco smoke exposure is defined as exposure to tobacco smoke while at home, in a vehicle, at school, at a workplace, or at an indoor or outdoor public place during the past 7 days. In 2015, students who reported having an asthma episode or attack at some time in the past year were significantly more likely than their counterparts who did not have an episode or attack to have been recently exposed to secondhand tobacco smoke (59.7% vs. 46.8%). Especially in a vehicle (25.2% vs. 16.5%), at school (24.8% vs. 16.1%), or at an indoor or outdoor public place (49.5% vs. 34.7%)—Table 2.

Table 2:

Among students who had an asthma episode or attack in the past 12 months:

Year	Were Current Cigarette Smokers*		Had Some Type of Recent SHS Exposure		Had Recent SHS Exposure at Home		Had Recent SHS Exposure in a Vehicle		Had Recent SHS Exposure at School		Had Recent SHS Exposure at Work**		Had Recent SHS Exposure at an Indoor/Outdoor Public Place		Live with a Cigarette Smoker	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2015	6.1	(2.9-9.4)	59.7	(54.9-64.4)	20.3	(16.0-24.5)	25.2	(20.4-29.9)	24.8	(19.9-29.7)	39.9	(27.9-51.8)	49.5	(45.8-53.2)	26.6	(22.1-31.0)
2013	7.8	(5.0-10.5)	63.8	(59.4-68.2)	26.4	(20.8-31.9)	25.2	(19.5-31.0)	30.8	(26.4-35.2)	42.2	(34.7-57.7)	49.5	(44.9-54.1)	32.3	(26.2-38.4)
2011	10.1	(6.7-13.5)	65.5	(60.7-70.3)	23.9	(17.9-30.0)	35.4	(28.3-42.5)	21.2	(16.6-25.8)	46.1	(34.4-54.8)	51.1	(45.1-57.0)	33.4	(26.9-40.0)

Among students who did not have an asthma episode or attack in the past 12 months:

Year	Were Current Cigarette Smokers*		Had Some Type of Recent SHS Exposure		Had Recent SHS Exposure at Home		Had Recent SHS Exposure in a Vehicle		Had Recent SHS Exposure at School		Had Recent SHS Exposure at Work**		Had Recent SHS Exposure at an Indoor/Outdoor Public Place		Live with a Cigarette Smoker	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2015	3.3	(2.1-4.4)	46.8	(44.3-49.3)	15.4	(14.0-16.8)	16.5	(14.8-18.1)	16.1	(13.7-18.6)	29.8	(23.6-36.0)	34.7	(32.2-37.2)	23.0	(21.1-25.0)
2013	5.2	(4.1-6.3)	50.4	(47.9-52.8)	17.4	(15.7-19.0)	19.9	(17.8-22.0)	20.6	(19.1-22.2)	39.0	(24.9-43.2)	36.6	(34.4-38.8)	27.6	(25.4-29.8)
2011	9.3	(7.8-10.8)	55.1	(51.6-58.7)	18.4	(15.5-21.4)	26.3	(23.0-29.5)	17.6	(15.5-19.7)	31.0	(26.3-35.7)	40.8	(37.7-43.9)	28.2	(24.6-31.8)

Data Source: Connecticut Youth Tobacco Survey; 2011-2015.

Abbreviations: SHS = secondhand smoke; CI = confidence interval

*smoked cigarettes on 1 or more of the past 30 days

**among students who worked during the past 7 days

For Further Information

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References

¹Connecticut Youth Tobacco Survey (YTS); 2015.

²Estimated number was rounded down to the nearest 1,000.

³Hospital Discharge Data; 2010-2014.

⁴Connecticut Youth Tobacco Survey (YTS); 2011-2015.

Note: Middle school is grades 6 to 8 and high school is grades 9 to 12.

Primary audience for this fact sheet is public health professionals.