

Overview

- An estimated 30,000² children in grades 6 through 12, or 10.5% of middle and high school students, in Connecticut reported having an episode of asthma or an asthma attack in the past 12 months. Having an episode of asthma or an asthma attack is more common among females (12.3%) than among males (8.7%).
- 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
- Overall prevalence of having an episode of asthma or an asthma attack decreased slightly between 2011⁴ and 2013 (11.6% to 10.5%).

Connecticut Estimates

Percentage of middle and high school students who had an episode of asthma or an asthma attack in 2013: (Table 1)

Overall

- 10.5% of students
- Represents about 30,000 middle and high school-aged youth

By Sex

- 8.7% of males
- 12.3% of females

By Race/Ethnicity

- 10.4% of non-Hispanic whites
- 10.3% of non-Hispanic blacks
- 12.0% of Hispanics



By Grade

- 8.7% in grade 6
- 12.4% in grade 7
- 10.1% in grade 8
- 11.0% in grade 9
- 11.0% in grade 10
- 10.8% in grade 11
- 9.2% in grade 12

Key Points:

- Approximately 1 in 10 CT middle and high school students reported an episode of asthma or asthma attack in the past year.
- Female students are significantly more likely than males to have had an episode of asthma or asthma attack.
- Living with a cigarette smoker or exposure to secondhand smoke significantly increases the prevalence of asthma attacks and episodes of asthma among students.

- Students who are current cigarette smokers (14.8%) are more likely than never smokers (9.7%) to have reported having an episode of asthma or an asthma attack in the past 12 months.

Table 1

CT Middle and High School Students Who Had an Episode of Asthma or an Asthma Attack in the Past 12 Months, 2005-2013								
	2005*		2009		2011		2013	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Total	8.5	(7.5-9.5)	10.2	(9.3-11.1)	11.6	(10.7-12.4)	10.5	(9.4-11.5)
Sex								
male	8.8	(7.3-10.3)	8.8	(7.4-10.1)	10.0	(8.6-11.5)	8.7	(7.2-10.2)
female	8.3	(6.9-9.6)	11.6	(10.3-12.9)	13.1	(11.7-14.4)	12.3	(10.7-13.8)
Race/Ethnicity								
white, non-Hispanic	8.2	(6.9-9.5)	10.3	(9.2-11.4)	11.4	(10.2-12.6)	10.4	(9.1-11.6)
black, non-Hispanic	13.9	(10.5-17.2)	8.7	(6.2-11.2)	12.7	(9.6-15.7)	10.3	(7.8-12.9)
Hispanic	5.6	(4.0-7.3)	11.3	(9.2-13.3)	11.9	(9.6-14.2)	12.0	(9.5-14.5)
Grade								
6	8.2	(5.6-10.9)	8.7	(6.1-11.3)	11.2	(8.4-14.0)	8.7	(6.6-10.9)
7	9.6	(6.6-12.5)	10.2	(7.7-12.6)	10.2	(7.5-12.9)	12.4	(10.1-14.8)
8	8.6	(5.6-11.5)	12.0	(10.3-13.7)	12.1	(9.7-14.6)	10.1	(8.2-11.9)
9	8.4	(5.8-11.0)	9.5	(6.6-12.3)	14.9	(12.4-17.3)	11.0	(9.0-13.0)
10	10.0	(7.1-12.8)	11.0	(8.4-13.5)	9.7	(7.6-11.9)	11.0	(8.0-14.0)
11	5.7	(3.3-8.2)	10.5	(8.1-12.8)	12.7	(10.1-15.3)	10.8	(7.4-14.3)
12	9.7	(6.4-13.0)	9.6	(7.4-11.8)	9.9	(7.1-12.7)	9.2	(6.8-11.7)
Smoking Status								
never cigarette smoker	8.1	(6.9-9.3)	9.9	(8.7-11.0)	11.4	(10.1-12.7)	9.7	(8.6-10.7)
ever cigarette smoker	9.0	(7.3-10.8)	11.0	(8.6-13.4)	12.3	(9.9-14.7)	13.1	(10.0-16.3)
current cigarette smoker	9.8	(7.3-12.3)	12.6	(9.6-15.5)	12.4	(8.5-16.4)	14.8	(9.6-20.0)
Secondhand Smoke Exposure								
no SHS/no smoker at home†	7.0	(5.5-8.4)	8.2	(6.9-9.5)	9.5	(8.1-10.8)	7.9	(6.6-9.2)
exposed to SHS past 7d	9.7	(8.3-11.2)	12.3	(11.0-13.5)	13.4	(11.6-15.3)	12.8	(11.2-14.4)
live with cigarette smoker	7.8	(6.2-9.4)	10.7	(9.1-12.2)	13.4	(12.1-14.8)	12.1	(9.8-14.3)

Source: CT Youth Tobacco Survey (2005, 2009, 2011, 2013)

*In 2005, two asthma questions were asked: 1) "Has a doctor or nurse ever told you that you have asthma?" and 2) "During the past 12 months, have you had an episode of asthma or an asthma attack?"

†no SHS exposure in the past 7 days and do not live with a cigarette smoker

Note: In 2007, the question, "During the past 12 months, have you had an episode of asthma or an asthma attack?" was not asked on the survey.

- Students with an episode of asthma or an asthma attack in the past 12 months were significantly more likely to have had recent secondhand tobacco smoke exposure (63.8%) than those students without an episode of asthma or an asthma attack (50.4%). Recent secondhand tobacco smoke exposure is defined as exposure to tobacco smoke while at home, in a vehicle, at school, at their place of work, or at an indoor or outdoor public place during the past 7 days. Specifically, students with an episode of asthma or an asthma attack were significantly more likely to be exposed to secondhand tobacco smoke while at home (26.4% vs. 17.4%), at school (30.8% vs. 20.6%), and at an indoor or outdoor public place (49.5% vs. 36.6%)—see Table 2.

Table 2

Risk Factors for Asthma Attacks								
	2005		2009		2011		2013	
	Had Asthma Attack	No Asthma Attack	Had Asthma Attack	No Asthma Attack	Had Asthma Attack	No Asthma Attack	Had Asthma Attack	No Asthma Attack
	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
Current cigarette smoker [‡]	14.0 (9.8-18.3)	11.8 (9.5-14.1)	12.3 (8.8-16.4)	9.9 (8.2-11.6)	10.1 (6.7-13.5)	9.3 (7.8-10.8)	7.8 (5.0-10.5)	5.2 (4.1-6.3)
Recent exposure to secondhand smoke (SHS)*	66.1 (60.9-71.4)	56.3 (53.1-59.5)	62.0 (56.9-67.1)	50.4 (48.0-52.8)	65.5 (60.7-70.3)	55.1 (51.6-58.7)	63.8 (59.4-68.2)	50.4 (47.9-52.8)
While at home, someone smoked a tobacco product in home*	n/a —	n/a —	n/a —	n/a —	23.9 (17.9-30.0)	18.4 (15.5-21.4)	26.4 (20.8-31.9)	17.4 (15.7-19.0)
Rode in a vehicle where someone was smoking a tobacco product*	40.3 (33.6-46.9)	36.9 (33.6-40.3)	35.9 (31.9-54.5)	30.0 (27.3-32.7)	35.4 (28.3-42.5)	26.3 (23.0-29.5)	25.2 (19.5-31.0)	19.9 (17.8-22.0)
Breathed smoke from someone who was smoking a tobacco product at their school*	n/a —	n/a —	n/a —	n/a —	21.2 (16.6-25.8)	17.6 (15.5-19.7)	30.8 (26.4-35.2)	20.6 (19.1-22.2)
Breathed smoke from someone who was smoking a tobacco product at their place of work*	n/a —	n/a —	42.9 (31.2-54.5)	30.8 (26.2-35.3)	46.1 (34.4-54.8)	31.0 (26.3-35.7)	42.2 (34.7-57.7)	39.0 (24.9-43.2)
Breathed smoke from someone who was smoking a tobacco product at an indoor or outdoor public place*¥	n/a —	n/a —	n/a —	n/a —	51.1 (45.1-57.0)	40.8 (37.7-43.9)	49.5 (44.9-54.1)	36.6 (34.4-38.8)
Live with a cigarette smoker	33.0 (27.4-38.5)	34.7 (31.8-37.5)	34.9 (30.2-39.6)	33.3 (30.6-36.1)	33.4 (26.9-40.0)	28.2 (24.6-31.8)	32.3 (26.2-38.4)	25.6 (25.4-29.8)
No SHS exposure* and do not live with a cigarette smoker	29.7 (24.3-35.1)	36.4 (33.3-39.6)	33.7 (28.7-38.7)	43.0 (40.6-45.5)	32.7 (28.3-37.2)	41.0 (37.8-44.3)	30.9 (25.9-35.9)	42.1 (40.1-44.2)

Source: CT Youth Tobacco Survey (2005, 2009, 2011, 2013)

[‡]smoked cigarettes on >1 days during the past 30 days

*during the past 7 days

¥Examples of indoor public places are school buildings, stores, restaurants and sports arenas. Examples of outdoor public places are school grounds, parking lots, stadiums and parks

n/a = not available, question not asked on survey

For Further Information

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References

- ¹Connecticut Youth Tobacco Survey (YTS); 2013.
- ²Estimated number was rounded down to the nearest 1,000.
- ³Hospital Discharge Data; 2010-2013.
- ⁴Connecticut Youth Tobacco Survey (YTS); 2011.

Notes:

- Middle school is grades 6 to 8 and high school is grades 9 to 12.
- Current smokers are defined as students who reported smoking cigarettes ≥ 1 day during the preceding 30 days.