

# CHILDREN'S HEALTH IN CONNECTICUT: 2011-2015

Results of the Behavioral Risk Factor  
Surveillance Survey (BRFSS)

June, 2018



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PO Box 340308, Hartford, CT 06134  
[www.ct.gov/dph/BRFSS](http://www.ct.gov/dph/BRFSS)

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## Acknowledgements

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The CT BRFSS team acknowledges with gratitude the time contributed by nearly 10,000 citizen volunteers within the State of Connecticut who responded anonymously to the survey as child caregivers in the survey during the 2011 to 2015 calendar years, combined. The results presented in this report would not be possible without their participation.

The authors are grateful for feedback within the Department of Public Health from Justin Peng and Marc Camardo within Community, Family Health and Prevention Section. The authors are also grateful for feedback from Constance Heye within the Office of Early Childhood.



Work on this project by Ms. Xi Zheng was supported by the Connecticut State Innovations Model (SIM) grant 1G1 CMS331404 funded by the Center for Medicare & Medicaid Innovation (CMMI). The Connecticut BRFSS is supported by Cooperative Agreement Number, 5 NU58DP006021, funded by the Centers for Disease Control and Prevention. This report's contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention, the Department of Health and Human Services, or the Center for Medicare & Medicaid Innovation (CMMI).



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## Additional Resources

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Find more BRFSS factsheets, reports and publications at the Connecticut Department of Public Health BRFSS website: <http://www.ct.gov/dph/BRFSS>.

Suggested citation:

Zheng X., Jorge C. (2018) Children's Health in Connecticut: Results of the Connecticut Behavioral Risk Factor Surveillance Survey 2011-2015, Connecticut Department of Public Health, Hartford, Connecticut ([www.ct.gov/dph/BRFSS](http://www.ct.gov/dph/BRFSS)).

Health and Surveillance Section, Connecticut Behavioral Risk Factor Surveillance System, New, 4-1-18



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## Introduction

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The Connecticut Behavioral Risk Factor Surveillance System (CT BRFSS) is an ongoing statewide voluntary phone survey of Connecticut citizen volunteers aged 18 and over. It is funded by the Centers for Disease Control and Prevention (CDC) in all 50 states, and has been implemented in Connecticut since 1989. Households are randomly selected and contacted by a contractor, who conducts most interviews in the evenings and on weekends. Once an interviewer reaches a household, one randomly selected person from the household is asked to participate in the survey. Listed and unlisted residential telephone numbers are included in the sample, but not business, Fax, or modem phone lines. Cell phones were added to the methodology in 2011.

During the CT BRFSS interview, the randomly selected respondent is asked if they have any children under 18 years old living in the household. If the respondent self-reports that they are a caregiver of children, the respondent is prompted to select the child if only one child lives in the household; if multiple children live in the household, the one child is selected at random.

The CT BRFSS questionnaire (<http://www.ct.gov/dph/BRFSS>) changes somewhat from year to year to provide information on emerging health issues in the state and to address state-specific priorities. The survey originally collected data on health behaviors related to the leading causes of death, but has since been expanded to include issues related to healthcare access, use of preventive health services, and monitoring emerging issues such as alternative tobacco use and dietary habits. State-added questions regarding Connecticut children 0-17 years old, inclusive, are also collected annually from the adult caregivers, as described above. Topics related to children include child height and weight, breastfeeding, asthma, oral health, soda and fast food consumption, and screen time. Results of the survey are used to inform public health programs across the state about progress toward adult and childhood health objectives, and to help identify emerging public health needs in the state.

Each month, survey data on adults and children from Connecticut are sent to CDC for editing and checking. At the end of each year, data are compiled and weighted to be representative of all adults and all children in the state. The weighted data are returned to states for analysis and use in planning and monitoring health programs. Summary data for all states are available on the CDC BRFSS website (<http://www.cdc.gov/BRFSS>).



The sample size for the CT BRFSS was increased starting in the 2015 survey year because of increased funding from two grant sources, the Preventive Health and Health Services Block Grant and the Connecticut State Innovations Model grant. Despite the increase in sample size, only about one-third of adult respondents volunteer information about children living in the household. This limits the ability to report child health indicators by demographic characteristics. Thus, a combined five-year CT BRFSS dataset was used in this child health report with a collective sample size of nearly 10,000 responses. Prevalence estimates and 95% confidence intervals were computed using SAS (Cary, NC) PROC SURVEYFREQ, which can properly compute variances for complex sampling design. Any responses of "Not Known/Not sure" or "Refused" were classified as missing. The coefficient of variation (CV) was used to assess the validity of each estimate. If the CV for any estimate was more than 15% and less than 20% ( $15\% \leq CV \leq 20\%$ ), the estimate may be of limited validity due to a high CV and therefore is shown in the tables with an asterisk (\*). An estimate with a CV greater than 20.0% ( $CV > 20.0\%$ ) has poor validity and was suppressed.

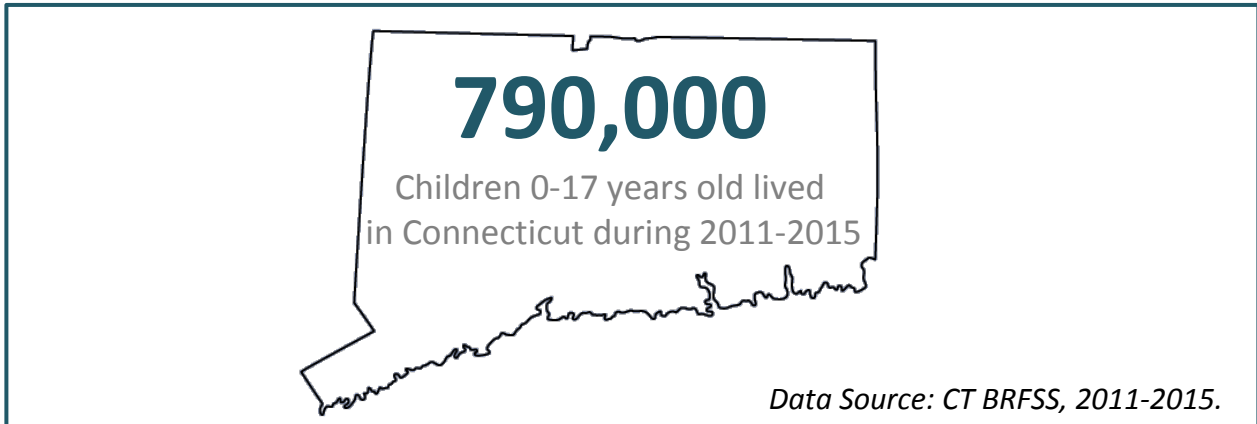
In this report, there are two main sections. The Connecticut Children's Health section discusses health topics related directly to children. New child weights (CNEWT), based on five-year weighted averages of annual child weights (\_CLLCPWT), were used to analyze each child health indicator at the statewide level, by age, gender, race/ethnicity, household income, and the adult caregiver's health insurance status and educational attainment. The Household and Child Health section discusses parents' health status or health-related behaviors, by their child's health. A sub-dataset of parental respondents (N=8,373), was extracted based on answers to the question "How are you related to the child". Other responses such as grandparent, aunt/uncle, etc. were excluded from the analysis. Selected parent health-related indicators and their demographic characteristics were evaluated using calculated adult weights (NEWT), based on five-year weighted averages of annual adult weights (\_LLCPWT). Child health indicators were investigated across parental socioeconomic and health-related characteristics using new child weights (CNEWT). In addition to the two sections described above, factsheets of mother/father and child health are included in this report.

Change in the prevalence of selected health indicators from year 2011 to 2015 was evaluated using a two-population one-tailed binomial test for significant increase or decrease, ( $\alpha=0.05$ ). Significance testing by child's or parents' characteristics was evaluated using a two-population one-tailed binomial test for significant increased or decreased risk/protection ( $\alpha=0.05$ ). Only significant results are discussed in this report.





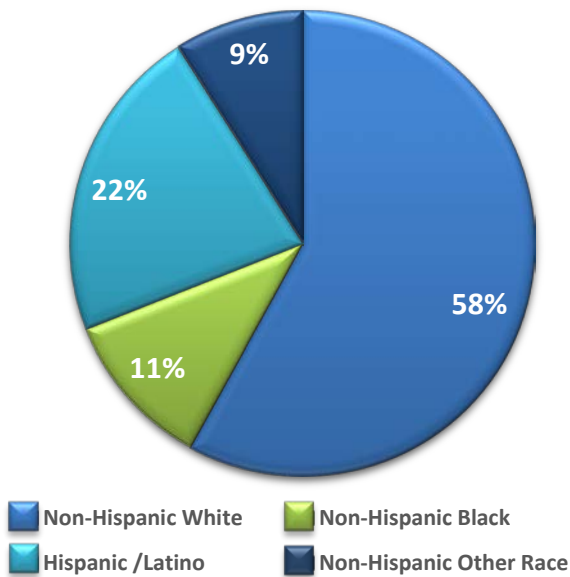
## Connecticut Child Demographics, 2011-2015



### RACE/ETHNICITY

More than half of the children were non-Hispanic White.

Nearly one in four children were Hispanic/Latino.



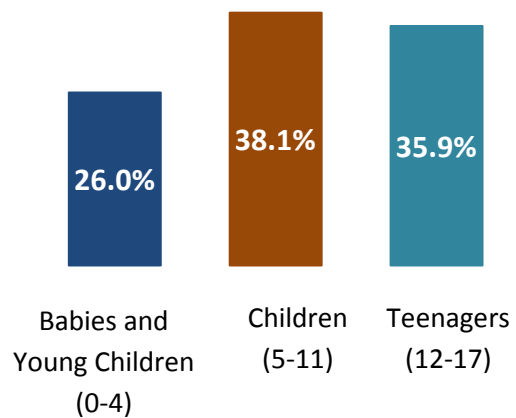
*Data Source: CT BRFSS, 2011-2015.*

### GENDER

Male and female children were equally distributed.

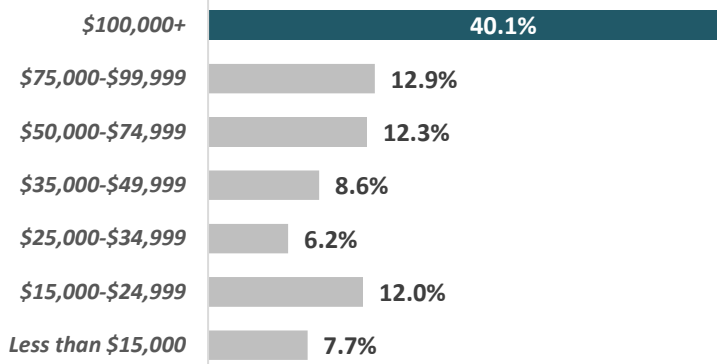


### AGE





## Household Income



**40.1%**

Connecticut children during 2011-2015 lived in households earning at least \$100,000 annually.

**92.3%**

Connecticut children who had an insured adult caregiver



**50.9%**

Connecticut children who had an adult caregiver with at least a college degree



*Note: all the demographic data above are estimated weighted population based on CT BRFSS 2011-2015, combined.*

**Table 1: Demographics of Connecticut Children Age 0-17, CT BRFSS 2011-2015.**

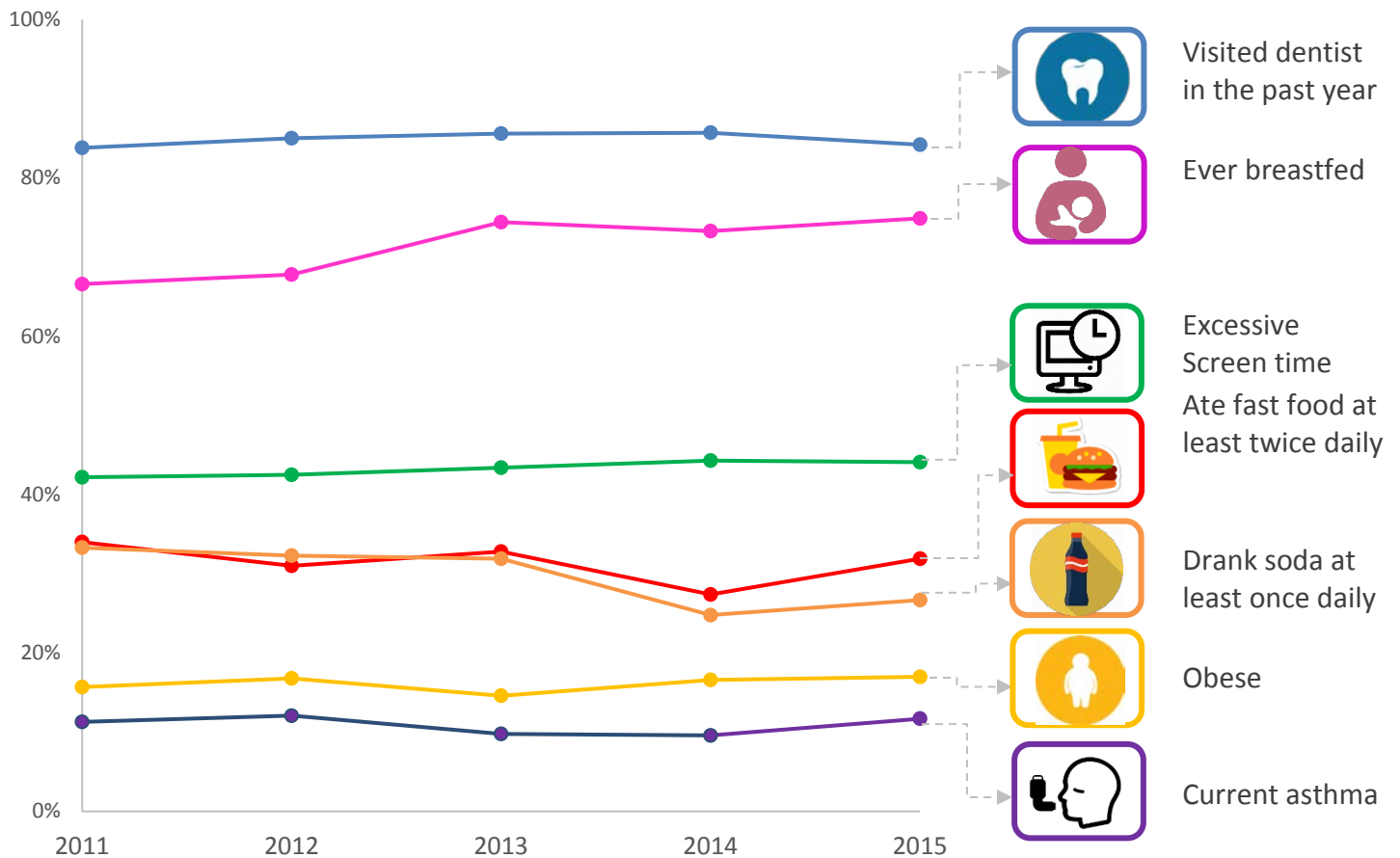
Demographic Characteristics		Survey Respondents	Estimated Population	Estimated % of Population
<b>Total</b>		<b>9,825</b>	<b>790,000</b>	<b>100.0</b>
<b>Age</b>	0-4 years old	1,879	190,000	26.0
	5-11 years old	3,152	270,000	38.1
	12-17 years old	3,820	260,000	35.9
<b>Gender</b>	Male	5,033	390,000	50.5
	Female	4,547	380,000	49.5
<b>Race/Ethnicity</b>	Non-Hispanic White	6,242	440,000	58.0
	Non-Hispanic Black	930	85,000	11.2
	Hispanic/ Latino	1,542	170,000	22.1
	Non-Hispanic Other Race	737	70,000	8.7
<b>Adult Caregiver's Income</b>	Less than \$15,000	567	50,000	7.7
	\$15,000-\$24,999	910	80,000	12.0
	\$25,000-\$34,999	532	40,000	6.2
	\$35,000-\$49,999	768	60,000	8.6
	\$50,000-\$74,999	1,202	90,000	12.3
	\$75,000-\$99,999	1,203	90,000	12.9
	\$100,000+	3,517	290,000	40.1
<b>Adult Caregiver's Insurance Status</b>	Insured	2,203	170,000	92.3
	Not Insured	168	10,000	7.7
<b>Adult Caregiver's Education</b>	Less than high school	618	60,000	7.8
	High school graduate	1,965	170,000	21.1
	Some college	2196	160,000	20.3
	College graduate	5,026	400,000	50.9



## Connecticut Children's Health, 2011-2015

**Figure 1** and **Table 2** show the change in selected health indicators among Connecticut children 0-17 years old, from 2011 through 2015. Most striking was a four-year decrease for children having soda at least once daily, from 33.3% in year 2011 to 26.7% in year 2015, which can be attributed to a significant decrease from 31.9% to 24.8% from years 2013 to 2014. Although there were significant annual decreases in children having fast food at least twice weekly from year 2011 to year 2014, a subsequent slight increase occurred from 2014 to 2015. There was also a significant four-year increase in children ever being breastfed, from 66.6% in year 2011 to 74.9% in year 2015, which can be attributed to a significant increase from 67.8% in year 2012 to 74.4% in year 2013. There was no significant change overall from year 2011 to year 2015 in child currently diagnosed with asthma, children with obesity, children having excessive screen time (two hours or more), and children having visited the dentist within the past year.

**Figure 1: Trends in Selected Child Health Indicators, CT BRFSS 2011-2015.**





**Table 2: Trend in Selected Child Health Indicators, CT BRFSS 2011-2015**

<b>Child health indicators</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Visited dentist in the past year</b>	83.8%	85.0%	85.6%	85.7%	84.2%
<b>Ever breastfed</b>	66.6%	67.8%	74.4%	73.3%	74.9%
<b>Excessive screen time</b>	42.2%	42.5%	43.4%	44.3%	44.1%
<b>Ate fast food at least twice daily</b>	34.0%	31.0%	32.8%	27.4%	31.9%
<b>Drank soda at least once daily</b>	33.3%	32.3%	31.9%	24.8%	26.7%
<b>Child obesity</b>	15.7%	16.8%	14.6%	16.6%	17.0%
<b>Current asthma</b>	11.3%	12.1%	9.8%	9.6%	11.7%

## Child Weight Status

As part of an annual state-specific module in the CT BRFSS, the adult caregiver is asked to provide the height and weight of the randomly selected child. Child weight status is calculated differently than that for adults.<sup>1</sup> For children, weight status is determined comparatively based on age and sex. An overweight child has a BMI between the 85<sup>th</sup> and 95<sup>th</sup> percentile for children of the same age and sex, while an obese child has a BMI at or above the 95<sup>th</sup> percentile for children of the same age and sex. The American Academy of Pediatrics recommends the use of BMI to screen for overweight and obesity in children beginning at 2 years old.<sup>2</sup> Obese children face a variety of health and social problems, and are more likely to be obese adults.<sup>3</sup>

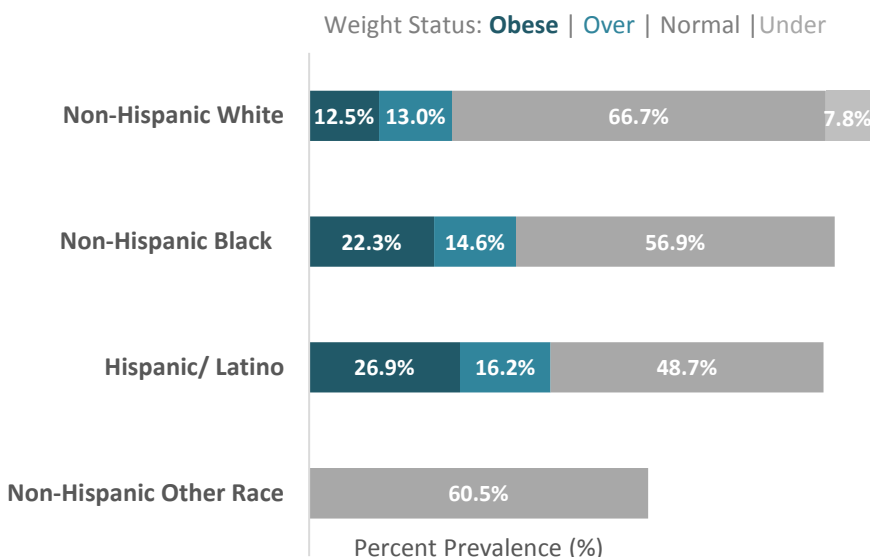
In Connecticut during 2011-2015, one in seven Connecticut children were overweight, and one in six were obese (**Table 3**). Compared to their counterparts in the state, the prevalence of obesity among Connecticut children was significantly greater for:

- Children 2-4 and 5-11 years old;
- Boys;
- Non-Hispanic Black and Hispanic/Latino children, compared to non-Hispanic White children;
- Children from households with an annual income less than \$100,000, the prevalence decreased with increased annual household incomes; and
- Children living with an adult caregiver who did not have a college degree.

Compared to their counterparts in the state, the prevalence of overweight among Connecticut children was significantly greater for:

- Children 5-11 years old, compared to children 2-4 years old; and
- Children living with an adult caregiver who did not have a college degree.

**Figure 2: Prevalence of Child Weight, by Race/ Ethnicity.**



**Table 3: Child Weight Status, CT BRFSS 2011-2015**

Demographic Characteristics		Obese			Overweight		
		%	95% CI		%	95% CI	
<b>Total</b>		<b>16.2</b>	14.9	17.5	<b>13.6</b>	12.5	14.7
<b>Age</b>	2-4 years old	<b>35.9</b>	30.9	40.9	<b>10.5</b>	7.7	13.2
	5-11 years old	<b>17.9</b>	15.8	20.0	<b>15.3</b>	13.4	17.2
	12-17 years old	<b>8.8</b>	7.4	10.1	<b>13.1</b>	11.4	14.8
<b>Gender</b>	Male	<b>18.5</b>	16.6	20.4	<b>14.2</b>	12.6	15.7
	Female	<b>13.9</b>	12.1	15.7	<b>13.1</b>	11.4	14.7
<b>Race/Ethnicity</b>	Non-Hispanic White	<b>12.5</b>	11.3	13.8	<b>13.0</b>	11.7	14.2
	Non-Hispanic Black	<b>22.3</b>	17.1	27.5	<b>14.6</b>	10.8	18.5
	Hispanic/Latino	<b>26.9</b>	22.5	31.3	<b>16.2</b>	12.4	20.0
	Non-Hispanic Other Races	<b>15.6*</b>	11.0	20.2	<b>10.2*</b>	7.0	13.4
<b>Adult Caregiver's Income</b>	Less than \$15,000	<b>30.9</b>	22.6	39.2	<b>18.8*</b>	12.7	25.0
	\$15,000-\$24,999	<b>26.2</b>	20.4	32.1	<b>13.6</b>	9.9	17.4
	\$25,000-\$34,999	<b>23.1</b>	16.7	29.6	<b>21.3*</b>	13.1	29.5
	\$35,000-\$49,999	<b>22.2</b>	17.0	27.3	<b>20.2</b>	14.7	25.8
	\$50,000-\$74,999	<b>17.1</b>	13.6	20.6	<b>15.8</b>	12.8	18.8
	\$75,000-\$99,999	<b>15.3</b>	12.2	18.5	<b>12.9</b>	10.1	15.6
	\$100,000+	<b>11.1</b>	9.4	12.9	<b>10.8</b>	9.3	12.2
<b>Adult Caregiver's Educational Attainment</b>	Less than high school	<b>26.6</b>	19.7	33.6	<b>22.6*</b>	15.3	29.8
	High school graduate	<b>24.4</b>	20.6	28.1	<b>16.4</b>	13.2	19.6
	Some college	<b>17.8</b>	14.9	20.7	<b>16.0</b>	13.5	18.5
	College graduate	<b>12.1</b>	10.6	13.6	<b>11.1</b>	9.8	12.4

\* Estimate may be of limited validity due to a high coefficient of variation ( $15\% \leq CV \leq 20\%$ ).

The causes of excess weight gain in young people are similar to those in adults, including behavior and genetics. Where people live can affect their ability to make healthy choices. Behaviors that influence excess weight gain include eating high-calorie, low-nutrient foods and beverages, not getting enough physical activity, sedentary activities such as watching television or other screen devices, medication use, and poor sleep routines. A healthy diet follows the 2015-2020 *Dietary Guidelines for Americans*,<sup>4</sup> which emphasizes eating a variety of vegetables and fruits, whole grains, a variety of lean protein foods, and low-fat and fat-free dairy products. It also limits eating foods and beverages with added sugars, solid fats, or sodium. The *Physical Activity Guidelines for Americans*, recommends children 6 years old or older engage in at least 60 minutes of physical activity daily.<sup>5</sup>



## Breastfeeding

The American Academy of Pediatrics recommends that mothers breastfeed infants exclusively for six months and continue to breastfeed for at least six more months after introducing solid foods.<sup>6</sup> Breastfeeding provides a host of health benefits for nursing mothers and babies. Nursing infants receive natural protection against common illnesses and infections due to the immunologic properties of breast milk. There is also some evidence that breastfeeding can prevent the development of allergies, auto-immune disorders, and even chronic disease later in life.<sup>7</sup> In the CT BRFSS, the adult caregiver is asked whether or not the selected child was ever breastfed.

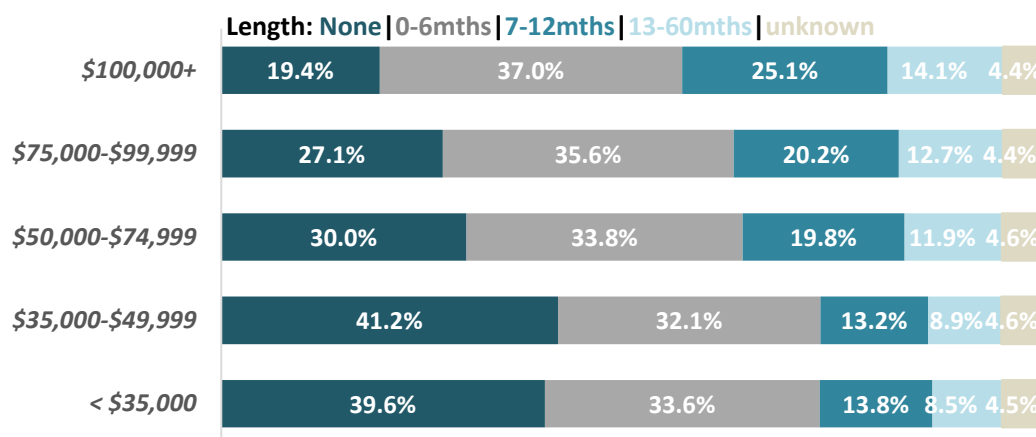
Nearly three out of every four children 0-17 years old were ever breastfed in Connecticut during 2011-2015 (**Table 4**).

Compared to their counterparts in the state, the prevalence of a child ever being breastfed was significantly less for:

- Non-Hispanic Black children;
- Children living in a household with annual earnings less than \$50,000; and
- Children living with a caregiver who did not have a college degree.

The prevalence of breastfeeding increased with increased annual household incomes, **Figure 3** (*below*) shows the length of the breastfeeding period among children who have ever been breastfed, by household income.

**Figure 3: Breastfed Time and Breastfed Time, by Household Income.**



**Table 4: Child Ever Breastfed, CT BRFSS 2011-2015**

Demographic Characteristics		%	95% CI	
<b>Total</b>		<b>71.4</b>	70.1	72.6
<b>Age</b>	0-4 years old	<b>74.6</b>	71.9	77.3
	5-11 years old	<b>71.9</b>	69.9	74.0
	12-17 years old	<b>68.7</b>	66.7	70.8
<b>Gender</b>	Male	<b>71.9</b>	70.2	73.7
	Female	<b>70.8</b>	69.0	72.6
<b>Race/Ethnicity</b>	Non-Hispanic White	<b>73.9</b>	72.5	75.4
	Non-Hispanic Black	<b>58.9</b>	54.3	63.4
	Hispanic/ Latino	<b>69.0</b>	65.9	72.1
	Non-Hispanic Other Races	<b>73.5</b>	68.8	78.2
<b>Adult Caregiver's Income</b>	Less than \$15,000	<b>57.7</b>	52.0	63.4
	\$15,000-\$24,999	<b>60.8</b>	56.2	65.4
	\$25,000-\$34,999	<b>63.5</b>	57.5	69.4
	\$35,000-\$49,999	<b>58.8</b>	53.7	63.8
	\$50,000-\$74,999	<b>70.0</b>	66.5	73.6
	\$75,000-\$99,999	<b>72.9</b>	69.6	76.2
	\$100,000+	<b>80.6</b>	79.0	82.3
<b>Adult Caregiver's Insurance Status</b>	Insured	<b>75.0</b>	72.6	77.5
	Not Insured	<b>74.2</b>	62.4	86.0
<b>Adult Caregiver's Educational Attainment</b>	Less than high school	<b>60.5</b>	55.1	65.9
	High school graduate	<b>56.1</b>	52.8	59.3
	Some college	<b>65.9</b>	63.2	68.6
	College graduate	<b>81.2</b>	79.8	82.6

Improving the well-being of mothers, infants, and children is an important public health goal for the United States. Their well-being determines the health of the next generation, and can help predict future public health challenges for families, communities, and the health care system. Thus, protection, promotion, and support of breastfeeding are important public health needs. Increased breastfeeding is also a major program area of the Centers for Disease Control and Prevention's State-based Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases.<sup>8</sup> Healthy People 2020 sets goals for increasing both breastfeeding initiation and duration,<sup>9</sup> as well as decreasing disparities in these rates across all populations. Many types of interventions have been implemented in the United States to increase breastfeeding initiation, to increase exclusive breastfeeding, and to increase its duration.<sup>10</sup>





## Child Oral Health

Although it is largely preventable, tooth decay is the most common chronic condition among children in the United States.<sup>11</sup> Dental caries (cavities) can cause pain and infection, and if left untreated, can lead to malnourishment and serious medical complications.<sup>12</sup> The American Academy of Pediatric Dentistry recommends that children see a dentist when their first tooth appears, and no later than their first birthday.<sup>13</sup>

Dental sealants can prevent tooth decay.<sup>14</sup> Sealants are thin, plastic coatings that are painted on the back teeth, preventing the grooves from getting germs and food particles lodged in them. It is recommended that sealants be applied soon after a permanent tooth has come in. Caregivers are asked in the CT BRFSS if the randomly-selected child saw a dental provider in the past year, and if so, whether or not they had ever had dental sealants.

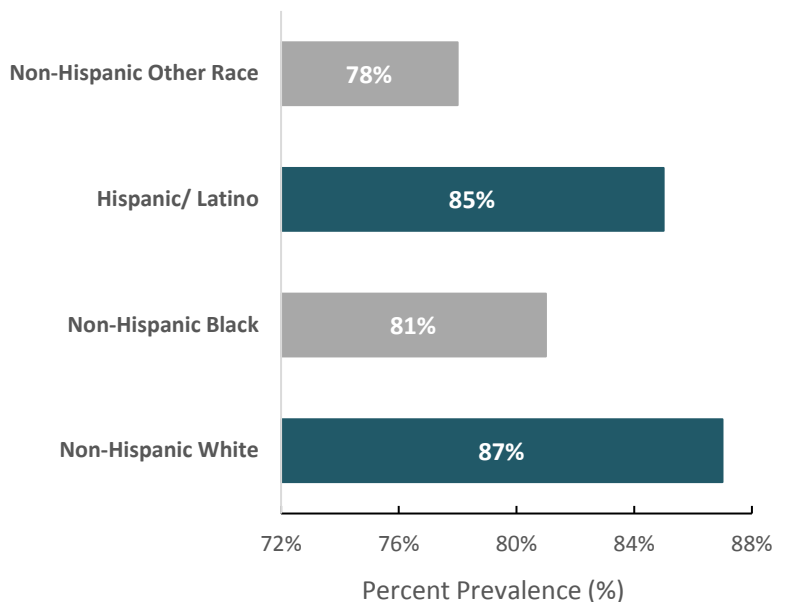
Nearly eighty-five percent of Connecticut children in 2011-2015 had a dental visit in the past year, and more than half of Connecticut children had dental sealants applied to their teeth at some time (**Table 5**).

Compared to their counterparts in the state, the prevalence of having a dentist visit in the past year was significantly greater for:

- Children 5-11 years old and 12-17 years old;
- Non-Hispanic White and Hispanic children, compared to non-Hispanic Black and non-Hispanic Other Race children; and
- Children living with a caregiver who had a college degree, compared to children living with a caregiver who had less than high school education.

Compared to their counterparts in the state, the prevalence of having

**Figure 4: Dentist Visit in the Previous Year, by Race/Ethnicity.**



dental sealants was significantly greater for children 12-17 years old, when compared to children 5-11 years old. This is likely due to the increase in the number of permanent teeth that come in as children get older.

**Table 5: Child Oral Health, CT BRFSS 2011-2015**

Demographic Characteristics		Visited Dentist in Past Year			Dental Sealants		
		%	95% CI		%	95% CI	
<b>Total</b>		<b>84.8</b>	83.8	85.8	<b>54.3</b>	52.0	56.5
<b>Age</b>	0-4 years old	<b>55.3</b>	52.3	58.4	^	^	^
	5-11 years old	<b>94.9</b>	93.8	96.0	<b>46.7</b>	43.4	50.1
	12-17 years old	<b>94.1</b>	93.1	95.1	<b>62.8</b>	59.7	65.8
<b>Gender</b>	Male	<b>83.9</b>	82.4	85.5	<b>52.1</b>	49.0	55.2
	Female	<b>85.8</b>	84.4	87.1	<b>56.4</b>	53.1	59.7
<b>Race/Ethnicity</b>	Non-Hispanic White	<b>86.7</b>	85.6	87.9	<b>56.2</b>	53.5	58.8
	Non-Hispanic Black	<b>80.9</b>	77.2	84.7	<b>51.4</b>	43.9	59.0
	Hispanic/ Latino	<b>84.8</b>	82.3	87.3	<b>50.7</b>	45.0	56.5
	Non-Hispanic Other Races	<b>77.7</b>	73.1	82.4	<b>56.4</b>	47.1	65.6
<b>Adult Caregiver's Income</b>	Less than \$15,000	<b>84.1</b>	80.3	88.0	<b>44.5</b>	35.0	53.9
	\$15,000-\$24,999	<b>81.6</b>	77.9	85.3	<b>50.3</b>	42.5	58.1
	\$25,000-\$34,999	<b>80.7</b>	75.8	85.7	<b>48.1</b>	37.2	59.0
	\$35,000-\$49,999	<b>83.3</b>	79.3	87.3	<b>61.7</b>	53.0	70.4
	\$50,000-\$74,999	<b>84.4</b>	81.4	87.4	<b>49.5</b>	42.9	56.0
	\$75,000-\$99,999	<b>84.2</b>	81.5	86.9	<b>55.3</b>	48.9	61.6
	\$100,000+	<b>87.9</b>	86.4	89.4	<b>56.0</b>	52.6	59.5
<b>Adult Caregiver's Insurance Status</b>	Yes	<b>84.8</b>	82.6	87.0	<b>54.2</b>	50.6	57.8
	No	<b>76.4</b>	64.8	88.0	<b>35.1</b>	21.4	48.7
<b>Adult Caregiver's Educational Attainment</b>	Less than high school	<b>80.5</b>	76.0	85.0	<b>47.2</b>	38.1	56.3
	High school graduate	<b>84.1</b>	81.6	86.6	<b>48.9</b>	43.5	54.2
	Some college	<b>84.7</b>	82.6	86.7	<b>52.6</b>	47.5	57.6
	College graduate	<b>85.9</b>	84.5	87.3	<b>57.6</b>	54.5	60.6

Estimates marked with a “^” are not reported because children under the age of five are not expected to have permanent molars.

Recommendations from the Centers for Disease Control and Prevention, are: “(1) Protect your child's teeth with fluoride toothpaste. If your child is younger than age 6, watch your child brush their teeth and make sure your child only uses a pea-sized amount of toothpaste and spits it out rather than swallows it; if your child is younger than age 2, do not use fluoride toothpaste unless your doctor or dentist tells you to. (2) Talk to your pediatrician, family doctor, nurse, or dentist about putting fluoride varnish on your child's teeth as soon as the first tooth appears in the mouth. (3) If your drinking water is not fluoridated, ask your dentist, family doctor, or pediatrician if your child needs oral fluoride supplements. (4) Talk to your child's dentist about dental sealants, and (5) have your child visit a dentist for a first checkup by age one.”<sup>17</sup>



## Asthma in Children

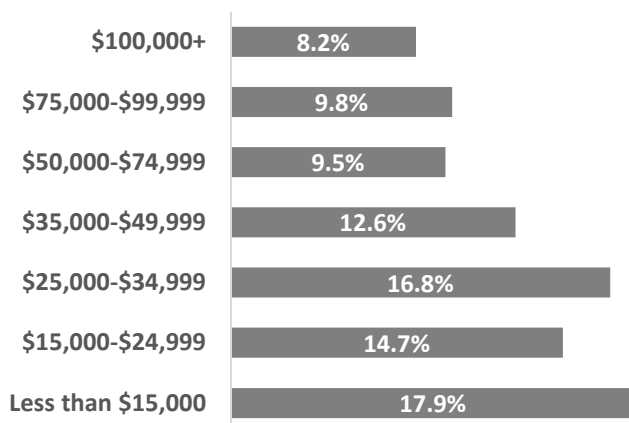
While asthma can affect people of all ages, it usually begins during childhood. Of the 25 million Americans who suffer from asthma, seven million are children.<sup>15</sup> Asthma is the third most common cause of hospitalizations in children, and accounts for 12.8 million missed days of school each year.<sup>59</sup> Caregivers are asked in the CT BRFSS if the randomly-selected child in the household had ever been diagnosed with asthma, and if the child still has asthma.

One in nine Connecticut children currently had asthma (**Table 6**) in 2011-2015. An additional five percent had been diagnosed with asthma in the past but no longer had the condition (*data not shown*).

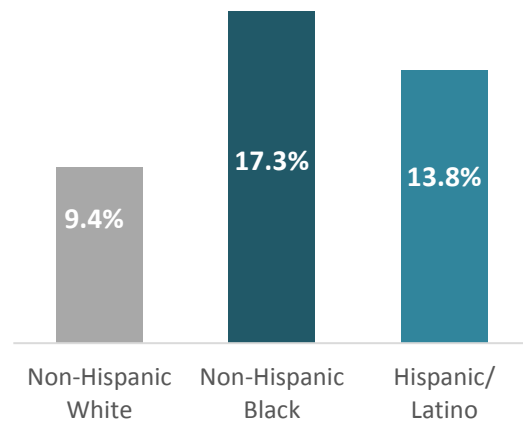
Compared to their counterparts in the state, the prevalence of having current asthma was significantly greater for:

- Children 12-17 and 5-11 years old;
- Boys;
- Non-Hispanic Black and Hispanic/Latino children, compared to non-Hispanic White children; and
- Children living with a caregiver who did not have a college education.

**Figure 6: Current Child Asthma, by Household Income.**



**Figure 5: Current Child Asthma, by Race/ Ethnicity.**



**Table 6: Child Current Asthma, CT BRFSS 2011-2015**

Demographic Characteristics		%	95% CI	
<b>Total</b>		<b>11.0</b>	10.1	11.9
<b>Age</b>	0-4 years old	<b>6.6</b>	4.9	8.3
	5-11 years old	<b>12.5</b>	11.0	13.9
	12-17 years old	<b>13.1</b>	11.6	14.6
<b>Gender</b>	Male	<b>12.4</b>	11.1	13.7
	Female	<b>9.7</b>	8.6	10.9
<b>Race/Ethnicity</b>	Non-Hispanic White	<b>9.4</b>	8.5	10.4
	Non-Hispanic Black	<b>17.3</b>	13.6	21.1
	Hispanic/ Latino	<b>13.8</b>	11.6	16.0
	Non-Hispanic Other Races	<b>7.4*</b>	5.1	9.7
<b>Adult Caregiver's Income</b>	Less than \$15,000	<b>17.9</b>	13.6	22.3
	\$15,000-\$24,999	<b>14.7</b>	11.2	18.2
	\$25,000-\$34,999	<b>16.8</b>	12.2	21.4
	\$35,000-\$49,999	<b>12.6</b>	9.1	16.2
	\$50,000-\$74,999	<b>9.5</b>	7.3	11.7
	\$75,000-\$99,999	<b>9.8</b>	7.8	11.8
	\$100,000+	<b>8.2</b>	7.0	9.3
<b>Adult Caregiver's Educational Attainment</b>	Less than high school	<b>14.8</b>	11.0	18.6
	High school graduate	<b>14.4</b>	12.0	16.8
	Some college	<b>11.6</b>	9.9	13.3
	College graduate	<b>8.7</b>	7.7	9.7
* Estimate may be of limited validity due to a high coefficient of variation ( $15\% \leq CV \leq 20\%$ ).				

Recommendations from the Australian Asthma Handbook to prevent asthma in high risk children, include: "(1) Ensure babies and children are not exposed to cigarette smoke. (2) If a family already has pets, it is not necessary to remove them unless the child develops evidence of pet allergy, and this is confirmed by skin-prick testing; (3) In children without demonstrated specific hypersensitivities, do not routinely recommend allergen avoidance measures for the purpose of reducing the child's risk of developing asthma; (4) Advise parents of children at risk of asthma that damp, moldy home environments may increase asthma risk in children with genetic predisposition to asthma and should be avoided if possible (e.g. by ventilation and mold removal), but that there is not clear evidence that anti-mold strategies will prevent asthma; (5) studies indicated that adolescent-onset asthma may be associated with acetaminophen use, thus parents should give children acetaminophen at a recommended dosages when necessary to reduce fever and pain, and avoid unnecessary or frequent use; (6) In children with atopic dermatitis or allergic rhinitis, manage according to current guidelines (using antihistamines, if indicated) but do not prescribe or recommend long-term antihistamine use specifically for the purpose of reducing the child's risk of developing asthma".<sup>16</sup>



## Child Soda/Fast Food Consumption

Consumption of soda and other sugar-sweetened beverages (SSBs) is associated with obesity in children.<sup>17</sup> The Centers for Disease Control and Prevention recommends that children drink soda no more than once a week. The American Heart Association recommends that children get no more than 100 calories a day from sugary beverages. Children who eat at fast-food restaurants may eat more and have poorer diets compared to children who eat at home.<sup>18</sup> Adult caregivers in the CT BRFSS are asked how many glasses, bottles, or cans of soda or other SSBs the randomly-selected child drinks on an average day. They are also asked how many times in the past week the child ate fast food or pizza at school, at home or at a fast-food restaurant.

One in three Connecticut children in 2011-2015 drank SSBs at least once daily or ate fast-food at least twice weekly **Table 7**.

Compared to their counterparts in the state, the prevalence of drinking SSBs at least once daily among children in Connecticut was significantly greater for:

- Children 12-17 and 5-11 years old;
- Boys;
- Non-Hispanic Black and Hispanic/Latino children;
- Children living in households with annual incomes less than \$100,000, the prevalence decreased with increased annual household incomes;
- Children living with a caregiver who did not have insurance; and
- Children living with a caregiver who did not have a college education.

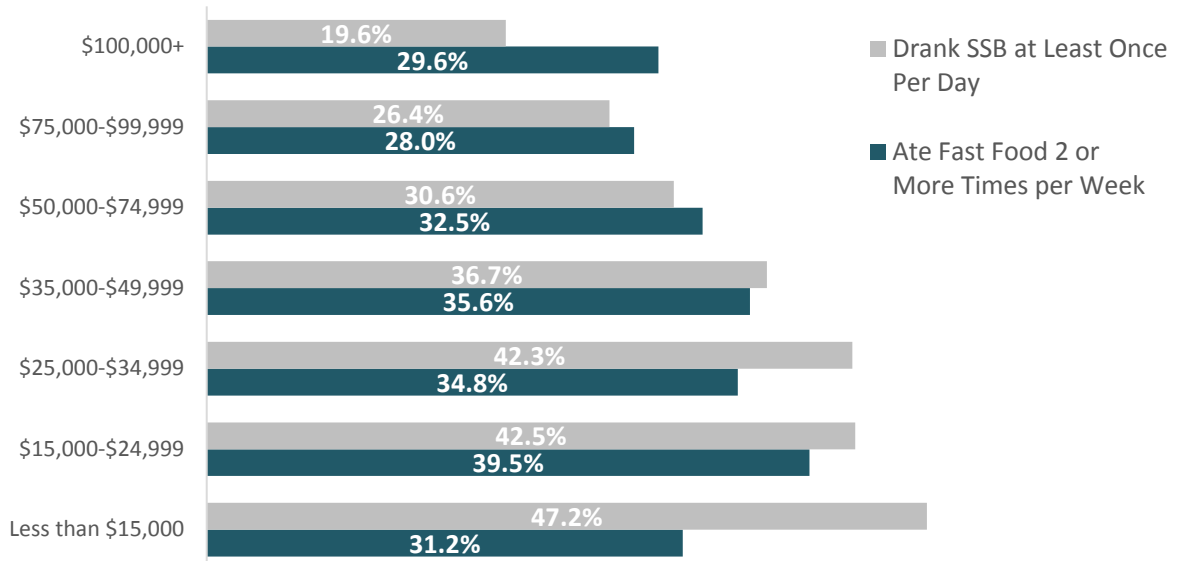
Compared to their counterparts in the state, the risk for eating fast-food two or more times weekly among children in Connecticut was significantly greater for:

- Children 12-17 and 5-11 years old; and
- Non-Hispanic Black and Hispanic/Latino children compared to non-Hispanic White children.

**Figure 7** shows the breakdown of child behaviors in soda and fast-food consumption by household income. There is no difference in eating fast-food two or more times per week among children with caregivers who have low levels of annual household income, while children from households with annual incomes of at least \$50,000 have less prevalence of drinking soda at least once daily.



**Figure 7: Child Soda or Fast Food Consumption, by Household Income.**



**Table 7: Child Soda or Fast Food Consumption, CT BRFSS 2011-2015.**

Demographic Characteristics		Drank SSB at Least Once per Day			Ate Fast Food Two or More Times per Week		
		%	95% CI		%	95% CI	
<b>Total</b>		<b>29.9</b>	28.5	31.2	<b>31.5</b>	30.1	32.9
<b>Age</b>	0-4 years old	<b>16.9</b>	14.1	19.7	<b>22.6</b>	19.1	26.0
	5-11 years old	<b>26.8</b>	24.7	28.9	<b>30.1</b>	28.0	32.2
	12-17 years old	<b>39.4</b>	37.3	41.6	<b>37.3</b>	35.2	39.5
<b>Gender</b>	Male	<b>31.8</b>	29.9	33.7	<b>32.3</b>	30.4	34.2
	Female	<b>27.9</b>	26.0	29.8	<b>30.8</b>	28.8	32.8
<b>Race/Ethnicity</b>	Non-Hispanic White	<b>24.3</b>	22.8	25.8	<b>28.6</b>	27.1	30.1
	Non-Hispanic Black	<b>46.7</b>	41.7	51.7	<b>36.0</b>	31.3	40.7
	Hispanic/ Latino	<b>36.0</b>	32.4	39.7	<b>35.8</b>	32.0	39.6
	Non-Hispanic Other Races	<b>28.6</b>	23.5	33.6	<b>34.3</b>	28.7	40.0
<b>Adult Caregiver's Income</b>	Less than \$15,000	<b>47.2</b>	40.8	53.6	<b>31.2</b>	25.2	37.1
	\$15,000-\$24,999	<b>42.5</b>	37.5	47.5	<b>39.5</b>	34.5	44.4
	\$25,000-\$34,999	<b>42.3</b>	35.5	49.1	<b>34.8</b>	27.8	41.7
	\$35,000-\$49,999	<b>36.7</b>	31.6	41.8	<b>35.6</b>	30.5	40.7
	\$50,000-\$74,999	<b>30.6</b>	26.9	34.4	<b>32.5</b>	28.7	36.3
	\$75,000-\$99,999	<b>26.4</b>	22.8	29.9	<b>28.0</b>	24.4	31.5
	\$100,000+	<b>19.6</b>	17.8	21.5	<b>29.6</b>	27.5	31.8
<b>Adult Caregiver's Insurance Status</b>	Insured	<b>25.4</b>	22.7	28.1	<b>31.9</b>	28.9	34.9
	Not Insured	<b>45.5</b>	33.8	57.2	<b>30.9</b>	20.3	41.4
<b>Adult Caregiver's Educational Attainment</b>	Less than high school	<b>51.7</b>	45.4	58.0	<b>36.1</b>	30.2	42.0
	High school graduate	<b>38.8</b>	35.4	42.2	<b>36.1</b>	32.6	39.6
	Some college	<b>33.5</b>	30.6	36.5	<b>34.8</b>	31.9	37.7
	College graduate	<b>22.2</b>	20.5	23.8	<b>28.0</b>	26.1	29.8



## Child Screen Time

The American Academy of Pediatrics recommends that screen time be limited to 1 hour per day of high quality programs for children aged 2 to 5 years, and place consistent limits on the screen time for children ages 6 and older.<sup>19</sup> U.S. children 8-18 years old are exposed to more than five hours of entertainment screen time, on average, per day.<sup>20</sup> This indicator is of interest because sedentary behaviors, such as sitting in front of the television for long periods, may contribute to weight gain or obesity. Additionally, television or computer exposure may negatively affect child development or perspective in other ways.<sup>21</sup>

The CT BRFSS survey asks the caregiver how much time the randomly selected child spent watching programs, movies, videos or playing video games on television. A subsequent question asks how much time the child spent using a computer tablet, or handheld device for playing video games or for something that is not schoolwork. The data from both of these questions are combined to calculate total screen time exposure for children 2-17 years old.

Nearly half of Connecticut children (2-17 years old) in 2011-2015 had excessive screen time (more than 2 hours daily) (**Table 8**).

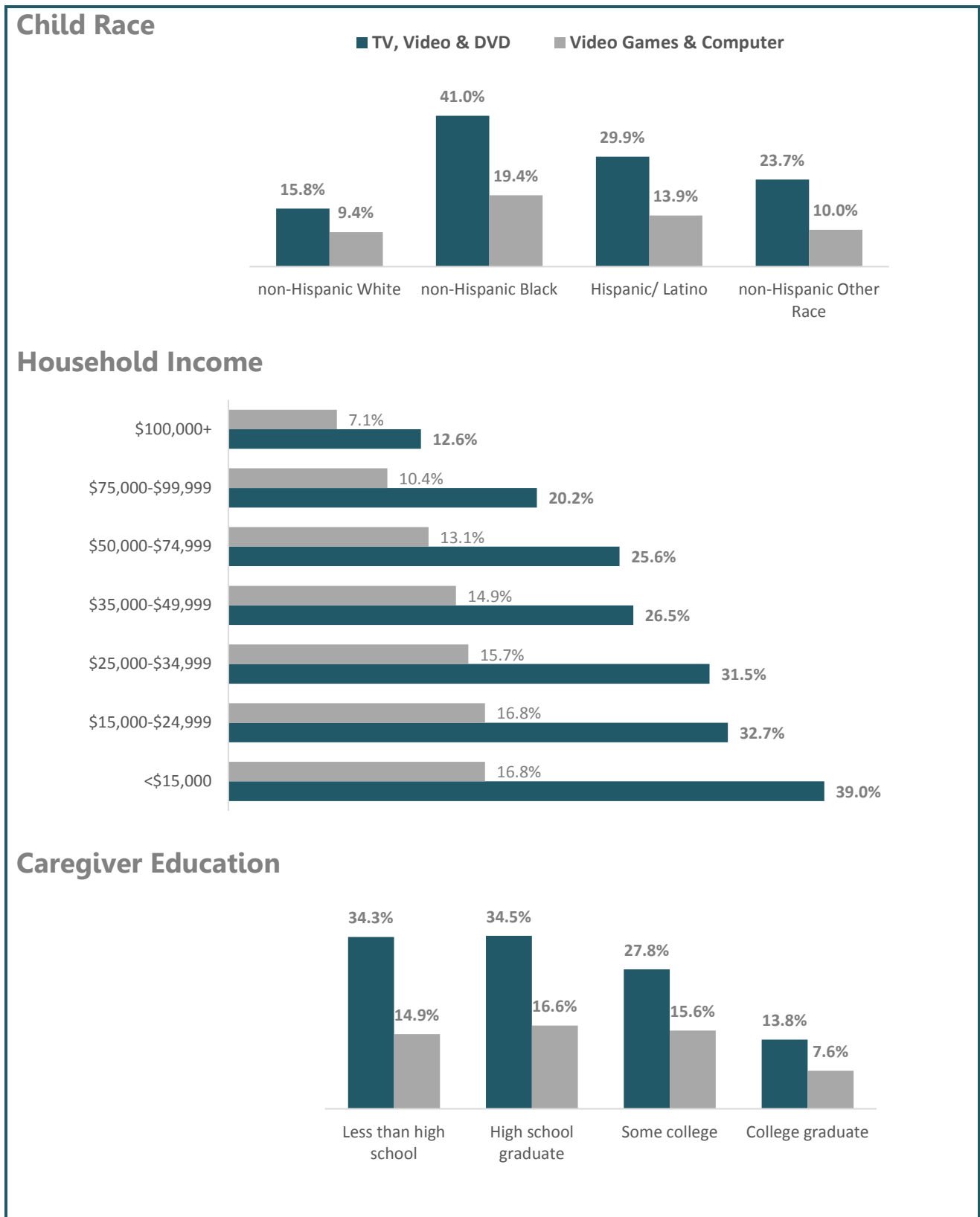
Compared to their counterparts in the state, the prevalence of excessive screen time among children in Connecticut was significantly greater for:

- Children older than 4 years old;
- Boys;
- Non-Hispanic Black children;
- Children living in households with annual incomes less than \$75,000;
- Children living with disabled adult caregivers; and
- Children living with adult caregivers without a college education.

**Figure 8** shows the breakdown of excessive screen time, by screen type. Both Hispanic/Latino and non-Hispanic Black children had a greater prevalence of having excessive screen time on video games and computers, compared to non-Hispanic White children. Excessive screen time on video games and computers decreased with increasing household income and adult caregiver's education level. Children in families with lower household income or living with an adult caregiver who had a lower education level had a greater prevalence of having excessive time on video games and computers.



**Figure 8: Child Characteristics by Screen Types among Children with Excessive Screen Time.**





**Table 8: Child Excessive Screen Time, CT BRFSS 2011-2015**

Demographic Characteristics		%	95% CI	
<b>Total</b>		<b>43.2</b>	41.8	44.6
<b>Age</b>	0-4 years old	<b>26.2</b>	23.2	29.2
	5-11 years old	<b>37.8</b>	35.5	40.1
	12-17 years old	<b>60.1</b>	58.0	62.3
<b>Gender</b>	Male	<b>47.9</b>	45.9	49.8
	Female	<b>38.7</b>	36.7	40.6
<b>Race/Ethnicity</b>	Non-Hispanic White	<b>38.4</b>	36.8	39.9
	Non-Hispanic Black	<b>63.7</b>	59.1	68.3
	Hispanic/ Latino	<b>47.8</b>	44.1	51.4
	Non-Hispanic Other Races	<b>39.8</b>	34.6	45.0
<b>Adult Caregiver Income</b>	Less than \$15,000	<b>55.7</b>	49.6	61.7
	\$15,000-\$24,999	<b>54.6</b>	49.8	59.4
	\$25,000-\$34,999	<b>55.0</b>	48.4	61.5
	\$35,000-\$49,999	<b>52.0</b>	46.8	57.2
	\$50,000-\$74,999	<b>48.5</b>	44.5	52.5
	\$75,000-\$99,999	<b>40.8</b>	37.1	44.6
	\$100,000+	<b>33.3</b>	31.2	35.4
<b>Adult Caregiver Insurance Status</b>	Insured	<b>43.6</b>	40.5	46.7
	Not Insured	<b>51.9</b>	40.3	63.4
<b>Adults Caregiver Disability</b>	Yes	<b>57.8</b>	49.1	66.6
	No	<b>42.1</b>	38.9	45.2
<b>Adult Caregiver Educational Attainment</b>	Less than high school	<b>47.9</b>	42.1	53.7
	High school graduate	<b>55.5</b>	52.2	58.9
	Some college	<b>52.8</b>	49.9	55.7
	College graduate	<b>34.2</b>	32.4	36.0

Limiting child screen time is one of many precautions parents can take to protect their children's health. The number of hours spent watching television is more of a concern for older teens and minorities,<sup>22</sup> and research has shown that children of minority race/ethnicity watch more hours of television per week than Caucasian children.<sup>10</sup> Further, children whose parents watch more than two hours of TV per day spend significantly more time with TV, the Internet, watching videos and playing video games.<sup>23</sup>

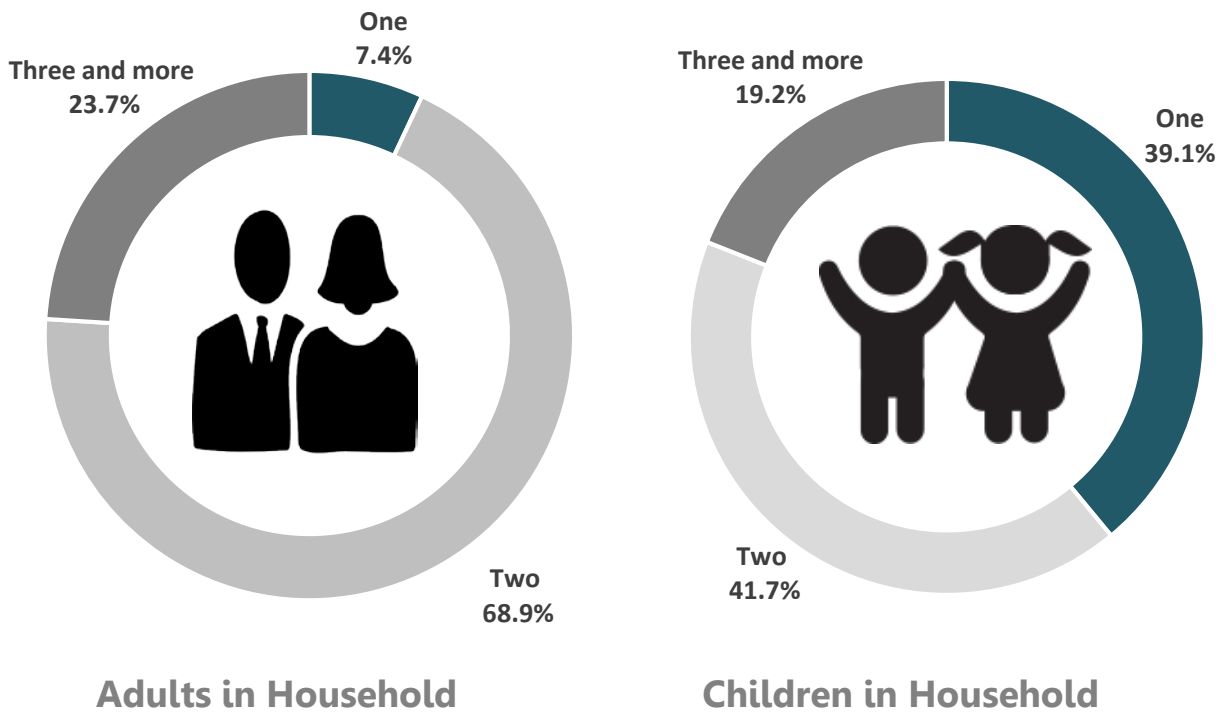


## Household and Child Health, 2011-2015

### Household Structure and Parent Socioeconomic Status

Households with large family size are linked with financial stress. Financial stress can directly influence individual well-being and indirectly influence family interaction.<sup>24</sup> Poverty is associated with poor health outcomes in children, and a number of serious chronic health problems, including heart conditions, hearing problems, intellectual disability, and asthma.<sup>25</sup> Health improves with increasing household income.<sup>23</sup>

**Figure 9: Number of Children and Adults in Household, CT BRFSS 2011-2015**

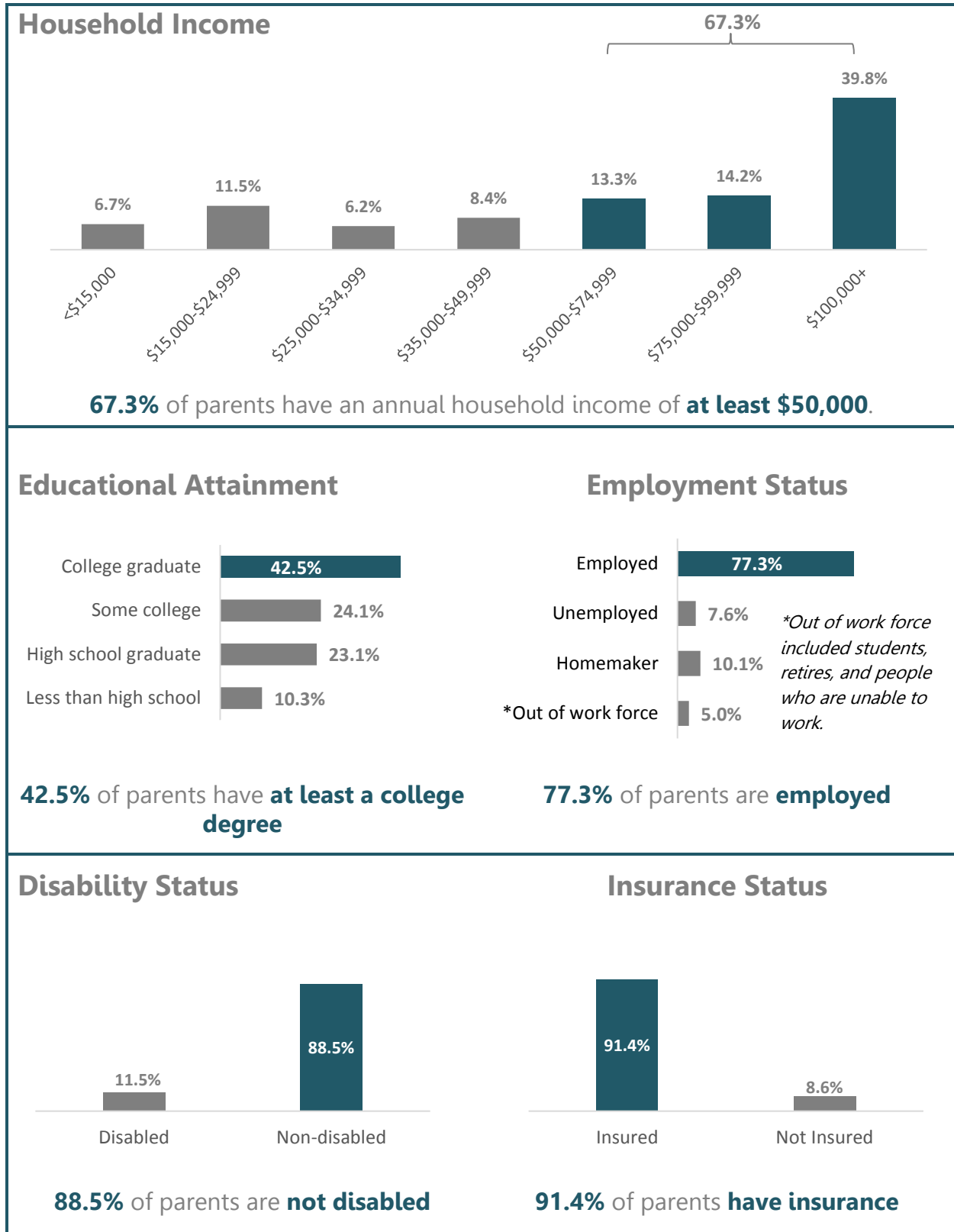


**68.9%** of households have **two adults** in the household.

**41.7%** of households have **two children** in the household.



**Figure 10: Household Socioeconomic Status, CT BRFSS 2011-2015**



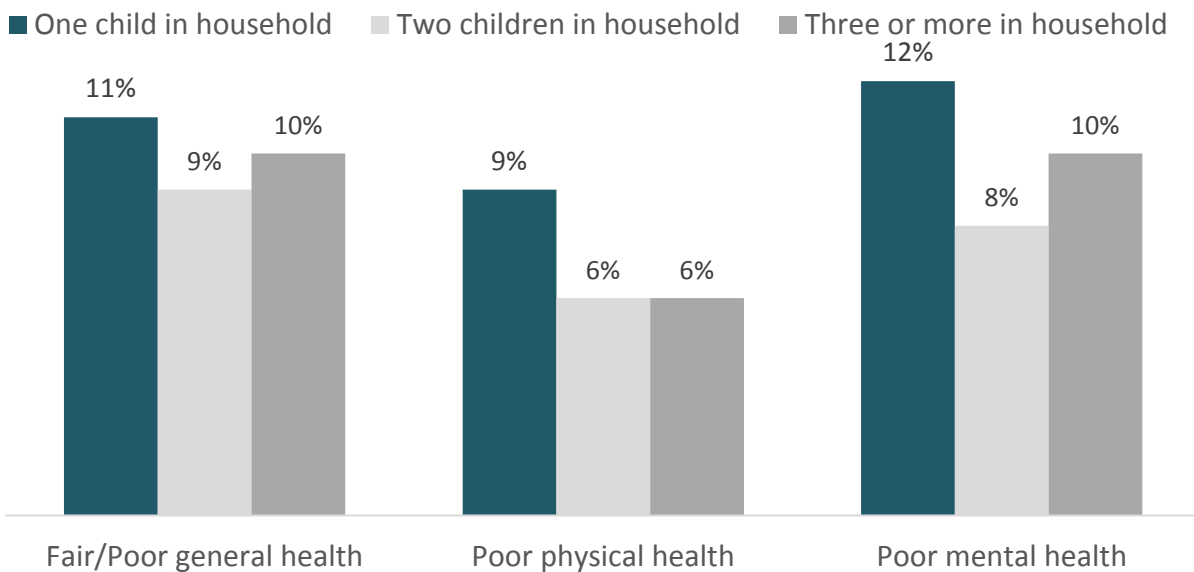


## Parental Health

The demands of parenting can cause considerable stress for families. The physical and emotional health of a child's parents can affect their ability to care for their child, and can influence the health of the family as a whole.<sup>26</sup>

Both general health and health-related quality of life were evaluated in the CT BRFSS. Parents were asked to rate their general health as excellent, very good, good, fair or poor. The "Healthy Days Measure" was used to define adults in poor physical or mental health if they reported 14 or more days for which their physical or mental health was "not good" in past month.

**Figure 11: Parental Health, by Number of Children, CT BRFSS 2011-2015**



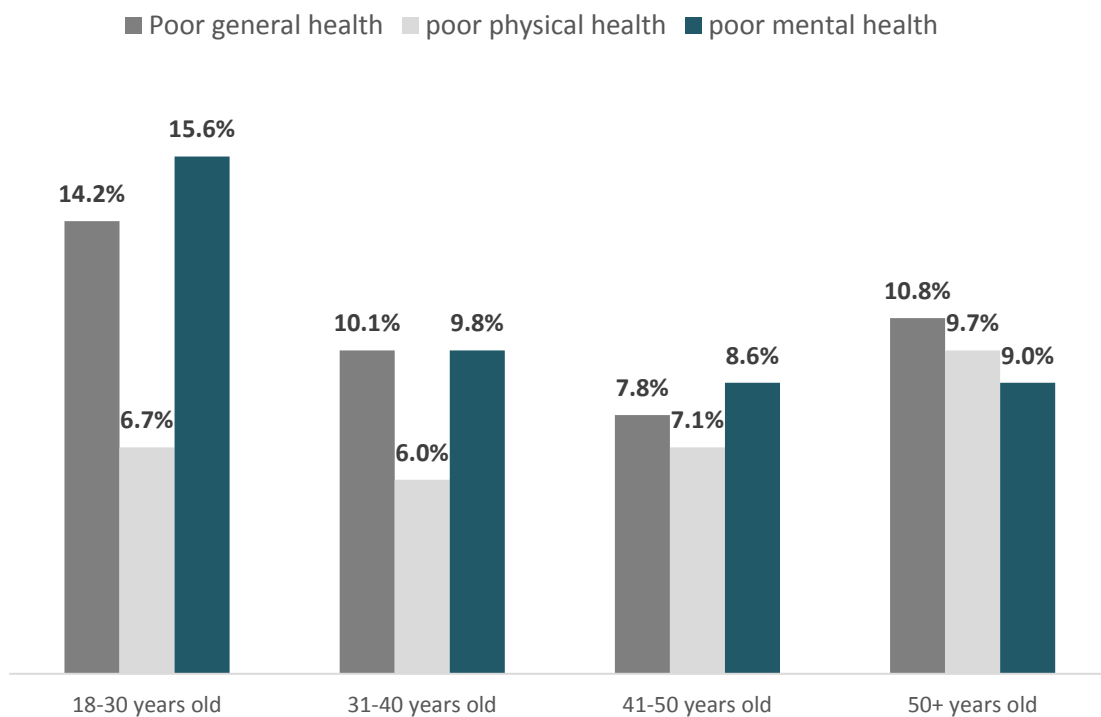
**Figure 11** shows parental-reported fair or poor general health, poor physical health and poor mental health, by the number of children less than 18 years of age living in the household. There were no significant differences in the prevalence of parents reporting fair or poor general health with one, two, or at least three children in the household. Compared to parents with one child in the household, parents with two children had a significantly less prevalence of poor



physical health, and parents with two, three or more children had significant less prevalence of poor mental health.

**Figure 12** shows parental-reported fair or poor general health, poor physical health and poor mental health, by parental age. In Connecticut, parents 18-30 years old had a significantly greater prevalence of poor general health (14.2%) compared to parents 41-50 years old (7.8%), and greater prevalence of poor mental health (15.6%) compared to parents from other age groups (30s, 40s and 50+).

**Figure 12: Parental Health, by Parental Age (CT BRFSS 2011-2015)**



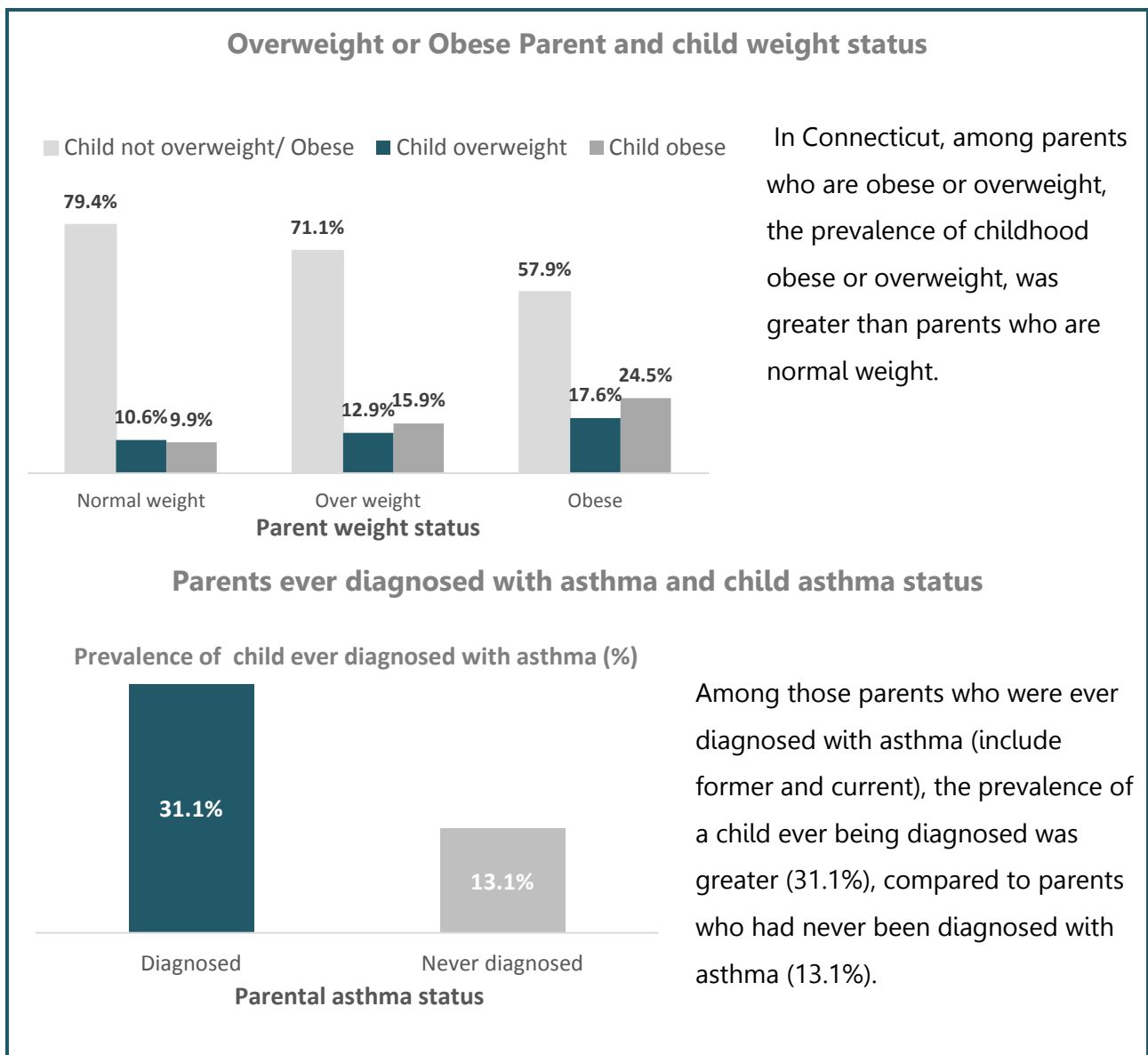


## Parental Health-related Behavior and Child Health

Studies suggest that many childhood health behaviors parallel those of their parents.<sup>23</sup>

Furthermore, children's living environments are also associated with their health.<sup>27</sup> Young children whose mothers smoke are more likely to develop wheezing and to have diminished pulmonary function, which may predispose them to asthma and chronic bronchitis.<sup>28</sup> A series of parental health-related behaviors, by child health or risk behavior, is shown in **Figure 13**.

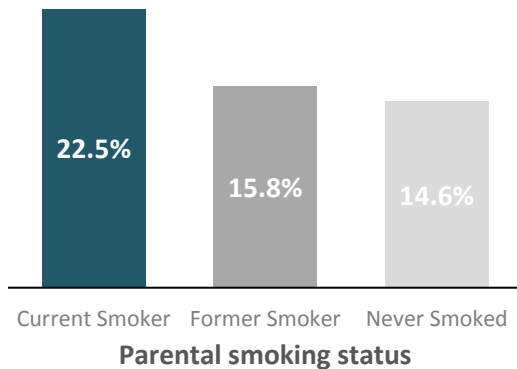
**Figure 13: Parental and Child Health Related Behaviors, CT BRFSS 2011-2015**





### Parent smoking status and child asthma

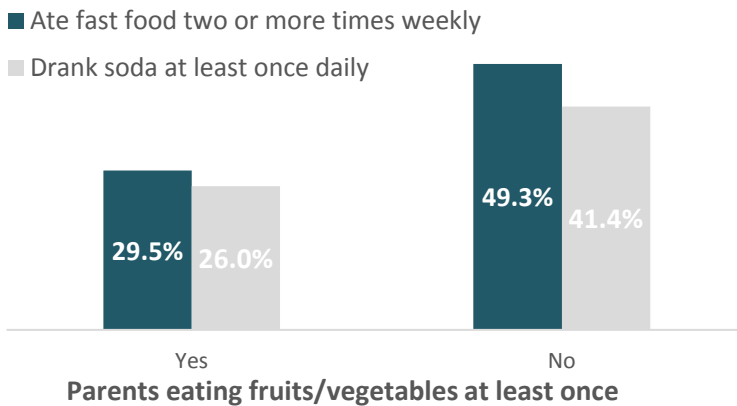
Prevalence of child ever diagnosed with asthma (%)



In Connecticut, the prevalence of children who ever had asthma (include former and current) was significantly higher among those whose parents were current smokers (22.5%), compared to parents who were former smokers (15.8%) or who had never smoked (14.6%).

### Parental and child diet

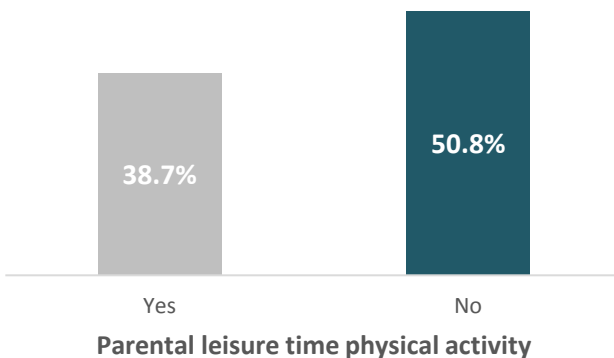
Prevalence of child soda and fast food consumption (%)



Among parents who ate vegetables or fruits more often (at least once daily), the prevalence of their children also eating fast food two or more times per week or drinking soda daily was significantly lower than among parents who ate vegetables and fruits less often.

### Parental leisure time physical activities and child excessive screen time

Prevalence of child spend excessive time on screen (%)

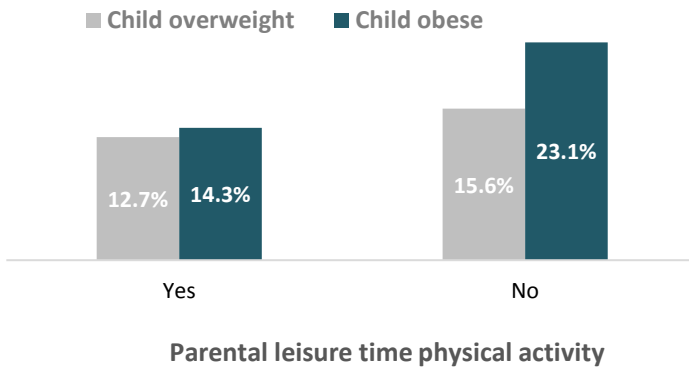


Children living with parents having leisure time physical activities had significantly less time on the screen (38.7%), compared to those without leisure time physical activities (50.8%).



### Parental leisure time physical activities and child weight status

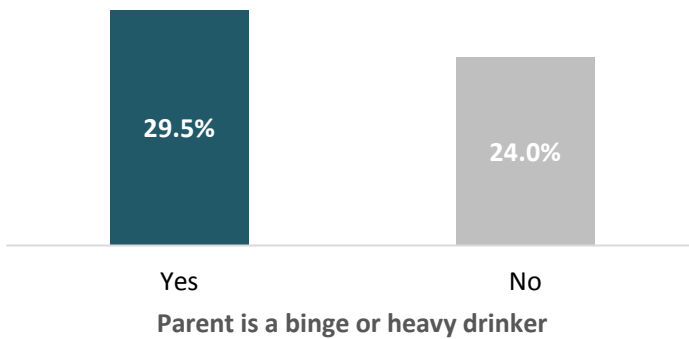
Prevalence of child overweight and obese (%)



Children living with a parent without leisure time physical activities had a greater prevalence of obesity (23.1%) or overweight (15.6%), compared to children living with a parent having leisure time physical activities.

### Parental excessive alcohol drinking and child soda consumption

Prevalence of child drinking soda daily (%)



Children living with a parent who was a binge or heavy drinker had a greater prevalence of drinking soda at least once daily (29.5%).





## Selected Factsheets

### Father and Child Health

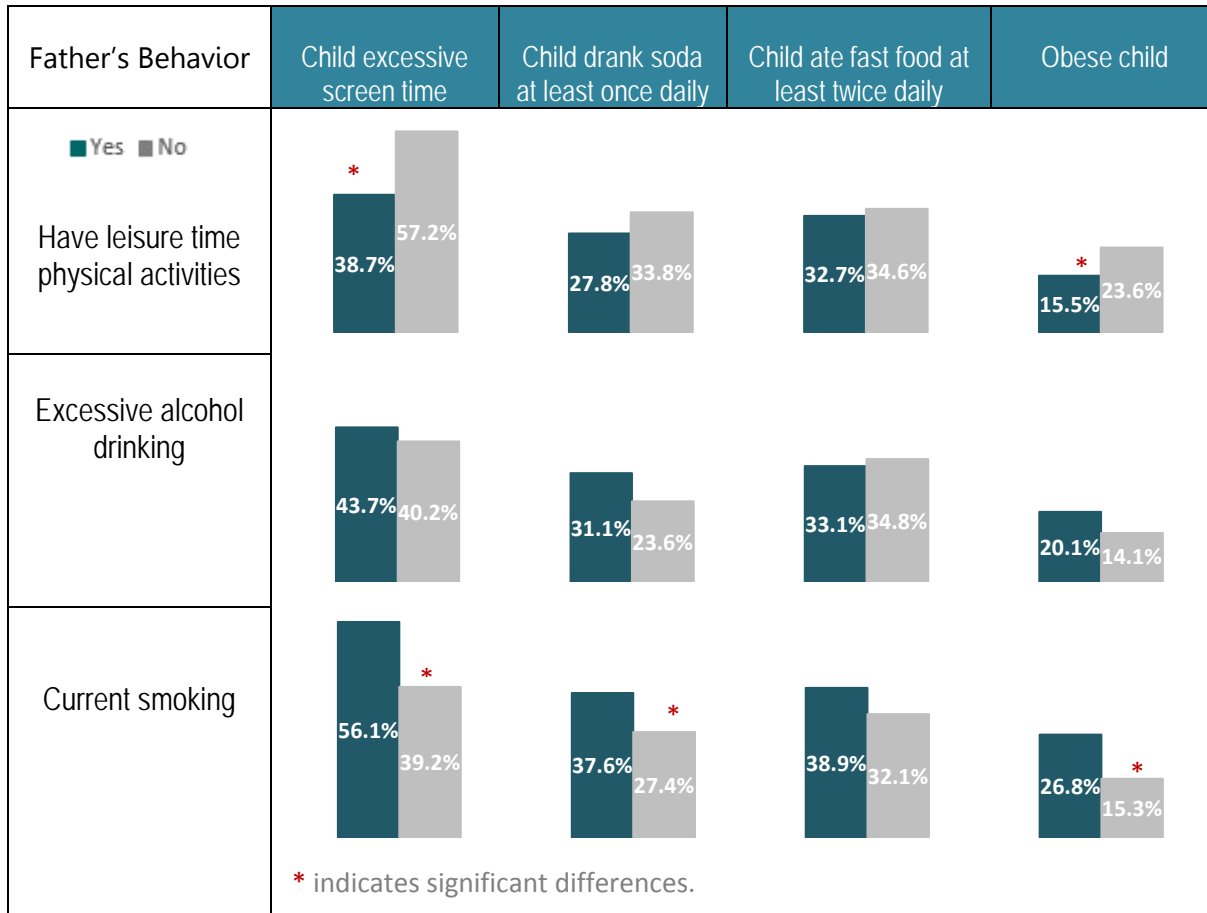
Fathers in Connecticut with at least one child in the household,

- **88.1%** were **employed**, and **4.4%** were **out of the work force**
- **43.0%** had at least a **college degree**
- **One in six** were a **current smoker**, while **one in four** were **former smoker**.

Fathers with **at least a college degree** had significantly high prevalence of :

- Being employed;
- Having leisure time activities;
- Being a nonsmoker; and
- Having good or better general, mental, or physical health.

#### Fathers' modifiable risk factors and child's health related behaviors





## Mother and Child Health

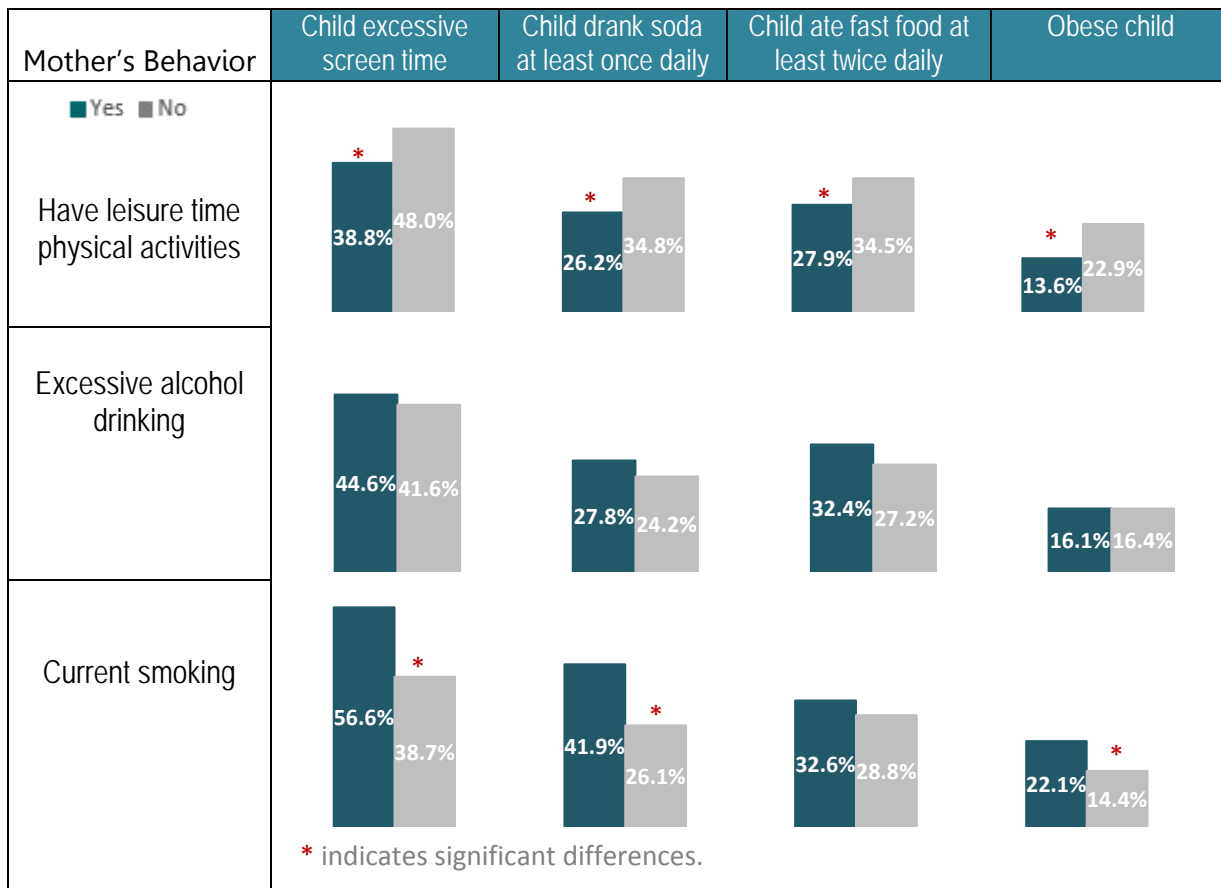
**Mothers in Connecticut** with at least one child under 18 years old,

- **68.6%** are **employed**, and **One in Six** are **homemakers**
- **42.2%** have at least a **college degree**
- **71.8% breastfed** the selected child
- **One in Seven** were **current smoker**, while **One in Five** are **former smoker**.

**Mothers** with **at least a college degree** had significantly high prevalence of :

- Being employed;
- Having leisure time activities;
- Being a nonsmoker; and
- Having good or better general, mental, or physical health.

### Mothers' modifiable risk factors and child's health related behaviors





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## Endnotes

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