HEALTH INDICATORS AND RISK BEHAVIORS IN CONNECTICUT: 2015

> Results of the Behavioral Risk Factor Surveillance Survey (BRFSS)

> > March, 2017







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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: <u>http://www.ct.gov/dph/BRFSS</u>.

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#### **Summary**

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.

The CT BRFSS questionnaire (<u>http://www.ct.gov/dph/BRFSS</u>) 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, utilization of preventive health services, and to monitor emerging issues such as alternative tobacco use and dietary habits. Results of the survey are used to inform public health programs across the state about progress toward health objectives, and to help identify emerging public health needs in the state.

Each month, survey data 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 in the state, and 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*). Data from the CT BRFSS have been used to inform development of state health plans, such as the State Health Improvement Plan,<sup>1</sup> the Connecticut coordinated chronic disease plan,<sup>2</sup> and to track online adult and child state health priorities,<sup>3,4</sup> and chronic disease dashboards.<sup>5</sup> Data are also being used to inform action plans for the population health component of the State Innovations Model (SIM) grant,<sup>6</sup> a grant from the U.S. Center for Medicare and Medicaid Service to transform healthcare in the state. Data from this survey are also used to monitor activity of the grant.<sup>7</sup>

In calendar year 2015, the CT BRFSS survey gathered data from citizen volunteers in Connecticut on a range of health-related risk factors and behaviors. State-specific items in the 2015 questionnaire included built environment/walkability, genomics of breast and ovarian cancer, non-prescription pain medication use, infertility, alternate tobacco use, and private well water.

Each section in this report presents summary results of health status, risk behaviors, clinical preventive behaviors, chronic conditions, and environmental factors during 2015, broken down by demographic subgroups of age, gender, race/ethnicity, income, health insurance status, disability status, and education level.





### Methodology

The population for the Connecticut Behavioral Risk Factor Surveillance System (CT BRFSS) consists of the total non-institutionalized English and Spanish-speaking adult population. In 2015, the CT BRFSS collected 7,858 landline interviews and 4,041 cell phone interviews, totaling 11,955 interviews. Fifty-six interviews had missing information about interview method because of limited information regarding state of resident. If any children lived in the same household as the respondent, one child was randomly selected and the adult respondent provided information about that child. A total of 2,377 interviews about children were completed. The landline sample was a disproportionate stratified random digit dial (RDD) sample, stratified by geography and listed status. Within each contacted household, one adult was selected at random to be interviewed. The cell phone sample was an un-stratified RDD sample drawn from dedicated cellular telephone banks with equal probability. An adult contacted by cell phone was eligible to complete the survey if he or she lived in a private residence or college housing either without a landline present, or with a landline but with at least 90 percent of all calls received by cell phone.

Landline and cell phone data were combined and weighted by CDC to adjust for differential selection probabilities. The weighted data were then adjusted to the distribution of the Connecticut adult population using iterative proportional fitting, or raking. Raking adjustments were made by telephone type, race/ethnicity, education, marital status, age by gender, gender by race/ethnicity, age by race/ethnicity, and renter/owner status. This weighting methodology was adopted by CDC in 2011 to accommodate the inclusion of cell phone interviews and to allow for adjustments to more demographics. As a result of these methodological changes, BRFSS data for 2011 and forward are not comparable to BRFSS data prior to 2011.

Prevalence estimates and 95% confidence intervals were computed using SAS PROC SURVEYFREQ, which can properly compute variances for complex sampling plans. Any responses of "Not Known/Not sure" or "Refused" were classified as missing. The coefficients of variation (CV) was used to assess the validity of each estimate. If the CV for any estimate was at least 15%, the estimate was not reported and is shown in the tables with an asterisk (\*).

Each health indicator was analyzed at the statewide level, and was evaluated by age, gender, race/ethnicity, household income, whether or not the adult had health care coverage, whether or not the adult had a disability, and the adult's educational attainment. Race and Ethnicity was defined by three categories: non-Hispanic White, non-Hispanic Black or African American, and Hispanic or Latino/a. A fourth category, non-Hispanic respondents of other or multiple races, was excluded from analysis because the CV was too large for most estimates in this category to allow reporting. Indicators concerning children were analyzed by the age of the child, gender of the child, race/ethnicity of the child, household income, and the adult proxy's health insurance status and educational attainment.

Significant increases or decreases compared to the U.S. were evaluated by a one-population one tailed binomial test at the 0.05(\*), 0.01(\*\*) and 0.001(\*\*\*) level. Change in the prevalence of selected health indicators from years 2011 to 2015 was evaluated using a two-population one tailed binomial test for significant increase or decrease at the 0.1(†), 0.05(††) and 0.01(<sup>†††</sup>) level. Significance testing by demographic characteristic was evaluated using a two population one-tailed binomial test for significant increase or decrease risk/protection or prevalence (alpha=0.05), only significant results are discussed in this report.



### **Adult Demographics**

**Table 1** shows the demographics ofthe survey respondents and theestimated population ofConnecticut adults.

- The majority of Connecticut's adult population was 55 years old or older (37.9%).
- Slightly more than half of the population was female (51.8%).
- Seventy percent of adults were Non-Hispanic White, one in seven was Hispanic, and one in ten were Non-Hispanic Black.
- The majority of adults lived in households earning at least \$75,000 annually (44.3%).
- Ninety-three percent of adults had some type of health insurance coverage.
- One in five respondents had a disability.
- Sixty-one percent of adults had more than a high school (HS) education.

\* Other tables in this report do not report on the Non-Hispanic Other/Multiple Race category because of high coefficients of variation.

*\*\* Responses for uninsured were low and some indicators of low prevalence had a high coefficients of variation.* 

#### Keeping Connecticut Healthy

#### Table 1: Adult Demographics, CT 2015

	Survey Respondents	Estimated Population	Estimated % of Population
Total	11,955	2,840,000	100
Age			
18-34 years old	1,437	790,000	28.2
35-54 years old	3,294	950,000	33.9
55 years old and over	6,977	1,060,000	37.9
Gender			
Male	5,059	1,370,000	48.2
Female	6,840	1,470,000	51.8
Race/Ethnicity			
Non-Hispanic White	8,924	1,970,000	70.7
Non-Hispanic Black	1,004	260,000	9.5
Hispanic	1,147	390,000	13.9
Non-Hispanic Other/ Multiple Race*	563	170,000	5.9
Income			
Less than \$35,000	2,975	680,000	29.9
\$35,000-\$74,999	2,483	590,000	25.8
\$75,000 and more	4,156	1,010,000	44.3
Insurance status			
Insured	11,298	2,620,000	92.8
Not Insured**	560	200,000	7.2
Disability			
Yes	2,526	520,000	19.0
No	8,874	2,200,000	81.0
Education			
HS graduate or less	3,631	1,110,000	39.4
More than HS Education	8,219	1,710,000	60.6

### **Child Demographics**

**Table 2** shows the demographics of the survey respondents and the estimated population of Connecticut children.

- The majority of the children were between 5 and 11 years old (39.2%), closely followed by children 12-17 years old (33.6%).
- There were nearly the same amount of male (50.4%) and female children (49.6%).
- The majority of children were Non-Hispanic White (54.6%). Twenty-four percent were Hispanic which is 10% more than the population of Hispanic adults (13.9%). Twelve percent were Non-Hispanic Black and 9.4% were Non-Hispanic Other or multiple races.
- The majority of children lived in households earning at least \$75,000 (52.6%).

	Survey Respondents	Estimated Population	Estimated % of Population
Total	2,377	760,000	100
Age			
0-4 years old	413	190,000	27.2
5-11 years old	773	270,000	39.2
12-17 years old	963	230,000	33.6
Gender			
Male	1,217	380,000	50.4
Female	1,099	370,000	49.6
Race/Ethnicity			
Non-Hispanic White	1,416	400,000	54.6
Non-Hispanic Black	210	90,000	11.6
Hispanic	447	180,000	24.3
Non-Hispanic Other/Multiple Race*	205	70,000	9.4
Adult Proxy Income			
Less than \$35,000	478	190,000	29.0
\$35,000-\$74,999	419	120,000	18.4
\$75,000 and more	1,177	350,000	52.6
Adult Proxy Insurance S	Status		
Insured	2,203	700,000	92.3
Not Insured	168	60,000	7.6
Adult Proxy Education			
HS graduate or less	583	220,000	29.0
More than HS Education	1,786	540,000	71.0

#### Table 2: Child Demographics, CT 2015

- Most of the children were insured (92.3%).
- Seventy-one percent had an adult proxy with more than a high school education.

\*Other tables in this report do not repot on the Non-Hispanic Other/Multiple Race category because of high coefficients of variation.



### List of 2015 Health Indicators





### 1. State of the State

### **Connecticut Comparison to the U.S. in 2015**

**Figure 1** and **Table 3** highlight selected adult health Indicators in Connecticut during calendar year 2015, compared to median results from 2015 for the U.S. and its territories.

Figure 1: Selected Adult Health Indicators in Connecticut versus the U.S. and Territories, 2015



#### Table 3: Selected Adult Health Indicators in Connecticut versus the U.S. and Territories, 2015

	СТ	U.S.	Risk	Significantly Greater or
Health Indicators	2015	Median	Difference	Less Risk/Protection
Obesity	25.3%	29.8%	-4.6%	Less Risk ***
Diabetes	9.3%	10.0%	-0.8%	Less Risk *
High Blood Cholesterol	37.4%	36.3%	1.0%	NS
High Blood Pressure	30.4%	30.9%	-0.5%	NS
Depression	17.6%	18.9%	-1.3%	Less Risk *
Current Asthma	10.5%	9.2%	1.3%	More Risk **
No Health Care Coverage (18-64 years old)	8.7%	13.0%	-4.3%	Less Risk ***
		· · · · · · · · · · · · · · · · · · ·		

Prevalence in 2015 of selected health indicators were obtained from the Behavioral Risk Factor Surveillance System for Connecticut (www.ct.gov/dph/brfss) and the U.S. and its territories (www.cdc.gov/brfss). Risk differences for Connecticut *versus* the U.S. and its territories were tested for significantly greater or lesser risk.

- significance < 0.05; \*\* - significance < 0.01; \*\*\* - significance < 0.001; NS - not significantly different.





**Figure 2** and **Table 4** highlight selected adult modifiable risk factors in Connecticut during 2015, compared to median results from 2015 for the U.S. and its territories. More information on these indicators is located within this report.





#### Table 4: Selected Adult Modifiable Risk Factors in Connecticut versus the U.S. and Territories, 2015

Madifiable Dick Factors	СТ	U.S.	Risk	Significantly Greater or		
	2015	Median	Difference	Less Risk/Protection		
Flu Vaccination	46.1%	42.0%	4.1%	More Protection ***		
Pneumococcal Vaccination (65 years and older)	72.7%	72.5%	0.2%	NS		
Current Cigarette Smoking	13.5%	17.5%	-4.0%	Less Risk ***		
Excessive Alcohol Consumption	18.6%	17.6%	1.0%	NS		
No Leisure Time Physical Activities	23.5%	26.2%	-2.7%	Less Risk ***		
Met Both Aerobic & Strengthening Guidelines	21.5%	17.6%	4.0%	More Protection ***		
Consume Vegetables at Least Once Daily	80.5%	77.7%	2.9%	More Protection ***		
Consume Fruits at Least Once Daily	64.5%	59.9%	4.6%	More Protection ***		
Check Up in Past 12 Months	72.9%	70.2%	2.7%	More Protection ***		
Prevalence in 2015 of selected modifiable risk factors were obtained from the Behavioral Risk Factor Surveillance Syste						

Prevalence in 2015 of selected modifiable risk factors were obtained from the Behavioral Risk Factor Surveillance System for Connecticut (www.ct.gov/dph/brfss) and the U.S. and its territories (www.cdc.gov/brfss). Risk differences for Connecticut versus the U.S. and its territories were tested for significantly greater or lesser risk.





Sixteen selected health indicators and modifiable risk factors were compared to estimates for the U.S. and its territories during 2015 (**Figure 1 and 2** and **Table 3 and 4**). More information about these statewide indicators can be found elsewhere in this report.

Compared to the U.S. and its territories, Connecticut adult risk was significantly less, and prevalence significantly better, for eleven of the sixteen health indicators:

- Obesity (p < 0.001);
- Diabetes (p < 0.05);
- Depression (p<0.05);
- No health care coverage among adults between 18 and 64 years old (p<0.001);
- Flu Vaccination in the past year (p < 0.001);
- Current cigarette use (p < 0.001);
- No leisure time physical activities (p<0.001);
- Met both aerobic and strengthening exercise guidelines (p<0.001);
- Consumed vegetables at least once daily (p<0.001);
- Consumed fruits at least once daily (p<0.001); and
- Check up in past 12 months (p < 0.001).

Compared to the U.S. and its territories, Connecticut adult risk was significantly more, and prevalence significantly worse, for only one health indicator:

• Current Asthma (p<0.01).

Risk in Connecticut of the remaining four health indicators were not significantly different from the U.S.:

- High blood cholesterol;
- High blood pressure;
- Pneumonia vaccination among adults 65 years old and older; and
- Excessive alcohol consumption.







### **Connecticut Comparison to Other States in 2015**

Connecticut's ranking compared to other states and U.S. territories for selected health indicators is shown in Figure 3.

#### Figure 3: Connecticut State Ranking for Selected Adult Health Indicators, BRFSS, 2015



(50 States, District of Columbia, Guam, and Puerto Rico)

Connecticut rankings that were among the best 10 states in the country during 2015;

Connecticut rankings that were worse than most states in the country during 2015.





For 23 selected health indicators, and compared to all states in the U.S. and its territories, Connecticut ranked among the **best ten** states in the country for seven indicators (*marked as blue stars in* Figure 3):

- Consumed fruits at least once daily, for which only four other states ranked better (New Hampshire, Vermont, Massachusetts, Maine);
- Flu vaccination;
- At least one primary care provider;
- No health care coverage (18-64 years old);
- Cardiovascular disease (45+ years);
- Obesity; and
- Current cigarette use, for which only three other states ranked better (California, Puerto Rico, Utah);

Among all 23 selected health indicators, Connecticut ranked **better than half** among all states in the U.S. and its territories for all **except** three indicators (*marked as red dots in* **Figure 3**):

- High blood cholesterol;
- Current asthma; and
- Excessive alcohol consumption.





# Change in Selected Connecticut Health Indicators (2011-2015)

**Figure 4, Figure 5** and **Table 5**show the change from 2011 through 2015 among Connecticut adults for selected biennial (**Figure 4**) and annual (**Figure 5**) health indicators.





Estimated percent prevalence values for selected health indicators are shown for years 2011 and 2015 (Figure 4A), and for years 2011, 2013 and 2015 (Figure 4B), with circles. Four-year change from year 2011 to 2015 (Figure 4A) and biennial change from years 2011-2013 and 2013-2015 (Figure 4B), are shown with lines. † -significance < 0.10; † † -significance < 0.05; † † † -significance < 0.01





#### Figure 5: Change in Selected Annual Health Indicators, CT BRFSS 2011-2015

Estimated percent prevalence values for selected health indicators are shown for years 2011 and 2015 (Figure 5A), and for years 2011, 2012, 2013, 2014 and 2015 (Figure 5B), with circles. Four-year change from 2011 to 2015 (Figure 5A) and annual change from years 2011-2012, 2012-2013, 2013-2014 and 2014-2015 (Figure 5B), are shown with lines. + -significance < 0.10; + + -significance < 0.05; + + + -significance < 0.01





Health Indicators	CT 2011	CT 2012	CT 2013	CT 2014	CT 2015	
High Blood Pressure <sup>#</sup>	29.7	-	31.3	_	30.4	
High Blood Cholesterol <sup>#</sup>	36.2	-	37.8	-	37.4	
Consume Vegetables at Least Once Daily <sup>#</sup>	78.3	Ι	77.8	-	80.5	
Consume Fruits at Least Once Daily <sup>#</sup>	67.8	-	66.3	-	64.5	
Meet Both Aerobic & Strengthening Guidelines	23.7	_	18.9	-	21.5	
Adult Obesity	24.5	25.6	25.0	26.3	25.3	
Flu Vaccination	39.4	39.2	40.3	42.9	46.1	
Pneumococcal Vaccination (65 years and	71.0	67.6	67.8	70.6	72.7	
Excessive Alcohol Consumption	19.6	19.3	19.5	17.6	18.6	
Current Cigarette Use	17.1	16.0	15.5	15.4	13.5	
No Health Care Coverage (18-64 years old)	14.8	12.8	12.3	10.6	8.7	
Child Asthma (0-17 years old)	10.1	11.0	10.1	10.1	10.6	
Child Obesity (2-17 years old)	15.7	16.8	14.6	16.6	16.3	
# Health indicators offered in the BRFSS every other year.						

#### Table 5: Trend in Percent Prevalence of Selected Health Indicators, CT, 2011-2015

Significant decreases from year 2011 to 2015 in Connecticut (**Figure 4A** and **Figure 5A**) were observed for the following indicators:

- Consumed fruits at least once daily (p<0.01), representing a four year decrease of 3.3% from year 2011 to 2015, or nearly 92,000 fewer adult residents who ate fruits at least once daily. This decrease can be attributed to a significant decrease from 66.3% to 64.5% from year 2013 to 2015 (p<0.05) (Figure 4B).</li>
- Cigarette smoking (p<0.01), with a steady annual decrease from 17.1% from year 2011 to 13.5% in year 2015, representing a four-year smoking decrease of 3.6% among adults in Connecticut. In year 2015, nearly 100,000 fewer residents in Connecticut smoked cigarettes, relative to year 2011. In year 2015, 13.5% (or nearly 380,000) of adult residents were current cigarette smokers. There was a significant single year reduction in the prevalence of cigarette smoking among Connecticut adults from year 2014 to 2015 (p<0.05) (Figure 5B).</li>
- No health care coverage among adults 18-64 years old (p<0.01), representing a four-year decrease from year 2011 to 2015 of 6.1% adult residents, or nearly 170,000 fewer adult residents without coverage. This four-year decrease in adults without health care coverage can be attributed to three significant decreases. From 14.8% to 12.8% from year 2011 to 2012 (p<0.1), from 12.3% to 10.6% from year 2013 to 2014 (p<0.1), and from 10.6% to 8.7% from year 2014 to 2015 (p<0.05) (Figure 5B).</li>



Significant increases from year 2011 to 2015 in Connecticut (**Figure 4A** and **Figure 5A**) were observed for the following indicators:

- Consumed vegetables at least once daily (p<0.05) among Connecticut adult residents, representing an increase from year 2011 to 2015 of 2.2% of adult residents, or nearly 6,000 more adult residents who ate vegetables at least once daily. This increase can be attributed to a significant increase from 77.8% to 80.5% from year 2013 to 2015 (p<0.01) (Figure 4B).</li>
- Flu vaccination (p<0.01), representing a four-year increase in adults who received the flu shot in the previous year. This four-year increase can be attributed to significant increases from 40.3% to 42.9% from year 2013 to 2014 (p<0.05) and from 42.9% to 46.1% from year 2014 to 2015 (p<0.01) (Figure 5B).</li>

No significant increase or decrease from years 2011 to 2015 in Connecticut (**Figure 4A** and **5A**) was observed for: high blood pressure, high blood cholesterol, adults who met both guidelines of aerobic and strengthening exercise, adult and child obesity, pneumococcal vaccination among adults at least 65 years of age, excessive alcohol consumption, and child asthma,.

Yearly significant changes were observed with two health indicators:

- Pneumococcal vaccination among adults at least 65 years of age, in which there was a significant decrease in vaccination coverage from 71.0% to 67.6% from year 2011 to 2012 (p<0.1), (Figure 5B).</li>
- Excessive alcohol consumption, in which there was a significant decrease of 1.9% from year 2013 to 2014 (p<0.1) (**Figure 5B**).





### **Vulnerable populations**

In 2015, certain groups were significantly more likely to experience poor health outcomes:

**Non-Hispanic Black and Hispanic adults** compared to non-Hispanic White adults, were at significantly greater risk of disability and limited healthcare coverage, with a greater risk of being enrolled in Medicaid. They were at a significantly greater risk of having no leisure time physical activity in the past week, and not always wearing a seatbelt. Among residents in the state, an annual routine checkup and annual dental visit, and flu and pneumococcal vaccinations were significantly less prevalent among those of minority race/ethnicity. Further, Hispanic and non-Hispanic Black adults were at significantly greater risk of having permanent teeth extracted.

**Disabled adults** were at significantly greater risk of reporting fair or poor health, as well as poor mental and physical health. They were at significantly greater risk of having limited healthcare coverage being enrolled in Medicaid. Among residents in the state, the prevalence of suffering a fall in the past year and being injured in the fall was significantly greater among residents with a disability. Further, disabled adults were at significantly greater risk of not having annual clinical preventive visits that included cervical, breast and prostate screening and pneumococcal and flu vaccinations. They were also at greater risk of not having an annual dental visit, with a higher prevalence of dental bone loss and permanent teeth extractions. Adults with disabilities were at significantly greater risk for nearly all chronic conditions evaluated, including asthma, COPD, arthritis, cardiovascular disease, cancer, pre-diabetes and diabetes, kidney disease, and depression.

Adults in the lowest income category (less than \$35,000 annually) were at significantly greater risk of reporting fair or poor health, as well as poor physical and mental health. They were at greater risk of being disabled and having obesity, as well as suffering falls. Among residents in the state, the prevalence of limited healthcare coverage and no health care insurance was significantly greater for adults with disabilities. Low-income adults were also at greater risk of having no leisure time activity, less seatbelt use, and using cigarettes and e-cigarettes. They were at greater risk of not having medical preventive care, which includes cervical and breast cancer screening, and colorectal cancer screening, as well as flu, pneumococcal, and shingles vaccinations. The prevalence of having an annual dentist visit was also significantly less among adults of low income, and they were also at significantly greater risk for several chronic conditions, including COPD, arthritis, cardiovascular disease, and cancer, as well as pre-diabetes and diabetes.

**Adults without health insurance** were at significant increased risk of reporting fair or poor health. They were at significant increased risk of having limited healthcare coverage and not receiving a routine medical checkup or flu vaccination in the past year. Among residents in the state, the prevalence of breast and colorectal cancer screening, as well as dental visits and teeth extractions, were significantly less among those without insurance. Adults without insurance were also at significant increased risk of smoking cigarettes.

**Adults with a high school degree or less** were at significant increased risk of reporting fair or poor general health, as well as poor physical and mental health, and they were at significant increased risk of living with a disability and being obese. The risk of having limited health care coverage and no healthcare insurance was significantly higher. Compared to their counterparts in the state, they reported a significantly lower prevalence of leisure time physical activity and seatbelt use, but significantly higher prevalence of smoking cigarettes and e-cigarettes. Adults with no more than a high school degree were at significant increased risk of not having cervical or colorectal cancer screening. The prevalence of visiting a dentist in the past year, getting a flu vaccine in the past year, and getting the shingles vaccine were significantly lower among adults without post-high school education. They were also at higher prevalence of a number of chronic conditions, including arthritis, cancer, cardiovascular disease, COPD, diabetes, and depression.



### 2. Health Status Indicators

### **General Health Status**

General self-rated health status is a valuable measure to collect alongside more objective health measures because it has strong predictive properties for health outcomes; specifically, self-reports of poor health are strongly associated with mortality.<sup>8</sup>

BRFSS respondents were asked to rate their general health as excellent, very good, good, fair or poor. The prevalence of adults who reported fair or poor health is shown in **Table 6**.

One in seven Connecticut adults rated their health as either fair or poor in 2015.

Compared to their counterparts in the state, the risk of having fair or poor health among adults in Connecticut was significantly greater for:

- Adults 55 years and older (20.0%);
- Non-Hispanic Black (17.3%) and Hispanic (28.3%) adults;
- Adults from households earning less than \$35,000 (29.2%) and \$35,000-\$74,999 (11.2%);
- Adults without health insurance (23.2%);
- Adults with a disability (45.1%) (as defined on page 23); and
- Adults with no more than a high school education (23.6%).

Table 6: Fair or Poor Health, CT 2015						
Demographic Characteristics	%	95 Confi Inte	5% dence rvals			
Total	14.9	14.0	15.8			
Age						
18-34 years old	9.4	7.5	11.2			
35-54 years old	14.2	12.6	15.8			
55 years old and over	20.0	18.7	21.4			
Gender						
Male	14.8	13.4	16.2			
Female	15.1	13.9	16.3			
Race/Ethnicity	Race/Ethnicity					
Non-Hispanic White	12.6	11.7	13.6			
Non-Hispanic Black	17.3	13.7	21.0			
Hispanic	28.3	24.8	31.8			
Income						
Less than \$35,000	29.2	26.9	31.6			
\$35,000-\$74,999	11.2	9.6	12.8			
\$75,000 and more	6.1	5.0	7.2			
Insurance Status						
Insured	14.3	13.4	15.2			
Not Insured	23.2	18.6	27.7			
Disability						
Yes	45.1	42.2	48.0			
No	7.7	6.9	8.5			
Education						
HS graduate or less	23.6	21.7	25.4			
More than HS Education	9.3	8.5	10.2			



### Disability

The Americans with Disabilities Act (ADA) defines an individual with a disability as "a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment." <sup>9</sup>

Respondents were classified as having a disability if they answered yes to any of the following five questions: 1) Are you blind or do you have serious difficulty seeing, even when wearing glasses? 2) Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering or making decisions? 3) Do you have serious difficulty walking or climbing stairs? 4) Do you have difficulty dressing or bathing? 5) Because of a physical, mental or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping? Results are shown in **Table 7**.

One in five Connecticut adults reported being 'disabled'.

Compared to their counterparts in the state, the risk of being disabled among adults in Connecticut was significantly greater for:

- Adults 55 years and older (26.7%);
- Women (20.5%);
- Non-Hispanic Black (22.9%) and Hispanic adults (28.1%);
- Adults from households earning less than \$35,000 (35.2%) and \$35,000-\$74,999 (15.6%); and
- Adults with no more than a high school education (28.4%).



#### Table 7: Disability among Adults, Connecticut, 2015

Demographic Characteristics	%	95% Confidenc Intervals	
Total	19.0	18.0	20.0
Age			
18-34 years old	13.2	11.0	15.4
35-54 years old	15.5	13.9	17.1
55 years old and over	26.7	25.2	28.2
Gender			
Male	17.5	16.0	19.0
Female	20.5	19.1	21.8
Race/Ethnicity			
Non-Hispanic White	17.5	16.4	18.5
Non-Hispanic Black	22.9	18.8	27.0
Hispanic	28.1	24.4	31.8
Income			
Less than \$35,000	35.2	32.7	37.7
\$35,000-\$74,999	15.6	13.7	17.6
\$75,000 and more	8.6	7.4	9.9
Insurance Status			
Insured	18.9	17.9	19.9
Not Insured	19.9	15.5	24.4
Education			
HS graduate or less	28.4	26.4	30.5
More than HS Education	13.0	12.1	14.0



### **Health-Related Quality of Life**

The BRFSS uses the "Healthy Days Measure" to assess health-related quality of life. The Healthy Days Measure has been useful for identifying health disparities and tracking population trends.<sup>10</sup> This measure defines adults in poor physical or mental health if they reported 14 or more days for which their physical or mental health was "not good" (within the past 30 days). The prevalence of adults who had poor physical health and/or poor mental health is reported in **Table 8**.

	Poor Physical Health		Poor Mental Health		ealth	
Demographic Characteristics	%	% 95% Confidence Intervals		%	95% Co Inter	nfident rvals
Total	10.9	10.1	11.7	11.1	10.3	12.0
Age						
18-34 years old	7.0	5.2	8.8	14.9	12.5	17.3
35-54 years old	10.4	9.1	11.8	11.4	10.1	12.8
55 years old and over	14.2	13.0	15.4	8.4	7.5	9.3
Gender						
Male	9.8	8.6	11.0	9.6	8.4	10.8
Female	11.9	10.8	13.0	12.6	11.4	13.9
Race/Ethnicity						
Non-Hispanic White	10.3	9.4	11.2	10.7	9.7	11.7
Non-Hispanic Black	10.8	7.9	13.7	10.3	7.5	13.2
Hispanic	14.8	12.0	17.5	14.6	11.7	17.5
Income						
Less than \$35,000	18.6	16.6	20.5	18.5	16.3	20.6
\$35,000-\$74,999	9.0	7.5	10.5	9.9	8.1	11.6
\$75,000 and more	6.6	5.3	7.9	6.9	5.6	8.1
Insurance Status						
Insured	10.9	10.1	11.7	11.1	10.2	12.0
Not Insured	*	*	*	*	*	*
Disability						
Yes	35.3	32.5	38.1	30.0	27.1	32.8
No	5.2	4.5	5.9	6.7	5.9	7.5
Education						
HS graduate or less	15.0	13.4	16.6	14.5	12.8	16.2
More than HS education	8.3	7.4	9.1	9.0	8.1	9.9
Estimates marked with an "*" are not reported because their coefficients of variation are at least 15% (see page 8).						

#### Table 8: Health-related Quality of Life, CT 2015



#### 2015 Connecticut BRFSS Report

One in nine Connecticut adults rated their physical health as poor. The prevalence of Connecticut adults who rated their mental health as poor (11.1%) was similar.

Compared to their counterparts in the state, the risk of **poor physical health** among adults in Connecticut was significantly greater for:

- Adults 55 years old and older (14.2%);
- Hispanic adults (14.8%), when compared with Non-Hispanic White adults (10.3%);
- Adults from households earning less than \$35,000 (18.6%) and \$35,000-\$74,999 (9.0%);
- Disabled adults (35.3%); and
- Adults with no more than a high school education (15.0%).

Compared to their counterparts in the state, the risk of **poor mental health** among adults in Connecticut was significantly greater for:

- Adults less than 35 years old (14.9%) and adults 35-54 years old (11.4%);
- Women (12.6%);
- Hispanic adults (14.6%) compared to non-Hispanic White adults (10.7%);
- Adults from households earning less than \$35,000 (18.5%) and \$35,000-\$74,999 (9.9%);
- Disabled adults (30.0%); and
- Adults with no more than a high school education (14.5%).

Respondents who reported at least 14 days of poor physical or mental health during the previous month were asked how many days this kept them from doing usual activities, such as selfcare, work, or recreation.

Results are reported in **Figure 6** (*on the right*). More than one-third (37%) of adults said that their poor health hampered their activities for 14 days or more during the previous month.

#### Figure 6: Poor Physical or Mental Health as a Barrier to Life's Activities, CT 2015







### **Financial Stress**

Financial stress can negatively impact a person's health. Previous BRFSS data have shown that adults experiencing housing instability or food insecurity are significantly more likely to suffer from insufficient sleep and mental distress,<sup>11</sup> and are at risk for homelessness.<sup>12</sup> Food insecurity affects people who face limited or uncertain availability of nutritionally adequate meals or limited ability to buy nutritious foods.<sup>13</sup> Among low-income adults, food insecurity is associated with chronic diseases, such as diabetes and hypertension.<sup>14</sup> Health disparities increase the stress of housing and food security, and substantially increase the risk for poor health outcomes.<sup>15</sup>

Respondents were asked to report how often in the past 12 months they felt worried or stressed about having enough money to pay for housing. They were also asked how often in that period they felt worried or stressed about having enough money to buy nutritious meals. The proportion of adults who felt worried or stressed "always" or "usually" is reported in **Table 9**.

Table 9. Housing and Food insecurity, CT 2015							
	Housing Insecurity			Food Insecurity			
Demographic Characteristics	%	95% Confidence Intervals		%	95% Confidence Intervals		
Total	13.6	12.4	14.8	6.7	5.8	7.6	
Age							
18-34 years old	16.0	12.8	19.3	8.4	5.9	10.8	
35-54 years old	17.2	15.0	19.3	8.1	6.6	9.6	
55 years old and over	9.2	7.9	10.4	4.4	3.4	5.4	
Gender							
Male	12.8	11.0	14.6	6.2	4.9	7.6	
Female	14.3	12.7	15.9	7.1	5.9	8.3	
Race/Ethnicity							
Non-Hispanic White	12.7	11.3	14.0	5.5	4.6	6.4	
Non-Hispanic Black	*	*	*	*	*	*	
Hispanic	20.2	16.0	24.4	13.7	10.1	17.4	
Income							
Less than \$35,000	26.4	23.3	29.5	16.5	13.7	19.2	
\$35,000-\$74,999	12.4	9.8	15.0	*	*	*	
\$75,000 and more	7.0	5.3	8.7	*	*	*	
Insurance Status							
Insured	13.3	12.1	14.5	5.9	5.0	6.8	
Not Insured	*	*	*	*	*	*	
Disability							
Yes	28.6	25.2	32.0	18.8	15.7	21.9	
No	9.9	8.7	11.1	3.7	2.9	4.4	
Education							
HS graduate or less	18.2	15.8	20.5	10.5	8.6	12.3	
More than HS education	10.7	9.4	12.1	4.3	3.4	5.2	
Estimates marked with an "*" are not reported because their coefficients of variation are at least 15% (see page 8)							

Table 9: Housing and Food Insecurity, CT 2015

stimates marked with an \_\_\_\_ are not reported because their coefficients of variation are at least 15% (see page



Connecticut Department of Public Health |Health Status Indicators

One in seven of Connecticut residents in 2015 felt stressed or worried about paying for housing in the previous year, while one in 15 felt stressed about paying for nutritious food.

Compared to their counterparts in the state, the risk of always feeling stress of paying for housing among adults in Connecticut was significantly greater for:

- Adults 18-34 years old (16.0%) and 35-54 years old (17.2%);
- Hispanic adults (20.2%), when compared to non-Hispanic White adults (12.7%);
- Adults from households earning less than \$35,000 (26.4%) and \$35,000-\$74,999 (12.4%);
- Disabled adults (28.6%); and
- Adults with no more than a high school education (18.2%).

Compared to their counterparts in the state, the risk of always feeling stress of buying nutritious meals among adults in Connecticut was significantly greater for:

- Adults 18-34 years old (8.4%) and 35-54 years old (8.1%);
- Hispanic adults (13.7%), when compared to non-Hispanic White (5.5%) adults;
- Disabled adults (18.8%); and

In 2015, nearly half of CT residents

never felt stressed about having

enough money to buy nutritious

meals (48%) and two-thirds of CT

adults never felt stressed about

having enough money to pay for

housing (66%) Figure 7 (on the

• Adults with no more than a high school education (10.5%).



#### Figure 7: Frequency of Food and Housing Insecurity



right).



### **Adult Weight Status**

The BRFSS survey asks respondents to provide their height and weight without shoes. A body mass index (BMI) is calculated by dividing their weight in kilograms by the squared value of their height in meters. An adult with a BMI between 25.0 and 29.9 is considered overweight, while an adult with a BMI of 30 or above is considered obese. The proportion of obese adults is of particular interest because obesity has been shown to be a major cause of preventable morbidity and mortality in the United States.<sup>16</sup> Overweight and obese adults are at risk for developing a wide range of health problems, including high blood pressure, type 2 diabetes, coronary heart disease, certain cancers, strokes and other diseases.<sup>17</sup> Results are shown in **Table 10**.

	Adult Overweight			Adult Obese			
Demographic Characteristics	%	95% Confidence Intervals		%	95% Confidence Intervals		
Total	36.4	35.1	37.7	25.3	24.1	26.4	
Age							
18-34 years old	29.3	26.2	32.4	19.5	16.9	22.1	
35-54 years old	38.2	36.0	40.4	27.8	25.7	29.8	
55 years old and over	39.9	38.2	41.5	27.4	25.9	28.9	
Gender							
Male	42.9	41.0	44.9	26.6	24.9	28.4	
Female	29.8	28.1	31.5	23.9	22.4	25.4	
Race/Ethnicity							
Non-Hispanic White	35.7	34.3	37.2	23.7	22.4	25.0	
Non-Hispanic Black	37.9	32.8	43.0	36.8	31.8	41.7	
Hispanic	40.0	35.8	44.2	30.3	26.4	34.2	
Income							
Less than \$35,000	34.8	32.1	37.4	32.7	30.1	35.3	
\$35,000-\$74,999	36.4	33.5	39.2	26.2	23.8	28.7	
\$75,000 and more	38.9	36.8	40.9	22.6	20.8	24.5	
Health Insurance Status							
Insured	36.2	34.9	37.5	25.2	24.0	26.4	
Not Insured	40.2	34.3	46.1	26.4	21.4	31.4	
Disability							
Yes	31.4	28.6	34.3	38.6	35.7	41.4	
No	37.7	36.2	39.2	22.0	20.7	23.2	
Education							
HS graduate or less	36.7	34.3	39.0	30.4	28.2	32.6	
More than HS education	36.1	34.6	37.6	22.1	20.8	23.4	

#### Table 10: Adult Weight Status, CT 2015



One in four Connecticut adults were obese in 2015, while more than one in three were overweight.

Compared to their counterparts in the state, the risk of **being obese** among Connecticut residents was significantly greater for:

- Adults 35-54 years old (27.8%) and at least 55 years old (27.4%);
- Non-Hispanic Black adults (36.8%) and Hispanic adults (30.3%);
- Adults from households earning of less than \$35,000 (32.7%) and \$35,000-\$74,999 (26.2%);
- Disabled adults (38.6%); and
- Adults with no more than a high school education (30.4%).



#### Figure 8: Adult Weight Status by Race/ Ethnicity, CT 2015

**Figure 8** (*above*) shows the distribution of weight status among Connecticut adults by race/ethnicity.





### **Child Weight Status**

As part of a state-specific module in the BRFSS, a child is randomly selected in the household and the adult respondent is asked to provide the height and weight of that child. As with adults, BMI was calculated for these randomly selected children; however child weight status is calculated differently than that for adults.<sup>18</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. Obese children face a variety of health and social problems, and are more likely to be obese adults.<sup>19</sup> Results for 2015 are shown in **Table 11**.

	Child Overweight			Child Obesity				
Demographic Characteristics	%	95% Confidence Intervals		%	95% Confidence Intervals			
Total	12.7	10.2	15.2	17.0	14.2	19.7		
Age								
2-4 years old	*	*	*	38.7	28.8	48.6		
5-11 years old	12.9	9.6	16.2	18.4	13.8	23.0		
12-17 years old and over	*	*	*	*	*	*		
Child Gender								
Male	13.9	10.8	17.0	18.5	14.7	22.2		
Female	*	*	*	15.6	11.6	19.6		
Race/Ethnicity								
Non-Hispanic White	12.1	9.6	14.6	12.4	9.6	15.2		
Non-Hispanic Black	*	*	*	*	*	*		
Hispanic	*	*	*	*	*	*		
Adult Proxy Income								
Less than \$35,000	*	*	*	*	*	*		
\$35,000-\$74,999	*	*	*	*	*	*		
\$75,000 and more	11.2	8.6	13.8	12.8	9.6	15.9		
Adult Proxy Insurance								
Insured	12.4	9.9	15.0	17.0	14.1	19.8		
Not Insured	*	*	*	*	*	*		
Adult Proxy Education								
HS graduate or less	*	*	*	26.3	19.3	33.3		
More than HS education	11.3	9.1	13.6	14.5	11.5	17.5		
Estimates marked with an "*" are not reported because their coefficients of variation are at least 15% (see page 8).								

#### Table 11: Child Weight Status, CT 2015



#### 2015 Connecticut BRFSS Report

One in eight Connecticut children during 2015 were overweight and one in six were obese.

Statistical comparisons among demographics could not be conducted because the coefficients of variance for the majority of the demographics was too high (15% or greater) and, therefore, the comparisons would not be valid.



Figure 9: Child Weight Status, CT 2015

Figure 9 (*on the right*) shows the distribution of weight status among Connecticut children, a majority of whom (63%) had a healthy weight.





### **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>20, 21</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>22</sup> In the BRFSS, an adult proxy is asked whether or not the selected child was ever breastfed. Results in 2015 are shown in **Table 12**.

Three out of every four children in 2015 have been breastfed in Connecticut.

Compared to their counterparts in the state, the prevalence of ever being breastfed among children was significantly greater for:

- Children with an adult proxy who were Non-Hispanic White adults (78.9%);
- Children living in a household with annual earnings of at least \$75,000 a year (83.4%); and
- Children with an adult proxy who had more than a high school education (78.4%).

**Figure 10** (*below*) shows the length of the breastfeeding period among children who had ever been breastfed. One in four children were not breastfed at all, and one in three were breastfed for six months or less.

#### Figure 10: Length of Breastfeeding Period, CT 2015



#### Demographic 95% Confidence % **Characteristics** Intervals Total 74.9 72.5 77.4 Age 0-4 years old 78.5 72.7 84.4 5-11 years old 75.3 71.4 79.2 12-17 years old and 75.4 71.4 67.5 over **Child Gender** Male 78.7 75.2 71.7 Female 74.5 71.0 78.0 **Race/Ethnicity** Non-Hispanic White 78.9 76.3 81.4 Non-Hispanic Black 64.4 54.5 74.2 Hispanic 71.3 65.4 77.2 Adult Proxy Income 73.8 Less than \$35,000 67.4 61.1 \$35,000-\$74,999 64.4 58.2 70.7 \$75,000 and more 80.9 85.9 83.4 **Adult Proxy Insurance**

75.0

74.2

66.1

78.4

### Table 12: Child Ever Breastfed, CT 2015



Insured

Not Insured

More than HS

education

**Adult Proxy Education** 

HS graduate or less

72.6

62.4

60.3

75.8

77.5

86.0

71.8

81.0



### **Genomics and Breast/Ovarian Cancer**

Breast cancer is the second leading cause of death from cancer in women,<sup>23,24</sup> while ovarian cancer causes more deaths than any other cancer of the female reproductive system.<sup>25,26</sup> In 2015, BRFSS respondents were asked if they had ever been told they had breast or ovarian cancer **Table 13**.

One in 20 Connecticut women had diagnosed breast cancer and/or ovarian cancer in 2015 (5.2%). Among those diagnosed with breast cancer, nearly half were diagnosed at or before age 50 years old (42.3%; *data not shown*).

The risk of breast and ovarian cancers among women in Connecticut was significantly greater for disabled women (6.8%).

*BRCA* stands for BReast CAncer susceptibility gene. Some women carry certain genetic changes in *BRCA* genes that increase their risk for getting breast, ovarian, and other kinds of cancer at a young age.<sup>27</sup>

A state-specific question in the 2015 BRFSS asked female respondents whether they or any of their family members tested for the *BRCA* gene, among those women reported having relatives diagnosed with breast and/or ovarian cancer. Nearly two-thirds respondents (57.7%) indicated had a close female relative who had a blood test for the *BRCA* gene.

**Figure 11** (*on the right*) shows the prevalence of breast and/or ovarian cancer among Connecticut women.

Figure 11: Breast and/or Ovarian Cancer among Women, CT 2015

	Diagnosed Breast or Ovarian Cancer				
Demographic Characteristics	%	95% Co Inte	nfidence rvals		
Total	5.2	4.5	5.9		
Age					
18-34 years old	*	*	*		
35-54 years old	*	*	*		
55-64 years old	9.1	7.9	10.3		
Race/Ethnicity					
Non-Hispanic White	6.2	5.3	7.0		
Non-Hispanic Black	*	*	*		
Hispanic	*	*	*		
Income					
Less than \$35,000	5.2	3.9	6.5		
\$35,000-\$74,999	*	*	*		
\$75,000 and more	4.7	3.6	5.8		
Insurance Status					
Insured	5.3	4.6	6.0		
Not Insured	*	*	*		
Disability					
Yes	6.8	5.2	8.4		
No	4.7	4.0	5.5		
Education					
HS graduate or less	5.9	4.5	7.3		
More than HS education	4.8	4.0	5.5		
Estimates marked with an "*" are not reported because their					

#### Table 13: Breast and Ovarian Cancer, CT 2015

Estimates marked with an "\*" are not reported because the coefficients of variation are at least 15% (see page 8).





Connecticut Department of Public Health |Health Status Indicators



### Healthcare Coverage

People who have access to a personal health care provider or a regular health care setting have better health outcomes.<sup>28</sup> Generally, an effective primary health care system is associated with better health outcomes. Limited healthcare coverage is a barrier to access to care that adversely impacts health outcomes. "Limited" healthcare coverage includes adults who do not have a primary care provider, which is a personal doctor or health care provider; or needed to see a doctor in the past year but could not because of cost. In this report, the results of adults having at least one primary health care provider and having limited health care access due to cost in 2015 are shown in **Table 14**.

	At Least One Primary Health Care Provider			No Health Care Access Due to Cost			
Demographic Characteristics	%	95% Confidence Intervals		%	95% Confidence Intervals		
Total	85.2	84.1	86.2	10.9	10.0	11.8	
Age							
18-34 years old	71.8	68.8	74.7	15.3	12.9	17.7	
35-54 years old	85.2	83.5	86.9	11.9	10.5	13.3	
55 years old and over	94.7	94.0	95.5	6.9	5.9	7.9	
Gender							
Male	79.9	78.1	81.6	10.1	8.8	11.3	
Female	90.1	88.8	91.3	11.7	10.4	13.0	
Race/Ethnicity							
Non-Hispanic White	89.6	88.5	90.6	7.4	6.6	8.2	
Non-Hispanic Black	79.4	74.8	83.9	15.3	11.2	19.4	
Hispanic	68.3	64.4	72.2	24.8	21.2	28.3	
Income							
Less than \$35,000	75.8	73.3	78.4	20.0	17.7	22.2	
\$35,000-\$74,999	86.3	83.9	88.7	11.2	9.3	13.1	
\$75,000 and more	91.2	89.8	92.5	4.8	3.7	5.9	
Insurance Status							
Insured	88.6	87.6	89.5	8.9	8.1	9.8	
Not Insured	40.9	35.6	46.2	37.2	31.7	42.6	
Disability							
Yes	87.1	84.9	89.3	21.2	18.5	23.9	
No	85.0	83.8	86.2	8.5	7.5	9.4	
Education							
HS graduate or less	80.3	78.2	82.3	14.4	12.6	16.1	
More than HS education	88.3	87.2	89.4	8.7	7.8	9.7	

#### Table 14: Healthcare Coverage, CT 2015





Eighty-five percent of Connecticut adults in 2015 reported having at least one primary care provider, while one in nine Connecticut adults could not get needed care in the previous year due to cost.

Compared to their counterparts in the state, the prevalence of **having at least one PCP** was significantly greater for:

- Adults at 55 years old and older (94.7%);
- Women (90.1%);
- Non-Hispanic Blacks (79.4%) and Hispanic (68.3%) adults;
- Adults from households earning at least \$75,000 annually (91.2%) and \$35,000-\$74,999 (86.3%);
- Adults with insurance (88.6%); and
- Adults with more than high school education (88.3%).

Compared to their counterparts in the state, the risk of **having limited health care coverage** among adults due to cost in Connecticut was significantly greater for:

- Adults aged 18-34 years old (15.3%) and 35-54 years old (11.9%);
- Adults from households earning less than \$35,000 (19.8%) and \$35,000-\$74,999 (11.2%);
- Adults without health insurance (36.5%);
- Disabled adults (21.2%); and
- Adults with no more than a high school education (14.3%).




## **Health Insurance Coverage**

Health insurance coverage includes private insurance and plans such as Health Maintenance Organizations (HMOs), or government plans such as Medicare or the Indian Health Service. Adults without health care coverage have higher mortality rates for a range of health conditions compared to insured adults.<sup>29</sup> Uninsured adults are less likely to get needed care and screenings, and have poorer health outcomes.<sup>30</sup> Medicaid is a public health insurance program for low-income Americans and other target groups including pregnant women and disabled persons. An expansion of Medicaid coverage under the Affordable Care Act went into effect in 2014. The prevalence of adults aged 18-64 years in 2015 who reported having no health care coverage, private insurance , Medicaid or Medicare are broken down by demographic characteristics in **Table 15**. There are **9.5%** of adults who obtained coverage via Tricare, Veterans Affairs (VA), military services, Indian Health Services, Tribal Health Services, or an unknown source are not shown in the table below.

	No	Insurar	nce	Private Insurance Medicaid		d	Medicare					
		95	%		95	5%		95	%		95	%
Demographics	%	Confi	dence	%	Confi	dence	%	Confi	dence	%	Confid	dence
		Lim	nits		Lin	nits		Lin	nits		Lim	nits
Total	8.7	7.8	9.7	64.7	63.2	66.3	10.8	9.8	11.8	6.2	5.5	7.0
Age												
18-34 years old	11.7	9.7	13.8	54.7	51.5	57.9	14.2	12.0	16.3	*	*	*
35-54 years old	7.9	6.6	9.2	70.2	68.1	72.3	9.6	8.3	10.9	5.6	4.5	6.7
55-64 years old	5.6	4.2	7.0	71.3	68.9	73.7	8.3	6.8	9.7	8.4	7.0	9.9
Gender												
Male	11.4	9.8	13.0	63.0	60.7	65.3	9.1	7.7	10.4	5.3	4.3	6.3
Female	6.2	5.1	7.2	66.4	64.3	68.4	12.4	11.0	13.9	7.1	6.0	8.2
Race/Ethnicity												
Non-Hispanic	45	36	54	74 9	73 3	76.6	73	64	82	5.0	42	58
White	4.5	5.0	5.4	74.5	75.5	70.0	7.5	0.4	0.2	5.0	7.2	5.0
Non-Hispanic	*	*	*	47.5	41.8	53.1	24.5	19.5	29.6	*	*	*
Black												
Hispanic	25.8	22.0	29.6	32.1	28.0	36.1	18.7	15.3	22.1	9.3	7.0	11.7
Income												
Less than \$35,000	20.5	17.6	23.3	23.2	20.4	26.0	29.3	26.2	32.4	15.5	13.3	17.8
\$35,000-\$74,999	7.8	5.7	9.9	71.8	68.4	75.1	7.8	6.0	9.5	*	*	*
\$75,000 and more	*	*	*	90.1	88.3	91.9	*	*	*	*	*	*
Disability												
Yes	10.2	7.7	12.7	37.7	34.0	41.4	22.8	19.8	25.8	17.7	15.1	20.2
No	8.4	7.4	9.5	70.6	68.9	72.3	8.2	7.2	9.2	3.8	3.1	4.6
Education												
HS graduate or less	16.5	14.3	18.7	44.7	41.8	47.5	17.4	15.2	19.5	10.2	8.6	11.9
More than HS education	4.1	3.4	4.8	76.6	75.0	78.2	7.0	6.1	7.8	3.8	3.1	4.5
Estimates marked with an	"*" are n	ot reporte	ed because	e their coe	efficients d	of variatio	n are at le	ast 15% (s	see page &	3).		

#### Table 15: Health Insurance Coverage, Adults 18-64 Years Old, CT 2015



Nighty-one percent of Connecticut adults aged 18-64 years old in 2015 had some kind of health insurance coverage. Whereas 64.7% had private health insurance that they obtained via their employer or purchased on their own, 10.8% had health coverage through Medicaid, and 6.2% had health coverage through Medicare. Nearly nine percent had no health coverage at all.

Compared to their counterparts in the state, the risk of having **no health insurance coverage** among adults aged 18-64 years old was significantly greater for:

- Adults 18-34 years old (11.7%) and 35-54 years old (7.9%);
- Men (11.4%);
- Hispanic adults (25.8%), when compared to Non-Hispanic White adults (4.5%);
- Adults from households earning less than \$35,000 (20.5%), when compared to those in households earning \$35,000-\$74,999 (7.8%); and
- Adults with no more than a high school education (16.5%).

Compared to their counterparts in the state, the prevalence of adults with **private health insurance coverage** among adults aged 18-64 years old was significantly greater for:

- Adults 35-54 years old (70.2%) and 55-64 years old (71.3%);
- Non-Hispanic White (74.9%);
- Adults from households earning \$35,000-\$74,999 (71.8%) and at least \$75,000 (90.1%);
- Adults without disabilities (70.6%); and
- Adults with more than a high school education (76.6%).

Compared to their counterparts in the state, the prevalence of adults who had **Medicaid coverage** among adults aged 18-64 years old was significantly greater for:

- Adults 18-34 years old (14.2%);
- Women (12.4%);
- Non-Hispanic Black (24.5%) and Hispanic (18.7%) adults;
- Adults from households earning less than \$35,000 (29.3%);
- Adults with disabilities (22.8%); and
- Adults with no more than a high school education (17.4%).

Compared to their counterparts in the state, the prevalence of adults who had **Medicare coverage** among adults aged 18-64 years old was significantly greater for:

- Adults 55-64 years old (8.4%);
- Women (7.1%);
- Hispanic adults (9.3%), when compared to Non-Hispanic White adults (5.0%);
- Disabled adults (17.7%); and
- Adults with no more than a high school education (10.2%).



## 3. Risk Behavior Indicators

## **Adult Physical Activity**

Regular physical exercise has been shown to prevent certain chronic diseases. A sedentary lifestyle is a risk factor for a variety of obesity, bone and joint diseases, depression, and chronic diseases.<sup>31</sup> Adults were asked to report whether they had participated in any physical activities or exercises such as running, calisthenics, golf, gardening or walking, other than for their job in the past 30 days. **Table 16** shows the prevalence of adults who did *not* engage in any leisure or recreational physical activity.

One in four Connecticut adults in 2015 did not engage in any recreational physical activity outside of work.

Compared to their counterparts in the state, the risk of no leisure-time activity among adults in Connecticut was significantly greater for:

- Ages 55 and older (27.2%);
- Female (25.3%);
- Non-Hispanic Black (29.2%) and Hispanic (35.6%) adults;
- Adults from households earning less than \$35,000 (24.6%);
- Adults without insurance (32.9%);
- Disabled (41.9%) adults; and
- Adults with no more than a high school education (35.5%).



#### Table 16: No Leisure-Time Physical Activity, CT 2015

Demographic Characteristics	%	95% Cor Inte	nfidence rval
Total	23.5	22.3	24.7
Age			
18-34 years old	18.7	15.9	21.5
35-54 years old	23.2	21.1	25.2
55 years old and over	27.2	25.6	28.7
Gender			
Male	21.5	19.8	23.2
Female	25.3	23.6	26.9
Race/Ethnicity			
Non-Hispanic White	20.2	19.0	21.3
Non-Hispanic Black	29.2	24.3	34.1
Hispanic	35.6	31.3	39.9
Income			
Less than \$35,000	35.2	32.5	38.0
\$35,000-\$74,999	24.6	22.0	27.3
\$75,000 and more	14.4	12.8	16.1
Insurance Status			
Insured	22.8	21.6	24.0
Not Insured	32.9	27.0	38.7
Disability			
Yes	41.9	38.9	44.8
No	19.1	17.8	20.4
Education			
HS graduate or less	35.5	33.1	37.9
More than HS education	16.0	14.8	17.2

## **Motor Vehicle Safety**

Seatbelt use is the most effective way to reduce the number of injuries and deaths in motor vehicle crashes.<sup>32</sup> Respondents to the BRFSS were asked how often they wore seatbelts when they drove or rode in a car. The prevalence of adults who said they always wore a seatbelt is shown in **Table 17**.

Nearly 90% of Connecticut adults in 2015 reported using a seatbelt all of the time. An additional six percent used seatbelts nearly all of the time as shown in **Figure 12**.

Compared to their counterparts in the state, the prevalence of always wearing a seatbelt was significantly greater for:

- Adults 55 years and older (92.4%) and 34-54 years old (91.6%);
- Women (92.7%);
- Non-Hispanic White adults (90.3%), when compared to Non-Hispanic Black adults (85.8%);
- Adults without disability (90.5%); and
- Adults with more than a high school education (91.2%).

#### Table 17: Seatbelt Use, CT 2015

Demographic Characteristics	%	95% Cor	ifidence
Total	89.8	88.9	90.7
Age			
18-34 years old	83.9	81.2	86.6
35-54 years old	91.6	90.2	93.0
55 years old and over	92.4	91.5	93.2
Gender			
Male	86.6	85.1	88.2
Female	92.7	91.6	93.8
Race/Ethnicity			
Non-Hispanic White	90.3	89.2	91.4
Non-Hispanic Black	85.8	82.2	89.5
Hispanic	89.7	86.8	92.5
Income			
Less than \$35,000	88.5	86.5	90.5
\$35,000-\$74,999	88.5	86.4	90.7
\$75,000 and more	90.9	89.4	92.5
Insurance Status			
Insured	90.1	89.1	91.0
Not Insured	*	*	*
Disability			
Yes	86.8	84.4	89.1
No	90.5	89.5	91.5
Education			
HS graduate or less	87.6	85.8	89.3
More than HS education	91.2	90.1	92.2

#### Figure 12: Seatbelt Use, CT 2015







The 2008 Physical Activity Guidelines for Americans recommends that adults participate in at least 150 minutes a week of moderate-intensity aerobic physical activity and at least two or more times a week of muscle-strengthening activities for health benefits.<sup>33</sup> People who are physically active generally live longer and have a lower risk for heart disease, stroke, type 2 diabetes, depression, and some cancers. <sup>34</sup>

The 2015 BRFSS asked respondents the frequency of their physical activities. **Table 18** shows the proportion of adults who met the aerobic and/or muscle strengthening exercise guidelines.

	Met Both Guidelines			G	Met Aerobic Guidelines Only			Met Strengthening Guidelines Only		
Demographic Characteristics	%	95% Coi Inte	95% Confidence Interval		95% Co Inte	nfidence erval	%	% 95% Confiden Interval		
Total	21.5	19.3	23.8	32.6	29.9	35.2	9.8	8.2	11.4	
Age										
18-34 years old	18.3	13.5	23.0	32.0	25.4	38.6	*	*	*	
35-54 years old	23.4	20.6	26.2	33.1	30.0	36.2	8.3	6.6	9.9	
55 years old and over	*	*	*	30.2	23.8	36.6	*	*	*	
Gender										
Male	26.3	22.5	30.0	30.6	26.8	34.3	12.4	9.5	15.4	
Female	18.3	15.6	21.0	33.9	30.3	37.5	8.0	6.2	9.8	
Race/Ethnicity										
Non-Hispanic White	25.4	22.6	28.1	35.4	32.3	38.5	10.7	8.6	12.8	
Non-Hispanic Black	*	*	*	*	*	*	*	*	*	
Hispanic	*	*	*	23.8	17.6	30.0	*	*	*	
Income										
Less than \$35,000	*	*	*	25.8	19.9	31.7	*	*	*	
\$35,000-\$74,999	18.1	13.0	23.2	33.7	27.6	39.9	*	*	*	
\$75,000 and more	26.2	23.1	29.3	34.3	30.8	37.8	11.9	9.4	14.4	
Insurance Status										
Insured	22.1	19.7	24.4	32.6	29.9	35.3	10.1	8.4	11.9	
Not Insured	*	*	*	*	*	*	*	*	*	
Disability										
Yes	*	*	*	23.9	17.5	30.2	*	*	*	
No	23.4	20.9	25.9	33.9	31.0	36.8	9.8	8.1	11.5	
Education										
HS graduate or less	16.6	12.2	20.9	29.1	23.4	34.7	*	*	*	
More than HS	23.6	21.0	26.2	34.0	31.1	36.9	10.3	8.4	12.2	
Estimates marked with an "*" a	are not reporte	ed because thei	ir coefficients c	of variation	are at least i	15% (see page	8).			

#### Table 18: Met Aerobic and/or Strengthening Guidelines, CT 2015





One in five Connecticut residents in 2015 met both the aerobic and muscle strengthening guidelines.

Compared to their counterparts in the state, the prevalence of adults who met aerobic and/or muscle strengthening guidelines was significantly greater for:

- Women (26.3%) were more likely to meet both guidelines compared to men (18.3%);
- Men (12.4%) were more likely to meet muscle strengthening guideline only compared to women (8.0%); and
- Non-Hispanic White adults (35.4%) were more likely to meet aerobic guideline only, when compared to Hispanic adults (23.8%).



#### Figure 13: Categories of Physical Activity, CT 2015





## **Fruit and Vegetable Consumption**

The Dietary Guidelines for Americans recommend that people consume five to thirteen servings of fruits and vegetables, with different amounts based on total calorie intake. The average American, however, only eats about three servings of fruits and vegetables each day. The benefits of fruits and vegetables are numerous. They can improve vision, lower blood pressure, prevent some types of cancer and reduce the risk of heart disease and stroke. Fruits and vegetables are also low in fat and calories, and contain many vital minerals and vitamins that maintain blood sugar and keep appetite in check.

The 2015 BRFSS asked respondents how often they ate fruits and vegetables, including servings of 100% fruit juice. **Table 19** shows the proportion of adults in 2015 consuming fruits or vegetables at least once daily.

	Consume Fruits at Least Once Daily			Consume Vegetables at Least Once Daily				
Demographic Characteristics	%	95% Confidence Intervals		%	95% Confidence Intervals			
Total	64.5	63.1	65.8	80.5	79.4	81.7		
Age								
18-34 years old	57.6	54.1	61.0	76.2	73.1	79.2		
35-54 years old	64.9	62.6	67.1	82.6	80.7	84.4		
55 years old and over	69.0	67.4	70.5	81.8	80.5	83.1		
Gender								
Male	59.9	57.9	62.0	76.8	75.0	78.6		
Female	68.6	66.9	70.4	84.0	82.5	85.5		
Race/Ethnicity	Race/Ethnicity							
Non-Hispanic White	65.7	64.2	67.2	82.3	81.0	83.6		
Non-Hispanic Black	62.5	57.0	67.9	71.2	66.3	76.1		
Hispanic	58.5	54.1	62.8	76.3	72.5	80.0		
Income								
Less than \$35,000	60.7	57.8	63.5	75.4	73.0	77.8		
\$35,000-\$74,999	63.5	60.5	66.6	79.1	76.5	81.8		
\$75,000 and more	68.7	66.6	70.7	87.5	85.9	89.0		
Insurance Status								
Insured	65.0	63.7	66.4	81.0	79.9	82.2		
Not Insured	57.5	51.5	63.4	74.9	69.6	80.2		
Disability								
Yes	61.1	58.1	64.1	74.1	71.3	76.9		
No	65.3	63.8	66.8	82.0	80.7	83.3		
Education								
HS graduate or less	59.1	56.6	61.6	74.3	72.0	76.6		
More than HS education	67.8	66.2	69.3	84.3	83.0	85.6		

#### Table 19: Fruit and Vegetable Consumption, CT 2015



Connecticut Department of Public Health | Risk Behavior Indicators

## 2015 Connecticut BRFSS Report

Almost two-thirds of Connecticut adults in 2015 ate fruits at least once daily, while eighty percent consumed vegetables at least once daily.

Compared to their counterparts in the state, the prevalence of adults who ate **fruits at least once daily** were significantly greater for:

- Adults at least 55 years old (69.0%) and 35-54 years old (64.9%);
- Women (68.6%);
- Non-Hispanic White (65.7%) adults, when compared to Hispanic adults (58.5%);
- Adults from households earning at least \$75,000 a year (68.7%);
- Adults with insurance (65.0%);
- Non-disabled adults (65.3%); and
- Adults with more than a high school education (67.8%).

Compared to their counterparts in the state, the prevalence of adults who ate **vegetables at least once daily** were significantly greater for:

- Adults at least 55 years old (81.8%) and 35-54 years old (82.6%);
- Women (84.0%);
- Non-Hispanic White adults (82.3%);
- Adults of high income households earning at least \$75,000 a year (87.5%);
- Adults with insurance (81.0%);
- Non-disabled adults (82.0%); and
- Adults with more than a high school education (84.3%).

# As shown in **Figure 14** (*on the right*), half of adults ate one or two daily fruit servings (51%) and two-thirds of adults ate one or two daily servings of vegetables (63%).





## Figure 14: Fruit and Vegetable Consumption, CT 2015



## **Child Screen Time**

The American Academy of Pediatrics recommends that screen time is 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>35</sup> U.S. children 8-18 years old are exposed to more than five hours of entertainment screen time daily.<sup>36</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.37

The BRFSS survey asks the adult proxy respondent how much time the selected child spent watching programs, movies, videos or playing video games on television. Another Table 20: Child Excessive Screen Time, CT 2015

Demographic Characteristics	%	95% Confidence Interval
Total	44.1	41.1 47.1
Age		
2-4 years old	29.0	21.8 36.2
5-11 years old	36.4	31.9 40.9
12-17 years old and over	60.9	56.6 65.1
Gender		
Male	45.8	41.7 50.0
Female	42.3	37.9 46.7
Race/Ethnicity		
Non-Hispanic White	38.8	35.4 42.3
Non-Hispanic Black	60.9	50.5 71.4
Hispanic	49.3	41.8 56.8
Adult Proxy Income		
Less than \$35,000	54.6	47.3 62.0
\$35,000-\$74,999	51.7	44.7 58.7
\$75,000 and more	34.4	30.8 38.0
Adult Proxy Insurance		
Insured	43.6	40.5 46.7
Not Insured	51.9	40.3 63.4
Adult Proxy Education		
HS graduate or less	52.3	45.6 59.0
More than HS education	41.2	37.9 44.4

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 were combined to calculate total screen time exposure for children ages 2-17. Results in 2015 are reported in **Table 20**.





Nearly half of Connecticut children in 2015 had excessive screen time (more than 2 hours daily).

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

• Children 12-17 years old (60.9%);

Figure 15 (*on the right*) shows

that 44% of Connecticut

2015.

children had more than two

hours of screen time daily in

- Non-Hispanic Black (60.9%) and Hispanic (49.3%) children;
- Children living in households with annual incomes of less than \$35,000 (54.6%) and \$35,000-\$74,999 (51.7%); and
- Children living with an adult proxy who had no more than a high school education (52.3%).



#### Figure 15: Combined Screen Time per Day, CT 2015

Figure 16: Excessive Screen Time, by Type of Screen, CT 2015





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## **Child Soda/Fast Food Consumption**

#### Consumption of soda and other sugar-sweetened beverages (**SSBs**) is associated with obesity in children.<sup>38</sup> Children who eat at fast-food and full service restaurants eat more and have poorer diets compared to children who eat at home.<sup>39</sup>

Adult proxy respondents report 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. Results in 2015 for children two years old and over are reported in **Table 21**.

One in four Connecticut children drank SSBs at least once daily in 2015, while one in three ate fast food two or more times weekly.

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

- Children 12-17 years old (33.3%);
- Children living in households with annual incomes of \$35,000 (39.1%) and \$35,000-\$74,999 (32.4%);
- Children living with an adult proxy who did not have insurance (45.5%); and
- Children living with an adult proxy who had no more than a high school education (40.5%).

Compared to non-Hispanic White children (28.7%), Hispanic children (39.6%) had greater risk for eating **fast food** two or more times weekly.



#### Table 21: Child Soda and Fast Food Consumption, CT2015

	Drank SSBs at A Least Once Daily			Ate Fa More	Ate Fast Food Two or More Times Weekly		
Demographic Characteristics	95% % Confidence Intervals		%	95% Confidence Intervals			
Total	26.7	24.4	28.9	31.9	29.5	34.3	
Age	.1.	.1.	.de	di	dt	dt	
2-4 years old	*	*	*	*	*	*	
5-11 years old	25.4	21.1	29.7	32.7	28.3	37.1	
12-17 years old and	33.3	29.3	37.4	38.6	34.0	43.1	
over							
Gender							
Male	27.4	23.9	31.0	30.8	27.1	34.5	
Female	25.8	21.9	29.7	33.0	28.7	37.4	
Race/Ethnicity							
Non-Hispanic White	18.9	16.2	21.5	28.7	25.5	31.9	
Non-Hispanic Black	49.1	38.4	59.7	*	*	*	
Hispanic	37.3	30.3	44.2	39.6	32.0	47.2	
Adult Proxy Income							
Less than \$35,000	39.1	32.1	46.0	36.0	28.7	43.2	
\$35,000-\$74,999	32.4	25.9	38.9	33.5	27.1	40.0	
\$75,000 and more	16.6	13.8	19.3	29.1	25.6	32.5	
Adult Proxy Insurance	)						
Insured	25.4	22.7	28.1	31.9	28.9	34.9	
Not Insured	45.5	33.8	57.2	*	*	*	
<b>Adult Proxy Education</b>	١						
HS graduate or less	40.5	34.0	47.0	34.5	27.8	41.2	
More than HS	21.8	19.0	24.6	31.1	28.0	34.1	
Estimates marked with an "* are at least 15% (see page 8	<i>" are not</i> ).	reported	l because	their coe	fficients of	variation	



## **Cigarette Smoking**

According to the Surgeon General, smoking is the number one preventable cause of death in the U.S.<sup>40</sup> It is detrimental to nearly every organ in the body and causes poorer overall health. Smokers are more likely to develop lung cancer, stroke and heart disease when compared to non-smokers. Smoking is associated with numerous other cancers and diseases. Nearly half a million Americans die every year in the U.S. as a result of cigarette smoking; meaning that one in five deaths nationwide can be linked to smoking. Results are shown in **Table 22**.

One in eight Connecticut adults in 2015 (13.5%) smoked cigarettes "every day" or "some days."

Compared to their counterparts in the state, the risk of smoking cigarettes was significantly greater for:

- Adults 18-34 years old (15.8%) and 35-54 years old (15.2%);
- Men (16.3%);
- Adults from households earning \$35,000-\$74,999 (14.3%), and less than \$35,000 (22.5%);
- Adults without insurance (22.7%);
- Disabled individuals; and
- Adults with no more than a high school education (19.3%).

**Figure 17** (*below*) shows that one in four Connecticut adults were former smokers (27%).

## Figure 17: Smoking Status, CT 2015



#### 95% Demographic % Confidence **Characteristics** Intervals Total 13.5 12.5 14.4 Age 18-34 years old 15.8 13.4 18.1 15.2 13.6 16.9 35-54 years old 11.6 55 years old and over 10.5 9.4 Gender 16.3 14.7 17.8 Male Female 10.9 9.8 12.0 **Race/Ethnicity** Non-Hispanic White 12.9 11.8 14.0 16.9 12.9 20.9 Non-Hispanic Black 12.5 18.3 Hispanic 15.4 Income 22.5 20.2 24.8 Less than \$35,000 12.2 \$35,000-\$74,999 14.3 16.4 8.1 6.7 9.4 \$75,000 and more **Insurance Status** Insured 12.7 11.8 13.7 22.7 17.5 27.9 Not Insured **Disability** 24.8 22.1 27.4 Yes No 10.8 9.8 11.8 Education HS graduate or less 19.3 17.3 21.2 More than HS education 9.7 8.8 10.6



#### Table 22: Cigarette Smoking, CT 2015



## Hookah, E-cigarette and Smokeless Tobacco Use

Although cigarette smoking in the United States has been steadily declining, use of alternative tobacco products has become more prevalent over the past several decades.<sup>41</sup> The health effects of non-cigarette tobacco are often perceived as less harmful than traditional cigarettes, particularly in younger age groups. Yet nicotine exposure during adolescence may have long-lasting adverse effects on the developing adolescent brain.<sup>29</sup> In addition, nearly all first-time tobacco use and much of the subsequent addiction occurs during adolescence and young adulthood. The negative health risks associated with snus and hookahs are well-established, and preliminary studies on e-cigarettes identify harmful effects as well.<sup>30,42,43</sup>

The BRFSS survey asks respondents to report their use of four types of tobacco products. **Electronic cigarettes**, commonly called e-cigarettes, contain cartridges of nicotine and other chemicals. The nicotine is aerosolized and inhaled through a battery-powered device that resembles a traditional cigarette. **Hookahs**, also known as water pipes, deliver a mixture of shredded tobacco (often flavored) through a mouth piece attached to a rubber hose. **Cigars**: Most cigars are composed primarily of a single type of tobacco (air-cured and fermented), and they have a tobacco wrapper.<sup>44</sup> **Dissolvable tobacco products** are smokeless and spit-free, made from finely milled tobacco, and held together by food-grade binders. The use of these alternative tobacco products are not shown here because the coefficients of variance for the majority of the demographics were too high (15% or greater). Therefore, the comparisons are of limited validity.

	Ever Tri Pen (	ed Vapor Or E-Cigar	or Vape ettes	Ever Tried Smoking Hookah Ever Tri			ver Tried C	ried Cigars	
Demographic Characteristics	%	95% Coi Inte	nfidence rval	%	95% Coi Inte	nfidence erval	%	95% Co Int	onfidence erval
Total	14.9	13.8	16.0	13.2	12.1	14.3	33.1	31.9	34.4
Age									
18-34 years old	30.8	27.6	34	33.9	30.6	37.2	39.9	36.6	43.3
35-54 years old	12.6	11.2	14.1	8.2	7.0	9.3	32.5	30.4	34.5
55 years old and over	6.2	15.4	7.0	3.5	2.9	4.2	29.3	27.9	30.7
Gender									
Male	17.5	15.7	19.2	15.9	14.2	17.6	52.0	49.9	54.0
Female	12.6	11.3	14.0	10.8	9.4	12.1	15.9	14.5	17.2
Race/Ethnicity									
Non-Hispanic White	15.4	14.2	16.7	13.1	11.9	14.3	38.1	36.6	39.6
Non-Hispanic Black	13.8	9.9	17.7	*	*	*	21.4	17.1	25.8
Hispanic	12.4	9.7	15.1	12.6	9.5	15.7	18.9	15.6	22.2

## Table 23: Use of Alternative Tobacco Products, CT 2015



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#### Table 23: Use of Alternative Tobacco Products, CT 2015, continued

One in seven Connecticut adults in 2015 had tried using vapor, vape pen or e-cigarettes, one in eight had tried smoking hookah and one in three had tried smoking cigars, cigarillos, or flavored little cigars.

Compared to their counterparts in the state, the risk of using **vapor**, **vape pen** or **e-cigarettes** was significantly greater for:

- Adults 18-34 years old (30.8%) and 35-54 years old (12.6%);
- Men (17.5%);
- Adults from households earning \$35,000-\$74,999 (16.5%) and less than \$35,000 (17.5%);
- Disabled adults (18.8%).

Compared to their counterparts in the state, the risk of using **Hookah** was significantly greater for:

- Young adults 18-34 (33.9%) and 35-54 (8.2%);
- Men (15.9%); and
- Adults with more than a high school education (15.6%).



Compared to their counterparts in the state, the risk of using **Cigars** was significantly greater for:

- Adults 18-34 years old (36.6%) and 35-54 years old (30.4%);
- Men (52.0%);
- Non-Hispanic White (38.1%) and Non-Hispanic Black (21.4%) adults;
- Adults from households earning at least \$75,000 (40.9%) and \$35,000-\$74,999 (25.0%);
- Adults with insurance (33.4%);

Figure 18 (*on the right*) shows

tobacco use by smoking status.

the breakdown of alternative

One fourth of Connecticut

adults in 2015 who had never

trying cigars, while 6% reported

smoked cigarettes reported

trying vapor or E-cigarettes.

- Adults without disability (33.9%); and
- Adults with more than high school education (37.1%).



## Figure 18: Ever Tried Alternative Tobacco Products, by Smoking (Cigarette) Status, CT 2015





## **Alcohol Consumption**

Excessive alcohol consumption, such as binge drinking and heavy drinking, is associated with numerous health problems, including chronic diseases, unintentional injuries, neurological impairments, and social problems.<sup>45</sup> A person binge drinks when they drink enough within a two-hour period that their blood alcohol concentration reaches 0.08 grams/deciliter. For men, this means consuming more than five drinks during one occasion. For women, it's more than four drinks.<sup>46</sup> Binge drinking is linked to a variety of health problems such as liver disease, neurological damage and alcohol poisoning, and can lead individuals to engage in risky and violent behaviors.<sup>47</sup> Heavy drinking is defined as consuming an average of more than two drinks per day for men, and more than one drink per day for women.<sup>48</sup> Excessive drinking is defined as either heavy drinking or binge drinking.

The BRFSS questionnaire ask respondents to report the number of days they had consumed at least one drink of alcohol in the past 30 days, and for those who did drink, how many times they drank more than these thresholds. The prevalence of adults in 2015 who engaged in binge drinking, heavy drinking, or excessive drinking over the previous 30 days is shown in **Table 24**.

		Binge Drin	king	Heavy Drinking			Excessive Alcohol Consumption				
Demographic Characteristics	%	95% Co Inte	nfidence erval	%	95% Confidence Interval		95% Confidence Interval		%	95% Co Inte	nfidence erval
Total	16.9	15.8	18.0	6.1	5.4	6.8	18.6	17.5	19.7		
Age											
18-34 years old	28.3	25.2	31.4	8.9	6.8	11.0	29.5	26.4	32.6		
35-54 years old	18.4	16.6	20.1	5.0	4.0	5.9	19.5	17.7	21.2		
55 years old and over	7.7	6.8	8.5	5.2	4.5	5.8	10.3	9.4	11.3		
Gender											
Male	23.1	21.3	24.9	6.4	5.3	7.6	24.1	22.3	25.9		
Female	11.1	9.9	12.4	5.8	4.9	6.6	13.5	12.2	14.8		
Race/Ethnicity											
Non-Hispanic White	18.1	16.8	19.4	7.1	6.3	8.0	20.2	18.9	21.5		
Non-Hispanic Black	12.5	9.0	16.1	*	*	*	13.2	9.5	16.8		
Hispanic	16.2	13.0	19.4	*	*	*	17.1	13.8	20.4		
Income											
Less than \$35,000	14.4	12.3	16.5	5.4	4.0	6.9	15.5	13.3	17.6		
\$35,000-\$74,999	16.8	14.3	19.4	5.4	4.1	6.6	18.6	16.0	21.2		
\$75,000 and more	21.6	19.7	23.6	7.9	6.6	9.3	23.6	21.7	25.6		

Table 24: Alcohol Consumption, CT 2015



	B	Singe Drin	king	Heavy Drinking			Excessive Alcohol Consumption		
Demographic Characteristics	%	95% Cor Inte	nfidence rval	%	95% Confidence Interval		%	% 95% Confid Interva	
Insurance Status									
Insured	16.1	15.0	17.2	6.0	5.3	6.7	17.9	16.8	19.0
Not Insured	25.7	20.2	31.2	*	*	*	26.7	21.2	32.3
Disability									
Yes	13.9	11.6	16.3	6.4	4.6	8.2	15.8	13.3	18.3
No	17.7	16.4	18.9	6.0	5.2	6.7	19.3	18.0	20.6
Education									
HS graduate or less	15.3	13.4	17.2	5.7	4.5	7.0	16.7	14.8	18.6
More than HS	17.9	16.6	19.3	6.3	5.5	7.2	19.8	18.5	21.2
Estimates marked with an	"*" are no	ot reported b	ecause their	coefficients	of variation a	re at least 15	5% (see page	8).	

#### Table 24: Alcohol Consumption, CT 2015, continued

One in five Connecticut adults in 2015 had excessive alcohol consumption. Approximately one in six Connecticut adults engaged in binge drinking, while one in 16 engaged in heavy drinking.

Compared to their counterparts in the state, the risk of **binge drinking** was significantly greater for:

- Adults 18-34 years old (28.3%) and 35-54 years old (18.4%);
- Men (23.1%);
- Non-Hispanic White adults (18.1%), when compared to non-Hispanic Black adults (12.5%);
- Adults from households earning at least \$75,000 (21.6%);
- Adults without insurance (25.7%); and
- Non-disabled adults (17.7%).

**Figure 19** (*on the right*) shows one in 25 Connecticut adults engaged in both binge drinking and heavy drinking (4%).

#### Figure 19: Alcohol Risk Behaviors, CT 2015





## 4. Clinical Preventive Practices

## **Routine Check-up in Past Year**

The CDC stresses the importance of routine check-ups for disease prevention and screening.<sup>49</sup> Respondents are asked how long it had been since they last visited a doctor for a routine check-up. The prevalence of adults in 2015 who had a check-up in the previous year is shown in Table 25.

Three-fourths of Connecticut adults in 2015 have had their check-up in the previous year.

Compared to their counterparts in the state, the prevalence of having a routine check-up within the past year was significantly greater for:

- Adults 35-54 years old (69.3%) and 55 years old and older (83.5%);
- Women (77.1%);
- Non-Hispanic Black (77.4%) and White (73.1%) adults; and
- Adults with insurance (75.1%).

Figure 20 (on the right) shows that

residents had a check-up within the last

Demographic Characteristics	%	95% Confidence Intervals		
Total	72.9	71.7	74.1	
Age				
18-34 years old	62.6	59.5	65.7	
35-54 years old	69.3	67.3	71.3	
55 years old and over	83.5	82.2	84.7	
Gender				
Male	68.4	66.5	70.3	
Female	77.1	75.6	78.7	
Race/Ethnicity				
Non-Hispanic White	73.1	71.8	74.5	
Non-Hispanic Black	77.4	72.9	81.9	
Hispanic	67.5	63.6	71.4	
Income				
Less than \$35,000	72.0	69.4	74.5	
\$35,000-\$74,999	72.2	69.5	74.9	
\$75,000 and more	72.6	70.7	74.6	
Insurance Status				
Insured	75.1	73.9	76.3	
Not Insured	44.7	39.1	50.3	
Disability				
Yes	75.9	73.2	78.7	
No	71.9	70.5	73.3	
Education				
HS graduate or less	73.3	71.1	75.5	
More than HS education	72.7	71.3	74.1	

## Figure 20: Time Since Last Routine Check-up, CT 2015

More than 5 years ago, 3-5 years ago, among those who reported ever having a 5% 7% checkup, eighty-eight percent of adult CT Less than one year, Two years ago, 73% 15%



two years.



## **Cholesterol Screening**

Cholesterol is a lipid that is produced in the liver and kidneys and ingested from food. Some cholesterol is necessary, but too much cholesterol can lead to clogging of the arteries. High cholesterol is one of the risk factors associated with heart attack, heart disease, and stroke.<sup>50</sup> Blood testing is the only way to determine how much cholesterol is in the body.<sup>51</sup> Patients are encouraged to talk to their primary care provider about cholesterol testing.

The 2015 BRFSS asked respondents if they had ever had their cholesterol checked, and if their cholesterol was checked in the past five years **Table 26**.

	Ever Had Blood Cholesterol		Checked B	lood Cholest	erol in Past	
Demographic Characteristics	%	95% Con Inte	nfidence rvals	%	95% Confidence Intervals	
Total	86.3	85.3	87.2	83.3	82.1	84.5
Age						
18-34 years old	64.5	61.2	67.8	60.7	57.3	64.1
35-54 years old	90.4	88.9	91.8	87.3	85.7	88.8
55 years old and over	97.4	96.8	97.9	95.0	94.3	95.8
Gender						
Male	84.1	82.4	85.8	80.5	78.7	82.3
Female	88.2	86.7	89.7	85.8	84.3	87.4
Race/Ethnicity						
Non-Hispanic White	89.7	88.5	90.9	86.5	85.2	87.8
Non-Hispanic Black	82.3	78.2	86.3	79.9	75.5	84.3
Hispanic	72.5	68.6	76.3	69.8	65.9	73.7
Income						
Less than \$35,000	79.4	76.9	82.0	75.9	73.3	78.6
\$35,000-\$74,999	87.0	84.5	89.5	83.8	81.2	86.4
\$75,000 and more	92.4	90.8	94.0	89.9	88.2	91.6
Insurance Status						
Insured	88.5	87.4	89.6	85.7	84.5	86.8
Not Insured	57.9	52.1	63.7	53.1	47.3	58.9
Disability						
Yes	88.6	86.3	90.8	85.7	83.3	88.1
No	85.7	84.4	87.0	82.9	81.5	84.2
Education						
HS graduate or less	81.2	79.1	83.3	78.0	75.8	80.2
More than HS education	89.5	88.3	90.7	86.7	85.4	88.0

## Table 26: Blood Cholesterol Screening, CT 2015



Eighty-six percent of Connecticut adults in 2015 reported having had their blood cholesterol checked, while eighty-three percent of those had their blood cholesterol checked in the past five years.

Compared to their counterparts in the state, the prevalence of **ever having blood cholesterol checked** was significantly greater for:

- Adults 35-54 years old (90.4%) and at least 55 years old (97.4%);
- Women (88.2%);
- Non-Hispanic White (89.7%) and Non-Hispanic Black (82.3%) adults;
- Adults from households earning \$35,000-74,000 (87.0%) and at least \$75,000 (92.4%);
- Adults with insurance (88.5%); and •
- Adults with more than a high school education (89.5%).

Compared to their counterparts in the state, the prevalence of having **blood cholesterol** checked in past 5 years was significantly greater for:

- Adults 35-54 years old (87.3%) and at least 55 years old (95.0%);
- Women (85.8%); •
- Non-Hispanic White (86.5%) and Non-Hispanic Black (79.9%) adults;
- Adults with annual household income of \$35,000-74,000 (83.8%) and at least \$75,000 (89.9%); and
- Adults with insurance (85.7%); and
- Adults with more than a high school education (86.7%).



## Figure 21: Time since Last Blood Cholesterol Test, **CT 2015**



the past year (75%).

## Adult Influenza and Pneumococcal Vaccinations

The influenza (flu) virus can cause serious infections, hospitalizations and even death in some susceptible individuals. Seasonal flu vaccines are recommended for everyone over six months of age.<sup>52</sup> Respondents were asked if they had received the seasonal flu vaccine, either as a shot or nasal spray mist. All respondents were asked if they had received the flu vaccine in the past 12 months.

Pneumonia is a lung infection that can be caused by viruses, bacteria, or fungi. It is the leading cause of death of children under five worldwide.<sup>53</sup> Infection caused by some types of pneumococcal bacteria can be prevented by a pneumococcal or 'pneumonia' vaccine.<sup>54</sup> BRFSS respondents are asked if they had ever received the pneumococcal vaccine, which is recommended to children under five years old, adults over 65 years old, and adults at high risk for disease (HIV infection, organ transplantation, leukemia, and severe kidney disease). Results

are shown in Table 27.

Demographic	Had a Flu V	accine in P	ast Year	Ever Had Pneumococcal Vaccination		
Characteristics	%	95% Confidence Interval		%	95% Co Int	onfidence terval
Total	46.1	44.7	47.5	33.2	31.9	34.5
Age						
18-34 years old	34.1	30.7	37.4	22.0	18.6	25.4
35-54 years old	40.8	38.6	43.1	16.1	14.3	17.9
55 years old and over	58.5	56.8	60.2	52.0	50.3	53.8
Gender						
Male	42.3	40.3	44.3	33.6	31.5	35.6
Female	49.5	47.7	51.4	32.9	31.2	34.6
Race/Ethnicity						
Non-Hispanic White	47.8	46.3	49.3	34.6	33.2	36.1
Non-Hispanic Black	39.9	34.7	45.1	33.3	27.8	38.8
Hispanic	41.3	36.8	45.8	26.9	22.7	31.1
Income				-		
Less than \$35,000	43.4	40.6	46.2	40.0	37.1	42.8
\$35,000-\$74,999	42.0	39.1	45.0	33.8	31.0	36.6
\$75,000 and more	49.7	47.6	51.9	26.1	24.2	28.1
Insurance Status				-		
Insured	48.0	46.6	49.4	34.2	32.8	35.5
Not Insured	22.2	17.5	26.9	18.6	13.7	23.4
Disability				-		
Yes	51.7	48.6	54.7	48.6	45.4	51.7
No	44.7	43.1	46.2	29.2	27.7	30.6
Education						
HS graduate or less	42.0	39.5	44.5	35.9	33.4	38.3
More than HS education	48.6	46.9	50.2	31.4	29.9	32.9

#### Table 27: Influenza and Pneumococcal Vaccinations, CT 2015



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Compared to their counterparts in the state, the prevalence of having an **influenza vaccination** among Connecticut adults was significantly greater for:

- Adults 55 years old and older (58.5%) and 35-54 years old (40.8%;
- Women (49.5%);
- Non-Hispanic White (47.8%) and Hispanic (41.3%) adults;
- Adults from households earning at least \$75,000 annually (49.7%);
- Adults with health insurance coverage (48.0%); and
- Adults with more than a high school education (48.6%).

Compared to their counterparts in the state, the prevalence of having a **pneumococcal vaccination** among Connecticut adults was significantly greater for:

- Adults at least 55 years old (52.0%) and 18-34 years old (22%);
- Non-Hispanic White adults (34.6%);
- Adults from households earning less than \$35,000 (40.0%) and \$35,000-74,999 (33.8%);
- Disabled adults (48.6%); and
- Adults with no more than a high school education (35.9%).





## Child Oral Health

Although it is largely preventable, tooth decay is the most common chronic condition among children in the United States.<sup>55</sup> Dental caries (cavities) can cause pain and infection, and if left untreated they can lead to malnourishment and serious medical complications.<sup>56</sup> The American Academy of Pediatric Dentistry recommends that children see a pediatric dentist when their first tooth appears, and no later than their first birthday.<sup>57</sup>

Dental sealants can also prevent tooth decay.<sup>58</sup> Sealants are thin, plastic coatings that are painted on the back teeth, protecting the grooves from getting germs and food particles lodged in them. It is recommended that sealants are applied soon after the permanent tooth has come in.

Adult respondents are asked if the randomly-selected child had seen a dental provider in the previous year, and if so, whether or not they had ever had dental sealants. For the purposes of this analysis, we examined dental sealants only in children 5-17 years old. Results in 2015 are shown in **Table 28**.

Eighty-four percent of Connecticut children in 2015 had a dental visit in the previous year, in which nearly half of them had dental sealants applied to their teeth at some time.

Compared to their counterparts in the state, the prevalence of having **dental sealants** was significantly greater for children 12-17 years old (63.8%), when compared to the children 5-11 years old (44.5%). This is likely due to the increase in the number of permanent teeth that come in as children get older.

## Table 28: Child Oral Health, CT 2015

	Visited Dentist in Past Year		Dent	al Seala	ants			
Demographic Characteristics	%	95% % Confidence Intervals		%	95 Confie Inter	% dence rvals		
Total	84.2	82.0	86.4	52.7	49.4	56.1		
Child Age								
0-4 years old	54.6	48.1	61.0	^	^	^		
5-11 years old	*	*	*	44.5	39.5	49.4		
12-17 years old	*	*	*	63.8	59.1	68.4		
Child Gender								
Male	83.8	80.5	87.2	52.1	47.5	56.7		
Female	84.5	81.6	87.5	53.5	48.6	58.4		
Child Race/Ethnicity								
Non-Hispanic White	86.5	84.0	89.1	55.7	51.6	59.7		
Non-Hispanic Black	*	*	*	52.5	40.6	64.5		
Hispanic	*	*	*	46.4	38.5	54.3		
Adult Proxy Income								
Less than \$35,000	*	*	*	46.7	38.7	54.6		
\$35,000-\$74,999	*	*	*	53.0	45.1	60.9		
\$75,000 and more	84.5	81.5	87.5	55.3	51.1	59.5		
Adult Proxy Insurance	2							
Insured	84.8	82.6	87.0	53.8	50.3	57.2		
Not Insured	*	*	*	*	*	*		
Adult Proxy Education	n							
HS graduate or less	81.6	76.5	86.8	46.6	39.7	53.5		
More than HS education	85.4	83.1	87.7	54.9	51.1	58.7		
Estimates marked with a "^ five do not yet have permar Estimates marked with an " variation are at least 15% (s	Estimates marked with a "A" are not reported because children under the age of five do not yet have permanent molars. Estimates marked with an "*" are not reported because their coefficients of							



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2015 Connecticut BRFSS Report

## Human Immunodeficiency Virus (HIV)

Over one million Americans are living with the Human Immunodeficiency Virus (HIV), and of these, about one in six are not aware they are infected. The group most affected by HIV is men who have sex with men, though heterosexuals and drug users can also be affected. African Americans and Hispanics are over-represented in new HIV infections.<sup>59</sup> The U.S. Preventive Services Task Force (USPSTF) recommends that clinicians screen adolescents and adults ages 15 to 65 years old for HIV infection.60

BRFSS respondents are asked if they have ever been tested for HIV, not including testing while donating blood Table 29.

One in three Connecticut adults in 2015 reported having tested for HIV, in which half of them were tested at a private healthcare provider's office as shown in Figure 22 below.

Compared with their counterparts in the state, the prevalence of being tested for HIV was significantly greater for:

- Adults 18-34 years (44.0%) and 34-54 • years (51.8%);
- Non-Hispanic Black (58.3%) and Hispanic adults (53.8%);
- Adults from households earning less than \$35,000 (43.0%); and
- Adults with more than a high school education (38.0%).

Test, CT 2015

#### Table 29: HIV Risk and Prevention, CT 2015

	Ever Tested for HIV				
Demographic Characteristics	%	95% Confidence Intervals			
Total	36.3	34.9	37.7		
Age					
18-34 years old	44.0	40.5	47.6		
35-54 years old	51.8	49.4	54.2		
55 years old and over	18.3	16.9	19.7		
Gender					
Male	35.6	33.5	37.6		
Female	37.0	35.1	38.9		
Race/Ethnicity					
Non-Hispanic White	30.5	29.0	32.0		
Non-Hispanic Black	58.3	53.0	63.6		
Hispanic	53.6	49.0	58.3		
Income					
Less than \$35,000	43.0	40.0	45.9		
\$35,000-\$74,999	33.1	30.1	36.2		
\$75,000 and more	38.0	35.8	40.1		
Insurance Status					
Insured	35.9	34.5	37.4		
Not Insured	41.8	35.8	47.9		
Disability					
Yes	38.9	35.7	42.0		
No	35.7	34.2	37.3		
Education					
HS graduate or less	33.7	31.2	36.2		
More than HS education	38.0	36.4	39.7		





## 5. Chronic Conditions

## Asthma in Adults

Asthma is a chronic lung disease that causes the airways to become inflamed or swollen. Symptoms of asthma include shortness of breath, coughing, and wheezing.<sup>61</sup> Four thousand people die in the U.S. each year due to asthma related causes. These deaths are preventable with proper treatment.<sup>62</sup> Overall, asthma rates have been increasing in adults in the U.S.<sup>63</sup> Respondents were asked if, among those who indicated a doctor or health professional had ever told them they had asthma, whether or not they still had asthma. Results in 2015 are shown in Table 30.

One in nine Connecticut adults (10.5%) reported having been diagnosed with asthma in 2015, and an additional five percent had been diagnosed with asthma in the past but no longer had the condition **Figure 23** (*on the right*).

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

- Women (13.4%);
- Non-Hispanic Black adults (14.0%);
- Adults from households earning less than \$35,000 (14.3%);
- Disabled adults (19.4%); and
- Adults with no more than a high school education (12.5%).

#### Figure 23: Adult Asthma Status, CT 2015

Demographic Characteristics	%	95% Confidence	
Total	10 5	9 7	
Age	10.5	5.7	11.5
18-34 years old	10.9	8.8	12.9
, 35-54 years old	10.8	9.5	12.1
55 years old and over	10.0	9.0	10.9
Gender			
Male	7.4	6.4	8.5
Female	13.4	12.2	14.6
Race/Ethnicity			
Non-Hispanic White	10.0	9.1	10.8
Non-Hispanic Black	14.0	10.5	17.4
Hispanic	13.1	10.3	15.8
Income			
Less than \$35,000	14.3	12.4	16.2
\$35,000-\$74,999	9.2	7.7	10.8
\$75,000 and more	9.0	7.8	10.3
Insurance Status			
Insured	11.0	10.2	11.8
Not Insured	*	*	*
Disability		-	
Yes	19.4	17.1	21.7
No	8.5	7.7	9.4
Education			
HS graduate or less	12.5	11.0	14.0
More than high school	9.3	8.4	10.1

Table 30: Adults Current Asthma, CT 2015

*Estimates marked with an "\*" are not reported because their coefficients of variation are at least 15% (see page 8).* 







## 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>59</sup> Asthma is the third most common cause of hospitalizations in children and accounts for 12.8 million missed days of school each year.60

Respondents are asked if the randomlyselected child in the household had ever been diagnosed with asthma and if the child still had asthma. Results in 2015 are shown in Table 31. Comparisons among demographics could not be made because the coefficients of variation were higher than 15% in most of the demographics.

One in nine Connecticut children in 2015 had been diagnosed with asthma. An additional four percent had been diagnosed with asthma in the past but no longer had the condition, as shown *below* (Figure 24).

#### Figure 24: Child Asthma Status, CT 2015



#### Table 31: Child Current Asthma, CT 2015

Demographic Characteristics	%	95% Cor Lin	nfidence nits			
Total	11.7	9.8	13.7			
Age						
0-4 years old	*	*	*			
5-11 years old	11.7	8.8	14.6			
12-17 years old	14.1	10.6	17.5			
Gender						
Male	13.0	10.0	16.0			
Female	10.4	8.0	12.9			
Race/Ethnicity						
Non-Hispanic White	8.1	6.4	10.0			
Non-Hispanic Black	*	*	*			
Hispanic	17.7	12.8	22.6			
Adult Proxy Income						
Less than \$35,000	*	*	*			
\$35,000-\$74,999	*	*	*			
\$75,000 and more	7.9	5.9	9.9			
Adult Proxy Insurance						
Insured	11.6	9.7	13.4			
Not insured	*	*	*			
Adult Proxy Education						
HS graduate or less	17.8	12.8	22.7			
More than high school	9.3	7.5	11.1			
Estimates marked with an "*" are not reported because their coefficients of variation are at least 15% (see page 8)						

Current Former Never



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## **Chronic Obstructive Pulmonary Disease**

Chronic Obstructive Pulmonary Disease (COPD) is a lung disease that includes two main conditions: emphysema and chronic bronchitis. The term COPD is used because most sufferers have many conditions. COPD is characterized by damage to the lungs and airways, which causes less air to flow into the lungs. Symptoms include heavy coughing, wheezing and shortness of breath. Cigarette smoking is the primary cause of COPD, though other lung irritants such as air pollution, chemical fumes and dust may also contribute.<sup>64</sup> Genetic factors may also contribute to COPD.

Respondents are asked if they were ever told they had COPD, emphysema or chronic bronchitis, and results in 2015 are shown in **Table 32**.

One in 20 Connecticut adults in 2015 had been diagnosed with COPD.

Compared to their counterparts in the state, the risk of COPD was significantly greater for:

- Adults at least 55 years old (9.5%), when compared to adults 35-54 years old (3.3%);
- Women (5.8%);
- Adults from households earning less than \$35,000 (9.1%) and \$35,000-\$74,999 (5.6%);
- Adults with disabilities (14.9%); and
- Adults with no more than a high school education (7.9%).

<b>PH</b>	Keeping Connecticut Healthy
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#### Table 32: Chronic Obstructive Pulmonary Disease, CT 2015

Demographic Characteristics	%	95% Cor inte	nfidence rval				
Total	5.1	4.7	5.6				
Age							
18-34 years old	*	*	*				
35-54 years old	3.3	2.6	4.0				
55 years old and over	9.5	8.5	10.4				
Gender							
Male	4.4	3.7	5.1				
Female	5.8	5.1	6.5				
Race/Ethnicity							
Non-Hispanic White	5.8	5.2	6.4				
Non-Hispanic Black	*	*	*				
Hispanic	*	*	*				
Income							
Less than \$35,000	9.1	7.8	10.3				
\$35,000-\$74,999	5.6	4.5	6.8				
\$75,000 and more	2.3	1.6	3.0				
Insurance Status							
Insured	5.4	4.9	5.9				
Not Insured	*	*	*				
Disability							
Yes	14.9	13.1	16.7				
No	2.9	2.4	3.4				
Education							
HS graduate or less	7.9	6.8	8.9				
More than HS education	3.4	3.0	3.8				
Estimates marked with an "*" are coefficients of variation are at lea	Estimates marked with an "*" are not reported because their coefficients of variation are at least 15% (see page 8).						

## Arthritis

Arthritis covers over 100 rheumatic conditions that affect the joints and the connective tissues.<sup>65</sup> It is the most common cause of disability in the U.S, and affects one in five American adults. Arthritis is more common among women, and the risk of developing arthritis symptoms increases with age.<sup>66</sup> In addition, there is some evidence that having arthritis can increase the risk of falls and associated injuries.<sup>67</sup>

Respondents are asked if they were ever told they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. Results in 2015 are shown in **Table 33**.

One in four Connecticut adults in 2015 had been diagnosed with arthritis (24.5%).

Compared to their counterparts in the state, the risk of arthritis was significantly greater for:

- Adults aged 55 and older (44.1%) and adults 35-54 years old (19.2%);
- Women (28.2%);
- Non-Hispanic White (28.2%) and Black (17.3%) adults;
- Adults from households earning less than \$35,000 (29.5%) and \$35,000-\$74,999 (26.6%);
- Adults with disabilities (50.2%); and
- 95% Confidence Demographic % **Characteristics** Intervals Total 24.5 23.5 25.5 Age 3.3 4.6 5.9 18-34 years old 19.2 17.6 20.8 35-54 years old 44.1 42.5 45.7 55 years old and over Gender 21.9 20.5 19.1 Male 28.2 26.8 29.6 Female **Race/Ethnicity** 28.2 27.0 29.4 Non-Hispanic White 17.3 14.1 20.5 **Non-Hispanic Black** 18.1 15.5 13.0 Hispanic Income 29.5 27.3 31.6 Less than \$35,000 26.6 24.3 28.8 \$35,000-\$74,999 19.4 17.9 20.8 \$75,000 and more **Insurance Status** 25.7 24.6 26.7 Insured 10.4 7.5 13.4 Not Insured Disability 50.2 47.4 53.1 Yes 18.7 17.7 19.6 No Education 27.8 26.0 29.7 HS graduate or less 22.4 21.3 23.5 More than high school

Table 33: Arthritis, CT 2015

• Adults with no more than a high school education (27.8%).





## Arthritis Burden

Adults with arthritis commonly experience functional limitations in carrying out daily activities. The most common limitations include problems stooping, bending, kneeling, standing for more than two hours, walking for more than one-fourth mile, pushing a heavy object, and climbing a flight of stairs. Arthritis-related work limitations affect at least one in every 25 working-age adults in every U.S. state, and arthritis-attributable limitations are highest among obese adults.<sup>68</sup>

In 2015, a series of questions asked respondents who reported an arthritis diagnosis if they were limited in any way in any of their usual activities because of arthritis or joint symptoms. These respondents were also asked whether arthritis affected their work and their social activities, including going shopping, to the movies, or to religious or social gatherings. The results of adults in 2015 who reported that arthritis impacted their daily life are shown in **Table 34** (*below*).

	Limited Usual Activities			Limited Social Activities A Lot			Limited Work Activities		
Demographic Characteristics	%	95% Confidence Interval		%	95% Coi Inte	nfidence rval	%	95% Con Inte	fidence rval
Total	10.6	9.9	11.3	3.6	3.1	4.0	6.7	6.1	7.3
Age									
18-34 years old	*	*	*	*	*	*	*	*	*
35-54 years old	7.9	6.8	9.1	2.7	2.1	3.4	5.8	4.8	6.7
55 years old and over	19.9	18.6	21.2	6.8	5.9	7.8	11.4	10.3	12.5
Gender									
Male	8.3	7.3	9.2	2.6	2.0	3.2	5.3	4.5	6.0
Female	12.8	11.8	13.8	4.5	3.8	5.1	8.0	7.1	8.9
Race/Ethnicity									
Non-Hispanic White	11.5	10.7	12.3	3.5	3.0	4.0	6.8	6.1	7.5
Non-Hispanic Black	*	*	*	*	*	*	*	*	*
Hispanic	*	*	*	*	*	*	8.2	6.2	10.2
Income									
Less than \$35,000	16.6	14.8	18.3	7.2	6.0	8.4	12.9	11.2	14.5
\$35,000-\$74,999	10.6	9.1	12.1	2.9	2.1	3.6	6.0	4.9	7.2
\$75,000 and more	6.5	5.7	7.3	*	*	*	3.0	2.3	3.8
Insurance Status									
Insured	11.1	10.4	11.8	3.8	3.3	4.3	6.9	6.3	7.5
Not Insured	*	*	*	*	*	*	*	*	*
Disability									
Yes	35.5	32.8	38.2	17.6	15.4	19.8	24.0	21.6	26.4
No	5.4	4.8	5.9	*	*	*	3.1	2.6	3.6
Education									
HS graduate or less	13.4	12.0	14.8	5.3	4.4	6.3	9.6	8.4	10.8
More than HS	8.8	8.1	9.5	2.4	2.0	2.8	4.8	4.2	5.4
Estimates marked with an "*"	are not rep	ported becau	se their coei	fficients of varia	tion are at lea	st 15% (see p	age 8).		

## Table 34: Arthritis Burden, CT 2015





One in ten Connecticut adults in 2015 reported having been limited in some way in their usual activities because of arthritis or joint symptoms (10.6%) while one in 28 reported arthritis limited their social activities "a lot" (3.6%) and one in 15 reported arthritis limited their work (6.7%).

Compared to their counterparts in the state, the prevalence of arthritis with **limited usual activities in some way** was significantly greater for:

- Adults at least 55 years old (19.9%), when compared to adults 35-54 years old (7.9%);
- Women (12.8%);
- Adults from households earning less than 35,000 (16.6%) and \$35,000-\$74,999 (10.6%);
- Disabled adults (35.5%); and
- Adults with no more than a high school education (13.4%).

Compared to their counterparts in the state, the prevalence of arthritis with **limited social activities "a lot"** was significantly greater for:

- Adults at least 55 years old (6.8%), when compared to adults 35-54 years old (2.7%);
- Women (4.5%);
- Adults from households earning less than 35,000 (7.2%), when compared to adults from households earning \$35,000-\$74,999 (2.9%); and
- Adults with no more than a high school education (5.3%).

Compared to their counterparts in the state, the prevalence of arthritis with **limited work** was significantly greater for:

- Adults at least 55 years old (11.4%), when compared to adults 35-54 years old (5.8%);
- Women (8.0%);
- Adults from households earning less than 35,000 (12.9%) and \$35,000-\$74,999 (6.0%);
- Disabled adults (24.0%); and
- Adults with no more than a high school education (9.6%).

**Figure 25** (*on the right*) shows onethird of CT residents with arthritis experienced pain rated as 1 to 3 on a ten-point scale, while nearly half rated their pain as 4 to 7 (42%), and one in six rated their pain as 8 to10 (17%).

## Figure 25: Arthritis Pain Level, CT 2015







## **Cardiovascular Diseases and Stroke**

Cardiovascular disease (CVD), encompasses several heart conditions. It is the leading cause of death in the United States. The most common type of heart disease is coronary heart disease.<sup>69</sup> Adults who suffer from coronary heart disease have plaque build-up in their coronary arteries, which reduces the flow of oxygen to the heart. This can lead to angina, characterized by chest pain or pressure, as well as heart attacks.<sup>70</sup> Cardiovascular disease and stroke can be prevented by remaining physically active and eating a healthy and well-balanced diet and managing risk factors such as high blood pressure and cholesterol.<sup>71</sup>

Respondents are asked if they were ever told they had any of the following: a heart attack, also called a myocardial infarction; angina or coronary heart disease; or a stroke. Results in 2015 for those who responded to all three questions were combined and presented in **Table 35**.

One in 14 Connecticut adults in 2015 had been diagnosed with a heart attack, coronary heart disease, or stroke.

Compared with their counterparts in the state, the risk of cardiovascular disease was significantly greater for:

- Adults 55 years old and older (15.4%), when compared to adults 35-54 years old (3.4%);
- Men (8.8%);
- Adults from households earning less than \$35,000 (12.1%) and \$35,000-\$74,999 (7.3%);
- Disabled adults (19.2%); and
- Adults with no more than a high school education (9.8%).

able 35:	Cardio	vascular	Disease,	CT 2015	
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Demographic	%	95% Confidence		
Characteristics	70	Intervals		
Total	7.2	6.7	7.8	
Age				
18-34 years old	*	*	*	
35-54 years old	3.4	2.5	4.2	
55 years old and	15.4	14 3	16.6	
over	15.1	11.5	10.0	
Gender				
Male	8.8	7.8	9.7	
Female	5.8	5.1	6.5	
Race/Ethnicity				
Non-Hispanic White	8.0	7.3	8.7	
Non-Hispanic Black	*	*	*	
Hispanic	6.6	4.7	8.5	
Income				
Less than \$35,000	12.1	10.6	13.6	
\$35,000-\$74,999	7.3	6.1	8.5	
\$75,000 and more	3.9	3.2	4.6	
Insurance Status				
Insured	7.5	6.9	8.1	
Not Insured	*	*	*	
Disability				
Yes	19.2	17.2	21.3	
No	4.5	4.0	5.0	
Education				
HS graduate or less	9.8	8.6	11.0	
More than high	5 5	5.0	61	
school	5.5	5.0	0.1	
Estimates marked with an "	*" are not re	ported because their		
coentelents of variation are	un nuast IJ/	o page page 0).		



## Cancer

After heart disease, cancer is the second leading cause of death among Americans. More than 500,000 Americans die every year from cancer.<sup>72</sup> Skin cancer is the most common cancer in the U.S. Its deadliest form, melanoma, can be caused by exposure to ultraviolet light.<sup>73</sup> Cancer can be prevented by eating a healthy diet, staying physically active, limiting alcohol consumption, not smoking, and practicing sun-safe behaviors such as using sunscreen, seeking shade, covering skin, and avoiding indoor tanning beds. Some types of cancer, such as cervical cancer, are preventable with vaccines and others, such as colorectal and breast cancer, can be managed with early screening.<sup>74</sup>

BRFSS respondents are asked if they were ever told they had skin cancer or any other type of cancer. Results in 2015 are shown in **Table 36**.

One in eight Connecticut adults in 2015 had been diagnosed with a type of cancer.

Compared to their counterparts in the state, the risk of cancer among adults in Connecticut was significantly greater for:

- Adults at least 55 years old (23.3%);
- Women (12.8%);
- Disabled adults (17.6%); and
- Adults with more than a high school education (12.1%).

**Figure 26** (*on the right*) shows that more than one-third of adults reported having skin cancer among those diagnosed with cancer.

## Table 36: Cancer, CT 2015

Demographic Characteristics	%	95% Confidence Intervals				
Total	11.5	10.9	12.2			
Age						
18-34 years old	*	*	*			
35-54 years old	6.6	5.6	7.6			
55 years old and over	23.3	22.1	24.6			
Gender						
Male	10.2	9.3	11.1			
Female	12.8	11.8	13.7			
Race/Ethnicity						
Non-Hispanic White	14.9	14.0	15.7			
Non-Hispanic Black	*	*	*			
Hispanic	*	*	*			
Income						
Less than \$35,000	10.6	9.3	12.0			
\$35,000-\$74,999	13.1	11.6	14.6			
\$75,000 and more	11.0	10.0	12.1			
Insurance Status						
Insured	12.2	11.5	12.9			
Not Insured	*	*	*			
Disability						
Yes	17.6	15.6	19.6			
No	10.2	9.5	10.9			
Education						
HS graduate or less	10.5	9.4	11.6			
More than high school	12.1	11.3	13.0			
Estimates marked with an "*" are not reported because their coefficients of variation are at least 15% (see page 8)						

## Figure 26: Prevalence of Skin and Other Cancers among Diagnosed Cancers, CT 2015





Connecticut Department of Public Health | Chronic Conditions

## Diabetes

Diabetes is a disease characterized by high levels of blood sugar. It can lead to serious health problems, such as heart disease, stroke, blindness and lower-extremity amputation.<sup>75</sup> Diabetes affects over 29 million people in the U.S. Those over 60 years of age, African-Americans and Hispanics, and groups of low socioeconomic status are at higher risk for diabetes.<sup>76</sup> BRFSS respondents are asked if they had ever been told they had diabetes. Women with diabetes only during pregnancy were not classified as having diabetes. Results in 2015 are shown in **Table 37**.

One in ten Connecticut adults in 2015 had been diagnosed with diabetes.

Compared to their counterparts in the state, the risk of diabetes among adults in Connecticut was significantly greater for:

- Adults at least 55 years old (16.8%);
- Men (10.3%);
- Non-Hispanic Black (14.3%) and Hispanic (11.5%) adults;
- Adults from households earning \$35,000-\$74,999 (8.8%) and less than \$35,000 (14.6%);
- Disabled adults (19.6%); and
- Adults with no more than a high school education (13.1%).

**Figure 27**(*on the right*) shows how adults with diabetes managed their disease. One in three were taking insulin (31%), half had taken a diabetes management class (47%), and three-fourths had tested their hemoglobin A1C level at least twice in the past year (77%).

Demographic Characteristics	%	95% Confidence Intervals				
Total	9.3	8.6	9.9			
Age						
18-34 years old	*	*	*			
35-54 years old	6.9	5.7	8.0			
55 years old and over	16.8	15.6	18.0			
Gender						
Male	10.3	9.2	11.4			
Female	8.3	7.4	9.1			
Race/Ethnicity						
Non-Hispanic White	8.2	7.5	8.9			
Non-Hispanic Black	14.3	11.1	17.5			
Hispanic	11.5	9.2	13.9			
Income						
Less than \$35,000	14.6	12.9	16.3			
\$35,000-\$74,999	8.8	7.4	10.1			
\$75,000 and more	6.2	5.2	7.2			
Insurance Status						
Insured	9.4	8.7	10.2			
Not Insured	*	*	*			
Disability						
Yes	19.6	17.5	21.7			
No	6.7	6.1	7.4			
Education						
HS graduate or less	13.1	11.7	14.5			
More than HS	6.8	6.1	7.4			
Estimates marked with an "*" are not reported because their coefficients of variation are at least 15% (see page 8).						

Table 37: Diabetes, CT 2015

#### Figure 27: Diabetes Management, CT 2015







## **Cholesterol Awareness**

It is estimated that more than 73 million American adults suffer from high cholesterol, but less than one in three of these adults has their high cholesterol under control.<sup>77</sup> People with high cholesterol have twice the risk of heart disease as people with lower levels of cholesterol.<sup>78</sup> Cholesterol can be controlled by making lifestyle and dietary changes. Depending on overall risk of cardiovascular disease, medication may be necessary.<sup>79</sup>

**Ever Told Blood Cholesterol** Was High 95% Confidence Demographic % **Characteristics** Intervals Total 37.4 36.1 38.6 Age 18-34 years old 18.5 15.4 21.6 35-54 years old 32.4 30.2 34.5 55 years old and 50.5 48.9 52.1 over Gender 38.2 42.2 Male 40.2 34.9 33.3 36.6 Female Race/Ethnicity Non-Hispanic 38.0 36.6 39.3 White 28.7 38.9 Non-Hispanic Black 33.8 Hispanic 39.8 35.3 44.3 Income Less than \$35,000 43.6 40.7 46.4 \$35,000-\$74,999 37.3 34.5 40.1 \$75,000 and more 34.0 32.1 35.9 **Insurance Status** Insured 37.7 36.4 39.0 Not Insured 32.4 25.9 38.9 Disability Yes 50.0 47.0 53.1 No 34.3 32.9 35.7 **Education** HS graduate or less 42.1 39.7 44.6 More than HS 34.7 33.3 36.1 education

The 2015 BRFSS asked respondents if they had ever been told they had high blood cholesterol levels. Results in 2015 are shown by demographics in **Table 38**.

One in three Connecticut adults in 2015 had ever been told their blood cholesterol was high.

Compared to their counterparts in the state, the risk of high blood cholesterol among adults in Connecticut was significantly greater for:

- Adults at least 55 years old (50.5%) and 35-54 years old (32.4%);
- Men (40.2%);
- Adults from households earning at least \$75,000 (34.0%);
- Disabled adults (50.0%); and
- Adults with no more than a high school education (42.1%).



## Table 38: Diagnosed High Blood Cholesterol, CT 2015



## **Hypertension Awareness**

Hypertension is the medical term for high blood pressure, a condition that impacts one in three adults in America (approximately 70 million people). It estimated that only 50% of these adults have their high blood pressure under control.<sup>80</sup> Medication and lifestyle changes are often enough to control high blood pressure, but if it is not controlled, it can result in heart problems, kidney disease, and stroke.<sup>81</sup> Consuming more than the recommended amount of sodium, smoking, drinking too much alcohol, and family history of high blood pressure can all contribute to the development of high blood pressure. African-Americans are more likely to develop high blood pressure than other groups.<sup>79</sup> Hypertension can be prevented by eating a healthy diet low in sodium and high in fruits and vegetables, being active, and not smoking.<sup>82</sup>

BRFSS respondents were asked if they had ever been told they had high blood pressure and, among those with diagnosed hypertension, whether they were currently taking medication for the condition. Results in 2015 are shown in **Table 39**.

	Ever Told Had High Blood Pressure			Currently Taking Medicine for High Blood Pressure			
Demographic Characteristics	%	95% Confidence Intervals		%	95% Confidence Intervals		
Total	30.4	29.3	31.5	75.9	73.9	77.9	
Age							
18-34 years old	8.8	6.9	10.6	*	*	*	
35-54 years old	23.2	21.3	25.1	61.1	56.5	65.7	
55 years old and over	52.9	51.3	54.5	88.4	86.8	90.0	
Gender							
Male	32.2	30.5	33.9	71.7	68.6	74.7	
Female	28.7	27.2	30.1	80.3	77.7	82.9	
Race/Ethnicity							
Non-Hispanic White	31.4	30.1	32.6	78.4	76.3	80.5	
Non-Hispanic Black	37.9	33.2	42.6	75.5	68.3	82.7	
Hispanic	24.8	21.4	28.3	63.8	55.9	71.7	
Income							
Less than \$35,000	38.8	36.2	41.3	77.2	73.6	80.9	
\$35,000-\$74,999	32.1	29.6	34.6	77.0	73.0	81.0	
\$75,000 and more	23.7	22.1	25.3	75.0	71.4	78.6	
Insurance Status							
Insured	31.5	30.3	32.6	76.8	74.8	78.8	
Not Insured	17.7	13.6	21.7	54.2	41.6	66.9	
Disability							
Yes	51.0	48.1	53.9	79.3	75.7	82.8	
No	25.5	24.3	26.7	74.1	71.5	76.6	
Education							
HS graduate or less	37.1	35.0	39.3	76.1	72.7	79.4	
More than HS education	26.1	24.9	27.3	75.7	73.3	78.1	
Estimates marked with an "*" are not reported because their coefficients of variation are at least 15% (see page 8).							

#### Table 39: Diagnosed Hypertension, CT 2015



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One in three Connecticut adults in 2015 have been diagnosed with hypertension, while three of four were taking medicine for their high blood pressure among those diagnosed with hypertension **Figure 28** (*below*).

Compared to their counterparts in the state, the risk of **ever having high blood pressure** among adults in Connecticut was significantly greater for:

- Adults at least 55 years old (52.9%) and 35-54 years old (23.2%);
- Men (32.2%);
- Non-Hispanic White (31.4%) and Non-Hispanic Black (37.9%) adults;
- Adults from households earning less than \$35,000 (38.8%);
- Adults with insurance (31.5%);
- Disabled adults (51.0%); and
- Adults with no more than a high school education (37.1%).

Compared to their counterparts in the state, the prevalence of **taking medicine for high blood pressure** among adults diagnosed with hypertension was significantly greater for:

- Adults at least 55 years old (88.4%), when compared to adults 35-54 years old (61.1%);
- Women (80.3%);
- Non-Hispanic White adults (78.4%) compared to Hispanic adults (63.8%); and
- Adults with insurance (76.8%).

# Figure 28: Blood Pressure Medicine among Adults with Hypertension, CT 2015




# **Kidney Disease**

Chronic Kidney Disease is a condition in which the kidneys cannot filter blood as well as they should, and so waste is not properly filtered. A person with kidney disease is more likely to develop heart disease and other health problems. Adults with diabetes or high blood pressure are at higher risk of developing chronic kidney disease.<sup>83</sup>

Chronic kidney disease can be detected early with blood tests. If it is detected, medication can reduce the damage to the kidneys by fifty percent. Kidney disease often runs in families, and family medical history can often identify people at risk for chronic kidney disease.<sup>84</sup>

Respondents are asked if they were ever told they had kidney disease. Results in 2015 are shown in **Table 40**.

One in 52 Connecticut adults in 2015 had been diagnosed with kidney disease.

Compared to their counterparts in the state, the risk of kidney disease among adults in Connecticut was significantly greater for:

- Disabled adults (4.9%); and
- Adults with no more than a high school education (2.6%).

### Table 40: Kidney Disease, CT 2015

Demographic Characteristics	%	95% Confidence				
Tatal	1.0	Inte	rvals			
	1.9	1.6	2.2			
Age	*	*	*			
18-34 years old	*	*	*			
35-54 years old	÷ Эг	2.0	4.0			
55 years old and over	3.5	2.9	4.0			
Gender	2.4	4.6	2.6			
Male	2.1	1.6	2.6			
Female	1.7	1.4	2.1			
Race/Ethnicity						
Non-Hispanic White	1.9	1.6	2.2			
Non-Hispanic Black	*	*	*			
Hispanic	*	*	*			
Income						
Less than \$35,000	3.3	2.4	4.1			
\$35,000-\$74,999	*	*	*			
\$75,000 and more	*	*	*			
Insurance Status						
Insured	2.0	1.7	2.3			
Not Insured	*	*	*			
Disability						
Yes	4.9	3.8	6.0			
No	1.2	0.9	1.5			
Education						
HS graduate or less	2.6	2.0	3.3			
More than high school	1.4	1.2	1.7			
Estimates marked with an "*" are not reported because their coefficients of variation are at least 15% (see page 8).						



# Depression

Depression is a common and serious illness that can take several forms. Symptoms include persistent feelings of sadness, anxiety, "emptiness," and hopelessness, as well as fatigue, irritability and restlessness. Depressive disorders may interfere with a person's work and daily activities and prevent them from functioning normally. Some forms of depression develop under unique circumstances; others occur in episodes or may be longer-term.<sup>85</sup> Depression is often misconstrued as a sign of weakness, and if left untreated, can have tragic consequences, including suicide. Medication and therapy have been proven effective in treating major depression.86

Respondents are asked if they were ever told they had a depressive disorder, including depression, major depression, dysthymia, or minor depression. Results in 2015 are shown in **Table 41**.

One in six Connecticut adults in 2015 had been diagnosed with depression (17.6%).

Compared to their counterparts in the state, the risk of having depression among Connecticut adults was significantly greater for:

- Women (21.4%);
- Hispanic adults (21.1%) and Non-Hispanic White adults (18.5%);
- Adults from households earning less than \$35,000 (25.6%);
- Disabled adults (42.0%); and
- Adults with no more than a high school education (19.2%).

#### Keeping Connecticut Healthy

### Table 41: Depression, CT 2015

Demographic Characteristics	%	95% Confidence Intervals					
Total	17.6	16.6	18.5				
Age							
18-34 years old	18.6	16.1	21.1				
35-54 years old	17.4	15.9	19.0				
55 years old and over	17.1	16.0	18.3				
Gender							
Male	13.4	12.1	14.7				
Female	21.4	20.0	22.8				
Race/Ethnicity							
Non-Hispanic White	18.5	17.3	19.6				
Non-Hispanic Black	12.4	9.2	15.6				
Hispanic	21.1	17.8	24.4				
Income							
Less than \$35,000	25.6	23.4	27.9				
\$35,000-\$74,999	16.2	14.2	18.3				
\$75,000 and more	13.3	11.8	14.8				
Insurance Status	Insurance Status						
Insured	17.8	16.8	18.8				
Not Insured	14.5	10.9	18.2				
Disability							
Yes	42.0	39.1	44.8				
No	11.9	11.0	12.8				
Education							
HS graduate or less	19.2	17.4	21.0				
More than high school	16.5	15.4	17.6				
<i>Estimates marked with an "*" are not reported because their coefficients of variation are at least 15% (see page 8).</i>							

## 6. Environmental Health Indicators

# Water Sources

Drinking water comes from a variety of sources including public water systems, private wells, or bottled water.<sup>87</sup> It is important to know where drinking water comes from, how it's been tested, and if it's safe to drink. According to the United States Environmental Protecting Agency (EPA), public drinking water systems consist of community and non-community systems. 8% of U.S. community water systems provide water to 82% of the U.S. population through large municipal water systems.<sup>88</sup> Private water systems are composed of private ground water residential wells, cisterns, and large private water systems that serve more than one residence.<sup>89</sup> Many people in the United States receive their water from private ground water wells. The presence of contaminants in sources of drinking water can lead to adverse health effects, including gastrointestinal illness, reproductive problems, and neurological disorders.<sup>90</sup>

In 2015, BRFSS respondents were asked to report their main source of water supply. The prevalence of adults in 2015 who reported having public or private well water supply in their residence is broken down by demographic characteristics in **Table 42**.

	Pub	lic Water Su	pply	Private Well Water Supply			
Demographic Characteristics	%	95% Confidence Intervals		% 95% Confid % Interval		nfidence rvals	
Total	71.1	69.8 72.4		26.0	24.7	27.2	
Age							
18-34 years old	76.7	73.3	80.1	19.2	16.1	22.4	
35-54 years old	69.2	67.0	71.3	27.9	25.8	30.0	
55 years old and over	69.5	68.0	71.1	28.2	26.7	29.7	
Gender							
Male	71.5	69.6	73.4	25.9	24.1	27.7	
Female	70.8	69.0	72.5	26.0	24.4	27.7	
Race/Ethnicity							
Non-Hispanic White	64.9	63.4	66.4	32.2	30.7	33.7	
Non-Hispanic Black	92.4	89.2	95.6	*	*	*	
Hispanic	92.3	89.7	95.0	*	*	*	
Income							
Less than \$35,000	83.5	81.2	85.8	13.6	11.5	15.8	
\$35,000-\$74,999	72.2	69.4	75.0	25.1	22.4	27.7	
\$75,000 and more	63.3	61.1	65.4	34.0	31.9	36.1	
Insurance Status							
Insured	70.2	68.9	71.5	26.9	25.6	28.2	
Not Insured	85.6	81.4	89.8	*	*	*	

#### Table 42: Household Water Source, CT 2015



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ort	C	/

	Public	Water Supp	Private Well Water Supply					
Demographic Characteristics	%	95% Confidence Intervals		%	95% Confidence Intervals			
Disability								
Yes	76.1	73.4	78.8	20.5	18	23.1		
No	69.9	68.4	71.3	27.3	25.9	28.7		
Education								
HS graduate or less	75.1	72.8	77.3	21.8	19.7	23.9		
More than HS education	68.8	67.3	70.4	28.4	26.9	29.8		
Estimates marked with an "*" are not reported because their coefficients of variation are at least 15% (see page 8).								

### Table 42: Household Water Source, CT 2015, continued

Two-thirds of Connecticut adults reported having public water supply, while one in four adults reported having private well as their main water source. Two-thirds of adults reported having their water tested within the past five years among those having private well as their main water source as shown in **Figure 29** (*below*).

Compared to their counterparts in the state, the prevalence of having **public water supply** among Connecticut adults was significantly greater for:

- Adults 18-34 years old (76.7%);
- Non-Hispanic Black (92.4%) and Hispanic (92.3%) adults;
- Adults from households earning less than \$35,000 (83.5%) and \$35,000-74,999 (72.2%);
- Adults without insurance (85.6%);
- Disabled adults (76.1%); and
- Adults with no more than a high school education (75.1%).

Compared to their counterparts in the state, the prevalence of having **private well water supply** among Connecticut adults was significantly greater for:

- Adults 34-54 years old (27.9%) and at least 55 years old (28.2%);
- Adults from households earning at least \$75,000 (34.0%) and \$35,000-74,999 (25.1%);
- Adults without disability (27.3%); and
- Adults with more than a high school education (28.4%).

### Figure 29: Time since Last Well Water Test, CT 2015









The built environment includes all of the physical parts of where we live and work (e.g., homes, buildings, streets, open spaces, and infrastructure). The built environment influences a person's level of physical activity. For example, inaccessible or nonexistent sidewalks and bicycle or walking paths contribute to sedentary habits. These habits lead to poor health outcomes such as obesity, cardiovascular disease, diabetes, and some types of cancer.<sup>91</sup>

In 2015, the BRFSS questionnaire asked respondents to report the number of days they had walked in the neighborhood in the past 30 days. Results in 2015 are shown **Table 43**.

	Never			1-7 Times			>7 Times		
Demographic Characteristics	%	95% Coi Inte	nfidence rval	% 95% Confidence Interval		%	95% Confidence Interval		
Total	38.3	36.7	40.0	25.1	23.6	26.6	36.6	35.0	38.2
Age									
18-34 years old	38.0	33.7	42.4	27.4	23.4	31.4	34.6	30.4	38.8
35-54 years old	33.5	30.8	36.2	28.3	25.7	30.9	38.2	35.4	40.9
55 years old and over	42.5	40.4	44.5	20.9	19.3	22.5	36.6	34.7	38.6
Gender									
Male	37.6	35.1	40.0	24.9	22.7	27.1	37.5	35.1	39.9
Female	39.0	36.8	41.2	25.3	23.3	27.3	35.7	33.5	37.9
Race/Ethnicity									
Non-Hispanic White	37.2	35.4	39.0	25.7	24.0	27.4	37.1	35.3	38.9
Non-Hispanic Black	45.2	38.6	51.8	20.0	15.0	25.1	34.7	28.4	41.1
Hispanic	40.6	35.1	46.1	23.1	18.7	27.5	36.3	31.1	41.6
Income									
Less than \$35,000	42.3	38.7	45.8	21.3	18.3	24.3	36.5	33.1	39.9
\$35,000-\$74,999	41.5	37.8	45.2	23.7	20.5	26.8	34.8	31.3	38.4
\$75,000 and more	32.6	30.0	35.2	28.7	26.3	31.2	38.6	36.0	41.2
Insurance Status									
Insured	38.5	36.8	40.2	25.3	23.8	26.8	36.2	34.5	37.8
Not Insured	36.5	29.4	43.5	22.5	16.4	28.6	41.0	33.7	48.3
Disability									
Yes	49.0	45.4	52.7	20.4	17.6	23.3	30.6	27.1	34.1
No	35.8	33.9	37.7	26.2	24.5	27.9	38.0	36.1	39.8
Education									
HS graduate or less	44.9	41.8	47.9	23.2	20.5	25.8	32.0	29.1	34.8
More than HS	34.3	32.4	36.2	26.3	24.5	28.1	39.4	37.4	41.3

### Table 43: Built Environment (Walkability), CT 2015





One in three Connecticut adults in 2015 reported they had never walked in their neighborhood in the past 30 days (38.3%), while one in four adults walked less than 7 times (25.1%) and one in three walked more than 7 times (36.6%) in the past 30 days.

Compared to their counterparts in the state, the prevalence of having **never** walked in their neighborhood in the past 30 days among Connecticut adults was significantly greater for:

- Non-Hispanic Black (45.2%) adults, when compared to Non-Hispanic White adults (37.2%);
- Adults from households earning less than \$35,000 (42.3%) and \$35,000-74,999 (41.5%);
- Disabled adults (49.0%); and
- Adults with no more than a high school education (44.9%).

Compared to their counterparts in the state, the prevalence of having walked in their neighborhood **less than 7 times** in the past 30 days among Connecticut adults was significantly greater for:

- Adults 18-34 years old (27.4%) and 34-54 years old (28.3%); and
- Adults without disability (26.2%).

Compared to their counterparts in the state, the prevalence of having walked in their neighborhood **more than 7 times** in the past 30 days among Connecticut adults was significantly greater for:

- Adults without disability (38.0%); and
- Adults with more than a high school education (39.4%).

Reasons were asked among those who didn't walk in their neighborhood frequently. **Figure 30** (*below*) shows lack of energy/motivation, medical conditions and lack of time are the main reasons for not walking frequently. Adults who reported never having walked in their neighborhood were more likely to cite other reasons. These other reasons included exercise elsewhere, nowhere to go, or no sidewalks.



### Figure 30: Top Reasons Why Didn't Walk More Frequently in Past Month, CT 2015



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### **Endnotes**

<sup>1</sup> Connecticut Department of Public Health (2014) Healthy Connecticut 2020. 2: State Health Improvement Plan, Connecticut Department of Public Health, Hartford, Connecticut. http://www.ct.gov/dph/lib/dph/state health planning/sha-ship/hct2020/hct2020 state hlth impv 032514.pdf

<sup>2</sup> Connecticut Department of Public Health (2014) Live Health Connecticut, A Coordinated Chronic Disease Prevention and Health Promotion Plan, Connecticut Department of Public Health, Hartford, Connecticut. http://www.ct.gov/dph/lib/dph/state health planning/dphplans/chron dis coord plan april 2014.pdf

<sup>3</sup> Connecticut Department of Public Health: Healthy Connecticut 2020 Performance Dashboard. http://www.ct.gov/dph/cwp/view.asp?a=3130&q=553676

<sup>4</sup> Committee on Children: RBA Children's Report Card, Connecticut General Assembly, Hartford, Connecticut. https://www.cqa.ct.gov/kid/rba/results.asp

<sup>5</sup> Connecticut Department of Public Health: Chronic Disease Prevention and Health Promotion, Live Healthy Connecticut Indicators. http://www.ct.gov/dph/cwp/view.asp?a=3137&Q=547826&PM=1

<sup>6</sup> Healthcare Innovation Central: State Innovation Model (SIM) Initiative, Connecticut Office of the Healthcare Advocate, Hartford, CT. http://www.healthreform.ct.gov/ohri/site/default.asp

<sup>7</sup> University of Connecticut Health Center, Center for Public Health and Health Policy: Connecticut State Innovation Model (CT SIM) Test Grant, Farmington, CT. http://www.publichealth.uconn.edu/sim.html

<sup>8</sup> DeSalvo, Karen B, Bloser, N, Reynolds, K, He, Jiang, Muntner, P. (2006) Mortality Prediction with a Single General Self-Rated Health Question. Journal of General Internal Medicine, 21(3):267-275.

<sup>9</sup> U.S. Department of Justice: A Guide to Disability Rights Laws, July 2009. http://www.ada.gov/cquide.htm

<sup>10</sup> Centers for Disease Control and Prevention (2000) Measuring Healthy Days: Population Assessment of Health-Related Quality of Life, Atlanta, Georgia. http://www.cdc.gov/hrgol/pdfs/mhd.pdf

<sup>11</sup> Liu, Y, Njai, RS, Greenlund, KJ, Chapman, DP, Croft, JB (2014) Relationships between Housing and Good Insecurity, Frequent Mental Distress, and Insufficient Sleep among Adults in 12 US States, 2009. Centers for Disease Control and Prevention: Preventing Chronic Disease. http://www.cdc.gov/pcd/issues/2014/13 0334.htm

<sup>12</sup> Kushel, Margot B., Reena Gupta, Lauren Gee, and Jennifer S. Haas. (2006) Housing Instability and Food Insecurity as Barriers to Health Care among Low-Income Americans. Journal of General Internal Medicine, 21(1): 71-77.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1484604/





<sup>13</sup> United States Department of Agriculture Economic Research Center (2014): Food Security in the U.S: Measurement.

https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement.aspx

<sup>14</sup> Seligman, Hilary K., Barbara A. Laraia, and Margot B. Kushel. (2010) Food Insecurity Is Associated with Chronic Disease among Low-Income NHANES Participants. Journal of Nutrition, 140(2): 304-310. <u>http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2806885/</u>

<sup>15</sup> Centers for Disease Control and Prevention (2017): Prevalence of Perceived Food and House Secrity-15 States, 2013.

https://www.cdc.gov/mmwr/volumes/66/wr/mm6601a2.htm?s\_cid=mm6601a2\_e\_

<sup>16</sup> National Heart, Blood and Lung Institute (1998): Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. *Obesity Education Initiative*. NIH Publication No. 98-4083.

http://www.nhlbi.nih.gov/guidelines/obesity/ob\_gdlns.pdf

<sup>17</sup> Centers for Disease Control and Prevention: Adult Overweight and Obesity: Causes and Consequences. <u>http://www.cdc.gov/obesity/adult/causes/index.html</u>

<sup>18</sup> Centers for Disease Control and Prevention: Growth Chart Training. <u>http://www.cdc.gov/nccdphp/dnpao/growthcharts/resources/sas.htm</u>

<sup>19</sup> Freedman DS, Dietz WH, Srinivasan SR, Berenson GS. (2009) Risk factors and adult body mass index among overweight children: the Bogalusa Heart Study. *Pediatrics*, 123:750-57.

<sup>20</sup> American Academy of Pediatrics: Breastfeeding Initiatives, FAQs. <u>https://www2.aap.org/breastfeeding/faqsBreastfeeding.html</u>

<sup>21</sup> Centers for Disease Control and Prevention (2016): U.S. Breastfeeding Report Card. https://www.cdc.gov/breastfeeding/data/reportcard.htm

<sup>22</sup> Jackson, Kelly M and Nazar, Andrea M (2006). Breastfeeding, the Immune Response, and Long-term Health. *Journal of the American Osteopathic Association*, 106(4):203-207.

<sup>23</sup> Centers for Disease Control and Prevention: Breast Cancer, Basic Information about Breast Cancer. <u>http://www.cdc.gov/cancer/breast/basic\_info/</u>

<sup>24</sup> Breast Cancer in Connecticut Fact Sheet.(2016) <u>http://www.ct.gov/dph/lib/dph/ctr/pdf/breastcancer.pdf</u>

<sup>25</sup> Centers for Disease Control and Prevention: Ovarian Cancer. <u>http://www.cdc.gov/cancer/ovarian/index.htm</u>

<sup>26</sup> Ovarian Cancer in Connecticut Fact Sheet. (2016) <u>http://www.ct.gov/dph/lib/dph/ctr/pdf/ovariancancer.pdf</u>

<sup>27</sup> Centers for Disease Control and Prevention: BRCA Tool. <u>http://www.cdc.gov/cancer/breast/young\_women/knowbrca.htm</u>





<sup>28</sup> Gutkin, Cal (2009) Outliers: extended families, better health outcomes. Why everyone should have a family doctor. *Canadian Family Physician*, 55 (7):768. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2718612/

<sup>29</sup> Cheung, MR (2013). Lack of Health Insurance Increases All Cause and All Cancer Mortality in Adults: An Analysis of National Health and Nutrition Examination Survey (NHANES III) *Data. Asian Pac J Cancer Prev,* 14(4):2259-2263.

<sup>30</sup> Marwick, C (2002). For the Uninsured, Health Problems Are More Serious. *Journal of the National Cancer Institute*, 94(13):967-968.

<sup>31</sup> Warburton, DE, Nichol, CW, Bredlin, SSD (2006) Health Benefits of Physical Activity: The Evidence. *Canadian Medical Association Journal*, 174(6):801-809.

<sup>32</sup> Centers for Disease Control and Prevention: Injury Prevention and Control, Motor Vehicle Safety, Seat Belts: Get the Facts.

http://www.cdc.gov/motorvehiclesafety/seatbelts/facts.html

<sup>33</sup> U.S. Department of Health and Human Services: 2008 Physical Activity Guidelines for Americans. <u>https://health.gov/PAGuidelines/pdf/paguide.pdf</u>

<sup>34</sup> U.S. Department of Health and Human Services: Physical Activity Guidelines Advisory Committee Report, 2008. <u>https://health.gov/paquidelines/Report/pdf/CommitteeReport.pdf</u>

<sup>35</sup> American Academy of Pediatrics (2015): New Recommendations for Children's Media Use. <u>https://www.aap.org/en-us/about-the-aap/aap-press-room/Pages/American-Academy-of-Pediatrics-Announces-New-Recommendations-for-Childrens-Media-Use.aspx</u>

<sup>36</sup> Rideout VJ, Foehr UG, Roberts DF (2010). Generation M<sup>2</sup>: Media in the Lives of 8- to 18-Year-Olds. http://kaiserfamilyfoundation.files.wordpress.com/2013/04/8010.pdf

<sup>37</sup> Moreno, MA (2011). Reducing Screen Time for Children. Arch Pediatr Adolesc Med, 165(11):1056.

<sup>38</sup> Ludwig, DS, Peterson, KE, Gortmaker, SL (2001) Relation Between Consumption of Sugar-sweetened Drinks and Childhood Obesity: A Prospective, Observational Analysis. *Lancet*, 357(9255):505-508.

<sup>39</sup> Powell, LM, Nguyen, BT (2013). Fast-food and Full-service Restaurant Consumption among Children and Adolescents: Effect on Energy, Beverage and Nutrient Intake. *J American Medical Association Pediatrics*, 167(1):14-20.

<sup>40</sup> U.S. Public Health Service (2014): The Health Consequences of Smoking – 50 Years of Progress: A Report of the Surgeon General.

http://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf

<sup>41</sup> Shivo, M, Advalovic, MV, Murin, S (2014). Non-cigarette Tobacco and the Lung. *Clin Rev Allergy Imun*, 46(1):34-53.

<sup>42</sup> American Cancer Society: Health Risks of Smokeless Tobacco. <u>http://www.cancer.org/cancer/cancercauses/tobaccocancer/smokeless-tobacco</u>





<sup>44</sup> National Cancer Institute: Cigar Smoking and Cancer. <u>https://www.cancer.gov/about-cancer/causes-prevention/risk/tobacco/cigars-fact-sheet</u>

<sup>45</sup> Centers for Disease Control and Prevention: Alcohol and Public Health, Frequently Asked Questions. <u>http://www.cdc.gov/alcohol/faqs.htm</u>

<sup>46</sup> National Institute on Alcohol Abuse and Alcoholism: Drinking Levels Defined. http://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

<sup>47</sup> Centers for Disease Control and Prevention: Fact Sheets- Binge Drinking. <u>http://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm</u>

<sup>48</sup> Centers for Disease Control and Prevention: Fact Sheets- Alcohol Use and Health. <u>http://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm</u>

<sup>49</sup> Centers for Disease Control and Prevention: Regular Check-Ups are Important. <u>http://www.cdc.gov/family/checkup/</u>

<sup>50</sup> American Heart Association (2014): Why Cholesterol Matters. <u>http://www.heart.org/HEARTORG/Conditions/Cholesterol/WhyCholesterolMatters/Why-Cholesterol-Matters\_UCM\_001212\_Article.jsp</u>

<sup>51</sup> American Heart Association (2014): Symptoms, Diagnosis & Monitoring of High Cholesterol. <u>http://www.heart.org/HEARTORG/Conditions/Cholesterol/SymptomsDiagnosisMonitoringofHigh</u> <u>Cholesterol/Symptoms-Diagnosis-Monitoring-of-High-Cholesterol UCM 001214 Article.jsp</u>

<sup>52</sup> Centers for Disease Control and Prevention: Key facts about seasonal flu vaccine. <u>http://www.cdc.gov/flu/protect/keyfacts.htm</u>

<sup>53</sup> Centers for Disease Control and Prevention: Pneumonia, Common Causes of Pneumonia. <u>http://www.cdc.gov/pneumonia/index.html</u>

<sup>54</sup> Centers for Disease Control and Prevention: Pneumococcal Disease, Pneumococcal Vaccination. <u>http://www.cdc.gov/pneumococcal/vaccination.html</u>

<sup>55</sup> Centers for Disease Control and Prevention: Division of Oral Health, Children's Oral Health. <u>http://www.cdc.gov/OralHealth/children\_adults/child.htm</u>

<sup>56</sup> Connecticut Department of Public Health, Office of Oral Health (2013): Oral Health in Connecticut. <u>http://www.ct.gov/dph/lib/dph/oral health/pdf/final oral health burden report 2013.pdf</u>

<sup>57</sup> American Academy of Pediatric Dentistry: Frequently asked questions. <u>http://www.aapd.org/resources/frequently\_asked\_questions/#36</u>

<sup>58</sup> Centers for Disease Control and Prevention, Division of Oral Health: Dental Sealants. <u>http://www.cdc.gov/oralhealth/publications/faqs/sealants.htm</u>





<sup>59</sup> AIDS.gov: HIV In the United States: At A Glance. <u>http://aids.gov/hiv-aids-basics/hiv-aids-101/statistics/#ref2</u>

<sup>60</sup> Centers for Disease Control and Prevention: HIV Testing in Clinical Settings. <u>https://www.cdc.gov/hiv/testing/clinical/</u>

<sup>61</sup> National Institutes of Health: National Heart, Lung and Blood Institute: What Is Asthma? <u>http://www.nhlbi.nih.qov/health/health-topics/topics/asthma/</u>

<sup>62</sup> Centers for Disease Control and Prevention. Breathing Easier. <u>http://www.cdc.gov/asthma/pdfs/breathing\_easier\_brochure.pdf</u>

<sup>63</sup> Agency for Toxic Substances and Disease Registry: Environmental Health and Medicine Education, Environmental Triggers of Asthma. <u>http://www.atsdr.cdc.gov/csem/csem.asp?csem=32&po=0</u>

<sup>64</sup> National Institutes of Health: National Heart, Lung and Blood Institute: What Is COPD? <u>http://www.nhlbi.nih.gov/health/health-topics/topics/copd/</u>

<sup>65</sup> Centers for Disease Control and Prevention: Arthritis Basics. <u>http://www.cdc.gov/arthritis/basics.htm</u>

<sup>66</sup> Centers for Disease Control and Prevention: Arthritis, Quick Stats. <u>http://www.cdc.gov/arthritis/press/quickstats.html</u>

<sup>67</sup> Barbour, KE, Stevens, JA, Helmick, CG, Luo, Y-H, Murphy, LB, Hootman, JM, Theis, K, Anderson, LA, Baker, NA, Sugerman, DE (2014). Falls and Fall Injuries among Adults with Arthritis - United States, 2012. *MMWR*, 63(17):379-383.

<sup>68</sup> Centers for Disease Control and Prevention (2014): About Arthritis Disabilities and Limitations. <u>http://www.cdc.gov/arthritis/data\_statistics/disabilities-limitations.htm</u>

<sup>69</sup> Centers for Disease Control and Prevention: Heart Disease Fact Sheet. <u>http://www.cdc.gov/dhdsp/data\_statistics/fact\_sheets/docs/fs\_heart\_disease.pdf</u>

<sup>70</sup> National Institutes of Health: National Heart, Lung and Blood Institute: What Is Coronary Heart Disease? <u>http://www.nhlbi.nih.gov/health/health-topics/topics/cad/</u>

<sup>71</sup> American Heart Association: How to Help Prevent Heart Disease – At Any Age. <u>http://www.heart.org/HEARTORG/HealthyLiving/How-to-Help-Prevent-Heart-Disease---At-Any-Age\_UCM\_442925\_Article.jsp#.VtSuDXnSlmM</u>

<sup>72</sup> Centers for Disease Control and Prevention: Cancer Prevention and Control, Statistics for Different Kinds of Cancer. <u>http://www.cdc.gov/cancer/dcpc/data/types.htm</u>

<sup>73</sup> Centers for Disease Control and Prevention: Skin Cancer, What Is Skin Cancer? <u>http://www.cdc.gov/cancer/skin/basic\_info/what-is-skin-cancer.htm</u>





<sup>74</sup> Centers for Disease Control and Prevention: Chronic Disease Prevention and health Promotion, Addressing the Cancer Burden, At a Glance.

http://www.cdc.gov/chronicdisease/resources/publications/aag/dcpc.htm

<sup>75</sup> Centers for Disease Control and Prevention: Diabetes Report Card 2012. <u>http://www.cdc.gov/diabetes/pubs/pdf/diabetesreportcard.pdf</u>

<sup>76</sup> Centers for Disease Control and Prevention: The National Program to Eliminate Diabetes-Related Disparities in Vulnerable Populations.

http://www.cdc.gov/diabetes/prevention/pdf/vulnerablepopulationsfactsheet.pdf

<sup>77</sup> Centers for Disease Control and Prevention (2015): High Cholesterol Facts. <u>http://www.cdc.gov/cholesterol/facts.htm</u>

<sup>78</sup> Centers for Disease Control and Prevention (2015): Division for Heart Disease and Stroke Prevention: Cholesterol Fact Sheet. http://www.cdc.gov/dhdsp/data statistics/fact sheets/fs cholesterol.htm

<sup>79</sup> American Heart Association (2015): Prevention and Treatment of High Cholesterol. <u>http://www.heart.org/HEARTORG/Conditions/Cholesterol/PreventionTreatmentofHighCholesterol/Prevention-and-</u> <u>Treatment-of-High-Cholesterol\_UCM\_001215\_Article.jsp</u>

<sup>80</sup> Nwankwo T, Yoon SS, Burt V, Gu Q. (2013) Hypertension among adults in the US: National Health and Nutrition Examination Survey, 2011-2012. NCHS Data Brief, No. 133. <u>http://www.cdc.gov/nchs/data/databriefs/db133.htm</u>

<sup>81</sup> National Institutes of Health. (2015) High Blood Pressure. <u>http://www.nlm.nih.gov/medlineplus/ency/article/000468.htm</u>

<sup>82</sup> Centers for Disease Control and Prevention (2014): Controlling Blood Pressure. <u>http://www.cdc.gov/bloodpressure/control.htm</u>

<sup>83</sup> Centers for Disease Control and Prevention: National Chronic Kidney Disease Fact Sheet, 2014. <u>http://www.cdc.gov/diabetes/pubs/pdf/kidney\_factsheet.pdf</u>

<sup>84</sup> National Institutes of Health: Chronic Kidney Disease and Kidney Failure. <u>https://report.nih.gov/nihfactsheets/ViewFactSheet.aspx?csid=34</u>

<sup>85</sup> National Institutes of Health: National Institute of Mental Health: Depression, What is Depression? <u>http://www.nimh.nih.gov/health/topics/depression/index.shtml</u>

<sup>86</sup> Centers for Disease Control and Prevention: Mental Health, Depression. <u>http://www.cdc.gov/mentalhealth/basics/mental-illness/depression.htm</u>

<sup>87</sup> Centers for Disease Control and Prevention: Drinking Water. <u>http://www.cdc.gov/healthywater/drinking/index.html</u>

<sup>88</sup> Centers for Disease Control and Prevention: Public Water Systems. <u>http://www.cdc.gov/healthywater/drinking/public/index.html</u>



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<sup>89</sup> Centers for Disease Control and Prevention: Private Water Systems. <u>http://www.cdc.gov/healthywater/drinking/private/index.html</u>

<sup>90</sup> Centers for Disease Control and Prevention: Drinking Water: Water-related Diseases and Contaminants in Public Water Systems.

http://www.cdc.gov/healthywater/drinking/public/water\_diseases.html

<sup>91</sup> Centers for Disease Control and Prevention: Impact of the Built Environment on Health. <u>http://www.cdc.gov/nceh/publications/factsheets/ImpactoftheBuiltEnvironmentonHealth.pdf</u>

