HEALTH RISK BEHAVIORS IN CONNECTICUT

Results of the 2013 Behavioral Risk Factor Surveillance Survey

August 2015

Connecticut Department of Public Health
410 Capitol Avenue,
PO Box 340308, Hartford, CT 06134
www.ct.gov/dph/BRFSS

Jewel Mullen, MD, MPH, MPA
Commissioner

ACKNOWLEDGEMENTS

Jewel Mullen, MD, MPH, MPA
Commissioner
Connecticut Department of Public Health

Janet M. Brancifort, MPH
Deputy Commissioner
Connecticut Department of Public Health

Diane Aye, MPH, PhD
CT BRFSS Coordinator
Section Chief, Health Statistics and Surveillance
Connecticut Department of Public Health

Carol L. Stone, PhD, MPH, MAS, MA
CT BRFSS Project Director/Principal Investigator
Health Statistics and Surveillance Section
Connecticut Department of Public Health

ADDITIONAL RESOURCES

For questions or comments about this report, please contact:

Carol L. Stone, PhD, MPH, MA, MAS
Supervising Epidemiologist
Health Statistics and Surveillance Section
Connecticut Department of Public Health
Hartford, Connecticut, 06016

Carol.Stone@ct.gov (860-509-7147)

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

Suggested citation:

Connecticut Department of Public Health (2015) Health Risk Behaviors in Connecticut: Results of the 2013 Connecticut Behavioral Risk Factor Surveillance Survey, Connecticut Department of Public Health, Hartford, Connecticut (*http://www.ct.gov/dph/BRFSS*).

Health Statistics and Surveillance Section, Survey and Research Unit, Connecticut Behavioral Risk Factor Surveillance System, New, 8-06-15

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

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 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 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. Data from the CT BRFSS have been used to inform development of state health plans, such as the State Health Improvement Plan,[1] the Connecticut coordinated chronic disease plan,[2] and to track online state health priorities,[3] and chronic disease dashboards.[4]   Data are also being used to inform annual action plans for state health initiatives.

In calendar year 2013, the CT BRFSS gathered survey data from citizen volunteers in Connecticut on a range of health-related risk factors and behaviors. State-specific items in the 2013 questionnaire included healthcare satisfaction, inadequate sleep, genomics, sodium and salt intake, home moisture and mold testing, Tdap vaccinations, hepatitis testing, arthritis burden, cholesterol, and hypertension awareness.

Each section in this report presents summary results for 2013 of a risk behavior or health condition, broken down by demographic subgroups of age, gender, race/ethnicity, income, health insurance status, disability status, and education level.

Figure 1 and **Table 1** highlight the selected health indicators in Connecticut during 2013, compared to median results from 2013 for the U.S and its territories. These health indicators are modifiable risk factors for poor health outcomes. More information on these indicators are located within this report.

Figure 1: Selected Modifiable Risk Factors in Connecticut *versus* the U.S. and territories, 2013
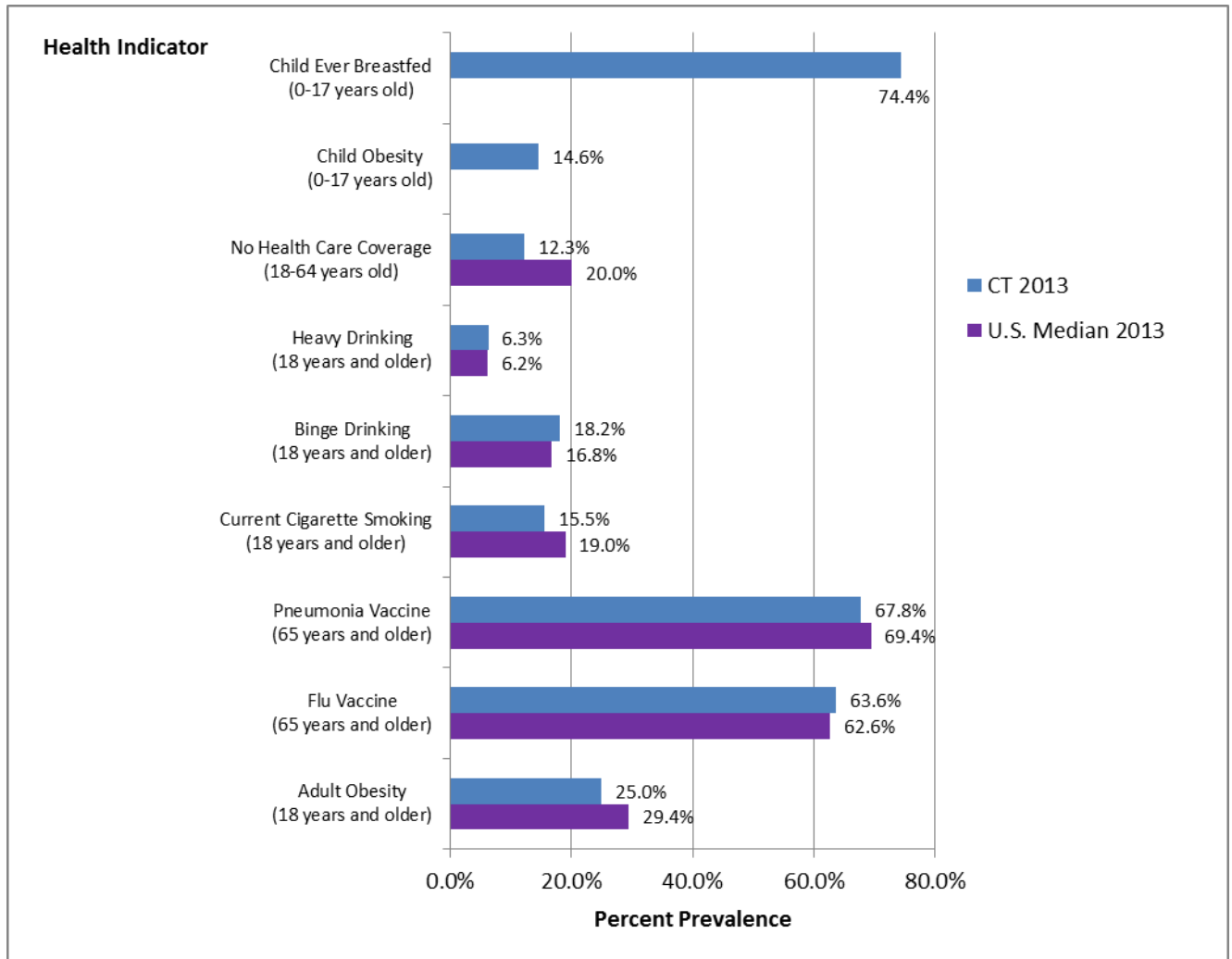
Table 1: Selected Modifiable Risk Factors in Connecticut *versus* the U.S. and territories, 2013

Risk Factor	CT 2013	U.S. Median 2013	Risk Difference	Significantly Greater or Lesser Risk
Adult Obesity (18 years and older)	25.0%	29.4%	-4.4%	Less Risk ***
Flu Vaccine (65 years and older)	63.6%	62.6%	1.0%	NS
Pneumonia Vaccine (65 years and older)	67.8%	69.4%	-1.6%	NS
Current Cigarette Smoking (18 years and older)	15.5%	19.0%	-3.5%	Lesser Risk ***
Binge Drinking (18 years and older)	18.2%	16.8%	1.4%	Greater Risk *
Heavy Drinking (18 years and older)	6.3%	6.2%	0.1%	NS
No Health Care Coverage (18-64 years old)	12.3%	20.0%	-7.7%	Lesser Risk ***
Child Obesity (2-17 years old)	14.6%	NA	NA	NA
Child Ever Breastfed (0-17 years old)	74.4%	NA	NA	NA
NA - child health indicators are not available for the U.S. and its territories.				
Prevalence for 2013 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.				
* - significance < 0.10; ** - significance < 0.05; *** - significance < 0.01				

Connecticut Comparison to the U.S. in 2013

Of the nine selected indicators that are modifiable risk factors for poor health outcomes, seven could be compared to estimates for the U.S. and its territories during 2013. National estimates from the BRFSS for child obesity and children who have ever been breastfed were not available. Of the seven remaining indicators, and compared to the U.S and its territories, the percent prevalence in Connecticut was significantly less for three indicators:

- Obesity among adults 18 years and older (p < 0.01);

- Current cigarette use among adults 18 years and older (p < 0.01); and

- No health care coverage among adults 18 years and older (p < 0.01).

Among the seven selected health indicators that could be compared to national estimates, only one in Connecticut had a higher percent prevalence than the U.S. and its territories:

- The risk of binge drinking among adults 18 years and older was greater (p < 0.10).

The remaining three health indicators for which comparison was possible did not differ in percent prevalence between Conneticut and the U.S. and its territories. These indicators were:

- Flu vaccinations among adults 65 years and older;

- Pneumonia vaccinations among adults 65 years and older; and

- Heavy drinking among adults 18 years and older.

Vulnerable populations

In 2013, certain groups were significantly more likely to experience poor health outcomes:

- Compared to non-Hispanic Whites, **Hispanic and non-Hispanic Black adults** were significantly more likely to report fair or poor health, and were also significantly more likely to be disabled, obese, sedentary or current smokers. Significant differences could also be seen in dietary habits and financial indicators: Hispanics and non-Hispanic Blacks were significantly more likely to eat less than one serving of fruit or vegetables per day and to have been advised to lower their sodium intake. They were significantly more likely than Whites to forego seeing a doctor when in need because of cost, to be stressed because of finances, and to be paying off medical debt. In terms of clinical indicators, Hispanics and non-Hispanic Blacks were significantly less likely to have gotten a flu shot or their blood cholesterol checked, but were significantly more likely to have gotten an HIV or Hepatitis C test. **Hispanic and non-Hispanic Black children** were significantly more likely to watch more than two hours of TV per day compared to non-Hispanic White children.

- **Disabled adults** were significantly more likely than non-disabled adults to report fair or poor general health, and this trend was visible in many other individual indicators: disabled adults suffered poor physical and mental health days at significantly higher rates than non-disabled adults; they were also significantly more likely to be obese, uninsured, sedentary, and not meet recommend exercise guidelines. They experienced financial stress, faced medical barriers because of cost, and were paying off medical bills at rates significantly higher than non-disabled adults. Adults with disabilities were also significantly more likely to have relatives who have experienced a heart attack, and to be dissatisfied with the quality of their healthcare. They were significantly more likely to consume less than one daily fruit/vegetable serving, to have been told to lower their sodium intake, and to be cigarette and e-cigarette smokers. In terms of many chronic conditions, disabled adults were also worse off: they were significantly more likely to have asthma, COPD, arthritis, cardiovascular disease, high blood pressure, high blood cholesterol, cancer, pre-diabetes, diabetes, kidney disease and depression. **Children whose adult proxy was disabled** were significantly more likely to watch at least three hours of TV each day and to consume at least one sugar-sweetened beverage (SSB) daily. Compared to children with non-disabled guardians, these children were also significantly less likely to be breastfed.

- **Adults in the lowest income category** were significantly more likely to experience fair or poor general health and financial stress. They were significantly more likely to be disabled, obese, uninsured, sedentary, facing barriers to medical care due to cost and lacking a personal doctor. Compared to adults in higher-income categories, they were significantly more likely to have relatives who had a heart attack, to be consuming less than one vegetable or fruit serving each day, and to be advised to lower their sodium. They were significantly more likely to be cigarette smokers, asthmatics, and to have COPD, cardiovascular disease, high blood pressure, diabetes and depression. Poor adults were also significantly less likely to get a flu shot or receive a Hepatitis C test. **Children living in the lowest income households** were significantly more likely to watch more than two hours of TV each day and drink at least one soda/sugary drink each day.

- **Adults without health insurance** were significantly more likely to experience poor mental health days and financial stress, to have a disability, to face barriers to healthcare access because of cost and lack a personal doctor, to be paying off medical debt and to be dissatisfied with their healthcare. Compared to adults with health coverage, they were significantly more likely to be sedentary, smokers (cigarettes and e-cigarettes), to have been told to lower their salt intake, and to consume less than one daily serving of fruit. Uninsured adults were significantly less likely to meet aerobic exercise guidelines, to get medical check-ups, to receive a flu/pneumonia shots, and to be tested for HCV. **Children living with uninsured guardians** were significantly more likely to drink at least one soda each day.

- **Adults with a high school degree or less** experienced poorer health outcomes compared to adults with at least some post-high school education. Less educated adults were significantly more likely to report fair or poor general health, poor mental and physical health days and financial stress. They were significantly more likely to be disabled, obese and uninsured. Compared to adults with higher levels of education, they were significantly more likely to face healthcare barriers because of cost and lack a personal healthcare provider, to be paying off medical debt and to be dissatisfied with their healthcare. They reported sedentary lifestyles and cigarette and e-cigarette smoking rates that were significantly higher than adults with higher levels of education. These adults were also significantly more likely to have male or female relatives who have had a heart attack, to not meet the recommended aerobic or strength guidelines, to consume less than one daily fruit or vegetable serving and to have been told to reduce their salt consumption. They were significantly more likely to have arthritis and limit their activities because of arthritis, to have cardiovascular disease, high blood pressure, high cholesterol, borderline diabetes, diabetes, kidney disease and depression. **Children living with an adult proxy with a high school degree or less** were significantly more likely to watch more than two hours of TV each day and drink at least one sugary drink each day. These children were also significantly less likely to be breastfed.

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 residing in telephone-equipped dwelling units. In 2013, the CT BRFSS collected 5,874 landline interviews and 1,836 cell phone interviews. 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 1,801 interviews about children were completed: 1,270 by landline and 531 by cell phone. The landline sample was a disproportionate stratified random digit dial (RDD) sample, stratified by geography and listed status. Listed phone numbers were oversampled relative to unlisted numbers at a rate of 1.5 to 1. Within each contacted household, one adult was selected at random to be interviewed. The cell sample was a disproportionate stratified RDD sample drawn from dedicated cellular telephone banks, stratified by geography. 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 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.

Prevalence estimates and confidence intervals were computed using SAS Proc SurveyMeans, which can compute variances for complex sampling plans. Respondents who reported that they did not know or refused to answer were treated as missing in the calculation of prevalence estimates. The coefficient of variation (CV), computed as the standard error divided by the mean, was used to assess the reliability 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, healthcare coverage, disability, and educational attainment. Race and Ethnicity was defined by three categories: non-Hispanic White, non-Hispanic Black, and Hispanic. 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 educational attainment. Disability was determined by the 2014 Disability Definition, which in addition to physical, mental, and emotional limitations, also includes vision impairment, difficulty walking or climbing stairs, difficulty bathing or dressing, or difficulty doing errands without assistance.

Overall significance testing by demographics was evaluated by Chi-Square tests in Proc SurveyFreq. For variables with more than two categories, if the Chi-Square test resulted ina significant value, pairwise tests for significant differences were conducted among each combination of categories. Each pairwise test was conducted by computing the confidence interval of the difference between the two estimates, using a pooled standard error. All

statements of inequality (e.g. more/less; greater likelihood) reflect a statistically significant difference for testing conducted at the 95% significance level.

ADULT DEMOGRAPHICS

Table 1a and **Table 1b** below show 2013 demographic values for Connecticut adults.

- A plurality of Connecticut's adult respondents was age 55 or older (36.7%). Over one-third was aged 35 to 54 (35.6%) and a smaller proportion, 27.7%, was aged 18 to 34.

- More than half of CT adults were female (51.9%, versus 48.1% who were male).

- In 2013, nearly three-quarters of CT adults were non-Hispanic Whites (72.3%), while nearly one in eight were Hispanic (13%) and just under one in ten were non-Hispanic Black (9.1%).

- A plurality of CT adults lived in households earning more than $75,000 per year. About thirty percent of adults lived in the lowest income households (30.4) and 27.1% lived in middle income households.

- Nine out of ten CT adults had health insurance in 2013 (90%).

- Three out of five CT adults had some post-high school education (60.1%).

Table 1a: Adult Demographics

	Survey Respondents	Estimated Population	Estimated Percent of Population
Age			
18-34 years old	1,163	770,000	27.7%
35-54 years old	2,404	990,000	35.6%
55 years old or older	4,046	1,020,000	36.7%
Gender			
Male	3,190	1,350,000	48.1%
Female	4,520	1,460,000	51.9%
Race/Ethnicity			
Non-Hispanic White	5,998	2,000,000	72.3%
Non-Hispanic Black	643	250,000	9.1%
Hispanic	577	360,000	13.0%
Non-Hispanic Other/Multiple Race*	348	150,000	5.6%
Household Income			
Less than $35,000	2,099	720,000	30.4%
$35,000-$74,999	1,847	640,000	27.1%
$75,000 or more	2,627	1,010,000	42.5%
Has Healthcare Coverage			
Yes	7,090	2,530,000	90.0%
No	604	280,000	10.0%
Disability			
Yes	1,633	520,000	19.1%
No	5,870	2,210,000	80.9%
Education			
HS Graduate or Less	2,480	1,120,000	39.9%
Some Post-HS Education	5,207	1,690,000	60.1%

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

CHILD DEMOGRAPHICS

Table 1b shows demographic information for Connecticut children in 2013.

- A plurality of CT children was aged 5-11, followed by 36.9% aged 12-17 and about one in four aged 0-4 (24.3%). The proportion of boys and girls was just about evenly split (50.5% boys and 49.5% girls).

- While 13% of adults identified as Hispanic in 2013, 22.7% of children were Hispanic. A majority of children were non-Hispanic White (57.4%) and 11.3% were non-Hispanic Black.

- A majority of children lived in households whose annual income was $75,000 or more. About one in four children lived in the poorest households (24%) and just over one in five lived in households earning between $35,000 and $75,000 (21.3%).

- One out of every ten adult proxy respondents did not have health coverage (10.2%) and a slightly higher proportion (12.9%) had a disability.

- Just under 30% of adult proxy respondents had a high school education or less (28.1%) while 71.9% had at least some post-high school education.

Table 1b: Child Demographics

	Survey Respondents	Estimated Population	Estimated Percent of Population
Age			
0-4 years old	365	170,000	24.3%
5-11 years old	545	270,000	38.8%
12-17 years old	678	260,000	36.9%
Gender			
Male	941	380,000	50.5%
Female	807	380,000	49.5%
Race/Ethnicity			
Non-Hispanic White	1,167	430,000	57.4%
Non-Hispanic Black	199	80,000	11.3%
Hispanic	259	170,000	22.7%
Non-Hispanic Other/Multiple Race*	81	60,000	8.6%
Household Income			
Less than $35,000	390	170,000	24.0%
$35,000-$74,999	364	150,000	21.3%
$75,000 or more	854	380,000	54.7%
Proxy Has Healthcare Coverage			
Yes	1,636	700,000	89.8%
No	160	80,000	10.2%
Proxy Has Disability			
Yes	240	100,000	12.9%
No	1,551	670,000	87.1%
Proxy's Education			
HS Graduate or Less	492	220,000	28.1%
Some Post-HS Education	1,304	560,000	71.9%

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

1. 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 and morbidity.[5]

BRFSS respondents were asked to rate their general health as excellent, very good, good, fair or poor. The proportion of adults who reported that their health was fair or poor is shown in **Table 2**.

- In 2013, about one in eight Connecticut adults rated their health as either fair or poor, with no differences between men and women.

- Adults aged 55 year old or older were more likely to be in fair or poor health (18.6%) compared to adults aged 35-54 (12.8%).

- Hispanics were more likely to report fair or poor health (23.2%) compared to both non-Hispanic Whites (11.3%) and non-Hispanic Blacks (17.1%). Non-Hispanic Blacks were also more likely than non-Hispanic Whites to report fair or poor general health.

- Health status improved with income: poorer adults were more likely to report poor general health compared to wealthier adults.

- Disabled adults were more likely to report fair or poor health (44.6%) compared to non-disabled adults (5.8%).

- Adults with a high-school degree or less were more likely to report fair or poor health (21.4%) compared to more educated adults (7.8%).

Table 2: Adult Health Status Indicators

Demographic Characteristics	General Health, Fair or Poor	
	%	**95% Confidence Interval**
Total	**13.2%**	**(12.2%-14.3%)**
Age		
18-34 years old	*	*
35-54 years old	12.8%	(10.9%-14.7%)
55 years old or older	18.6%	(16.9%-20.3%)
Gender		
Male	12.5%	(10.9%-14.1%)
Female	13.9%	(12.4%-15.4%)
Race/Ethnicity		
Non-Hispanic White	11.3%	(10.2%-12.4%)
Non-Hispanic Black	17.1%	(13.2%-20.9%)
Hispanic	23.2%	(18.4%-28.0%)
Income		
Less than $35,000	26.2%	(23.4%-29.1%)
$35,000-$74,999	9.6%	(7.8%-11.4%)
$75,000 or more	4.4%	(3.3%-5.5%)
Has Healthcare Coverage		
Yes	12.5%	(11.4%-13.6%)
No	20.5%	(16.2%-24.8%)
Disability		
Yes	44.6%	(40.8%-48.4%)
No	5.8%	(4.9%-6.6%)
Education		
HS Graduate or Less	21.4%	(19.1%-23.8%)
Some Post-HS Education	7.8%	(6.9%-8.7%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

Health-Related Quality of Life

Adults in poor physical or mental health are defined as having reported 14 or more days for which their mental or physical health was "not good," within the past 30 days. The Healthy Days measure has been useful for identifying health disparities and tracking population trends.[6] The proportion of adults who reported 14 or more physical and mental unhealthy days in the previous month is shown in **Table 3**.

Table 3: Adult Health-Related Quality of Life

Demographic Characteristics	Poor Physical Health		Poor Mental Health	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**10.2%**	**(9.2%-11.2%)**	**10.4%**	**(9.4%-11.4%)**
Age				
18-34 years old	*	*	12.0%	(9.6%-14.3%)
35-54 years old	10.1%	(8.5%-11.7%)	10.7%	(9.0%-12.3%)
55 years old or older	13.0%	(11.5%-14.5%)	9.2%	(7.9%-10.5%)
Gender				
Male	8.9%	(7.6%-10.3%)	8.5%	(7.1%-9.9%)
Female	11.5%	(10.0%-12.9%)	12.2%	(10.7%-13.6%)
Race/Ethnicity				
Non-Hispanic White	9.6%	(8.5%-10.7%)	9.6%	(8.5%-10.7%)
Non-Hispanic Black	*	*	*	*
Hispanic	12.9%	(9.2%-16.5%)	14.1%	(10.3%-17.9%)
Income				
Less than $35,000	17.0%	(14.7%-19.3%)	17.2%	(14.8%-19.7%)
$35,000-$74,999	9.2%	(7.4%-10.9%)	9.4%	(7.5%-11.4%)
$75,000 or more	4.8%	(3.7%-6.0%)	5.6%	(4.3%-6.8%)
Has Healthcare Coverage				
Yes	10.0%	(9.0%-11.0%)	9.9%	(8.9%-10.9%)
No	*	*	15.2%	(11.3%-19.0%)
Disability				
Yes	33.7%	(30.1%-37.2%)	30.1%	(26.6%-33.7%)
No	4.9%	(4.0%-5.7%)	5.8%	(4.9%-6.6%)
Education				
HS Graduate or Less	15.1%	(13.1%-17.1%)	13.9%	(12.0%-15.9%)
Some Post-HS Education	7.1%	(6.1%-8.1%)	8.1%	(7.1%-9.2%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

- One in ten Connecticut adults experienced 14 or more days of poor mental or physical health in the previous month.

- Adults aged 55 years old and older were more likely to experience poor physical health (13%) compared to adults who were 35-54 years old (10.1%).

- Women were more likely to experience poor physical and mental health (11.5% and 12.2%, respectively) compared to men (8.9% and 8.5%).

- One in seven Hispanic adults poor mental health in the previous month (14.1%), which was higher than the rate for Non-Hispanic Whites (9.6%).

- Likelihood of experiencing physical or poor mental health days decreased as incomes rose, and the rates of unhealthy physical and mental health were similar within each income category. About 17% of the poorest adults reported 14 or more physical or mental unhealthy days in the past month.

- Uninsured adults were more likely to experience poor mental health days (15.2%), compared to adults with healthcare coverage (9.9%).

- Disabled adults were more likely to suffer both poor physical and poor mental health days compared to non-disabled adults.

- Adults with a high school education or less were more likely to experience poor physical and mental health compared to adults with higher levels of education.

- **Figure 2** below shows the number of poor physical or mental health days that Connecticut adults experienced in 2013. While 37.4% of adults experienced no poor health days, 38.6% reported 14 or more poor health days.

Figure 2: Poor Physical or Mental Health as a Barrier to Life's Activities, CT 2013
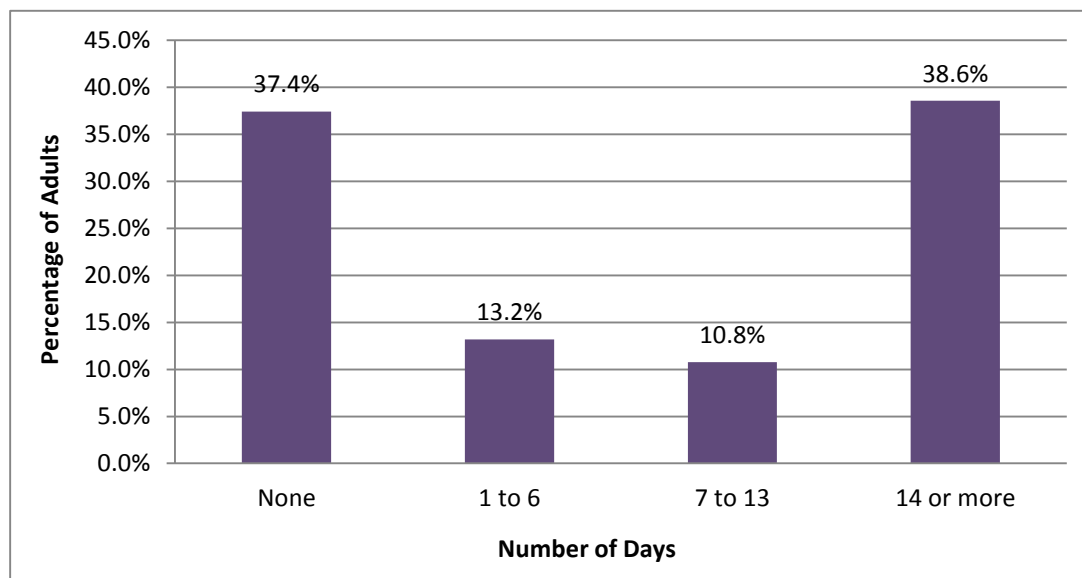
Financial Stress

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.[7] Different forms of housing instability, including difficulty paying rent or living in overcrowded conditions, can be risk factors for homelessness.[8] Food insecurity affects people who face limited or uncertain availability of nutritionally-adequate meals or limited ability to buy nutritious foods.[9] Among low-income adults, food insecurity is associated with chronic diseases such as diabetes and hypertension.[10]

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 4** below.

Table 4: Adult Financial and Economic Sources of Stress

Demographic Characteristics	Stress about paying rent or mortgage		Stress about buying nutritious meals	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**15.3%**	**(14.0%-16.7%)**	**8.7%**	**(7.7%-9.7%)**
Age				
18-34 years old	17.8%	(14.2%-21.4%)	10.2%	(7.5%-12.9%)
35-54 years old	19.0%	(16.6%-21.4%)	11.1%	(9.3%-12.9%)
55 years old or older	10.7%	(9.2%-12.2%)	5.6%	(4.4%-6.7%)
Gender				
Male	13.6%	(11.7%-15.6%)	7.2%	(5.8%-8.7%)
Female	16.8%	(15.0%-18.7%)	10.0%	(8.5%-11.5%)
Race/Ethnicity				
Non-Hispanic White	13.1%	(11.7%-14.5%)	6.8%	(16.7%-20.1%)
Non-Hispanic Black	23.4%	(17.5%-29.3%)	*	*
Hispanic	23.6%	(18.2%-29.1%)	15.8%	(11.3%-20.2%)
Income				
Less than $35,000	28.0%	(24.8%-31.3%)	17.5%	(14.8%-20.1%)
$35,000-$74,999	17.6%	(14.6%-20.6%)	8.5%	(6.3%-10.6%)
$75,000 or more	5.7%	(4.3%-7.1%)	*	*
Has Healthcare Coverage				
Yes	13.5%	(12.2%-14.8%)	7.4%	(6.4%-8.4%)
No	31.9%	(26.0%-37.9%)	19.7%	(14.9%-24.6%)
Disability				
Yes	32.9%	(28.8%-36.9%)	22.1%	(18.6%-25.5%)
No	11.2%	(9.9%-12.6%)	5.5%	(4.6%-6.5%)
Education				
HS Graduate or Less	21.3%	(18.6%-24.0%)	12.8%	(10.8%-14.9%)
Some Post-HS Education	11.5%	(10.2%-12.9%)	6.0%	(5.0%-7.1%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

- In 2013, nearly one in six Connecticut adults (15.3%) had felt stressed or worried about paying for housing in the previous year, while one in 12 (8.7%) felt stressed about paying for nutritious food.

- Adults who were 55 years old or older were less likely to report financial stress compared to both categories of younger respondents.

- Women were more likely to report financial stress compared to men: one in six women was stressed about paying for housing (16.8%), compared to 13.6% of men, and 10% of women were stressed about buying nutritious meals compared to 7.2% of men.

- Hispanics and non-Hispanic Blacks were more likely to experience stress due to housing costs (23.6% and 23.4% respectively), compared to non-Hispanic Whites (13.1%). Similarly, Hispanic adults were more likely to feel worried about buying nutritious meals (15.8%), compared to non-Hispanic Whites (6.8%).

- Financial stress levels decreased as incomes rose. Twenty-eight percent of adults in the lowest income households experienced stress about paying for housing. Adults in the poorest households were also more likely to experience stress related to buying nutritious foods than households earning $35,000 to $75,000 (17.5% versus 8.5%, respectively).

- Uninsured adults were more likely to experience both types of financial stress compared to adults who had healthcare coverage. Nearly one in three uninsured adults felt stress related to housing costs (31.9%), while one in five experienced stress about paying for nutritious foods (19.7%).

- Disabled adults felt more financial stress than non-disabled adults. One in three disabled adults reported stress related to paying for housing (32.9%), compared to 11.2% of non-disabled adults. Over 20% (22.1%) of disabled adults were worried about paying for nutritious meals, compared to 5.5% of non-disabled adults.

- Adults with lower levels of education reported more financial stress than adults with higher levels of education. Just over one in five adults with a high school degree or less experienced stress related to housing costs (21.3%) while one in eight (12.8%) felt worried about paying for nutritionally-balanced meals.

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."[11] In 2013, the definition of disability changed to include five questions. The questions used to determine disability status in 2012 and 2013 are detailed in **Table 5a** below:

Table 5a: Disability Definitions

2012 Disability Definition	2013 Disability Definition
1. Are you limited in any way in any activities because of physical, mental, or emotional problems? **2**. Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone?	**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?

The new definition allows for different forms of disability, related to vision, cognitive ability, mobility, self-care and independent living. For both definitions, respondents were categorized as having a disability if they answered yes to at least one of the questions. Results for disabled adults based on the old and new definitions are shown in **Table 5b** below.

Table 5b: Disability among Adults

Demographic Characteristics	Total Disability (2012 Definition)		Total Disability (2013 Definition)	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**20.0%**	**(18.7%-21.2%)**	**19.1%**	**(17.8%-20.5%)**
Age				
18-34 years old	10.7%	(8.1%-13.2%)	14.5%	(11.5%-17.6%)
35-54 years old	17.3%	(15.2%-19.4%)	16.3%	(14.2%-18.4%)
55 years old or older	29.5%	(27.5%-31.4%)	25.3%	(23.4%-27.2%)
Gender				
Male	17.9%	(16.1%-19.7%)	16.9%	(15.0%-18.8%)
Female	21.9%	(20.1%-23.6%)	21.2%	(19.4%-23.1%)
Race/Ethnicity				
Non-Hispanic White	21.7%	(20.2%-23.2%)	17.3%	(15.9%-18.7%)
Non-Hispanic Black	18.6%	(14.5%-22.7%)	24.8%	(19.6%-30.0%)
Hispanic	14.1%	(10.7%-17.5%)	28.2%	(23.1%-33.3%)
Income				
Less than $35,000	29.8%	(27.0%-32.6%)	35.1%	(31.9%-38.3%)
$35,000-$74,999	18.7%	(16.3%-21.2%)	16.1%	(13.8%-18.4%)
$75,000 or more	12.8%	(11.1%-14.5%)	7.8%	(6.3%-9.3%)

Table 5b: Disability among Adults

Demographic Characteristics	Total Disability (2012 Definition)		Total Disability (2013 Definition)	
	%	95% Confidence Interval	%	95% Confidence Interval
Has Healthcare Coverage				
Yes	20.4%	(19.1%-21.8%)	18.5%	(17.2%-19.9%)
No	15.4%	(11.6%-19.2%)	24.2%	(19.3%-29.0%)
Education				
HS Graduate or Less	24.3%	(21.9%-26.6%)	28.3%	(25.7%-30.9%)
Some Post-HS Education	17.2%	(15.8%-18.5%)	13.2%	(11.9%-14.5%)

- According to the revised definition, just under one in five Connecticut adults was disabled in 2013 (19.1%). As shown in **Figure 3** below, of the adults defined as disabled according to at least one definition, 28% of adults were disabled based on the 2012 (old) definition only, 24.7% were disabled based on the 2013 (new) definition only, and 47.2% were disabled based on both definitions.

- Adults who were 55 years old or older were more likely to report a disability in 2013 (25.3%) compared to both categories of younger adults (14.5% and 16.3%).

- Women were more likely to be disabled (21.2%) compared to men (16.9%).

- Non-Hispanic Blacks and Hispanics were both more likely to report a disability (24.8% and 28.2%, respectively) compared to non-Hispanic Whites (17.3%).

- The proportion of adults reporting a disability decreased with income. Adults living in households making less than $35,000 were more likely to report a disability (35.1%) compared to adults in higher income brackets, while adults living in households making $75,000 or more were less likely to report a disability (7.8%).

- Uninsured adults were more likely to report a disability (24.2%) compared to adults with healthcare coverage (18.5%).

- Adults with no more than a high school education were more likely to report a disability (28.3%), compared to adults with higher levels of education (13.2%).

Figure 3: Characteristics of Disabled Adults, CT 2013

2012 Definition Only (28%)

2013 Definition Only (24.7%)

Both (47.2%)
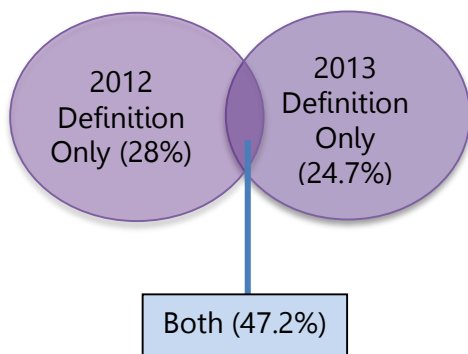
Adult Weight Status

The BRFSS asked respondents to provide their height and weight without shoes. A body mass index (BMI) was calculated by dividing their weight in kilograms by the squared value of their height in meters. An adult who has a BMI between 25 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.[12] 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.[13] The proportions of Connecticut adults who were overweight or obese in 2013 are shown in **Table 6** below.

Table 6: Adult Weight Status by Demographics

Demographic Characteristics	Overweight		Obese	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**37.6%**	**(36.0%-39.2%)**	**24.9%**	**(23.5%-26.4%)**
Age				
18-34 years old	32.3%	(28.4%-36.1%)	18.7%	(15.4%-21.9%)
35-54 years old	38.9%	(36.1%-41.6%)	27.4%	(24.9%-29.9%)
55 years old or older	40.1%	(37.9%-42.3%)	27.5%	(25.5%-29.4%)
Gender				
Male	43.9%	(41.4%-46.4%)	25.5%	(23.4%-27.6%)
Female	31.4%	(29.3%-33.5%)	24.4%	(22.4%-26.4%)
Race/Ethnicity				
Non-Hispanic White	38.2%	(36.4%-40.0%)	23.3%	(21.7%-24.8%)
Non-Hispanic Black	34.9%	(29.3%-40.6%)	32.5%	(27.2%-37.9%)
Hispanic	39.6%	(33.8%-45.4%)	32.8%	(27.3%-38.4%)
Income				
Less than $35,000	35.6%	(32.3%-38.8%)	31.0%	(27.8%-34.2%)
$35,000-$74,999	40.3%	(37.0%-43.6%)	25.0%	(22.2%-27.9%)
$75,000 or more	37.7%	(35.1%-40.3%)	21.2%	(19.0%-23.3%)
Has Healthcare Coverage				
Yes	37.9%	(36.1%-39.6%)	24.6%	(23.1%-26.1%)
No	35.0%	(29.3%-40.7%)	28.0%	(22.7%-33.3%)
Disability				
Yes	34.0%	(30.3%-37.7%)	37.8%	(34.0%-41.6%)
No	38.7%	(36.9%-40.6%)	22.1%	(20.5%-23.6%)
Education				
HS Graduate or Less	38.6%	(35.6%-41.5%)	28.9%	(26.2%-31.6%)
Some Post-HS Education	36.9%	(35.0%-38.8%)	22.4%	(20.8%-24.0%)

- In 2013, one quarter (24.9%) of adults was obese, while 37.6% was overweight.
- Adults aged 18-34 were less likely to be overweight or obese compared to adults in older age groups.
- Adult males were more likely to be overweight (43.9%), compared to females (31.4%).
- Non-Hispanic Blacks and Hispanics were both more likely to be obese (32.5% and 32.8%, respectively), compared to non-Hispanic whites (23.3%).
- The rate of obesity decreased as household income rose.
- Adults with a disability were less likely to be overweight (34%) compared to non-disabled adults (38.7%) but were more likely to be obese (37.8%), compared to adults without a disability (22.1%).
- Adults with a high school degree or less were more likely to be obese (28.9%) compared to adults with more than a high school education (22.4%).
- **Figure 4** below shows the proportion of Connecticut adults in each weight category. While over one-third of adults had a normal weight in 2013 (35.6%), a combined 62.5% were overweight or obese.

Figure 4: Adult Weight Status, CT 2013
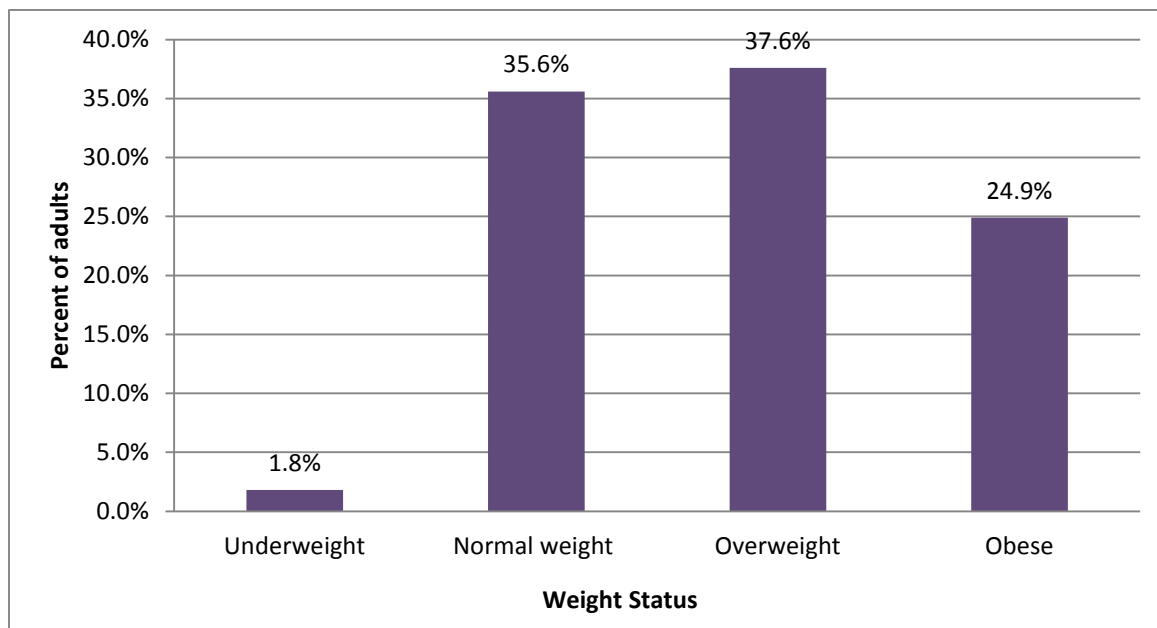
Child Weight Status

As part of a state-specific module, a child was randomly selected in the household and the adult respondent was 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.[14] For children, weight status is determined comparatively based on age and sex. An overweight child has a BMI between the 85th-95th percentile for children of the same age and sex, while an obese child has a BMI at or above the 95th percentile for children of the same age and sex.[15] Obese children face a variety of health and social problems, and are more likely to be obese adults.[16] Child weight status by demographics is shown in **Table 7** below.

Table 7: Child Weight Status by Demographics

Demographic Characteristics	Overweight		Obese	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**12.7%**	**(10.0%-15.3%)**	**14.6%**	**(11.7%-17.4%)**
Child Age				
0-4 years old	*	*	*	*
5-11 years old	*	*	*	*
12-17 years old	*	*	*	*
Child Gender				
Male	*	*	17.2%	(13.2%-21.3%)
Female	14.1%	(10.1%-18.2%)	*	*
Child Race/Ethnicity				
Non-Hispanic White	13.3%	(10.2%-16.4%)	10.7%	(8.0%-13.4%)
Non-Hispanic Black	*	*	*	*
Hispanic	*	*	*	*
Proxy's Income				
Less than $35,000	*	*	*	*
$35,000-$74,999	*	*	*	*
$75,000 or more	*	*	*	*
Proxy Has Healthcare Coverage				
Yes	12.3%	(9.7%-15.0%)	14.2%	(11.3%-17.1%)
No	*	*	*	*
Proxy Has Disability				
Yes	*	*	*	*
No	11.7%	(8.9%-14.4%)	13.3%	(10.4%-16.1%)
Proxy's Education				
HS Graduate or Less	*	*	*	*
Some Post-HS Education	10.5%	(7.8%-13.1%)	11.9%	(8.9%-14.9%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%. The race, age and gender variables refer to the child, while the other data points refer to the adult proxy.*

- In 2013, one in every eight Connecticut children was overweight (12.7%) and one in seven was obese (14.6%). As shown in **Figure 5** below, two-thirds of Connecticut children had a normal weight in 2013 (66%).

Figure 5: Child Weight Status, CT 2013
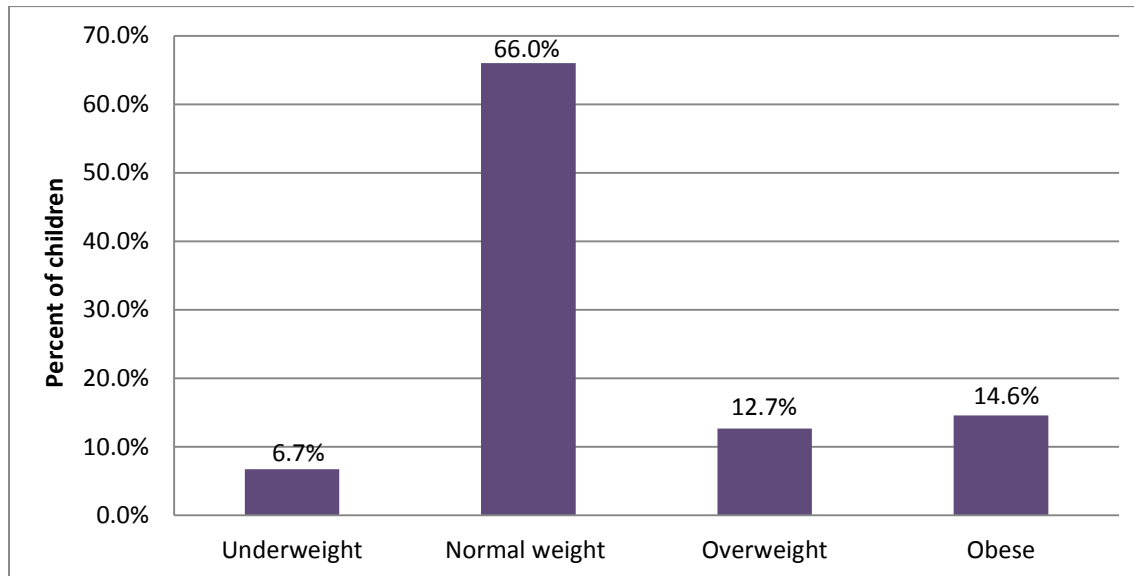
Breastfeeding

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.[17] Breastfeeding provides a host of health benefits for nursing mothers and babies, as nursing infants receive natural protections against common illnesses and infections thanks to the immunologic properties of expressed 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.[18] In a state-added section, the adult proxy was asked whether the selected child was ever breastfed. Results are shown in **Table 8**.

- About three-quarters of Connecticut children were breastfed (74.4%), with no differences based on child age, gender, racial/ethnic background, or the health insurance status of the adult proxy.

- Children in the highest-income households were more likely to be breastfed (80.1%) compared to children in both of the lower-income categories.

- Children with disabled adult proxies were less likely to be breastfed (62.4%) compared to children with non-disabled adult proxies (76%).

- Children of adult proxies with a high school education or less were less likely to be breastfed (59.8%) compared to children with adult proxies with higher levels of education (79.9%).

- **Figure 6** below shows the length of the breastfeeding period: while one-quarter of children were not breastfed (25.6%), over one-third were breastfed for six months or less (36.8%).

Table 8: Breastfeeding Characteristics

Demographic Characteristics	Child Ever Breastfed	
	%	95% Confidence Interval
Total	**74.4%**	**(71.6%-77.2%)**
Child Age		
0-4 years old	78.2%	(72.7%-83.7%)
5-11 years old	75.9%	(71.0%-80.7%)
12-17 years old	72.5%	(67.8%-77.2%)
Child Gender		
Male	76.2%	(72.7%-79.8%)
Female	72.0%	(67.6%-76.5%)
Child Race/Ethnicity		
Non-Hispanic White	76.7%	(73.6%-79.8%)
Non-Hispanic Black	65.9%	(56.6%-75.3%)
Hispanic	73.1%	(66.0%-80.2%)
Proxy's Income		
Less than $35,000	63.2%	(56.4%-70.1%)
$35,000-$74,999	69.6%	(62.6%-76.5%)
$75,000 or more	80.1%	(76.5%-83.6%)
Proxy Has Healthcare Coverage		
Yes	74.6%	(71.6%-77.5%)
No	71.9%	(62.3%-81.5%)
Proxy Has Disability		
Yes	62.4%	(53.1%-71.7%)
No	76.0%	(73.1%-78.9%)
Proxy's Education		
HS Graduate or Less	59.8%	(53.4%-66.1%)
Some Post-HS Education	79.9%	(76.9%-82.9%)

Figure 6: Length of Breastfeeding Period, CT 2013

The age, gender, and race variables refer to the child, while the other data points refer to the adult proxy.

No Healthcare Coverage (Uninsured)

Health insurance coverage includes private insurance plans such as Health Maintenance Organizations (HMOs) as well as government plans such as Medicare or the Indian Health Service. Adults without healthcare coverage have higher mortality rates for a range of health conditions compared to insured adults. They are less likely to get needed care and screenings, and have poorer health outcomes.[19] The proportion of adults aged 18-64 who reported having no Healthcare coverage and their demographic characteristics is shown in **Table 9**.

- In 2013, one in eight Connecticut adults (12.3%) had no healthcare coverage.

- Adults who were 55 years old or older were nearly 1.5 times less likely to be uninsured (9.2%), compared to adults in either younger age group.

- Men were more likely to be uninsured (13.7%) compared to women (10.9%).

- Hispanics were nearly 4.5 times more likely to be uninsured (33.1%) compared to non-Hispanic Whites (7.5%).

- Adults whose household income was less than $35,000 were four times more likely to be uninsured (30%) compared to adults in the mid-level income category (7.8%).

- Disabled adults were 1.5 times more likely to be uninsured (17.4%) compared to non-disabled adults (11.3%).

- Adults with a high school education or less were three times more likely to be uninsured (20.6%) compared to adults with higher education levels (7.1%).

Table 9: Uninsured Adults by Demographics

Demographic Characteristics	No Healthcare Coverage Among Adults Less than 65 Years Old	
	%	95% Confidence Interval
Total	12.3%	(11.0%-13.6%)
Age		
18-34 years old	13.7%	(11.0%-16.4%)
35-54 years old	12.6%	(10.7%-14.6%)
55 years old or older	9.2%	(7.3%-11.2%)
Gender		
Male	13.7%	(11.7%-15.7%)
Female	10.9%	(9.1%-12.6%)
Race/Ethnicity		
Non-Hispanic White	7.5%	(6.3%-8.6%)
Non-Hispanic Black	*	*
Hispanic	33.1%	(27.7%-38.6%)
Income		
Less than $35,000	30.0%	(26.3%-33.8%)
$35,000-$74,999	7.8%	(5.8%-9.9%)
$75,000 or more	*	*
Disability		
Yes	17.4%	(13.7%-21.1%)
No	11.3%	(9.9%-12.8%)
Education		
HS Graduate or Less	20.6%	(17.7%-23.5%)
Some Post-HS Education	7.1%	(5.9%-8.2%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

Limited Healthcare Coverage

In this report, "limited" healthcare coverage includes adults who:

a) Do not have a primary care provider, which is a personal doctor or healthcare provider.
b) Needed to see a doctor in the past year but could not because of cost.
c) Did not take their medication as prescribed because of cost.

People who have access to a personal healthcare provider or a regular healthcare setting have better health outcomes, and in general, an effective primary healthcare system is associated with better health outcomes.[20] Additionally, the actual or perceived prohibitive cost of prescriptions and co-payments contribute to poor medication adherence, a significant public health problem that causes increased patient morbidity and mortality, as well as higher healthcare costs.[21] Healthcare barriers are shown for different demographic subgroups in **Table 10** below.

Table 10: Adults with Limited Healthcare by Demographics

Demographic Characteristics	No Personal Healthcare Provider		No Healthcare Access Because Due to Cost		Did Not Take Prescribed Medicine Because of Cost	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Total	15.2%	(13.9%-16.4%)	12.1%	(11.0%-13.2%)	7.6%	(6.7%-8.5%)
Age						
18-34 years old	29.7%	(26.1%-33.3%)	13.8%	(11.3%-16.3%)	7.7%	(5.7%-9.6%)
35-54 years old	14.1%	(12.2%-16.0%)	15.9%	(13.8%-17.9%)	9.6%	(7.9%-11.3%)
55 years old and older	5.4%	(4.4%-6.4%)	7.2%	(6.1%-8.4%)	5.7%	(4.6%-6.7%)
Gender						
Male	18.6%	(16.6%-20.6%)	11.0%	(9.4%-12.6%)	6.2%	(5.0%-7.3%)
Female	12.0%	(10.4%-13.6%)	13.1%	(11.6%-14.6%)	8.9%	(7.6%-10.2%)
Race/Ethnicity						
Non-Hispanic White	11.0%	(9.8%-12.2%)	8.8%	(7.8%-9.9%)	5.9%	(5.0%-6.7%)
Non-Hispanic Black	19.4%	(14.7%-24.0%)	19.4%	(14.6%-24.2%)	*	*
Hispanic	32.5%	(26.9%-38.0%)	24.7%	(20.1%-29.3%)	13.9%	(10.0%-17.8%)
Income						
Less than $35,000	24.1%	(21.0%-27.2%)	21.7%	(19.0%-24.4%)	14.5%	(12.2%-16.8%)
$35,000-$74,999	12.9%	(10.6%-15.2%)	11.0%	(8.9%-13.1%)	7.3%	(5.4%-9.1%)
$75,000 or more	9.1%	(7.4%-10.8%)	4.7%	(3.5%-5.9%)	3.2%	(2.3%-4.2%)
Has Healthcare Coverage						
Yes	11.4%	(10.2%-12.6%)	7.9%	(7.0%-8.8%)	6.4%	(5.5%-7.2%)
No	49.4%	(43.7%-55.2%)	49.4%	(43.7%-55.1%)	18.1%	(13.8%-22.3%)
Disability						
Yes	13.6%	(10.5%-16.7%)	24.2%	(20.8%-27.6%)	17.2%	(14.4%-20.1%)
No	15.3%	(13.9%-16.7%)	9.1%	(8.0%-10.1%)	5.2%	(4.4%-6.1%)
Education						
HS Graduate or Less	19.8%	(17.3%-22.3%)	16.4%	(14.2%-18.5%)	10.6%	(8.8%-12.4%)
Some Post-HS Education	12.0%	(10.8%-13.3%)	9.2%	(8.1%-10.4%)	5.6%	(4.7%-6.4%)

Estimates marked with a "*" are not reported because their coefficients of variation are at least 15%.

- About one in six Connecticut adults reported not having a personal healthcare provider in 2013 (15.2%). Barriers due specifically to cost were less prevalent: about one in eight adults (12.1%) needed to see a doctor in the past year but could not, while one in 13 did not take a needed prescription (7.6%).

- There were differences in healthcare access based on age, and the likelihood of not having a personal healthcare provider decreased with age. While just fewer than 30% of younger adults did not have a personal doctor, just over 5% of the oldest adults did not have a personal doctor or provider.

- Adults who were 55 years old or older were less likely to forgo seeing a doctor because of cost (7.2%) than either category of younger adults. They were also less likely to forego a needed prescription because of cost compared to adults aged 35-54 (5.7% versus 9.6%).

- While men were more likely to not have a personal health provider (18.6%, compared to 12% for women), women were more likely to not take a medication as prescribed due to cost compared to men (8.9% versus 6.2%).

- Hispanics were more likely to not have a personal doctor or provider compared to adults of other racial and ethnic backgrounds, and non-Hispanic Whites were less likely to lack a personal provider compared to other groups.

- Non-Hispanic Whites were less likely to forego seeing a doctor when in need because of cost (8.8%) compared to both non-Hispanic Blacks (19.4%) and Hispanics (24.7%). Hispanics were more likely to forego prescribed medications due to cost (13.9%), compared to non-Hispanic Whites (5.9%).

- Likelihood of lacking a personal doctor, foregoing a needed doctor's visit or not taking a prescribed medication because of cost decreased as income increased. The lowest income group had the lowest levels of healthcare access: almost one in four of these adults lacked a personal healthcare provider, over one in five did not see a doctor when needed because of cost constraints (21.7%), and one in seven did not take a prescribed medicine (14.5%).

- Half of uninsured adults did not have a personal doctor or provider (49.4%) in 2013, compared to only one in nine adults with health coverage. That same proportion of uninsured adults needed to see a doctor in the past year but could not because of cost (49.4%), which is higher than adults who had health insurance (7.9%). Uninsured adults were nearly three times more likely to forego prescribed medications because of cost (18.1%), compared to adults with health coverage (6.4%).

- Nearly one in four disabled adults did not see a doctor when they needed to because of cost (24.2%), which is nearly three times more likely than for non-disabled adults (9.1%). Disabled adults were also over three times more likely to not take prescribed medications because of cost concerns, compared to non-disabled adults (17.2% versus 5.2%)

- Adults with less education were nearly two times more likely to lack a personal provider, forego seeing a doctor, and not take a prescribed medication because of cost, compared to more educated adults.

Medicaid

Medicaid is a public health insurance program for low-income Americans and other target groups including pregnant women and disabled persons. Medicaid programs are run by the states within specific federal requirements.[22] Connecticut's Medicaid program, Husky Health, offers a comprehensive benefit package to eligible members. An expansion of Medicaid coverage under the Affordable Care Act (ACA) went into effect in 2014. The proportion of adults who reported having Medicaid coverage in 2013 is shown in **Table 11** below. *Note: This question was only asked of respondents who reported some kind of healthcare coverage.*

- In 2013, before Medicaid expansion under the ACA, 9.4% of Connecticut adults with health insurance reported having Medicaid coverage.

- Likelihood of having Medicaid coverage decreased with age: one in seven adults under age 34 with health insurance had Medicaid coverage (14.1%) compared to 5.7% of adults aged 55-64 years old.

- Women were more likely to have Medicaid coverage compared to men (11.6% versus 7.1%).

- Non-Hispanic blacks were more likely to be Medicaid beneficiaries (21.8%) compared to non-Hispanic Whites (5.8%).

- Nearly one in four disabled adults with health insurance were Medicaid enrollees in 2013 (23.3%), and were more likely to be Medicaid beneficiaries compared to non-disabled adults (6.1%).

- Adults with a high school education or less were more likely to be Medicaid beneficiaries (17.2%) compared to adults with higher levels of education (5.4%).

Table 11: Adult Medicaid Coverage by Demographics

Demographic Characteristics	Has Medicaid	
	%	95% Confidence Interval
Total	**9.4%**	**(8.1%-10.8%)**
Age		
18-34 years old	14.1%	(10.6%-17.6%)
35-54 years old	8.0%	(6.5%-9.5%)
55-64 years old	5.7%	(4.2%-7.2%)
Gender		
Male	7.1%	(5.2%-9.0%)
Female	11.6%	(9.6%-13.6%)
Race/Ethnicity		
Non-Hispanic White	5.8%	(4.6%-7.0%)
Non-Hispanic Black	21.8%	(16.1%-27.5%)
Hispanic	*	*
Income		
Less than $35,000	34.9%	(29.9%-39.8%)
$35,000-$74,999	*	*
$75,000 or more	*	*
Has Healthcare Coverage		
Yes	9.4%	(8.1%-10.8%)
No	*N/A*	*N/A*
Disability		
Yes	23.3%	(18.2%-28.4%)
No	6.1%	(4.9%-7.2%)
Education		
HS Graduate or Less	17.2%	(13.9%-20.4%)
Some Post-HS Education	5.4%	(4.2%-6.6%)

Estimates marked with a "" are not reported because their coefficients of variation are greater than 15%.*

Cells with N/A (Not Applicable) indicate that the measure does not apply to the demographic category in question.

Medical Debt

The financial burden of medical care and the accumulation of medical debt can affect almost anyone and can cause considerable economic and personal hardship.[23] A collector may report a medical debt to a credit agency, which could affect an individual's ability to access housing, insurance or employment, thereby impacting their standard of living over the long term.[24]

Respondents were asked if they had any medical bills that were being paid off over time (**Table 12**). This could include medical bills paid off with a credit card, through personal loan, or via a payment plan with a hospital or provider, and could include bills incurred in 2013 as well as in previous years.

- One in six Connecticut adults was paying off medical bills in 2013.

- Adults aged 35-54 years old were more likely to be paying off medical bills (21.5%) compared to adults both younger (16.9%) and older (12.1%).

- Nearly one in five CT women was paying off medical debt in 2013 (19%), and women were more likely than men to have medical debt (14.5%).

- Non-Hispanic Whites were less likely to be paying off medicals bills (14.6%) compared to non-Hispanic Blacks (26.7%) and Hispanics (22%).

- Adults in the highest income category were less likely to be paying off medical debt (11.8%) compared to adults in the two lower-income categories; probably because higher income adults are more likely to have insurance coverage.

- Uninsured adults were two times more likely to be paying off medical debt (31.1%), compared to adults with health coverage (15.2%).

- Disabled adults were more likely to be paying off medical bills (28.3%) compared to non-disabled adults (14.2%).

- Adults with lower levels of education were more likely to be paying off medical debt (19.5%) compared to adults with higher education levels (15%).

Table 12: Adults Currently Paying off Medical Bills by Demographics

Demographic Characteristics	Any Medical Bills Being Paid Off	
	%	95% Confidence Interval
Total	16.8%	(15.5%-18.1%)
Age		
18-34 years old	16.9%	(13.9%-19.9%)
35-54 years old	21.5%	(19.2%-23.8%)
55 years old or older	12.1%	(10.6%-13.6%)
Gender		
Male	14.5%	(12.7%-16.3%)
Female	19.0%	(17.1%-20.8%)
Race/Ethnicity		
Non-Hispanic White	14.6%	(13.3%-16.0%)
Non-Hispanic Black	26.7%	(21.5%-31.9%)
Hispanic	22.0%	(17.2%-26.8%)
Income		
Less than $35,000	21.5%	(18.7%-24.2%)
$35,000-$74,999	19.2%	(16.5%-22.0%)
$75,000 or more	11.8%	(10.0%-13.6%)
Has Healthcare Coverage		
Yes	15.2%	(13.9%-16.5%)
No	31.1%	(25.5%-36.7%)
Disability		
Yes	28.3%	(24.7%-31.9%)
No	14.2%	(12.8%-15.5%)
Education		
HS Graduate or Less	19.5%	(17.1%-21.8%)
Some Post-HS Education	15.0%	(13.6%-16.5%)

Healthcare Satisfaction

Patient satisfaction with healthcare is a common measure of care quality and studying patient satisfaction has become an important part of the healthcare industry. Studies have shown that personal relationships and promptness are triggers of patient satisfaction.[25] At the same time, there is ongoing debate surrounding whether reported levels of patient satisfaction are that helpful in determining the actual practices of healthcare providers.[26] BRFSS respondents were asked how satisfied they were with the healthcare they received. Results by demographics are shown in **Table 13** below.

- Two thirds of Connecticut adults were very satisfied with their care (67.9%), and just under one-third were somewhat satisfied (29%), as shown in **Figure 7** below.

- Satisfaction with healthcare increased with age.

- Non-Hispanic Whites were more likely to be satisfied with their healthcare (70.7%) compared to adults of other backgrounds.

- The wealthiest adults were more likely to be satisfied with their healthcare, compared to both categories of lower-income adults.

- Adults with health coverage were more likely to be very satisfied with their healthcare (69.4%) compared to uninsured adults (52.7%).

- Disabled adults were less likely to be highly satisfied with their healthcare (58.9%) compared to non-disabled adults (70.1%).

- Adults with more education were more likely to report high satisfaction with the healthcare they've received (69.5%) compared to adults with a high school degree or less (65.3%).

Table 13: Adult Health Satisfaction by Demographics

Demographic Characteristics	Very Satisfied With Healthcare	
	%	**95% Confidence Interval**
Total	**67.9%**	**(66.3%-69.5%)**
Age		
18-34 years old	60.6%	(56.5%-64.7%)
35-54 years old	66.1%	(63.5%-68.7%)
55 years old or older	74.6%	(72.7%-76.5%)
Gender		
Male	68.2%	(65.8%-70.6%)
Female	67.6%	(65.4%-69.7%)
Race/Ethnicity		
Non-Hispanic White	70.7%	(68.9%-72.5%)
Non-Hispanic Black	60.1%	(55.3%-66.7%)
Hispanic	63.8%	(58.0%-69.5%)
Income		
Less than $35,000	61.7%	(58.4%-65.1%)
$35,000-$74,999	66.2%	(62.9%-69.4%)
$75,000 or more	73.6%	(71.1%-76.1%)
Has Healthcare Coverage		
Yes	69.4%	(67.8%-71.1%)
No	52.7%	(46.5%-58.9%)
Disability		
Yes	58.9%	(55.1%-62.7%)
No	70.1%	(68.3%-71.9%)
Education		
HS Graduate or Less	65.3%	(62.4%-68.2%)
Some Post-HS Education	69.5%	(67.7%-71.4%)

Figure 7: Satisfaction with Care, CT 2013

- Very satisfied
- Somewhat satisfied
- Not at all satisfied

3%
29%
68%
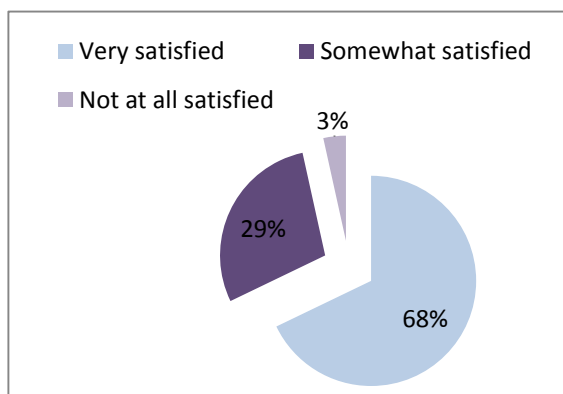
Inadequate Sleep

The recommended amount of sleep varies by age group, with school-age children recommended to have at least ten hours of sleep each night and teenagers recommended to get 9-10 hours each night. Adults should get 7-8 hours of nightly sleep.[27] Lack of sleep can have a substantial impact on health. Studies have found that short sleep duration is associated with an increased risk of cardiovascular disease, diabetes, and obesity.[28] Sleep loss can also impact daily function, with inadequate sleep increasing the risk of drowsy driving and crashes.[29]

As part of a state-added section in 2013, BRFSS respondents were asked to report how many hours of sleep they get on average in a 24-hour period. Results are shown in **Table 14** below.

- In 2013, two-thirds (66%) of Connecticut adults got less than eight hours of sleep per night, with similar sleep time for men and women, and across racial and ethnic backgrounds. As shown in **Figure 8** below, 82% of adults got 6-8 hours of sleep per night.

- Middle-aged adults, aged between 35 and 54 years old, were more likely to report inadequate sleep (70.8%), compared to both other age groups.

- Adults in the lowest income households were less likely to experience inadequate sleep (60.7%), compared to both higher-income groups.

- Adults with some post-high school education were more likely to report inadequate sleep patterns (68.1%), compared to adults with a high school degree or less (63.1%).

Table 14: Adult Inadequate Sleep by Demographics

Demographic Characteristics	Less Than 8 Hours of Sleep per Night	
	%	**95% Confidence Interval**
Total	**66.0%**	**(64.4%-67.6%)**
Age		
18-34 years old	63.3%	(59.3%-67.3%)
35-54 years old	70.8%	(68.3%-73.3%)
55 years old or older	63.5%	(61.4%-65.6%)
Gender		
Male	66.2%	(63.7%-68.6%)
Female	65.8%	(63.7%-68.0%)
Race/Ethnicity		
Non-Hispanic White	66.6%	(64.8%-68.4%)
Non-Hispanic Black	66.6%	(61.1%-72.1%)
Hispanic	63.0%	(57.2%-68.7%)
Income		
Less than $35,000	60.7%	(57.4%-64.1%)
$35,000-$74,999	69.2%	(66.1%-72.2%)
$75,000 or more	70.1%	(67.5%-72.6%)
Has Healthcare Coverage		
Yes	66.4%	(64.7%-68.1%)
No	62.3%	(56.7%-68.0%)
Disability		
Yes	67.0%	(63.3%-70.7%)
No	66.1%	(64.3%-67.9%)
Education		
HS Graduate or Less	63.1%	(60.2%-66.0%)
Some Post-HS Education	68.1%	(66.2%-69.9%)

Figure 8: Hours of Sleep for Adults, CT 2013
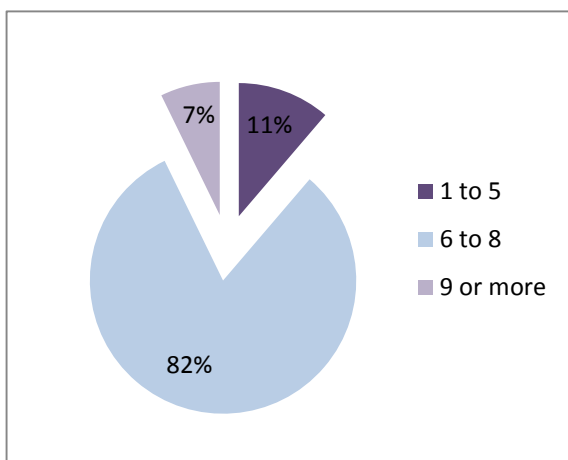
Genomics and Cardiovascular Disease

A state-specific question in the 2013 BRFSS asked respondents about their family history of heart attack and familial hypercholesterolemia, two conditions whose risk is increased by the presence of specific genes. Heart disease is one of the leading causes of death for both men and women in the United States, but early detection can help mitigate the effects of heart disease.30 Healthcare providers assign a risk score based on a variety of factors, including family history of heart disease. The US Preventative Services Task Force (USPSTF) recommends that screening for heart disease begin at the age of 20 for people who have a close male relative who had a heart attack before the age of 50 or a close female relative who had a heart attack before the age of 60.31 Women develop heart disease at older ages than men and on average have heart attacks later in life.

About 1 in 200 to 500 people has familial hypercholesterolemia (FH). FH is even more common in certain populations such as French Canadians, Ashkenazi Jews, Lebanese, and South African Afrikaners. In these populations FH may be found as frequently as 1 in every 67 people. In the United States, between 600,000 and two million people live with FH, and as many as 90% of them are undiagnosed.[32]

FH is an inherited disorder that increases cholesterol levels and can lead to early coronary heart disease and death. Early detection and treatment of FH, usually through tracing family medical history, can reduce the impact of FH.[33] BRFSS respondents were asked to state if they were aware of a relative who had FH. Hereditary health indicators are displayed in **Table 15** below.

Table 15: Adult Genomics by Demographics

Demographic Characteristics	Male Relative Had Heart Attack Before 50		Female Relative Had Heart Attack Before 60		Discussed Familial Hypercholesterolemia	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Total	11.2%	(10.2%-12.3%)	6.7%	(5.9%-7.4%)	12.8%	(11.7%-14.0%)
Age						
18-34 years old	8.9%	(6.4%-11.5%)	*	*	9.3%	(6.7%-12.0%)
35-54 years old	10.8%	(9.1%-12.5%)	6.8%	(5.5%-8.1%)	12.8%	(11.0%-14.6%)
55 years old or older	13.3%	(11.8%-14.8%)	8.4%	(7.1%-9.6%)	15.3%	(13.7%-16.9%)
Gender						
Male	10.3%	(8.7%-11.9%)	5.4%	(4.3%-6.4%)	11.7%	(10.0%-13.4%)
Female	12.2%	(10.7%-13.6%)	7.9%	(6.7%-9.0%)	13.8%	(12.3%-15.3%)
Race/Ethnicity						
Non-Hispanic White	11.3%	(10.1%-12.5%)	5.9%	(5.1%-6.8%)	11.9%	(10.7%-13.1%)
Non-Hispanic Black	*	*	*	*	14.6%	(10.7%-18.4%)
Hispanic	16.2%	(12.0%-20.5%)	*	*	16.3%	(11.7%-20.9%)
Income						
Less than $35,000	15.6%	(13.2%-18.1%)	10.7%	(8.7%-12.6%)	13.5%	(11.0%-15.9%)
$35,000-$74,999	8.3%	(6.6%-10.0%)	6.2%	(4.6%-7.7%)	15.1%	(12.6%-17.6%)
$75,000 or more	9.9%	(8.2%-11.5%)	4.3%	(3.3%-5.2%)	12.3%	(10.5%-14.0%)
Has Healthcare Coverage						
Yes	10.9%	(9.8%-12.0%)	6.3%	(5.5%-7.0%)	12.9%	(11.7%-14.1%)
No	14.0%	(9.9%-18.0%)	*	*	12.6%	(9.0%-16.2%)

Demographic Characteristics	Male Relative Had Heart Attack Before 50		Female Relative Had Heart Attack Before 60		Discussed Familial Hypercholesterolemia	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Disability						
Yes	16.6%	(13.9%-19.3%)	11.6%	(9.4%-13.9%)	14.0%	(11.2%-16.8%)
No	9.9%	(8.8%-11.0%)	5.3%	(4.5%-6.1%)	12.2%	(11.0%-13.4%)
Education						
HS Graduate or Less	14.8%	(12.7%-17.0%)	8.8%	(7.3%-10.4%)	13.5%	(11.3%-15.6%)
Some Post-HS Education	8.9%	(7.9%-9.9%)	5.2%	(4.4%-6.0%)	12.4%	(11.2%-13.7%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

- One in nine Connecticut adults had a close male relative who had a heart attack before the age of 50; while a smaller proportion (6.7%) had a close female relative who had a heart attack before the age of 60. About one in eight adults have had a healthcare provider talk to them about familial hypercholesterolemia (12.8%).

- Adults aged 55 years old or older were more likely to have a male relative who experienced a heart attack before age 50, compared to both categories of younger adults.

- The likelihood of having a healthcare professional discuss hereditary high cholesterol increased with age.

- Women were more likely than men to have a female relative who experienced a heart attack before age 60 (7.9% versus 5.4%).

- Hispanic adults were more likely than non-Hispanic Whites (16.2% *versus* 11.3%) to have a male relative who had a heart attack.

- Adults in the lowest income category were more likely to have a male relative who suffered from a heart attack before age 50 (15.6%) compared to either category of higher-income adults. Similarly, likelihood of having a female relative who suffered a heart attack before 60 decreased with income.

- Compared to non-disabled adults, disabled adults were more likely to have a male relative who had a heart attack before 50 (16.6%) and were also more likely to have a female relative who had a heart attack before 60 (11.6%).

- Adults with a high school degree or less were more likely to have a male relative who suffered a heart attack before age 50 (14.8%), and were also more likely to have a female relative who suffered a heart attack before age 60 (8.8%), compared to adult with higher levels of education (8.9% and 5.2%, respectively).

2. RISK BEHAVIOR INDICATORS

Adult Physical Activity

Regular physical exercise has definitively been shown to prevent certain chronic diseases, just as a sedentary lifestyle is a risk factor for a variety of chronic conditions, obesity, bone and joint diseases and depression.[34] There are two kinds of recommended exercise: in aerobic physical activity (popularly known as "cardio"), the body's large muscles move in a rhythmic manner for a sustained period, thereby improving cardiorespiratory fitness.[35] In strength training (also called resistance training), specific muscle-strengthening activities increase skeletomuscular power, endurance and mass. Strength training can help reduce the symptoms of many diseases and symptoms, especially those that worsen with age, such as arthritis, diabetes and osteoporosis.[36]

The CDC recommends 2.5 hours, or 150 minutes, of moderate-intensity aerobic activity each week, along with muscle-strengthening of the major muscle groups on two or more days each week.[37]

BRFSS respondents 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. Those who did exercise in the previous month were asked to report what types of physical activity they spent the most time doing, and how often and how long they engaged in these activities in the past month. A secondary question for all respondents asked how often they had participated in physical activities to strengthen muscles in the previous month. **Table 16** below shows the proportion of adults who did not engage in any leisure-time physical activity, as well as the proportion who met aerobic and strength guidelines.

Table 16: Adult Physical Activity by Demographics

Demographic Characteristics	No Leisure Time Physical Activity		Met Aerobic Guidelines		Met Strength Guidelines	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Total	24.9%	(23.4%-26.4%)	50.9%	(49.2%-52.7%)	30.0%	(28.4%-31.6%)
Age						
18-34 years old	18.3%	(14.9%-21.7%)	51.7%	(47.4%-56.0%)	42.6%	(38.3%-46.8%)
35-54 years old	25.6%	(23.1%-28.2%)	49.3%	(46.4%-52.1%)	27.6%	(25.1%-30.1%)
55 years old or older	28.9%	(26.8%-31.0%)	52.2%	(50.0%-54.5%)	23.5%	(21.6%-25.3%)
Gender						
Male	23.2%	(21.0%-25.4%)	52.5%	(49.8%-55.1%)	33.3%	(30.8%-35.8%)
Female	26.5%	(24.4%-28.5%)	49.5%	(47.2%-51.9%)	27.0%	(24.9%-29.1%)
Race/Ethnicity						
Non-Hispanic White	21.5%	(20.0%-23.1%)	54.4%	(52.5%-56.4%)	30.9%	(29.0%-32.7%)
Non-Hispanic Black	31.0%	(25.3%-36.6%)	43.5%	(37.2%-49.8%)	29.8%	(24.1%-35.6%)
Hispanic	40.3%	(34.3%-46.2%)	36.9%	(31.1%-42.8%)	24.2%	(19.2%-29.2%)
Income						
Less than $35,000	34.5%	(31.1%-37.8%)	43.5%	(40.0%-47.1%)	23.1%	(20.1%-26.1%)
$35,000-$74,999	25.8%	(22.8%-28.8%)	49.8%	(46.4%-53.3%)	31.7%	(28.4%-35.0%)
$75,000 or more	15.6%	(13.6%-17.6%)	58.8%	(56.0%-61.6%)	33.4%	(30.7%-36.0%)

Demographic Characteristics	No Leisure Time Physical Activity		Met Aerobic Guidelines		Met Strength Guidelines	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Has Healthcare Coverage						
Yes	24.0%	(22.4%-25.5%)	52.3%	(50.4%-54.1%)	30.5%	(28.8%-32.2%)
No	33.2%	(27.5%-38.9%)	39.5%	(33.6%-45.4%)	25.4%	(20.2%-30.6%)
Disability						
Yes	43.2%	(39.3%-47.1%)	32.8%	(29.1%-36.5%)	19.6%	(16.5%-22.7%)
No	20.5%	(19.0%-22.1%)	55.2%	(53.3%-57.2%)	32.4%	(30.5%-34.2%)
Education						
HS Graduate or Less	34.3%	(31.4%-37.2%)	42.5%	(39.4%-45.6%)	23.4%	(20.6%-26.1%)
Some Post-HS Education	18.8%	(17.2%-20.4%)	56.4%	(54.4%-58.4%)	34.4%	(32.4%-36.4%)

- One in four Connecticut adults did not engage in any kind of leisure-time physical activity in the previous month (24.9%). As shown in **Figure 9** on the next page, of all the adults who met at least one guideline, half met only the aerobic guideline (50%), 15.5% met only the strength guideline, and one-third (34.4%) met both. **It is important to note that 39.7% of adults met neither guidelines.**

- Half of all adults (50.9%) met the CDC-recommended guidelines for aerobic activity, with no differences across age, gender or income categories, and thirty percent of adults met the strength training guidelines, with no differences based on racial background or health insurance status.

- Younger adults aged 18-34 were less likely to have had no physical activity (18.3%) compared to both categories of older adults.

- Women were more likely to have foregone any physical activity in the past month (26.5%) compared to men (23.2%) and were less likely to have met the strength guidelines (27%) compared to men (33.3%).

- Two out of five Hispanic adults had no physical activity in the past month (40.3%), and Hispanics were more likely than adults from all other racial/ethnic backgrounds to be sedentary. Non-Hispanic Blacks were also more likely than non-Hispanic Whites to have had no exercise in the past month (31% versus 21.5%). Non-Hispanic Whites were more likely to meet the aerobic fitness guidelines (54.4%), compared to non-Hispanic Blacks (43.5%) and Hispanics (36.9%).

- The likelihood of leading a sedentary lifestyle decreased as incomes rose. Adults in the lowest income category were less likely to have met the strength guidelines (23.1%) compared to both categories of higher-income adults.

- Uninsured adults were more likely to have gone without exercising (33.2%) compared to adults with health insurance (24%), and uninsured adults were less likely to meet the aerobic guidelines.

- Disabled adults were more than twice as likely to be sedentary compared to non-disabled adults (43.2% compared 20.5%). They were less likely to meet the aerobic guidelines (32.8%) compared to non-disabled adults (55.2%) and were also less likely to meet the the strength training guidelines (19.6% versus 32.8%).

Adults with a high school degree or less were more likely to have foregone exercising in the previous month (34.3%), and were less likely to meet aerobic activity guidelines (42.5%) compared to adults with high education levels (18.8% were sedentary and 56.4% met aerobic guidelines). They were also less likely to meet strength guidelines (34.4% versus 23.4%).

Figure 9: Meeting Exercise Guidelines, CT 2013

Aerobic Only (50%)

Strength Only (15.5%)

Both (34.4%)
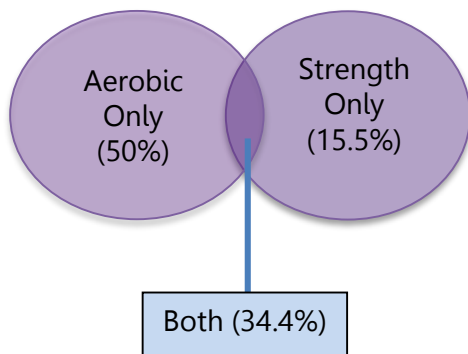
Child TV/Video Game Time

Despite the American Academy of Pediatrics' recommendation that children aged two and older be exposed to no more than two hours a day of screen time, U.S. children currently watch an average of four hours of entertainment media per day. This indicator is of interest because sedentary behaviors like sitting in front of television for long periods may contribute to poor health outcomes such as weight gain or obesity. Additionally, television or computer exposure may negatively affect a child's development or perspective in other ways.[38]

The BRFSS survey asked adult proxy respondents how much time the selected child spent watching television, videos or DVDs on an average day. A subsequent question asked how much time the child spent playing video games or on the computer. **Table 17** below shows the proportion of children aged two and older who viewed screens for more than two hours per day.

Table 17: Child TV/Video Game Time by Demographics

Demographic Characteristics	More than Two Hours TV Time Per Day		More than Two Hours Video Game Time Per Day	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**22.8%**	**(19.8%-25.7%)**	**10.4%**	**(8.4%-12.4%)**
Age				
2-4 years old	*	*	*	*
5-11 years old	16.8%	(12.7%-20.8%)	*	*
12-17 years old	28.3%	(23.4%-33.2%)	20.5%	(16.3%-24.7%)
Gender				
Male	27.1%	(22.7%-31.4%)	13.9%	(10.7%-17.0%)
Female	18.3%	(14.4%-22.1%)	*	*
Race/Ethnicity				
Non-Hispanic White	16.2%	(13.3%-19.1%)	8.3%	(6.3%-10.4%)
Non-Hispanic Black	41.7%	(30.4%-53.0%)	*	*
Hispanic	28.5%	(20.7%-36.2%)	*	*
Proxy's Income				
Less than $35,000	37.0%	(29.4%-44.6%)	*	*
$35,000-$74,999	25.7%	(18.8%-32.7%)	*	*
$75,000 or more	15.4%	(11.8%-19.1%)	*	*
Proxy Has Healthcare Coverage				
Yes	21.9%	(18.9%-25.0%)	10.1%	(8.0%-12.1%)
No	*	*	*	*
Proxy Has Disability				
Yes	39.9%	(27.4%-46.0%)	*	*
No	20.2%	(17.6%-23.7%)	9.0%	(7.7%-11.9%)
Proxy's Education				
HS Graduate or Less	37.3%	(30.7%-43.9%)	*	*
Some Post-HS Education	17.2%	(14.1%-20.4%)	8.7%	(6.6%-10.9%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%. The race, age and gender variables refer to the child, while the other data points refer to the adult proxy.*

- Close to one in four Connecticut children aged two and over spent more than two hours per day watching TV, videos or DVDs (22.8%), while one in ten spent at over two hours playing video games or on the computer (10.4%). As shown in **Figure 10** below, of all children who watched more than two hours of screen time each day, 62% only watched TV, 16.3% only viewed computer or video games, and 21.7% viewed both media.

- Older children and teens, ages 12 to 17, were more likely to spend more than two hours each day watching TV (28.3%) compared to children aged 5-11 (16.8%). One in five children aged 12-17 spent at over two hours playing video or computer games (20.5%).

- Boys were more likely than girls to watch more than two hours of TV per day (27.1% compared to 18.3%).

- Non-Hispanic Black children and Hispanic children were more likely to watch more than two hours of TV each day (41.7% and 28.5%, respectively) compared to non-Hispanic White children (16.2%).

- The proportion of children who spent more than two hours per day watching TV decreased as incomes rose, with children in the poorest households over twice as likely to spend that time watching TV compared to children in the highest income households (37% versus 15.4%).

- Children with disabled proxies were more likely to spend more than two hours per day watching TV, compared to children with non-disabled adult proxies (39.9% compared to 20.2%).

- Children with adult proxies who had a high school education or less were more likely to watch TV for more than two hours (37.3%), compared to children living with an adult proxy with a higher level of education (17.2%).

Figure 10: More than Two Hours of Child Screen Time, CT 2013

TV Only (62%)

Video or Computer Games Only (16.3%)

Both (21.7%)
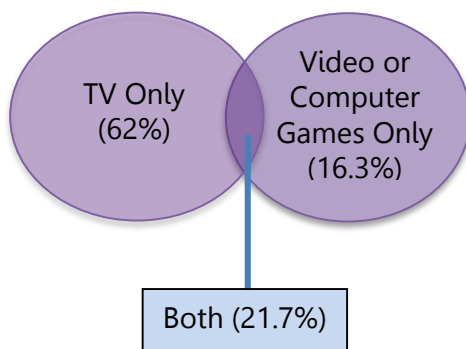
Child Soda/Fast Food Consumption

Consumption of soda and other sugar-sweetened beverages (SSBs) is associated with obesity in children.[39] At the same time, children who eat at fast-food and full service restaurants eat more and have poorer diets compared to children who eat at home.[40]

Adult proxy respondents reported how many glasses, bottles, or cans of soda or other sugar-sweetened drinks the randomly-selected child drank on an average day. They were 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, carryout or drive-thru. Results for children aged two and over are reported in **Table 18** below.

Table 18: Child Soda and Fast Food Consumption by Demographics

Demographic Characteristics	Drank Soda or Sugary Drink At Least Once Per Day		Ate Fast Food At Least Twice Weekly	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**31.9%**	**(28.6%-35.3%)**	**32.8%**	**(29.4%-36.3%)**
Age				
2-4 years old	*	*	*	*
5-11 years old	27.4%	(22.2%-32.6%)	34.6%	(28.8%-40.4%)
12-17 years old	43.8%	(38.5%-49.0%)	35.7%	(30.7%-40.7%)
Gender				
Male	34.8%	(30.2%-39.4%)	34.3%	(29.7%-39.0%)
Female	29.1%	(24.2%-34.1%)	31.5%	(26.4%-36.7%)
Race/Ethnicity				
Non-Hispanic White	27.7%	(23.9%-31.4%)	29.6%	(25.7%-33.5%)
Non-Hispanic Black	42.2%	(30.9%-53.5%)	37.6%	(27.1%-48.1%)
Hispanic	36.5%	(27.8%-45.2%)	37.1%	(28.1%-46.1%)
Proxy's Income				
Less than $35,000	44.5%	(36.5%-52.6%)	35.9%	(28.0%-43.7%)
$35,000-$74,999	34.1%	(26.6%-41.6%)	38.8%	(31.0%-46.6%)
$75,000 or more	24.8%	(20.5%-29.1%)	30.4%	(25.7%-35.1%)
Proxy Has Healthcare Coverage				
Yes	30.2%	(26.8%-33.6%)	32.3%	(28.7%-35.8%)
No	47.8%	(35.0%-60.6%)	*	*
Proxy Has Disability				
Yes	45.4%	(35.4%-55.4%)	40.5%	(30.4%-50.6%)
No	29.8%	(26.2%-33.3%)	31.6%	(27.9%-35.2%)
Proxy's Education				
HS Graduate or Less	41.4%	(34.5%-48.3%)	36.0%	(29.1%-42.8%)
Some Post-HS Education	28.2%	(24.4%-32.0%)	31.7%	(27.8%-35.7%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%. The race, age and gender variables refer to the child, while the other data points refer to the adult proxy.*

- About one-third of CT children drank at least one soda or sugary drink each day (31.9%), and about the same proportion ate fast food more than twice per week (32.8%), with no differences between boys and girls. As shown in **Figure 11** below, of all the children who drank soda at least once daily or ate at fast food restaurants at least twice weekly, 35.6% of children only drank soda, 36.5% only consumed fast food, and 27.8% engaged in both activities.

- Children aged 12-17 were more likely to drink at least one soda per day (43.8%), compared to children aged 5-11 (27.4%).

- There were no differences in relation to frequent fast food consumption or daily SSB drinking for children of different racial or ethnic backgrounds.

- Children in households where the annual income was over $75,000 were less likely to drink a soda or sugary drink each day, compared to children living in both lower-income categories.

- Children living with an uninsured adult proxy were more likely to drink an SSB each day (47.8%) compared to children living with an adult proxy with health coverage (30.2%).

- Children whose adult proxy was disabled were more likely to consume at least one daily SSB (45.4%), compared to children living with a non-disabled adult proxy (29.8%).

- Children whose adult proxy had a high school education or less were more likely to drink a daily soda or sugary drink (41.4%) compared to children whose adult proxy had a higher level of education (28.2%).

Figure 11: Child Diet Risk Factors, CT 2013

Soda/SSB only (35.6%)

Fast Food Only (36.5%)

Both (27.8%)
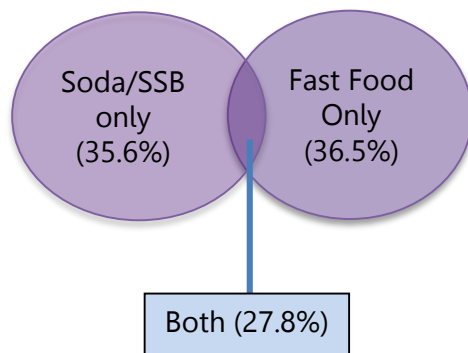
Adult Sugar-Sweetened Beverages

Soda and other sugar-sweetened beverages (SSBs), when consumed regularly, have been shown to have a detrimental effect on adult health. SSBs are the single largest source of calorie consumption and added sugars in the American diet. They are linked to an increased risk of chronic disease and weight gain. Regular consumption of SSBs increases the risk of mortality and death from cardiovascular disease.[41] SSB consumption differs depending on several demographic characteristics, health conditions, and behavioral patterns.[42]

In the BRFSS, SSBs are defined as regular soda and sugar-sweetened fruit drinks, sweet tea, and sports and energy drinks (not including 100% juice, diet drinks, or artificially sweetened drinks). Adults were asked how often in the past 30 days they had consumed regular soda and how often they had consumed sugar-sweetened fruit drinks (including iced tea and energy drinks). Results by demographics are shown in **Table 19** below.

Table 19: Adult Sugar-Sweetened Beverage Consumption by Demographics

Demographic Characteristics	At Least One Soda per Day		At Least One Soda or Fruit Drink per Day	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**10.3%**	**(9.1%-11.4%)**	**19.5%**	**(18.0%-21.0%)**
Age				
18-34 years old	15.2	(11.9%-18.4%)	29.7%	(25.6%-33.9%)
35-54 years old	9.9%	(8.1%-11.6%)	18.0%	(15.7%-20.0%)
55 years old or older	7.5%	(6.3%-8.8%)	14.4%	(12.7%-16.0%)
Gender				
Male	12.9%	(11.1%-14.7%)	24.2%	(21.9%-26.6%)
Female	7.9%	(6.4%-9.4%)	15.3%	(13.4%-17.2%)
Race/Ethnicity				
Non-Hispanic White	8.2%	(7.1%-9.3%)	16.6%	(16.0%-23.6%)
Non-Hispanic Black	16.4%	(11.8%-21.0%)	30.3%	(24.5%-36.2%)
Hispanic	19.9%	(14.7%-25.2%)	31.1%	(25.0%-37.1%)
Income				
Less than $35,000	16.6%	(13.6%-19.5%)	28.0%	(24.6%-31.4%)
$35,000-$74,999	9.8%	(7.7%-11.9%)	20.3%	(17.3%-23.3%)
$75,000 or more	5.2%	4.0%-6.5%)	12.6%	(10.5%-14.6%)
Has Healthcare Coverage				
Yes	8.9%	(7.8%-10.0%)	17.7%	(16.2%-19.2%)
No	23.1%	(17.7%-28.5%)	36.2%	(30.0%-42.5%)
Disability				
Yes	15.3%	(11.9%-18.6%)	28.8%	(24.9%-32.8%)
No	9.1%	(7.9%-10.3%)	17.5%	(15.9%-19.0%)
Education				
HS Graduate or Less	15.6%	(13.2%-18.0%)	27.1%	(24.3%-30.0%)
Some Post-HS Education	6.8%	(5.7%-7.9%)	14.7%	(13.1%-16.3%)

- One in ten Connecticut adults drank at least one soda per day in 2013 (10.3%), while almost twice that proportion drank a soda or fruit drink each day (19.5%).

- Younger adults aged 18-34 were more than twice as likely to drink at least one soda or fruit drink per day (29.7%) compared to adults aged 35-54 (18.0%).

- Men were more likely to drink at least one soda or fruit drink each day (24.2%) compared to women (15.3%).

- Adults in the highest income households were less likely to consume at least one fruit drink or soda per day (12.6%), compared to adults in either lower-income category.

- Adults with a high school degree or less were nearly twice as likely to consume at least one soda or fruit drink per day (27.1%) compared to adults with higher levels of education (14.7%).

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.[43] However, the average American only eats about three servings of fruits and vegetables each day.[44] The benefits of fruits of vegetables are numerous. They can improve vision, lower blood pressure, prevent some types of cancer and reduce the risk of heart disease and stroke.[45] Fruits and vegetables are also low in fat and calories but contain many vital minerals and vitamins that maintain blood sugar and keep appetite in check.[46]

The 2013 BRFSS asked respondents how often they ate fruits and vegetables, including servings of 100% fruit juice. **Table 20** shows the proportion of adults consuming less than one serving of fruits and vegetables per day, by demographic sub-group.

Table 20: Adult Fruit and Vegetable Consumption by Demographics

Demographic Characteristics	Less Than One Serving of Fruit per Day		Less Than One Serving of Vegetables per Day	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	33.7%	(32.0%-35.4%)	22.2%	(20.6%-23.8%)
Age				
18-34 years old	39.5%	(35.3%-43.7%)	25.5%	(21.4%-29.5%)
35-54 years old	36.5%	(33.7%-39.2%)	20.8%	(18.4%-23.3%)
55 years old or older	27.1%	(25.1%-29.1%)	21.3%	(19.4%-23.3%)
Gender				
Male	37.3%	(34.8%-39.9%)	26.1%	(23.7%-28.5%)
Female	30.4%	(28.1%-32.6%)	18.6%	(16.5%-20.6%)
Race/Ethnicity				
Non-Hispanic White	30.3%	(28.5%-32.1%)	20.1%	(18.4%-21.8%)
Non-Hispanic Black	41.3%	(35.1%-47.5%)	37.6%	(31.3%-43.9%)
Hispanic	47.1%	(41.0%-53.1%)	27.3%	(21.7%-33.0%)
Income				
Less than $35,000	41.4%	(37.8%-44.9%)	29.8%	(26.4%-33.2%)
$35,000-$74,999	31.0%	(27.9%-34.2%)	20.7%	(17.7%-23.7%)
$75,000 or more	30.0%	(27.3%-32.6%)	16.8%	(14.4%-19.1%)
Has Healthcare Coverage				
Yes	32.6%	(30.9%-34.4%)	21.8%	(20.2%-23.4%)
No	43.3%	(37.2%-49.4%)	25.6%	(20.0%-31.3%)
Disability				
Yes	39.8%	(32.6%-39.7%)	30.7%	(24.4%-31.3%)
No	32.3%	(31.1%-34.9%)	20.2%	(19.0%-22.5%)
Education				
HS Graduate or Less	41.9%	(38.8%-45.0%)	29.9%	(27.0%-32.8%)
Some Post-HS Education	28.5%	(26.6%-30.4%)	17.3%	(15.5%-19.1%)

- One third of Connecticut adults ate less than one fruit serving per day (33.7%), while a smaller proportion, 22.2%, consumed less than one serving of vegetables per day. As shown in **Figure 12** below, half of adults ate one or two daily fruit servings (51.4%) and 61.9% ate one or two daily servings of vegetables.

- Adults in the oldest age category were less likely to consume less than one fruit serving per day (27.1%), compared to both categories of younger adults.

- Men were more likely to eat less than one fruit serving (37.3%), compared to women (30.4%), and were also more likely to consume less than one vegetable serving per day (26.1% versus 18.6%).

- Non-Hispanic Blacks and Hispanics were more likely to consume less than a daily serving of fruit or vegetables, compared to non-Hispanic Whites.

- For vegetables, the likelihood of consuming less than one daily serving decreased as incomes rose. For fruit, adults in the lowest income category were more likely to consume less than one daily serving (41.4%), compared to adults in both higher-income categories.

- Uninsured adults were more likely to consume less than one daily fruit serving (43.3%) compared to adults with health coverage (32.6%).

- Disabled adults were more likely to eat less than one daily serving of fruit (39.8%) or vegetables (30.7%), compared to non-disabled adults (20.2% consumed less than one veggie serving and 20.2% consumed less than one veggie serving).

- Adults with a high school degree or less were also more likely to consume less than a daily fruit or veggie serving (41.9% and 29.9%, respectively), compared to adults with higher levels of education (28.5% and 17.3% respectively).

Figure 12: Adult Fruit and Vegetable Consumption, CT 2013
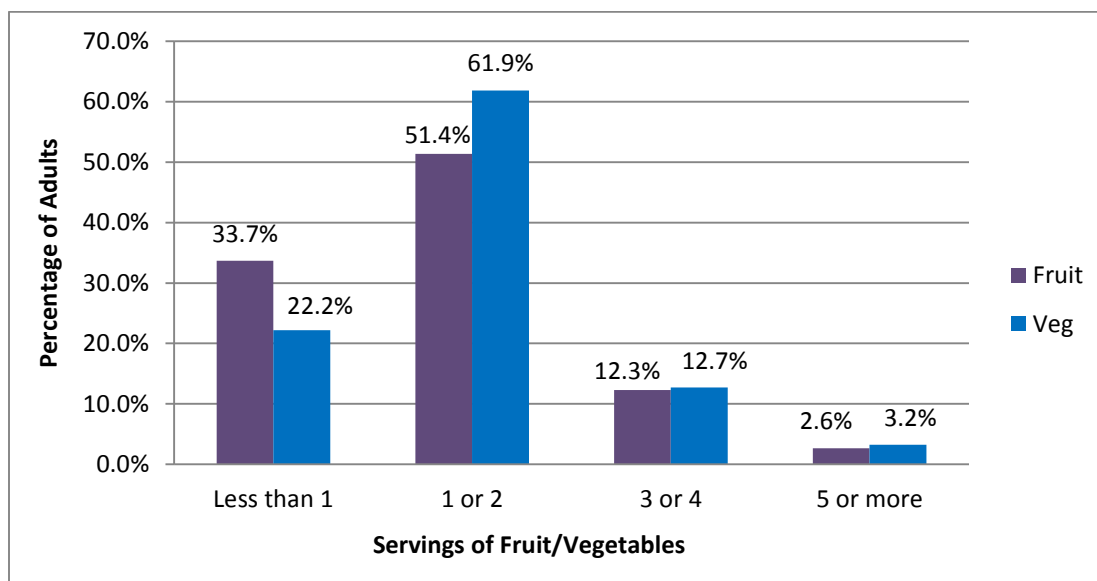
Sodium and Salt

Although the recommended daily sodium consumption is 2,300 milligrams or about 1 teaspoon of salt, the average daily sodium intake for Americans is 3,400 milligrams.[47] Eating too much sodium can increase the risk of high blood pressure, stroke, heart failure, and kidney disease. Seventy-five percent of sodium is obtained through restaurant and processed foods.[48]

BRFSS respondents were asked whether they were watching or reducing sodium intake and whether they had ever been advised by a doctor to reduce their sodium intake. Results by demographic sub-group are displayed in **Table 21**.

Table 21: Adult Sodium and Salt Intake by Demographics

Demographic Characteristics	Watching Salt Intake		Doctor Advised Reducing Salt	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**53.5%**	**(51.7%-55.2%)**	**23.4%**	**(21.9%-24.8%)**
Age				
18-34 years old	34.4%	(30.2%-38.7%)	11.3%	(8.3%-14.3%)
35-54 years old	49.9%	(47.0%-52.8%)	20.8%	(18.4%-23.2%)
55 years old or older	68.8%	(66.8%-70.9%)	33.8%	(31.7%-36.0%)
Gender				
Male	51.2%	(48.5%-53.9%)	24.5%	(22.3%-26.8%)
Female	55.5%	(53.1%-57.9%)	22.3%	(20.4%-24.2%)
Race/Ethnicity				
Non-Hispanic White	51.2%	(49.3%-53.2%)	21.1%	(19.6%-22.6%)
Non-Hispanic Black	70.4%	(64.7%-76.1%)	35.0%	(29.1%-40.8%)
Hispanic	57.1%	(50.8%-63.4%)	31.6%	(25.7%-37.6%)
Income				
Less than $35,000	62.0%	(58.4%-65.6%)	32.6%	(29.2%-35.9%)
$35,000-$74,999	57.4%	(53.9%-60.9%)	23.6%	(20.7%-26.4%)
$75,000 or more	44.6%	(41.9%-47.4%)	16.8%	(14.9%-18.8%)
Has Healthcare Coverage				
Yes	53.6%	(51.7%-55.4%)	22.8%	(21.3%-24.3%)
No	52.0%	(45.7%-58.4%)	29.3%	(23.3%-35.3%)
Disability				
Yes	66.2%	(58.9%-66.2%)	38.4%	(32.2%-39.1%)
No	50.4%	(49.1%-53.1%)	19.8%	(18.5%-21.7%)
Education				
HS Graduate or Less	60.3%	(57.1%-63.5%)	29.2%	(26.4%-32.0%)
Some Post-HS Education	49.1%	(47.0%-51.1%)	19.7%	(18.1%-21.2%)

- Over half of Connecticut adults were watching or reducing their sodium or salt intake in 2013 (53.5%), while nearly one in four adults were advised by their doctor to reduce their sodium or salt intake (23.4%).

- A person's likelihood to monitor their salt intake, and the likelihood of their doctor telling them to reduce their salt intake, both increased with age. Adults aged 55 years old or older were twice as likely to watch their sodium and salt consumption (68.8%) compared to the youngest adults (34.4%) and were also three times more likely to have been told by their doctor to cut back on sodium and salt consumption (33.8%), compared to the youngest adults (11.3).

- Women were more likely than men to be watching their sodium intake (55.5% versus 51.2%)

- Non-Hispanic Blacks were more likely to be watching their sodium and salt intake (70.4%) compared to adults of other racial or ethnic backgrounds. Non-Hispanic Blacks and Hispanics were both more likely to have been told to reduce their sodium or salt intake compared to non-Hispanic Whites (21.1%).

- Adults in the highest income category were less likely to be watching their sodium consumption (44.6%) compared to adults in both lower-income categories. Meanwhile, the likelihood to have been advised to lower sodium consumption decreased as incomes rose.

- Uninsured adults were more likely to have been advised to lower their salt intake by a medical professional (29.3%) compared to adults with health coverage (22.8%).

- Disabled adults were more likely to have been advised to lower their sodium intake (38.4%) and to also be watching their sodium intake (66.2%), compared to non-disabled adults (19.8% were advised to reduce salt consumption and 50.4% were watching it).

- Adults with less than a high school degree were more likely to have been told to reduce their salt consumption (29.2%) and also to be watching their salt intake (60.3%), compared to adults with higher levels of education (19.7% were advised to reduce salt consumption and 49.1% were watching it).

Figure 13: Length of Time Watching Salt, CT2013
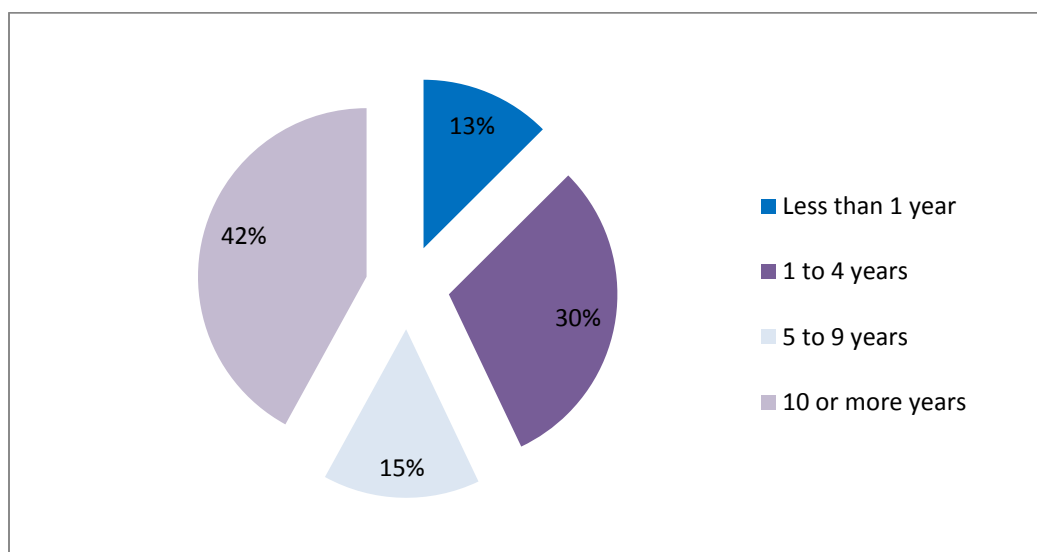
Cigarette Smoking

Smoking is the number one preventable cause of death in the U.S. 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. Nearly half a million Americans die every year in the United States as a result of cigarette smoking; including nearly 42,000 from secondhand smoke. In all, about one in five deaths nationwide can be linked to smoking.[49] BRFSS respondents were asked if they had smoked at least 100 cigarettes in their life. Those who did were asked if they currently smoked every day, some days or not at all. **Table 22** reports the proportion of current smokers—those who smoke every day or some days.

- The proportion of Connecticut adults who were current smokers in 2013, meaning they smoked cigarettes every day or some days, was 15.5%.

- Adults aged 55 and over were less likely to be smokers (11%) compared to both categories of younger adults.

- Men were more likely to be smokers (16.8%), compared to women (14.3%).

- Hispanics and non-Hispanic Blacks were more likely to be current smokers (20.5% and 19.9%, respectively), compared to non-Hispanic Whites (14.3%).

- In 2013, the likelihood of being a smoker decreased as incomes rose.

- Adults who were uninsured, disabled or having a high school education or less were all more likely to be smokers.

- As shown in **Figure 14** below, more than half of adult respondent had never smoked (56%), while 28% were former smokers.

Table 22: Current Adult Smokers by Demographics

Demographic Characteristics	Current Smoker %	95% Confidence Interval
Total	15.5%	(14.3%-16.7%)
Age		
18-34 years old	18.5%	(15.4%-21.5%)
35-54 years old	18.1%	(16.0%-20.2%)
55 years old or older	11.0%	(9.6%-12.3%)
Gender		
Male	16.8%	(14.9%-18.6%)
Female	14.3%	(12.7%-15.9%)
Race/Ethnicity		
Non-Hispanic White	14.3%	(13.0%-15.6%)
Non-Hispanic Black	19.9%	(15.0%-24.8%)
Hispanic	20.5%	(16.0%-25.0%)
Income		
Less than $35,000	24.4%	(21.5%-27.3%)
$35,000-$74,999	17.6%	(15.0%-20.1%)
$75,000 or more	9.3%	(7.6%-10.9%)
Has Healthcare Coverage		
Yes	14.3%	(13.1%-15.5%)
No	26.1%	(21.2%-31.0%)
Disability		
Yes	25.5%	(22.2%-28.9%)
No	13.1%	(11.8%-14.4%)
Education		
HS Graduate or Less	22.4%	(20.0%-24.8%)
Some Post-HS Education	11.0%	(9.8%-12.3%)

Figure 14: Smoking Status, CT 2013

- Current (every day) 10%
- Current (some days) 6%
- Former smoker 28%
- Never smoked 56%
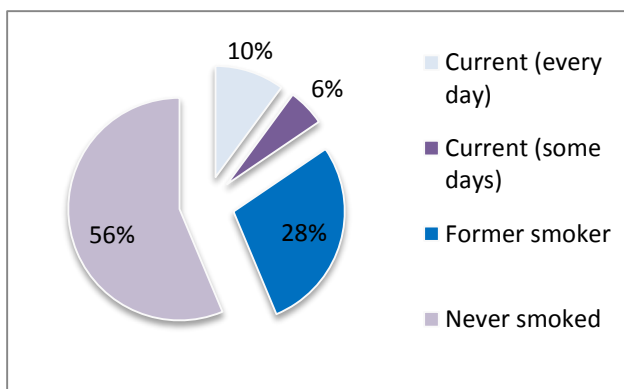
E-cigarette, Hookah and Smokeless Tobacco Use

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. The health effects of non-cigarette tobacco are often perceived as less harmful than traditional cigarettes, particularly in younger age groups.[50]

The BRFSS survey asked respondents to report their use of the following tobacco products:

- Electronic cigarettes, commonly called e-cigarettes, contain cartridges of nicotine and other chemicals. The fluid is vaporized and inhaled through a battery-powered device that resembles a traditional cigarette.

- Hookah, also known as a water pipe, delivers a small mixture of shredded tobacco (often flavored) through a mouth piece attached to a rubber hose.

- Snus was described to respondents as a moist, smokeless tobacco that is usually sold in individual or pre-packaged pouches. These are placed under the lip against the gum.

- Dissolvable tobacco products are made of powdered tobacco that has been compressed and resembles a piece of hard candy. The product dissolves entirely, and the user does not need to spit out or throw away any substance.[51]

Results by demographic sub-group are shown in **Table 23** below.

Table 23: Adult Hookah, E-Cigarette and Smokeless Tobacco Use by Demographics

Demographic Characteristics	Ever Tried E-Cigarettes		Ever Tried Smoking Hookah		Ever tried Snus	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Total	**12.0%**	**(10.7%-13.3%)**	**11.5%**	**(10.2%-12.8%)**	**6.0%**	**(5.2%-6.9%)**
Age						
18-34 years old	21.8%	(18.1%-25.6%)	28.7%	(24.6%-32.9%)	9.7%	(7.1%-12.2%)
35-54 years old	11.4%	(9.4%-13.4%)	7.6%	(6.2%-9.1%)	7.1%	(5.7%-8.4%)
55 years old or older	6.2%	(5.0%-7.4%)	3.9%	(3.0%-4.8%)	2.7%	(2.0%-3.4%)
Gender						
Male	12.8%	(10.9%-14.7%)	14.6%	(12.7%-16.5%)	11.5%	(9.8%-13.2%)
Female	11.2%	(9.4%-13.0%)	8.7%	(7.0%-10.4%)	*	*
Race/Ethnicity						
Non-Hispanic White	11.8%	(10.3%-13.3%)	11.8%	(10.3%-13.2%)	7.3%	(6.2%-8.3%)
Non-Hispanic Black	*	*	*	*	*	*
Hispanic	*	*	*	*	*	*
Income						
Less than $35,000	16.2%	(13.3%-19.2%)	10.1%	(7.9%-12.4%)	*	*
$35,000-$74,999	12.7%	(10.3%-15.1%)	12.3%	(9.7%-15.0%)	6.6%	(5.0%-8.3%)
$75,000 or more	8.3%	(6.3%-10.2%)	12.3%	(10.2%-14.5%)	7.5%	(5.8%-9.2%)
Has Healthcare Coverage						
Yes	11.2%	(9.9%-12.5%)	11.2%	(9.8%-12.5%)	5.6%	(4.7%-6.4%)
No	18.9%	(13.6%-24.1%)	*	*	*	*

Demographic Characteristics	Ever Tried E-Cigarettes		Ever Tried Smoking Hookah		Ever tried Snus	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Disability						
Yes	21.7%	(17.8%-25.5%)	9.7%	(6.9%-12.4%)	*	*
No	9.7%	(8.4%-11.0%)	11.9%	(10.5%-13.3%)	6.0%	(5.2%-7.2%)
Education						
HS Graduate or Less	15.0%	(12.6%-17.4%)	8.2%	(6.4%-10.1%)	5.5%	(4.1%-7.0%)
Some Post-HS Education	10.1%	(8.6%-11.6%)	13.6%	(11.9%-15.3%)	6.4%	(5.3%-7.4%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

- Just under one in eight Connecticut adults had tried an e-cigarette in 2013 (12%). A slightly smaller proportion had tried smoking hookah before (11.5%), while only 6% had ever tried snus.

- The likelihood of having tried e-cigarettes was highest among the youngest adults, where over one in five had tried an e-cigarette. The likelihood decreased with age, and only 6.2% of the oldest adults had tried e-cigarettes. Similarly, the likelihood of having ever tried hookah decreased with age, with the youngest adults more than seven times more likely to have tried hookah (28.7%) compared to adults over 55 (3.9%). Adults aged 55 and older were less likely to have ever tried snus (2.7%), compared to both categories of younger adults.

- Men were more likely to have tried hookah (14.6%) compared to women (8.7%).

- Adults in the highest income category were less likely to have tried e-cigarettes compared to adults in both lower-income categories.

- Uninsured adults were more likely to have tried e-cigarettes (18.9%) compared to adults with health insurance (11.2%).

- Over one in five disabled adults had tried smoking an e-cigarette in 2013 (21.7%), which was higher than non-disabled adults (9.7%).

- Adults with a high school degree or less were more likely to have smoked an e-cigarette (15%) compared to adults with higher levels of education (10.1%). The reverse was true for hookah: Adults with some post-high school education were more likely to have tried hookah (13.6%) compared to adults with a high school degree or less (8.2%).

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.[52] A person binge drinks when they drink so much within a two-hour period that their blood alcohol concentration reaches 0.08g/dL. For men, this means consuming more than 5 drinks during one occasion. For women, it is more than 4 drinks.[53] 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.[54] Heavy drinking is defined as consuming an average of more than two drinks a day for men, and more than one drink per day for women.[55]

The BRFSS questionnaire asked 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 proportion of adults who engaged in binge drinking and heavy drinking over the previous 30 days is shown in **Table 24**.

Table 24: Adult Alcohol Consumption by Demographics

Demographic Characteristics	Binge Drinking		Heavy Drinking	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	18.2%	(16.8%-19.6%)	6.3%	(5.4%-7.2%)
Age				
18-34 years old	31.4%	(27.5%-35.2%)	*	*
35-54 years old	19.0%	(16.8%-21.2%)	5.9%	(4.7%-7.2%)
55 years old or older	8.0%	(6.8%-9.2%)	4.7%	(3.8%-5.7%)
Gender				
Male	24.3%	(22.0%-26.6%)	6.1%	(4.7%-7.5%)
Female	12.5%	(10.9%-14.2%)	6.5%	(5.2%-7.7%)
Race/Ethnicity				
Non-Hispanic White	19.9%	(18.2%-21.5%)	7.4%	(6.2%-8.5%)
Non-Hispanic Black	*	*	*	*
Hispanic	16.1%	(11.8%-20.4%)	*	*
Income				
Less than $35,000	15.5%	(12.8%-18.2%)	*	*
$35,000-$74,999	17.2%	(14.7%-19.8%)	7.1%	(5.3%-8.8%)
$75,000 or more	22.2%	(19.7%-24.7%)	7.7%	(5.9%-9.5%)
Has Healthcare Coverage				
Yes	17.7%	(16.3%-19.2%)	6.4%	(5.4%-7.4%)
No	22.4%	(17.5%-27.3%)	*	*
Disability				
Yes	14.6%	(11.4%-17.7%)	*	*
No	19.1%	(17.5%-20.6%)	6.2%	(5.3%-7.4%)
Education				
HS Graduate or Less	17.8%	(15.3%-20.3%)	5.4%	(3.9%-6.9%)
Some Post-HS Education	18.3%	(16.7%-20.0%)	6.9%	(5.7%-8.1%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

- In 2013, 18.2% of Connecticut adults had participated in binge drinking in the past 30 days, while 6.3% could be categorized as heavy drinkers based on their behavior in the previous 30 days.

- Binge drinking behavior was associated with age for all categories, with younger adults binge drinking at rates nearly four times higher than adults aged 55 years old or older (31.4% versus 8%).

- Men were twice as likely to engage in binge drinking (24.3%) compared to women (12.5%). On the other hand, men and women engaged in heavy drinking at similar levels.

- Adults in the highest income category were more likely to binge drink (22.2%), compared to adults in both lower-income categories. High- and mid-level income adults engaged in heavy drinking at the same levels.

- Disabled adults were less likely to binge drink (14.6%) compared to non-disabled adults (19.1%).

- As shown in **Figure 15** below, 38% of adult had no drinks in the prior 30 days, 43% did not engage in either binge drinking or heavy drinking, 14% engaged in at least one of this behaviors, and 5% engaged in both heavy drinking and binge drinking.

Figure 15: Alcohol Risk Behaviors, CT 2013
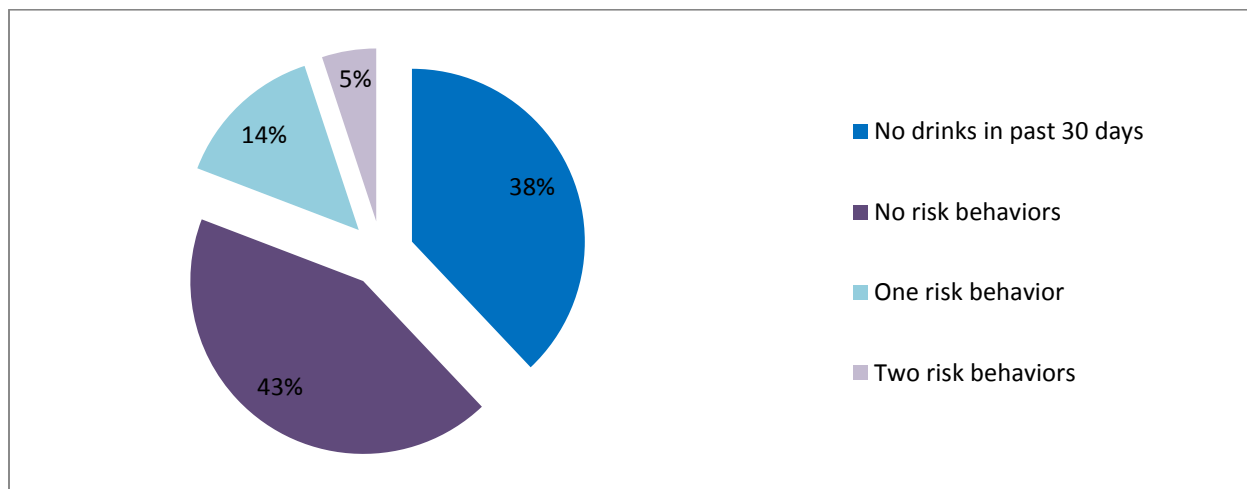
Motor Vehicle Safety

Seatbelt use is currently the most effective way to reduce the number of injuries and deaths in motor vehicle crashes.[56] BRFSS respondents were asked how often they wore seatbelts when they drove or rode in a car. The proportion of adults who said they always wore a seatbelt is shown in **Table 25** below. *Note: Adults who said they wore it "nearly always" are not included.*

- Just under 90% of Connecticut adults always wore a seatbelt (89.1%). As shown in **Figure 16** below, 6% wore it "nearly always."
- Younger adults aged 18-34 were less likely to wear a seatbelt when in a motor vehicle (84.9%) compared to both categories of older adults.
- Women were more likely than men to always wear seatbelt (91.6% versus 86.5%).
- Non-Hispanic Whites were more likely to wear seatbelts (90.2%), compared to Hispanics (83%).
- Seatbelt use rose with income. While 91.5% of adults in the wealthiest households always wore seatbelts, 85.1% of adults in the lowest income category always did.
- Adults with health coverage were more likely to always wear seatbelts, compared to uninsured adults (90% versus 81.4%).
- Disabled adults were less likely to wear seatbelts anytime they were in a car (84%) compared to non-disabled adults (90.3%).
- Adults with some post-high school education were more likely to always wear seatbelts (91.2%), compared to adults with a high school degree or less (85.8%).

Table 25: Adult Seat Belt Use by Demographics

Demographic Characteristics	Always Uses a Seatbelt	
	%	**95% Confidence Interval**
Total	**89.1%**	**(88.0%-90.3%)**
Age		
18-34 years old	84.9%	(81.9%-88.0%)
35-54 years old	90.0%	(88.3%-91.7%)
55 years old or older	91.2%	(89.9%-92.6%)
Gender		
Male	86.5%	(84.7%-88.2%)
Female	91.6%	(90.1%-93.1%)
Race/Ethnicity		
Non-Hispanic White	90.2%	(89.1%-91.4%)
Non-Hispanic Black	88.0%	(84.2%-91.8%)
Hispanic	83.0%	(77.9%-88.2%)
Income		
Less than $35,000	85.1%	(82.3%-87.8%)
$35,000-$74,999	88.8%	(86.5%-91.0%)
$75,000 or more	91.5%	(90.0%-93.1%)
Has Healthcare Coverage		
Yes	90.0%	(88.8%-91.1%)
No	81.4%	(76.7%-86.1%)
Disability		
Yes	84.0%	(84.3%-89.5%)
No	90.3%	(88.5%-91.0%)
Education		
HS Graduate or Less	85.8%	(83.5%-88.1%)
Some Post-HS Education	91.2%	(90.1%-92.4%)

Figure 16: Frequency of Seatbelt Use, CT 2013
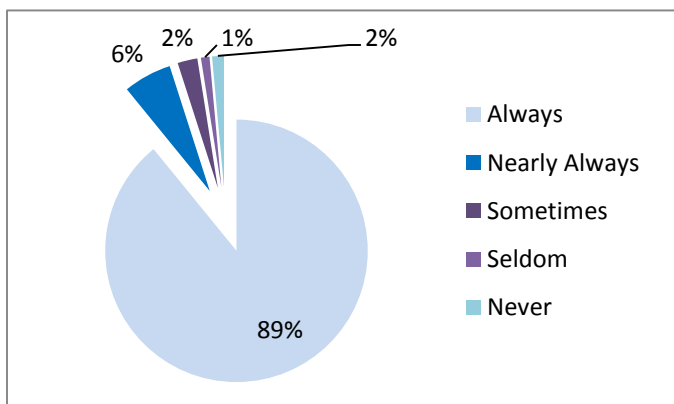
Mold in the Home

The presence of mold in the home puts adults and children at risk for breathing problems, especially individuals who are allergic to mold or have a chronic lung disease or asthma.[57] Mold needs moisture to thrive and therefore can become a problem where there is flooding, backed-up sewers, leaky roofs or anything that increases indoor dampness.[58] CT DPH does not recommend air testing for mold because there is no scientific evidence supporting the measurement of indoor microbiological factors to guide health protective actions.[55]

BRFSS respondents were asked if they had ever had the air in their homes tested for mold. Results by demographics are shown in **Table 26** below.

- In 2013, 18.3% of Connecticut adults had the air in their home tested for mold, with similar results across age and income categories.

- Men were more likely to have had their home tested for mold (20%) compared to women (16.8%).

- Non-Hispanic Blacks were more likely to test their homes for mold (25.7%) than non-Hispanic Whites (17.2%).

Table 26: Adults Who Tested Home for Mold by Demographics

Demographic Characteristics	Ever Had Air in Home Tested for Mold	
	%	95% Confidence Interval
Total	18.3%	(16.8%-19.8%)
Age		
18-34 years old	21.0%	(17.0%-25.0%)
35-54 years old	18.7%	(16.3%-21.1%)
55 years old or older	16.2%	(14.5%-17.9%)
Gender		
Male	20.0%	(17.6%-22.3%)
Female	16.8%	(15.0%-18.7%)
Race/Ethnicity		
Non-Hispanic White	17.2%	(15.6%-18.8%)
Non-Hispanic Black	25.7%	(19.6%-31.7%)
Hispanic	19.3%	(13.9%-24.7%)
Income		
Less than $35,000	16.7%	(13.9%-19.5%)
$35,000-$74,999	17.1%	(14.4%-19.8%)
$75,000 or more	19.6%	(17.2%-22.0%)
Has Healthcare Coverage		
Yes	18.3%	(16.8%-19.8%)
No	*	*
Disability		
Yes	17.4%	(15.3%-22.0%)
No	18.6%	(16.6%-19.9%)
Education		
HS Graduate or Less	17.7%	(15.0%-20.4%)
Some Post-HS Education	18.7%	(17.0%-20.3%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

3. CLINICAL PREVENTIVE PRACTICES

Routine Check-up in Past Year

The CDC stresses the importance of routine check-ups for disease prevention and screening.[59] BRFSS respondents were asked how long it had been since they last visited a doctor for a routine check-up. The proportion of adults who had a check-up in the previous year is shown in **Table 27** below.

- Just over 70% of Connecticut adults had a check-up in the previous year (71.8%), with no differences across income or education backgrounds. As shown in **Figure 17**, 15% of adults had a check-up at least one year before the survey but less than two years prior.

- The likelihood of having had a routine check-up in the past year increased with age.

- Women were more likely to have seen a medical professional for a routine check-up (74%) compared to men (69.4%).

- Uninsured adults were 1.5 times less likely to have had a check-up (49.5%) compared to adults with health coverage (74.2%).

- Disabled adults were more likely to have had a check-up (75.6%), compared to non-disabled adults (71.1%).

Table 27: Adults Who Had Routine Check-up by Demographics

Demographic Characteristics	Routine Checkup in Past Year	
	%	95% Confidence Interval
Total	71.8%	(70.2%-73.4%)
Age		
18-34 years old	60.4%	(56.4%-64.3%)
35-54 years old	69.4%	(66.9%-71.8%)
55 years old or older	82.6%	(80.9%-84.3%)
Gender		
Male	69.4%	(67.1%-71.8%)
Female	74.0%	(71.9%-76.1%)
Race/Ethnicity		
Non-Hispanic White	71.9%	(70.2%-73.7%)
Non-Hispanic Black	74.0%	(68.5%-79.6%)
Hispanic	66.6%	(61.1%-72.0%)
Income		
Less than $35,000	70.8%	(67.6%-74.0%)
$35,000-$74,999	73.2%	(70.3%-76.2%)
$75,000 or more	71.7%	(69.1%-74.2%)
Has Healthcare Coverage		
Yes	74.2%	(72.6%-75.9%)
No	49.5%	(43.7%-55.2%)
Disability		
Yes	75.6%	(71.9%-79.4%)
No	71.1%	(69.3%-72.8%)
Education		
HS Graduate or Less	72.0%	(69.1%-74.8%)
Some Post-HS Education	71.7%	(69.9%-73.5%)

Figure 17: Time since Last Check-up, CT 2013

- Less than 1 year — 72%
- 1-2 years — 15%
- 2-5 years — 7%
- 5 + years ago — 5%
- Never — 1%
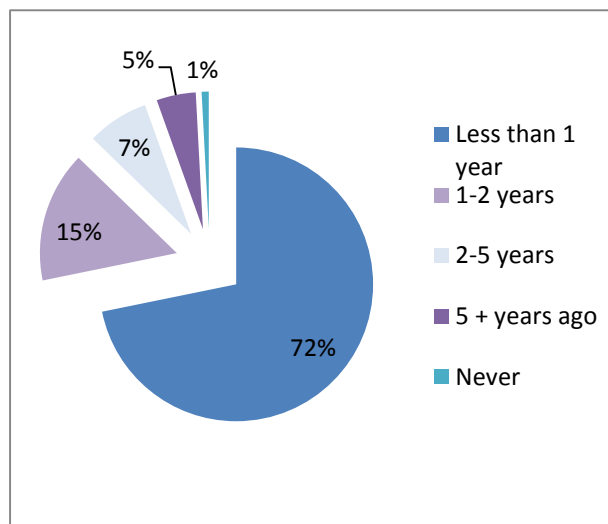
Cholesterol Screening

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, the leading causes of death among Americans.[60] Blood testing is the only way to determine how much cholesterol is in the body.[61] Patients are encouraged to talk to their primary care provider about cholesterol testing.

The 2013 BRFSS asked respondents if they had ever had their cholesterol checked, and if their cholesterol was checked in the past five years (**Table 28**).

Table 28: Adults Who Had Blood Cholesterol Test by Demographics

Demographic Characteristics	Ever Had Blood Cholesterol Checked		Checked Blood Cholesterol in Past Five Years	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**85.9%**	**(84.6%-87.3%)**	**83.1%**	**(81.6%-84.5%)**
Age				
18-34 years old	61.4%	(57.4%-65.5%)	57.1%	(53.0%-61.3%)
35-54 years old	91.7%	(90.1%-93.3%)	88.8%	(87.0%-90.5%)
55 years old or older	97.6%	(97.0%-98.2%)	95.7%	(94.8%-96.5%)
Gender				
Male	85.2%	(83.1%-87.2%)	82.0%	(79.8%-84.2%)
Female	86.7%	(84.8%-88.6%)	84.0%	(82.1%-86.0%)
Race/Ethnicity				
Non-Hispanic White	89.2%	(87.7%-90.7%)	86.2%	(84.6%-87.8%)
Non-Hispanic Black	83.4%	(78.6%-88.2%)	82.2%	(77.3%-87.1%)
Hispanic	72.0%	(66.7%-77.2%)	68.8%	(63.4%-74.2%)
Income				
Less than $35,000	78.6%	(75.5%-81.7%)	75.7%	(72.5%-78.8%)
$35,000-$74,999	89.5%	(87.2%-91.9%)	87.2%	(84.8%-89.7%)
$75,000 or more	91.9%	(89.9%-93.8%)	88.7%	(86.4%-90.9%)
Has Healthcare Coverage				
Yes	87.7%	(86.3%-89.2%)	85.3%	(83.8%-86.8%)
No	69.1%	(63.9%-74.4%)	61.9%	(56.4%-67.4%)
Disability				
Yes	86.6%	(83.5%-89.6%)	83.7%	(80.4%-87.0%)
No	85.8%	(84.2%-87.4%)	83.1%	(81.4%-84.7%)
Education				
HS Graduate or Less	82.2%	(79.6%-84.8%)	78.9%	(76.2%-81.7%)
Some Post-HS Education	88.4%	(86.9%-90.0%)	85.8%	(84.1%-87.4%)

- In 2013, 85.9% of Connecticut adults had ever had their blood cholesterol checked, with no differences based on gender or disability status. A slightly smaller proportion, 83.1%, had their blood cholesterol checked in the past five years, with no difference based on gender or disability status.

- The proportion of adults who reported ever having a blood cholesterol test increased with age, as did the proportion of adults who were tested in the previous five years. Less than two-thirds of adults aged 18 to 34 had ever had their blood cholesterol tested (61.4%), whereas over 90% of adults aged 35 years old and older had been tested. Similarly, 57.1% of adults aged 18-34 had their blood cholesterol tested in the previous five years, while 95.7% of older adults did.

- Non-Hispanic Whites were more likely than adults from other racial/ethnic groups to have ever had their blood cholesterol checked. Hispanics were less likely than adults of other races to have ever had their blood cholesterol checked, or to have been tested in the previous five years.

- Adults in the lowest income bracket were less likely than those in both the middle- and upper-income categories to have ever had their blood cholesterol checked, or to have been tested in the previous five years.

- Adults with healthcare coverage were more likely to ever have ever had their blood cholesterol checked, or to have been tested in the prior five years, compared to adults without healthcare coverage.

- Adults with no more than a high school degree were less likely to have their blood cholesterol tested (82.2%) compared to adults with higher levels of education (88.4%). The same relationship can be observed for adults who had their blood checked in the previous five year (85.8% of adults with some post-high school education had been tested, compared to 78.9% of adults with a high school degree or less).

Child Oral Health

 Although it is largely preventable, tooth decay is the most common chronic disease among children in the United States.[62] Dental caries (cavities) can cause pain and infection, and if left untreated they can lead to malnourishment and serious medical complications.[63] Dental disease has also been linked with other chronic conditions, such as diabetes, heart disease and stroke.[64] 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.[65]

Adult respondents were asked if the randomly-selected child had seen a dental provider in the previous year. Results by demographics are shown in **Table 29** below.

Table 29: Child Visited Dentist in Past Year by Demographics

Demographic Characteristics	Child Visited Dentist in Past Year		Child Has Dental Sealants	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**85.6%**	**(83.3%-87.9%)**	**43.5%**	**(40.1%-46.8%)**
Age				
0-4 years old	55.5%	(48.7%-62.4%)	*	*
5-11 years old	95.5%	(93.3%-97.7%)	49.9%	(43.8%-55.9%)
12-17 years old	93.0%	(90.2%-95.8%)	62.2%	(56.9%-67.5%)
Gender				
Male	83.6%	(80.3%-86.9%)	41.2%	(36.7%-45.7%)
Female	88.0%	(84.9%-91.2%)	45.3%	(40.3%-50.2%)
Race/Ethnicity				
Non-Hispanic White	88.0%	(85.5%-90.5%)	44.9%	(40.9%-48.8%)
Non-Hispanic Black	83.2%	(75.9%-90.6%)	42.4%	(31.7%-53.1%)
Hispanic	85.8%	(80.4%-91.2%)	39.9%	(31.5%-48.3%)
Proxy's Income				
Less than $35,000	84.6%	(80.0%-89.1%)	39.8%	(32.3%-47.2%)
$35,000-$74,999	83.7%	(78.0%-89.5%)	40.6%	(33.1%-48.1%)
$75,000 or more	88.5%	(85.6%-91.3%)	44.7%	(40.0%-49.4%)
Proxy Has Healthcare Coverage				
Yes	87.2%	(85.0%-89.4%)	44.7%	(41.2%-48.2%)
No	72.7%	(62.4%-82.9%)	*	*
Proxy Has Disability				
Yes	87.4%	(82.0%-92.7%)	42.7%	(33.2%-52.2%)
No	85.4%	(82.9%-87.9%)	43.7%	(40.1%-47.3%)
Proxy's Education				
HS Graduate or Less	87.9%	(84.1%-91.8%)	39.0%	(32.5%-45.5%)
Some Post-HS Education	85.0%	(82.2%-87.7%)	45.2%	(41.3%-49.1%)

The race, age and gender variables refer to the child, while the other data points refer to the adult proxy.

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

- In 2013, 85.6% of CT children had visited a dentist in the previous 12 months, and just under half of children (43.5%) had received dental sealants on their permanent teeth.

- Just over half of children aged 0 to 4 had seen a dentist (55.5%), which was lower than the proportions of children aged 5-11 and 12-17.

- The only difference related to dental sealants was based on age: while half of children aged 5-11 had dental sealants (49.9%), 62.2% of children aged 12-17 had them.

- Children who lived with an uninsured adult proxy were less likely to have seen a dentist in the previous year (72.7%) compared to children living with adult proxies with health coverage (87.2%).

Adult Flu and Pneumonia 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 old.[66] BRFSS respondents were asked if they had received the seasonal flu vaccines, either as a shot or nasal spray mist.

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, but can often be prevented by administering a pneumonia vaccine.[67] BRFSS respondents were asked if they had ever received the pneumonia vaccine, which is given once or twice in a person's lifetime: generally to children under five years old and to adults at high risk for disease.[68]

Results for both vaccines are shown in **Table 30** below.

Table 30: Adult Flu and Pneumonia Vaccinations by Demographics

Demographic Characteristics	Had a Flu Shot in Past Year		Ever Had a Pneumonia Shot	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	40.3%	(38.6%-41.9%)	30.1%	(28.5%-31.7%)
Age				
18-34 years old	25.8%	(21.9%-29.7%)	19.6%	(15.6%-23.6%)
35-54 years old	34.6%	(32.0%-37.3%)	14.8%	(12.6%-16.9%)
55 years old and older	55.5%	(53.3%-57.7%)	49.1%	(46.8%-51.4%)
Gender				
Male	35.5%	(33.1%-37.8%)	28.9%	(26.4%-31.3%)
Female	44.7%	(42.4%-46.9%)	31.2%	(29.0%-33.3%)
Race/Ethnicity				
Non-Hispanic White	43.5%	(41.6%-45.3%)	31.4%	(29.7%-33.2%)
Non-Hispanic Black	32.2%	(26.7%-37.8%)	30.0%	(24.0%-36.0%)
Hispanic	31.6%	(25.9%-37.3%)	23.9%	(18.1%-29.7%)
Income				
Less than $35,000	34.9%	(31.6%-38.2%)	36.5%	(32.9%-40.0%)
$35,000-$74,999	40.5%	(37.2%-43.8%)	31.8%	(28.6%-35.0%)
$75,000 or more	43.6%	(40.9%-46.4%)	22.8%	(20.4%-25.3%)
Has Healthcare Coverage				
Yes	42.4%	(40.6%-44.1%)	31.4%	(29.7%-33.1%)
No	21.2%	(16.3%-26.2%)	18.4%	(13.6%-23.2%)
Disability				
Yes	40.9%	(37.2%-44.7%)	47.0%	(42.8%-51.1%)
No	40.0%	(38.1%-41.8%)	26.1%	(24.4%-27.8%)
Education				
HS Graduate or Less	36.8%	(33.9%-39.7%)	32.7%	(29.7%-35.7%)
Some Post-HS Education	42.4%	(40.5%-44.4%)	28.3%	(26.5%-30.1%)

- In 2013, 40.3% of Connecticut adults had received a flu shot in the previous year, while just under one-third had ever had a pneumonia vaccine (30.1%).

- The likelihood of getting a flu shot or a pneumonia shot both increased with age. Adults over 55 years old were most likely to have received a flu vaccination (55.5%) and adults between the ages of 18 and 34 were least likely to have gotten a flu vaccination (25.8%). Slightly more than one-third (34.6%) of adults aged 34-54 had received a flu shot in the past year. Pneumonia vaccination rates were also highest among older adults, aged over 55 (49.1%).

- Women were more likely to have received a flu shot (44.7%) compared to men (35.5%), but there were no gender differences related to pneumonia vaccines.

- Non-Hispanic Whites were more likely to have received a flu shot (43.5%) than any other racial/ethnic group. Hispanics were less likely to have ever received the pneumonia shot (23.9%) compared to non-Hispanic Whites (31.4%).

- Adults in the lowest income category were less likely (34.9%) than adults in either of the two upper-income categories to have received a flu vaccine. Adults in the highest income category were less likely to have received the pneumonia shot (22.8%) compared to adults in either lower-income category.

- Insured adults were twice as likely to have received a flu shot (42.4%) compared to adults without healthcare coverage (21.2%). Uninsured adults were less likely to have gotten the pneumonia shot (18.4%) compared to adults with health coverage (31.4%).

- Nearly half of disabled adults had received the pneumonia shot in the prior 12 months (47%); they were more likely to get the vaccine compared to non-disabled adults (26.1%).

- Adults with a high school degree or less were less likely to have received a flu vaccine (36.8%) than adults with some post-high school education (42.4%). At the same time, adults with a high school degree or less were more likely to have received a pneumonia shot compared to adults with higher levels of education (32.7% versus 28.3%).

- **Figure 18** below shows the locations where adults received flu shots. The most common location was a doctor's office or HMO (40.4%), followed by worlplace/school (22.2%)

Figure 18: Location of Flu Shot, Connecticut, 2013

	Doctor's Office/HMO	Workplace/School	Supermarket/ Drug Store	Other	Hospital/ER	Health Dept./Clinic/Community Center
■ Series1	40.4%	22.2%	6.3%	4.2%	1.6%	1.2%
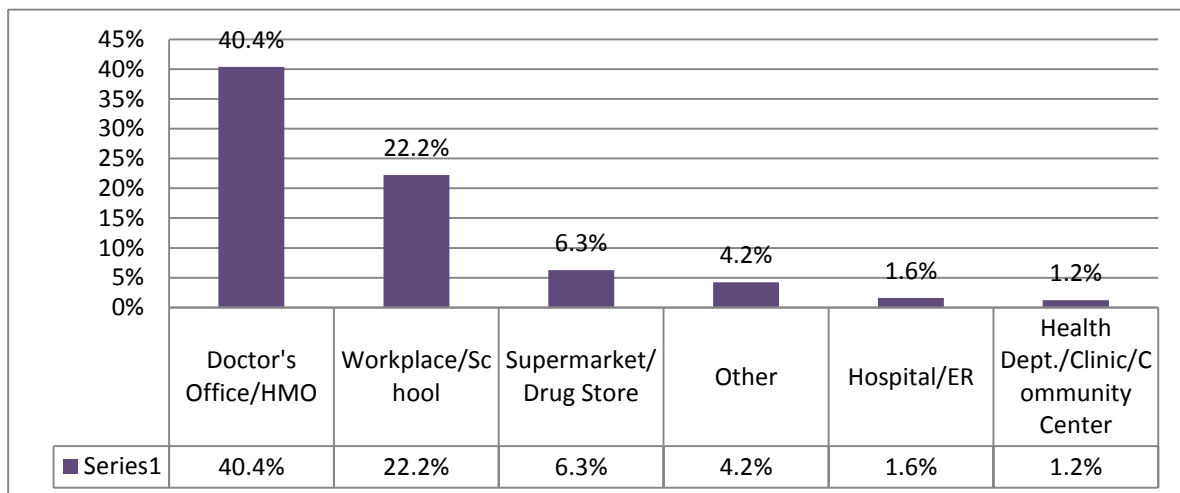
Adult Tdap Vaccination

The Adult Tdap vaccination immunizes against tetanus, diphtheria, and pertussis, three bacterial diseases. Tetanus enters the body through cuts and scratches that have come into contact with the bacteria, usually through dirt or soil. Diphtheria and pertussis are spread aerially and can spread between humans through coughing and sneezing.[69] Vaccines have been instrumental in decreasing the incidence of these diseases.[70]

In 2005, the Advisory Committee on Immunization Practices recommended the use of a new vaccine, Tdap, that immunized against all three diseases, rather than just tetanus and diphtheria (Td). They also recommended that adults between the ages of 19-64 receive one shot of Tdap instead of a booster dose of Td.[71] The 2013 BRFSS asked respondents whether they had received a Tdap vaccination since 2005. Results are shown in **Table 31**.

- In 2013, 18.2% had received the Tdap vaccine. As shown in **Figure 19** below, 30% of respondent have not received a tetanus shot since 2005.

- The likelihood of having received the Tdap decreased with age. Younger adults aged 18-34 were twice as likely to have received the Tdap (27.3%) compared to adults aged 55 and older (13.6%).

- Adults living in the highest income households were more likely to have received the Tdap (21.4%) compared to adults in both lower-income categories.

- Disabled adults were less likely to have had a Tdap shot since 2005 (14%) compared to non-disabled adults (19.3%).

- Adults with some post-high school education were more likely to receive the Tdap compared to adults with a high school degree or less (20.9% versus 14.3%).

Table 31: Adult Tdap Vaccination by Demographics

Demographic Characteristics	Ever had TDAP	
	%	95% Confidence Interval
Total	18.2%	(16.8%-19.7%)
Age		
18-34 years old	27.3%	(23.2%-31.5%)
35-54 years old	16.5%	(14.4%-18.6%)
55 years old and older	13.6%	(12.0%-15.2%)
Gender		
Male	17.2%	(15.0%-19.3%)
Female	19.2%	(17.2%-21.2%)
Race/Ethnicity		
Non-Hispanic White	18.1%	(16.5%-19.6%)
Non-Hispanic Black	17.0%	(12.3%-21.8%)
Hispanic	20.7%	(14.7%-26.7%)
Income		
Less than $35,000	17.3%	(14.0%-20.6%)
$35,000-$74,999	16.5%	(13.8%-19.1%)
$75,000 or more	21.4%	(19.0%-23.9%)
Has Healthcare Coverage		
Yes	18.5%	(16.9%-20.0%)
No	*	*
Disability		
Yes	14.0%	(10.7%-17.2%)
No	19.3%	(17.6%-20.9%)
Education		
HS Graduate or Less	14.3%	(11.7%-16.8%)
Some Post-HS Education	20.9%	(19.1%-22.7%)

Figure 19: Tdap and Tetanus Vaccinations, CT 2013

Legend:
- Tdap — 18%
- Tetanus shot, not Tdap — 8%
- Tetanus shot, not sure what type — 30%
- No tetanus since 2005 — 44%
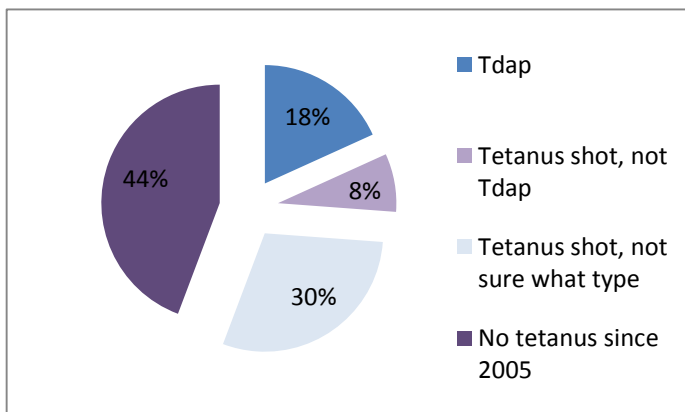
Human Papilloma Virus (HPV) Vaccination

Human Papilloma Virus (HPV) is the most common sexually transmitted infection. The virus is extremely common, and in most cases, it goes away on its own without symptoms. However, infection with certain strains of the virus can lead to genital warts or cervical cancer.[72] The CDC recommends that preteen girls and boys get the three-dose HPV vaccine series to protect against genital warts, rare cancers that can affect both sexes and cervical cancers that can affect females.[73] Respondents aged 18–49 years were asked if they had ever had an HPV vaccination. The Advisory Committee on Immunization Practices recommends routine vaccination for males and females ages 11–12 years; vaccination is also recommended for unvaccinated females 13–26 years and males 13–21 years with certain groups of males recommended to be vaccinated up to age 26.[74] Results by demographics are shown in **Table 32**. Please note that age and sex restrictions on the vaccine explain why data for older adults, and males, are not reportable.

- About one in seven Connecticut adults had been vaccinated to prevent HPV infection (14.5%). Results were not reportable for many demographic sub-groups, including men. Just over one in five women received an HPV vaccination (21.9%). As shown in **Figure 20** below, two thirds of vaccine recipients got three shots.
- Over one in four young adults aged 18-34 years received an HPV vaccination (26.7%).

Figure 20: Number of HPV Shots, CT 2013

Table 32: Adult HPV Vaccination by Demographics

Demographic Characteristics	Ever Had HPV vaccination?	
	%	95% Confidence Interval
Total	14.5%	(12.0%-17.0%)
Age		
18-34 years old	26.7%	(22.2%-31.2%)
35-54 years old	*	*
55 years old or older	*	*
Gender		
Male	*	*
Female	21.9%	(18.0%-25.9%)
Race/Ethnicity		
Non-Hispanic White	14.6%	(11.4%-17.8%)
Non-Hispanic Black	*	*
Hispanic	*	*
Income		
Less than $35,000	*	*
$35,000-$74,999	*	*
$75,000 or more	*	*
Has Healthcare Coverage		
Yes	15.2%	(12.4%-17.9%)
No	*	*
Disability		
Yes	*	*
No	13.5%	(10.8%-16.2%)
Education		
HS Graduate or Less	*	*
Some Post-HS Education	14.9%	(11.7%-18.0%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

Human Immunodeficiency Virus (HIV) Testing

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 are over-represented in new HIV infections, as are Hispanics.[75] Individuals can be tested for the virus by testing blood or oral fluid.

BRFSS respondents were asked if they had ever been tested for HIV, not counting testing while giving blood. Results by demographic sub-group are shown in **Table 33**.

- In 2013, 35.8% of BRFSS respondents had been tested for HIV/AIDS, with no differences between males and females, people with disabilities and those without, and those with only a high school degree and those with higher levels of education.

- The oldest age group was less likely to have been tested for HIV than those in the younger age groups. Only 15.9% of people over 55 had been tested while about half of 18-34 year olds and 35-54 years olds had been tested.

- Non-Hispanic Whites were less likely to have been tested (29.6%) than Non-Hispanic Blacks and Hispanics (57.3% and 56.4%, respectively).

- In 2013, 42.9% of those in the lowest income bracket had been tested for HIV/AIDS. Fewer adults had been tested in both higher-income brackets, with 32.6% of people making between $35,000 and $74,999 being tested and 35.6% of those making more than $75,000 being tested.

- Those without health insurance were more likely to have been tested for HIV (47.9%) than those with health insurance (34.5%).

Table 33: Adult Tested for HIV by Demographics

Demographic Characteristics	Ever tested for HIV	
	%	95% Confidence Interval
Total	**35.8%**	**(34.1%-37.5%)**
Age		
18-34 years old	50.3%	(45.9%-54.6%)
35-54 years old	46.4%	(43.6%-49.3%)
55 years old and older	15.9%	(14.2%-17.5%)
Gender		
Male	34.1%	(31.7%-36.6%)
Female	37.3%	(35.0%-39.6%)
Race/Ethnicity		
Non-Hispanic White	29.6%	(27.9%-31.4%)
Non-Hispanic Black	57.3%	(51.0%-63.6%)
Hispanic	56.4%	(50.4%-62.5%)
Income		
Less than $35,000	42.9%	(39.3%-46.5%)
$35,000-$74,999	32.6%	(29.3%-35.8%)
$75,000 or more	35.6%	(32.9%-38.4%)
Has Healthcare Coverage		
Yes	34.5%	(32.7%-36.2%)
No	47.9%	(41.6%-54.2%)
Disability		
Yes	38.8%	(34.8%-42.9%)
No	35.1%	(33.3%-37.0%)
Education		
HS Graduate or Less	34.4%	(31.3%-37.4%)
Some Post-HS Education	36.6%	(34.7%-38.6%)

Hepatitis C Testing

The Hepatitis C virus (HCV) is the most common blood borne pathogen in the US and is spread through direct (blood-to-blood) contact with infected blood. The Center for Disease Control and Prevention (CDC) estimates that about 3.2 million (1.6%) Americans are infected with HCV, yet 40-60% are unaware that they are infected. CDC data also indicates that "baby boomers" (birth cohort 1945-65) are five times more likely to be infected than the other age groups, and that 60% of new HCV infections occur in people who inject drugs (PWID) due to needles and/or drug paraphilia sharing practices. In Connecticut, various estimates indicate that there are approximately 80,000 people with past or present chronic HCV.

Most people who are infected with HCV do not have symptoms; thus it can be difficult to identify people with acute or chronic HCV infection. HCV can silently progress over time to cirrhosis, and is the leading cause of primary liver cancer and liver transplantations. Knowing one's HCV status is important to prevent liver damage and to be evaluated for treatment. New treatment options (2014) offer cure rates nearing 100% in as little as 8 to 24 weeks. It is important to know that unlike hepatitis A and hepatitis B, there is no vaccine for HCV. Also unlike hepatitis A and B, HCV antibodies do not provide immunity. This means that even after being cured, you can get re-infected with HCV. Therefore, education, risk avoidance, harm reduction, life style practices, testing, early identification, surveillance, and linkage to care and treatment are key public health interventions.

Since 1998, CDC has recommended HCV risk factor testing. In addition CDC (2012) and the United States Preventative Services Task Force (2013) added to the testing recommendations that all baby boomers have at least a one-time HCV test. HCV tests require a blood specimen obtained either through phlebotomy or a finger stick depending on the type of test. The point-of-care rapid HCV antibody finger stick test (2010) can detect the presence of HCV antibodies within 20-40 minutes. Positive HCV antibody tests results need to be confirmed with additional tests (e.g., PCR test) to determine if current infection is present. All persons who are currently infected with HCV should discuss the findings with their primary care provider who will conduct follow-up liver assessments and make appropriate referrals to a HCV specialist.

BRFSS respondents were asked whether they had ever been tested for HCV and whether the test was a rapid test. Results are shown by demographic subgroup in **Table 34**. Please note: The denominator analyzed in the table is the total number of adults who know whether the test was rapid. As a result, 14.5% of the population was excluded from the denominator beause they did not know whether the test they received was a rapid test.

Table 34: Adult Tested for Hepatitis C by Demographics

Demographic Characteristics	Ever Had Hepatitis C test		Was Test a Rapid Test	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	25.4%	(23.8%-27.1%)	23.5%	(19.7%-27.4%)
Age				
18-34 years old	36.1%	(31.6%-40.6%)	28.8%	(20.6%-37.0%)
35-54 years old	27.6%	(25.0%-30.3%)	19.5%	(14.8%-24.1%)
55 years old or older	16.7%	(14.9%-18.5%)	22.1%	(16.4%-27.9%)

	Ever Had Hepatitis C test		Was Test a Rapid Test	
Demographic Characteristics	**%**	**95% Confidence Interval**	**%**	**95% Confidence Interval**
Gender				
Male	25.8%	(23.4%-28.3%)	23.5%	(18.0%-29.0%)
Female	25.1%	(22.9%-27.3%)	23.6%	(18.2%-29.0%)
Race/Ethnicity				
Non-Hispanic White	21.2%	(19.5%-22.9%)	20.0%	(15.8%-24.3%)
Non-Hispanic Black	39.8%	(33.3%-46.4%)	*	*
Hispanic	38.4%	(32.1%-44.8%)	*	*
Income				
Less than $35,000	31.2%	(27.5%-34.8%)	30.4%	(22.7%-38.1%)
$35,000-$74,999	25.5%	(22.2%-28.9%)	30.4%	(22.3%-38.6%)
$75,000 or more	23.0%	(20.5%-25.4%)	*	*
Has Healthcare Coverage				
Yes	24.7%	(23.0%-26.4%)	24.5%	(20.3%-28.8%)
No	31.6%	(25.8%-37.3%)	*	*
Disability				
Yes	32.9%	(28.7%-37.1%)	*	*
No	23.7%	(21.9%-25.4%)	21.0%	(17.0%-24.9%)
Education				
HS Graduate or Less	25.9%	(23.0%-28.8%)	27.3%	(20.5%-34.0%)
Some Post-HS Education	25.0%	(23.1%-27.0%)	20.5%	(16.1%-25.0%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

- Approximately one-quarter of Connecticut adults had been tested for Hepatitis C (25.4%), with no differences between males and females or differing education levels. Of those who received a Hepatitis C test, almost one-quarter (23.5%) were given a rapid test.

- HCV testing rates were highest among adults aged 18-34 (36.1%) and decreased with age, with slightly more than a quarter (27.6%) of 35-54 year olds being tested and only 16.7% of people aged 55 and older being tested for HCV.

- Non-Hispanic Blacks and Hispanics were more likely to be tested (39.8% and 38.4%, respectively) than Non-Hispanic Whites (21.2%).

- Adults in the lowest income households were more likely to be tested (31.2%) than those in the highest income brackets. Approximately one-quarter of adults making between $35,000 and $74,999 (25.5%) had been tested for HCV, while slightly less (23.0%) of those in the highest income bracket had been tested.

- Adults without health insurance were more likely to be tested (31.6%) than adults with health insurance (24.7%), just as adults with a disability were more likely to be tested (32.9%) than adults without a disability (23.7%).

4. 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.[76] African-Americans have a disproportionately higher rate of hospitalization and death due to asthma compared to Whites.[77] Overall, in the past decade, rates of asthma among both adults and child have been increasing.[78] BRFSS respondents were asked if a doctor or health professional had ever told them they had asthma, and whether they still had asthma. The proportion of adults who currently have asthma is shown in **Table 35** below.

- One in ten Connecticut adults reported having asthma in 2013 (9.8%). There were no differences in asthma rates between adults of different educational backgrounds. Additionally 6% of adults were former asthma sufferers, as shown in **Figure 21** below.

- Women were more likely than men to have asthma (12.4% versus to 7%).

- Asthma rates for adults of some racial/ethnic backgrounds could not be reported, but rates of non-Hispanic Whites were on par with the overall rate (9.7%).

- Adults in the lowest income category were more likely to have asthma compared to either higher-income category.

- Adults with disabilities were two-and-a-half times more as likely to have asthma (18.5%), compared to non-disabled adults (7.7%).

Table 35: Adults Currently Have Asthma by Demographics

Demographic Characteristics	%	95% Confidence Interval
Total	**9.8%**	**(8.8%-10.8%)**
Age		
18-34 years old	10.4%	(8.0%-12.7%)
35-54 years old	10.5%	(8.9%-12.1%)
55 years old or older	8.9%	(7.6%-10.1%)
Gender		
Male	7.0%	(5.8%-8.3%)
Female	12.4%	(10.9%-13.8%)
Race/Ethnicity		
Non-Hispanic White	9.7%	(8.6%-10.8%)
Non-Hispanic Black	*	*
Hispanic	*	*
Income		
Less than $35,000	11.0%	(9.1%-12.8%)
$35,000-$74,999	8.2%	(6.5%-9.9%)
$75,000 or more	8.3%	(6.9%-9.6%)
Has Healthcare Coverage		
Yes	10.1%	(9.0%-11.1%)
No	*	*
Disability		
Yes	18.5%	(15.6%-21.5%)
No	7.7%	(6.8%-8.7%)
Education		
HS Graduate or Less	10.6%	(8.9%-12.4%)
Some Post-HS Education	9.3%	(8.2%-10.4%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

Figure 21: Adult Asthma Status, CT 2013
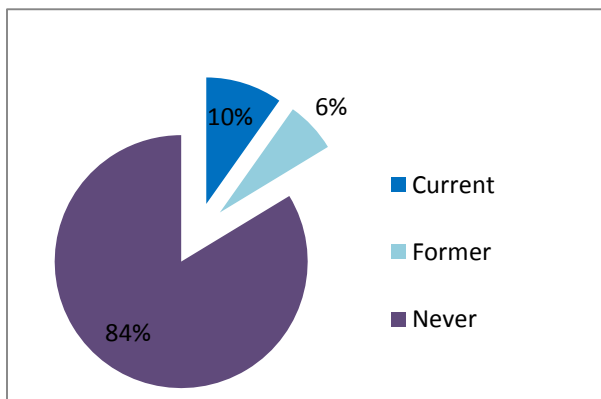
Current: 10%, Former: 6%, Never: 84%

Asthma in Children

While asthma can affect people of all ages, it usually starts during childhood. Of the 25 million Americans who suffer from asthma, seven million of these are children.[79] Asthma is one of the most common chronic diseases facing children and is the third most common reason for hospitalization of children under the age of 15.[80] Respondents were asked if the randomly-selected child in the household had ever been diagnosed with asthma and if the child still had asthma. Results for children aged 0 to 17 are shown in **Table 36** below.

- About one in ten Connecticut children had asthma in 2013, the same rate as for adults (9.8%). Child asthma rates could not be reported for many demographic categories.
- As shown in **Figure 22** below, an additional 5% of Connecticut children were former asthma sufferers in 2013.

Figure 22: Child Asthma Status, CT 2013
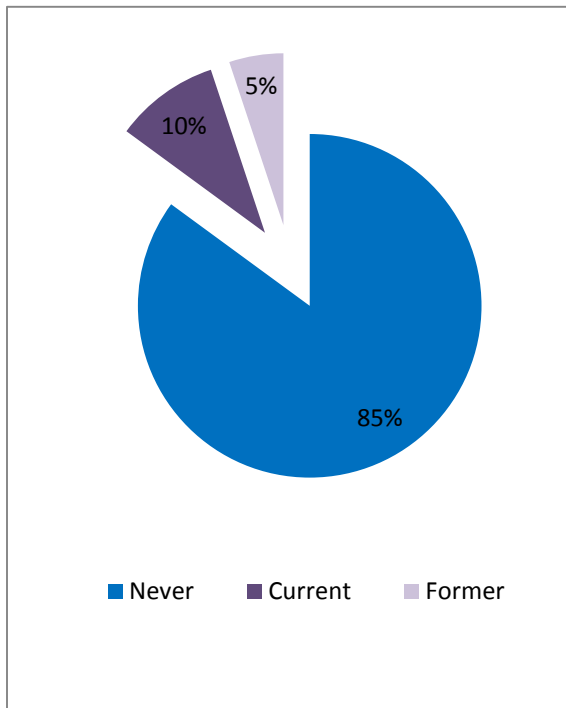
Table 36: Children Currently have Asthma by Demographics

Demographic Characteristics	%	95% Confidence Interval
Total	**9.8%**	**(8.0%-11.6%)**
Age		
0-4 years old	*	*
5-11 years old	10.4%	(7.4%-13.4%)
12-17 years old	13.0%	(9.3%-16.7%)
Gender		
Male	12.2%	(9.5%-14.9%)
Female	*	*
Race/Ethnicity		
Non-Hispanic White	9.0%	(6.9%-11.0%)
Non-Hispanic Black	*	*
Hispanic	*	*
Proxy's Income		
Less than $35,000	*	*
$35,000-$74,999	*	*
$75,000 or more	8.0%	(5.8%-10.1%)
Proxy Has Healthcare Coverage		
Yes	9.9%	(8.0%-11.7%)
No	*	*
Proxy Has Disability		
Yes	*	*
No	8.6%	(6.8%-10.4%)
Proxy's Education		
HS Graduate or Less	*	*
Some Post-HS Education	9.1%	(7.1%-11.2%)

The race, age and gender variables refer to the child, while the other data points refer to the adult proxy.

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

Chronic Obstructive Pulmonary Disease (COPD)

Chronic Obstructive Pulmonary Disease (COPD) is a lung disease that includes two main conditions: emphysema and chronic bronchitis. The term COPD is used because many sufferers have both conditions. COPD causes irreversible damage to and from the lungs and airways, which causes less air to flow to the lungs. Symptoms include mucus-heavy coughing, wheezing and shortness of breath. Cigarette smoking is the primary cause of COPD though genetics and other pollutants in the air may also contribute.[81] Respondents were asked if they were ever told they had COPD, emphysema or chronic bronchitis. Results by demographics are shown in **Table 37**.

- In 2013, 5.9% of Connecticut adults suffered from COPD.

- Adults aged 55 years old or older were more likely than adults aged 35-54 to have a COPD diagnosis (10.4% versus 3.8%).

- Women were more likely to have COPD (7.1%) compared to men (4.5%).

- While the rate of COPD for some racial/ethnic sub-groups was not reportable, the rate of COPD among non-Hispanic Whites (6.3%) was higher than the rate for adults overall.

- The likelihood of having a COPD diagnosis decreased as incomes increased. Adults in the lowest income category reported COPD at a rate nearly five times higher than the highest-income adults.

- Disabled adults reported COPD diagnoses at a rate five times higher than non-disabled adults (17.1% versus 3.1%),.

- The rate of COPD among adults with a high school degree or less was twice the rate for adults with higher levels of education (8.4% versus 4.2%).

Table 37: Adults Who Currently Have COPD by Demographics

Demographic Characteristics	Ever Told Had COPD	
	%	95% Confidence Interval
Total	5.9%	(5.2%-6.6%)
Age		
18-34 years old	*	*
35-54 years old	3.8%	(2.9%-4.8%)
55 years old or older	10.4%	(9.0%-11.8%)
Gender		
Male	4.5%	(3.6%-5.4%)
Female	7.1%	(6.1%-8.1%)
Race/Ethnicity		
Non-Hispanic White	6.3%	(5.5%-7.2%)
Non-Hispanic Black	*	*
Hispanic	*	*
Income		
Less than $35,000	9.9%	(8.2%-11.6%)
$35,000-$74,999	6.0%	(4.5%-7.4%)
$75,000 or more	2.1%	(1.5%-2.7%)
Has Healthcare Coverage		
Yes	6.0%	(5.3%-6.8%)
No	*	*
Disability		
Yes	17.1%	(14.4%-19.7%)
No	3.1%	(2.5%-3.7%)
Education		
HS Graduate or Less	8.4%	(7.0%-9.8%)
Some Post-HS Education	4.2%	(3.5%-4.9%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

Arthritis

Arthritis covers over 100 rheumatic conditions that affect the joints and the connective tissues.[82] It is caused when the cartilage between bones disappears, either through normal wear and tear, breaking bones, getting an infection, or having an autoimmune disease.[83] Arthritis is the most common cause of disability in the U.S and affects one in five American adults. Women and older people are more likely to experience arthritis symptoms.[84] BRFSS respondents were asked if they were ever told they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. Results by demographics are shown in **Table 38**.

- Just under one in four Connecticut adults had been diagnosed with arthritis in 2013 (23.7%).

- The oldest adults—those aged 55 or older—were more likely to have an arthritis diagnosis (44.7%), compared to middle-aged adults (17.7%).

- Women were more likely than men to have arthritis (27% versus 20.2%).

- There were differences in arthritis diagnoses based on racial/ethnic background: non-Hispanic Whites were twice as likely to have arthritis compared to Hispanics (26.7% versus 13.4%). Non-Hispanic Blacks were also more likely than Hispanics to have been diagnosed with arthritis.

- Adults with health insurance were twice as likely to have an arthritis diagnosis compared to uninsured adults (25% versus 12.1%).

- Nearly half of disabled adults had arthritis (47.1%), which was higher than the rate for non-disabled adults (18.4%).

- Adults with a high school degree or less were more likely to have an arthritis diagnosis (27.1%), compared to adults with some post-high school education (21.5%).

Table 38: Adults Diagnosed with Arthritis by Demographics

Demographic Characteristics	Diagnosed with Arthritis	
	%	95% Confidence Interval
Total	**23.7%**	**(22.5%-25.0%)**
Age		
18-34 years old	*	*
35-54 years old	17.7%	(15.7%-19.8%)
55 years old or older	44.7%	(42.5%-46.8%)
Gender		
Male	20.2%	(18.4%-22.0%)
Female	27.0%	(25.2%-28.7%)
Race/Ethnicity		
Non-Hispanic White	26.7%	(25.2%-28.2%)
Non-Hispanic Black	22.1%	(17.7%-26.5%)
Hispanic	13.4%	(10.1%-16.6%)
Income		
Less than $35,000	28.1%	(25.5%-30.7%)
$35,000-$74,999	26.3%	(23.7%-29.0%)
$75,000 or more	19.8%	(17.8%-21.8%)
Has Healthcare Coverage		
Yes	25.0%	(23.7%-26.4%)
No	12.1%	(8.9%-15.2%)
Disability		
Yes	47.1%	(43.3%-50.8%)
No	18.4%	(17.1%-19.6%)
Education		
HS Graduate or Less	27.1%	(24.8%-29.4%)
Some Post-HS Education	21.5%	(20.1%-22.9%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

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 1/4 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.[85]

In 2013, 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 proportion of adults who reported that arthritis impacted their daily life is shown in **Table 39** below. *Please note that the proportions below are in relation to all adults, not just adults diagnosed with arthritis.*

Table 39: Adult Arthritis Burden by Demographics

Demographic Characteristics	Limited Usual Activities		Limited Social Activities A Lot		Limited Work Activities	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Total	**9.8%**	**(8.9%-10.6%)**	**3.4%**	**(2.9%-4.0%)**	**6.0%**	**(5.3%-6.7%)**
Age						
18-34 years old	*	*	*	*	*	*
35-54 years old	7.6%	(6.2%-9.0%)	3.5%	(2.5%-4.5%)	5.4%	(4.2%-6.6%)
55 years old or more	18.3%	(16.6%-19.9%)	5.7%	(4.7%-6.7%)	10.6%	(9.1%-12.0%)
Gender						
Male	7.3%	(6.2%-8.3%)	2.4%	(1.8%-3.1%)	4.6%	(3.7%-5.5%)
Female	12.0%	(10.8%-13.3%)	4.4%	(3.6%-5.2%)	7.2%	(6.2%-8.3%)
Race/Ethnicity						
Non-Hispanic White	10.8%	(9.8%-11.9%)	3.2%	(2.6%-3.8%)	6.0%	(5.2%-6.9%)
Non-Hispanic Black	*	*	*	*	*	*
Hispanic	*	*	*	*	*	*
Income						
Less than $35,000	14.7%	(12.7%-16.6%)	8.0%	(6.5%-9.5%)	11.6%	(9.7%-13.4%)
$35,000-$74,999	10.0%	(8.3%-11.8%)	*	*	5.2%	(3.9%-6.4%)
$75,000 or more	6.5%	(5.3%-7.8%)	*	*	*	*
Has Healthcare Coverage						
Yes	10.2%	(9.3%-11.1%)	3.5%	(3.0%-4.1%)	6.2%	(5.4%-6.9%)
No	*	*	*	*	*	*
Disability						
Yes	33.0%	(29.6%-36.4%)	16.7%	(14.1%-19.3%)	22.3%	(19.3%-25.3%)
No	4.7%	(4.1%-5.4%)	*	*	2.5%	(2.0%-3.0%)
Education						
HS Graduate or Less	10.9%	(9.4%-12.4%)	5.4%	(4.3%-6.5%)	8.5%	(7.1%-9.9%)
Some Post-HS Education	9.0%	(8.1%-10.0%)	2.1%	(1.6%-2.6%)	4.4%	(3.7%-5.1%)

Estimates marked with a "*" are not reported because their coefficients of variation are at least 15%.

- Nearly one in ten Connecticut adults was limited in some way in his or her usual activities because of arthritis or joint symptoms (9.8%). In 2013, arthritis impacted the social activities "a lot" of 3.4% of adults and affected the work of 6% of adults.

- Adults aged 55 or older were more two-and-a-half times more likely to have limited their usual activities in some way because of arthritis (18.3%) compared to middle-aged adults (7.6%). They were also more likely to have limited their social activities "a lot" (5.7%) compared to middle-aged adults (3.5%) and to have limited their work (10.6% versus 5.4% for adults aged 35-54).

- Women were more likely than men to limit their usual activities because of arthritis (12% of all women versus 7.3% of men). Women were also more likely to limit their social activities "a lot" and their work, compared to men.

- The likelihood of limiting one's usual activities because of arthritis decreased as incomes rose. Adults in the poorest households were more likely to limit their work because of arthritis symptoms (11.6%) compared to adults in households earning between $35,000 and $75,000 (5.2%).

- One third of disabled adults had limited their activities because of arthritis (33%), a rate seven times higher than for non-disabled adults (4.7%). Over one in five disabled adults limited their work activities because of arthritis (22.3%), which is nine times higher than the rate for non-disabled adults (2.5%).

- Adults with a high school degree or less were more likely to limit their usual activities because of arthritis (10.9%), compared to adults with higher education levels (9%) and were also more likely to limit their social activities "a lot" (5.4% versus 2.1% respectively), and their work (8.5% versus 4.4% respectively).

- As shown in **Figure 23** below, about one-third of arthritis sufferers experienced pain that they rated as between 1 and 3 on a ten-point scale, while 42% rated their pain between 4 and 7, and 16% rated their pain the highest, between 8 and 10.

Figure 23: Arthritis Pain Level, from 0 to 10, CT 2013
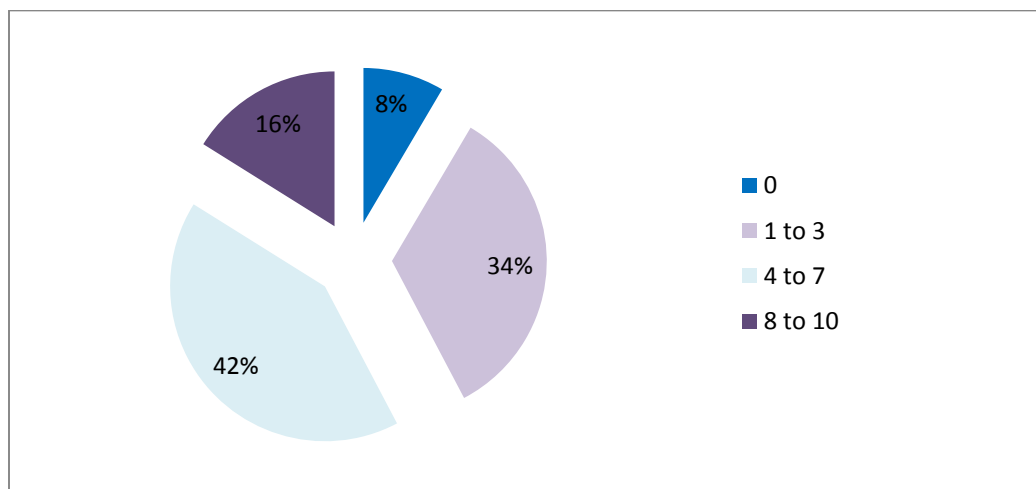
Cardiovascular Disease

Cardiovascular disease (CVD), commonly known as heart disease, encompasses several heart conditions. It is the leading cause of death for men and women and for people of most racial/ethnic groups in the United States. The most common heart disease is coronary heart disease.[86] 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.[87] Cardiovascular disease can be prevented by remaining physically active and eating a healthy and well-balanced diet and controlling risk factors such as high blood pressure and cholesterol.[88]

BRFSS respondents were asked if they were ever told they had the following: a heart attack or myocardial infarction; angina or coronary heart disease; a stroke. Results were combined and are presented in **Table 40** below.

- In 2013, one out of every 13 Connecticut adults had experienced a form of cardiovascular disease (7.7%).

- The oldest adults were more than four times more likely to have suffered from cardiovascular disease (16.7%) compared to middle-aged adults (3.8%)..

- Men were more likely than women to have had cardiovascular disease (8.7% versus 6.7%).

- Rates of cardiovascular disease decreased as incomes rose, with adults in the poorest households more than twice as likely to have experienced a heart condition (11.7%) compared to adults in the highest income category (4.5%).

- Disabled adults were nearly four times more likely to have a heart condition compared to non-disabled adults (19% versus 4.9%).

- Adults with a high school degree or less were more likely to have experienced a cardiovascular condition compared to adults with higher levels of education (10.2% compared to 6%).

Table 40: Adult Cardiovascular Disease Signs by Demographics

Demographic Characteristics	At least one of Heart Attack, Coronary Heart Disease, Stroke	
	%	95% Confidence Interval
Total	7.7%	(6.9%-8.4%)
Age		
18-34 years old	*	*
35-54 years old	3.8%	(2.8%-4.8%)
55 years old or older	16.7%	(15.1%-18.3%)
Gender		
Male	8.7%	(7.6%-9.9%)
Female	6.7%	(5.7%-7.6%)
Race/Ethnicity		
Non-Hispanic White	8.3%	(7.5%-9.2%)
Non-Hispanic Black	*	*
Hispanic	*	*
Income		
Less than $35,000	11.7%	(9.9%-13.4%)
$35,000-$74,999	7.7%	(6.2%-9.1%)
$75,000 or more	4.5%	(3.5%-5.5%)
Has Healthcare Coverage		
Yes	7.9%	(7.1%-8.6%)
No	*	*
Disability		
Yes	19.0%	(16.4%-21.6%)
No	4.9%	(4.2%-5.6%)
Education		
HS Graduate or Less	10.2%	(8.7%-11.6%)
Some Post-HS Education	6.0%	(5.2%-6.8%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

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 is estimated that only 50% of these adults have their high blood pressure under control.[89] 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.[90] 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.[91] Hypertension can be prevented by eating a healthy diet low in sodium and high in fruits and vegetables, being active, and not smoking.[92]

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 are shown in **Table 41**.

Table 41: Adult Diagnosed with Hypertension by Demographics

Demographic Characteristics	Ever Told Had High Blood Pressure		Currently Taking Medicine for High Blood Pressure	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	31.3%	(29.9%-32.7%)	76.0%	(73.7%-78.4%)
Age				
18-34 years old	8.6%	(6.5%-10.6%)	*	*
35-54 years old	25.4%	(23.0%-27.7%)	62.7%	(57.5%-68.0%)
55 years old or older	53.9%	(51.8%-56.1%)	88.5%	(86.6%-90.4%)
Gender				
Male	34.1%	(31.8%-36.3%)	69.1%	(65.4%-72.8%)
Female	28.7%	(26.9%-30.5%)	83.6%	(81.0%-86.3%)
Race/Ethnicity				
Non-Hispanic White	32.5%	(30.9%-34.2%)	79.3%	(76.7%-81.8%)
Non-Hispanic Black	35.7%	(30.4%-41.0%)	77.5%	(69.7%-85.3%)
Hispanic	25.8%	(21.3%-30.4%)	58.7%	(49.1%-68.3%)
Income				
Less than $35,000	38.9%	(35.9%-42.0%)	72.7%	(68.2%-77.3%)
$35,000-$74,999	33.7%	(30.8%-36.7%)	77.7%	(73.0%-82.3%)
$75,000 or more	24.2%	(22.1%-26.2%)	76.7%	(72.6%-80.8%)
Has Healthcare Coverage				
Yes	31.9%	(30.4%-33.4%)	78.3%	(75.9%-80.6%)
No	26.5%	(21.7%-31.3%)	51.9%	(41.6%-62.3%)
Disability				
Yes	49.5%	(45.7%-53.3%)	77.4%	(73.0%-81.9%)
No	27.2%	(25.7%-28.7%)	75.3%	(72.4%-78.2%)
Education				
HS Graduate or Less	35.9%	(33.2%-38.5%)	76.8%	(73.0%-80.7%)
Some Post-HS Education	28.3%	(26.7%-29.9%)	75.3%	(72.3%-78.2%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

- In 2013, just under one-third of Connecticut adults had ever been told they had high blood pressure (31.3%). Of those with high blood pressure, more than three-quarters (76%) were taking medicine for their high blood pressure.

- The likelihood of an adult having ever been told they had high blood pressure increased with age. Only 8.6% of those in the youngest age bracket (aged 18-34) had ever been told they had high blood pressure, while one-quarter of 35-54 year olds and more than half of those aged 55 and over had ever been told. Adults older than 55 years old were also more likely to be taking medicine for high blood pressure compared to adults between the ages of 35 and 54.

- Men were more likely than women to have been told they had hypertension than women (34.1% versus 28.7%). However, women were more likely to be taking medicine for high blood pressure than men (83.6% versus 69.1%).

- Non-Hispanic Whites and Non-Hispanic Blacks were more likely to be taking medicine for high blood pressure than Hispanics.

- The likelihood of having high blood pressure decreased as incomes increased but there was no difference in blood pressure medication habits based on income.

- Adults with healthcare coverage were more likely to have ever been told they had high blood pressure (31.9%) compared to adults without health insurance (26.5%). They were also more likely to be taking medicine for high blood pressure than adults without health insurance (78.3% versus 51.9%).

- Almost half of CT adults with disabilities had ever been told they had high blood pressure (49.5%); they were more likely to been told they had high blood pressure compared to adults without disabilities (27.2%). The blood pressure medication rates for both groups were not different however.

- Adults with a high school diploma or less were more likely to have been told they had high blood pressure (35.9%) compared to adults with some post-high school education (28.3%), but there was no difference in blood pressure medication habits between these two groups.

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.[93] People with high cholesterol have twice the risk of heart disease as people with lower levels of cholesterol.[94] Cholesterol can be controlled by making lifestyle and dietary changes. Depending on overall risk of cardiovascular disease, medication may be necessary.[95]

The 2013 BRFSS asked respondents if they had ever been told they had high blood cholesterol levels. Results are shown by demographics in **Table 42**.

- In 2013, over one-third of Connecticut adults (37.8%) had been told their blood cholesterol was high, with similar results across racial and ethnic backgrounds and for adults both with and without health insurance.

- The proportion of adults with high blood cholesterol increased with age. Older adults were more likely to have been told their blood cholesterol was high, with more than half of adults over 55 reporting such a diagnosis. Slightly less than one-third of adults 35 to 54 and only 13.4% of adults ages 18-34 had ever been told they had high blood cholesterol.

- Men were more likely to have been diagnosed with high cholesterol (40.4% of men who had their blood tested, versus 35.5% of women).

- Adults in the highest income bracket were less likely to have ever been told they had high blood cholesterol (33.5%) compared to either lower-income category.

- Disabled adults were more likely to ever have been told they had high blood cholesterol (50.3%) compared to non-disabled adults (35%).

- Adults who ended their education before or right after high school were also more likely to have been given a high cholesterol diagnosis (44.3% versus 33.9% for more educated adults).

Table 42: Adult Diagnosed with Cholesterol by Demographics

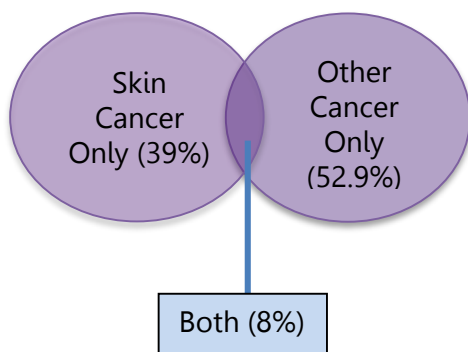| Demographic Characteristics	Ever Told Blood Cholesterol Was High	
	%	95% Confidence Interval
Total	**37.8%**	**(36.2%-39.5%)**
Age		
18-34 years old	13.4%	(9.9%-16.9%)
35-54 years old	32.5%	(29.9%-35.2%)
55 years old or older	53.6%	(51.4%-55.7%)
Gender		
Male	40.4%	(37.9%-42.9%)
Female	35.5%	(33.4%-37.5%)
Race/Ethnicity		
Non-Hispanic White	39.1%	(37.3%-40.9%)
Non-Hispanic Black	33.3%	(27.5%-39.2%)
Hispanic	35.7%	(29.6%-41.8%)
Income		
Less than $35,000	39.3%	(35.9%-42.7%)
$35,000-$74,999	40.9%	(37.6%-44.2%)
$75,000 or more	33.5%	(30.9%-36.0%)
Has Healthcare Coverage		
Yes	38.1%	(36.5%-39.8%)
No	34.3%	(28.0%-40.7%)
Disability		
Yes	50.3%	(46.3%-54.3%)
No	35.0%	(33.3%-36.8%)
Education		
HS Graduate or Less	44.3%	(41.2%-47.4%)
Some Post-HS Education	33.9%	(32.1%-35.7%)

Cancer

After heart disease, cancer is the second leading cause of death among Americans. More than 500,000 Americans die every year from the more than 100 identified types of cancer.[96] Skin cancer is the most common cancer in the U.S.; its deadliest form, melanoma, is caused by exposure to ultraviolet light.[97] 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 up, and avoiding indoor tanning beds. Some types of cancer, such as cervical cancer are preventable with vaccines and others, such as prostate and breast cancer, can be managed with early screening.[98] BRFSS respondents were asked if they were ever told they had skin cancer or any other type of cancer. Results by demographic sub-group are shown in **Table 43**.

- One in eight CT adults had ever had a cancer diagnosis in 2013 (12.4%), with no differences based on income or educational background. As **Figure 24** below shows, of all adults with a cancer diagnosis, 39% only had skin cancer, 52.9% only had another type of cancer, and 8% had both skin cancer and another type of cancer.

- Adults over 55 were more than three times more likely to report a cancer diagnosis compared to middle-aged adults (24.8% versus 7.6%).

- Women were more likely to have cancer (14.7%), compared to men (9.9%).

- Disabled adults were nearly twice as likely to have cancer compared to non-disabled adults (19.7% compared to 10.7%).

Table 43: Adult Diagnosed with Cancer by Demographics

Demographic Characteristics	Ever Told Had Cancer	
	%	95% Confidence Interval
Total	12.4%	(11.4%-13.3%)
Age		
18-34 years old	*	*
35-54 years old	7.6%	(6.2%-8.9%)
55 years old or older	24.8%	(22.9%-26.6%)
Gender		
Male	9.9%	(8.6%-11.1%)
Female	14.7%	(13.3%-16.0%)
Race/Ethnicity		
Non-Hispanic White	15.3%	(14.1%-16.4%)
Non-Hispanic Black	*	*
Hispanic	*	*
Income		
Less than $35,000	12.3%	(10.4%-14.1%)
$35,000-$74,999	13.6%	(11.6%-15.6%)
$75,000 or more	11.9%	(10.4%-13.5%)
Has Healthcare Coverage		
Yes	13.5%	(12.5%-14.5%)
No	*	*
Disability		
Yes	19.7%	(16.9%-22.5%)
No	10.7%	(9.8%-11.7%)
Education		
HS Graduate or Less	11.9%	(10.2%-13.5%)
Some Post-HS Education	12.7%	(11.7%-13.8%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

Figure 24: Adult Cancer Diagnoses, CT 2013

Skin Cancer Only (39%)

Other Cancer Only (52.9%)

Both (8%)

Pre-Diabetes

Pre-diabetes refers to blood sugar levels that are higher than normal but not high enough to be diabetes. More than one in three American adults has pre-diabetes.[99] Adults with pre-diabetes are at-risk for developing Type 2 diabetes, heart disease and stroke.[100] Without any changes to lifestyle and diet, 15-30% of people with pre-diabetes will develop Type 2 diabetes within five years.[101] BRFSS respondents were asked if they had ever been told they had pre-diabetes or borderline diabetes. Women with pre-diabetes during pregnancy were coded as not having pre-diabetes. Results by demographics are shown in **Table 44**.

- In 2013, 6.9% of CT adults had been diagnosed with pre-diabetes, with no differences based on gender or income category.

- Adults aged 55 and higher were more likely to have a pre-diabetes diagnosis compared to middle-aged adults (11.4% versus 6.4%).

- Disabled adults reported pre-diabetes at nearly twice the rate of non-disabled adults (11.3% versus 6.1%).

- Adults with a high school degree or less were more likely to suffer from borderline diabetes (8%), compared to more educated adults (6.1%)

Table 44: Adult Diagnosed with Pre-Diabetes by Demographics

Demographic Characteristics	Ever Told Had Pre-Diabetes	
	%	95% Confidence Interval
Total	**6.9%**	**(6.0%-7.7%)**
Age		
18-34 years old	*	*
35-54 years old	6.4%	(5.0%-7.8%)
55 years old or older	11.4%	(10.0%-12.9%)
Gender		
Male	6.3%	(5.2%-7.4%)
Female	7.4%	(6.2%-8.6%)
Race/Ethnicity		
Non-Hispanic White	6.6%	(5.8%-7.5%)
Non-Hispanic Black	*	*
Hispanic	*	*
Income		
Less than $35,000	6.6%	(5.2%-8.0%)
$35,000-$74,999	7.8%	(5.9%-9.6%)
$75,000 or more	6.0%	(4.9%-7.2%)
Has Healthcare Coverage		
Yes	6.8%	(6.0%-7.6%)
No	*	*
Disability		
Yes	11.3%	(8.9%-13.8%)
No	6.1%	(5.2%-7.0%)
Education		
HS Graduate or Less	8.0%	(6.4%-9.7%)
Some Post-HS Education	6.1%	(5.3%-6.9%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*
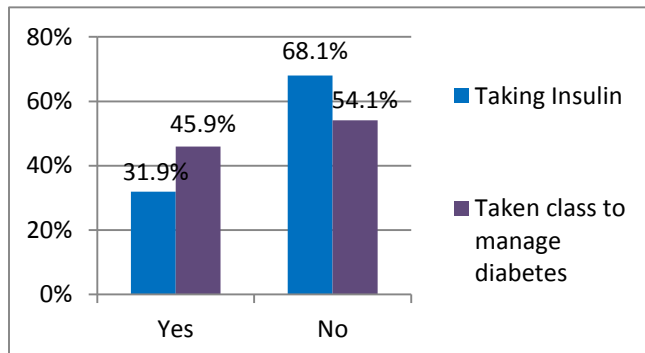
Diabetes

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.[102] 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 more at-risk for diabetes.[103] Adults who lose a modest amount of weight and increase their physical activity can reduce their risk of developing diabetes.[104] BRFSS respondents were asked if they had ever been told they had diabetes. Women with diabetes during pregnancy were coded as not having diabetes. Results by demographics are shown in **Table 45** below.

- In 2013, 8.3% of Connecticut adults had been diagnosed with diabetes.

- Adults aged 55 and older were more likely to have diabetes compared to middle-aged adults (16.3% versus 5.9%).

- Men were more likely to have diabetes compared to women (9.2% compared to 7.6%).

- Non-Hispanic Blacks were almost twice as likely to have diabetes (14%) compared to non-Hispanic Whites (7.7%).

- Adults in the lowest income households were more likely to have been diagnosed with diabetes (12.5%) compared to adults in both higher-income household categories.

- Nearly one in five disabled adults had been told they had diabetes (18.6%) a higher rate than non-disabled adults (5.9%).

- Adults with a high school degree or less were more likely to have diabetes, compared to more educated adults.

- As shown in **Figure 25** below, 31.9% of diabetic adults took insulin and 45.9% took a diabetes management class.

Table 45: Adult Diagnosed with Diabetes by Demographics

Demographic Characteristics	Ever Told Had Diabetes	
	%	95% Confidence Interval
Total	8.3%	(7.6%-9.1%)
Age		
18-34 years old	*	*
35-54 years old	5.9%	(4.7%-7.2%)
55 years old or older	16.3%	(14.7%-17.9%)
Gender		
Male	9.2%	(7.9%-10.4%)
Female	7.6%	(6.6%-8.5%)
Race/Ethnicity		
Non-Hispanic White	7.7%	(6.9%-8.6%)
Non-Hispanic Black	14.0%	(10.4%-17.6%)
Hispanic	*	*
Income		
Less than $35,000	12.5%	(10.6%-14.4%)
$35,000-$74,999	7.2%	(5.9%-8.6%)
$75,000 or more	6.0%	(4.8%-7.1%)
Has Healthcare Coverage		
Yes	8.6%	(7.7%-9.4%)
No	*	*
Disability		
Yes	18.6%	(16.0%-21.2%)
No	5.9%	(5.2%-6.7%)
Education		
HS Graduate or Less	10.7%	(9.2%-12.2%)
Some Post-HS Education	6.7%	(5.8%-7.5%)

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*

Figure 25: Diabetes Management, CT 2013

Kidney Disease

Chronic Kidney Disease (CKD) is a condition in which the kidneys cannot filter blood as well as they should, and so wastes are not properly filtered. A person with kidney disease is more likely to develop heart disease and other health problems. Adults with diabetes and/or high blood pressure are at higher risk of developing CKD.[105] CKD can be detected early with blood tests. If it is detected, medication can reduce the damage to kidneys by 50%. Kidney disease often runs in families and family medical histories can often identify those at risk for CKD.[106]

BRFSS respondents were asked if they were ever told they had kidney disease. Results are shown by demographics in **Table 46**.

- Only 2.1% of CT adults reported having kidney disease in 2013. **Figure 26** below shows the prevalence of kidney disease over time in Connecticut and nationally.

- The rate of kidney disease among the oldest adults (4.5%) was twice the overall level.

- Disabled adults reported kidney disease at more than four times the rate of non-disabled adults (5.8% versus 1.3%).

- Adults with a high school degree or less were twice as likely to suffer from kidney disease (3.1%), compared to adults with higher levels of education (15%).

Table 46: Adult Diagnosed with Kidney Disease by Demographics

Demographic Characteristics	Ever Told Had Kidney Disease	
	%	95% Confidence Interval
Total	2.1%	(1.7%-2.5%)
Age		
18-34 years old	*	*
35-54 years old	*	*
55 years old or older	4.5%	(3.5%-5.4%)
Gender		
Male	*	*
Female	2.2%	(1.7%-2.8%)
Race/Ethnicity		
Non-Hispanic White	2.3%	(1.8%-2.8%)
Non-Hispanic Black	*	*
Hispanic	*	*
Income		
Less than $35,000	*	*
$35,000-$74,999	*	*
$75,000 or more	*	*
Has Healthcare Coverage		
Yes	2.1%	(1.7%-2.5%)
No	*	*
Disability		
Yes	5.8%	(4.2%-7.3%)
No	1.3%	(0.9%-1.6%)
Education		
HS Graduate or Less	3.1%	(2.2%-3.9%)
Some Post-HS Education	1.5%	(1.1%-1.9%)

Figure 26: Prevalence of Kidney Disease, CT 2013

	CT 2011	CT 2012	CT 2013	US Median 2013
	1.9%	2.3%	2.1%	2.5%

Estimates marked with a "" are not reported because their coefficients of variation are at least 15%.*
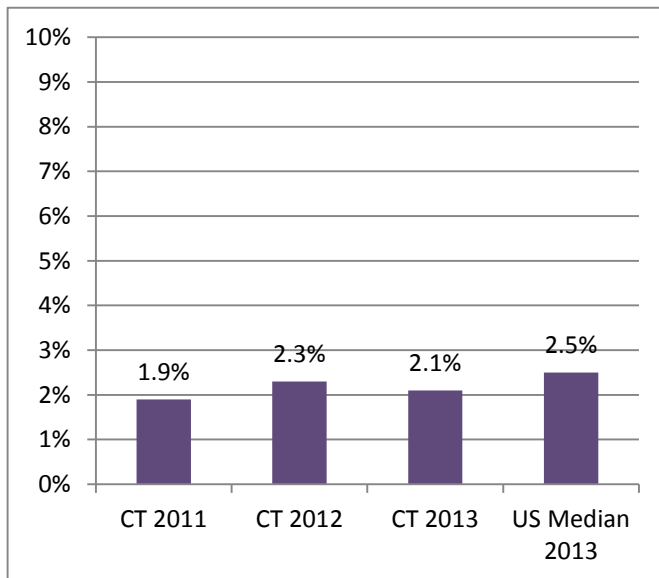
Depression

Depression is a common and serious illness that can take several forms. Symptoms include persistent feelings of sadness, anxiety, "emptiness," 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.[107] Depression is often misconstrued as a sign of weakness, and if left untreated, can have tragic consequences, including suicide. Medication and therapy has been proven effective in treating major depression. Respondents were asked if they were ever told they had a depressive disorder, including depression, major depression, dysthymia, or minor depression (**Table 47**).[108]

- In 2013, 17.4% of all CT adults had been diagnosed with some type of depressive disorder. There were no differences by age group, racial/ethnic background or health insurance status.

- Women were more likely than men to suffer from some kind of depression (21.3% versus 13.3%).

- The rates of depressive disorders decreased as incomes increased, and adults in the lowest income households were more than twice as likely to report a depression diagnosis (25.2%) compared to the highest-income adults (11.8%).

- Adults with disabilities were more likely to report a depressive disorder (42.3%), compared to non-disabled adults (11.5%).

- Adults with a high school degree or less were more likely to have a depression diagnosis (20.2%) compared to adults with higher levels of education (15.7%).

Table 47: Adult Diagnosed with Depression by Demographics

Demographic Characteristics	Ever Told Had Depressive Disorder	
	%	95% Confidence Interval
Total	17.4%	(16.2%-18.7%)
Age		
18-34 years old	16.7%	(13.9%-19.6%)
35-54 years old	17.9%	(15.9%-19.9%)
55 years old or older	17.9%	(16.3%-19.6%)
Gender		
Male	13.3%	(11.7%-15.0%)
Female	21.3%	(19.5%-23.0%)
Race/Ethnicity		
Non-Hispanic White	18.0%	(16.6%-19.4%)
Non-Hispanic Black	15.6%	(11.3%-19.9%)
Hispanic	19.1%	(14.9%-23.3%)
Income		
Less than $35,000	25.2%	(22.4%-28.0%)
$35,000-$74,999	17.9%	(15.5%-20.4%)
$75,000 or more	11.8%	(10.2%-13.3%)
Has Healthcare Coverage		
Yes	17.6%	(16.3%-18.8%)
No	16.6%	(12.7%-20.6%)
Disability		
Yes	42.3%	(38.5%-46.1%)
No	11.5%	(10.4%-12.6%)
Education		
HS Graduate or Less	20.2%	(18.0%-22.5%)
Some Post-HS Education	15.7%	(14.3%-17.0%)

ENDNOTES

1 Connecticut Department of Public Health, "Healthy Connecticut 2020. 2: State Health Improvement Plan. (2014) http://www.ct.gov/dph/lib/dph/state_health_planning/sha-ship/hct2020/hct2020_state_hlth_impv_032514.pdf

2 Connecticut Department of Public Health. "Live Health Connecticut, A Coordinated Chronic Disease Prevention and Health Promotion Plan. (2014). http://www.ct.gov/dph/lib/dph/state_health_planning/dphplans/chron_dis_coord_plan__april_2014.pdf

3 Connecticut Department of Public Health. "Healthy Connecticut 2020 Performance Dashboard." (July 17, 2015). http://www.ct.gov/dph/cwp/view.asp?a=3130&q=553676

4 Connecticut Department of Public Health. "Chronic Disease Prevention and Health Promotion: Live Healthy Connecticut Indicators." (October, 31, 2014). http://www.ct.gov/dph/cwp/view.asp?a=3137&Q=547826&PM=1

5 DeSalvo, Karen B. MD, MPH, MSc., et al. "Mortality Prediction with a Single General Self-Rated Health Question". *Journal of General Internal Medicine.* 21.3. (March 2006): 267-75. http://onlinelibrary.wiley.com/doi/10.1111/j.1525-1497.2005.00291.x/full

6 Centers for Disease Control and Prevention. "Measuring Healthy Days: Population Assessment of Health-Related Quality of Life." November 2000. http://www.cdc.gov/hrqol/pdfs/mhd.pdf

7 Liu, Yong, et al. "Relationships between Housing and Good Insecurity, Frequent Mental Distress, and Insufficient Sleep Among Adults in 12 US States, 2009." *Preventing Chronic Disease.* 11.1 (March 2014). http://www.cdc.gov/pcd/issues/2014/13_0334.htm

8 Kushel, Margot B., Reena Gupta, Lauren Gee, and Jennifer S. Haas. "Housing Instability and Food Insecurity as Barriers to Health Care Among Low-Income Americans." *Journal of General Internal Medicine.* 21.2 (January 2006): 71-77. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1484604/

9 United States Department of Agriculture Economic Research Center. "Food Security in the U.S: Measurement." September 2014. http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement.aspx

10 Seligman, Hilary K., Barbara A. Laraia, and Margot B. Kushel. "Food Insecurity Is Associated with Chronic Disease among Low-Income NHANES Participants." *The Journal of Nutrition.* 140.2. (February 2010): 304-310. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2806885/

11 U.S. Department of Justice. "A Guide to Disability Rights Laws," July 2009. http://www.ada.gov/cguide.htm

12 National Heart, Blood and Lung Institute. "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. (September, 2008).
http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf

[13] Centers for Disease Control and Prevention. "Adult Overweight and Obesity: Causes and Consequences." 27 April 2012. http://www.cdc.gov/obesity/adult/causes/index.html; NHLBI, "Clinical Guidelines."

[14] Child BMI were compared against CDC growth charts. For overview of SAS code used to compute child weight status, see:
http://www.cdc.gov/nccdphp/dnpao/growthcharts/resources/sas.htm

[15] Centers for Disease Control and Prevention. "Basics About Childhood Obesity." 27 Apr. 2012. http://www.cdc.gov/obesity/childhood/basics.html; Barlow, Sarah E. "Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity: Summary Report." *American Academy of Pediatrics.*120.S164: (2007)
http://pediatrics.aappublications.org/content/120/Supplement_4/S164.full.html

[16] CDC. "Basics About Childhood Obesity." August 2012.
http://www.cdc.gov/obesity/childhood/basics.html

[17] American Academy of Pediatrics. "Breastfeeding Initiatives: FAQS."
https://www2.aap.org/breastfeeding/faqsBreastfeeding.html

[18] Jackson, Kelly M. and Andrea M. Nazar. "Breastfeeding, the Immune Response, and Long-term Health." *The Journal of the American Osteopathic Association*. 106.4 (April 2006): 203-207.
http://jaoa.org/article.aspx?articleid=2093315

[19] Dorn, Stan. "Uninsured and Dying Because of It: Updating the Institute of Medicine Analysis on the Impact of Uninsurance on Mortality". *Urban Institute.* January 2008.
http://www.urban.org/UploadedPDF/411588_uninsured_dying.pdf; Marwick, Charles. "For the Uninsured, Health Problems Are More Serious". *Journal of the National Cancer Institute.* 94.13. (2002): 967-968. http://jnci.oxfordjournals.org/content/94/13/967.full; Wilper, Andrew P., et al. "Health Insurance and Mortality in US Adults". *American Journal of Public Health.* 99.12. (December 2009): 2289-2295. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2775760/

[20] Gutkin, Cal. "Outliers: extended families, better health outcomes. Why everyone should have a family doctor." *Canadian Family Physician.* 55.7. 768: (July 2009).
http://www.cfp.ca/content/55/7/768.full

[21] Brown, Marie T. and Jennifer K. Bussell. "Medication Adherence: WHO Cares?" *Mayo Clinic Proceedings*. 86.4 (April 2011): 304-314. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3068890; Kennedy, J., Tuleu, I. and Mackay, K. "Unfilled prescriptions of Medicare Beneficiaries: Prevalence, Reasons, and Types of Medicines Prescribed." *Journal of Managed Care Pharmacy*. 14.6. (July/August 2008): 553-560.
http://www.ncbi.nlm.nih.gov/pubmed/18693779

[22] Paradise, Julia. "Medicaid Moving Forward." *The Henry J. Kaiser Family Foundation*. 09 March 2015. http://kff.org/health-reform/issue-brief/medicaid-moving-forward/

[23] Pollitz, Karen and Cynthia Cox. "Medical Debt Among People with Health Insurance." *The Henry J. Kaiser Family Foundation.* 07 January 2014. http://kff.org/private-insurance/report/medical-debt-among-people-with-health-insurance/

[24] Stone, Corey. "Here's How Medical Debt Hurts Your Credit Report." *Consumer Financial Protection Bureau.* 11 Dec 2014. http://www.consumerfinance.gov/blog/heres-how-medical-debt-hurts-your-credit-report/

[25] Senic, Vladimir and Velijko Marinkovic. "Patient care, satisfaction and service quality in health care." *International Journal of Consumer Studies*. 27.3. (September 2012): 312-319.

[26] Williams, Brian. "Patient Satisfaction: A valid concept?" *Social Science and Medicine.* 38.4. (February 1994): 509-516.

[27] Centers for Disease Control and Prevention. "Insufficient Sleep Is a Public Health Epidemic." 13 January 2014. http://www.cdc.gov/features/dssleep/index.html

[28] Shankar, Anoop and Shirmila Syamala, andSita Kalidindi. "Insufficient Rest or Sleep and Its Relation to Cardiovascular Disease, Diabetes and Obesity in a National, Multiethnic Sample." *Public Library of Science*. 30 November 2010. http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0014189#pone-0014189-g001

[29] NCSDR/NHTSA Expert Panel on Driver Fatigue and Sleepiness. "Drowsy Driving and Automobile Crashes." 1998. http://www.nhtsa.gov/people/injury/drowsy_driving1/Drowsy.html#NCSDR/NHTSA

[30] Centers for Disease Control and Prevention. "Public Health Genomics: Family Health History." 20 November 2014. http://www.cdc.gov/genomics/famhistory/index.htm

[31] Centers for Disease Control and Prevention. "Genomics and Heart Disease." 17 February 2015. http://www.cdc.gov/features/heartdisease/

[32] FH Foundation, "FH Facts." June 29, 2015. http://thefhfoundation.org/about-fh/what-is-fh

[33] Centers for Disease Control and Prevention. "Genomics and Heart Disease." 17 February 2015. http://www.cdc.gov/features/heartdisease/

[34] Warburton, Darren E., Crystal Whitney Nichol, Shannon S.D. Bredin. "Health benefits of physical activity: the evidence". *Canadian Medical Association Journal.*174.6. 801-809: (14 March 2006). http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1402378/

[35] Centers for Disease Control and Prevention. "Glossary of Terms." *Physical Activity*. 16 February 2011. http://www.cdc.gov/physicalactivity/everyone/glossary/index.html#mod-intensity

[36] Centers for Disease Control and Prevention. "Why Strength Training?" *Physical Activity.* 24 February 2011. http://www.cdc.gov/physicalactivity/growingstronger/why/

[37] Centers for Disease Control and Prevention. "How Much Physical Activity do Adults Need?" *Physical Activity.* 3 March 2014. http://www.cdc.gov/physicalactivity/everyone/guidelines/adults.html

[38] Moreno, Megan A. MD, MSEd, MPH, et al. "Reducing Screen Time for Children". *Journal of the American Medical Association: Pediatrics.* 165.11. (November 2011) http://archpedi.jamanetwork.com/article.aspx?articleid=1107620; American Academy of Pediatrics. "Media and Children." http://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/pages/media-and-children.aspx

[39] Ludwig, David S., Karen E. Peterson, Steven L. Gortmaker. "Relation between consumption of sugar-sweetened drinks and childhood obesity: a prospective, observational analysis". *Lancet.* 357. 505-8.: (2001) http://www.commercialalert.org/candp/lancet.pdf

[40] Powell, LM, BT Nguyen. "Fast-food and full-service restaurant consumption among children and adolescents: effect on energy, beverage and nutrient intake". *Journal of the American Medical Association: Pediatrics.* 167.1. 14-20: (January 2013) http://www.ncbi.nlm.nih.gov/pubmed/23128151

[41] Malik, Vasanti S., An Pan, Lawrence de Koning, Eva Schernhammer, Walter C. Willett, and Frank B. Hu. "Sugar Sweetened and Artificially Sweetened Beverages and risk of Mortality in US Adults." *Moderated Poster Abstract Presentations at the American Heart Association: Dietary Sugars.* (2014). http://circ.ahajournals.org/content/129/Suppl_1/AMP49.short

[42] Kristal, Ross B., Arthur E. Blank, Judith Wylie-Rosett, and Peter A. Selwyn. "Factors Associated with Daily Consumption of Sugar-Sweetened Beverages Among Adult Patients at Four Federally Qualified Health Centers, Bronx, New York, 2013." *Preventing Chronic Disease.* 2015; 12:140342. http://www.cdc.gov/pcd/issues/2015/14_0342.htm

[43] U.S. Department of Agriculture and U.S. Department of Health and Human Services. "Dietary Guidelines for Americans, 2010." December 2010. http://www.health.gov/dietaryguidelines/dga2010/DietaryGuidelines2010.pdf

[44] Harvard School of Public Health. "Vegetables and Fruits." *The Nutrition Source.* 2015. http://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/vegetables-and-fruits/

[45] Ibid.

[46] Centers for Disease Control and Prevention. "Fruits and Vegetables." *Nutrition for Everyone.* 8 December 2014. http://www.cdc.gov/nutrition/everyone/fruitsvegetables/

[47] U.S. Department of Agriculture and U.S. Department of Health and Human Services. "Dietary Guidelines for Americans, 2010." December 2010. http://www.health.gov/dietaryguidelines/dga2010/DietaryGuidelines2010.pdf

[48] American Heart Association. "About Sodium (Salt)." Getting Healthy. 29 April 2014. http://www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/HealthyEating/About-Sodium-Salt_UCM_463416_Article.jsp

[49] Centers for Disease Control and Prevention. "Health Effects of Cigarette Smoking". 6 February 2014. http://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/

[50] Schivo, M., MV Advalovic, S. Murin. "Non-cigarette tobacco and the lung". *The Journal of Allergy and Clinical Immunology.* 46.1. 34-53: (February 2014). http://www.ncbi.nlm.nih.gov/pubmed/23673789

[51] American Society of Clinical Oncology. "Health Risks of Waterpipes, Smokeless Tobacco, and E-cigarettes". http://www.cancer.net/navigating-cancer-care/prevention-and-healthy-living/tobacco-use/health-risks-waterpipes-smokeless-tobacco-and-e-cigarettes

[52] Centers for Disease Control and Prevention. "Alcohol and Public Health: Frequently Asked Questions". 31 July 2013. http://www.cdc.gov/alcohol/faqs.htm

[53] National Institute on Alcohol Abuse and Alcoholism. "Moderate & Binge Drinking". http://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

[54] Centers for Disease Control and Prevention. "Fact Sheets- Binge Drinking". 7 Nov. 2012. http://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm

[55] Centers for Disease Control and Prevention. "Fact Sheets- Alcohol Use and Health". 26 December 2013. http://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm

[56] Centers for Disease Control and Prevention. "Seat Belts Fact Sheet". 4 January 2011. http://www.cdc.gov/motorvehiclesafety/seatbelts/facts.html#howbig

[57] Centers for Disease Control and Prevention. "Facts about Mold and Dampness." 17 June 2014. http://www.cdc.gov/mold/dampness_facts.htm

[58] United States Environmental Protection Agency. "A Brief Guide to Mold, Moisture, and Your Home." 3 April 2015. http://www.epa.gov/mold/moldguide.html

[59] Centers for Disease Control and Prevention, "Regular Check-Ups are Important". 2 Feb. 2014. http://www.cdc.gov/family/checkup/

[60] American Heart Association. "Why Cholesterol Matters." 21 April 2014. http://www.heart.org/HEARTORG/Conditions/Cholesterol/WhyCholesterolMatters/Why-Cholesterol-Matters_UCM_001212_Article.jsp

[61] American Heart Association. "Symptoms, Diagnosis & Monitoring of High Cholesterol." 16 April 2014. http://www.heart.org/HEARTORG/Conditions/Cholesterol/SymptomsDiagnosisMonitoringofHighCholesterol/Symptoms-Diagnosis-Monitoring-of-High-Cholesterol_UCM_001214_Article.jsp

[62] Centers for Disease Control and Prevention. "Children's Oral Health". 10 September 2013. http://www.cdc.gov/OralHealth/children_adults/child.htm

[63] Mullen, Jewel, M.D., M.P.H., M.P.A. "Oral Health in Connecticut", *Connecticut Department of Public Health.* December 2013. http://www.ct.gov/dph/lib/dph/oral_health/pdf/final_oral_health_burden_report_2013.pdf

[64] National Children's Oral Health Foundation. "Facts About Tooth Decay". http://www.ncohf.org/resources/tooth-decay-facts

[65] American Academy of Pediatric Dentistry. "Frequently Asked Questions". http://www.aapd.org/resources/frequently_asked_questions

[66] Centers for Disease Control and Prevention. "Key Facts About Seasonal Flu Vaccine". 7 November 2013. http://www.cdc.gov/flu/protect/keyfacts.htm

[67] Centers for Disease Control and Prevention, "Pneumonia." February 25, 2015. http://www.cdc.gov/pneumonia/

[68] Centers for Disease Control and Prevention. "Vaccines and Preventable Diseases: Pneumococcal Vaccination." 7 June 2013. http://www.cdc.gov/VACCINES/vpd-vac/pneumo/default.htm#vacc

[69] Centers for Disease Control and Prevention. "Tdap (Tetanus, Diphtheria, Pertussis) VIS." 24 February 2015. http://www.cdc.gov/vaccines/hcp/vis/vis-statements/tdap.html

[70] National Institutes of Health. "Tetanus, Diphtheria, Pertussis (Tdap) Vaccine." *MedlinePlus*. 15 May 2014. http://www.nlm.nih.gov/medlineplus/druginfo/meds/a607027.html

[71] Advisory Committee on Immunization Practices. "Preventing Tetanus, Diphtheria, and Pertussis Among Adults: Use of Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccine." 15 December 2006. http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5517a1.htm

[72] Centers for Disease Control and Prevention. "Genital HPV Infection – Fact Sheet". 14 February 2013. http://www.cdc.gov/std/hpv/stdfact-hpv.htm

[73] Centers for Disease Control and Prevention. "HPV Vaccines". 5 February 2013. http://www.cdc.gov/hpv/vaccine.html

[74] Centers for Disease Control and Prevention. "MMWR Recommendations and Reports: Current Volume (2014)." http://www.cdc.gov/mmwr/indrr_2014.html

[75] U.S. Department of Health and Human Services. "HIV In the United States: At A Glance." 6 June 2012. https://aids.gov/hiv-aids-basics/hiv-aids-101/statistics/

[76] National Heart, Lung and Blood Institute. "What Is Asthma?" 5 June 2012. http://www.nhlbi.nih.gov/health/health-topics/topics/asthma/

[77] United States Environmental Protection Agency. "Asthma Facts." March 2013. http://www.epa.gov/asthma/pdfs/asthma_fact_sheet_en.pdf

[78] Agency for Toxic Substances and Disease Registry. "Environmental Triggers of Asthma Cover Page." 29 December 2014. http://www.atsdr.cdc.gov/csem/csem.asp?csem=32&po=0

[79] National Heart, Lung and Blood Institute. "What Is Asthma?" 5 June 2012. http://www.nhlbi.nih.gov/health/health-topics/topics/asthma/

[80] United States Environmental Protection Agency. "Asthma Facts." March 2013. http://www.epa.gov/asthma/pdfs/asthma_fact_sheet_en.pdf

[81] National Heart, Lung and Blood Institute. "What Is COPD?" 5 June 2012. http://www.nhlbi.nih.gov/health/health-topics/topics/copd/

[82] Centers for Disease Control and Prevention.
"Arthritis Basics." 1 August 2011. http://www.cdc.gov/arthritis/basics.htm

[83] U.S. National Library of Medicine. "Rheumatoid Arthritis." *MedlinePlus*. 12 May 2015. http://www.nlm.nih.gov/medlineplus/ency/article/000431.htm

[84] Centers for Disease Control and Prevention. "Quick Stats on Arthritis". 1 August 2011. http://www.cdc.gov/arthritis/media/quickstats.htm

[85] Centers for Disease Control and Prevention. "About Arthritis Disabilities and Limitations." 6 November 2014. http://www.cdc.gov/arthritis/data_statistics/disabilities-limitations.htm

[86] Centers for Disease Control and Prevention. "Heart Disease Fact Sheet". http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/docs/fs_heart_disease.pdf

[87] National Heart, Lung and Blood Institute. "What Is Coronary Heart Disease?" 31 August 2012. http://www.nhlbi.nih.gov/health/health-topics/topics/cad/

[88] American Heart Association. "Preventing Heart Disease – At Any Age." 2015. https://www.heart.org/HEARTORG/GettingHealthy/Preventing-Heart-Disease---At-Any-Age_UCM_442925_Article.jsp

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

[90] National Institutes of Health. "High Blood Pressure." *MedlinePlus*. 9 April 2015.
http://www.nlm.nih.gov/medlineplus/ency/article/000468.htm

[91] Ibid.

[92] Centers for Disease Control and Prevention. "Controlling Blood Pressure." 7 July 2014.
http://www.cdc.gov/bloodpressure/control.htm

[93] Centers for Disease Control and Prevention. "High Cholesterol Facts." 17 March 2015.
http://www.cdc.gov/cholesterol/facts.htm

[94] Centers for Disease Control and Prevention. "Cholesterol Fact Sheet." *Division for Heart Disease and Stroke Prevention*. 30 April 2015.
http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_cholesterol.htm

[95] American Heart Association. "Prevention and Treatment of High Cholesterol." 2015.
http://www.heart.org/HEARTORG/Conditions/Cholesterol/PreventionTreatmentofHighCholesterol/Prevention-and-Treatment-of-High-Cholesterol_UCM_001215_Article.jsp

[96] Centers for Disease Control and Prevention. "Cancer Statistics by Cancer Type". 25 September 2013. http://www.cdc.gov/cancer/dcpc/data/types.htm

[97] Centers for Disease Control and Prevention. "What Is Skin Cancer?" 19 February 2014.
http://www.cdc.gov/cancer/skin/basic_info/what-is-skin-cancer.htm

[98] Centers for Disease Control and Prevention. "Addressing the Cancer Burden at a Glance." *Chronic Disease Prevention and Health Promotion*. 18 February 2015.
http://www.cdc.gov/chronicdisease/resources/publications/aag/dcpc.htm

[99] Centers for Disease Control and Prevention. "Prediabetes: Could it be You?" 2014.
http://www.cdc.gov/diabetes/pubs/statsreport14/prediabetes-infographic.pdf

[100] National Diabetes Information Clearinghouse. "Prediabetes: What You Need to Know". 24 July 2013. http://diabetes.niddk.nih.gov/dm/pubs/prediabetes_ES/

[101] Centers for Disease Control and Prevention. "Prediabetes." *Diabetes Home*. 18 February 2015.
http://www.cdc.gov/diabetes/basics/prediabetes.html

[102] Centers for Disease Control and Prevention. "Diabetes Report Card 2012: National and State Profile of Diabetes and Its Complications". 13 February 2014.
http://www.cdc.gov/diabetes/pubs/pdf/diabetesreportcard.pdf

[103] 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

[104] U.S. Department of Health and Human Services. "Diabetes Prevention Program." *National Diabetes Information Clearinghouse*. 9 September 2013.
http://diabetes.niddk.nih.gov/dm/pubs/preventionprogram/

[105] Centers for Disease Control and Prevention. "National Chronic Kidney Disease Fact Sheet, 2014". http://www.cdc.gov/diabetes/pubs/pdf/kidney_factsheet.pdf

[106] National Institutes of Health. "Chronic Kidney Disease and Kidney Failure." *Research Portfolio Online Reporting Tools*. 29 March 2013.
http://report.nih.gov/nihfactsheets/ViewFactSheet.aspx?csid=34

[107] National Institute of Mental Health. "What is Depression?"
http://www.nimh.nih.gov/health/topics/depression/index.shtml

[108] Centers for Disease Control and Prevention. "Depression." *Mental Health*. 4 October 2013.
http://www.cdc.gov/mentalhealth/basics/mental-illness/depression.htm