



# **REPORT ON THE 2018 BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM IN LOUISIANA**

**Prepared for the Louisiana  
Department of Health**



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# Introduction

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual, ongoing national study administered by the federal Centers for Disease Control and Prevention and the public state departments of health that encompasses telephone surveys in each state. The BRFSS has helped state policy makers track changes in health quality within and across states. The value of the BRFSS project is its ability to compare health-related outcomes and behaviors across groups within the population, to place them in the context of other U.S. states and territories, and to track them over time. The BRFSS provides a systematic analysis of common risk factors leading to a host of problematic health outcomes. By isolating predictive risk factors, public health officials can target preventative strategies to demographic groups. In addition, by identifying current health patterns, we are better able to identify areas in which the general health of Louisiana residents is improving and monitor problematic developments.

In addition to annual sections of the survey, the 2018 BRFSS in Louisiana included rotating sections on breast, cervical, prostate, and colorectal cancer screening as well as optional modules on health care access, e-cigarette use, and respiratory health.

Louisiana is overwhelmingly categorized as an at-risk state in the majority of public health studies. The state suffers from persistent poverty, below average educational attainment, and poor health outcomes when compared to peers across the United States. Louisiana residents in general struggle with a variety of negative health issues.

Louisiana adult residents suffer higher rates of heart disease, physical disability, diabetes, and obesity than adults in the United States as a whole. Louisiana adults also tend to engage in behaviors that pose a risk to health more than their peers nationally, including higher tobacco use, less frequent exercise, and riding in automobiles without wearing a seatbelt.

However, health outcomes are not uniform across populations, even within states. Health outcomes frequently vary by socio-economic status, including diabetes, obesity, heart disease, arthritis, depression, kidney disease, and physical disability. As such, these conditions tend to be more frequent among Louisiana residents with lower levels of education and/or lower household incomes. Because the adult population of Louisiana includes higher shares of these socio-economically disadvantaged groups, the state also lags behind national averages on health outcomes related to socio-economic conditions.

# 1. Subjective Health Evaluation

*Analysis of Section 1 ("Health Status") of the 2018 BRFSS Questionnaire*

Most Louisiana residents view their health positively, but they remain less positive than Americans do generally. In Louisiana, 77.5% of state residents describe their health as "excellent," "very good," or "good," and 22.1% describe it as "fair" or "poor." Nationally, 81.4% of BRFSS respondents describe their health positively, and 18.3% describe it as "fair" or "poor."

Despite taking a somewhat more sanguine view toward their own health than Americans take generally, Louisiana residents remain largely positive in their beliefs about their health. A fact that is of particular interest given the prevalence of negative health risks and outcomes documented later in this report.

Unsurprisingly, assessments of the quality of one's health tend to decline with age. Under the age of 45, more than 80% of Louisiana residents believe their health is "good" or better. At the age of 65 and older, however, the share drops to 69.1%.

The divides by socio-economic status are even larger than by age. Individuals with higher household earnings and individuals with higher levels of educational attainment tend to evaluate their health more positively than those with lower household earnings or less education do. For example, 61.3% of respondents with annual household earnings less than \$25,000 (roughly the bottom 30 percent of households in Louisiana) evaluate their general health positively, but 91.9% of individuals with annual household earnings above \$75,000 (roughly the top 30 percent of

households in Louisiana) do so. Put another way, the share of individuals concerned about the quality of their health is more than four and a half times larger among the bottom third of household incomes (38.2%) than among the top third (8.1%).

In a similar pattern, while only 58.3% of Louisiana adults without a high school diploma describe their overall health as "good" or better, 90.2% of those with a four-year college degree rate their health positively – a difference of more than 30 percentage points.

**In Louisiana, 77.5% of state residents describe their health as "excellent," "very good," or "good," and 22.1% describe it as "fair" or "poor."**

There is also a gap of eight percentage points between how black and white residents of Louisiana judge their health status. However, this gap likely reflects differences in average socio-economic status across racial groups. When statistically controlling for educational attainment and household income (that is, when comparing whites and blacks with similar levels of education and household earnings), whites and blacks evaluate their health similarly.

**Table 1: Subjective Evaluations of General Health**

	"Good" or better health			"Poor" or "Fair" health		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	77.5	[75.8,79.1]	2,786,684	22.1	[20.5,23.7]	793,785
AGE						
18-24	89.4	[84.5,92.9]	400,134	10.50	[7.0,15.4]	46,796
25-34	83.6	[78.0,88.0]	554,949	16.30	[12.0,21.9]	108,336
35-44	83.1	[79.2,86.5]	493,670	15.90	[12.7,19.7]	94,374
45-54	71.5	[67.4,75.2]	402,596	27.50	[23.8,31.5]	154,945
55-64	72.2	[68.4,75.7]	432,159	27.60	[24.1,31.3]	165,010
65 and over	69.1	[65.7,72.2]	503,176	30.80	[27.6,34.1]	224,324
GENDER						
Male	77.4	[74.7,79.9]	1,338,494	22.3	[19.8,25.0]	385,019
Female	77.6	[75.5,79.6]	1,435,907	21.9	[19.9,24.0]	404,737
Refused	72.6	[46.7,88.9]	12,283	23.8	[8.8,50.3]	4,029
RACE-ETHNICITY						
White, Non-Hispanic	80.2	[78.4,82.0]	1,707,012	19.3	[17.6,21.1]	411,030
Black, Non-Hispanic	72.1	[68.2,75.6]	776,018	27.5	[24.0,31.4]	296,487
Hispanic	80.5	[71.3,87.3]	146,667	19.5	[12.7,28.7]	35,436
Other, Non-Hispanic	77.3	[70.0,83.2]	98,067	22.4	[16.5,29.7]	28,460
Don't know/No answer	71.5	[59.4,81.2]	58,919	27.2	[17.6,39.4]	22,372
EDUCATION						
Did not graduate HS	58.3	[51.9,64.4]	339,841	41.2	[35.1,47.5]	240,055
HS diploma/equivalent	75.6	[73.0,78.1]	909,460	23.9	[21.4,26.5]	286,975
Some college/2-year college degree	81.2	[78.6,83.6]	840,916	18.3	[16.0,21.0]	189,934
4-year college degree or higher	90.2	[88.5,91.8]	682,401	9.7	[8.2,11.5]	73,312
Don't know/No answer	76.6	[35.4,95.1]	11,465	23.4	[4.9,64.6]	3,509
HOUSEHOLD INCOME						
Less than \$25,000	61.3	[57.4,65.1]	622,098	38.2	[34.4,42.1]	387,262
\$25,000-\$49,999	80.6	[77.1,83.7]	550,974	18.9	[15.9,22.3]	129,028
\$50,000-\$74,999	84.8	[80.5,88.2]	339,710	14.7	[11.3,18.8]	58,756
\$75,000 or more	91.9	[89.9,93.5]	834,932	8.1	[6.4,10.1]	73,291
Don't know/No answer	74.7	[70.5,78.4]	438,969	24.7	[21.0,28.9]	145,448

## 2. Health Related Quality of Life

*Analysis of Section 2 ("Healthy Days") of the 2018 BRFSS Questionnaire*

Louisiana residents more frequently experience poor physical and mental health than Americans generally, and face more instances in which poor health keeps them from doing typical activities such as work or recreation.

On average, Louisiana adults report 4.5 days of poor physical health per month and 4.9 days of poor mental health per month. Furthermore, Louisianans report 5.4 days per month on average when any kind of poor health prevents them from engaging in their normal activities such as self-care, work, or recreation.

Several demographic characteristics are associated with experiences of poor health. Age is negatively associated with health quality, with mental health being an exception. Younger individuals report fewer days of poor physical health and fewer days when poor health interfered with their usual activities. Individuals between the ages of 18 and 24 report 2.7 days of poor physical health per month on average and 2.4 days when poor health interfered with usual activities. In contrast, individuals 65 or older report 6.3

days of poor physical health and 7.3 days when poor health interfered with usual activities. Adults between the ages of 18 and 24 report 5.5 days of poor mental health whereas those 65 and over report 3.0 days.

There are more experiences of both poor physical health and poor mental health among individuals with lower levels of education and individuals with lower household income. Individuals in the bottom 30% of household income report 7.1 days of poor physical health and 7.1 days of poor mental health in a month on average, while those in the top 30% of household earnings report 2.2 days and three days respectively. A similar pattern holds for the number of days in which poor health interfered with usual activities: 8.2 days versus 2.4 days.

Women experience slightly more physically unhealthy days than men on average. Women also experience approximately an additional day of poor mental health relative to men. However, women are not more likely than men to report that poor health prevented them from engaging in their normal daily activities.

<b>Table 2: Days of Poor Health</b>						
	Days physical health not good in last month		Days mental health not good in last month		Days poor health kept from activities	
	Mean	95% CI	Mean	95% CI	Mean	95% CI
Total	4.5	[4.1, 4.8]	4.9	[4.5, 5.2]	5.4	[5.0, 5.8]
AGE						
18-24	2.7	[1.9, 3.5]	5.5	[4.6, 6.5]	2.4	[1.6, 3.2]
25-34	3.1	[2.3, 3.9]	5.8	[4.9, 6.7]	4.1	[3.2, 5.0]
35-44	3.1	[2.5, 3.7]	5.6	[4.6, 6.6]	3.9	[3.0, 4.8]
45-54	5.4	[4.6, 6.3]	5.4	[4.6, 6.2]	7.0	[5.9, 8.1]
55-64	5.5	[4.8, 6.2]	4.4	[3.7, 5.1]	7.3	[6.2, 8.3]
65 and over	6.3	[5.5, 7.0]	3.0	[2.4, 3.6]	7.3	[6.2, 8.4]
GENDER						
Male	4.2	[3.7, 4.6]	4.4	[3.9, 4.9]	5.5	[4.8, 6.2]
Female	4.7	[4.3, 5.1]	5.3	[4.9, 5.8]	5.3	[4.7, 5.8]
Refused	6.3	[0.8, 11.9]	6.0	[1.0, 10.9]	6.2	[1.3, 11.1]
RACE-ETHNICITY						
White, Non-Hispanic	4.3	[3.9, 4.7]	4.8	[4.4, 5.2]	5.1	[4.6, 5.6]
Black, Non-Hispanic	4.9	[4.2, 5.6]	4.7	[4.1, 5.4]	5.8	[4.9, 6.6]
Hispanic	3.9	[2.5, 5.3]	6.6	[4.3, 8.8]	5.3	[2.7, 7.8]
Other, Non-Hispanic	4.5	[3.1, 5.9]	5.2	[3.7, 6.6]	6.4	[4.3, 8.4]
Don't know/No answer	4.5	[2.9, 6.1]	5.2	[3.0, 7.3]	6.2	[3.2, 9.1]
EDUCATION						
Did not graduate HS	7.7	[6.6, 8.9]	6.5	[5.4, 7.7]	7.7	[6.4, 9.1]
HS diploma/equivalent	4.4	[3.9, 4.9]	5.2	[4.6, 5.8]	5.9	[5.1, 6.7]
Some college/2-year college degree	4.1	[3.6, 4.7]	4.8	[4.2, 5.4]	4.9	[4.2, 5.6]
4-year college degree or higher	2.6	[2.5, 2.9]	3.4	[3.0, 3.9]	2.8	[2.4, 3.3]
Don't know/No answer	3.5	[0.0, 8.0]	0.2	[0.0, 0.4]	0.9	[0.0, 1.9]
HOUSEHOLD INCOME						
Less than \$25,000	7.1	[6.3, 7.8]	7.1	[6.4, 7.9]	8.2	[7.3, 9.1]
\$25,000-\$49,999	3.5	[2.9, 4.1]	5.0	[4.2, 5.8]	4.1	[3.3, 5.0]
\$50,000-\$74,999	3.4	[2.5, 4.2]	2.7	[2.1, 3.3]	2.6	[1.8, 3.4]
\$75,000 or more	2.2	[1.8, 2.6]	3.0	[2.6, 3.5]	2.4	[1.9, 2.9]
Don't know/No answer	5.4	[4.6, 6.3]	5.3	[4.4, 6.1]	6.7	[5.5, 7.9]

### 3. Access to Care

*Analysis of Section 3 (“Health Care Access”) and Module 3 (“Health Care Access”) of the 2018 BRFSS Questionnaire*

#### HEALTH CARE COVERAGE

The share of Louisiana’s non-elderly adult population (age 18 to 64) without health care coverage – whether health insurance plans, HMOs, or government plans – continued to shrink for the fifth consecutive year in 2018. For the second consecutive year, the share is smaller in Louisiana than it is in the United States as a whole.

In Louisiana, nine percent of non-elderly adults – about one in ten – lack any health coverage. Nationally, 11.5 percent of non-elderly adults lack health coverage.

**For the second consecutive year, the uninsured rate among non-elderly adults in Louisiana is smaller than in the United States.**

Despite significant increases in the share of Louisiana adults with coverage, health care coverage remains strongly associated with socio-economic status. Nearly one in twenty-five adults under the age of 65 in the top 30% of household incomes lack coverage (4.1 percent), but slightly over three in twenty-five adults with household incomes below \$25,000 lack coverage (12.8 percent). Importantly, however, the share of adults at the bottom 30% of household incomes without coverage decreased by approximately six percentage points following 2017 (18.4 percent).

More concerning, however, is the fact that most of the non-elderly Louisiana adults without health insurance have lacked

coverage for more than a year. Among the uninsured, 57.4% have not had coverage for more than a year – including 27.6% who have lacked coverage for more than three years and 10.6% who have never had coverage. This share of the chronic uninsured – without coverage for more than a year – constitutes 6.6% of the state’s total non-elderly adult population.

**6.6% of the non-elderly adult population is chronically uninsured, having lacked coverage for more than a year.**

#### HEALTH CARE ACCESS: PRIMARY CARE PROVIDERS

Primary care providers are physicians, physician assistants, or nurse practitioners who serve as coordinators of patient health and as trustees of patient wellness. They are a crucial component of maintaining individual health because they focus on preventive care rather than illness management. Research suggests that individuals who regularly visit a primary care provider have better health outcomes and are better able to manage their health care.

In Louisiana, 76.2 percent of adults report having someone they consider their personal doctor or health care provider. As with health insurance coverage, there are substantial gaps across socio-economic groups and demographic groups.

Approximately three fourths of adults without a high school diploma have a primary care provider (76.6%), while 82.6% of college graduates have a provider. Similarly, 72.3% of Louisiana adults with household incomes below \$25,000 have a primary care provider, as compared to 81.8% of those with household incomes of \$75,000 or more.

While nearly six in ten of adults between the ages of 18 and 24 (57.7%) have a health care provider, slightly more than nine in ten of adults over the age of 65 years (92.5%) have a provider.

There is also a gap between males and females: 71% of men but 81% of adult women in Louisiana have a health care provider – a statistically significant 10 percentage point gap.

#### HEALTH CARE ACCESS: FREQUENCY OF ROUTINE CHECKUPS

Nearly eight in ten Louisiana adults report visiting a doctor for a routine checkup over the previous year (79.3%). This share is statistically greater compared to 2017's share of 71.2%.

Gender, race, and age are associated with incidence of routine checkups. Women (83.5%) are substantially more likely than men (74.8%) to report visiting a doctor for a routine checkup over the previous year. Similarly, the share of black adults (83.4%) is significantly greater than the share of white adults (78%). Lastly, there is nearly a 25 percentage point gap between the youngest adults (68.6%) and seniors (93.1%).

Interestingly, incidence of seeing a health care provider for routine checkups remains unrelated to either household income or educational attainment, two common measures of socio-economic status.

#### HEALTH CARE ACCESS: FREQUENCY OF ANY VISITS TO DOCTORS, NURSES, OR OTHER PROVIDERS

The share of Louisiana adults who have visited a doctor, nurse, or other health professional for any type of medical care during the previous year is slightly greater than the share who have done so specifically for routine checkups. In all, 83.9% of adults have seen a health care professional for any care. There is a slight but statistically significant decrease in this share compared to 2016 (87.9%), when the metric was last included in Louisiana's BRFSS.

Eleven percent of those who did not have a routine checkup in the previous year (which comprises about 55% of the total adult population) nevertheless saw a health care professional during the same period. In other words, a significant share of the state's adult population misses potentially preventative care and yet ultimately requires some form of care.

#### HEALTH CARE ACCESS: PROHIBITIVE COSTS

In all, 14.8% of Louisiana adults say there was a time in the previous year when they needed to see a doctor but were unable to because of cost. This share is even higher (23.9%) among individuals with household incomes less than \$25,000 (roughly the bottom 30% of households in Louisiana) but drops to 5.2% among individuals with household incomes of \$75,000 or more (roughly the top 30% of households in Louisiana).

When considering prescription medication alone, 9.6% of the state's adult population reports that they were unable to take prescribed medications due to cost. The inability to pay for prescription medications is especially high among adults that are Hispanic, ages 45 through 54, do not have a high school diploma or equivalent, or in the range of lower household incomes. There is



also a slight but statistically significant gap between men (7.7%) and women (11.4%).

### SATISFACTION WITH CARE

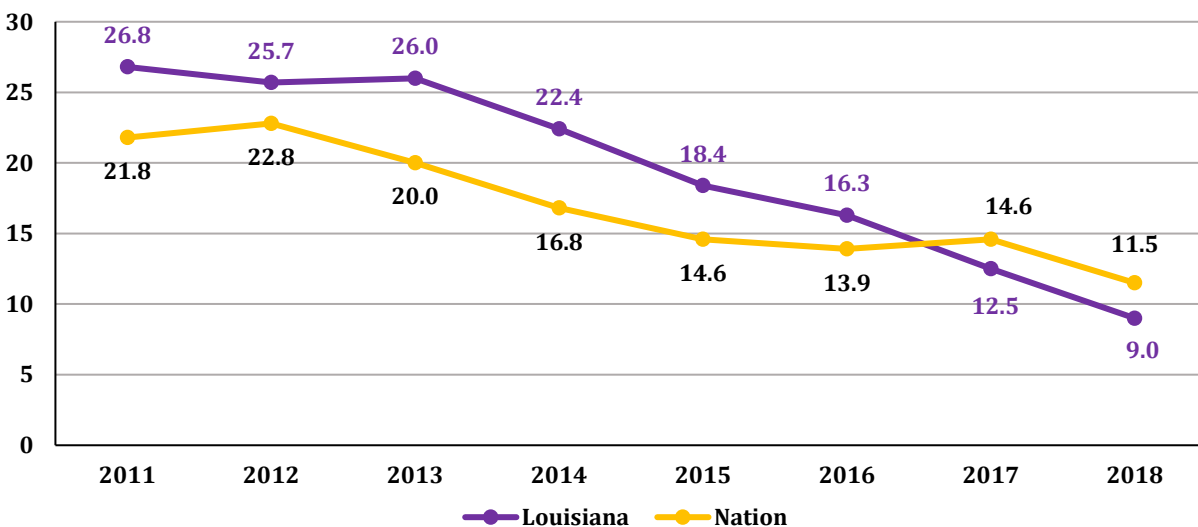
Despite the prevalence of health challenges explored elsewhere in this report and inequalities in access to care, Louisiana adults across a range of backgrounds are largely satisfied with their care. When asked how satisfied they are with the health care they have received, most Louisiana adults (93.7%)

report they are “very” or “somewhat” satisfied.

Satisfaction is slightly higher among women, whites, college graduates, and individuals with higher household incomes, but the differences are modest – less than five percentage points in each case. Seniors comprise the greatest share of adults at least somewhat satisfied with the care they have received (97.3%).

### Share of Louisiana Non-elderly Adult Population Without Health Coverage Declines

*Percent of non-elderly adults (age 18-64) reporting they do not have health care coverage*



2011-2018 Behavioral Risk Factor Surveillance System

<b>Table 3a: Access to Care</b>						
	No coverage*			Has health care provider		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	9.0	[8.0,10.1]	324,126	76.2	[74.5,77.8]	2,738,950
<b>AGE</b>						
18-24	12.3	[9.1,16.5]	55,184	57.7	[51.7,63.6]	258,408
25-34	12.9	[10.1,16.3]	85,609	62.9	[57.7,67.7]	417,245
35-44	12.6	[9.8,16.2]	74,937	69.1	[64.5,73.4]	410,544
45-54	9.3	[7.2,11.8]	52,245	81.7	[78.2,84.7]	459,666
55-64	9.4	[7.2,12.2]	56,150	86.8	[83.7,89.3]	519,430
65 and over	---	---	---	92.5	[90.2,94.3]	673,657
<b>GENDER</b>						
Male	10.0	[8.6,11.7]	173,569	71.0	[68.3,73.5]	1,226,777
Female	8.1	[6.8,9.7]	150,558	81.0	[78.9,83.0]	1,498,783
Refused	---	---	---	82.1	[54.9,94.5]	13,390
<b>RACE-ETHNICITY</b>						
White, Non-Hispanic	7.8	[6.6,9.1]	165,703	78.9	[77.0,80.8]	1,679,084
Black, Non-Hispanic	10.0	[8.1,12.2]	107,509	74.0	[70.4,77.3]	796,529
Hispanic	12.7	[7.4,20.9]	23,057	64.4	[54.6,73.1]	117,239
Other, Non-Hispanic	14.6	[9.0,22.8]	18,543	66.1	[56.9,74.2]	83,937
Don't know/No answer	11.3	[4.9,24.2]	9,314	76.0	[65.6,84.1]	62,160
<b>EDUCATION</b>						
Did not graduate HS	10.2	[7.4,13.9]	59,460	76.6	[71.2,81.2]	446,603
HS diploma/equivalent	12.2	[10.3,14.4]	146,770	71.2	[68.0,74.3]	856,624
Some college/2-year college degree	8.5	[6.7,10.6]	87,486	76.8	[73.7,79.6]	794,356
4-year college degree or higher	4.0	[3.0,5.4]	30,298	82.6	[80.2,84.8]	624,719
Don't know/No answer	0.7	[0.1,5.5]	111	93.8	[70.1,99.0]	14,047
<b>HOUSEHOLD INCOME</b>						
Less than \$25,000	12.8	[10.6,15.4]	129,893	72.3	[68.6,75.7]	732,989
\$25,000-\$49,999	12.1	[9.5,15.2]	82,675	74.1	[70.0,77.7]	506,178
\$50,000-\$74,999	5.8	[3.9,8.7]	23,287	80.9	[76.5,84.7]	324,282
\$75,000 or more	4.1	[2.8,5.9]	36,979	81.8	[78.9,84.5]	743,715
Don't know/No answer	8.7	[6.6,11.5]	51,293	73.5	[69.1,77.5]	431,785

\* Among adults under the age of 65

**Table 3b: Access to Care**

	Could not afford care			Routine checkup in past year		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	14.8	[13.5,16.1]	531,003	79.3	[77.7,80.8]	2,851,761
AGE						
18-24	15.6	[11.6,20.7]	69,923	68.6	[63.0,73.8]	307,266
25-34	17.2	[14.1,21.0]	114,459	68.3	[63.4,72.9]	453,398
35-44	16.5	[13.3,20.2]	97,852	69.0	[64.3,73.4]	409,846
45-54	20.1	[17.1,23.6]	113,353	84.7	[81.6,87.4]	476,521
55-64	14.4	[11.8,17.4]	86,123	88.0	[85.2,90.3]	526,679
65 and over	6.8	[4.9,9.2]	49,293	93.1	[91.1,94.7]	678,051
GENDER						
Male	13.4	[11.6,15.5]	232,137	74.8	[72.2,77.3]	1,293,452
Female	16.1	[14.4,17.9]	297,172	83.5	[81.5,85.3]	1,544,287
Refused	10.4	[2.8,31.7]	1,694	86.0	[58.8,96.3]	14,022
RACE-ETHNICITY						
White, Non-Hispanic	13.2	[11.8,14.8]	281,076	78.0	[76.1,79.9]	1,659,593
Black, Non-Hispanic	16.1	[13.6,19.0]	173,160	83.4	[80.1,86.2]	897,530
Hispanic	19.0	[11.9,29.0]	34,565	72.9	[63.3,80.8]	132,804
Other, Non-Hispanic	21.8	[15.7,29.3]	27,621	71.9	[63.2,79.2]	91,242
Don't know/No answer	17.8	[10.5,28.7]	14,580	86.4	[78.0,91.9]	70,592
EDUCATION						
Did not graduate HS	21.3	[16.9,26.4]	124,147	80.1	[75.0,84.5]	467,379
HS diploma/equivalent	13.7	[11.8,15.9]	164,884	77.9	[74.9,80.6]	935,993
Some college/2-year college degree	16.3	[14.0,19.0]	169,129	79.4	[76.5,82.1]	822,300
4-year college degree or higher	9.6	[8.0,11.5]	72,732	80.7	[78.2,83.0]	610,160
Don't know/No answer	0.7	[0.1,5.5]	111	89.0	[65.2,97.2]	13,329
HOUSEHOLD INCOME						
Less than \$25,000	23.9	[20.9,27.2]	242,555	81.9	[78.9,84.6]	831,058
\$25,000-\$49,999	15.9	[13.1,19.2]	108,699	75.7	[71.6,79.5]	517,590
\$50,000-\$74,999	12.7	[9.6,16.6]	50,952	79.3	[74.5,83.4]	317,765
\$75,000 or more	5.2	[4.0,6.8]	47,610	79.1	[76.0,81.9]	719,127
Don't know/No answer	13.8	[10.9,17.4]	81,187	79.4	[75.5,82.8]	466,221

**Table 3c: Access to care**

	Seen a health care provider more than once in past year			Unable to take prescribed medication in past year due to cost			At least somewhat satisfied with health care received		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	83.9	[82.2,85.4]	2,899,983	9.6	[8.6,10.8]	332,700	93.7	[92.7,94.6]	3,239,016
AGE									
18-24	79.0	[73.0,83.9]	321,899	8.0	[4.8,12.9]	32,437	93.8	[88.7,96.7]	382,447
25-34	79.7	[73.6,84.6]	490,865	11.5	[8.8,14.8]	70,573	92.0	[88.6,94.5]	567,159
35-44	79.9	[75.3,83.7]	454,119	9.8	[7.5,12.8]	55,963	90.2	[86.9,92.7]	512,701
45-54	86.7	[83.8,89.2]	480,458	12.8	[10.3,15.7]	70,790	93.4	[91.3,95.0]	517,233
55-64	89.0	[86.6,91.0]	526,491	9.8	[7.7,12.4]	58,203	94.8	[93.0,96.1]	560,823
65 and over	87.2	[84.5,89.5]	626,152	6.2	[4.7,8.3]	44,733	97.3	[95.6,98.3]	698,652
GENDER									
Male	81.3	[78.4,83.8]	1,342,445	7.7	[6.4,9.4]	127,687	91.7	[89.9,93.3]	1,515,406
Female	86.4	[84.5,88.0]	1,544,083	11.4	[9.9,13.0]	203,492	95.7	[94.6,96.6]	1,710,766
Refused	82.5	[57.1,94.3]	13,455	9.3	[2.1,32.9]	1,520	78.7	[50.6,93.0]	12,843
RACE-ETHNICITY									
White, Non-Hispanic	85.9	[84.2,87.5]	1,763,746	8.5	[7.4,9.7]	173,948	94.3	[93.1,95.2]	1,935,652
Black, Non-Hispanic	81.3	[77.3,84.8]	856,647	10.9	[8.9,13.2]	114,461	93.7	[91.4,95.4]	987,141
Hispanic	80.7	[71.3,87.6]	122,911	14.2	[7.3,25.9]	21,608	89.4	[77.7,95.3]	136,085
Other, Non-Hispanic	76.8	[67.8,83.9]	90,360	11.0	[7.3,16.4]	12,997	89.6	[83.3,93.7]	105,413
Don't know/No answer	83.4	[73.0,90.3]	66,319	12.2	[6.4,22.2]	9,686	94.0	[87.9,97.1]	74,725
EDUCATION									
Did not graduate HS	77.7	[71.2,83.1]	444,423	12.7	[9.4,16.9]	72,590	92.1	[87.7,95.1]	526,988
HS diploma/equivalent	81.5	[78.7,84.1]	945,572	9.2	[7.7,11.1]	107,025	93.5	[91.8,94.9]	1,084,675
Some college/2-year college degree	85.8	[83.2,88.1]	856,711	10.0	[8.1,12.2]	99,483	93.4	[91.6,94.8]	931,966
4-year college degree or higher	90.4	[88.4,92.1]	640,836	7.5	[6.0,9.3]	53,285	96.0	[94.7,97.0]	680,852
Don't know/No answer	65.7	[31.3,89.0]	9,841	2.1	[0.4,9.6]	318	79.7	[34.8,96.7]	11,935
HOUSEHOLD INCOME									
Less than \$25,000	82.7	[78.8,85.9]	809,398	14.7	[12.3,17.4]	143,679	92.1	[89.8,93.9]	901,967
\$25,000-\$49,999	82.7	[78.5,86.2]	542,706	10.8	[8.5,13.6]	70,755	91.7	[88.3,94.2]	602,030
\$50,000-\$74,999	86.9	[82.1,90.5]	330,535	5.3	[3.6,7.8]	20,111	95.7	[93.3,97.3]	364,282
\$75,000 or more	90.0	[87.6,92.0]	781,029	5.1	[3.8,6.9]	44,476	95.7	[94.0,96.9]	830,684
Don't know/No answer	76.2	[71.9,80.1]	436,314	9.4	[6.9,12.7]	53,679	94.3	[92.1,96.0]	540,054

## 4. Exercise

### *Analysis of Section 4 ("Exercise") of the 2018 BRFSS Questionnaire*

Louisiana adults continue to lag behind their peers nationally in exercise. Across the United States, 75.7% of adults engage in physical activity or exercise beyond what they do for their jobs. In this state, 69.1% of adults report participating in physical activities or exercises (other than what they do on their regular job) during the past month.

Exercise is statistically related to race, gender, and age. Although white and Hispanic adults exercise at comparable rates (71.5% and 71.3%), black adults lag behind at 64.6%. Men are more likely to report having engaged in physical activity other than what they do on their regular job in the past month than women. When looking at exercise across the age groups, a 15.4 percentage point gap between the youngest and oldest adults emerges.

**Table 4: Exercise**

	Engaged in physical activity other than job in past month		
Total	69.1	[67.3,70.9]	2,485,466
AGE			
18-24	76.7	[70.8,81.7]	343,433
25-34	75.3	[69.6,80.2]	499,671
35-44	70.1	[65.5,74.2]	415,961
45-54	69.5	[65.6,73.2]	391,678
55-64	64.9	[60.8,68.7]	388,263
65 and over	61.3	[57.7,64.8]	446,460
GENDER			
Male	72.6	[69.9,75.3]	1,255,453
Female	65.9	[63.5,68.3]	1,219,563
Refused	61.8	[36.2,82.2]	10,450
RACE-ETHNICITY			
White, Non-Hispanic	71.5	[69.4,73.5]	1,521,724
Black, Non-Hispanic	64.6	[60.6,68.4]	695,646
Hispanic	71.3	[60.8,79.9]	129,787
Other, Non-Hispanic	65.7	[56.7,73.7]	83,436
Don't know/No answer	66.6	[55.3,76.3]	54,873
EDUCATION			
Did not graduate HS	49.3	[43.0,55.6]	287,544
HS diploma/equivalent	65.1	[62.0,68.1]	783,058
Some college/2-year college degree	73.7	[70.8,76.5]	763,424
4-year college degree or higher	85.0	[82.8,86.9]	642,509
Don't know/No answer	47.7	[20.5,76.4]	7,145
HOUSEHOLD INCOME			
Less than \$25,000	54.1	[50.1,58.0]	548,643
\$25,000-\$49,999	71.8	[67.7,75.5]	490,361
\$50,000-\$74,999	77.4	[72.8,81.4]	310,165
\$75,000 or more	83.1	[80.4,85.5]	755,306
Don't know/No answer	64.8	[60.3,69.1]	380,991

## 5. Inadequate Sleep

*Analysis of Section 5 ("Inadequate Sleep") of the 2018 BRFSS Questionnaire*

Health research has linked insufficient sleep to a number of chronic physical and mental health conditions including diabetes, cardiovascular disease, obesity and depression. The federal Centers for Disease Control and Prevention recommend that adults get at least seven hours of sleep each night, with even more sleep for those over the age of 60 years.

Louisiana adults sleep about as much as the CDC recommends. The number of hours of sleep per night is, on average, seven. Nearly

all demographic groups considered here – whether by age, gender, race/ethnicity, educational attainment, or household income – have an average amount of nightly sleep within the margin of error of the recommendation.

The single exception are adults between the ages of 25 and 34 years, whose average hours of sleep (6.7 hours) fall short of the CDC recommendation.

**Table 5: Inadequate sleep**

	Average hours of sleep	
	Mean	95% CI
Total	7.0	[6.9, 7.1]
AGE		
18-24	7.0	[6.8, 7.2]
25-34	6.7	[6.5, 6.9]
35-44	7.0	[6.7, 7.2]
45-54	6.9	[6.8, 7.0]
55-64	7.0	[6.9, 7.1]
65 and over	7.4	[7.3, 7.6]
GENDER		
Male	7.0	[6.8, 7.1]
Female	7.1	[7.0, 7.2]
Refused	6.7	[6.0, 7.4]
RACE-ETHNICITY		
White, Non-Hispanic	7.0	[7.0, 7.1]
Black, Non-Hispanic	7.0	[6.8, 7.2]
Hispanic	7.0	[6.7, 7.3]
Other, Non-Hispanic	6.7	[6.5, 7.0]
Don't know/No answer	7.4	[7.0, 7.7]
EDUCATION		
Did not graduate HS	6.9	[6.5, 7.3]
HS diploma/equivalent	7.1	[7.0, 7.2]
Some college/2-year college degree	7.0	[6.9, 7.1]
4-year college degree or higher	7.0	[6.9, 7.1]
Don't know/No answer	6.8	[4.9, 8.7]
HOUSEHOLD INCOME		
Less than \$25,000	7.0	[6.9, 7.2]
\$25,000-\$49,999	6.9	[6.7, 7.0]
\$50,000-\$74,999	7.0	[6.9, 7.2]
\$75,000 or more	6.9	[6.8, 7.0]
Don't know/No answer	7.3	[7.0, 7.5]



## 6. Asthma & Respiratory Health

*Analysis of Section 6 ("Chronic Health Conditions") and Module 10 ("Respiratory Health") of the 2018 BRFSS Questionnaire*

### ASTHMA

Asthma is a chronic inflammation of the airways resulting in coughing, wheezing and tightening of the chest, along with shortness of breath. Illness or allergies can trigger asthmatic attacks, and, in the worst cases, these attacks can be fatal. Incidence of asthma has been increasing throughout the world, with higher rates in more developed, western nations.

In Louisiana, 8.8% of adults are currently diagnosed with asthma. The rate in Louisiana is statistically indistinguishable from the national rate of 9.2%.

Asthma incidence is higher among women (10%) than among men (7.4%). However, these data cannot reveal whether the gap arises from an underlying difference in prevalence of asthma or a difference in the likelihood of seeking or receiving a diagnosis.

Asthma also disproportionately affects individuals with less education and lower household earnings. Adults who did not graduate from high school (15.2%) are nearly two-and-a-half times more likely to report asthma incidence than their counterparts who have at least a 4-year college degree (6.2%). Similarly, individuals in the bottom 30% of household incomes (14%) are over two-and-a-half times more likely to report asthma incidence than their counterparts in the top 30% of households (6.3%).

### RESPIRATORY CONDITIONS

There is higher incidence of respiratory conditions such as chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis in Louisiana (9.8%) than in the nation as a whole (6.8%).

Respiratory conditions are related to age, gender, and socio-economic status. Risk of respiratory conditions increases markedly late in life. Less than seven percent of adults under the age of 35 suffer from COPD, emphysema, or chronic bronchitis, but incidence increases to 15.4% among adults 65 years or older. While 7.8% of men have had one of these conditions, 11.6% of women have. College graduates are roughly one fifth as likely to suffer from respiratory conditions (4.3%) compared to those without a high school diploma (20.1%). Relatedly, individuals with household earnings of \$75,000 or more are also roughly one fifth as likely to have respiratory conditions (3.3%) than those in households with income below \$25,000 (15.8%).

Beyond diagnosis of a respiratory condition, 19.4% of Louisiana adults say they suffered from a cough on most days during the three months preceding their survey interview. Similarly, 18.4% say they coughed up phlegm or mucus on most days during the previous three months. Approximately one-in-four adults (26.6%) have shortness of breath either when walking up stairs and inclines or when hurrying on level ground. Finally, 29.6% have been given a breathing test to diagnose breathing problems.

**Table 6: Asthma & COPD**

	Currently diagnosed with asthma			COPD		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	8.8	[7.6,10.1]	316,423	9.8	[8.7,11.0]	351,739
AGE						
18-24	9.8	[6.7,14.0]	43,664	2.7	[1.4,5.3]	12,276
25-34	10.8	[7.0,16.4]	71,594	6.3	[4.4,9.0]	42,076
35-44	6.9	[4.7,9.9]	40,708	6.8	[3.9,11.5]	40,145
45-54	8.9	[6.9,11.4]	50,072	10.8	[8.5,13.6]	60,512
55-64	10.5	[8.2,13.4]	63,103	14.2	[11.4,17.5]	84,858
65 and over	6.5	[5.0,8.4]	47,282	15.4	[13.0,18.1]	111,873
GENDER						
Male	7.4	[5.6,9.8]	128,309	7.8	[6.3,9.6]	134,607
Female	10.0	[8.7,11.6]	185,613	11.6	[10.1,13.3]	215,482
Refused	14.8	[3.7,43.7]	2,501	10.1	[1.8,40.2]	1,650
RACE-ETHNICITY						
White, Non-Hispanic	7.8	[6.7,9.1]	166,448	10.4	[9.1,11.8]	220,170
Black, Non-Hispanic	11.2	[8.4,14.7]	120,081	9.5	[7.3,12.3]	102,426
Hispanic	9.2	[4.4,18.3]	16,717	7.7	[4.1,14.0]	13,973
Other, Non-Hispanic	5.3	[3.0,9.2]	6,739	5.9	[3.4,9.8]	7,443
Don't know/No answer	7.8	[3.2,18.0]	6,437	9.5	[5.1,16.8]	7,726
EDUCATION						
Did not graduate HS	15.2	[10.4,21.6]	88,484	20.1	[15.5,25.7]	117,466
HS diploma/equivalent	7.3	[5.9,9.1]	88,125	9.8	[8.3,11.5]	118,202
Some college/2-year college degree	9.0	[7.2,11.1]	92,949	8.0	[6.5,9.8]	83,222
4-year college degree or higher	6.2	[5.0,7.7]	46,865	4.3	[3.4,5.6]	32,849
Don't know/No answer	---	---	---	---	---	---
HOUSEHOLD INCOME						
Less than \$25,000	14.0	[11.0,17.7]	142,301	15.8	[13.6,18.3]	160,529
\$25,000-\$49,999	6.9	[5.0,9.5]	47,416	8.1	[5.9,11.1]	55,267
\$50,000-\$74,999	6.0	[4.2,8.7]	24,182	6.0	[4.2,8.6]	24,066
\$75,000 or more	5.2	[3.8,6.9]	46,962	3.3	[2.3,4.6]	29,845
Don't know/No answer	9.4	[7.0,12.6]	55,561	14.0	[10.3,18.6]	82,032

## 7. Diabetes

*Analysis of Section 6 (“Chronic Health Conditions”) of the 2018 BRFSS Questionnaire*

Diabetes represents a significant and growing health risk in the United States. Marked by high levels of sugar in the blood, individuals with diabetes are at greater risk for cardiovascular disease, chronic renal failure, high blood pressure, and a range of health related problems.

Like other adverse health conditions considered in this report, Louisiana has a higher prevalence of diabetes than the nation. The share of Louisiana residents with diabetes is 14.1%, about three percentage points above the national rate of 11.3%.

Diabetes incidence is most closely associated with age and socio-economic status. Diabetes is extremely rare among adults under the age of 45, but approximately one out of five adults 45 or older has diabetes. However, the rate increases to nearly one in three for adults 65 years or older.

Among individuals in the bottom 30% of household incomes in Louisiana (less than \$25,000), 19.4% have diabetes. In contrast, this share falls by ten percentage points to 9.4% among individuals in the top 30% of household income in the state (\$75,000 or more).

Similarly, among individuals without a high school diploma 18.5% have diabetes, while 8.6% of college graduates have diabetes.

There is also a racial gap in the prevalence of diabetes between whites and blacks in the state. While 12.8% of white adults in Louisiana have diabetes, the share increases to 17.7% for blacks.

**Table 7: Diabetes**

	Diagnosed with diabetes		
	%	95% CI	Est. Pop.
Total	14.1	[12.9,15.3]	505,468
AGE			
18-24	3.2	[1.6,6.5]	14,438
25-34	2.6	[1.5,4.7]	17,411
35-44	4.8	[3.4,6.6]	28,406
45-54	20.0	[16.8,23.6]	112,506
55-64	22.6	[19.3,26.4]	135,430
65 and over	27.1	[24.0,30.5]	197,277
GENDER			
Male	13.4	[11.8,15.2]	231,334
Female	14.5	[12.8,16.3]	267,670
Refused	39.6	[18.2,65.9]	6,464
Total	14.1	[12.9,15.3]	505,468
RACE-ETHNICITY			
White, Non-Hispanic	12.8	[11.4,14.3]	271,552
Black, Non-Hispanic	17.7	[15.2,20.5]	190,622
Hispanic	5.8	[3.0,10.8]	10,499
Other, Non-Hispanic	7.6	[4.7,12.0]	9,663
Don't know/No answer	28.3	[19.2,39.6]	23,132
EDUCATION			
Did not graduate HS	18.5	[14.4,23.3]	107,658
HS diploma/equivalent	14.5	[12.6,16.6]	173,893
Some college/2-year college degree	14.6	[12.6,17.0]	151,647
4-year college degree or higher	8.6	[7.3,10.2]	65,175
Don't know/No answer	47.4	[19.8,76.6]	7,095
HOUSEHOLD INCOME			
Less than \$25,000	19.4	[16.8,22.2]	196,277
\$25,000-\$49,999	13.0	[10.3,16.3]	89,007
\$50,000-\$74,999	12.8	[9.7,16.7]	51,272
\$75,000 or more	9.4	[7.8,11.4]	85,707
Don't know/No answer	14.2	[11.5,17.3]	83,204

## 8. Arthritis Burden

*Analysis of Section 6 ("Chronic Health Conditions") of the 2018 BRFSS Questionnaire*

The term, arthritis, describes more than 100 rheumatic diseases and conditions that affect joints, the tissues which surround joints and other connective tissue. The pattern, severity, and location of symptoms can vary depending on the specific form of the disease. Typically, rheumatic conditions are characterized by pain and stiffness in and around one or more joints. The symptoms can develop gradually or suddenly. Certain rheumatic conditions can also involve the immune system and various internal organs of the body.

More than one-fourth (29.0 percent) of Louisiana adults have been diagnosed with arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. This overall incidence rate has remained similar since at least 2015, as have the rates among demographic subgroups.

These conditions are more frequent among older adults and women. Nearly one in two adults between the ages of 55 and 64 (44.2 percent) have been diagnosed with these conditions; and well more than half of those who are 65 years of age or older (55.5 percent) have been diagnosed.

The share of women who have been diagnosed with one of these conditions is 33.9% – 10.3 percentage points higher than men. Louisiana women have a slightly higher median age and lower average household income than Louisiana men. Yet, even after controlling for these factors known to be associated with arthritis and related conditions, women in the state exhibit higher incidence.

Like other health risk factors and health conditions, arthritis disproportionately affects those with less education and those in lower earning households. Among individuals in the bottom 30% of household income, 33.4% have been diagnosed with arthritis or a related condition. The share drops to 23.9% among individuals in the top 30% of household incomes. The same pattern holds for educational attainment. Among college graduates, 22.4% have been diagnosed with arthritis or a similar condition, while 39.9% of individuals who did not finish high school have been diagnosed with arthritis or related rheumatoid condition.

**Table 8: Arthritis**

	Diagnosed with arthritis *		
	%	95% CI	Est. Pop.
Total	29.0	[27.4,30.7]	1,043,244
AGE			
18-24	1.8	[0.9,3.8]	8,197
25-34	9.1	[6.6,12.4]	60,336
35-44	19.1	[15.8,22.8]	113,187
45-54	34.3	[30.5,38.3]	192,953
55-64	44.2	[40.2,48.2]	264,411
65 and over	55.5	[52.0,58.9]	404,159
GENDER			
Male	23.6	[21.5,26.0]	408,714
Female	33.9	[31.7,36.2]	627,006
Refused	46.1	[23.0,71.1]	7,524
RACE-ETHNICITY			
White, Non-Hispanic	32.2	[30.2,34.3]	684,693
Black, Non-Hispanic	25.7	[22.8,28.8]	276,281
Hispanic	16.3	[10.3,24.7]	29,597
Other, Non-Hispanic	22.5	[16.8,29.6]	28,606
Don't know/No answer	29.4	[20.8,39.9]	24,067
EDUCATION			
Did not graduate HS	39.9	[34.1,45.9]	232,530
HS diploma/equivalent	28.2	[25.6,30.9]	338,599
Some college/2-year college degree	28.6	[25.9,31.6]	296,313
4-year college degree or higher	22.4	[20.2,24.7]	169,258
Don't know/No answer	31.8	[11.6,62.3]	4,759
HOUSEHOLD INCOME			
Less than \$25,000	33.4	[30.0,36.9]	338,318
\$25,000-\$49,999	28.0	[24.5,31.9]	191,692
\$50,000-\$74,999	24.7	[20.7,29.3]	99,042
\$75,000 or more	23.9	[21.3,26.7]	217,364
Don't know/No answer	33.5	[29.4,37.9]	196,828

\* Including arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia

## 9. Other Chronic Conditions

*Analysis of Section 6 ("Chronic Health Conditions") of the 2018 BRFSS Questionnaire*

Chronic diseases and conditions are persistent health conditions with long-lasting effects. Typically, these conditions may be controlled but not cured. These unique conditions require more frequent doctor visits, more extensive care from physicians, and often more lengthy hospital stays. These diseases and conditions affect not only the health of individual patients but also states' health care systems. According to the Center for Disease Control, chronic diseases are a leading cause of death and disability in the United States and soak up a majority of health care spending in the country.

In addition to the chronic diseases and conditions that are the focus of various sections of this report – asthma, chronic obstructive pulmonary disease, emphysema, and chronic bronchitis, diabetes, and arthritis – the Behavioral Risk Factor Surveillance System also tracks the prevalence of additional conditions and diseases: cardiovascular conditions; skin and other cancers; depressive disorders; and kidney disease.

Rates of incidence for each of these chronic conditions in Louisiana are generally comparable with those in the United States as a whole.

**Rates of incidence for many chronic conditions in Louisiana are generally comparable with those in the United States as a whole.**

### CARDIOVASCULAR CONDITIONS

Cardiovascular disease refers to strokes and diseases of the heart, such as coronary heart disease. Coronary heart disease (manifested by heart attacks) and strokes are the most common causes of death in the United States. Cardiovascular disease is also the leading cause of death in Louisiana.

Heart attacks are no more common in Louisiana than in the country as a whole. Overall, 5.0% of Louisiana adults report that they have had a heart attack or myocardial infarction compared to 4.6% of all American adults. Six percent of adults in the state have been diagnosed with angina or coronary heart disease; the rate for the United States is 4.3 percent. Finally, 5.1% of Louisiana adults report that they have suffered a stroke. The rate for adults in the nation as a whole is 3.4 percent.

Risk of cardiovascular disease is highest among older adults. Among Louisiana adults age 65 years or older, 12.1% report having a heart attack, 15.7% report coronary heart disease, and 11.1% report having a stroke. In contrast, these incidents are extremely rare among those under the age of 35, less than three percent in each case.

Socio-economic factors, such as household income and education, are also important predictors of cardiovascular health risks. The incidence of coronary heart disease, for example, is 6.3 percentage points higher among those without a high school diploma than for those with a four-year college degree. The gap is 6.2% between the bottom 30% and top 30% of household incomes.

### CANCER

Louisianans suffer from skin cancer at a slightly lower rate than the national population but suffer from other forms of

cancer at a similar rate. Nationally, 6.3% of adults have had skin cancer. In Louisiana, the share of adults is 5.6 percent. Meanwhile, Louisianans suffer from other forms of cancer at a comparable rate compared to the national population. Nationally, 6.8% of adults have been diagnosed with another form of cancer, as have 6.7% of Louisiana adults.

Risk of skin and other types of cancer are related to age, gender, race, and educational attainment. Interestingly, though skin and other types of cancer are related to educational attainment, they are not related to income. There are very few diagnoses of cancer among those under the age of 45: less than 2.0% for skin cancer and no more than 2.1% for other cancers for each age group. The incidence of cancer rises steadily over age groups, yet it remains under 9.0% for non-seniors. Incidence of cancer peaks among seniors. Adults 65 years of age or older have had a diagnosis of skin cancer at a rate of 15.6% and other cancers at a rate of 17.1%.

Women are less likely than men to have ever had skin cancer (4.9% versus 6.3%) but are slightly more likely to have ever had other cancers (7.4% versus 6%).

Skin cancer is exceptionally rare among black residents of Louisiana (0.2 percent). Among white adult residents of the state, 8.7% have had skin cancer. The share of whites who have had other cancers is 7.9 percent, and the racial gap in this regard is smaller as 5.3% of black Louisiana residents have had other cancers.

## DEPRESSIVE DISORDER

Louisiana adults are diagnosed with depression at a higher rate than the national adult population (23.1% and 18.2% respectively).

Women in Louisiana are nearly twice as likely as men to suffer from depression (26.9% versus 19.1%). Whites are more likely to be diagnosed with depression than blacks

(24.9% versus 19.4%). It should be noted, however, that these data cannot reveal whether this difference results from gaps in the likelihood of suffering from depression or gaps in the propensity across groups to seek out a diagnosis and treatment.

The share of individuals without a high school diploma who have been diagnosed with depressive disorders (35.9%) is nearly twice as high as that of college graduates (17.9%). Approximately one in three individuals with household incomes below \$25,000 have been diagnosed with depression (33.5%), while one in eight (14.7%) of individuals with household income of \$75,000 or more suffer from depression.

**23.1% of Louisiana adults suffer from depression.**

## KIDNEY DISEASE

Kidney disease is a relatively rare diagnosis both in Louisiana and in the United States as a whole. In this state, 3.8% of adults have been diagnosed with kidney disease, in line with the national rate of 3.1%.

As with many other chronic conditions, both age and socio-economic status are associated with kidney disease. There are very few cases of kidney disease among those under the age of 35. The risk rises incrementally over life culminating at a rate of 7.8% among those 65 years of age or older. The rate of incidence for kidney disease is twice as high for individuals who never graduated high school than for college graduates (6.8% versus 2.5%). Similarly, 2.1% of individuals in the highest earning households have been diagnosed with kidney disease, while 5.7% of those in the lowest earning households have.



<b>Table 9a: Chronic Conditions</b>									
	Heart attack			Coronary heart disease			Stroke		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	5.0	[4.3,5.7]	178,290	6.0	[5.2,6.9]	215,130	5.1	[4.3,5.9]	181,551
AGE									
18-24	0.5	[0.1,1.9]	2,053	1.6	[0.3,8.1]	7,044	0.6	[0.1,2.6]	2,749
25-34	0.8	[0.2,2.8]	5,301	0.7	[0.2,2.8]	4,943	1.7	[0.8,3.3]	11,163
35-44	1.4	[0.7,2.8]	8,491	1.2	[0.6,2.4]	7,347	2.9	[1.6,5.2]	17,339
45-54	5.6	[3.7,8.2]	31,329	4.2	[2.6,6.6]	23,697	3.9	[2.7,5.6]	22,179
55-64	7.1	[5.6,9.0]	42,639	9.6	[7.4,12.3]	57,405	7.9	[5.9,10.7]	47,551
65 and over	12.1	[10.0,14.6]	88,476	15.7	[13.3,18.5]	114,694	11.1	[8.9,13.7]	80,570
GENDER									
Male	5.7	[4.7,6.9]	98,974	6.3	[5.1,7.7]	108,238	4.5	[3.6,5.6]	77,322
Female	4.3	[3.4,5.3]	78,844	5.7	[4.7,6.9]	105,033	5.5	[4.4,6.8]	101,907
Refused	2.9	[0.7,11.6]	472	11.4	[2.1,44.2]	1,860	14.2	[3.4,43.8]	2,322
RACE-ETHNICITY									
White, Non-Hispanic	5.7	[4.8,6.7]	120,563	6.5	[5.6,7.5]	138,341	5.0	[4.1,6.1]	105,585
Black, Non-Hispanic	4.0	[2.9,5.5]	43,247	4.8	[3.5,6.7]	52,201	5.6	[4.3,7.4]	60,750
Hispanic	3.3	[1.3,8.4]	6,022	---	---	---	4.2	[1.6,10.2]	7,578
Other, Non-Hispanic	2.7	[1.4,5.2]	3,442	3.2	[1.6,6.0]	4,010	3.6	[1.7,7.8]	4,622
Don't know/No answer	6.1	[2.9,12.5]	5,016	5.3	[2.4,11.3]	4,296	3.7	[1.5,8.9]	3,017
EDUCATION									
Did not graduate HS	9.2	[6.7,12.5]	53,746	9.8	[6.9,13.9]	57,382	11.0	[8.0,14.9]	64,010
HS diploma/equivalent	5.2	[4.2,6.5]	62,876	6.2	[4.9,7.7]	73,944	4.5	[3.5,5.8]	54,388
Some college/2-year college degree	3.8	[2.8,5.1]	39,551	5.5	[4.2,7.1]	56,468	4.3	[3.2,5.7]	44,392
4-year college degree or higher	2.9	[2.2,3.9]	22,118	3.5	[2.7,4.5]	26,521	2.5	[1.8,3.4]	18,761
Don't know/No answer	--	--	--	---	---	---	--	--	--
HOUSEHOLD INCOME									
Less than \$25,000	8.2	[6.6,10.2]	83,349	9.3	[7.3,11.7]	93,861	8.9	[7.1,11.0]	89,977
\$25,000-\$49,999	3.7	[2.5,5.4]	24,972	5.2	[3.6,7.5]	35,637	5.1	[3.3,7.6]	34,624
\$50,000-\$74,999	4.5	[3.1,6.5]	17,980	6.5	[4.6,9.1]	26,013	2.5	[1.5,4.2]	9,934
\$75,000 or more	2.1	[1.5,3.1]	19,527	3.1	[2.2,4.4]	28,448	1.6	[1.0,2.6]	14,829
Don't know/No answer	5.5	[3.9,7.7]	32,462	5.3	[3.8,7.4]	31,172	5.5	[4.0,7.6]	32,188

**Table 9b: Chronic Conditions**

	Skin cancer			Other cancer		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	5.6	[4.9,6.3]	200,609	6.7	[6.0,7.6]	242,375
<b>AGE</b>						
18-24	---	---	---	1.2	[0.4,3.7]	5,221
25-34	0.3	[0.1,1.1]	1,950	1.3	[0.6,2.8]	8,721
35-44	1.9	[1.0,3.4]	10,985	2.1	[1.2,3.7]	12,494
45-54	5.5	[3.9,7.9]	31,188	7.0	[5.2,9.6]	39,650
55-64	7.2	[5.6,9.2]	43,081	8.7	[6.8,11.1]	52,080
65 and over	15.6	[13.4,18.1]	113,404	17.1	[14.6,19.8]	124,209
<b>GENDER</b>						
Male	6.3	[5.3,7.5]	109,115	6.0	[4.9,7.2]	103,263
Female	4.9	[4.1,5.9]	91,256	7.4	[6.4,8.7]	137,701
Refused	1.5	[0.2,10.1]	238	8.7	[1.2,42.0]	1,412
<b>RACE-ETHNICITY</b>						
White, Non-Hispanic	8.7	[7.7,9.9]	185,584	7.9	[6.9,9.0]	167,316
Black, Non-Hispanic	0.2	[0.1,0.6]	1,942	5.3	[3.9,7.0]	56,752
Hispanic	0.4	[0.1,1.8]	802	---	---	---
Other, Non-Hispanic	2.3	[1.2,4.5]	2,926	3.2	[1.8,5.7]	4,089
Don't know/No answer	11.4	[6.6,19.0]	9,355	8.9	[4.5,16.8]	7,260
<b>EDUCATION</b>						
Did not graduate HS	3.1	[1.9,5.3]	18,350	7.3	[5.0,10.7]	42,604
HS diploma/equivalent	5.7	[4.6,7.0]	68,113	6.3	[5.2,7.7]	75,943
Some college/2-year college degree	5.8	[4.5,7.4]	59,936	6.9	[5.5,8.6]	71,394
4-year college degree or higher	7.2	[6.0,8.6]	54,211	6.8	[5.6,8.3]	51,746
Don't know/No answer	---	---	---	---	---	---
<b>HOUSEHOLD INCOME</b>						
Less than \$25,000	3.9	[2.9,5.3]	39,982	6.0	[4.7,7.7]	61,042
\$25,000-\$49,999	6.3	[4.8,8.4]	43,356	8.5	[6.7,10.6]	57,851
\$50,000-\$74,999	5.6	[3.9,7.9]	22,375	7.2	[4.8,10.5]	28,688
\$75,000 or more	7.1	[5.7,8.8]	64,302	5.7	[4.5,7.2]	51,484
Don't know/No answer	5.2	[3.9,7.0]	30,594	7.4	[5.4,10.1]	43,311

**Table 9c: Chronic Conditions**

	Depressive disorder			Kidney disease		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	23.1	[21.5,24.8]	829,753	3.8	[3.2,4.6]	137,258
AGE						
18-24	22.3	[17.9,27.5]	99,939	1.0	[0.2,3.9]	4,408
25-34	26.7	[21.8,32.3]	177,286	0.9	[0.3,2.1]	5,738
35-44	21.1	[17.6,25.0]	125,140	1.4	[0.7,2.7]	8,432
45-54	26.7	[23.3,30.5]	150,489	4.2	[2.8,6.3]	23,467
55-64	25.1	[21.5,29.1]	150,218	6.4	[4.2,9.6]	38,518
65 and over	17.4	[14.9,20.3]	126,680	7.8	[6.0,10.1]	56,695
GENDER						
Male	19.1	[16.6,21.9]	330,192	3.1	[2.3,4.1]	53,327
Female	26.9	[24.8,29.1]	497,935	4.5	[3.5,5.8]	83,455
Refused	10.0	[1.4,45.8]	1,626	2.9	[0.7,11.7]	476
RACE-ETHNICITY						
White, Non-Hispanic	24.9	[23.0,26.9]	529,504	3.6	[2.8,4.7]	77,525
Black, Non-Hispanic	19.4	[16.1,23.2]	209,178	4.5	[3.3,6.1]	48,395
Hispanic	23.9	[16.7,33.1]	43,574	2.6	[0.7,9.5]	4,815
Other, Non-Hispanic	19.7	[14.3,26.5]	25,013	3.9	[1.7,8.6]	4,968
Don't know/No answer	27.5	[18.2,39.2]	22,484	1.9	[0.7,5.4]	1,556
EDUCATION						
Did not graduate HS	35.9	[29.9,42.5]	209,502	6.8	[4.2,10.8]	39,671
HS diploma/equivalent	22.1	[19.7,24.8]	266,100	3.8	[2.9,5.0]	45,487
Some college/2-year college degree	21.1	[18.6,23.9]	218,663	3.2	[2.3,4.5]	33,222
4-year college degree or higher	17.9	[15.8,20.2]	135,377	2.5	[1.8,3.5]	18,879
Don't know/No answer	0.7	[0.1,5.5]	111	--	--	--
HOUSEHOLD INCOME						
Less than \$25,000	33.5	[29.7,37.4]	339,439	5.7	[4.3,7.5]	57,811
\$25,000-\$49,999	22.9	[19.4,26.8]	156,336	4.1	[2.4,7.0]	28,282
\$50,000-\$74,999	13.3	[10.2,17.1]	53,111	2.5	[1.4,4.4]	10,160
\$75,000 or more	14.7	[12.5,17.3]	133,906	2.1	[1.3,3.3]	19,272
Don't know/No answer	25.0	[21.2,29.2]	146,961	3.7	[2.4,5.6]	21,733

## 10. Oral Health

*Analysis of Section 7 ("Oral Health") of the 2018 BRFSS Questionnaire*

Approximately four in ten adult residents of Louisiana did not see a dentist or similar oral health care professional in the past year. Incidence of regular dental care is related to socio-economic status. While 26.4% of individuals in the top 30% of household incomes did not see a dentist, a little more than double (53.9%) of individuals in the bottom 30% did not see a dentist.

Nearly half of adults (47.8%) in Louisiana have had at least one permanent tooth removed. As with regular dental care, teeth extraction is significantly associated with economic means. About one in three individuals in the highest earning households have had a tooth removed, but 59.6% in the lowest earning households have.

Among seniors in Louisiana, 15.3% have had all of their natural teeth removed. Again, the differences by socio-economic status are profound. While approximately five percent of seniors with college degrees have had all of their permanent teeth removed, the share is around seven times larger among those without a high school diploma (35.2%).

**Table 10: Oral health**

	Have not seen dentist in past year			All natural teeth removed*			At least one permanent tooth removed		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	41.2	[39.3,43.1]	1,480,811	15.3	[12.9,18.1]	119,765	47.8	[45.9,49.7]	3,595,226
AGE									
18-24	36.6	[30.9,42.7]	163,778	---	---	---	11.5	[8.2,15.9]	51,582
25-34	44.9	[39.7,50.2]	297,800	---	---	---	31.2	[26.0,36.8]	206,792
35-44	44.0	[39.3,48.8]	261,302	---	---	---	44.0	[39.3,48.9]	261,399
45-54	40.2	[36.2,44.3]	226,213	---	---	---	53.1	[49.0,57.2]	299,005
55-64	43.0	[39.0,47.1]	257,121	---	---	---	65.5	[61.8,69.1]	392,022
65 and over	37.7	[34.3,41.2]	274,597	16.4	[13.9,19.4]	119,765	69.7	[66.5,72.7]	507,389
GENDER									
Male	45.7	[42.9,48.6]	789,966	14.9	[11.3,19.4]	50,891	48.7	[45.8,51.6]	841,828
Female	37.1	[34.7,39.5]	685,699	15.7	[12.6,19.5]	67,469	46.8	[44.4,49.3]	866,543
Refused	30.4	[13.2,55.7]	5,146	12.6	[2.3,46.6]	1,405	58.0	[33.4,79.2]	9,817
RACE-ETHNICITY									
White, Non-Hispanic	38.7	[36.5,40.9]	822,358	12.7	[10.3,15.7]	65,744	45.2	[43.0,47.4]	961,458
Black, Non-Hispanic	47.3	[43.4,51.2]	508,897	25.5	[19.1,33.3]	47,858	55.5	[51.5,59.4]	597,364
Hispanic	40.3	[31.1,50.3]	73,424	---	---	---	34.5	[25.8,44.5]	62,883
Other, Non-Hispanic	41.5	[33.3,50.3]	52,720	31.4	[15.6,53.1]	5,006	39.0	[31.1,47.4]	49,471
Don't know/No answer	28.4	[20.0,38.7]	23,413	3.2	[1.0,9.3]	1,156	57.1	[45.7,67.8]	47,012
EDUCATION									
Did not graduate HS	57.7	[51.2,64.0]	336,767	35.2	[25.9,45.8]	49,261	70.7	[64.4,76.3]	412,365
HS diploma/equivalent	46.3	[43.1,49.6]	557,263	19.0	[15.0,23.8]	45,518	50.2	[47.0,53.5]	603,906
Some college/2-year college degree	36.9	[33.7,40.1]	381,524	7.4	[4.7,11.4]	16,208	43.9	[40.6,47.2]	454,363
4-year college degree or higher	26.7	[24.2,29.4]	201,790	5.2	[3.4,7.8]	8,778	32.0	[29.4,34.6]	241,777
Don't know/No answer	17.7	[4.4,50.1]	2,654	---	---	---	38.6	[15.4,68.4]	5,777
HOUSEHOLD INCOME									
Less than \$25,000	53.9	[49.9,57.9]	546,828	29.2	[22.9,36.4]	62,249	59.6	[55.7,63.4]	604,505
\$25,000-\$49,999	44.5	[40.2,48.8]	303,876	16.0	[11.4,21.9]	26,823	51.6	[47.4,55.8]	352,807
\$50,000-\$74,999	36.3	[31.4,41.5]	145,335	10.2	[6.0,16.9]	9,279	45.6	[40.6,50.8]	182,809
\$75,000 or more	26.4	[23.4,29.7]	240,296	5.2	[2.8,9.6]	6,286	35.1	[32.0,38.3]	319,265
Don't know/No answer	41.6	[37.0,46.3]	244,476	8.0	[5.0,12.7]	15,129	44.0	[39.5,48.7]	258,802

\*Asked only to respondent 65 years or older.

# 11. Obesity

*Analysis of Section 8 ("Demographics") of the 2018 BRFSS Questionnaire*

The terms "obese" and "overweight" refer to ranges of weight that are greater than what is generally considered healthy for a given height. These ranges of weight have been shown to increase the likelihood of certain diseases and other health problems.

For adults, overweight and obesity ranges are determined by using weight and height to calculate a number called the "body mass index" (BMI). An adult who has a BMI between 25 and 29.9 is considered overweight, while an adult who has a BMI of 30 or higher is considered obese. Obesity is associated with a range of health problems including coronary heart disease, Type 2 diabetes, cancer, stroke, sleep apnea, and infertility. Understanding the trends in adults who are overweight or obese is an important part of understanding other health issues including adverse health outcomes.

While there are fewer overweight individuals in Louisiana than there are in the United States as a whole, obesity is more prevalent in Louisiana than in the United States. Nationally, 35.0% of adults are overweight and 30.9% are obese. In Louisiana, the shares

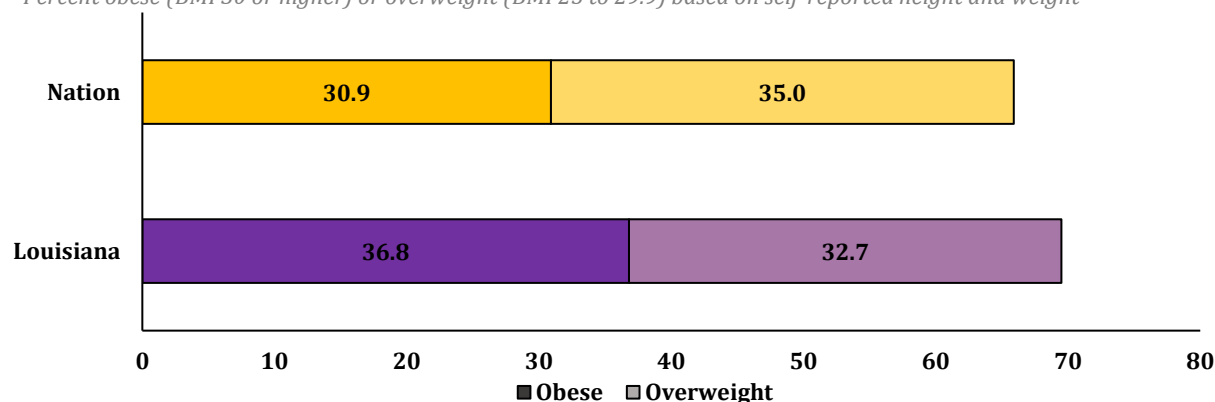
of adults that are overweight and obese are 32.7% and 36.8% – ranking among the highest rates of obesity across all states.

Unlike many other health conditions with which age typically has a strong association, age is only loosely connected to obesity. This is mostly because the share of obese adults is relatively higher among those between the ages of 35 and 64, and lower for adults who are either older or younger than this range.

Obesity is a health challenge that cuts across socio-economic lines but is especially prevalent among those with less education and lower household earnings. In each case, the gap in incidence of obesity between those with more and less education or income is about seven percentage points. Black adults in the state are more likely to suffer from obesity than white adults, 46.2% versus 33.0%. This difference remains statistically significant when accounting for differences in educational attainment, age, gender, and household income.

## Significantly more Obesity in Louisiana Relative to United States

*Percent obese (BMI 30 or higher) or overweight (BMI 25 to 29.9) based on self-reported height and weight*



*2018 Behavioral Risk Factor Surveillance System*

**Table 11: Weight and Obesity**

	Overweight*			Obese^		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	33.8	[32.0,35.6]	1,116,659	36.2	[34.4,38.1]	1,198,147
AGE						
18-24	29.0	[23.3,35.5]	120,251	21	[16.3,26.7]	87,093
25-34	31.8	[27.2,36.7]	193,249	34.9	[30.3,39.8]	212,235
35-44	36.8	[32.1,41.8]	200,619	38.3	[33.6,43.3]	208,766
45-54	30.2	[26.4,34.3]	158,520	46.8	[42.2,51.4]	245,599
55-64	36.2	[32.5,40.0]	203,826	39.3	[35.6,43.2]	221,513
65 and over	36.8	[33.6,40.1]	240,193	34.2	[31.0,37.5]	222,941
GENDER						
Male	37.1	[34.4,39.9]	605,339	36	[33.3,38.7]	586,418
Female	30.6	[28.2,33.0]	511,320	36.5	[34.1,39.0]	610,902
Refused	---	---	---	16.1	[1.2,75.5]	---
RACE-ETHNICITY						
White, Non-Hispanic	35.0	[33.0,37.1]	696,892	33.5	[31.4,35.6]	666,322
Black, Non-Hispanic	32.0	[28.4,35.8]	312,365	42.2	[38.4,46.2]	412,280
Hispanic	29.9	[20.4,41.5]	42,640	33.2	[23.2,44.9]	47,292
Other, Non-Hispanic	32.5	[23.3,43.4]	50,023	36.2	[26.6,47.0]	55,655
Don't know/No answer	32.8	[21.8,46.0]	14,740	36.9	[24.8,50.8]	16,598
EDUCATION						
Did not graduate HS	31.4	[26.2,37.2]	172,197	36.4	[31.0,42.1]	199,211
HS diploma/equivalent	32.1	[29.2,35.2]	355,772	38.6	[35.4,41.9]	427,547
Some college/2-year college degree	34.3	[31.0,37.8]	330,124	37.7	[34.4,41.2]	362,735
4-year college degree or higher	37.2	[34.2,40.3]	255,354	30.2	[27.4,33.1]	207,462
Don't know/No answer	72.9	[29.7,94.5]	3,213	27.1	[5.5,70.3]	1,193
HOUSEHOLD INCOME						
Less than \$25,000	31.6	[28.3,35.1]	320,037	38.1	[34.7,41.7]	386,367
\$25,000-\$49,999	34.6	[30.5,38.9]	223,307	38.3	[34.0,42.8]	247,652
\$50,000-\$74,999	34.6	[29.6,40.0]	131,310	35.9	[30.9,41.1]	136,048
\$75,000 or more	36.5	[33.2,39.8]	292,597	35.2	[31.9,38.7]	282,752
Don't know/No answer	32.0	[27.2,37.1]	149,408	31.1	[26.4,36.2]	145,328

\* BMI greater than or equal to 25 but less than 30

^ BMI greater than or equal to 30

## 12. Disability

*Analysis of Section 8 ("Demographics") of the 2018 BRFSS Questionnaire*

Disability, as defined by the Behavioral Risk Factor Surveillance System Survey is a physical, mental, or emotional problem that limits activity. Disabilities represent a significant health concern and are associated with poor health outcomes, including cardiovascular disease and diabetes, and lower self-reported health status.

Incidence of disability tends to be higher in Louisiana than in the United States as a whole.

The prevalence of specific sensory disabilities among Louisiana adults is slightly higher than in the national population. 9.4% of Louisiana adults and 6.6% of Americans report that they are deaf or have serious difficulty hearing. Similarly, 6.5% of adults in the state report that they are blind or have difficulty seeing even when wearing glasses whereas 5.1 adults across the United States report vision impairment.

Additionally, 16.5% of Louisiana adults have trouble concentrating, remembering, or

making decisions because of a physical, mental, or emotional condition. The national share to report this sort of cognitive impairment is lower (11.3%).

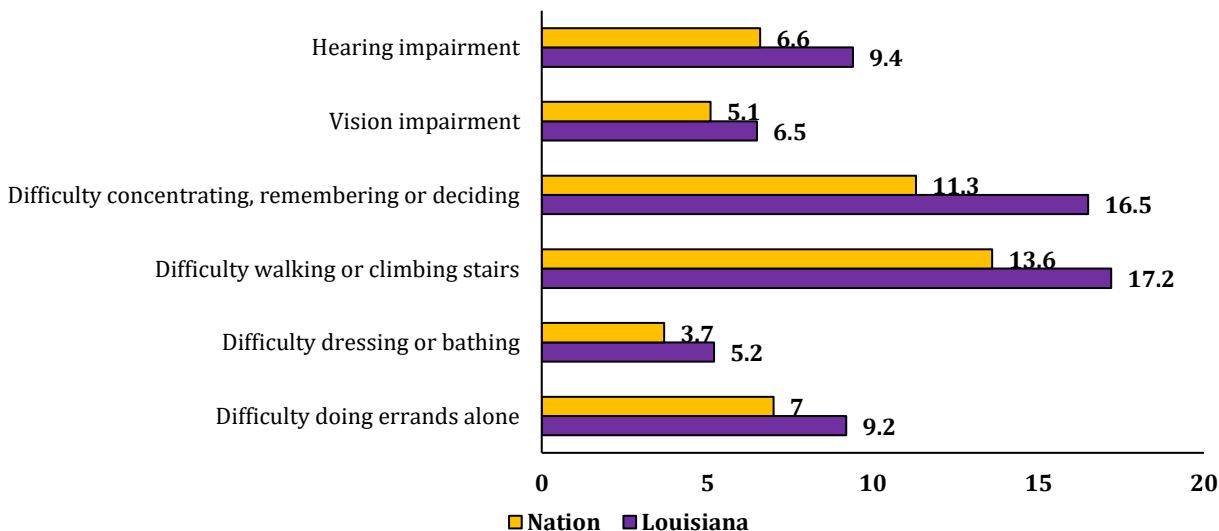
Louisiana adults are also more likely to report difficulties in engaging in normal daily activities than their peers nationally.

These difficulties include 17.2% of adults who report serious difficulty walking or climbing stairs; 5.3% who report difficulty dressing or bathing; and 9.2% who report difficulty doing errands alone such as visiting a doctor's office or shopping because of a physical, mental, or emotional condition. Nationally, these shares are 13.6%, 3.7%, and 7.0%, respectively.

In Louisiana, one in four adults (25.5%) report limited activity due to physical, mental, or emotional problems. One in ten (10.3%) report health problems severe enough that they require the use of special equipment such as a cane, a wheelchair, a special bed or a special telephone.

### Rates of Disability Frequently Outpace National Averages

*Percent reporting conditions of disability*



2018 Behavioral Risk Factor Surveillance System



<b>Table 12a: Disability</b>						
	Serious difficulty hearing			Vision impaired even when wearing glasses		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	9.4	[8.3,10.5]	325,655	6.5	[5.7,7.4]	225,588
<b>AGE</b>						
18-24	3.4	[1.3,8.5]	14,466	2.3	[1.0,5.2]	9,736
25-34	3.0	[1.5,5.7]	19,117	4.8	[3.1,7.3]	30,653
35-44	5.2	[3.5,7.7]	29,641	2.9	[1.6,5.0]	16,406
45-54	10.8	[8.3,13.8]	58,514	9.5	[7.4,12.1]	51,738
55-64	11.6	[8.9,14.9]	66,663	8.3	[6.3,10.7]	47,398
65 and over	19.4	[16.7,22.5]	137,253	9.9	[7.9,12.3]	69,658
<b>GENDER</b>						
Male	11.5	[9.8,13.3]	192,044	6.0	[4.9,7.5]	101,092
Female	7.4	[6.1,8.9]	131,336	6.9	[5.8,8.2]	123,156
Refused	17.2	[4.6,47.5]	2,275	10.1	[2.8,30.5]	1,340
<b>RACE-ETHNICITY</b>						
White, Non-Hispanic	9.6	[8.4,11.1]	200,391	5.1	[4.2,6.1]	104,698
Black, Non-Hispanic	7.7	[5.9,10.0]	79,366	8.9	[7.1,11.0]	90,969
Hispanic	12.3	[6.3,22.4]	21,467	4.8	[1.9,11.8]	8,454
Other, Non-Hispanic	9.1	[5.4,14.7]	11,080	8.3	[4.8,14.0]	10,145
Don't know/No answer	18.2	[10.1,30.8]	13,351	15.5	[8.8,25.8]	11,322
<b>EDUCATION</b>						
Did not graduate HS	19.2	[14.9,24.4]	108,212	14.1	[10.8,18.3]	79,396
HS diploma/equivalent	8.4	[7.0,10.1]	97,057	7.1	[5.7,8.7]	81,218
Some college/2-year college degree	7.4	[5.8,9.5]	75,306	4.8	[3.7,6.2]	48,549
4-year college degree or higher	6.0	[4.9,7.3]	43,968	2.2	[1.6,3.0]	16,313
Don't know/No answer	7.5	[1.8,25.9]	1,113	0.7	[0.1,5.6]	111
<b>HOUSEHOLD INCOME</b>						
Less than \$25,000	12.2	[9.9,15.1]	121,842	12.8	[10.7,15.2]	127,201
\$25,000-\$49,999	10.4	[8.2,13.3]	70,697	5.5	[4.0,7.5]	37,363
\$50,000-\$74,999	8.3	[5.7,12.0]	32,948	2.8	[1.4,5.8]	11,195
\$75,000 or more	4.7	[3.6,6.0]	42,065	1.7	[1.1,2.5]	15,285
Don't know/No answer	11.6	[8.8,15.1]	58,103	6.9	[4.7,10.0]	34,544

<b>Table 12b: Disability</b>						
	Difficulty concentrating, remembering or deciding			Difficulty walking or climbing stairs		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	16.5	[15.1,18.1]	571,588	17.2	[15.9,18.6]	592,105
<b>AGE</b>						
18-24	16.1	[12.0,21.4]	69,177	4.6	[2.2,9.5]	19,690
25-34	18.8	[14.8,23.7]	119,789	4.7	[3.1,7.1]	29,808
35-44	13.1	[10.3,16.7]	75,242	9.7	[7.2,12.9]	55,361
45-54	20.3	[17.0,24.0]	109,916	21.8	[18.6,25.5]	118,269
55-64	17.7	[14.2,21.8]	101,628	26.2	[22.8,30.0]	149,528
65 and over	13.7	[11.2,16.5]	95,837	31.3	[28.0,34.8]	219,448
<b>GENDER</b>						
Male	16.2	[14.0,18.6]	268,709	14.1	[12.3,16.1]	233,373
Female	16.8	[14.8,19.0]	298,910	19.9	[18.0,21.9]	353,136
Refused	30.0	[11.5,58.6]	3,969	42.3	[18.6,70.2]	5,595
<b>RACE-ETHNICITY</b>						
White, Non-Hispanic	16.3	[14.5,18.2]	335,603	16.1	[14.6,17.8]	332,484
Black, Non-Hispanic	17.4	[14.4,20.8]	178,245	19.8	[17.1,22.8]	202,292
Hispanic	15.6	[9.5,24.6]	27,126	12.7	[6.5,23.3]	22,113
Other, Non-Hispanic	11.8	[7.8,17.4]	13,761	19.0	[13.6,26.0]	22,247
Don't know/No answer	23.1	[13.9,35.8]	16,854	17.8	[11.2,27.0]	12,968
<b>EDUCATION</b>						
Did not graduate HS	31.5	[26.0,37.5]	177,022	32.4	[27.1,38.1]	181,945
HS diploma/equivalent	17.2	[14.7,19.9]	195,989	16.8	[14.8,19.1]	191,504
Some college/2-year college degree	14.3	[12.0,17.0]	143,854	16.3	[14.0,18.8]	163,062
4-year college degree or higher	7.5	[6.0,9.2]	54,612	7.3	[6.1,8.7]	53,275
Don't know/No answer	0.7	[0.1,5.6]	111	15.6	[4.5,42.3]	2,319
<b>HOUSEHOLD INCOME</b>						
Less than \$25,000	28.8	[25.2,32.6]	285,604	29.0	[25.8,32.4]	286,768
\$25,000-\$49,999	15.6	[12.6,19.2]	105,507	16.0	[13.1,19.5]	108,182
\$50,000-\$74,999	7.0	[4.9,9.9]	27,164	9.9	[7.1,13.6]	38,528
\$75,000 or more	6.3	[4.7,8.2]	56,486	5.3	[4.2,6.8]	48,021
Don't know/No answer	19.6	[15.8,24.0]	96,828	22.4	[18.6,26.6]	110,605

<b>Table 12c: Disability</b>						
	Difficulty dressing or bathing			Difficulty doing errands alone		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	5.3	[4.5,6.2]	183,109	9.2	[8.1,10.5]	316,514
<b>AGE</b>						
18-24	2.0	[0.5,8.1]	8,512	5.3	[2.9,9.5]	22,575
25-34	2.1	[1.2,3.8]	13,456	7.3	[4.5,11.5]	46,049
35-44	3.7	[2.3,5.8]	21,094	5.3	[3.6,7.8]	30,289
45-54	8.5	[6.6,11.0]	46,082	12.1	[9.6,15.1]	64,946
55-64	6.4	[4.8,8.5]	36,580	11.7	[8.8,15.3]	66,518
65 and over	8.2	[6.2,10.8]	57,385	12.3	[9.9,15.3]	86,137
<b>GENDER</b>						
Male	4.8	[3.7,6.1]	79,191	7.3	[5.8,9.0]	120,217
Female	5.8	[4.7,7.0]	102,057	10.9	[9.3,12.8]	193,024
Refused	14.1	[3.7,40.9]	1,861	25.2	[8.3,55.6]	3,273
<b>RACE-ETHNICITY</b>						
White, Non-Hispanic	4.4	[3.6,5.4]	91,145	8.4	[7.1,9.9]	172,549
Black, Non-Hispanic	6.5	[5.1,8.3]	66,365	11.3	[8.8,14.4]	114,645
Hispanic	7.1	[2.3,19.7]	12,253	4.5	[2.1,9.7]	7,801
Other, Non-Hispanic	8.0	[4.6,13.6]	9,344	11.2	[7.0,17.5]	13,064
Don't know/No answer	5.5	[2.5,11.5]	4,002	11.6	[6.4,20.0]	8,456
<b>EDUCATION</b>						
Did not graduate HS	13.6	[10.2,18.0]	76,594	19.7	[15.3,24.9]	109,768
HS diploma/equivalent	4.4	[3.5,5.6]	50,247	9.0	[7.1,11.4]	102,424
Some college/2-year college degree	4.4	[3.3,5.9]	43,890	8.4	[6.7,10.6]	84,171
4-year college degree or higher	1.7	[1.2,2.4]	12,267	2.8	[2.0,3.7]	20,040
Don't know/No answer	0.7	[0.1,5.6]	111	0.7	[0.1,5.6]	111
<b>HOUSEHOLD INCOME</b>						
Less than \$25,000	10.4	[8.4,12.9]	103,287	18.7	[15.7,22.1]	183,757
\$25,000-\$49,999	3.0	[2.0,4.5]	20,103	8.6	[6.3,11.7]	58,074
\$50,000-\$74,999	2.5	[1.0,6.1]	9,587	4.0	[2.2,7.3]	15,442
\$75,000 or more	1.1	[0.7,1.7]	9,707	1.2	[0.7,1.9]	10,528
Don't know/No answer	8.2	[6.0,11.3]	40,425	10.0	[7.6,12.9]	48,714

# 13. Tobacco Use

*Analysis of Section 9 (“Tobacco Use”) and Module 6 (“E-Cigarettes”) of the 2018 BRFSS Questionnaire*

Tobacco use is associated with a variety of negative health outcomes, including coronary heart disease, lung cancer, and cancer of the larynx and mouth.

Although rates of smoking in Louisiana continue to decline – from 25.7% of adults in 2011, 21.7 in 2016, to 19.5% in 2018 – tobacco use remains higher than the national rate of 14.8%.

Louisiana adults are also slightly more likely to use chewing tobacco, snuff, or snus: 5.3% versus 3.6% nationally. A similar share (5.7%) of Louisiana adults uses e-cigarettes.

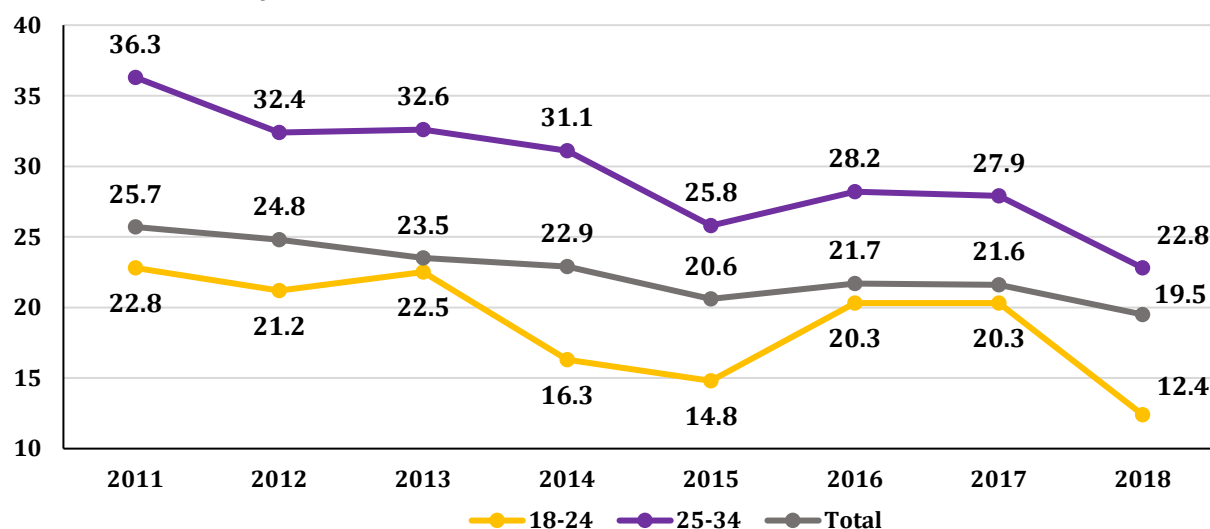
In general, across all forms included in the BRFSS, tobacco use remains more prevalent among men than among women. Moreover, educational attainment and household income remain negatively related to tobacco use. While 33.3% of individuals who did not

graduate high school are current smokers, only 7.2% of those with at least a 4-year college degree are – a gap of 26.1 percentage points. Similarly, a 13.1 percentage point gap emerges between individuals in the bottom 30% of household incomes and those in the top 30%.

The pattern across age, however, is more complicated. Cigarette use is most common among adults ages 35-44, rather than among the youngest adults. However, adults ages 25-34 (22.8%), 45-54 (21.9%), and 55-64 (21.9%) smoke at comparable rates. Adults in the oldest age group tend to smoke at the lowest rate (11.4%). In contrast, e-cigarette use is most common among the youngest adults, and use steadily declines with age. Other forms of tobacco use are consistent across age until dropping precipitously among those 55 years and older.

## Rates of Smoking Decline Among Younger Adults in Louisiana

*Percent who are currently smokers*



*2011-2018 Behavioral Risk Factor Surveillance System*

**Table 13: Tobacco Use**

	Current smoker			Use other tobacco*			Current e-cigarette user		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	19.5	[18.0,21.0]	699,366	5.3	[4.5,6.2]	179,680	5.7	[4.8,6.7]	174,816
AGE									
18-24	12.4	[9.0,16.8]	55,395	6.7	[3.7,11.6]	28,207	14.6	[10.8,19.5]	52,520
25-34	22.8	[19.1,26.9]	151,057	6.2	[4.4,8.7]	38,958	9.5	[6.7,13.3]	51,778
35-44	26.1	[22.1,30.6]	155,161	6.8	[4.9,9.4]	38,831	5.9	[3.8,9.1]	30,526
45-54	21.9	[18.6,25.7]	123,550	6.1	[4.5,8.3]	32,531	4.0	[2.8,5.6]	19,474
55-64	21.9	[18.5,25.7]	131,031	4.5	[3.2,6.4]	25,659	2.3	[1.6,3.5]	12,395
65 and over	11.4	[9.4,13.9]	83,172	2.2	[1.4,3.6]	15,495	1.3	[0.7,2.3]	8,122
GENDER									
Male	21.6	[19.4,23.9]	372,544	9.9	[8.3,11.7]	161,811	7.2	[5.7,8.9]	105,299
Female	17.4	[15.6,19.4]	322,576	0.9	[0.6,1.4]	15,814	4.2	[3.3,5.4]	67,462
Refused	25.1	[9.4,52.0]	4,246	15.8	[3.6,48.5]	2,055	17.8	[4.1,52.7]	2,055
RACE-ETHNICITY									
White, Non-Hispanic	21.9	[20.0,23.9]	465,273	6.4	[5.4,7.6]	131,091	6.4	[5.2,7.8]	118,918
Black, Non-Hispanic	15.1	[12.8,17.8]	162,630	2.6	[1.7,4.0]	26,339	3.3	[2.1,5.2]	30,838
Hispanic	19.9	[13.2,29.0]	36,317	---	---	---	12.3	[6.7,21.5]	15,653
Other, Non-Hispanic	16.6	[11.5,23.3]	21,034	3.6	[1.8,6.8]	4,137	7.9	[4.7,13.0]	7,925
Don't know/No answer	17.1	[10.7,26.3]	14,112	5.7	[2.3,13.1]	4,138	2.2	[0.7,6.7]	1,481
EDUCATION									
Did not graduate HS	33.3	[27.9,39.1]	194,063	8.8	[5.8,12.9]	48,709	4.4	[2.3,8.3]	21,909
HS diploma/equivalent	21.3	[19.0,23.9]	256,587	5.9	[4.7,7.4]	66,517	6.1	[4.6,7.9]	62,481
Some college/2-year college degree	18.8	[16.4,21.5]	194,417	3.9	[2.8,5.3]	38,269	7.1	[5.5,9.3]	64,968
4-year college degree or higher	7.2	[5.8,8.8]	54,300	3.4	[2.5,4.8]	24,821	4.0	[2.9,5.4]	25,458
Don't know/No answer	---	---	---	---	---	---	---	---	---
HOUSEHOLD INCOME									
Less than \$25,000	26.6	[23.7,29.9]	270,277	5.0	[3.5,7.2]	49,112	5.8	[4.1,8.2]	51,347
\$25,000-\$49,999	19.7	[16.5,23.4]	134,889	4.0	[2.7,5.8]	26,601	6.0	[4.4,8.3]	36,743
\$50,000-\$74,999	19.7	[15.7,24.4]	78,835	6.7	[4.3,10.3]	25,801	5.3	[3.0,9.2]	18,457
\$75,000 or more	13.5	[11.2,16.3]	122,755	6.1	[4.7,7.9]	54,398	5.9	[4.4,7.9]	48,074
Don't know/No answer	15.8	[12.6,19.5]	92,610	4.9	[3.2,7.4]	23,768	4.6	[2.9,7.3]	20,195

\* Chewing tobacco, snuff, or snus

## 14. Alcohol Use

*Analysis of Section 10 ("Alcohol Consumption") of the 2018 BRFSS Questionnaire*

Excessive alcohol use is associated with several negative health outcomes, including liver disease, increased risks for certain types of cancer, heart disease, obesity, and kidney disease.

Heavy drinking for men is defined as consuming, on average, more than 14 drinks per week. For women, it is defined as drinking more than seven drinks, on average, per week. A drink is defined as a 12-ounce beer, a five ounce glass of wine, or a drink with one shot of liquor.

Heavy drinking is less common than binge drinking in both Louisiana and the United States as a whole. 6.3% of Louisiana adults are heavy drinkers, which is comparable to the share nationally (5.9%).

Adults engage in heavy drinking at comparable rates through middle age. The rate of heavy drinking falls, however, among those 55 years or older.

Unlike many other health behaviors, the individuals with higher household incomes are more likely to engage in this particular behavioral health risk. About five percent of individuals in the bottom 30% of household incomes engage in heavy drinking, but nearly nine percent of those in the top 30% of household incomes do.

The survey also asks the number of times in the past month when individuals consumed

five or more alcoholic drinks (for men) or four or more alcoholic drinks (for women) in a single occasion. Consuming more than this number of drinks in a single occasion is classified as binge drinking.

As with heavy drinking, binge drinking is no more common in Louisiana than across the country as a whole. Here, 15.8% of adults report having engaged in binge drinking at some point in the previous month, comparable to past years. Nationally, the share is 15.2%.

Men, whites, and individuals with higher household incomes are more likely to engage in binge drinking. The strongest demographic association with binge drinking, however, is age. Nearly one in four 18 to 34 year olds engage in binge drinking. The rate steadily falls throughout middle age and dips under ten percent among the elderly.

**One in five 18 to 34 year olds in Louisiana engage in binge drinking.**

**Table 14: Alcohol use**

	Heavy drinking*			Binge drinking^		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	6.3	[5.5,7.1]	225,018	15.8	[14.4,17.2]	566,369
AGE						
18-24	6.6	[4.4,9.7]	29,400	20.2	[16.1,25.0]	90,511
25-34	7.3	[5.4,9.7]	48,183	20.0	[16.4,24.0]	132,425
35-44	7.2	[5.3,9.8]	42,929	23.4	[19.2,28.1]	138,780
45-54	7.2	[5.4,9.7]	40,738	15.4	[12.7,18.4]	86,464
55-64	5.2	[3.9,6.9]	30,895	12.1	[9.9,14.8]	72,456
65 and over	4.5	[3.2,6.3]	32,873	6.3	[4.7,8.3]	45,732
GENDER						
Male	7.3	[6.1,8.7]	125,807	20.6	[18.4,23.0]	356,200
Female	5.4	[4.4,6.5]	99,211	11.2	[9.8,12.7]	206,395
Refused	---	---	---	22.3	[7.8,49.4]	3,774
RACE-ETHNICITY						
White, Non-Hispanic	7.0	[6.1,8.2]	149,798	17.2	[15.7,18.9]	366,879
Black, Non-Hispanic	4.4	[3.3,5.9]	47,369	12.4	[9.8,15.5]	133,169
Hispanic	7.0	[3.2,14.3]	12,661	17.7	[11.4,26.4]	32,176
Other, Non-Hispanic	5.4	[2.5,11.1]	6,847	13.8	[9.1,20.5]	17,579
Don't know/No answer	10.1	[5.0,19.6]	8,343	20.1	[12.1,31.4]	16,566
EDUCATION						
Did not graduate HS	4.6	[2.9,7.3]	26,774	12.2	[8.3,17.6]	70,903
HS diploma/equivalent	5.9	[4.8,7.4]	71,413	14.4	[12.4,16.8]	173,499
Some college/2-year college degree	7.1	[5.5,9.0]	73,016	18.4	[16.0,21.2]	190,868
4-year college degree or higher	6.9	[5.6,8.6]	52,451	17.3	[15.2,19.7]	131,099
Don't know/No answer	9.1	[1.2,44.4]	1,364	---	---	---
HOUSEHOLD INCOME						
Less than \$25,000	5.1	[3.7,6.8]	51,249	10.9	[8.9,13.3]	110,551
\$25,000-\$49,999	6.9	[5.2,9.0]	46,886	18.0	[15.0,21.5]	123,132
\$50,000-\$74,999	5.1	[3.4,7.8]	20,594	16.4	[12.9,20.6]	65,636
\$75,000 or more	9.2	[7.5,11.2]	83,539	22.1	[19.4,25.0]	200,788
Don't know/No answer	3.9	[2.6,5.8]	22,750	11.3	[8.0,15.7]	66,262

\* Males who consume more than 14 drinks per week or females who consume more than 7 drinks per week

^ Males that consume five or more drinks on one occasion or females who consume four or more drinks on one occasion

## 15. Automotive Safety

*Analysis of Section 13 ("Seat Belt Use and Drinking and Driving") of the 2018 BRFSS Questionnaire*

Around eight in ten (81.6%) of Louisiana's adults report that they always wear a seatbelt when riding in a car. The rate of seatbelt usage in Louisiana is comparable to the national rate (81.8%). Although rates of seat belt use are high across all demographic breakdowns observed here, significant differences remain across age and gender. For example, while 73.7% of 18 to 24 year olds report wearing a seatbelt (6.3 percentage points higher than in 2017), the share among those 65 or older is significantly higher at 86.3%. A gap also exists between women and men. 84.6% of women report always wearing their seatbelt while the share for men is 78.6%, a six percentage point difference. The difference between those without a high school diploma and those with a college degree is 12.4 percentage points – 74.0% versus 86.4%, respectively.

A small share of Louisiana's residents report that they have driven after having too much to drink. In fact, just 2.1% do so. Louisiana's rate of drinking and driving is comparable to the national share (1.6%). The rate in Louisiana is also low among all demographic breakdowns observed here. Generally, the rates are small enough, relative to the margin of error, that meaningful differences across groups cannot be identified statistically. However, there appear to be significant differences across age and gender. While 2.8% of adults less than 25 years of age report having driven after drinking too much, only 1.1% of adults 65 and over report doing so. With respect to gender, men (3.3%) are more than three times as likely as women (0.9%) to drive after having too much to drink.



**Table 15: Seat belt use**

	Always wears seatbelt			Have driven after drinking too much		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	81.6	[80.1,83.0]	2,934,111	2.1	[1.7,2.7]	75,849
AGE						
18-24	73.7	[67.8,78.8]	329,903	2.8	[1.5,4.9]	12,419
25-34	78.9	[74.8,82.5]	523,717	3.3	[2.2,5.1]	22,231
35-44	79.3	[75.3,82.8]	470,772	2.7	[1.6,4.6]	15,909
45-54	84.2	[81.0,86.9]	474,025	1.9	[1.1,3.3]	10,718
55-64	84.7	[81.6,87.4]	506,976	1.1	[0.6,1.9]	6,669
65 and over	86.3	[83.5,88.7]	628,717	1.1	[0.4,2.6]	7,903
GENDER						
Male	78.6	[76.2,80.8]	1,359,012	3.3	[2.5,4.3]	56,583
Female	84.6	[82.7,86.3]	1,565,202	0.9	[0.6,1.4]	16,171
Refused	58.5	[33.5,79.7]	9,897	18.3	[5.7,45.4]	3,095
RACE-ETHNICITY						
White, Non-Hispanic	84.0	[82.3,85.5]	1,786,399	2.0	[1.5,2.6]	42,048
Black, Non-Hispanic	78.9	[75.8,81.7]	849,611	2.1	[1.3,3.3]	22,515
Hispanic	77.9	[67.0,85.9]	141,813	4.2	[1.5,11.3]	7,591
Other, Non-Hispanic	78.8	[69.1,86.1]	100,045	2.4	[0.9,6.4]	3,052
Don't know/No answer	68.3	[56.7,78.0]	56,242	0.8	[0.1,5.4]	644
EDUCATION						
Did not graduate HS	79.3	[74.0,83.7]	462,266	1.5	[0.6,3.7]	8,549
HS diploma/equivalent	79.9	[77.3,82.4]	961,065	1.7	[1.1,2.6]	20,801
Some college/2-year college degree	82.3	[79.6,84.8]	852,225	2.4	[1.6,3.7]	24,945
4-year college degree or higher	85.3	[83.1,87.2]	644,858	2.9	[2.0,4.1]	21,554
Don't know/No answer	91.5	[62.0,98.6]	13,697	---	---	---
HOUSEHOLD INCOME						
Less than \$25,000	81.8	[78.6,84.5]	829,400	1.1	[0.5,2.3]	10,980
\$25,000-\$49,999	84.7	[81.6,87.3]	578,708	2.6	[1.7,4.0]	17,556
\$50,000-\$74,999	80.3	[75.3,84.5]	321,811	2.7	[1.5,4.8]	10,772
\$75,000 or more	86.0	[83.5,88.2]	781,492	3.1	[2.1,4.5]	28,008
Don't know/No answer	71.9	[67.5,75.9]	422,699	1.5	[0.8,2.8]	8,534

## 16. Immunizations

*Analysis of Section 11(Immunization”) of the 2018 BRFSS Questionnaire*

Influenza (the flu) is a contagious respiratory illness caused by influenza viruses. Each year, an estimated 10-20% of the population contracts the influenza virus, causing mild to severe illness. The flu is especially threatening for children and the elderly. Pneumonia is also a particularly dangerous threat for the elderly. The best protection in each case is vaccination.

Only about one in four (26.3%) of Louisiana adults received vaccination against the flu in the past year. In contrast, 33.2% of adults in the United States have received such vaccination. The share for adults in Louisiana this year marks a statistically significant decrease compared to previous years –it was 34.6% in 2017 and 32.8% in 2016. Although flu vaccination varies by gender, race, and

socio-economic status, the largest gap occurs across age groups. Not only are adults under the age of 45 some of the least likely individuals across demographic groups to report being vaccinated against the flu, the largest gap in vaccination – slightly over 30 percentage points – occurs within age groups.

A majority of Louisiana’s elderly population has also received vaccination against pneumonia (57.2%).

Although the rate of flu vaccination for all adults in Louisiana lags behind the national rate, vaccination among the state’s elderly population – both for flu and pneumonia – are comparable to national rates.

**Table 16: Immunizations**

	Flu vaccine in past year			Flu vaccine in past year*			Pneumonia vaccine*		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	26.3	[24.6,28.0]	884,773	45.6	[42.0,49.2]	314,265	57.2	[53.8,60.6]	446,677
AGE									
18-24	14.9	[10.9,19.9]	61,828	---	---	---	---	---	---
25-34	17.7	[13.2,23.3]	110,680	---	---	---	---	---	---
35-44	18.3	[15.1,22.0]	101,709	---	---	---	---	---	---
45-54	24.5	[21.0,28.5]	128,888	---	---	---	---	---	---
55-64	30.1	[26.6,33.8]	167,403	---	---	---	---	---	---
65 and over	45.6	[42.0,49.2]	314,265	45.6	[42.0,49.2]	314,265	61.3	[57.8,64.7]	446,677
GENDER									
Male	24.4	[21.9,27.1]	394,874	39.3	[34.4,44.3]	133,854	53.2	[48.0,58.4]	181,362
Female	28.0	[25.9,30.3]	486,776	40.5	[36.0,45.2]	173,536	61.0	[56.3,65.5]	261,198
Refused	26.1	[7.8,59.6]	3,123	18.8	[3.9,56.6]	2,084	37.1	[13.3,69.4]	4,117
RACE-ETHNICITY									
White, Non-Hispanic	28.2	[26.3,30.2]	569,710	44.9	[41.0,48.9]	231,687	64.8	[60.9,68.6]	334,567
Black, Non-Hispanic	24.5	[20.9,28.4]	242,131	33.2	[26.2,41.0]	62,238	43.4	[36.0,51.1]	81,256
Hispanic	21.3	[14.3,30.6]	36,535	---	---	---	45.7	[21.9,71.6]	11,204
Other, Non-Hispanic	18.4	[12.9,25.6]	21,039	40.5	[23.7,60.0]	6,474	60.7	[42.3,76.5]	9,691
Don't know/No answer	21.7	[13.6,32.8]	15,357	9.2	[4.2,19.1]	3,352	27.2	[16.1,42.2]	9,959
EDUCATION									
Did not graduate HS	24.3	[18.6,31.0]	133,702	44.2	[33.7,55.2]	61,810	48.7	[38.1,59.4]	68,096
HS diploma/equivalent	23.6	[21.1,26.3]	261,769	40.2	[34.7,45.9]	96,053	61.5	[55.9,66.9]	147,020
Some college/2-year college degree	27.3	[24.3,30.4]	266,039	36.6	[30.9,42.8]	80,662	58.0	[51.5,64.2]	127,717
4-year college degree or higher	30.2	[27.7,32.9]	216,585	40.1	[35.0,45.4]	68,126	59.5	[53.9,64.9]	101,022
Don't know/No answer	45.0	[18.4,74.9]	6,677	---	---	---	34.8	[9.3,73.5]	2,823
HOUSEHOLD INCOME									
Less than \$25,000	25.9	[22.2,29.9]	249,772	44.8	[37.7,52.2]	95,509	60.3	[52.8,67.4]	128,478
\$25,000-\$49,999	26.4	[23.0,30.2]	175,304	45.9	[39.2,52.7]	77,036	66.2	[59.1,72.7]	111,160
\$50,000-\$74,999	28.8	[24.4,33.6]	108,245	42.9	[33.5,52.8]	39,057	59.2	[49.4,68.3]	53,871
\$75,000 or more	25.6	[22.9,28.5]	226,370	39.2	[32.6,46.2]	47,157	63.2	[56.0,69.8]	75,945
Don't know/No answer	26.2	[22.2,30.7]	125,083	26.9	[21.3,33.4]	50,715	41.0	[34.2,48.2]	77,223

\* Among those 65 years or older

# 17. HIV / AIDS Screening

*Analysis of Section 17 ("HIV/AIDS") of the 2018 BRFSS Questionnaire*

One of the most effective ways to monitor HIV/AIDS is to receive regular testing. Louisiana's adults, overall, are slightly more likely to have been tested for HIV than adults in the United States as a whole. The share of adults that have been tested for HIV in Louisiana is 41.2%, while nationally the share is 38.6%.

HIV testing is associated with age, household income, and race. Adults between the ages of 25 and 44 are the most likely to have been tested, with approximately six in ten reporting they have been tested. A lower share of 18-24 year olds have been tested for HIV (42.2%), but the least likely age groups to have been tested are age 55 to 64 (30.4%) and age 65 or older (15.6%).

Slightly over half of adults (51.8%) in the bottom 30% of the distribution of household income in Louisiana have been tested for HIV. The likelihood of having been tested declines further up the income ladder: 35.9% of adults with household income in the top 30% of the state (\$75,000 or more) have been tested.

About a third of whites (32.2%) in Louisiana have been tested for HIV, but more well over half of blacks (58.0%) have been tested. The racial gap does not simply reflect differences in average household income across these groups. Even when statistically accounting for socio-economic and demographic differences between whites and blacks in the state, blacks are 25.8 percentage points more likely to have been tested.

**Table 17: HIV Testing**

	Ever tested for HIV		
	%	95% CI	Est. Pop.
Total	41.2	[39.2,43.2]	1,335,162
AGE			
18-24	42.2	[36.0,48.7]	172,566
25-34	59.1	[53.7,64.3]	352,245
35-44	58.7	[53.5,63.6]	317,338
45-54	45.2	[40.9,49.6]	226,828
55-64	30.4	[26.9,34.2]	163,588
65 and over	15.6	[13.0,18.6]	102,597
GENDER			
Male	39.8	[36.7,42.9]	620,246
Female	42.6	[40.0,45.2]	711,471
Refused	29.9	[9.1,64.4]	3,444
Total	41.2	[39.2,43.2]	1,335,162
RACE-ETHNICITY			
White, Non-Hispanic	32.2	[30.0,34.4]	625,115
Black, Non-Hispanic	58.0	[53.8,62.1]	554,813
Hispanic	56.1	[45.7,66.1]	90,413
Other, Non-Hispanic	35.4	[27.8,43.8]	39,629
Don't know/No answer	36.5	[25.5,49.1]	25,193
EDUCATION			
Did not graduate HS	41.9	[35.2,48.9]	217,228
HS diploma/equivalent	39.3	[35.9,42.8]	421,705
Some college/2-year college degree	43.9	[40.4,47.5]	417,400
4-year college degree or higher	39.9	[37.0,42.9]	273,720
Don't know/No answer	36.3	[11.3,71.7]	5,109
HOUSEHOLD INCOME			
Less than \$25,000	51.8	[47.6,55.9]	478,589
\$25,000-\$49,999	43.4	[38.9,47.9]	278,232
\$50,000-\$74,999	35.5	[30.6,40.8]	129,911
\$75,000 or more	35.9	[32.6,39.3]	307,843
Don't know/No answer	31.1	[26.4,36.2]	140,587

## 18. Cancer Screening

*Analysis of Section 14 (“Breast and Cervical Cancer Screening”), Section 15 (“Prostate Cancer Screening”), and Section 16 (“Colorectal Cancer Screening”) of the 2018 BRFSS Questionnaire*

The Behavioral Risk Factors Surveillance System tracks a variety of cancer screenings that are recommended regularly for specific gender and age groups. These include screenings for breast, cervical, prostate, and colorectal cancers. These forms of cancer often have a much higher survival rate when diagnosed early via screening.

### BREAST AND CERVICAL CANCER

Women face unique and important health risks, including breast and cervical cancer. By screening for breast cancer, mammograms are a tool for prevention and for providing early treatment that enhances survival rates. Cervical cancer used to be the leading cause of cancer death for women in the United States. However, over the past 40 years, the number of cases of cervical cancer and the number of deaths from cervical cancer have decreased significantly. This decline is the result of an increasing number of women getting Pap tests, which can identify cervical pre-cancer before it turns into cancer. Cervical cancer is the easiest female-specific cancer to prevent with regular Pap tests and follow-up. It is also highly curable when found and treated early.

Two thirds of Louisiana women who are 40 years or older report having a mammogram in the previous three years. This rate is similar to the national rate, 65.4%. Age and socio-economic status are statistically related to having a mammogram. Women in their early forties are much less likely to have a mammogram than women who are in their fifties or older. There is also a gap of 20.2 percentage points between the least and most educated women. This gap has increased since the last time this metric was included in Louisiana’s 2016 BRFSS. While the previous and current rates of mammogram incidence among women with a 4-year college degree

or higher are comparable, there has been a five percentage point decrease for the share of women who did not graduate high school (59.5% in 2016 but 54.4% in 2018). There is also a 15.9 percentage point gap between women in households with the smallest incomes versus those in households with the largest incomes. While the shares for women in households with the smallest incomes remain comparable, there has been a nearly five percent increase for women in households with the largest incomes (75.5% in 2016 versus 80.2% in 2018).

The survey also asks all adult women whether they have had a pap test. Approximately 85% of adult Louisiana women have had one. Compared to 2016, this rate of incidence has increased across a handful of demographic groups. For example, 69.3% of adult women who did not graduate high school reported having had a pap test, but the share increased to 79.8% in 2018. Similarly, while this share was 74.8% for women in the bottom 30% of household incomes in 2016, it increased to 83.7% in 2018.

There is also a significant age discrepancy in women who have had a pap test. The rate of cervical screening is nearly 90% among women between the ages of 25 and 44, but much less frequent among women under the age of 25 (69.2%) and women 65 years or older (73.4%).

### PROSTATE CANCER

In order to detect and diagnose prostate cancer, the Center for Disease Control recommends that men ages 40 and older have a prostate-specific antigen (PSA) test. In Louisiana, 34.1% of men 40 years of age or older report having a PSA test in the previous two years. This marks a substantial decrease

in the rate of testing since it was last measured for Louisiana in 2016 (41.4%). Accordingly, shares of incidence across demographic groups reflect this decrease.

As with cancer screening for women, there are important differences in PSA testing between men. For example, only 31.4% of black men 40 years and older have had a PSA test in the past two years while close to half (37.6%) of white men in this age group have had a recent screening. Only 21.7% of men 40 years or older without high school diploma have had a PSA test in the past two years; the share among college graduates is 47.6%. Similarly, 19% of men 40 years or older who live in households with earnings under \$25,000 have screened recently, but 44.8% of men in this age group with household incomes of \$75,000 or more have had a PSA test in the past two years.

## COLORECTAL HEALTH

Colorectal cancer mainly develops from precancerous polyps in the colon or rectum.

Screening tests can find these polyps so that they can be removed before they turn into cancer. Screening tests also allow the cancer to be caught early, when treatment works best. The Center for Disease Control recommends that individuals receive colorectal screening once they are 50 years old. Colorectal screening, using procedures such as sigmoidoscopy or colonoscopy, has increased throughout the United States in recent decades.

There is a modest 5.2 percentage point increase in the share of adults age 50 or older who have had colorectal screening since 2016. Among this population, 69.3% report having colorectal screening. Colorectal screening is far more common among college graduates (77.6%) than among those with only a high school diploma (64.5%) or no diploma (56.5%).

**Table 18a: Cancer screening**

	Mammogram in past two years*			Pap test in past three years^		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	66.6	[63.8,69.4]	770,411	85.1	[82.2,87.6]	772,995
AGE						
18-24	---	---	---	69.8	[58.6,79.1]	70,645
25-34	---	---	---	88.5	[80.7,93.5]	236,337
35-44	49.1	[39.8,58.5]	74,250	91.5	[87.4,94.4]	204,070
45-54	69.1	[63.8,74.0]	198,163	85.3	[79.5,89.6]	135,192
55-64	74.3	[69.2,78.8]	231,502	80.4	[74.5,85.2]	115,231
65 and over	65.9	[61.0,70.4]	266,495	74.3	[52.6,88.3]	11,520
GENDER						
Male	---	---	---	---	---	---
Female	66.6	[63.8,69.4]	770,411	85.1	[82.2,87.6]	772,995
Refused	---	---	---	---	---	---
RACE-ETHNICITY						
White, Non-Hispanic	65.5	[62.0,69.0]	477,870	85.0	[81.9,87.6]	418,433
Black, Non-Hispanic	71.0	[65.7,75.9]	232,254	87.9	[81.0,92.6]	272,981
Hispanic	57.3	[36.2,76.1]	21,770	76.1	[59.3,87.5]	40,102
Other, Non-Hispanic	69.4	[55.2,80.6]	21,080	77.5	[61.9,88.0]	25,045
Don't know/No answer	55.0	[36.8,72.0]	17,437	80.3	[57.0,92.6]	16,435
EDUCATION						
Did not graduate HS	54.4	[44.6,63.9]	95,852	79.8	[69.0,87.5]	64,315
HS diploma/equivalent	66.9	[62.2,71.3]	240,880	80.1	[72.7,85.8]	224,165
Some college/2-year college degree	67.0	[61.7,71.9]	231,568	87.0	[82.6,90.5]	245,777
4-year college degree or higher	74.6	[70.1,78.6]	199,959	89.8	[86.6,92.4]	237,099
Don't know/No answer	34.3	[6.4,80.0]	2,152	---	---	---
HOUSEHOLD INCOME						
Less than \$25,000	64.3	[59.0,69.3]	221,281	83.7	[76.8,88.9]	247,861
\$25,000-\$49,999	66.2	[59.0,72.8]	151,062	84.8	[79.1,89.1]	157,268
\$50,000-\$74,999	68.9	[59.2,77.2]	80,278	87.5	[79.9,92.5]	82,356
\$75,000 or more	80.2	[75.2,84.4]	209,149	91.4	[87.4,94.2]	220,547
Don't know/No answer	52.6	[45.9,59.2]	108,641	71.1	[61.1,79.4]	64,964

\*Women age 40 or older

^Women ages 21 through 65



**Table 18b: Cancer screening**

	PSA test in past two years**			Sigmoidoscopy/colonoscopy^^		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	34.1	[31.1,37.1]	317,168	69.3	[66.6,71.8]	822,095
AGE						
18-24	---	---	---	---	---	---
25-34	---	---	---	---	---	---
35-44	8.2	[3.9,16.6]	10,394	---	---	---
45-54	22.6	[17.6,28.4]	55,549	54.3	[48.2,60.3]	141,101
55-64	40.2	[34.7,46.1]	104,453	69.8	[65.6,73.7]	365,062
65 and over	49.5	[44.1,55.0]	146,772	78.2	[74.1,81.8]	315,933
GENDER						
Male	34.1	[31.1,37.1]	317,168	67.0	[62.9,70.9]	377,253
Female	---	---	---	71.1	[67.6,74.3]	439,971
Refused	---	---	---	---	---	---
RACE-ETHNICITY						
White, Non-Hispanic	37.6	[34.0,41.3]	223,869	69.8	[66.7,72.8]	553,223
Black, Non-Hispanic	31.4	[25.4,38.0]	75,985	69.4	[63.9,74.4]	225,366
Hispanic	11.9	[4.8,26.7]	4,925	51.5	[31.6,70.9]	15,454
Other, Non-Hispanic	20.5	[10.1,37.0]	4,822	70.0	[55.4,81.4]	16,329
Don't know/No answer	27.1	[14.9,44.2]	7,567	70.5	[50.0,85.1]	11,723
EDUCATION						
Did not graduate HS	21.7	[15.3,29.9]	39,227	56.5	[47.4,65.3]	114,492
HS diploma/equivalent	33.2	[28.4,38.3]	108,189	64.5	[60.2,68.5]	252,036
Some college/2-year college degree	34.3	[28.6,40.5]	82,251	76.0	[71.4,80.1]	259,749
4-year college degree or higher	47.6	[42.4,53.0]	86,138	77.6	[73.6,81.1]	192,995
Don't know/No answer	44.1	[7.9,87.9]	1,364	---	---	---
HOUSEHOLD INCOME						
Less than \$25,000	19.0	[14.5,24.6]	45,917	56.4	[50.7,61.9]	186,530
\$25,000-\$49,999	38.3	[31.3,45.9]	59,734	69.9	[63.4,75.6]	154,062
\$50,000-\$74,999	38.7	[30.7,47.3]	45,312	75.0	[68.2,80.7]	103,510
\$75,000 or more	44.8	[39.6,50.1]	135,780	78.4	[74.3,81.9]	267,872
Don't know/No answer	26.8	[19.4,35.7]	30,426	70.8	[63.2,77.4]	110,121

\*\* Men age 40 or older

^^ Adults age 50 or older

## 19. Falls and Injury among Adults 45 Years or Older

*Analysis of Section 12 ("Falls") of the 2018 BRFSS Questionnaire*

Almost one in three (24.9%) of Louisiana adults who are 45 years or older report that they have fallen in the past month. This rate has seen a moderate decrease since the last time it was measured (29.6%) in Louisiana's 2016 BRFSS.

Slightly more than one in ten (11.6%) Louisiana adults who are 45 years or older report that they had a fall in the previous year that caused an injury – that is, caused them to see a doctor or limit their regular activities for at least one day.

**Table 19: Falls and Injury**

	Fallen in last year*			Injured from fall in last year*		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	24.9	[23.0,26.9]	440,163	11.6	[10.2,13.1]	204,667
AGE						
18-24	---	---	---	---	---	---
25-34	---	---	---	---	---	---
35-44	6.6	[0.7,41.4]	334	6.6	[0.7,41.4]	334
45-54	24.7	[21.0,28.7]	128,506	12.9	[10.2,16.3]	67,422
55-64	23.2	[20.1,26.6]	128,903	9.1	[7.3,11.4]	50,843
65 and over	26.7	[23.7,30.1]	182,421	12.6	[10.3,15.4]	86,069
GENDER						
Male	21.3	[18.5,24.4]	173,366	8.1	[6.3,10.4]	66,217
Female	28.1	[25.5,30.8]	265,565	14.6	[12.6,16.9]	138,451
Refused	14.5	[2.6,52.1]	1,233	---	---	---
RACE-ETHNICITY						
White, Non-Hispanic	25.7	[23.4,28.1]	294,801	11.2	[9.6,13.0]	128,709
Black, Non-Hispanic	22.4	[18.8,26.6]	105,245	11.1	[8.5,14.3]	52,007
Hispanic	23.8	[11.6,42.6]	14,195	12.2	[3.4,35.1]	7,245
Other, Non-Hispanic	31.2	[21.1,43.5]	13,062	21.0	[12.8,32.5]	8,795
Don't know/No answer	25.0	[14.8,38.9]	12,860	15.4	[7.1,30.1]	7,911
EDUCATION						
Did not graduate HS	31.5	[25.4,38.2]	101,766	14.7	[10.6,19.8]	47,391
HS diploma/equivalent	23.1	[20.3,26.2]	129,873	11.4	[9.3,13.9]	64,072
Some college/2-year college degree	25.7	[22.0,29.8]	127,850	13.0	[10.1,16.6]	64,693
4-year college degree or higher	21.1	[18.5,24.1]	79,962	7.5	[5.9,9.6]	28,510
Don't know/No answer	7.4	[1.2,33.6]	713	---	---	---
HOUSEHOLD INCOME						
Less than \$25,000	33.9	[29.8,38.2]	173,228	18.0	[15.0,21.5]	92,062
\$25,000-\$49,999	25.7	[21.5,30.3]	82,589	10.3	[7.5,13.9]	33,057
\$50,000-\$74,999	24.0	[18.2,31.0]	48,322	9.8	[6.0,15.6]	19,671
\$75,000 or more	15.7	[13.1,18.8]	74,050	5.4	[3.8,7.7]	25,520
Don't know/No answer	23.4	[18.8,28.8]	61,975	13.0	[9.3,17.9]	34,358

\*Among adults age 45 or older

# About the BRFSS

The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys that collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. For many states, the BRFSS is the only available source of timely and accurate data on health-related behaviors.

BRFSS was established in 1984 by the U.S. Centers for Disease Control and Prevention (CDC); currently, data is collected monthly in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands and Guam. More than 350,000 adults are interviewed each year, making the BRFSS the largest telephone health survey in the world. States use BRFSS data to identify emerging health problems, establish and track health objectives, develop and evaluate public health policies and programs. Many states also use BRFSS data to support health-related legislative efforts.

# Methodology

In this report, we present the findings from the 2018 BRFSS survey for the state of Louisiana. The findings are based on 5,125 weighted participants who were interviewed on either landline or cellular telephones. As has been widely noted, the cell-phone-only population has grown remarkably over the last several years. In 2018, the best available estimates placed the cell-only population at over 30% and rapidly growing. Importantly, the cell-only population is also comprised of many hard to reach demographic groups – younger residents, minority residents, and those living in households with unrelated adults. Incorporating cell phones into the BRFSS methodology assures that the cell only population is part of the sampling frame and minimizes the potential for coverage bias. The combined response rate for the 2018 BRFSS in Louisiana is 39.1 percent.

Weighting is a statistical tool that adjusts the sample to reflect probabilities of selection and participation as well as to ensure the demographic makeup of the sample reflects known distributions among the population. The BRFSS uses an iterative “raking” procedure to reduce nonresponse error.

In this report, demographic analyses are based on participant responses and imputed values for age, gender, race, ethnicity, and education in cases when participants failed to provide a response. The CDC conducted the imputation procedure. Missing values for household income, however, are retained because the CDC did not impute values for this demographic variable.

The content of the 2018 BRFSS questionnaire was the result of extensive collaborations between experts from federal, state and independent organizations. It consists of four major components: core questions, rotating core questions, optional questions and state-added questions. Core, rotating core and optional questions are standardized and are comparable across states. These questions can also be merged to provide national estimates. Core questions form the basis of the BRFSS and are generally used by each state. The rotating core questions are also asked in each state but are only used on a biennial basis. The optional module section consists of groups of questions supported by the CDC that each state may include in the questionnaire. State-added questions are optional and added based on priority data needs.

All of the content is developed with the goal of providing federal and state officials with viable estimates of prevalence rates for chronic diseases and associated risk factors. Because the BRFSS encompasses many different topics and questions, the validity may vary for some sections or modules within the survey. In reporting the findings, some categories may be excluded from the analysis if the sample size is relatively small and estimates cannot be computed with a reasonable degree of confidence.

More details on BRFSS methodology for collecting and weighting data are available at:

[https://www.cdc.gov/brfss/annual\\_data/2018/pdf/overview-2018-508.pdf](https://www.cdc.gov/brfss/annual_data/2018/pdf/overview-2018-508.pdf)

[https://www.cdc.gov/brfss/annual\\_data/2018/pdf/weighting-2018-508.pdf](https://www.cdc.gov/brfss/annual_data/2018/pdf/weighting-2018-508.pdf)

[https://www.cdc.gov/brfss/annual\\_data/2018/pdf/2018-sdqr-508.pdf](https://www.cdc.gov/brfss/annual_data/2018/pdf/2018-sdqr-508.pdf)

A copies of the instrument and codebooks are available at:

[https://www.cdc.gov/brfss/questionnaires/pdf-ques/2018\\_BRFSS\\_English\\_Questionnaire-508.pdf](https://www.cdc.gov/brfss/questionnaires/pdf-ques/2018_BRFSS_English_Questionnaire-508.pdf)

[https://www.cdc.gov/brfss/annual\\_data/2018/pdf/codebook18\\_llcp-v2-508.pdf](https://www.cdc.gov/brfss/annual_data/2018/pdf/codebook18_llcp-v2-508.pdf)

# About the Public Policy Research Lab

Louisiana State University's Public Policy Research Lab (PPRL) is a research center dedicated to high quality, state-of-the-art data collection and analytics, with a special emphasis on survey research. PPRL is a joint effort of the Manship School of Mass Communication's Reilly Center for Media and Public Affairs and the College of Humanities and Social Sciences.

PPRL provides a variety of services including survey research, 'big data' analytics, social media tracking, and focus group interviews. The Lab is primarily known for its telephone survey work. PPRL has more than 50 computer-assisted telephone interview call stations and a corps of highly-trained, well-supervised professional callers. It is one of the largest phone survey data collection facilities in the Southeastern Conference.

PPRL is dedicated to meeting the unique goals and objectives for each project by working closely with those seeking data, research expertise, or analysis. PPRL's clients have included: the federal Center for Disease Control and Prevention, the Louisiana Department of Health and Hospitals, the Louisiana Department of Labor, Louisiana Public Broadcasting, the Mississippi-Alabama Sea Grant Consortium, and the Baton Rouge Area Foundation.

More information on previous surveys may be found at: [www.pprllsu.edu](http://www.pprllsu.edu)

## **Principal Authors**

Michael Henderson

Director, Public Policy Research Lab

Max Magana

Graduate Research Assistant, Public Policy Research Lab