



# REPORT ON THE 2016 BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM IN LOUISIANA

# Prepared for the Louisiana Department of Health



December 2018

FOR FURTHER INFORMATION ON THIS REPORT:

Dr. Michael Henderson 225-578-5149 mbhende1@lsu.edu

## 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 2016 BRFSS in Louisiana included rotating sections on adequacy of sleep, oral health, injury from falls, drinking and driving, breast and cervical cancer screening, prostate cancer screening, and colorectal screening. The 2016 BRFSS also included, for the first time, a new section on the use of e-cigarettes. In Louisiana, the survey included optional modules on diabetes, a more extensive battery on health care access, health literacy, cancer survivorship, disability, and emotional support & life satisfaction.

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, respiratory conditions, diabetes, and obesity than adults in the United States as a whole.

However, health outcomes are not uniform across populations, even within states. In addition to natural variation in health quality across age groups, health outcomes frequently diverge by socioeconomic status – measured via education and household income. Some of the largest socioeconomic gaps in health occur for diabetes, obesity, heart disease and COPD.

# **Subjective Health Evaluation**

Analysis of Section 1 ("Health Status") of the 2016 BRFSS Questionnaire

Most adults in Louisiana believe they are in good health. More than three in four (77.7 percent) rate their own health as "excellent," "very good," or "good." Only about one-fifth of state residents (21.8 percent) rate their own health as "fair" or "poor."

Age, socio-economic status, and race are associated with subjective perceptions of health. For example, nearly nine in ten Louisianans between the ages of 18 and 34 rate their health positively, but only two in three Louisianans fifty five years or older rate their health positively.

There is also a significant gap between how black and white residents of the state judge their health status. Among white adults, 79.2 percent describe their health as "good," "very good," or "excellent." This share is nearly six percentage points higher than the share of blacks who describe their health positively (73.6 percent). This gap appears to reflect differences in socio-economic status between blacks and whites in the state, on average. 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.

Indeed, measures of socio-economic status are the characteristics most strongly associated with subjective evaluations of health among the demographic characteristics considered here. Individuals with higher household incomes and higher levels of educational attainment tend to have more positive assessments of their health than those with lower household incomes or less education. For example, 63.4 percent 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 92.4 percent of individuals with annual household earnings above \$75,000 (roughly the top 30 percent of households in Louisiana) do so.

In a similar pattern, just more than half (57.7 percent) of Louisiana adults without a high school diploma describe their overall health as "good" or better, while 89.3 percent of those with a four-year college degree rate their health positively. Two in five adults in Louisiana without a high school diploma – roughly, a quarter million people – say their health is only fair or even poor.

Table 1: Subjective evaluations of general health

Table 1: Subjective evaluations of		Good" or bette	er health	"Po	"Poor" or "Fair" health			
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.		
Total	77.7	[75.9,79.4]	2,787,571	21.8	[20.1,23.5]	780,978		
AGE								
18-24	88.7	[82.5,92.9]	409,633	11.3	[7.1,17.5]	52,120		
25-34	86.4	[81.0,90.5]	575,935	13.6	[9.5,19.0]	90,423		
35-44	81.8	[76.4,86.2]	478,544	15.5	[11.6,20.3]	90,427		
45-54	76.4	[71.9,80.3]	447,415	23.6	[19.6,28.0]	138,116		
55-64	68.8	[65.0,72.4]	413,868	30.9	[27.3,34.7]	185,985		
65 and over	67.1	[64.1,69.9]	462,176	32.5	[29.7,35.5]	223,907		
GENDER								
Male	78.9	[76.3,81.4]	1,367,579	20.5	[18.1,23.1]	355,150		
Female	76.5	[74.0,78.8]	1,418,874	22.9	[20.7,25.4]	425,828		
Refused								
RACE-ETHNICITY								
White, Non-Hispanic	79.2	[77.1,81.2]	1,703,830	20.4	[18.4,22.5]	438,402		
Black, Non-Hispanic	73.6	[69.7,77.2]	789,870	25.3	[21.8,29.0]	271,024		
Hispanic	82.1	[69.8,90.1]	146,352	17.9	[9.9,30.2]	31,859		
Other, Non-Hispanic	82.2	[74.2,88.1]	105,714	17.8	[11.9,25.8]	22,955		
Don't know/No answer	71.4	[55.1,83.5]	41,804	28.6	[16.4,44.9]	16,738		
EDUCATION								
Did not graduate HS	57.7	[51.2,64.0]	355,431	40.4	[34.3,46.9]	249,154		
HS diploma/equivalent	77.0	[74.0,79.7]	924,219	22.5	[19.8,25.5]	270,486		
Some college/2-year college degree	82.0	[79.0,84.6]	848,113	17.8	[15.2,20.7]	183,751		
4-year college degree or higher	89.3	[86.9,91.4]	650,639	10.6	[8.5,13.0]	77,000		
Don't know/No answer	90.0	[61.0,98.1]	8,758	6.0	[0.8,34.5]	586		
HOUSEHOLD INCOME								
Less than \$25,000	63.4	[59.3,67.3]	679,381	35.2	[31.3,39.2]	376,983		
\$25,000-\$49,999	79.2	[75.5,82.5]	590,597	20.7	[17.4,24.4]	154,312		
\$50,000-\$74,999	85.5	[81.0,89.0]	360,415	14.3	[10.8,18.8]	60,420		
\$75,000 or more	92.4	[89.9,94.2]	733,035	7.3	[5.5,9.7]	58,061		
Don't know/No answer	76.2	[71.2,80.6]	424,143	23.6	[19.2,28.6]	131,202		

# **Health Related Quality of Life**

Analysis of Section 2 ("Healthy Days") of the 2016 BRFSS Questionnaire

On average, Louisiana residents report 4.3 days of poor physical health per month and 4.2 days of poor mental health per month. Furthermore, Louisianans experience nearly six 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.

A number of demographic characteristics are associated with experiences of poor health. For example, 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 2.4 days of poor physical health per month on average and 3.7 days when poor health interfered with usual activities. Individuals 65 or older report 6.3 days of poor physical health and 7.4 days when poor health interfered with usual activities. However, age is not related to experiences of poor mental health.

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. For example, individuals in the bottom 30 percent of household income report 7.1 days of poor physical health and 6.6 days of poor mental health in a month on average, while those in the top 30 percent of household earnings report 2.2 days and 2.6 days respectively. A similar pattern holds for the number of days in which poor health interfered with usual activities: 8.5 days versus 3.1 days.

There is also a gender gap in experiences of poor health. Women, on average, experience an additional day of poor physical health each month compared to men and an additional day and half of poor mental health. However, women are no more likely than men to report poor health preventing them from engaging in their normal daily activities.

Table 2: Days of poor health

	not god	sical health od in last	not god	ntal health od in last		oor health n activities
		onth		onth		0 = 0 / 0 =
	Mean	95% CI	Mean	95% CI	Mean	95% CI
Total	4.3	[3.9,4.6]	4.2	[3.8,4.5]	5.7	[5.1,6.2]
AGE						
18-24	2.4	[1.0, 3.8]	3.7	[2.5,4.8]	3.7	[1.5,6.0]
25-34	2.0	[1.4, 2.6]	4.7	[3.6,5.7]	3.8	[2.6,5.0]
35-44	3.6	[2.6,4.5]	5.1	[4.0,6.2]	6.0	[4.4,7.6]
45-54	4.3	[3.5,5.0]	3.9	[3.2,4.6]	5.4	[4.2,6.6]
55-64	6.6	[5.7,7.4]	4.5	[3.8,5.2]	7.2	[6.2,8.2]
65 and over	6.3	[5.6,7.0]	3.2	[2.7,3.7]	7.4	[6.4,8.4]
GENDER						
Male	3.8	[3.3,4.3]	3.5	[3.0,3.9]	5.4	[4.6,6.2]
Female	4.7	[4.2,5.2]	4.9	[4.3,5.4]	5.9	[5.1,6.6]
Refused	1.2	[0.0,2.5]	0.6	[0.0,1.3]		
RACE-ETHNICITY						
White, Non-Hispanic	4.2	[3.8,4.6]	4.0	[3.6,4.4]	5.2	[4.7,5.8]
Black, Non-Hispanic	4.8	[3.9,5.6]	4.5	[3.8,5.3]	6.8	[5.5,8.1]
Hispanic	2.8	[1.4,4.2]	3.3	[1.6,4.9]	4.1	[1.6,6.6]
Other, Non-Hispanic	3.2	[1.7,4.7]	4.7	[3.1,6.3]	5.3	[3.0,7.7]
Don't know/No answer	4.0	[2.0,6.0]	6.6	[3.6,9.6]	5.7	[2.3,9.1]
EDUCATION						
Did not graduate HS	6.3	[5.2,7.4]	6.2	[5.0,7.5]	8.3	[6.7,9.9]
HS diploma/equivalent	4.3	[3.7,3.9]	4.3	[3.7,4.9]	5.8	[5.0,6.7]
Some college/2-year college degree	4.2	[3.5,5.0]	3.8	[3.2,4.4]	5.4	[4.2,6.5]
4-year college degree or higher	2.6	[2.2,3.0]	2.8	[2.3,3.2]	3.1	[2.4,3.7]
Don't know/No answer	3.9	[0,10.5]	3.7	[0,8.5]	9.8	[0,21.9]
HOUSEHOLD INCOME						
Less than \$25,000	7.1	[6.2,8.0]	6.6	[5.7,7.5]	8.5	[7.3,9.7]
\$25,000-\$49,999	3.8	[3.1,4.5]	3.7	[3.0,4.4]	4.5	[3.5,5.4]
\$50,000-\$74,999	2.6	[1.9,3.3]	2.7	[2.1,3.4]	3.3	[2.2,4.3]
\$75,000 or more	2.2	[1.8,2.6]	2.6	[2.1,3.1]	3.1	[2.3,3.9]
Don't know/No answer	3.7	[3.1,4.4]	3.6	[2.8,4.4]	5.4	[4.2,6.6]

## **Access to Care**

Analysis of Section 3 ("Health Care Access") and Module 4 ("Health Care Access") of the 2016 BRFSS Questionnaire

#### HEALTH CARE COVERAGE

In 2016, the share of the Louisiana adult population under the age of 65 without health care coverage – whether health insurance plans, HMOs, or government plans – continued to decline to 16.7 percent. It is the third consecutive year to see a drop in the share of uninsured adults.

Health care coverage is strongly associated with socio-economic status. Fewer than one in twenty adults under the age of 65 with household incomes of \$75,000 or more lack coverage (4.7 percent), but about one-quarter of those with household incomes below \$25,000 lack coverage (26.2 percent). Importantly, though, the latter share declined nearly eight percentage points even as the former held steady – indicating that the poorest Louisianans are seeing the most growth in health care coverage.

Coverage also varies by age, with the youngest adults (i.e., between the ages of 18 to 24 years) the least likely to have coverage (23.6 percent). The share of uncovered drops to less than one-in-five among ages 25 to 54 and to less than one-in-ten among ages 55 to 64.

# HEALTH CARE ACCESS: PRIMARY CARE PROVIDERS

Most Louisianans have a health care provider. In fact, 75 percent of adults report having someone they consider to be their personal doctor or health care provider. 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.

As with health insurance coverage, socioeconomic status and age strongly predict access to a primary care provider.

Approximately three fourths of adults without a high school diploma have a primary care provider (73.2 percent), while 80.4 percent of college graduates have a provider. Similarly, 69.3 percent of Louisiana adults with household incomes below \$25,000 have a primary care provider, as compared to 80.8 percent of those with household incomes of \$75,000 or more.

Only half of adults between the ages of 18 and 24 have a health care provider, but more than 80 percent of adults over the age of 44 years have a provider.

There is also a difference across genders: 68.6 percent of men and 81 percent of adult women in Louisiana have a health care provider, but only 68.6 percent of adult men do.

# HEALTH CARE ACCESS: FREQUENCY OF ROUTINE CHECKUPS

Seven in ten Louisiana adults report visiting a doctor for a routine checkup over the previous year (70.2 percent).

Women and older individuals are more likely to see a doctor for routine checkups. Three quarters of women (74.6 percent) have done so in the previous year, but only 65.6 percent of men have. Nearly all seniors have seen a doctor for a routine checkup in the previous year (88 percent), but only about half of

adults under the age of 25 have done so (53.3 percent).

Interestingly, incidence of seeing a health care provider for routine checkups is not related to either household income or educational attainment, two common measures of socio-economic status.

HEALTH CARE ACCESS: FREQEUNCY 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 care during the previous year is higher than the share who have done so specifically for routine checkups. In all, 84.2 percent of adults have seen a health care professional for any care.

In fact, 63 percent of those who did not have a routine checkup in the previous year (or about 16 percent 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

On the other hand, there are strong relationships between socio-economic status and the ability to afford care when it is necessary. In all, 17.5 percent 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 (29.5 percent) among individuals with household incomes less than \$25,000 (roughly the bottom thirty percent of households in Louisiana) but drops to 6.5 percent among individuals with household incomes of \$75,000 or more (roughly the top thirty percent of households in Louisiana).

When considering prescription medication alone, 10.5 percent 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 blacks in the state as well as individuals with lower household incomes. Women, too, are more likely than men to have missed taking prescription medication due to cost.

### 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 (92.9 percent) report they are "very" or "somewhat" satisfied.

Satisfaction is slightly higher among women, whites, and individuals with higher household incomes, but the differences are quite modest – less than five percentage points in each case.

Table 3a: Access to care

	No coverage*			Has	Has health care provider			
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.		
Total	16.3	[14.4,18.5]	473,623	75.0	[72.8,77.1]	2,692,201		
AGE								
18-24	23.6	[17.2,31.6]	109,069	51.6	[43.3,59.7]	238,058		
25-34	16.8	[12.5,22.2]	112,169	57.0	[50.7,63.1]	379,703		
35-44	16.5	[12.5,21.3]	96,250	73.8	[68.3,78.6]	431,737		
45-54	17.0	[13.6,21.1]	99,596	81.6	[77.3,85.2]	478,120		
55-64	9.4	[7.3,12.0]	56,539	86.8	[83.8,89.4]	522,381		
65 and over				93.2	[91.4,94.7]	642,202		
GENDER								
Male	18.4	[15.5,21.9]	264,067	68.6	[65.2,71.8]	1,188,084		
Female	14.3	[11.9,17.0]	209,555	81.0	[78.2,83.5]	1,503,696		
Refused				37.7	[3.8,90.3]	422		
RACE-ETHNICITY								
White, Non-Hispanic	13.1	[11.0,15.5]	218,798	78.2	[75.9,80.4]	1,682,851		
Black, Non-Hispanic	18.6	[14.9,23.1]	168,045	73.0	[68.3,77.3]	783,495		
Hispanic	33.7	[21.5,48.5]	56,081	60.1	[46.1,72.7]	107,174		
Other, Non-Hispanic	19.8	[11.6,31.7]	22,612	65.0	[54.0,74.6]	83,639		
Don't know/No answer	16.7	[7.2,34.2]	8,086	59.8	[42.9,74.7]	35,041		
EDUCATION								
Did not graduate HS	24.9	[18.4,32.8]	113,510	73.2	[66.7,78.9]	451,255		
HS diploma/equivalent Some college/2-year college	19.8	[16.4,23.8]	193,202	72.3	[68.5,75.7]	867,750		
degree	15.1	[11.9,19.0]	130,813	75.9	[71.5,79.8]	784,883		
4-year college degree or higher	6.0	[4.3,8.5]	36,051	80.4	[77.0,83.3]	585,347		
Don't know/No answer	0.5	[0.1,4.9]	46	26.3	[6.7,63.9]	2,555		
HOUSEHOLD INCOME								
Less than \$25,000	26.2	[22.0,31.0]	220,875	69.3	[64.8,73.5]	742,653		
\$25,000-\$49,999	18.0	[13.9,23.1]	101,121	78.7	[74.5,82.4]	586,972		
\$50,000-\$74,999	7.1	[4.3,11.5]	25,205	79.5	[73.6,84.3]	335,087		
\$75,000 or more	4.7	[3.0,7.3]	33,999	80.8	[77.0,84.1]	641,154		
Don't know/No answer	21.7	[15.6,29.4]	92,424	69.4	[62.9,75.2]	386,334		

<sup>\*</sup>Among adults under the age of 65

Table 3b: Access to care

	Со	uld not afford	care Est.	Routine checkup in past year			
	%	95% CI	Pop.	%	95% CI	Est. Pop.	
Total	17.5	[15.8,19.3]	627,557	70.2	[68.1,72.3]	2,519,738	
AGE							
18-24	19.9	[13.8,27.7]	91,795	53.3	[45.1,61.4]	246,265	
25-34	21.4	[16.8,26.9]	142,791	59.8	[53.6,65.6]	398,304	
35-44	20.4	[16.1,25.5]	119,195	64.3	[58.5,69.8]	376,287	
45-54	20.8	[17.1,25.1]	121,930	71.8	[67.2,76.0]	420,857	
55-64	16.6	[13.8,19.7]	99,573	78.5	[75.2,81.6]	471,960	
65 and over	7.6	[6.0,9.5]	52,274	88	[85.8,89.9]	606,066	
GENDER							
Male	15.4	[13.0,18.2]	266,302	65.6	[62.2,68.8]	1,135,310	
Female	19.5	[17.2,21.9]	361,255	74.6	[71.9,77.1]	1,384,417	
Refused				1	[0.1,10.6]	12	
RACE-ETHNICITY							
White, Non-Hispanic	14.2	[12.4,16.2]	305,449	69	[66.5,71.4]	1,483,880	
Black, Non-Hispanic	23.2	[19.6,27.2]	248,879	77.2	[73.0,80.8]	828,065	
Hispanic	23.8	[13.6,38.2]	42,357	56.2	[42.6,69.0]	100,156	
Other, Non-Hispanic	16.8	[10.1,26.5]	21,554	53.7	[42.8,64.2]	69,049	
Don't know/No answer	15.9	[8.2,28.6]	9,318	65.9	[49.0,79.5]	38,588	
EDUCATION							
Did not graduate HS	24.5	[19.3,30.7]	151,028	69.2	[62.6,75.2]	425,884	
HS diploma/equivalent	17.2	[14.5,20.3]	206,855	70.4	[66.8,73.7]	844,849	
Some college/2-year college degree	19.5	[16.3,23.1]	201,480	69.9	[65.7,73.8]	722,944	
4-year college degree or higher	9.1	[7.3,11.4]	66,495	71	[67.5,74.3]	517,183	
Don't know/No answer	17.4	[3.9,52.2]	1,698	91.2	[63.2,98.4]	8878	
HOUSEHOLD INCOME							
Less than \$25,000	29.5	[25.8,33.4]	315,740	70.4	[66.4,74.1]	754,122	
\$25,000-\$49,999	17.8	[14.2,22.1]	132,883	70.9	[66.3,75.0]	528,417	
\$50,000-\$74,999	7.6	[5.2,10.8]	31,928	69.5	[63.3,75.1]	293,067	
\$75,000 or more	6.5	[4.7,9.0]	51,576	70.7	[66.5,74.6]	561,270	
Don't know/No answer	17.1	[12.6,23.0]	95,429	68.8	[62.4,74.5]	382,862	

Table 3c: Access to care

		nealth care pro			able to take pre		At least somewhat satisfied with		
		an once in pas	-		tion in past year		health care received		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	87.9	[86.3,89.4]	2,818,062	10.5	[9.2,11.9]	351,743	92.9	[91.7,94.0]	3,110,475
AGE									
18-24	84.3	[77.0,89.6]	332,632	7.6	[3.8,14.5]	30,655	91.7	[85.1,95.5]	370,946
25-34	86.6	[81.8,90.3]	477,546	13.1	[9.4,18.1]	73,922	90.2	[85.8,93.4]	508,284
35-44	82.4	[77.1,86.7]	423,551	11.5	[8.2,15.8]	62,097	92.9	[89.8,95.1]	502,954
45-54	85.4	[81.1,88.8]	479,519	11.3	[8.6,14.7]	64,090	91.3	[87.7,93.9]	519,106
55-64	91.0	[88.4,93.0]	515,212	12.4	[10.1,15.1]	73,074	93.2	[90.9,94.9]	549,603
65 and over	95.5	[94.0,96.7]	589,602	7.1	[5.6,8.8]	47,904	97.2	[95.9,98.0]	659,582
GENDER									
Male	82.8	[79.9,85.3]	1,287,693	8.2	[6.5,10.3]	131,293	91.1	[89.0,92.9]	1,461,863
Female	92.8	[91.1,94.2]	1,529,947	12.7	[10.9,14.7]	220,449	94.6	[93.0,95.8]	1,647,493
Refused	37.7	[3.8,90.3]	422						
RACE-ETHNICITY									
White, Non-Hispanic	88.8	[86.9,90.4]	1,733,037	8.6	[7.3,10.0]	173,920	94.7	[93.4,95.7]	1,920,840
Black, Non-Hispanic	87.8	[84.3,90.7]	860,421	14.0	[11.1,17.5]	143,792	90.6	[87.5,93.0]	932,804
Hispanic	83.4	[67.0,92.6]	97,220	11.6	[4.8,25.4]	13,743	86.8	[72.8,94.1]	103,013
Other, Non-Hispanic	84.7	[74.6,91.2]	87,045	13.7	[8.1,22.1]	15,165	95.5	[88.7,98.3]	105,715
Don't know/No answer	76.0	[58.5,87.7]	40,339	8.8	[3.6,19.8]	5,122	82.3	[67.5,91.3]	48,103
EDUCATION									
Did not graduate HS	86.0	[80.3,90.3]	457,287	15.0	[10.9,20.3]	86,624	91.1	[87.0,94.0]	526,139
HS diploma/equivalent	85.7	[82.6,88.3]	942,663	9.9	[7.9,12.5]	113,919	92.4	[89.9,94.3]	1,057,764
Some college/2-year college degree	90.3	[87.3,92.7]	814,228	11.7	[9.5,14.4]	109,656	93.0	[90.5,94.9]	870,238
4-year college degree or higher	89.9	[87.2,92.0]	595,046	6.1	[4.7,8.0]	41,543	95.4	[93.5,96.7]	646,579
Don't know/No answer	90.8	[61.1,98.4]	8,427				96.0	[72.2,99.6]	9,345
HOUSEHOLD INCOME									
Less than \$25,000	86.8	[83.4,89.6]	821,652	17.9	[15.0,21.3]	179,982	90.7	[88.1,92.7]	909,752
\$25,000-\$49,999	90.4	[87.4,92.8]	594,079	10.8	[7.9,14.5]	72,938	94.3	[91.6,96.1]	639,349
\$50,000-\$74,999	88.5	[84.2,91.8]	338,072	5.6	[3.7,8.5]	22,161	95.5	[91.5,97.7]	376,069
\$75,000 or more	89.2	[85.8,91.8]	669,252	4.8	[3.3,7.0]	36,169	95.6	[93.3,97.2]	722,467
Don't know/No answer	84.3	[78.3,88.9]	395,006	7.8	[5.3,11.5]	40,493	89.7	[84.7,93.2]	462,837

# **Physical Activity**

Analysis of Section 4 ("Exercise") of the 2016 BRFSS Questionnaire

Exercise may be on the rise in Louisiana. In this state, 70.8 percent of adults report participating in physical activities or exercises other than what they do on the regular job in the past month. This share is up from 60.3 percent in the 2015 BRFSS survey.

Nevertheless, Louisiana adults continue to lag behind their peers nationally in exercise. Across the United States, 75.5 percent of adults engage in physical activity or exercise beyond what they do for their jobs.

The 2016 BRFSS does not include measures for type, frequency, or difficulty of exercise.

Exercise is strongly related to both education and income. The exercise gap between college

graduates and those who did not finish high school is 31.2 percentage points, significantly larger than the 22.9 percentage point gap in 2015. When looking at exercise across different levels of household income, the share reporting exercise rises from 56.3 percent among those in the bottom 30 percent of household incomes to 84.1 percent among those in the top 30 percent of household incomes.

There are also age and gender gaps. Nearly 80 percent of adults under the age of 35 report getting physical activity outside of work, but the share drops to about 67 percent among those 65 years or older. Among women, 67.7 percent report exercising in the previous month. Among men, 74.0 percent do.

**Table 4: Exercise** 

	Engaged in physical activity othe than job in past month						
Total	% 70.8	95% CI [68.7,72.7]	Est. Pop. 2,539,954				
AGE							
18-24	78.3	[69.9,84.8]	361,455				
25-34	79.2	[73.3,84.1]	527,728				
35-44	72.5	[66.8,77.6]	424,254				
45-54	68.4	[63.7,72.8]	400,787				
55-64	67.4	[63.7,70.9]	405,385				
65 and over	61.0	[57.9,64.0]	420,344				
GENDER							
Male	74.0	[71.0,76.8]	1,281,937				
Female	67.7	[65.0,70.4]	1,256,898				
Refused							
RACE-ETHNICITY							
White, Non-Hispanic	72.6	[70.3,74.7]	1,560,606				
Black, Non-Hispanic	66.1	[61.6,70.3]	709,167				
Hispanic	73.1	[59.0,83.7]	130,294				
Other, Non-Hispanic	77.0	[68.0,84.1]	99,118				
Don't know/No answer	69.6	[55.6,80.7]	40,768				
EDUCATION							
Did not graduate HS	54.5	[47.9,61.0]	335,788				
HS diploma/equivalent	68.3	[65.0,71.5]	820,021				
Some college/2-year college degree	73.1	[69.2,76.7]	756,096				
4-year college degree or higher	85.7	[83.2,87.8]	623,995				
Don't know/No answer	37.4	[9.3,77.7]	3,644				
HOUSEHOLD INCOME							
Less than \$25,000	56.3	[52.0,60.5]	603,323				
\$25,000-\$49,999	72.1	[68.1,75.8]	537,847				
\$50,000-\$74,999	78.4	[73.7,82.4]	330,580				
\$75,000 or more	84.1	[80.8,86.9]	667,188				
Don't know/No answer	72.1	[66.4,77.0]	401,015				

# **Inadequate Sleep**

Analysis of Section 5 ("Inadequate Sleep") of the 2016 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 recommends 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, on average, sleep about as much as the CDC recommends. Among all adults in the state, the average number of hours of sleep per night is seven. Almost every demographic group considered here – whether by age, gender, race/ethnicity, educational attainment, or household income – has an average amount of nightly sleep within the margin of error of the recommendation.

The single exception are adults between the ages of 35 and 44 years, whose average hours of sleep (6.7 hours) falls short of the CDC recommendation.

Table 5: Inadequate sleep

Table 5: Inadequate sleep	Λ 1.	
	_	ours of sleep
	%	95% CI
Total	7.0	[6.9,7.1]
AGE		
18-24	7.0	[6.7,7.3]
25-34	6.9	[6.7, 7.1]
35-44	6.7	[6.5,6.8]
45-54	7.0	[6.8,7.3]
55-64	7.1	[6.9,7.2]
65 and over	7.3	[7.2,7.4]
GENDER		
Male	7.0	[6.9,7.1]
Female	7.0	[6.9,7.1]
Refused	3.5	[0.9,6.1]
RACE-ETHNICITY		
White, Non-Hispanic	7.0	[6.9,7.1]
Black, Non-Hispanic	7.0	[6.8,7.2]
Hispanic	7.1	[6.8,7.5]
Other, Non-Hispanic	7.0	[6.6,7.3]
Don't know/No answer	6.8	[6.2,7.5]
EDUCATION		
Did not graduate HS	7.2	[6.8,7.5]
HS diploma/equivalent	7.0	[6.9,7.2]
Some college/2-year college degree	6.9	[6.8,7.0]
4-year college degree or higher	7.0	[6.9,7.1]
Don't know/No answer	6.5	[5.9,7.0]
HOUSEHOLD INCOME		
Less than \$25,000	6.9	[6.7,7.0]
\$25,000-\$49,999	7.0	[6.9,7.2]
\$50,000-\$74,999	7.0	[6.8,7.2]
\$75,000 or more	7.0	[6.9,7.1]
Don't know/No answer	7.3	[7.0,7.6]

## **Asthma**

Analysis of Section 6 ("Chronic Health Conditions") of the 2016 BRFSS Questionnaire

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, 8.3 percent of adults have a current asthma diagnosis. This continues a slow trend of increasing incidence since 2011 when 6.6 adults had a current diagnosis of asthma.

Asthma incidence is twice as high among women (11 percent) than among men (5.3 percent).

The share of adult black residents of the state currently diagnosed with asthma (12.4 percent) is nearly twice as high as among white residents (6.5 percent).

Asthma also disproportionately affects individuals with less education and lower household earnings. For example, among adults with household incomes under \$25,000, roughly the bottom 30 percent of Louisiana households on the distribution of income, 11.8 percent suffer from asthma. The share in the top 30 percent of household incomes who currently have asthma is only about a third of this amount (4.4 percent). Likewise, the share of individuals without a high school diploma who have a current asthma diagnosis (14.9 percent) is nearly three times that of individuals with a four-year college degree (5.2 percent).

Table 6: Asthma

Tuble of Housing	Currently diagnosed with asthma					
	%					
Total	8.3	[7.1,9.6]	Est. Pop. 297,349			
AGE						
18-24	9.0	[5.1,15.4]	41,485			
25-34	6.7	[4.1,10.9]	44,813			
35-44	9.6	[6.4,14.2]	56,188			
45-54	6.4	[4.6,8.8]	37,535			
55-64	11.8	[9.5,14.6]	71,246			
65 and over	6.7	[5.3,8.3]	46,083			
GENDER						
Male	5.3	[3.9,7.2]	91,786			
Female	11.0	[9.3,13.0]	204,865			
Refused	62.3	[9.7,96.2]	697			
RACE-ETHNICITY						
White, Non-Hispanic	6.5	[5.4,8.0]	140,807			
Black, Non-Hispanic	12.4	[9.6,15.8]	132,753			
Hispanic	7.2	[2.7,17.6]	12,742			
Other, Non-Hispanic	6.1	[3.4,10.8]	7,850			
Don't know/No answer	5.5	[2.0,13.9]	3,196			
EDUCATION						
Did not graduate HS	14.9	[10.8, 20.3]	91,814			
HS diploma/equivalent	7.7	[6.0, 9.9]	92,726			
Some college/2-year college degree	7.2	[5.3,9.6]	74,350			
4-year college degree or higher	5.2	[3.9,6.9]	38,069			
Don't know/No answer	4.0	[0.4,27.8]	389			
HOUSEHOLD INCOME						
Less than \$25,000	11.8	[9.3,14.8]	125,979			
\$25,000-\$49,999	8.3	[5.8,11.8]	62,096			
\$50,000-\$74,999	5.1	[3.1,8.0]	21,329			
\$75,000 or more	4.4	[3.1,6.2]	34,964			
Don't know/No answer	9.5	[6.5,13.8]	52,981			

## **Diabetes**

Analysis of Section 6 ("Chronic Health Conditions"), Module 1 ("Pre-Diabetes") & Module 2 ("Diabetes") of the 2016 BRFSS Questionnaire

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. It is a health risk that is on the rise in the United States.

Among the adult population of Louisiana, 12.1 percent have been diagnosed with diabetes. This is slightly higher than the national rate, which is 10.8 percent. Louisiana is the state with the tenth highest rate of diabetes, a relative improvement over 2015 when the state placed sixth.

Furthermore, another 7.4 percent of adult state residents are diagnosed with prediabetes or borderline diabetes. In other words, one in five Louisiana adults either has or is at great risk of having diabetes.

Diabetes incidence is most closely associated with age and socio-economic status. Diabetes is extremely rare among adults under the age of 35, at less than 1 percent. However, 20.9 percent of individuals between the ages of 55 and 64 have diabetes as do 28.3 percent of individuals 65 years or older.

When considering economic differences, 16.1 percent of individuals in the bottom 30 percent of household income have diabetes, but this share falls by more than half to 6.5 percent in the top 30 percent of household

income in the state. Among individuals without a high school diploma 18.8 percent have diabetes, while 8.3 percent of college graduates have diabetes.

#### TREATMENT AND MANAGEMENT

Most adults diagnosed with diabetes are participating in some sort of treatment or monitoring. One third of diabetic adults in Louisiana (33.0 percent) are taking insulin for treatment. More than half (57.9 percent) check their blood for glucose or sugar at least once per day, on average. An even higher share (84.7 percent) have seen a doctor, nurse, or other health care professional within the past year specifically about their diabetes. Nearly as many (81.4 percent) had an A1C test in the past year. The share who have had a health care professional check their feet for sores or irritations related to their diabetes in the past year is 68.3 percent. Approximately half (49.1 percent) have taken a course in how to manage their diabetes.

#### **EFFECT ON VISION**

A significant share of diabetic patients in Louisiana are at risk of vision impairment as a result of their condition. About one in five diabetic patients have been told by their doctor that their condition has affected their eyes (19.7 percent).

**Table 7a: Diabetes** 

	Dia	gnosed with di	iabetes	Diagn	osed with pre	-diabetes	Taking insulin*		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	12.1	[11.0,13.3]	434,272	7.4	[6.5,8.5]	249,974	33.0	[28.4,37.9]	140,160
AGE									
18-24	0.6	[0.1, 3.9]	2,609	2.4	[0.8,6.6]	9,706	100.0		2,609
25-34	8.0	[0.2, 2.7]	5,158	4.2	[2.0,8.5]	23,429	13.4	[1.3,63.8]	691
35-44	5.3	[3.3,8.3]	30,851	5.6	[3.7,8.4]	30,669	24.4	[11.0,45.7]	6,457
45-54	12.9	[9.8,16.7]	75,360	8.8	[6.5,11.8]	50,140	40.8	[27.1,56.0]	30,056
55-64	20.9	[17.7,24.4]	125,502	12.2	[9.9,15.0]	72,276	29.7	[21.9,38.8]	37,239
65 and over	28.3	[25.5,31.2]	194,791	9.3	[7.8,11.2]	63,754	33.0	[27.6,39.0]	63,109
GENDER									
Male	11.1	[9.4,13.0]	192,224	6.7	[5.3,8.4]	107,627	34.0	[26.5,42.5]	63,511
Female	13.0	[11.6,14.7]	242,047	8.2	[6.9,9.6]	142,348	32.2	[26.8,38.1]	76,650
Refused									
RACE-ETHNICITY									
White, Non-Hispanic	11.4	[10.1,12.9]	245,574	7.6	[6.5,8.9]	153,894	31.7	[26.1,37.9]	76,580
Black, Non-Hispanic	13.8	[11.6,16.5]	148,405	7.4	[5.5,9.8]	75,856	31.2	[23.8,39.6]	45,960
Hispanic	8.5	[3.6,18.8]	15,080	5.8	[2.7,11.9]	7,161	75.1	[40.9,93.0]	8,056
Other, Non-Hispanic	13.7	[8.9,20.4]	17,612	4.1	[2.3,7.4]	4,567	41.1	[22.8,62.2]	7,152
Don't know/No answer	13.0	[6.8,23.3]	7,600	14.5	[6.3,30.0]	8,497	31.7	[10.0,66.1]	2,412
EDUCATION									
Did not graduate HS	18.8	[15.0,23.2]	115,842	7.9	[5.1,12.1]	45,697	38.0	[28.0,49.2]	44,055
HS diploma/equivalent	12.3	[10.4,14.6]	147,755	6.7	[5.3,8.4]	77,175	32.8	[24.9,41.8]	46,594
Some college/2-year college degree	10.6	[8.8,12.7]	110,007	8.3	[6.6,10.4]	78,308	27.4	[20.2,36.1]	29,493
4-year college degree or higher	8.3	[6.9,10.0]	60,545	7.2	[5.7,9.1]	48,721	33.7	[25.4,43.0]	19,896
Don't know/No answer	1.3	[0.1,10.4]	122	0.7	[0.1,4.2]	73	100.0		122
HOUSEHOLD INCOME									
Less than \$25,000	16.1	[13.6,18.9]	172,279	7.4	[5.6,9.7]	74,763	39.2	[31.1,47.9]	65,421
\$25,000-\$49,999	13.4	[11.1,16.2]	100,265	8.4	[6.4,11.0]	57,087	24.9	[18.1,33.3]	24,845
\$50,000-\$74,999	10.8	[8.3,14.0]	45,648	7.6	[5.3,10.7]	29,896	19.5	[11.6,31.0]	8,911
\$75,000 or more	6.5	[4.9,8.5]	51,415	7.2	[5.4,9.6]	54,921	33.6	[22.1,47.4]	16,398
Don't know/No answer	11.6	[9.0,14.9]	64,665	6.4	[4.6,8.9]	33,307	38.7	[26.9,51.9]	24,585
*Among adults with diabetes									

<sup>\*</sup>Among adults with diabetes

**Table 7b: Diabetes** 

	Test blood sugar at least			Seen	n health care pi	rovider				
		once per day			for diabetes in past year*			Had A1C test in past year*		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	
Total	57.9	[52.8,62.7]	245,657	84.7	[80.9,87.9]	359,651	81.4	[77.1,85.1]	345,592	
AGE										
18-24										
25-34	22.4	[3.5,69.5]	1,155	83.4	[30.0,98.3]	4,301	83.4	[30.0,98.3]	4,301	
35-44	48.0	[27.3,69.4]	12,710	69.8	[43.1,87.5]	18,480	75.3	[50.3,90.1]	19,944	
45-54	60.1	[45.1,73.5]	44,354	93.6	[85.1,97.3]	68,994	96.8	[91.1,98.9]	71,358	
55-64	56.9	[47.6,65.7]	71,368	85.2	[78.1,90.2]	106,878	86.6	[79.7,91.4]	108,698	
65 and over	60.8	[54.4,66.8]	116,069	82.9	[77.6,87.2]	158,389	74.0	[67.2,79.7]	141,291	
GENDER										
Male	53.4	[45.2,61.4]	99,641	87.2	[81.5,91.4]	162,713	86.4	[79.4,91.2]	161,119	
Female	61.3	[55.1,67.2]	146,016	82.7	[77.4,87.0]	196,938	77.5	[71.7,82.4]	184,472	
Refused										
RACE-ETHNICITY										
White, Non-Hispanic	58.3	[52.1,64.3]	140,647	84.7	[79.6,88.7]	204,428	85.2	[79.9,89.3]	205,669	
Black, Non-Hispanic	57.0	[47.9,65.7]	84,140	84.8	[77.5,90.0]	125,081	73.4	[64.6,80.6]	108,289	
Hispanic	33.9	[9.6,71.2]	3,632	86.4	[56.8,96.9]	9,268	94.5	[65.6,99.4]	10,129	
Other, Non-Hispanic	76.7	[57.1,89.1]	13,360	84.7	[66.9,93.8]	14,740	87.6	[69.2,95.7]	15,258	
Don't know/No answer	51.0	[23.3,78.2]	3,879	80.7	[54.1,93.7]	6,135	82.2	[54.1,94.8]	6,246	
EDUCATION										
Did not graduate HS	61.3	[50.6,71.1]	71,047	85.2	[76.6,91.0]	98,667	67.4	[57.1,76.2]	78,073	
HS diploma/equivalent	54.7	[45.7,63.5]	77,759	83.4	[76.1,88.7]	118,395	81.1	[72.3,87.6]	115,195	
Some college/2-year college degree	54.8	[45.4,63.9]	58,870	85.6	[77.4,91.2]	91,965	90.8	[84.3,94.7]	97,532	
4-year college degree or higher	64.0	[54.9,72.3]	37,858	85.4	[77.5,90.9]	50,501	92.5	[86.5,95.9]	54,670	
Don't know/No answer										
HOUSEHOLD INCOME										
Less than \$25,000	60.8	[52.1,68.9]	101,427	87.2	[81.2,91.4]	145,367	73.9	[65.8,80.7]	123,287	
\$25,000-\$49,999	54.0	[44.2,63.5]	53,832	80.2	[69.8,87.7]	79,993	86.5	[77.5,92.3]	86,239	
\$50,000-\$74,999	56.0	[42.4,68.8]	25,567	83.1	[71.6,90.6]	37,941	90.8	[79.7,96.1]	41,437	
\$75,000 or more	51.1	[37.3,64.7]	24,960	86.6	[74.9,93.3]	42,295	96.2	[89.7,98.6]	46,970	
Don't know/No answer	62.7	[49.6,74.2]	39870	85	[76.2,90.9]	54055	74.9	[62.5,84.3]	47659	

<sup>\*</sup>Among adults with diabetes

Table 7c: Diabetes

	Feet checked in past year*			Has taken class to manage diabetes*			Diabetes has affected eyes*		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	68.3	[63.6,72.7]	289,664	49.1	[44.1,54.0]	208,313	19.7	[15.8,24.2]	83,464
AGE									
18-24									
25-34	74.4	[25.4,96.1]	3,836	20.1	[2.5,70.7]	1,035	5.6	[0.5,38.9]	287
35-44	57.5	[35.5,76.9]	15,245	43.9	[24.2,65.8]	11,638	14.9	[4.9,37.7]	3,956
45-54	62.5	[48.0,75.1]	46,083	56.3	[41.7,69.8]	41,508	19.0	[9.3,35.1]	14,034
55-64	70.2	[61.4,77.8]	88,160	49.8	[40.7,59.0]	62,550	20.2	[12.9,30.2]	25,386
65 and over	71.6	[65.8,76.7]	136,339	46.6	[40.5,52.7]	88,972	20.8	[16.3,26.3]	39,801
GENDER									
Male	73.5	[66.3,79.6]	137,124	47.0	[39.0,55.1]	87,658	21.6	[15.1,30.0]	40,357
Female	64.2	[58.0,70.0]	152,540	50.7	[44.6,56.8]	120,655	18.1	[13.9,23.2]	43,107
Refused									
RACE-ETHNICITY									
White, Non-Hispanic	65.5	[59.3,71.2]	157,947	45.2	[39.1,51.3]	108,974	12.6	[9.4,16.6]	30,356
Black, Non-Hispanic	73.6	[65.1,80.6]	108,164	53.4	[44.5,62.1]	78,763	25.8	[18.4,34.9]	38,080
Hispanic	74.8	[40.1,92.9]	8,017	78.9	[46.1,94.2]	8,455	54.3	[17.0,87.4]	5,825
Other, Non-Hispanic	68.9	[47.1,84.6]	11,992	51.9	[31.8,71.5]	9,037	39.5	[21.3,61.2]	6,879
Don't know/No answer	46.6	[20.2,75.1]	3,544	40.6	[16.0,70.9]	3,083	30.6	[9.4,65.2]	2,324
EDUCATION									
Did not graduate HS	58.3	[47.5,68.3]	67,492	33.9	[24.7,44.5]	39,281	22.9	[15.3,32.8]	26,524
HS diploma/equivalent	71.8	[63.6,78.8]	101,941	54.3	[45.7,62.7]	77,165	20.2	[13.0,30.2]	28,746
Some college/2-year college degree	72.0	[63.3,79.3]	77,018	53.2	[43.9,62.3]	57,179	15.3	[10.0,22.7]	16,484
4-year college degree or higher	72.9	[63.7,80.5]	43,090	58.7	[49.2,67.6]	34,688	19.8	[13.5,28.1]	11,710
Don't know/No answer									
HOUSEHOLD INCOME									
Less than \$25,000	74.4	[67.2,80.6]	124,068	46.0	[37.8,54.5]	76,740	21.7	[15.4,29.7]	36,225
\$25,000-\$49,999	65.1	[55.3,73.7]	64,857	51.3	[41.6,60.9]	51,100	13.3	[7.6,22.0]	13,223
\$50,000-\$74,999	67.5	[53.4,78.9]	30,798	45.9	[33.1,59.2]	20,952	16.3	[9.1,27.6]	7,454
\$75,000 or more	72.6	[59.0,82.9]	35,435	51.3	[37.5,64.9]	25,053	27.6	[15.4,44.4]	13,474
Don't know/No answer	54.6	[41.6,67.1]	34,506	54.2	[41.5,66.4]	34,468	20.6	[11.7,33.7]	13,088

<sup>\*</sup>Among adults with diabetes

## **Arthritis Burden**

Analysis of Section 6 ("Chronic Health Conditions") of the 2016 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 (27.7 percent) of Louisiana adults have been diagnosed with arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. This overall incidence rate is similar to 2015, as our the rates among demographic subgroups.

These conditions are more frequent among older adults and women. Close to half of Louisiana adults between the ages of 55 and 64 (41.8 percent) have been diagnosed with these conditions; and well more than half of those who are 65 years of age or older (56.0 percent) have been diagnosed.

The share of women who have been diagnosed with one of these conditions is 31.8 percent – 8.5 percentage points higher than men. Louisiana women have a 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 disproportionally affects those with less education and those in lower earning households. Among individuals in the bottom 30 percent of household income, 34.9 percent have been diagnosed. The share drops to 20.9 percent among individuals in the 30 percent of household with the highest income. The same pattern holds for educational attainment. Among college graduates, 22.4 percent have been diagnosed with arthritis or a similar condition, while 36.6 percent 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	27.7	[26.0,29.4]	993,176				
AGE							
18-24	5.2	[2.4,10.9]	24,079				
25-34	10.8	[7.5,15.2]	71,753				
35-44	16.7	[12.9,21.4]	97,646				
45-54	27.7	[23.6,32.2]	162,222				
55-64	41.8	[38.1,45.6]	251,520				
65 and over	56.0	[52.9,59.1]	385,956				
GENDER							
Male	23.3	[20.9,25.9]	403,501				
Female	31.8	[29.4,34.2]	589,675				
Refused							
RACE-ETHNICITY							
White, Non-Hispanic	30.1	[28.0,32.3]	647,910				
Black, Non-Hispanic	26.0	[22.7,29.7]	279,213				
Hispanic	11.3	[6.2,19.7]	20,122				
Other, Non-Hispanic	21.3	[15.0,29.3]	27,394				
Don't know/No answer	31.6	[20.2,45.8]	18,537				
EDUCATION							
Did not graduate HS	36.6	[31.0,42.7]	225,733				
HS diploma/equivalent	29.3	[26.4,32.3]	351,257				
Some college/2-year college degree	24.3	[21.4,27.5]	251,452				
4-year college degree or higher	22.4	[19.9,25.1]	163,316				
Don't know/No answer	14.6	[3.4,45.1]	1,418				
HOUSEHOLD INCOME							
Less than \$25,000	34.9	[31.2,38.8]	374,411				
\$25,000-\$49,999	27.4	[24.0,31.2]	204,650				
\$50,000-\$74,999	25.7	[21.3,30.6]	108,255				
\$75,000 or more	20.9	[18.0,24.2]	166,112				
Don't know/No answer	25.1	[21.3,29.4]	139,749				

<sup>\*</sup>Including arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia

## **Other Chronic Conditions**

Analysis of Section 6 ("Chronic Health Conditions") and Module 17 ("Cancer Survivorship") of the 2016 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, diabetes, and arthritis – the Behavioral Risk Factor Surveillance System also tracks the prevalence of additional conditions and diseases: cardiovascular conditions; skin and other cancers; chronic obstructive pulmonary disease, emphysema, and chronic bronchitis (respiratory conditions); depressive disorders; and kidney disease.

## 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.

Overall, 4.0 percent of Louisiana adults report that they have had a heart attack or myocardial infarction. A similar share of adults in the state have been diagnosed with angina or coronary heart disease, 5.8 percent. Finally, 4.0 percent report that they have had a stroke.

Risk of cardiovascular disease is highest among older adults. Among Louisiana adults age 65 years or older, 13.3 percent report having had a heart attack, 15.2 percent report coronary heart disease, and 10.6 percent report having had a stroke. In contrast, these incidents are extremely rare among those under the age of 35, at one percent or less.

Household income is also important predictors of cardiovascular health risks. The incidence of heart attacks, for example, is twice as high among those with household earnings under \$25,000 (6.2 percent) than among those with household earnings of \$75,000 or more (3.0 percent).

Although there are no statistically identifiable gender differences in incidence of stroke or coronary heart disease, men are more at risk of heart attack than women: 6.7 percent versus 3.6 percent.

#### **CANCER DIAGNOSES & SURVIVORSHIP**

About one in twenty Louisiana adults have had skin cancer. A slightly higher share (6.2 percent) have had any other form of cancer.

Among those Louisiana residents who have been diagnosed with cancer at some point during their lives, most have had only one form of cancer (83.9 percent). However, 12.9 percent have had two forms of cancer, and 3.2 percent have had three or more.

The median age at first diagnosis is 55 years in Louisiana.

The most common diagnoses among individuals in Louisiana who have had or currently have cancer are:

1. Skin cancer, other than melanoma (20.5 percent of diagnoses)

- 2. Melanoma (12.5 Percent of diagnoses)
- 3. Breast cancer (11.6 percent of diagnoses)
- 4. Prostate cancer (8.8 percent of diagnoses)
- 5. Colon cancer (7.7 percent of diagnoses)
- 6. Cervical cancer (5.7 percent of diagnoses)

Among individuals diagnosed with cancer, 12. 4 percent are currently receiving treatment, and another 13.3 percent have not yet started treatment. Seven in ten (70.1 percent) have completed their treatment. Among this last group who has completed treatment, 92 percent had health insurance that paid for all or part of their treatment. However, more than one on ten (10.7 percent) report that they have subsequently been denied health insurance or life insurance coverage because of their previous cancer diagnosis.

Risk of skin and other types of cancer are related to age and race. There are very few diagnoses of cancer among those under the age of 45. The incidence of cancer rises steadily over age groups peaking among the elderly. Skin cancer is exceptionally rare among black residents of Louisiana (0.6 percent). Among whites, 7.3 percent of adult residents of the state have had skin cancer. The share of whites who have had other cancers is 7.3 percent, and the racial gap is smaller than for skin cancer as 4.3 percent of black Louisiana residents have been diagnosed with other cancers.

### RESPRIATORY CONDITIONS

Incidence of respiratory conditions such as chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis is 8.2 percent in Louisiana.

Respiratory conditions are related to age, and socio-economic status. Risk of respiratory conditions increases markedly late in life. Relatively few adults under the age of 45 suffer from COPD, emphysema, or chronic bronchitis, but incidence reaches 14.3

percent among adults 65 years or older. Individuals with household earnings of \$75,000 or more are significantly less likely to have respiratory conditions (4.0 percent) than those in households with income below \$25,000 (12.9 percent).

## **DEPRESSIVE DISORDER**

One in five Louisiana adults (19.8 percent) has been diagnosed with depression or a depressive disorder.

Women in Louisiana are nearly twice as likely to be diagnosed with depression than men (25.4 percent versus 13.8 percent). 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 genders to seek out a diagnosis and treatment.

The share of individuals without a high school diploma who have been diagnosed with depressive disorders (28.1 percent) is nearly twice as high as that of college graduates (14.4 percent). The same holds for household income. Nearly one in three individuals with household incomes below \$25,000 have been diagnosed with depression (28.9 percent), while just one in nine (11.9 percent) of individuals with household income of \$75,000 or more suffer from depression.

#### KIDNEY DISEASE

In Louisiana, 3.0 percent of adults have been diagnosed with kidney disease. As with many other chronic conditions, age is strongly related to 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 6.9 percent among those 65 years of age or older.

**Table 9a: Chronic conditions** 

	Heart attack			C	oronary heart	disease	Stroke		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	5.1	[4.4,5.9]	182,742	5.8	[5.1,6.6]	207,911	4.0	[3.4,4.6]	142,071
AGE									_
18-24				0.1	[0.0,0.8]	536			
25-34	0.2	[0.0, 1.5]	1,446	0.5	[0.1, 1.8]	3,053	0.9	[0.3, 3.0]	6,061
35-44	1.6	[0.7, 3.6]	9,191	1.2	[0.5, 3.1]	6,962	1.7	[0.7, 3.8]	9,665
45-54	5.1	[3.3,7.9]	30,125	4.6	[2.9,7.2]	26,826	3.3	[2.1,5.4]	19,615
55-64	8.4	[6.5,10.8]	50,575	11.0	[8.8,13.7]	66,040	5.6	[4.2, 7.6]	33,880
65 and over	13.3	[11.3,15.6]	91,406	15.2	[13.1,17.5]	104,494	10.6	[8.8,12.7]	72,850
GENDER									
Male	6.7	[5.5,8.0]	115,714	6.7	[5.5,8.1]	115,941	3.7	[2.9,4.7]	64,164
Female	3.6	[2.9,4.5]	67,028	5.0	[4.2, 5.9]	91,970	4.2	[3.4,5.2]	77,907
Refused									
RACE-ETHNICITY									
White, Non-Hispanic	6.3	[5.3,7.4]	135,099	6.6	[5.7,7.7]	142,357	3.8	[3.1,4.6]	81,453
Black, Non-Hispanic	3.2	[2.3,4.4]	33,855	4.8	[3.6,6.3]	51,144	4.6	[3.4,6.2]	49,359
Hispanic	1.1	[0.4,3.3]	1,961	1.6	[0.6, 3.9]	2,775	2.3	[1.0, 5.1]	4,039
Other, Non-Hispanic	7.6	[4.2,13.2]	9,729	6.5	[3.4,12.0]	8,373	3.1	[1.5,6.2]	3,961
Don't know/No answer	3.6	[1.5,8.4]	2,098	5.6	[1.9,15.0]	3,262	5.6	[2.0,14.6]	3,260
EDUCATION									
Did not graduate HS	9.6	[7.2,12.7]	59,123	8.5	[6.3,11.5]	52,607	6.9	[5.0,9.5]	42,602
HS diploma/equivalent	4.7	[3.7,6.0]	56,918	6.5	[5.3,8.1]	78,409	3.5	[2.6,4.6]	41,651
Some college/2-year college degree	4.5	[3.3,5.9]	46,147	4.7	[3.6,6.0]	48,174	3.7	[2.7,5.0]	38,150
4-year college degree or higher	2.8	[2.1,3.8]	20,555	3.9	[3.0,5.1]	28,722	2.7	[1.8,4.0]	19,669
Don't know/No answer									
HOUSEHOLD INCOME									
Less than \$25,000	6.2	[4.9, 7.8]	66,684	7.3	[5.9,9.1]	78,374	6.4	[5.1,8.1]	68,558
\$25,000-\$49,999	7.4	[5.6,9.7]	54,963	6.8	[5.2,8.9]	50,859	3.8	[2.7,5.5]	28,625
\$50,000-\$74,999	3.9	[2.4,6.3]	16,618	5.0	[3.3,7.6]	21,286	2.7	[1.4,5.1]	11,304
\$75,000 or more	3	[1.9,4.5]	23,530	4.0	[2.8,5.6]	31,375	1.5	[0.9, 2.6]	12,132
Don't know/No answer	3.8	[2.7,5.3]	20,947	4.7	[3.4,6.3]	26,016	3.9	[2.7,5.5]	21,453

**Table 9b: Chronic conditions** 

	Skin cancer			Other cancer			COPD			
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	
Total	4.8	[4.2,5.5]	173,401	6.2	[5.4,7.1]	222,246	8.2	[7.2, 9.4]	295,063	
AGE										
18-24	0.2	[0.0, 1.5]	954	0.2	[0.0, 1.6]	1,045	3.4	[1.5,7.8]	15,856	
25-34	1.4	[0.5, 3.6]	9254	1.7	[0.5, 5.6]	11,413	5.6	[3.1,9.9]	37,580	
35-44	0.3	[0.1, 1.6]	1,991	3.6	[2.0,6.6]	21,247	4.0	[2.2,7.2]	23,555	
45-54	3.1	[1.9,5.2]	18,403	4.6	[3.2,6.6]	26,893	6.2	[4.4,8.7]	36,140	
55-64	7.3	[5.5,9.5]	43,855	9.5	[7.5,11.9]	56,972	13.8	[11.3,16.8]	83,230	
65 and over	14.4	[12.5,16.5]	98,944	15.2	[13.2,17.4]	104,677	14.3	[12.2,16.8]	98,702	
GENDER										
Male	5.7	[4.7,6.9]	98,499	5.2	[4.1,6.6]	90,261	6.8	[5.4,8.6]	118,558	
Female	4.0	[3.3,4.9]	74,901	7.1	[6.1, 8.3]	131,986	9.5	[8.1,11.2]	176,505	
Refused										
RACE-ETHNICITY										
White, Non-Hispanic	7.3	[6.4,8.3]	156,678	7.3	[6.4,8.4]	157,880	8.4	[7.3,9.7]	180,948	
Black, Non-Hispanic	0.6	[0.2, 1.6]	6,665	4.3	[2.9,6.3]	45,738	8.4	[6.2,11.3]	90,508	
Hispanic	1.5	[0.5, 4.6]	2,625	4.1	[1.6,9.8]	7,267	5.3	[1.8,15.1]	9,526	
Other, Non-Hispanic	1.3	[0.6, 3.0]	1,669	5.1	[2.1,11.6]	6,517	4.9	[2.5,9.3]	6,306	
Don't know/No answer	9.8	[2.9,28.6]	5,763	8.3	[2.7,22.8]	4,845	13.3	[5.9,27.1]	7,775	
EDUCATION										
Did not graduate HS	4.2	[2.7,6.5]	26,054	7.8	[5.3,11.3]	48,014	15.4	[11.7,20.2]	95,141	
HS diploma/equivalent	4.2	[3.3,5.3]	50,066	6.1	[4.9, 7.7]	73,737	7.8	[6.2,9.7]	93,697	
Some college/2-year college degree	4.5	[3.4,6.0]	46,977	5.9	[4.8, 7.4]	61,262	7.9	[6.2,9.9]	81,273	
4-year college degree or higher	6.9	[5.6,8.6]	50,302	5.4	[4.3,6.7]	39,234	3.4	[2.5,4.7]	24,952	
Don't know/No answer										
HOUSEHOLD INCOME										
Less than \$25,000	4.0	[3.0, 5.4]	43,229	7.0	[5.3,9.2]	75,090	12.9	[10.5,15.7]	138,054	
\$25,000-\$49,999	5.7	[4.3,7.4]	42,356	7.5	[5.9,9.5]	55,696	8.1	[6.1,10.6]	60,247	
\$50,000-\$74,999	4.1	[2.8,5.9]	17,274	6.0	[4.1,8.6]	25,131	4.5	[2.8,7.2]	19,173	
\$75,000 or more	4.9	[3.7,6.5]	39,225	4.7	[3.6,6.2]	37,531	4.0	[2.5,6.2]	31,438	
Don't know/No answer	5.6	[4.0,7.8]	31,315	5.2	[3.7,7.1]	28,799	8.3	[6.1,11.2]	46,152	

**Table 9c: Chronic conditions** 

	Г	epressive disorc	ler	Kidney disease			
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	
Total	19.8	[18.1,21.6]	710,668	3.0	[2.5,3.7]	109,026	
AGE							
18-24	19.8	[13.9,27.4]	91,460	0.2	[0.0, 1.7]	1,143	
25-34	20.2	[15.5,25.9]	134,600	0.3	[0.0, 1.8]	1,732	
35-44	18.6	[14.6,23.3]	108,569	1.6	[0.7, 3.6]	9,387	
45-54	22.4	[18.7,26.7]	131,541	3.1	[1.8,5.3]	18,435	
55-64	22.2	[19.2,25.5]	133,462	5.1	[3.6,7.3]	30,863	
65 and over	16.1	[14.1,18.4]	111,036	6.9	[5.6,8.5]	47,464	
GENDER							
Male	13.8	[11.7,16.3]	239,203	3.1	[2.3,4.1]	52,964	
Female	25.4	[22.9,28.0]	471,465	3.0	[2.4,3.8]	56,062	
Refused							
RACE-ETHNICITY							
White, Non-Hispanic	21.4	[19.3,23.6]	460,207	3.1	[2.5,3.9]	67,107	
Black, Non-Hispanic	17.4	[14.3,21.1]	186,908	3.2	[2.2,4.7]	34,555	
Hispanic	13.3	[6.8,24.3]	23,682	0.8	[0.2,3.1]	1,418	
Other, Non-Hispanic	17.6	[11.6,25.7]	22,609	3.3	[1.4,7.5]	4,264	
Don't know/No answer	29.5	[17.8,44.6]	17,262	2.9	[0.7,11.1]	1,682	
EDUCATION							
Did not graduate HS	28.1	[22.5,34.4]	172,918	2.6	[1.6,4.1]	16,078	
HS diploma/equivalent	17.8	[15.2,20.7]	213,353	3.3	[2.4,4.6]	39,560	
Some college/2-year college degree	21.1	[18.0,24.6]	218,551	2.9	[2.0,4.2]	29,768	
4-year college degree or higher	14.4	[12.1,17.0]	104,608	3.2	[2.3,4.5]	23,620	
Don't know/No answer	12.7	[2.3,47.0]	1,237				
HOUSEHOLD INCOME							
Less than \$25,000	28.9	[25.2,33.0]	310,162	3.6	[2.7,4.9]	38,856	
\$25,000-\$49,999	20.3	[16.9,24.2]	151,470	2.6	[1.6,4.3]	19,442	
\$50,000-\$74,999	14.8	[11.4,19.0]	62,457	2.5	[1.5,4.1]	10,644	
\$75,000 or more	11.9	[9.4,14.9]	94,436	2.8	[1.8,4.2]	21,952	
Don't know/No answer	16.6	[12.6,21.4]	92,144	3.3	[2.2,4.9]	18,132	

## **Oral Health**

Analysis of Section 7 ("Oral Health") of the 2016 BRFSS Questionnaire

Four in ten adult residents of Louisiana did not see a dentist or similar oral health care professional in the past year. Regular dental care is more frequent among individuals in higher socio-economic conditions. While 27.1 percent of individuals with household earnings of at least \$75,000 did not see a dentist, more than twice as many (59.9 percent) individuals in households with earnings less than \$25,000 did not see a dentist.

Half of Louisiana adults (47.9 percent) have had at least one permanent tooth removed. As with regular dental care, teeth extraction

is significantly associated with economic means. One in three individuals in the highest earning households have had a tooth removed, but 58.7 percent in the lowest earning households have.

Among seniors in Louisiana, one in five (19.3 percent) have had all of their permanent teeth removed. Again, the differences by socio-economic status are profound. Three percent of seniors with college degrees have had all of their permanent teeth removed, but the share is twelve times larger (among those without a high school diploma (36.7 percent).

Table 10: Oral health

							At leas	ent tooth		
		Have not seen dentist in past year			All permanent teeth removed*			removed		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	
Total	42.6	[40.4,44.8]	1,528,228	19.3	[16.8,22.2]	133,224	47.9	[45.7,50.1]	1,718,205	
AGE										
18-24	37.8	[30.2,46.0]	174,458				11.0	[6.9,17.2]	50,881	
25-34	44.4	[38.3,50.7]	295,966				31.5	[25.9,37.8]	210,102	
35-44	40.5	[34.9,46.4]	236,969				43.4	[37.6,49.4]	254,001	
45-54	43.0	[38.1,48.0]	251,859				53.6	[48.7,58.4]	314,186	
55-64	44.2	[40.4,48.1]	266,115				65.4	[61.7,68.9]	393,572	
65 and over	44.0	[40.9,47.1]	302,861	19.3	[16.8,22.2]	133,224	71.9	[69.1,74.6]	495,463	
GENDER										
Male	43.8	[40.5,47.1]	758,870	20.6	[16.3,25.6]	64,779	46.2	[42.9,49.5]	800,247	
Female	41.4	[38.6,44.3]	768,660	16.9	[14.2,19.9]	68,446	49.5	[46.6,52.3]	917,958	
Refused	62.3	[9.7,96.2]	697							
RACE-ETHNICITY										
White, Non-Hispanic	38.3	[35.9,40.8]	824,533	17.5	[14.9,20.4]	86,965	44.4	[42.0,46.8]	954,579	
Black, Non-Hispanic	50.8	[46.2,55.5]	545,524	21.9	[15.8,29.4]	39,130	56.6	[51.8,61.2]	607,256	
Hispanic	42.9	[30.5,56.2]	76,405	12.0	[4.7,27.5]	1,406	32.8	[22.1,45.6]	58,411	
Other, Non-Hispanic	46.1	[35.7,56.8]	59,317	22.3	[11.3,39.2]	3,589	46.8	[36.4,57.5]	60,218	
Don't know/No answer	38.3	[24.7,54.0]	22,448	13.1	[5.3,29.2]	2,136	64.4	[48.5,77.7]	37,741	
EDUCATION										
Did not graduate HS	58.5	[51.7,65.0]	360,430	36.7	[29.5,44.6]	60,904	62.0	[54.9,68.6]	382,155	
HS diploma/equivalent	43.9	[40.3,47.5]	526,770	19.5	[15.3,24.6]	45,775	53.4	[49.7,57.0]	641,015	
Some college/2-year college degree	42.7	[38.5,46.9]	441,321	12.8	[9.4,17.1]	22,342	45.7	[41.6,49.9]	472,632	
4-year college degree or higher	27.3	[24.1,30.8]	198,746	3.0	[1.8,4.7]	4,203	30.5	[27.5,33.6]	221,783	
Don't know/No answer	9.9	[2.0,36.7]	961				6.4	[1.2,27.1]	620	
HOUSEHOLD INCOME										
Less than \$25,000	59.9	[55.5,64.0]	641,486	28.1	[23.0,33.8]	67,610	58.7	[54.3,63.0]	629,634	
\$25,000-\$49,999	42.5	[38.0,47.1]	316,888	16.6	[12.4,21.9]	30,893	55.1	[50.3,59.9]	411,157	
\$50,000-\$74,999	31.7	[26.5,37.4]	133,692	8.4	[4.5,14.9]	5,736	46.9	[41.2,52.6]	197,624	
\$75,000 or more	27.1	[23.5,31.1]	215,360	4.9	[2.4,9.6]	4,126	33.3	[29.5,37.3]	263,999	
Don't know/No answer	39.7	[33.8,45.9]	220,801	17.9	[12.9,24.2]	24,860	38.8	[33.5,44.3]	215,791	
*Among those 65 years or older			L. Company							

<sup>\*</sup>Among those 65 years or older

# **Obesity**

Analysis of Section 8 ("Demographics") of the 2016 BRFSS Questionnaire

The terms "obese" and "overweight" are both labels for ranges of weight that are greater than what is generally considered healthy for a given height. The terms also identify ranges of weight that 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.

In Louisiana, nearly seven in ten adults are in a range of weight associated with these poor

health outcomes: 35.5 percent are obese and another 33.7 percent are overweight.

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, 42.0 percent versus 32.3 percent. However, this difference shrinks when accounting for differences in educational attainment and household income.

Table 11: Weight and obesity

	Overweight*			Obese^				
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.		
Total	33.7	[31.6,35.9]	1,127,169	35.5	[33.4,37.7]	1,188,131		
AGE								
18-24	25.3	[19.0,32.9]	110,800	25.9	[18.9,34.4]	113,293		
25-34	38.2	[32.0,44.8]	232,865	28.8	[23.6,34.6]	175,532		
35-44	30.0	[24.4,36.3]	160,756	45.2	[39.1,51.4]	241,763		
45-54	34.4	[29.7,39.4]	189,192	40.5	[35.5,45.6]	222,748		
55-64	36.9	[33.1,40.9]	207,359	36.6	[32.9,40.4]	205,480		
65 and over	34.8	[31.8,37.9]	226,196	35.3	[32.2,38.4]	229,315		
GENDER								
Male	39.0	[35.7,42.3]	647,416	34.5	[31.5,37.8]	573,905		
Female	28.5	[25.9,31.3]	479,753	36.5	[33.7,39.5]	614,227		
Refused								
RACE-ETHNICITY								
White, Non-Hispanic	34.1	[31.7,36.6]	687,504	32.3	[30.0,34.7]	652,473		
Black, Non-Hispanic	33.4	[28.9,38.1]	330,164	42.0	[37.5,46.7]	416,170		
Hispanic	36.4	[24.2,50.7]	62,029	32.9	[21.6,46.6]	56,051		
Other, Non-Hispanic	28.8	[20.3,39.1]	34,887	39.0	[28.5,50.5]	47,213		
Don't know/No answer	27.8	[15.7,44.5]	12,586	35.9	[20.8,54.5]	16,224		
EDUCATION								
Did not graduate HS	31.4	[25.3,38.3]	178,894	36.3	[30.3,42.9]	206,719		
HS diploma/equivalent	32.8	[29.3,36.5]	369,003	38.2	[34.6,41.9]	429,430		
Some college/2-year college degree	34.7	[30.6,38.9]	336,119	36.0	[32.0,40.3]	349,615		
4-year college degree or higher	36.1	[32.7,39.6]	243,153	29.3	[26.1,32.7]	197,505		
Don't know/No answer				73.2	[23.7,96.0]	4,862		
HOUSEHOLD INCOME								
Less than \$25,000	32.1	[28.1,36.4]	329,223	40.0	[35.7,44.3]	409,667		
\$25,000-\$49,999	31.9	[27.2,36.9]	227,259	37.6	[33.1,42.3]	268,333		
\$50,000-\$74,999	39.4	[33.7,45.5]	158,306	34.1	[28.9,39.7]	136,915		
\$75,000 or more	36.1	[32.2,40.3]	270,265	33.5	[29.5,37.8]	250,463		
Don't know/No answer	31.1	[25.7,37.2]	142,116	26.9	[21.9,32.6]	122,754		

<sup>\*</sup> BMI greater than or equal to 25 but less than 30

^ BMI greater than or equal to 30

# **Disability**

Analysis of Section 8 ("Demographics") and Module 25 ("Disability") of the 2016 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.

In Louisiana, one in four adults (25.5 percent) report limited activity due to physical, mental, or emotional problems. One in ten (10.3 percent) 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.

The prevalence of specific sensory disabilities among Louisiana adults is similar to the national population. In all, 5.3 percent of Louisiana adults and 5.8 percent of Americans report that they are deaf or have serious difficulty hearing. Similarly, 5.8 percent of adults in the state report that they

are blind or have difficulty seeing even when wearing glasses; nationally, 4.7 adults report vision impairment.

Additionally, 15.4 percent 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 (10.6 percent).

Louisiana adults are more likely to report difficulties in engaging in normal daily activities than their peers nationally. In Louisiana, 18.5 percent of adults report serious difficulty walking or climbing stairs; 5.0 percent report difficulty dressing or bathing; and 8.8 percent 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 percent, 3.7 percent, and 6.8 percent, respectively.

Table 12a: Disability

-	Physical, mental, or emotional			Health	problems requi	re use of	Serious difficulty			
	pro	problem limits activity		special equipment			hearing			
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	
Total	25.5	[23.7,27.4]	832,843	10.3	[9.1,11.5]	334,755	5.3	[4.6,6.1]	186,397	
AGE										
18-24	11.0	[6.0,19.4]	43,504	3.3	[0.7,14.7]	13,110	2.0	[0.7, 5.5]	9,084	
25-34	18.6	[13.7,24.8]	102,190	1.8	[0.8, 4.0]	9,684	1.4	[0.5, 3.6]	8,796	
35-44	20.8	[16.4,25.9]	109,366	4.8	[2.8,8.0]	25,086	1.9	[0.9, 3.8]	10,665	
45-54	24.0	[20.1,28.4]	134,159	7.2	[5.2,10.0]	40,187	5.3	[3.6,7.9]	30,492	
55-64	35.9	[32.3,39.6]	206,699	16.1	[13.4,19.2]	92,590	6.5	[4.9,8.6]	38,241	
65 and over	35.7	[32.8,38.7]	236,926	23.3	[20.8,26.0]	154,098	13.3	[11.4,15.5]	89,118	
GENDER										
Male	22.6	[20.1, 25.4]	354,289	8.8	[7.4,10.5]	137,498	7.6	[6.3,9.1]	128,094	
Female	28.1	[25.6,30.8]	478,554	11.6	[10.0, 13.5]	197,257	3.2	[2.6,4.0]	58,303	
Refused										
RACE-ETHNICITY										
White, Non-Hispanic	26.0	[23.9,28.3]	517,474	9.8	[8.6,11.1]	193,076	6.3	[5.4,7.3]	130,577	
Black, Non-Hispanic	24.3	[20.7,28.3]	242,222	12.0	[9.5,15.1]	119,830	3.9	[2.7,5.6]	40,706	
Hispanic	19.4	[10.5,33.0]	22,996	4.9	[2.4, 9.6]	5,805	3.8	[1.3,10.2]	6,737	
Other, Non-Hispanic	27.4	[19.1,37.5]	30,118	6.0	[3.3,10.6]	6,589	4.2	[1.9,9.0]	5,379	
Don't know/No answer	34.7	[21.7,50.4]	20,033	16.4	[8.7,28.8]	9,455	5.2	[2.2,11.5]	2,998	
EDUCATION										
Did not graduate HS	34.3	[28.4,40.6]	189,131	16.1	[12.7,20.2]	88,503	8.4	[6.1,11.4]	48,872	
HS diploma/equivalent	23.8	[21.0,26.8]	267,499	10.1	[8.6,12.0]	113,849	5.8	[4.5, 7.4]	68,399	
Some college/2-year college degree	27.6	[24.0,31.4]	253,429	10.2	[7.8,13.4]	93,907	3.6	[2.7,4.8]	36,443	
4-year college degree or higher	18.4	[15.9,21.2]	122,478	5.8	[4.7,7.2]	38,435	4.6	[3.4,6.1]	32,440	
Don't know/No answer	3.5	[0.5,20.7]	306	0.7	[0.1,6.4]	62	2.8	[0.3,21.6]	244	
HOUSEHOLD INCOME										
Less than \$25,000	38.0	[33.9,42.3]	373,464	18.6	[15.7,22.0]	182,144	6.6	[5.1,8.5]	68,985	
\$25,000-\$49,999	24.5	[20.9,28.5]	162,734	8.8	[6.9,11.1]	58,417	5.4	[4.0,7.2]	39,330	
\$50,000-\$74,999	20.1	[16.2,24.8]	78,555	5.7	[4.0, 8.0]	22,064	4.4	[2.9,6.4]	18,010	
\$75,000 or more	14.0	[11.4,17.0]	104,864	3.0	[2.0,4.4]	22,304	4.2	[3.0,5.8]	32,713	
Don't know/No answer	23.5	[19.4,28.2]	113,225	10.4	[8.0,13.4]	49,826	5.3	[3.8,7.4]	27,358	

Table 12b: Disability

	Vision impaired even when				iculty concentr		Difficulty walking or			
	wearing glasses		remembering or deciding			climbing stairs				
	%	95% CI	Est. Pop.	%	Est. Pop.	Est. Pop.	%	Est. Pop.	Est. Pop.	
Total	5.8	[4.9,6.8]	200,841	15.4	[13.8,17.2]	536,342	18.5	[17.0,20.2]	643,247	
AGE										
18-24	2.1	[0.7, 6.2]	9,564	13.6	[8.7,20.5]	60,893	4.1	[1.3,12.3]	18,247	
25-34	4.2	[2.2,8.1]	27,457	16.5	[11.8,22.5]	106,178	7.7	[4.4,12.9]	49,156	
35-44	5.4	[3.0, 9.5]	30,193	17.0	[12.8,22.2]	95,323	13.9	[10.1,18.9]	78,236	
45-54	7.3	[5.1,10.2]	41,651	14.5	[11.3,18.4]	82,914	18.1	[14.6,22.2]	103,446	
55-64	7.6	[5.8,9.9]	44,328	16.0	[13.3,19.2]	93,444	28.7	[25.3,32.5]	167,171	
65 and over	7.1	[5.8,8.7]	47,647	14.6	[12.5,17.1]	97,591	34.1	[31.3,37.1]	226,990	
GENDER										
Male	5.3	[4.0,7.0]	89,634	12.9	[10.7,15.5]	217,008	14.8	[12.8,17.1]	248,789	
Female	6.1	[5.0,7.6]	110,510	17.8	[15.5,20.3]	319,334	22.0	[19.7,24.4]	394,457	
Refused										
RACE-ETHNICITY										
White, Non-Hispanic	4.9	[3.9,6.0]	101,076	13.9	[12.0,15.9]	288,659	17.3	[15.6,19.2]	360,079	
Black, Non-Hispanic	8.1	[6.0, 10.9]	84,142	17.8	[14.5,21.6]	184,377	22.4	[18.9,26.2]	231,463	
Hispanic	2.0	[0.7, 5.2]	3,482	16.6	[8.5,29.7]	29,524	11.6	[5.5,22.5]	20,590	
Other, Non-Hispanic	6.6	[3.3,12.9]	8,448	14.4	[8.8,22.6]	17,926	13.7	[8.6,21.0]	17,068	
Don't know/No answer	6.4	[1.7,20.7]	3,693	27.4	[15.9,42.9]	15,856	24.7	[14.4,39.0]	14,047	
EDUCATION										
Did not graduate HS	12.6	[8.9,17.5]	73,385	32.9	[26.8,39.6]	191,045	34.3	[28.6,40.6]	199,333	
HS diploma/equivalent	5.6	[4.2, 7.4]	66,008	14.4	[12.0,17.2]	168,763	18.3	[16.0,20.9]	213,443	
Some college/2-year college degree	3.9	[2.9, 5.4]	39,824	13.7	[11.1,16.8]	138,474	16.3	[13.4,19.5]	163,726	
4-year college degree or higher	3.0	[2.1,4.3]	21,562	5.4	[3.9,7.2]	37,998	9.3	[7.6,11.3]	66,050	
Don't know/No answer	0.7	[0.1,6.4]	62	0.7	[0.1,6.4]	62	7.9	[1.4,33.5]	695	
HOUSEHOLD INCOME										
Less than \$25,000	12.0	[9.5,15.2]	125,145	27.2	[23.4,31.3]	282,084	33.9	[30.0,38.0]	351,521	
\$25,000-\$49,999	2.7	[1.8,4.2]	19,895	13.9	[10.7,17.9]	101,538	16.5	[13.7,19.9]	120,576	
\$50,000-\$74,999	3.3	[1.9,5.7]	13,635	7.3	[4.7,11.3]	30,315	9.5	[7.2,12.5]	39,333	
\$75,000 or more	1.4	[0.9, 2.4]	11,371	5.7	[3.9,8.3]	44,655	5.1	[3.8,6.9]	40,273	
Don't know/No answer	6.0	[4.2,8.4]	30,796	15.2	[11.5,19.9]	77,751	18.1	[14.5,22.2]	91,544	

Table 12c: Disability

Table 12c: Disability										
	Di	ifficulty dress	ing	Difficulty doing						
	0.4	or bathing	T . D	0.4	errands alone					
	%	Est. Pop.	Est. Pop.	%	Est. Pop.	Est. Pop.				
Total	5.0	[4.2,5.9]	172,606	8.8	[7.7,9.9]	302,474				
AGE										
18-24				3.1	[1.3,7.3]	13,447				
25-34	1.7	[0.7, 4.0]	10,710	4.5	[2.5,7.7]	28,678				
35-44	5.3	[3.1,9.0]	29,694	9.0	[6.1,13.2]	50,751				
45-54	5.0	[3.3,7.5]	28,744	9.4	[6.9,12.5]	53,338				
55-64	8.1	[6.3,10.4]	46,963	11.1	[9.0,13.6]	64,089				
65 and over	8.5	[6.8,10.6]	56,494	13.9	[11.9,16.2]	92,170				
GENDER										
Male	4.6	[3.5,5.9]	76,269	6.3	[5.0,7.9]	105,226				
Female	5.4	[4.4,6.6]	96,337	11.1	[9.5,12.8]	197,247				
Refused										
RACE-ETHNICITY										
White, Non-Hispanic	4.5	[3.6,5.6]	93,454	8.6	[7.3,10.0]	177,738				
Black, Non-Hispanic	6.4	[4.9,8.4]	66,368	10.2	[8.1,12.8]	103,894				
Hispanic	0.7	[0.2,2.0]	1,190	3.8	[1.5,9.6]	6,789				
Other, Non-Hispanic	3.0	[1.4,6.2]	3,753	5.5	[2.8,10.3]	6,827				
Don't know/No answer	13.8	[6.5,26.8]	7,841	12.8	[6.2,24.5]	7,226				
EDUCATION										
Did not graduate HS	10.3	[7.5,13.8]	59,496	18.3	[14.3,23.2]	106,101				
HS diploma/equivalent	4.4	[3.4,5.8]	51,466	8.7	[7.0,10.7]	100,848				
Some college/2-year college degree	4.6	[3.3,6.3]	46,180	6.6	[5.2,8.4]	65,832				
4-year college degree or higher	2.2	[1.3,3.5]	15,463	4.2	[3.1,5.7]	29,632				
Don't know/No answer				0.7	[0.1,6.4]	62				
HOUSEHOLD INCOME										
Less than \$25,000	10.0	[8.0,12.4]	103,419	18.0	[15.2,21.1]	184,351				
\$25,000-\$49,999	2.8	[1.7,4.6]	20,713	4.8	[3.4,6.8]	35,217				
\$50,000-\$74,999	1.5	[0.7,3.2]	6,271	4.4	[2.7,7.2]	18,232				
\$75,000 or more	1.5	[0.8,2.8]	11,646	2.6	[1.7,4.0]	20,245				
Don't know/No answer	6.0	[4.3,8.5]	30,557	8.8	[6.5,11.8]	44,427				
	3.0	[ 1.5,0.5]	55,557	3.0	[0.0,11.0]	,				

#### **Tobacco Use**

Analysis of Section 9 ("Tobacco Use") & Section 10 ("E-Cigarettes") of the 2016 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 have declined in recent years – from 25.7 percent of adults in 2011 to 21.7 percent in 2016 – tobacco use remains higher than the national rate of 15.5 percent.

About one in twenty Louisiana adults (5.1 percent) use chewing tobacco, snuff, or snus.

A similar share (5.7 percent) uses ecigarettes.

In general, across all forms included in the BRFSS, tobacco use is more prevalent among men than women, and among individuals with less education or household earnings than others.

The pattern across age, however, is more complicated. Cigarette use is more common in the 25 to 44 year old range, rather than among the youngest adults. In contrast, ecigarette 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.

Total	Table 13: Tobacco use									
Total			Current smoke	er	Us	ses other toba	cco*	Curr	ent e-cigarett	e user
AGE         20.3         [14.3,28.1]         93,864         7.3         [4.2,12.4]         31,947         10.1         [6.2,16.0]         46,461           25-34         28.2         [22.7,34.5]         188,179         5.5         [3.2,9.1]         34,942         7.1         [4.5,11.1]         47,494           35-44         26.0         [21.1,31.4]         15.1,845         5.4         [3.2,9.0]         29,824         7.9         [51.1,1.9]         45,938           45-54         23.4         [19.5,28.0]         137,337         7.5         [5.3,10.6]         42,301         6.2         [4.0,9.5]         36,425           55-64         22.0         [18.9,25.5]         132,629         3.0         [2.0,4.5]         17,460         3.5         [23,5.3]         21,022           65 and over         10.0         [8.9,13.4]         75,625         2.7         [18.3.9]         17,600         1.2         [0,7.2.0]         8.28           65 and over         11.0         [8.9,13.4]         75,625         2.7         [18.3.9]         17,600         1.2         [0,7.2.0]         8.28           8 femula         19.2         [16.6,21.8]         33.5         [18.3.1.1]         [3.0,2.1]         3.1         1.5		%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
18-24       20.3       [14.3,28.1]       93,864       7.3       [4.2,12.4]       31,947       10.1       [6.2,16.0]       46,461         25-34       28.2       [22.7,34.5]       188,179       5.5       [3.2,91]       34,942       7.1       [4.5,11.1]       47,494         45-54       26.0       [21.1,31.4]       151,845       5.4       [3.2,90]       29,824       7.9       [5.1,11.9]       36,938         45-54       26.0       [21.3,31.4]       151,845       5.4       [3.2,90]       29,824       7.9       [5.1,11.9]       36,932         55-64       22.0       [18.9,25.5]       13,2629       3.0       [2.0,45]       17,436       3.5       [23,53]       21,022         65 and over       11.0       8,913.4       75,625       2.7       [18.3)       17,600       1.2       0,72.0       38,282         6ENDER       24.4       [21.6,27.6]       423,237       9.0       [7.3,11.2]       15,992       7.1       [5.4,9.2]       122,689         Female       19.2       [16.8,21.8]       356,241       1.3       [0.8,21.]       23,131       4.5       [3.3,60]       82,934         Kefused       21.7       [19.4,24.1]       465,757	Total	21.7	[19.8,23.7]	779,479	5.1	[4.1,6.2]	174,051	5.7	[4.7,7.0]	205,623
25-34   28.2   [22.7,34.5]   188,179   5.5   [3.2,9.1]   34,942   7.1   [4.5,11.1]   47,494   35-44   26.0   [21.1,31.4]   151,845   5.4   32.9.0]   29,824   7.9   [5.1,11.9]   45,938   45-54   23.4   [19.5,28.0]   137,337   7.5   [5.3,10.6]   42,301   6.2   [4.0,9.5]   36,425   55-64   22.0   [18.9,25.5]   132,629   3.0   [2.0,4.5]   17,436   3.5   [2.3,5.3]   21,022   65 and over   11.0   [8.9,13.4]   75,625   2.7   [18.3.9]   17,600   1.2   [0.7,2.0]   8,282   65 and over   11.0   [8.9,13.4]   75,625   2.7   [18.3.9]   17,600   1.2   [0.7,2.0]   8,282   65 and over   11.0   [21.6,27.6]   423,237   9.0   [7.3,11.2]   150,920   7.1   [5.4,9.2]   122,689   7.1   1.0	AGE									
35-44         26.0         [21.1,31.4]         151,845         5.4         [3.2,90]         29,824         7.9         [5.1,11.9]         45,988           45-54         23.4         [19.5,28.0]         137,337         7.5         [5.3,10.6]         42,301         6.2         [4.0,9.5]         36,425           55-64         22.0         [18.9,25.5]         132,629         3.0         [2.0,4.5]         17,436         3.5         [2.3,5.3]         21,022           65 and over         11.0         [8.91,34]         75,625         2.7         [18.9.9]         17,600         1.2         [0.7,20]         8,282           GENDER         36.4         2.4         [21.6,27.6]         423,237         9.0         [7.3,11.2]         150,920         7.1         [5.4,9.2]         122,689           Female         19.2         [16.8,21.8]         356,241         1.3         [0.8,21]         23,131         4.5         [3.3,60]         82,934           Refused         19.2         [16.8,21.8]         356,241         1.3         [0.8,21]         23,131         4.5         [3.3,60]         82,934           Refused         19.2         [16.8,21.8]         465,757         6.1         [4.8,7.7]         15.919	18-24	20.3	[14.3,28.1]	93,864	7.3	[4.2,12.4]	31,947	10.1	[6.2,16.0]	46,461
45-54         23.4         [19.5,28.0]         137,337         7.5         [5.3,10.6]         42,301         6.2         [4.0,9.5]         36,425           55-64         22.0         [18,9.25.5]         132,629         3.0         [2.0,4.5]         17,436         3.5         [2.3,5.3]         21,022           65 and over         11.0         [8.9,13.4]         75,625         2.7         [18.3.9]         17,600         1.2         [0.7,2.0]         8,282           GENDER         Male         24.4         [21.6,27.6]         423,237         9.0         [7.3,11.2]         150,920         7.1         [5.4,9.2]         122,689           Female         19.2         [16.8,21.8]         356,241         1.3         [0.8,2.1]         23,131         4.5         [3.3,60]         82,934           Refused         19.2         [16.8,21.8]         356,241         1.3         [0.8,2.1]         23,131         4.5         [3.3,60]         82,934           Refused         19.2         [16.8,21.8]         356,241         1.3         [0.8,2.1]         23,131         4.5         [3.3,60]         82,934           Refused         21.2         [19.4,24.1]         465,757         6.1         [4.8,7.7]         <	25-34	28.2	[22.7,34.5]	188,179	5.5	[3.2,9.1]	34,942	7.1	[4.5,11.1]	47,494
55-64         22.0         [18.9,25.5]         132,629         3.0         [2.0,4.5]         17,436         3.5         [2.3,5.3]         21,022           65 and over         11.0         [8.9,13.4]         75,625         2.7         [18.3.9]         17,600         1.2         [0.7,2.0]         8,282           GENDER         Male         24.4         [21.6,27.6]         423,237         9.0         [7.3,11.2]         150,920         7.1         [5.4,9.2]         122,689           Female         19.2         [16.8,21.8]         356,241         1.3         [0.8,2.1]         23,131         4.5         [3.3,6.0]         82,934           Refused         19.2         [16.8,21.8]         356,241         1.3         [0.8,2.1]         23,131         4.5         [3.3,6.0]         82,934           Refused         21.7         [19.4,24.1]         465,757         6.1         [4.8,7.7]         125,919         6.6         [5.2,8.3]         141,525           Black, Non-Hispanic         21.7         [19.4,24.1]         465,757         6.1         [4.8,7.7]         125,919         6.6         [5.2,8.3]         141,525           Other, Non-Hispanic         21.8         [14.3,31.7]         28,023         3.1	35-44	26.0	[21.1,31.4]	151,845	5.4	[3.2,9.0]	29,824	7.9	[5.1,11.9]	45,938
65 and over         11.0         [8,9,13.4]         75,625         2.7         [1,8,3.9]         17,600         1.2         [0,7,2.0]         8,282           GENDER           Male         24.4         [21,6,27.6]         423,237         9.0         [7,3,11.2]         150,920         7.1         [5,4,9.2]         122,689           Female         19.2         [16,8,21.8]         356,241         1.3         [0,8,2.1]         23,131         4.5         [3,3,60]         82,934           Refused         19.2         11,4,241         356,241         1.3         [0,8,2.1]         23,131         4.5         [3,3,60]         82,934           Refused         19.2         11,4,241         465,757         6.1         [4,8,7.7]         125,919         6.6         [5,2,8,3]         141,525           Black, Non-Hispanic         21.7         [19,4,24.1]         465,757         6.1         [4,8,7.7]         125,919         6.6         [5,2,8,3]         141,525           Black, Non-Hispanic         21.7         [19,4,24.1]         465,757         8.8         [3,6,19.9]         15,599         7.1         [2,6,18.2]         12,666           Other, Non-Hispanic         21.8         [14,3,31.7]         28,023 <t< td=""><td>45-54</td><td>23.4</td><td>[19.5,28.0]</td><td>137,337</td><td>7.5</td><td>[5.3,10.6]</td><td>42,301</td><td>6.2</td><td>[4.0, 9.5]</td><td>36,425</td></t<>	45-54	23.4	[19.5,28.0]	137,337	7.5	[5.3,10.6]	42,301	6.2	[4.0, 9.5]	36,425
GENDER         Male         24.4         [21.6,27.6]         423,237         9.0         [7.3,11.2]         150,920         7.1         [5.4,9.2]         122,689           Female         19.2         [16.8,21.8]         356,241         1.3         [0.8,2.1]         23,131         4.5         [33,6.0]         82,934           Refused         19.2         16.8,21.8]         356,241         1.3         [0.8,2.1]         23,131         4.5         [33,6.0]         82,934           Refused         19.2         11.4         465,757         6.1         [4.8,7.7]         125,919         6.6         [5.2,8.3]         141,525           Black, Non-Hispanic         21.7         [19.4,24.1]         465,757         6.1         [4.8,7.7]         125,919         6.6         [5.2,8.3]         141,525           Black, Non-Hispanic         20.9         [17.4,24.8]         223,964         2.4         [1.5,3.8]         24,446         3.5         [2.1,5.5]         37,028           Hispanic         25.7         [15.3,40.0]         45,873         8.8         [3.6,19.9]         15,599         7.1         [2.6,18.2]         12,664           Other, Non-Hispanic         21.8         [14.3,31.7]         28,023         3.1 <td< td=""><td>55-64</td><td>22.0</td><td>[18.9,25.5]</td><td>132,629</td><td>3.0</td><td>[2.0,4.5]</td><td>17,436</td><td>3.5</td><td>[2.3,5.3]</td><td>21,022</td></td<>	55-64	22.0	[18.9,25.5]	132,629	3.0	[2.0,4.5]	17,436	3.5	[2.3,5.3]	21,022
Male         24.4         [21.6,27.6]         423,237         9.0         [7.3,11.2]         150,920         7.1         [5.4,9.2]         122,689           Female         19.2         [16.8,21.8]         356,241         1.3         [0.8,21]         23,131         4.5         [3.3,60]         82,934           Refused	65 and over	11.0	[8.9,13.4]	75,625	2.7	[1.8,3.9]	17,600	1.2	[0.7, 2.0]	8,282
Female         19.2         [16.8,21.8]         356,241         1.3         [0.8,2.1]         23,131         4.5         [3.3,6.0]         82,934           Refused	GENDER									
Refused	Male	24.4	[21.6,27.6]	423,237	9.0	[7.3,11.2]	150,920	7.1	[5.4,9.2]	122,689
RACE-ETHNICITY         White, Non-Hispanic       21.7       [19.4,24.1]       465,757       6.1       [4.8,7.7]       125,919       6.6       [5.2,8.3]       141,525         Black, Non-Hispanic       20.9       [17.4,24.8]       223,964       2.4       [1.5,3.8]       24,446       3.5       [2.1,5.5]       37,028         Hispanic       25.7       [15.3,40.0]       45,873       8.8       [3.6,19.9]       15,599       7.1       [2.6,18.2]       12,664         Other, Non-Hispanic       21.8       [14.3,31.7]       28,023       3.1       [1.2,7.7]       3,799       4.9       [2.2,10.5]       6,263         Don't know/No answer       27.1       [14.2,45.4]       15,861       7.6       [27,19.4]       4,288       13.9       [5.5,31.0]       8,143         EDUCATION       8       27.8       19.8,26.0]       272,939       5.0       [5.8,13.9]       52,545       7.4       [4.6,11.6]       45,678         HS diploma/equivalent       22.7       [19.8,26.0]       272,939       5.0       [3.7,6.9]       58,008       6.4       [4.6,8.8]       77,183         Some college/2-year college degree       22.1       [18.8,25.8]       228,497       4.0       [2.7,5.8] <t< td=""><td>Female</td><td>19.2</td><td>[16.8,21.8]</td><td>356,241</td><td>1.3</td><td>[0.8, 2.1]</td><td>23,131</td><td>4.5</td><td>[3.3,6.0]</td><td>82,934</td></t<>	Female	19.2	[16.8,21.8]	356,241	1.3	[0.8, 2.1]	23,131	4.5	[3.3,6.0]	82,934
White, Non-Hispanic         21.7         [19.4,24.1]         465,757         6.1         [4.8,7.7]         125,919         6.6         [5.2,8.3]         141,525           Black, Non-Hispanic         20.9         [17.4,24.8]         223,964         2.4         [1.5,3.8]         24,446         3.5         [2.1,5.5]         37,028           Hispanic         25.7         [15.3,40.0]         45,873         8.8         [3.6,19.9]         15,599         7.1         [2.6,18.2]         12,664           Other, Non-Hispanic         21.8         [14.3,31.7]         28,023         3.1         [1.2,7.7]         3,799         4.9         [2.2,10.5]         6,263           Don't know/No answer         27.1         [14.2,45.4]         15,861         7.6         [27,19.4]         4,288         13.9         [5.5,31.0]         8,143           EDUCATION         200         272,808         9.1         [5.8,13.9]         52,545         7.4         [4.6,11.6]         45,678           HS diploma/equivalent         22.7         [19.8,26.0]         272,939         5.0         [3.7,6.9]         58,008         6.4         [4.6,8.8]         77,183           Some college/2-year college degree         22.1         [18.8,25.8]         28,497         4.0	Refused									
Black, Non-Hispanic         20.9         [17.4,24.8]         223,964         2.4         [1.5,3.8]         24,446         3.5         [2.1,5.5]         37,028           Hispanic         25.7         [15.3,40.0]         45,873         8.8         [3.6,19.9]         15,599         7.1         [2.6,18.2]         12,664           Other, Non-Hispanic         21.8         [14.3,31.7]         28,023         3.1         [1.2,7.7]         3,799         4.9         [2.2,10.5]         6,263           Don't know/No answer         27.1         [14.2,45.4]         15,861         7.6         [2.7,19.4]         4,288         13.9         [5.5,31.0]         8,143           EDUCATION         5         5         5         7.4         [4.6,11.6]         45,678           HS diploma/equivalent         22.7         [19.8,26.0]         272,939         5.0         [3.7,6.9]         58,008         6.4         [4.6,8.8]         77,183           Some college/2-year college degree         22.1         [18.8,25.8]         228,497         4.0         [2.7,5.8]         39,203         5.6         [3.8,8.2]         57,918           4-year college degree or higher         9.4         [7.4,11.9]         68,356         3.4         [2.3,5.2]         24,295	RACE-ETHNICITY									
Hispanic         25.7         [15.3,40.0]         45,873         8.8         [3.6,19.9]         15,599         7.1         [2.6,18.2]         12,664           Other, Non-Hispanic         21.8         [14.3,31.7]         28,023         3.1         [1.2,7.7]         3,799         4.9         [2.2,10.5]         6,263           Don't know/No answer         27.1         [14.2,45.4]         15,861         7.6         [2.7,19.4]         4,288         13.9         [5.5,31.0]         8,143           EDUCATION         34.0         [27.8,40.8]         209,298         9.1         [5.8,13.9]         52,545         7.4         [4.6,11.6]         45,678           HS diploma/equivalent         22.7         [19.8,26.0]         272,939         5.0         [3.7,6.9]         58,008         6.4         [4.6,81.6]         45,678           Some college/2-year college degree         22.1         [18.8,25.8]         228,497         4.0         [2.7,5.8]         39,203         5.6         [3.8,8.2]         57,918           4-year college degree or higher         9.4         [7.4,11.9]         68,356         3.4         [2.3,5.2]         24,295         3.3         [2.0,5.5]         24,147           Don't know/No answer         4.0         [0.4,27.8]	White, Non-Hispanic	21.7	[19.4,24.1]	465,757	6.1	[4.8, 7.7]	125,919	6.6	[5.2,8.3]	141,525
Other, Non-Hispanic         21.8         [14.3,31.7]         28,023         3.1         [1.2,7.7]         3,799         4.9         [2.2,10.5]         6,263           Don't know/No answer         27.1         [14.2,45.4]         15,861         7.6         [2.7,19.4]         4,288         13.9         [5.5,31.0]         8,143           EDUCATION           Did not graduate HS         34.0         [27.8,40.8]         209,298         9.1         [5.8,13.9]         52,545         7.4         [4.6,11.6]         45,678           HS diploma/equivalent         22.7         [19.8,26.0]         272,939         5.0         [3.7,6.9]         58,008         6.4         [4.6,18.8]         77,183           Some college/2-year college degree         22.1         [18.8,25.8]         228,497         4.0         [2.7,5.8]         39,203         5.6         [3.8,8.2]         57,918           4-year college degree or higher         9.4         [7.4,11.9]         68,356         3.4         [2.3,5.2]         24,295         3.3         [2.0,5.5]         24,147           Don't know/No answer         4.0         [0.4,27.8]         389            7.2         [0.8,42.0]         697           HOUSEHOLD	Black, Non-Hispanic	20.9	[17.4,24.8]	223,964	2.4	[1.5,3.8]	24,446	3.5	[2.1,5.5]	37,028
Don't know/No answer         27.1         [14.2,45.4]         15,861         7.6         [2.7,19.4]         4,288         13.9         [5.5,31.0]         8,143           EDUCATION           Did not graduate HS         34.0         [27.8,40.8]         209,298         9.1         [5.8,13.9]         52,545         7.4         [4.6,11.6]         45,678           HS diploma/equivalent         22.7         [19.8,26.0]         272,939         5.0         [3.7,6.9]         58,008         6.4         [4.6,8.8]         77,183           Some college/2-year college degree         22.1         [18.8,25.8]         228,497         4.0         [2.7,5.8]         39,203         5.6         [3.8,8.2]         57,918           4-year college degree or higher         9.4         [7.4,11.9]         68,356         3.4         [2.3,5.2]         24,295         3.3         [2.0,5.5]         24,147           Don't know/No answer         4.0         [0.4,27.8]         389            7.2         [0.8,42.0]         697           HOUSEHOLD INCOME         28.0         [24.1,32.2]         299,865         4.5         [3.0,6.6]         45,999         5.3         [3.6,7.9]         57,035         \$25,000-\$49,999         3.4	Hispanic	25.7	[15.3,40.0]	45,873	8.8	[3.6,19.9]	15,599	7.1	[2.6,18.2]	12,664
EDUCATION         Did not graduate HS       34.0       [27.8,40.8]       209,298       9.1       [5.8,13.9]       52,545       7.4       [4.6,11.6]       45,678         HS diploma/equivalent       22.7       [19.8,26.0]       272,939       5.0       [3.7,6.9]       58,008       6.4       [4.6,8.8]       77,183         Some college/2-year college degree       22.1       [18.8,25.8]       228,497       4.0       [2.7,5.8]       39,203       5.6       [3.8,8.2]       57,918         4-year college degree or higher       9.4       [7.4,11.9]       68,356       3.4       [2.3,5.2]       24,295       3.3       [2.0,5.5]       24,147         Don't know/No answer       4.0       [0.4,27.8]       389          7.2       [0.8,42.0]       697         HOUSEHOLD INCOME           7.2       [0.8,42.0]       57,035         \$25,000-\$49,999       23.1       [19.3,27.4]       171,990       4.9       [3.2,7.4]       35,626       6.4       [4.4,9.2]       47,378         \$50,000-\$74,999       14.8       [11.1,19.5]       62,422       5.9       [3.4,10.2]       24,273       7.7       [4.7,12.5]       32,477 <td>Other, Non-Hispanic</td> <td>21.8</td> <td>[14.3,31.7]</td> <td>28,023</td> <td>3.1</td> <td>[1.2,7.7]</td> <td>3,799</td> <td>4.9</td> <td>[2.2,10.5]</td> <td>6,263</td>	Other, Non-Hispanic	21.8	[14.3,31.7]	28,023	3.1	[1.2,7.7]	3,799	4.9	[2.2,10.5]	6,263
Did not graduate HS       34.0       [27.8,40.8]       209,298       9.1       [5.8,13.9]       52,545       7.4       [4.6,11.6]       45,678         HS diploma/equivalent       22.7       [19.8,26.0]       272,939       5.0       [3.7,6.9]       58,008       6.4       [4.6,8.8]       77,183         Some college/2-year college degree       22.1       [18.8,25.8]       228,497       4.0       [2.7,5.8]       39,203       5.6       [3.8,8.2]       57,918         4-year college degree or higher       9.4       [7.4,11.9]       68,356       3.4       [2.3,5.2]       24,295       3.3       [2.0,5.5]       24,147         Don't know/No answer       4.0       [0.4,27.8]       389           7.2       [0.8,42.0]       697         HOUSEHOLD INCOME               5.0       [3.6,7.9]       57,035         \$25,000-\$49,999       23.1       [19.3,27.4]       171,990       4.9       [3.2,7.4]       35,626       6.4       [4.4,9.2]       47,378         \$50,000-\$74,999       14.8       [11.1,19.5]       62,422       5.9       [3.4,10.2]       24,273       7.7       <	Don't know/No answer	27.1	[14.2,45.4]	15,861	7.6	[2.7,19.4]	4,288	13.9	[5.5,31.0]	8,143
HS diploma/equivalent 22.7 [19.8,26.0] 272,939 5.0 [3.7,6.9] 58,008 6.4 [4.6,8.8] 77,183 Some college/2-year college degree 22.1 [18.8,25.8] 228,497 4.0 [2.7,5.8] 39,203 5.6 [3.8,8.2] 57,918 4-year college degree or higher 9.4 [7.4,11.9] 68,356 3.4 [2.3,5.2] 24,295 3.3 [2.0,5.5] 24,147 Don't know/No answer 4.0 [0.4,27.8] 389 7.2 [0.8,42.0] 697 HOUSEHOLD INCOME  Less than \$25,000 28.0 [24.1,32.2] 299,865 4.5 [3.0,6.6] 45,999 5.3 [3.6,7.9] 57,035 \$25,000-\$49,999 23.1 [19.3,27.4] 171,990 4.9 [3.2,7.4] 35,626 6.4 [4.4,9.2] 47,378 \$50,000-\$74,999 14.8 [11.1,19.5] 62,422 5.9 [3.4,10.2] 24,273 7.7 [4.7,12.5] 32,477	EDUCATION									
Some college/2-year college degree       22.1       [18.8,25.8]       228,497       4.0       [2.7,5.8]       39,203       5.6       [3.8,8.2]       57,918         4-year college degree or higher       9.4       [7.4,11.9]       68,356       3.4       [2.3,5.2]       24,295       3.3       [2.0,5.5]       24,147         Don't know/No answer       4.0       [0.4,27.8]       389          7.2       [0.8,42.0]       697         HOUSEHOLD INCOME       28.0       [24.1,32.2]       299,865       4.5       [3.0,6.6]       45,999       5.3       [3.6,7.9]       57,035         \$25,000-\$49,999       23.1       [19.3,27.4]       171,990       4.9       [3.2,7.4]       35,626       6.4       [4.4,9.2]       47,378         \$50,000-\$74,999       14.8       [11.1,19.5]       62,422       5.9       [3.4,10.2]       24,273       7.7       [4.7,12.5]       32,477	Did not graduate HS	34.0	[27.8,40.8]	209,298	9.1	[5.8,13.9]	52,545	7.4	[4.6,11.6]	45,678
4-year college degree or higher       9.4       [7.4,11.9]       68,356       3.4       [2.3,5.2]       24,295       3.3       [2.0,5.5]       24,147         Don't know/No answer       4.0       [0.4,27.8]       389          7.2       [0.8,42.0]       697         HOUSEHOLD INCOME         Less than \$25,000       28.0       [24.1,32.2]       299,865       4.5       [3.0,6.6]       45,999       5.3       [3.6,7.9]       57,035         \$25,000-\$49,999       23.1       [19.3,27.4]       171,990       4.9       [3.2,7.4]       35,626       6.4       [4.4,9.2]       47,378         \$50,000-\$74,999       14.8       [11.1,19.5]       62,422       5.9       [3.4,10.2]       24,273       7.7       [4.7,12.5]       32,477	HS diploma/equivalent	22.7	[19.8,26.0]	272,939	5.0	[3.7,6.9]	58,008	6.4	[4.6,8.8]	77,183
Don't know/No answer         4.0         [0.4,27.8]         389            7.2         [0.8,42.0]         697           HOUSEHOLD INCOME         Uses than \$25,000         28.0         [24.1,32.2]         299,865         4.5         [3.0,6.6]         45,999         5.3         [3.6,7.9]         57,035           \$25,000-\$49,999         23.1         [19.3,27.4]         171,990         4.9         [3.2,7.4]         35,626         6.4         [4.4,9.2]         47,378           \$50,000-\$74,999         14.8         [11.1,19.5]         62,422         5.9         [3.4,10.2]         24,273         7.7         [4.7,12.5]         32,477	Some college/2-year college degree	22.1	[18.8,25.8]	228,497	4.0	[2.7,5.8]	39,203	5.6	[3.8,8.2]	57,918
HOUSEHOLD INCOME       Less than \$25,000     28.0     [24.1,32.2]     299,865     4.5     [3.0,6.6]     45,999     5.3     [3.6,7.9]     57,035       \$25,000-\$49,999     23.1     [19.3,27.4]     171,990     4.9     [3.2,7.4]     35,626     6.4     [4.4,9.2]     47,378       \$50,000-\$74,999     14.8     [11.1,19.5]     62,422     5.9     [3.4,10.2]     24,273     7.7     [4.7,12.5]     32,477	4-year college degree or higher	9.4	[7.4,11.9]	68,356	3.4	[2.3,5.2]	24,295	3.3	[2.0,5.5]	24,147
Less than \$25,000       28.0       [24.1,32.2]       299,865       4.5       [3.0,6.6]       45,999       5.3       [3.6,7.9]       57,035         \$25,000-\$49,999       23.1       [19.3,27.4]       171,990       4.9       [3.2,7.4]       35,626       6.4       [4.4,9.2]       47,378         \$50,000-\$74,999       14.8       [11.1,19.5]       62,422       5.9       [3.4,10.2]       24,273       7.7       [4.7,12.5]       32,477	Don't know/No answer	4.0	[0.4,27.8]	389				7.2	[0.8,42.0]	697
\$25,000-\$49,999	HOUSEHOLD INCOME									
\$50,000-\$74,999 14.8 [11.1,19.5] 62,422 5.9 [3.4,10.2] 24,273 7.7 [4.7,12.5] 32,477	Less than \$25,000	28.0	[24.1,32.2]	299,865	4.5	[3.0,6.6]	45,999	5.3	[3.6,7.9]	57,035
	\$25,000-\$49,999	23.1	[19.3,27.4]	171,990	4.9	[3.2,7.4]	35,626	6.4	[4.4,9.2]	47,378
\$75,000 or more 16.3 [13.2,19.9] 129,374   4.8 [3.1,7.2] 37,086   4.0 [2.3,6.9] 31,703	\$50,000-\$74,999	14.8	[11.1,19.5]	62,422	5.9	[3.4,10.2]	24,273	7.7	[4.7,12.5]	32,477
	\$75,000 or more	16.3	[13.2,19.9]	129,374	4.8	[3.1,7.2]	37,086	4.0	[2.3,6.9]	31,703
Don't know/No answer         20.8         [15.9,26.7]         115,827         6.2         [3.7,10.2]         31,066         6.7         [4.0,10.8]         37,030	Don't know/No answer	20.8	[15.9,26.7]	115,827	6.2	[3.7,10.2]	31,066	6.7	[4.0,10.8]	37,030

<sup>\*</sup>Chewing tobacco, snuff, or snus

### Alcohol Use

Analysis of Section 11 ("Alcohol Consumption") of the 2016 BRFSS Questionnaire

Excessive alcohol use is associated with a number of 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.

Six percent of Louisiana adults are heavy drinkers. The share for the United States as a whole is 5.6 percent. Heavy drinking is more common among men and 25 to 54 year olds.

The survey also asks the number of times in the past month on which 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.

In Louisiana, 15.7 percent engaged in binge drinking at some point in the previous month. There is a far more clear pattern between age and binge drinking than for heavy drinking. Binge drinking is most frequent among adults under 35 years of age, and declines among older individuals.

Men are approximately twice as likely as women to engage in binge drinking.

Finally, unlike many other risky health behaviors that are more frequent among more socio-economically disadvantaged individuals, alcohol consumption – particularly binge drinking – is more common among those with higher household incomes.

Table 14: Alcohol use								
	]	Heavy drinkin	g*	Binge drinking^				
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.		
Total	6.0	[5.1,7.2]	216,589	15.7	[14.1,17.4]	562,176		
AGE								
18-24	5.1	[2.6,9.6]	23,568	20.7	[15.3,27.4]	95,719		
25-34	6.0	[3.7,9.7]	40,119	23.3	[18.4,28.9]	155,140		
35-44	8.3	[5.6,12.2]	48,774	17.9	[13.9,22.9]	104,967		
45-54	7.5	[5.4,10.5]	44,218	19.7	[15.9,24.1]	115,223		
55-64	6.0	[4.4,8.2]	36,082	10.3	[8.2,12.9]	62,228		
65 and over	3.5	[2.4,5.0]	23,830	4.2	[3.1,5.7]	28,898		
GENDER								
Male	7.3	[5.7,9.2]	126,162	20.8	[18.2,23.7]	360,123		
Female	4.9	[3.8,6.3]	90,427	10.9	[9.1,13.0]	202,053		
Refused								
RACE-ETHNICITY								
White, Non-Hispanic	6.3	[5.1,7.7]	134,785	17.6	[15.6,19.8]	377,903		
Black, Non-Hispanic	4.8	[3.2,6.9]	51,042	11.3	[8.9,14.3]	121,153		
Hispanic	8.9	[3.8,19.4]	15,807	24.7	[14.2,39.5]	44,092		
Other, Non-Hispanic	7.8	[4.0,14.7]	10,077	10.0	[5.4,17.8]	12,884		
Don't know/No answer	8.3	[2.8,22.0]	4,877	10.5	[4.0,24.8]	6,144		
EDUCATION								
Did not graduate HS	4.9	[2.9,8.2]	30,136	12.9	[9.0,18.0]	79,204		
HS diploma/equivalent	7.5	[5.7,9.8]	89,838	16.2	[13.6,19.3]	194,870		
Some college/2-year college degree	5.5	[3.8,7.8]	56,552	15.3	[12.2,18.9]	157,745		
4-year college degree or higher	5.5	[4.0, 7.6]	40,063	17.8	[15.0,21.0]	129,660		
Don't know/No answer				7.2	[0.8,42.0]	697		
HOUSEHOLD INCOME								
Less than \$25,000	5.2	[3.6,7.5]	55,746	11.4	[8.9,14.6]	122,589		
\$25,000-\$49,999	5.6	[3.7,8.4]	42,034	15.4	[11.9,19.7]	115,146		
\$50,000-\$74,999	5.6	[3.7,8.5]	23,658	18.2	[13.8,23.6]	76,669		
\$75,000 or more	8.1	[6.1,10.7]	64,037	23.1	[19.5,27.1]	183,302		
Don't know/No answer	5.6	[3.4,9.1]	31,115	11.6	[8.3,16.0]	64,469		

<sup>\*</sup> Males who consume more than 14 drinks per week or females who consume more than 7 drinks per week

 $<sup>^{\</sup>wedge}$  Males that consume five or more drinks on one occasion or females who consume four or more drinks on one occasion

### **Immunizations**

Analysis of Section 12 ("Immunization") of the 2016 BRFSS Questionnaire

Influenza (the flu) is a contagious respiratory illness caused by influenza viruses. Each year, an estimated 10-20 percent 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.

Overall, one in three of all adults (32.8 percent) and half of seniors (51.6 percent) in Louisiana received vaccination against the flu during the previous year. An even larger share of seniors (69.2 percent) have received

vaccination for pneumonia. In both cases, among the elderly population of Louisiana, there are few differences inn vaccination by gender, race, or socio-economic status. In the general adult population, however, there is a wide disparity in flu vaccination between men (28.4 percent) and women (37.0 percent).

Finally, most adults in Louisiana (57.6 percent) have received a tetanus vaccination since 2005. Tetanus vaccination is more common among younger adults, men, and individuals with higher levels of education or household earnings.

**Table 15a: Immunizations among all adults** 

	Fl	u vaccine in p	ast year		Tetanus sł	not	Pneumonia vaccine		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	32.8	[30.9,34.9]	1,110,101	57.6	[55.2,59.9]	1,301,305	31.0	[29.1,32.9]	1,045,581
AGE									
18-24	18.4	[12.6,25.9]	78,161	74.6	[65.7,81.8]	96,589	19.2	[13.7,26.2]	81,745
25-34	31.4	[25.8,37.6]	197,415	64.9	[57.9,71.2]	197,892	20.3	[15.7,25.9]	127,278
35-44	23.3	[19.1,28.0]	127,920	62.2	[56.0,68.0]	192,512	17.3	[13.2,22.4]	94,935
45-54	28.3	[24.3,32.8]	158,111	51.9	[46.5,57.1]	246,690	18.9	[15.4,23.1]	105,595
55-64	37.4	[33.6,41.2]	212,356	54.9	[50.8,58.9]	237,563	32.8	[29.2,36.5]	185,960
65 and over	51.6	[48.4,54.8]	336,139	42.7	[39.3,46.1]	330,060	69.2	[66.1,72.2]	450,068
GENDER									
Male	28.4	[25.5,31.4]	463,121	60.8	[57.2,64.3]	586,843	28.4	[25.6,31.3]	462,347
Female	37.0	[34.3,39.7]	646,980	54.5	[51.4,57.4]	714,462	33.4	[30.9,36.0]	583,234
Refused									
RACE-ETHNICITY									
White, Non-Hispanic	35.4	[33.1,37.8]	719,079	57.2	[54.5,59.8]	789,256	33.0	[30.8,35.3]	668,431
Black, Non-Hispanic	30.4	[26.4,34.7]	303,405	55.8	[50.9,60.6]	408,010	26.1	[22.6,29.9]	260,469
Hispanic	14.2	[8.1,23.6]	24,733	70.3	[57.0,80.9]	43,890	33.0	[21.5,46.8]	57,406
Other, Non-Hispanic	39.5	[29.4,50.5]	47,743	63.7	[51.6,74.3]	38,520	29.2	[20.8,39.3]	35,141
Don't know/No answer	27.2	[16.5,41.4]	15,141	53.3	[35.3,70.6]	21,630	43.7	[28.6,60.1]	24,135
EDUCATION									
Did not graduate HS	34.2	[28.3,40.7]	193,977	44.7	[37.5,52.2]	282,757	34.2	[28.4,40.5]	193,173
HS diploma/equivalent	27.6	[24.5,30.8]	315,024	55.1	[51.2,58.9]	469,523	30.3	[27.2,33.5]	345,393
Some college/2-year college degree	30.9	[27.3,34.7]	299,839	65.0	[60.8,68.9]	307,907	31.9	[28.3,35.7]	308,503
4-year college degree or higher	43.3	[39.7,46.9]	299,453	61.8	[58.2,65.4]	239,989	28.7	[25.7,31.8]	198,205
Don't know/No answer	21.8	[3.6,67.7]	1,808	60.7	[19.8,90.6]	1,129	3.7	[0.5,22.4]	306
HOUSEHOLD INCOME									
Less than \$25,000	30.2	[26.6,34.1]	306,466	54.5	[50.0,58.9]	423,676	37.5	[33.6,41.6]	380,095
\$25,000-\$49,999	35.1	[30.7,39.8]	250,445	58.8	[53.8,63.7]	268,107	34.5	[30.3,38.9]	245,374
\$50,000-\$74,999	35.1	[30.0,40.6]	141,551	60.0	[54.0,65.7]	151,572	27.2	[22.7,32.3]	109,440
\$75,000 or more	34.2	[30.4,38.1]	260,151	62.8	[58.6,66.9]	254,572	21.6	[18.6,25.0]	164,434
Don't know/No answer	30.9	[25.7,36.6]	151,488	51.8	[44.7,58.9]	203,378	29.9	[25.1,35.1]	146,239

Table 15b: Immunizations among the elderly

Tuote 1001 mmumbutons umong the order.	Flu	ı vaccine in pa	ıst year*		Tetanus shot <sup>*</sup>	¢	Pneumonia vaccine*		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	51.6	[48.4,54.8]	336,139	42.7	[39.3,46.1]	330,060	69.2	[66.1,72.2]	450,068
AGE									
18-24									
25-34									
35-44									
45-54									
55-64									
65 and over	51.6	[48.4,54.8]	336,139	42.7	[39.3,46.1]	330,060	69.2	[66.1,72.2]	450,068
GENDER									
Male	43.1	[37.9,48.5]	135,478	42.9	[37.6,48.3]	129,153	60.9	[55.4,66.0]	191,377
Female	49.1	[45.5,52.7]	198,876	30.1	[26.9,33.4]	116,563	63.6	[60.0,67.0]	257,523
Refused									
RACE-ETHNICITY									
White, Non-Hispanic	48.5	[45.1,51.9]	240,843	34.6	[31.5,37.8]	166,169	66.7	[63.3,69.9]	331,262
Black, Non-Hispanic	44.4	[37.0,52.1]	79,520	39.6	[32.0,47.8]	68,020	53.4	[45.8,60.8]	95,498
Hispanic	20.1	[9.0,39.1]	2,356	28.9	[13.7,51.2]	3,391	42.9	[24.3,63.8]	5,033
Other, Non-Hispanic	42.2	[26.4,59.7]	6,797	35.5	[21.3,52.8]	5,196	66.3	[46.6,81.6]	10,678
Don't know/No answer	29.8	[15.4,49.6]	4,838	28.8	[13.8,50.5]	2,940	39.5	[22.3,59.9]	6,428
EDUCATION									
Did not graduate HS	47.9	[40.0,56.0]	79,438	28.4	[21.3,36.9]	45,709	59.0	[50.9,66.6]	97,824
HS diploma/equivalent	44.6	[39.3,50.0]	104,729	34.1	[28.9,39.6]	77,404	62.2	[56.6,67.5]	145,994
Some college/2-year college degree	48.2	[42.5,53.9]	84,274	39.5	[34.0,45.4]	66,302	67.5	[61.8,72.7]	118,133
4-year college degree or higher	46.3	[41.0,51.7]	65,913	42.5	[37.2,47.9]	56,058	60.9	[55.4,66.1]	86,642
Don't know/No answer				24.5	[2.9,77.8]	244	18.0	[3.0,60.6]	306
HOUSEHOLD INCOME									
Less than \$25,000	46.4	[40.5,52.4]	111,799	35.4	[29.5,41.7]	81,434	61.6	[55.6,67.3]	148,300
\$25,000-\$49,999	50.9	[45.0,56.8]	94,843	34.0	[28.6,39.9]	62,766	69.6	[64.0,74.7]	129,720
\$50,000-\$74,999	50.1	[41.3,58.9]	34,366	39.5	[31.4,48.2]	26,253	62.7	[53.7,70.8]	42,953
\$75,000 or more	39.6	[32.2,47.7]	33,720	48.0	[40.3,55.9]	36,816	58.8	[50.0,67.1]	50,007
Don't know/No answer	42.8	[36.6,49.3]	59,625	29.3	[23.5,35.9]	38,447	56.0	[49.1,62.6]	77,920

<sup>\*</sup> Among those 65 years or older

# Falls and Injury among Adults 45 Years or Older Analysis of Section 13 ("Falls") of the 2016 BRFSS Questionnaire

Almost one in three (29.6 percent) of Louisiana adults who are 45 years or older report that they have fallen in the past month.

One in eight (12.5 percent) 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 16: Falls and injury

		Fallen in last y	year*	Injur	ed from fall in	last year*
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	29.6	[27.6,31.8]	525,225	12.5	[11.0,14.2]	221,722
AGE						
18-24						
25-34						
35-44						
45-54	28.0	[23.8,32.6]	155,133	12.7	[9.6,16.6]	70,329
55-64	30.5	[27.0,34.3]	172,689	12.9	[10.3,15.9]	72,869
65 and over	30.5	[27.7,33.5]	197,403	12.2	[10.3,14.3]	78,525
GENDER						
Male	24.4	[21.4,27.7]	201,235	8.4	[6.5,10.7]	69,117
Female	34.2	[31.5,37.0]	323,990	16.1	[13.9,18.5]	152,606
Refused						
RACE-ETHNICITY						
White, Non-Hispanic	31.4	[28.9,33.9]	369,487	12.3	[10.5,14.2]	144,277
Black, Non-Hispanic	26.7	[22.6,31.3]	126,287	13.8	[10.7,17.7]	65,287
Hispanic	17.6	[9.6,30.2]	8,221	6.6	[2.7,15.3]	3,089
Other, Non-Hispanic	26.2	[17.1,38.0]	11,790	9.3	[4.5,18.1]	4,166
Don't know/No answer	29.6	[15.9,48.4]	9,439	15.4	[5.7,35.3]	4,904
EDUCATION						
Did not graduate HS	36.5	[30.3,43.1]	118,730	18.3	[13.6,24.2]	59,699
HS diploma/equivalent	26.3	[23.2,29.8]	164,648	10.5	[8.5,12.8]	65,430
Some college/2-year college degree	30.6	[26.7,34.8]	144,486	13.6	[10.7,17.1]	64,003
4-year college degree or higher	27.6	[24.2,31.4]	96,233	9	[7.1,11.5]	31,509
Don't know/No answer	63.1	[18.2,93.0]	1,129	60.5	[17.5,91.8]	1,082
HOUSEHOLD INCOME						
Less than \$25,000	36.2	[32.0,40.5]	196,055	17.8	[14.6,21.5]	96,611
\$25,000-\$49,999	29.1	[24.9,33.6]	106,154	12.3	[9.4,15.8]	44,841
\$50,000-\$74,999	23.4	[18.7,28.7]	52,137	6.6	[4.4,9.7]	14,690
\$75,000 or more	24.9	[20.9,29.4]	99,522	8.2	[5.8,11.4]	32,789
Don't know/No answer	29.4	[24.1,35.2]	71,355	13.5	[9.4,18.9]	32,791

<sup>\*</sup> Among adults age 45 or older.

# **Automotive Safety**

Analysis of Section 14 ("Seatbelt Use") & Section 15 ("Drinking and Driving") of the 2016 BRFSS Questionnaire

The vast majority of Louisiana adults (82.1 percent) report that they always wear their seatbelt when riding in a car. Although rates of seat belt use are high across all demographic breakdowns considered here, significant differences remain across age. gender, and education. For example, 72.9 percent of adults under the age of 25 always wear a seat belt (nearly ten percentage point higher than the previous year), but the share among those 65 or older is much higher at 86.3 percent. Among women, 85.7 percent report always wearing their seatbelt. For men, the share is 78.3 percent, a 7.4 percentage point gap. The difference between those without a high school diploma and those with a college degree is 12.4 percentage points – 74.0 percent versus 86.4 percent, respectively.

Very few Louisiana residents report that they have driven after having too much to drink. In fact, just 1.7 percent do so. The rate is also low among age, gender, race/ethnicity, education, and household income groups. Generally, the rates are small enough, relative to the margin of error, that meaningful differences across groups cannot be identified statistically. The one exception is gender. Men (2.6 percent) are more than four times as likely as women (0.6 percent) to drive when they have had too much to drink.

Table 17: Seat belt use

	Alv	vays wears sea	Have dr	iven after dri much	nking too	
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	82.1	[80.2,83.8]	2,946,057	1.7	[1.2,2.4]	60,156
AGE						
18-24	72.9	[64.5,80.0]	336,739	1.5	[0.5,4.2]	7,015
25-34	78.4	[73.0,83.0]	522,689	3.0	[1.6,5.4]	19,716
35-44	81.1	[76.1,85.3]	474,706	1.4	[0.5,4.3]	8,319
45-54	85.6	[81.8,88.7]	501,447	2.6	[1.2,5.3]	15,030
55-64	85.8	[82.7,88.4]	516,314	1.1	[0.6, 2.1]	6,725
65 and over	86.3	[84.1,88.2]	594,161	0.5	[0.2,1.2]	3,350
GENDER						
Male	78.3	[75.3,81.0]	1,356,181	2.8	[1.9,4.1]	48,554
Female	85.7	[83.3,87.8]	1,589,875	0.6	[0.3, 1.4]	11,602
Refused						
RACE-ETHNICITY						
White, Non-Hispanic	83.1	[81.0,85.0]	1,787,746	1.9	[1.2, 2.9]	40,753
Black, Non-Hispanic	78.8	[74.6,82.5]	845,732	1.3	[0.6, 2.7]	13,658
Hispanic	85.4	[70.9,93.4]	152,277	1.2	[0.3, 5.7]	2,210
Other, Non-Hispanic	83.1	[73.5,89.7]	106,905	2.7	[0.9, 7.7]	3,535
Don't know/No answer	91.1	[82.6,95.7]	53,397			
EDUCATION						
Did not graduate HS	74.0	[67.4,79.6]	455,852	1.8	[0.7, 5.1]	11,390
HS diploma/equivalent	82.4	[79.4,85.1]	989,492	1.7	[1.0,3.1]	20,717
Some college/2-year college degree	83.5	[79.9,86.5]	863,351	1.3	[0.7, 2.5]	13,734
4-year college degree or higher	86.4	[83.8,88.6]	629,127	2.0	[1.1, 3.4]	14,315
Don't know/No answer	84.6	[53.0,96.4]	8,234			
HOUSEHOLD INCOME						
Less than \$25,000	81.0	[77.1,84.5]	868,596	1.8	[0.9,3.6]	19,381
\$25,000-\$49,999	82.4	[78.4,85.8]	614,297	1.0	[0.5,2.1]	7,420
\$50,000-\$74,999	83.7	[78.5,87.8]	352,948	2.5	[1.0,6.1]	10,739
\$75,000 or more	84.6	[81.1,87.6]	671,708	2.3	[1.3,3.8]	17,988
Don't know/No answer	78.8	[73.3,83.4]	438,507	8.0	[0.3,2.5]	4,627

### **Cancer Screening**

Analysis of Section 16 ("Breast and Cervical Cancer Screening"), Section 17 ("Prostate Cancer Screening") and Section 18 ("Colorectal Cancer Screening") of the 2016 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 two years. This rate is similar to the national rate, 65.7 percent. Age and socio-economic status are correlated with 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 12.8 percentage points between the least and most educated women, as well as a 11.3 percentage point gap between women in households with the smallest incomes versus those in households with the largest incomes.

The survey also asks all adult women whether or not they have ever had a pap test. Four in five adult Louisiana women have had a pap test, but fewer among women with lower levels of education and smaller household incomes have. Overall, 81.5 percent of adult women in Louisiana have ever had a pap test. The share of women without high school diplomas who have had a pap test is 59.5 percent. Similarly, only 64.2 percent of women in the bottom 30 percent of household incomes in the state have had a pap test.

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

#### 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, 41.1 percent of men 40 years of age or older report having a PSA test in the previous two years.

As with cancer screening for women, there are important differences in PSA testing between men. For example, only 36.2 percent of black men 40 years and older have had a PSA test in the past two years while close to half (46.4 percent) of white men in this age group have had a recent screening. Only 28.6 percent 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 53.3 percent. Similarly, 24.9 percent of men 40 years or older who live in

households with earnings under \$25,000 have screened recently, but 49.2 percent 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.

Among Louisiana's adult population 50 years or older, 64.1 percent report having colorectal screening. Colorectal screening is far more common among college graduates (75.2 percent) than among those with only a high school diploma (59.9 percent) or no diploma (51.7 percent). Indeed, among that last group, roughly one out of every two adults for whom the CDC recommends screening receives no screening.

Table 18: Cancer screening

	Mammo	gram in past tv	vo years*	Pap te	st in past three	years^	PSA to	est in past two	years**	Sigmoi	doscopy/colono	oscopy^^
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	67.0	[64.2,69.7]	776,712	81.5	[77.7,84.8]	756,451	41.4	[37.8,45.1]	393,260	64.1	[61.3,66.8]	789,164
AGE												
18-24				69.2	[53.1,81.6]	85,398						
25-34				89.0	[80.0,94.3]	236,122						
35-44	49.7	[39.3,60.2]	78,829	87.6	[80.2,92.5]	169,508	15.6	[8.1,27.9]	21,928			
45-54	72.2	[66.4,77.4]	216,818	79.8	[71.9,85.9]	152,910	26.8	[20.7,34.0]	71,204	47.3	[40.8,53.9]	147,836
55-64	70.6	[65.8,74.9]	220,691	73.4	[66.3,79.6]	104,261	54.5	[48.2,60.6]	143,764	65.8	[61.8,69.7]	346,886
65 and over	67.2	[63.7,70.5]	260,373	66.3	[45.8,82.0]	8,253	56.0	[50.3,61.6]	156,363	75.3	[71.5,78.8]	294,442
GENDER												
Male							41.4	[37.8,45.1]	393,260	61.0	[56.5,65.3]	356,536
Female	67.0	[64.2,69.7]	776,712	81.5	[77.7,84.8]	756,451				67.0	[63.6,70.3]	432,628
Refused												
RACE-ETHNICITY												
White, Non-Hispanic	65.9	[62.7,68.9]	495,510	77.8	[72.5,82.3]	402,812	46.4	[42.2,50.6]	273,675	65.3	[62.0,68.4]	538,493
Black, Non-Hispanic	70.4	[64.3,75.9]	235,836	86.5	[80.2,91.0]	281,767	36.2	[28.8,44.3]	99,993	63.0	[57.0,68.5]	209,508
Hispanic	64.7	[37.1,85.1]	18,937	82.7	[53.7,95.2]	38,228	9.5	[3.6,22.8]	3,036	52.7	[30.0,74.4]	15,163
Other, Non-Hispanic	66.7	[51.8,78.9]	16,525	84.7	[63.7,94.6]	26,342	31.3	[19.4,46.3]	9,933	66.3	[52.4,77.8]	19,308
Don't know/No answer	53.4	[30.8,74.6]	9,905	99.6	[96.3,99.9]	7,302	34.1	[14.3,61.4]	6,623	44.6	[23.3,68.1]	6,692
EDUCATION												
Did not graduate HS	59.5	[50.6,67.8]	124,298	69.3	[51.7,82.7]	77,450	28.6	[20.1,38.9]	51,020	51.7	[43.4,59.8]	106,558
HS diploma/equivalent	64.8	[60.0,69.3]	251,971	82.1	[75.8,87.1]	210,018	37.6	[31.9,43.7]	133,450	59.9	[55.3,64.4]	270,047
Some college/2-year college degree	70.8	[65.9,75.3]	229,836	81.4	[73.8,87.2]	251,761	47.6	[40.4,54.9]	106,714	69.7	[64.3,74.5]	232,053
4-year college degree or higher	72.3	[67.7,76.4]	169,462	86.3	[81.2,90.3]	217,221	53.3	[47.1,59.4]	102,050	75.2	[70.9,79.1]	180,481
Don't know/No answer	44.0	[14.1,79.0]	1,145				36.0	[3.4,90.0]	26	5.0	[0.4,42.8]	26
HOUSEHOLD INCOME												
Less than \$25,000	64.2	[58.6,69.3]	246,693	74.8	[66.5,81.7]	234,993	24.9	[19.2,31.5]	68,619	54.9	[49.5,60.3]	193,965
\$25,000-\$49,999	66.0	[59.6,71.9]	151,762	82.9	[75.3,88.5]	149,919	44.1	[36.0,52.6]	88,208	69.5	[63.8,74.6]	181,530
\$50,000-\$74,999	75.5	[68.0,81.7]	90,769	82.4	[73.4,88.9]	98,205	52.4	[42.8,61.8]	64,655	70.2	[62.9,76.6]	115,315
\$75,000 or more	75.5	[69.9,80.3]	180,197	88.4	[81.6,93.0]	190,103	49.2	[42.3,56.1]	124,770	66.3	[60.5,71.7]	198,893
Don't know/No answer	57.7	[51.2,64.0]	107,291	83.9	[68.8,92.5]	83,230	48.8	[37.9,59.8]	47,008	65.5	[57.2,72.9]	99,461

<sup>\*</sup>Women age 40 or older ^Women age 18 or older \*\* Men age 40 or older ^^ Adults age 50 or older

# **HIV/AIDS Screening**

Analysis of Section 19 ("HIV/AIDS") of the 2016 BRFSS Questionnaire

According to recent Center for Disease Control estimates, two of Louisiana's largest cities – Baton Rouge and New Orleans – rank near the top of the list of United States cities for frequency of new AIDS cases each year.

One of the most effective ways to monitor HIV/AIDS is to receive regular testing. Louisiana's adults are more likely than the national adult population to have been tested for HIV. The share in Louisiana is 42.8 percent, while nationally the share is 36.6 percent.

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 more than sixty percent saying they have been tested. A lower share of 18-24 year olds have been tested (38.1 percent), but testing is least common ages 55 to 64 (27.8 percent) and age 65 or older (15.2 percent).

Testing is more frequent among those with less education or household income. Approximately half of individuals without a high school diploma (49.3 percent) have been tested, but the share drops to about 40 percent for the remaining higher levels of educational attainment. Similarly, half of adults (50.6 percent) in the bottom 30 percent of the distribution of household income in Louisiana have been tested for HIV, but only 38.9 percent of adults with household income in the top 30 percent of the state (\$75,000 or more) have been tested.

About a third of whites (32.6 percent) in Louisiana have been tested for HIV, but more well over half of blacks (60.2 percent) 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 26.2 percentage points more likely to have been tested.

**Table 19: HIV testing** 

Table 19: HIV testing	Ever tested for HIV						
	%	95% CI	Est. Pop.				
Total	42.8	[40.5,45.2]	1397873				
Total	42.0	[40.3,43.2]	1397073				
AGE							
18-24	38.1	[30.0,46.9]	160,877				
25-34	66.9	[60.5,72.6]	405,188				
35-44	64.6	[58.8,70.0]	346,367				
45-54	44.7	[39.6,50.0]	240,726				
55-64	27.8	[24.3,31.5]	150,644				
65 and over	15.2	[12.8,18.0]	94,073				
GENDER							
Male	42.7	[39.1,46.3]	674,129				
Female	43.0	[40.0,46.1]	723,744				
Refused							
RACE-ETHNICITY							
White, Non-Hispanic	32.6	[30.1,35.3]	641,123				
Black, Non-Hispanic	60.2	[55.5,64.6]	578,173				
Hispanic	55.3	[41.3,68.5]	93,334				
Other, Non-Hispanic	44.4	[33.7,55.7]	51,991				
Don't know/No answer	63.0	[47.5,76.2]	33,251				
EDUCATION							
Did not graduate HS	49.3	[42.1,56.5]	269,307				
HS diploma/equivalent	40.4	[36.6,44.4]	445,468				
Some college/2-year college degree	42.0	[37.6,46.5]	394,460				
4-year college degree or higher	43.0	[39.3,46.8]	287,103				
Don't know/No answer	18.5	[3.5,58.8]	1,536				
HOUSEHOLD INCOME							
Less than \$25,000	50.6	[46.1,55.0]	495,286				
\$25,000-\$49,999	41.6	[36.6,46.9]	285,163				
\$50,000-\$74,999	39.4	[33.5,45.6]	153,261				
\$75,000 or more	38.9	[34.7,43.4]	288,797				
Don't know/No answer	37.5	[30.6,44.8]	175,366				

## **Health Literacy**

Analysis of Module 5 ("Health Literacy") of the 2016 BRFSS Questionnaire

In 2016, the Louisiana Department of Health included the optional "Health Literacy" module in the data collection for Behavioral Risk Factor Surveillance System in the state. The module contains questions asking respondents about how much difficulty they experience in obtaining or understanding information about health topics. Participants respond by indicating whether they find it "very easy," "somewhat easy," "somewhat difficult," or "very difficult" to find or understand health information.

Few Louisiana adults express any difficulty in the tasks included in these questions. Just 4.2 percent say they experience difficulty in getting advice or information about health or medical topics when needed. The share is higher for individuals in more disadvantaged socio-economic circumstances – 7.0 percent among those without a high school diploma and 7.8 percent among those in the bottom thirty percent of household incomes in the state.

Slightly higher shares of the state's adults – 7.8 percent and 7.9 percent, respectively – report difficulty in understanding information that doctors, nurses and other health professionals tell them and in understanding written health information on the internet, in newspapers or magazines, or in brochures at their doctor's office or clinic. Again, difficulty is greatest among those with less education or smaller household incomes. Additionally, older individuals – particularly those over the age of 45 – have more difficulty in understanding written health information.

**Table 20: Health literacy** 

Table 20: Health literacy	Experien	ced difficulty i	n attaining	Ex	perienced diffic	culty	Experienced difficulty		
	informat	ion on health	or medical	underst	anding informa	tion from	unders	standing writte	n health
		topics		he	alth care provi	ders	information		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	4.2	[3.3,5.2]	125,911	7.8	[6.5,9.2]	232,962	7.9	[6.7,9.2]	235,757
AGE									
18-24	5.2	[2.3,11.6]	19,097	5.4	[2.5,11.5]	19,788	2.7	[1.0,6.6]	9,473
25-34	4.8	[2.6,8.6]	23,968	8.9	[5.1,15.3]	44,782	5.7	[3.0,10.5]	28,219
35-44	5.1	[3.1,8.3]	25,148	5.9	[3.6,9.4]	28,940	5.0	[2.9,8.5]	24,730
45-54	4.7	[3.1,7.1]	24,335	9.1	[6.3,13.1]	47,287	11.4	[8.3,15.6]	59,096
55-64	3.9	[2.6,5.8]	20,604	8.9	[6.7,11.8]	47,063	10.6	[8.0,13.8]	55,527
65 and over	2.1	[1.4,3.1]	12,759	7.5	[5.9,9.4]	45,101	9.8	[7.9,12.0]	58,711
GENDER									
Male	4.9	[3.5,6.8]	71,001	8.4	[6.6,10.7]	120,884	9.2	[7.4,11.5]	132,095
Female	3.5	[2.6,4.7]	54,911	7.2	[5.6,9.2]	112,077	6.7	[5.4,8.2]	103,662
Refused									
RACE-ETHNICITY									
White, Non-Hispanic	3.4	[2.6,4.6]	63,418	6.8	[5.4,8.4]	124,107	7.1	[5.9,8.6]	129,847
Black, Non-Hispanic	4.9	[3.2,7.3]	44,006	8.9	[6.4,12.1]	80,212	9.3	[6.9,12.4]	83,297
Hispanic	9.1	[3.8,20.3]	10,207	14.3	[6.4,29.0]	16,077	9.5	[3.6,22.5]	10,652
Other, Non-Hispanic	7.2	[2.8,17.0]	7,118	8.7	[4.1,17.7]	8,685	7.2	[3.6,14.0]	7,171
Don't know/No answer	2.2	[0.3, 13.8]	1,163	7.6	[2.8,18.8]	3,881	9.4	[3.9,20.7]	4,790
EDUCATION									
Did not graduate HS	7.0	[4.4,11.0]	35,630	20.5	[15.4,26.9]	104,534	19.4	[14.8,25.0]	98,842
HS diploma/equivalent	5.7	[4.1, 8.0]	59,555	7.6	[5.8,9.8]	78,645	8.8	[6.9,11.1]	89,719
Some college/2-year college degree	2.5	[1.5,4.1]	21,044	3.5	[2.3,5.2]	29,081	3.5	[2.4,5.2]	29,377
4-year college degree or higher	1.6	[0.9, 2.7]	9,683	2.5	[1.6,3.9]	15,463	2.7	[1.8,4.3]	16,918
Don't know/No answer							10.9	[1.9,43.6]	901
HOUSEHOLD INCOME									
Less than \$25,000	7.8	[5.8,10.5]	71,402	14.3	[11.2,18.1]	130,306	15.1	[12.2,18.7]	136,456
\$25,000-\$49,999	4.1	[2.4,6.8]	25,280	5.0	[3.3,7.5]	30,749	5.5	[3.9,7.6]	33,519
\$50,000-\$74,999	0.7	[0.2, 1.9]	2,494	3.8	[2.2,6.5]	13,676	4.4	[2.7,7.2]	15,817
\$75,000 or more	1.5	[0.8, 2.8]	10,293	3.0	[1.8, 5.0]	21,041	2.2	[1.3, 3.7]	15,379
Don't know/No answer	3.9	[1.9,7.6]	16,442	8.8	[5.6,13.6]	37,190	8.2	[5.7,11.8]	34,586

### **Emotional Support and Life Satisfaction**

Analysis of Module 24 ("Emotional Support and Life Satisfaction") of the 2016 BRFSS Questionnaire

People who are happy and more satisfied with their lives enjoy better physical and mental health. Research suggests that happiness and life satisfaction predict later health outcomes. In addition, emotional support is similarly related to both physical and mental well-being and is especially significant for individuals suffering chronic medical conditions or diseases.

#### **EMOTIONAL SUPPORT**

When asked about the emotional support they receive, 8.5 percent of Louisiana adults indicate they rarely or never receive needed social and emotional support. Although a relatively small percentage, this nevertheless amounts to a quarter million residents of the state.

There are modest differences in emotional support by race. Blacks are about twice as likely as whites to say they rarely or never get the social and emotional support they need (12.5 percent versus 6.3 percent).

Socio-economic status is related to the largest gaps in social and emotional support. Support rises with education and household income. Among college graduates, 4.1 percent report a lack of emotional support, but among individuals without a high school diploma, this share more than triples to 14.7 percent. Among individuals with household incomes of \$75,000 or more, only 4.6 percent report a lack of emotional support, while among individuals with household income less than \$25,000 the share is nearly three times larger at 13.6 percent.

#### LIFE SATISFACTION

The module also asks participants whether they are "very satisfied," "satisfied," "dissatisfied," or "very dissatisfied" with their life.

Overall, 5.9 percent of Louisiana adults say they are "dissatisfied" or "very dissatisfied" with their life. Education and household income predict differences in life satisfaction. Dissatisfaction occurs more frequently among the less educated and those with lower household incomes. Among college graduates, about just one in forty say they are dissatisfied with life (2.7 percent). Among individuals without a high school diploma, approximately one in eight expresses dissatisfaction (13.0 percent). Among individuals with household incomes of \$75,000 or more, 1.9 percent report dissatisfaction with life. Among individuals with household income less than \$25,000 11.6 percent do

Table 21: Emotional support and life satisfaction

		y or never rece tional and soci		Dis	satisfied with	own life
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	8.5	[7.2,10.0]	246,888	5.9	[4.8,7.2]	174,713
AGE						
18-24	9.0	[4.6, 16.6]	31,284	7.3	[3.6,14.2]	25,373
25-34	7.4	[4.3,12.3]	36,212	8.4	[4.7, 14.4]	41,345
35-44	7.9	[5.0,12.3]	38,030	4.9	[2.9,8.2]	24,090
45-54	5.6	[3.6,8.6]	28,695	5.5	[3.7, 8.1]	28,199
55-64	9.3	[7.0,12.3]	47,156	5.2	[3.8, 7.2]	27,156
65 and over	11.4	[9.2,14.1]	65,511	4.8	[3.6,6.5]	28,549
GENDER						
Male	9.4	[7.4,12.0]	130,286	6.4	[4.9, 8.5]	91,365
Female	7.6	[6.1, 9.4]	116,602	5.4	[4.0, 7.3]	83,348
Refused						
RACE-ETHNICITY						
White, Non-Hispanic	6.3	[5.0,7.8]	112,686	5.6	[4.2,7.4]	101,089
Black, Non-Hispanic	12.5	[9.5,16.3]	107,726	6.4	[4.5, 9.0]	56,568
Hispanic	10.5	[5.1,20.4]	11,658	3.9	[1.6,9.3]	4,365
Other, Non-Hispanic	10.6	[5.4,19.7]	10,390	9.2	[4.0,19.6]	9,118
Don't know/No answer	9.2	[3.6,21.2]	4,427	7.3	[2.5,19.8]	3,573
EDUCATION						
Did not graduate HS	14.7	[10.4,20.3]	71,601	13.0	[8.6,19.2]	65,430
HS diploma/equivalent	9.7	[7.4,12.5]	95,949	5.0	[3.6,6.9]	50,694
Some college/2-year college degree	6.7	[4.9, 9.2]	54,591	5.2	[3.7,7.2]	42,385
4-year college degree or higher	4.1	[2.8,5.8]	24,747	2.7	[1.7,4.1]	16,203
Don't know/No answer						
HOUSEHOLD INCOME						
Less than \$25,000	13.6	[10.6,17.1]	118,508	11.6	[8.9,15.2]	103,524
\$25,000-\$49,999	7.1	[5.2,9.6]	42,351	4.8	[3.2,7.4]	29,126
\$50,000-\$74,999	2.5	[1.5,4.2]	8,907	2.6	[1.1,5.8]	9,175
\$75,000 or more	4.6	[2.8,7.6]	31,732	1.9	[0.8,4.4]	13,137
Don't know/No answer	11.4	[7.6,16.7]	45,390	4.7	[2.6,8.4]	19,750

### **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 2016 BRFSS survey for the state of Louisiana. The findings are based on 5,256 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 2016, 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 2016 BRFSS in Louisiana is 30.7 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 2016 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: <a href="https://www.cdc.gov/brfss/annual\_data/2016/pdf/overview\_2016.pdf">https://www.cdc.gov/brfss/annual\_data/2016/pdf/overview\_2016.pdf</a> <a href="https://www.cdc.gov/brfss/annual\_data/2016/pdf/weighting\_the-data\_webpage\_content.pdf">https://www.cdc.gov/brfss/annual\_data/2016/pdf/2016-sdqr.pdf</a>

A copies of the instrument and codebooks are available at:

https://www.cdc.gov/brfss/questionnaires/pdf-ques/2016 BRFSS Questionnaire FINAL.pdf https://www.cdc.gov/brfss/annual\_data/2016/pdf/codebook16\_llcp.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.

The Lab 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