



# REPORT ON THE 2015 BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM IN LOUISIANA

# Prepared for the Louisiana Department of Health



December 2017







FOR FURTHER INFORMATION ON THIS REPORT:
Dr. Michael Henderson 225-578-5149

mbhende1@lsu.edu

## **Executive Summary**

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.

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. However, health outcomes are not uniform across populations, even within states.

#### HEALTH CARE COVERAGE ON THE RISE

Even before the expansion of the state's Medicaid program in 2016, the share of Louisiana's nonelderly adults without health care coverage dropped steadily from 2013 (26.0 percent) to 2015 (18.4 percent).

#### SMOKING ON THE DECLINE

While Louisiana adults exhibit a greater propensity for smoking than their peers nationally, the share who are current smokers has been on the decline for the past few years from 25.7 percent of adults in 2011 to 20.6 percent in 2015. The decline in rates of smoking in Louisiana over the period from 2011 to 2015 have been most pronounced among those under the age of 35. The rate fell by eight percentage points for adults age 18 to 24 and by 10.5 percentage points for adults 35 to 44.

#### LOUISIANA LAGS BEHIND NATIONAL AVERAGES IN MANY METRICS OF HEALTH OUALITY

Louisiana residents in general struggle with a variety of negative health issues. Louisiana adult residents suffer higher rates of heart disease, respiratory conditions, physical disability, diabetes, and obesity than adults in the United States as a whole.

#### SOCIO-ECONOMIC STATUS IS STRONGLY ASSOCIATED WITH HEALTH

Health outcomes diverge by education and household income, including: diabetes, obesity, heart disease, COPD, arthritis, depression, kidney disease, and physical disability.

## **Subjective Health Evaluation**

Analysis of Section 1 ('Health Status') of the 2015 BRFSS Questionnaire

Adult residents of Louisiana have a more negative view of their health than adults across the United States. In this state, 77.9 percent of adults rate their own health status as "excellent," "very good," or "good." About one-fifth of state residents (21.9 percent) rate their own health as "fair" or "poor." In the country as a whole, 82 percent evaluate their health status positively and 17.7 percent describe their health as "fair" or "poor."

Subjective health ratings are correlated with respondents' age, socio-economic status, and race. While 89.6 percent of 18 to 24 year old respondents evaluate their general health positively, only 64.0 percent of seniors 65 years old or older do so.

Individuals with higher levels of educational attainment and individuals with higher household earnings tend to evaluate their health more positively than those with less education or lower household earnings. For example, just more than half (54.6 percent) of Louisiana adults without a high school diploma describe their overall health as "good" or better, while 90.3 percent of those

with a four-year college degree rate their health positively.

In a similar pattern, 60.9 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 91.0 percent of individuals with annual household earnings above \$75,000 (roughly the top 30 percent of households in Louisiana) do so.

There is also a significant gap between how black and white residents of Louisiana judge their health status. Among white adults, 80.9 percent describe their health as "good," "very good," or "excellent." This share is eight and a half percentage points higher than the share of blacks who describe their health positively (72.2 percent). However, this gap likely reflects differences in socio-economic status across race groups 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.

Table 1: Subjective Evaluations of Ge	Table 1: Subjective Evaluations of General Health											
	"(	"Good" or better health "Poor" or "Fai % 95% CI Est. Pop. % 95% CI										
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.						
Total	77.9	[76.3,79.4]	2,777,684	21.9	[20.4,23.5]	780,966						
AGE												
18-24	89.6	[84.5,93.1]	417,190	10.1	[6.6,15.2]	47,040						
25-34	87.4	[83.6,90.5]	579,109	12.2	[9.2,16.0]	81,003						
35-44	85.0	[80.6,88.5]	491,300	15.0	[11.5,19.4]	86,946						
45-54	76.6	[72.5,80.3]	457,497	23.4	[19.7,27.5]	139,619						
55-64	67.9	[64.3,71.3]	404,893	31.6	[28.2,35.2]	188,342						
65 and over	64.0	[60.9,67.1]	427,695	35.6	[32.6,38.8]	238,016						
GENDER												
Male	79.3	[76.9,81.6]	1,368,034	20.5	[18.3,23.0]	354,087						
Female	76.5	[74.4,78.4]	1,409,650	23.2	[21.2,25.2]	426,879						
RACE-ETHNICITY												
White, Non-Hispanic	80.9	[79.1,82.6]	1,730,097	19.0	[17.3,20.7]	405,691						
Black, Non-Hispanic	72.2	[68.8,75.4]	769,747	27.4	[24.2,30.8]	291,556						
Hispanic	76.2	[64.2,85.1]	89,068	23.8	[14.9,35.8]	27,802						
Other, Non-Hispanic	80.1	[72.4,86.0]	147,695	19.6	[13.7,27.3]	36,176						
Don't know/No answer	66.8	[52.2,78.8]	41,078	32.1	[20.3,46.7]	19,740						
EDUCATION												
Did not graduate HS	54.6	[49.3,59.8]	344,096	44.5	[39.3,49.8]	280,391						
HS diploma/equivalent	79.1	[76.6,81.4]	951,204	20.8	[18.4,23.3]	249,660						
Some college/2-year college degree	82.1	[79.4,84.4]	834,024	17.9	[15.5,20.5]	181,463						
4-year college degree or higher	90.3	[88.4,92.0]	644,455	9.7	[8.0,11.6]	68,896						
Don't know/No answer	87.6	[44.5,98.4]	3,906	12.4	[1.6,55.5]	554						
HOUSEHOLD INCOME												
Less than \$25,000	60.9	[57.3,64.3]	587,021	38.9	[35.5,42.4]	375,080						
\$25,000-\$49,999	82.0	[78.4,85.0]	538,965	17.8	[14.8,21.3]	117,093						
\$50,000-\$74,999	87.0	[82.6,90.4]	361,612	12.3	[9.0,16.6]	51,152						
\$75,000 or more	91.0	[88.3,93.1]	724,849	9.0	[6.9,11.7]	71,646						
Don't know/No answer	77.1	[73.5,80.3]	565,238	22.6	[19.4,26.3]	165,995						

# **Health Related Quality of Life**

Analysis of Section 2 ('Healthy Days') of the 2015 BRFSS Questionnaire

Louisiana residents experience poorer physical health and more instances in which poor health keeps them from doing typical activities such as work or recreation than Americans as a whole. On average, Louisiana residents report a half day more of poor physical health per month. Americans as whole report 3.9 days of poor physical health in a month on average, while Louisiana residents report 4.5 days.

Louisiana also exceeds the national average in the number of days in a month when residents experience poor mental health. Louisiana residents experience an average of 4.3 days of poor health, while the average for Americans as a whole is 3.7 days.

The survey also asks how many days the respondent experienced either poor physical health or poor mental health that interfered with their usual activities. On average, Louisiana residents experience a full day more of limited activity due to poor health. State residents report an average 5.9 days in a month when poor health kept them from doing their usual activities such as self-care, work or recreation. Across the United States, the average is 4.8 days.

Reported experiences of poor physical health are related to age. Individuals under the age of 35 report, on average, 2.4 days a month of poor physical health. Individuals who are 65 years or older report more than twice as many days of poor physical (6.6 days).

There are more experiences of both poor physical health and poor mental health among individuals with lower levels of education and individuals with lower household income. For example, individuals in the bottom 30 percent of household income report 7.9 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 2.3 days and 2.2 days respectively.

Similar patterns hold for the number of days in which poor health interfered with usual activities.

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 of poor mental health.

Table 2: Days of Poor Health			T _		T _	
	-	s physical	_	s mental		poor health
		not good in t month		not good st month		pt from tivities
	Mean	95% CI	Mean	95% CI	Mean	95% CI
Total	4.5	[4.2,4.8]	4.3	[4.0,4.6]	5.9	[5.4,6.4]
AGE						
18-24	2.5	[1.6,3.1]	4.7	[3.6,5.8]	2.9	[1.6,4.1]
25-34	2.4	[1.8,3.1]	4.4	[3.5,5.2]	3.3	[2.4,4.2]
35-44	2.5	[2.6,4.3]	4.5	[3.6,5.4]	5.3	[4.0,6.7]
45-54	4.9	[4.2,5.7]	4.9	[4.1,5.8]	7.3	[6.0, 8.5]
55-64	6.6	[5.8,7.4]	4.4	[3.6,5.1]	8.1	[7.0,9.3]
65 and over	6.6	[5.9,7.3]	3.2	[2.7,3.7]	7.7	[6.8,8.9]
GENDER						
Male	3.9	[3.5,4.4]	3.8	[3.3,4.3]	5.6	[4.8,6.4]
Female	5.0	[4.6,5.4]	4.8	[4.4,5.2]	6.1	[5.6,6.7]
RACE-ETHNICITY						
White, Non-Hispanic	4.2	[3.9,4.6]	4.3	[3.9,4.7]	5.8	[5.2,6.4]
Black, Non-Hispanic	4.6	[4.0,5.3]	4.3	[3.6,4.9]	6.1	[5.1,7.0]
Hispanic	5.5	[2.3,8.1]	4.9	[2.7,7.2]	6.3	[2.8,9.9]
Other, Non-Hispanic	4.9	[3.3,6.6]	5.0	[3.4,6.5]	5.6	[3.6,7.5]
Don't know/No answer	6.9	[3.3,10.6]	3.0	[1.1,4.9]	6.9	[2.8,11.1]
EDUCATION						
Did not graduate HS	7.6	[6.5,8.8]	6.2	[5.1,7.3]	8.7	[7.3,10.2]
HS diploma/equivalent	4.3	[3.8,4.8]	4.2	[3.6,4.8]	6.1	[5.3,7.0]
Some college/2-year college degree	4.4	[3.8,4.9]	4.4	[3.8, 5.0]	5.5	[4.7,6.3]
4-year college degree or higher	2.3	[1.9, 2.7]	2.7	[2.3,3.1]	2.8	[2.3,3.4]
Don't know/No answer	2.7	[0.0,7.7]	0.6	[0.0,1.8]		
HOUSEHOLD INCOME						
Less than \$25,000	7.9	[7.1,8.7]	6.6	[5.9,7.4]	8.5	[7.6,9.4]
\$25,000-\$49,999	4.0	[3.3,4.6]	4.3	[3.6,5.1]	5.7	[4.6,6.7]
\$50,000-\$74,999	2.3	[1.7,2.9]	3.2	[2.3,4.0]	3.2	[2.2,4.2]
\$75,000 or more	2.2	[1.8,2.7]	2.8	[2.2,3.4]	2.9	[2.1,3.6]
Don't know/No answer	4.2	[3.5,4.9]	3.5	[2.8,4.2]	6.0	[4.7,7.2]

### **Access to Care**

Analysis of Section 3 ('Health Care Access') of the 2015 BRFSS Questionnaire

#### HEALTH CARE COVERAGE

In 2015, the share of the Louisiana adult population under the age of 65 without health care coverage – whether health insurance plans, HMOs, or government plans – outpaced the national share by four percentage points. Nationally, 14.6 percent of these non-seniors lack health coverage, but in Louisiana 18.4 percent lack coverage.

This represents a significant decline in the share of Louisiana's non-elderly adult population who lack health care coverage. From 2001 through 2015, the share of uncovered non-elderly adult residents dropped more than eight percentage points. Most of this decline has occurred over the years 2014 and 2015.

Unsurprisingly, health care coverage is strongly correlated with socio-economic status. Fewer than one in twenty of adults under the age of 65 with household incomes of \$75,000 or more lack coverage, but one-third of those with household incomes below \$25,000 lack coverage. Similarly, just 6.5 percent of non-elderly adults with college degrees lack health care coverage, but more than five times as many (38.1 percent) without a high school diploma lack coverage.

These socio-economic patterns account for the racial gap in coverage between nonelderly blacks and whites in Louisiana. The nine point gap vanishes when accounting for differences in educational attainment and household income.

Coverage also varies by age. Adults 18 to 24 years old are the least likely to have coverage (22.3 percent). The share of uncovered drops for older adults.

# HEALTH CARE ACCESS: PRIMARY CARE PROVIDERS

Despite less health care coverage, Louisiana adults are no less likely to have primary care providers than their peers nationally. In Louisiana, 77.2 percent of adults report having someone they consider to be their personal doctor or health care provider. The share for the United States as a whole is 78.1 percent.

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.

Socio-economic status strongly predicts access to a primary care provider. Approximately one in four Louisiana adults (26.2 percent) with household incomes below \$25,000 do not have a primary care provider, as compared to 17.0 percent of those with household incomes of \$75,000 or more. Similarly, 29.4 percent of adults without a high school diploma lack a primary care provider, while just 21.7 percent of noncollege high school graduates and 16.9 percent of college graduates do not have a provider.

About one in five whites (19.4 percent) have no primary care provider, while a quarter (25.3 percent) of blacks have no provider.

There is also a difference across genders. Nearly twice as many men (29.4 percent) as women (16.0 percent) say they do not have someone they consider to be a personal doctor or health care provider.

# HEALTH CARE ACCESS: FREQUENCY OF ROUTINE CHECKUPS

Seven in ten Louisiana adults report visiting a doctor for a routine checkup over the previous year. Women and older individuals are more likely to see a doctor for routine checkups. Three quarters of women (75.9 percent) have done so in the previous year, but only 64.9 percent of men have.

Nearly ninety percent of seniors have seen a doctor for a routine checkup in the previous year. Less than sixty percent of adults under the age of 35 have done so.

#### HEALTH CARE ACCESS: PROHIBITIVE COSTS

Sixteen 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. Socio-economic status is strongly associated with ability to pay for care. Approximately thirty percent of individuals with household incomes less than \$25,000 (roughly the bottom thirty percent of households in Louisiana) reported being unable to see a doctor because of cost, compared to just 7.0 percent of individuals with household incomes of \$75,000 or more (roughly the top thirty percent of households).

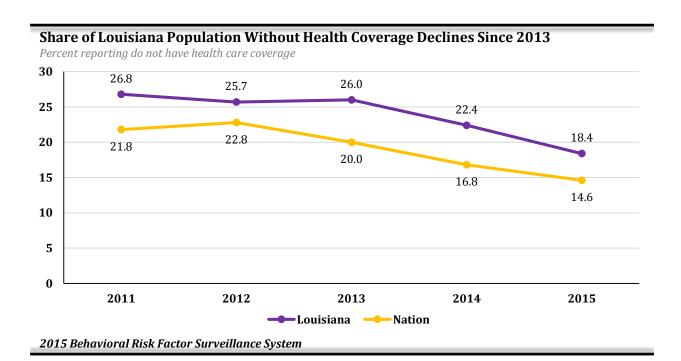


Table 3a: Access to Care		No coverag	·e*	Нэс	health care p	rovider
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	18.4	[16.6,20.4]	534,287	77.2	[75.4,78.9]	803,163
AGE						
18-24	22.3	[16.8,29.0]	103,754	60.6	[53.7,67.2]	176,233
25-34	19.3	[15.5,23.7]	127,698	63.4	[58.3,68.2]	241,335
35-44	20.5	[16.3,25.3]	118,281	72.2	[67.1,76.8]	160,682
45-54	18.9	[15.4,22.9]	112,666	80.6	[76.8,83.9]	114,634
55-64	12.1	[9.8,14.7]	71,888	87.5	[84.9,89.7]	74,669
65 and over				94.4	[92.8,95.7]	35,609
GENDER						
Male	19.7	[16.9,22.9]	282,877	70.2	[67.2,73.1]	507,018
Female	17.1	[15.0,19.5]	251,410	83.7	[81.6,85.5]	296,144
RACE-ETHNICITY						
White, Non-Hispanic	14.1	[12.1,16.2]	233,278	80.5	[78.4,82.4]	415,041
Black, Non-Hispanic	23.4	[19.7,27.5]	213,764	74.3	[70.5,77.8]	269,901
Hispanic	31.3	[20.9,44.0]	34,558	61.5	[49.3,72.4]	42,917
Other, Non-Hispanic	22.1	[14.9,31.5]	36,852	66.6	[57.4,74.8]	59,159
Don't know/No answer	32.1	[16.4,53.1]	15,835	73.7	[54.1,87.0]	16,144
EDUCATION						
Did not graduate HS	38.1	[31.7,45.0]	181,486	69.9	[64.2,75.0]	185,001
HS diploma/equivalent	19.1	[16.2,22.3]	183,666	77.9	[74.7,80.8]	260,964
Some college/2-year college degree	15.2	[12.4,18.4]	129,995	76.7	[73.4,79.8]	236,548
4-year college degree or higher	6.5	[4.9, 8.7]	39,141	82.9	[80.1,85.4]	120,366
Don't know/No answer				93.6	[62.9,99.2]	284
HOUSEHOLD INCOME						
Less than \$25,000	33.9	[29.7,38.3]	250,995	73.8	[70.2,77.0]	252,488
\$25,000-\$49,999	19.2	[15.0,24.3]	97,797	81.6	[77.5,85.0]	120,899
\$50,000-\$74,999	10.9	[7.2,16.2]	39,156	76.7	[70.6,81.9]	96,685
\$75,000 or more	4.7	[3.0,7.1]	33,764	83.0	[79.6,86.0]	135,212
Don't know/No answer	20.0	[15.7,25.1]	112,575	71.6	[67.0,75.8]	197,880

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

Table 3b: Access to Care				I		
		ould not affor			ne checkup in	
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	16.3	[14.9,17.8]	580,398	70.6	[68.7,72.4]	958,767
AGE						
18-24	15.7	[11.3,21.2]	72,916	57.4	[50.3,64.1]	177,878
25-34	17.3	[13.9,21.3]	114,543	57.5	[52.4,62.4]	256,124
35-44	21.6	[17.4,26.3]	124,651	66.3	[61.2,71.1]	185,827
45-54	18.9	[15.7,22.7]	113,138	71.4	[67.2,75.3]	158,074
55-64	17.2	[14.5,20.3]	102,612	78.3	[75.2,81.2]	120,148
65 and over	7.9	[6.2,9.9]	52,538	88.7	[86.6,90.5]	60,717
GENDER						
Male	14.7	[12.6,17.0]	253,002	64.9	[61.8,67.8]	562,698
Female	17.8	[15.9,19.7]	327,396	75.9	[73.6,78.0]	396,070
RACE-ETHNICITY						
White, Non-Hispanic	13.6	[12.1,15.4]	291,906	69.5	[67.2,71.7]	593,024
Black, Non-Hispanic	20.4	[17.5,23.7]	217,759	74.5	[70.7,77.9]	251,978
Hispanic	18.0	[10.6,28.8]	20,988	69.6	[57.4,79.5]	33,759
Other, Non-Hispanic	17.6	[11.9,25.2]	32,429	63.9	[54.5,72.3]	61,666
Don't know/No answer	28.2	[16.9,43.1]	17,317	61.6	[44.7,76.2]	18,340
EDUCATION						
Did not graduate HS	28.3	[23.7,33.4]	178,540	68.2	[62.6,73.3]	173,411
HS diploma/equivalent	16.2	[14.0,18.8]	195,337	71.5	[68.2,74.6]	316,637
Some college/2-year college degree	15.9	[13.5,18.6]	161,151	70.5	[67.0,73.8]	274,813
4-year college degree or higher	6.4	[5.0,8.1]	45,371	71.2	[67.9,74.2]	192,012
Don't know/No answer				57.5	[19.2,88.5]	1,894
HOUSEHOLD INCOME						
Less than \$25,000	29.6	[26.3,33.0]	285,248	69.7	[66.0,73.1]	268,589
\$25,000-\$49,999	14.7	[11.8,18.3]	96,887	73.4	[69.1,77.3]	167,722
\$50,000-\$74,999	7.7	[5.2,11.4]	32,078	69.4	[63.5,74.8]	117,446
\$75,000 or more	7.0	[5.0,9.7]	55,689	72.4	[68.6,75.9]	206,883
Don't know/No answer	15.1	[12.1,18.6]	110,496	67.8	[63.3,72.0]	198,127

## **Hypertension Awareness**

Analysis of Section 4 ('Hypertension Awareness') of the 2015 BRFSS Questionnaire

Hypertension, or high blood pressure (HBP) increases the risk for heart disease and stroke, the first and third leading causes of death in the United States. Often called the "silent killer" because there are often no warning signs or symptoms, HBP has strong connections to cardiovascular disease independent of other risk factors.

The most effective way to determine if an individual has HBP is through simple testing by a health professional. According to the CDC, about one in three U.S. adults have high blood pressure. Eating a healthy diet and maintaining a healthy body weight are the best ways to prevent hypertension.

About four in ten Louisiana adult residents (39.2 percent) have been diagnosed with HBP. The rate of incidence of HBP is significantly higher in Louisiana than it is nationally. Across the United States, 31.9 percent of adults have been diagnosed with HBP.

As expected, high blood pressure is most prevalent among older populations. More than seventy percent of Louisiana adults over 65 years report being told by a doctor or a health professional that they have high blood pressure.

HBP occurs more frequently among the less educated and those living in households with lower earnings. Approximately half of adults without a high school diploma have been diagnosed with HBP. Incidence falls to 30.8 percent among those with a four-year college degree. Similarly, approximately half of adults with household earnings below \$25,000 have been diagnosed with HBP, but 30 percent of adults in households with \$75,000 or more in earnings have had this diagnosis.

Nearly half of adult black Louisiana residents (45.6 percent) report high blood pressure, while 38.1 percent of white residents have had a HBP diagnosis. However, there is no evidence of a race difference in HBP diagnosis when statistically controlling for differences in socio-economic status.

#### **TREATMENT**

Most adult Louisiana residents who have been diagnosed with HBP are currently taking medication for the condition (83.4 percent). This is especially true for older individuals. A majority of individuals 35 or older who have been diagnosed with HBP take medicine for treatment. Below the age of 35, however, most adults who have been diagnosed with HBP are not taking medicine for the condition.

Table 4: Hypertension Awareness						
				Т	aking medica	
	_	nosed with hy	=		hypertensi	
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	39.2	[37.4,41.0]	1,398,844	83.4	[81.0,85.6]	1,166,537
AGE						
18-24	8.3	[5.1,13.3]	38,872	18.5	[5.5,47.2]	7,198
25-34	17.5	[13.9,21.7]	115,868	47.9	[35.8,60.1]	55,449
35-44	29.2	[24.8,33.9]	168,643	75.9	[67.4,82.8]	128,024
45-54	43.3	[39.1,47.7]	258,764	81.0	[74.9,86.0]	209,683
55-64	56.4	[52.7,60.0]	336,078	91.0	[87.7,93.5]	305,925
65 and over	72.0	[69.1,74.7]	480,619	95.8	[94.1,97.0]	460,259
GENDER						
Male	39.5	[36.8,42.4]	681,623	80.5	[76.6,83.8]	548,574
Female	38.9	[36.6,41.2]	717,221	86.2	[83.0,88.8]	617,962
RACE-ETHNICITY						
White, Non-Hispanic	38.1	[35.9,40.2]	813,877	83.4	[80.4,86.1]	678,854
Black, Non-Hispanic	45.6	[41.9,49.4]	486,382	85.5	[81.0,89.0]	415,653
Hispanic	29.2	[20.0,40.3]	34,072	57.4	[36.4,76.1]	19,572
Other, Non-Hispanic	24.4	[18.2,32.0]	45,070	82.8	[66.9,92.0]	37,321
Don't know/No answer	31.6	[20.3,45.7]	19,442	77.9	[51.3,92.2]	15,138
EDUCATION						
Did not graduate HS	50.7	[45.3,56.0]	319,325	83.1	[76.5,88.1]	265,213
HS diploma/equivalent	41.7	[38.6,44.9]	501,601	84.1	[80.2,87.4]	422,091
Some college/2-year college degree	35.1	[32.0,38.4]	357,085	81.9	[76.8,86.1]	292,491
4-year college degree or higher	30.9	[27.9,33.9]	220,115	84.8	[79.8,88.7]	186,578
Don't know/No answer	16.1	[2.9,55.0]	718	22.7	[1.8,82.5]	163
HOUSEHOLD INCOME						
Less than \$25,000	49.4	[45.8,53.0]	476,563	85.5	[81.2,89.0]	407,589
\$25,000-\$49,999	39.9	[35.8,44.1]	262,448	82.9	[77.2,87.4]	217,601
\$50,000-\$74,999	37.7	[32.4,43.3]	156,837	73.2	[64.1,80.7]	114,852
\$75,000 or more	30.1	[26.8,33.7]	239,962	85.3	[79.2,89.8]	204,683
Don't know/No answer	35.9	[32.1,39.8]	263,034	84.3	[78.6,88.7]	221,811

<sup>\*</sup> Among those diagnosed with hypertension (high blood pressure)

## **Cholesterol Awareness**

Analysis of Section 5 ('Cholesterol Awareness') of the 2015 BRFSS Questionnaire

High blood cholesterol (total cholesterol >240 mg/dL) is a major risk factor for heart disease, the leading cause of death in the United States. Cholesterol is a fat-like substance found in your body and many foods. Your body needs it to work properly, but too much cholesterol can build up in your arteries, narrowing the path and limiting blood flow. When too much plaque blocks an artery carrying blood to the heart, a heart attack occurs. Chest pain, also called angina, is caused by too much plaque in a coronary artery. Approximately one in every six adults has high cholesterol. As a result, public health agencies have attempted to reduce the prevalence of high blood cholesterol (HBC) through screenings and by increasing public awareness of the strategies for reducing it.

Nearly three-fourths of adult Louisiana residents (72.4 percent) reports that they had their blood cholesterol checked within the past five years, which is just shy of the national estimate (74.8 percent). Age, gender, and socio-economic status are all related to the likelihood of having blood cholesterol checked.

Fewer than half (36.7 percent) of adults between the ages of 18 and 24 have had their blood cholesterol checked in the previous five years. The share reaches just above 50 percent for adults between the ages of 25 and 34. The share tops 70 percent for ages 35 to 44, 80 percent for ages 45 to 64, and 90 percent for those 65 years or older.

Women are more likely to have had their blood cholesterol checked than men – 75.9 percent versus 68.8 percent, respectively.

Although a majority among all education and income groups have had their blood cholesterol checked in the past five years, the

likelihood of having done so nevertheless varies with the following measures of socioeconomic status. Slightly less than two-thirds of adults without a high school diploma have had their blood cholesterol checked recently, but 80.7 percent of four-year college graduates have. Likewise, 69.8 percent of adults with household income less than \$25,000 have been checked while 79.4 percent of those whose households earn \$75,000 or more have been tested in the past five years.

#### DIAGNOSIS OF HIGH BLOOD CHOLESTEROL

Of the individuals who have had their blood cholesterol checked, 38.9 percent have been diagnosed with HBC.

Education, income and age are important factors when examining the percent of Louisiana adults who have been told by a healthcare professional that they have high blood cholesterol. About half (47.2 percent) of tested adults who did not graduate from high school report they have been diagnosed with HBC, compared to 40.4 percent of tested adults with a high school diploma, 39.6 percent of adults with some college or a twoyear degree, and 29.7 percent of college graduates with a four-year degree. Similarly, about half of those in the lowest category of household income (45.8 percent) have been told by a health care professional that their blood cholesterol is high. Less than a third (31.3 percent) of those in the highest earning households had the same diagnosis.

More than half of adults at least 65 years of age who have been tested report HBC (60.3 percent). The share falls below half to 40.4% among adults age 45 to 54, below one-fifth among adults age 25-34, and to about one in ten among adults under 25 years of age.

Table 5: Cholesterol Awareness	Cho	lesterol check past five ye		Diag	gnosed with h cholestero	
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	72.4	[70.5,74.3]	2,584,470	38.9	[37.0,40.9]	1,067,977
AGE						
18-24	36.7	[30.5,43.5]	170,982	12.7	[7.3,21.1]	23,854
25-34	55.7	[50.6,60.7]	368,984	13.9	[10.1,18.9]	56,137
35-44	71.8	[66.7,76.3]	414,978	25.5	[21.0,30.7]	114,048
45-54	82.9	[79.0,86.2]	495,008	38.6	[34.1,43.1]	200,503
55-64	88.4	[85.8,90.5]	526,924	52.7	[48.9,56.5]	292,570
65 and over	91.0	[88.9,92.7]	607,595	60.3	[57.1,63.5]	380,866
GENDER						
Male	68.8	[65.7,71.7]	1,186,240	39.0	[36.0,42.1]	499,636
Female	75.9	[73.5,78.1]	1,398,229	38.8	[36.4,41.3]	568,340
RACE-ETHNICITY						
White, Non-Hispanic	74.5	[72.2,76.7]	1,593,301	41.1	[38.7,43.4]	697,814
Black, Non-Hispanic	71.1	[67.2,74.8]	758,198	36.6	[32.8,40.5]	290,118
Hispanic	64.0	[52.0,74.6]	74,842	26.0	[16.3,38.8]	21,986
Other, Non-Hispanic	68.0	[58.4,76.3]	125,419	34.2	[25.7,43.9]	44,097
Don't know/No answer	53.2	[37.4,68.4]	32,709	36.6	[23.4,52.2]	13,962
EDUCATION						
Did not graduate HS	64.6	[58.9,70.0]	407,421	47.3	[41.7,53.0]	210,725
HS diploma/equivalent	71.1	[67.7,74.3]	854,896	40.4	[37.0,43.8]	364,797
Some college/2-year college degree	73.2	[69.7,76.5]	744,169	39.6	[36.0,43.4]	311,833
4-year college degree or higher	80.7	[77.7,83.4]	575,586	29.9	[26.9,33.0]	180,366
Don't know/No answer	53.8	[17.2,86.7]	2,398	8.0	[1.0,43.5]	255
HOUSEHOLD INCOME						
Less than \$25,000	69.8	[66.0,73.3]	672,771	45.8	[41.9,49.7]	327,528
\$25,000-\$49,999	74.9	[70.5,78.8]	492,430	37.6	[33.3,42.1]	191,354
\$50,000-\$74,999	72.7	[66.3,78.3]	302,278	37.1	[31.7,42.9]	119,996
\$75,000 or more	79.4	[75.7,82.7]	632,577	31.3	[27.7,35.2]	208,574
Don't know/No answer	66.1	[61.5,70.4]	484,413	41.6	[37.2,46.2]	220,524

<sup>\*</sup> Among those who had blood cholesterol checked within past five years

## **Asthma**

Analysis of Section 6 ('Chronic Health Conditions'), Module 8 ('Adult Asthma History') & Module 23 ('Childhood Asthma Prevalence') of the 2015 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, 8.1 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. Whereas, incidence of asthma among adults in the state previously lagged slightly behind the nation as a whole, by 2015 the rate in Louisiana is statistically indistinguishable from the national rate of 8.8 percent.

Asthma incidence is higher among women than among men and higher among blacks than among whites, in each case by about three percentage points. These data cannot reveal whether the gap arises from an underlying difference in prevalence of asthma or a difference in the likelihood of seeking or receiving a diagnosis.

Incidence also tracks socio-economic disadvantage – disproportionately affecting those with less education and lower household earnings. For example, the share of individuals without a high school diploma who have a current asthma diagnosis (10.7 percent) is twice that of individuals with a four-year college degree (5.2 percent).

Among adults with household incomes under \$25,000, roughly the bottom 30 percent of Louisiana households on the distribution of income, 11.5 percent suffer from asthma. The share in the top 30 percent of household

income who currently have asthma is only about a third of this amount (5.0 percent).

When statistically accounting for educational attainment and household income, there is no longer a discernible difference in asthma incidence between whites and blacks. However, the gender gap remains.

#### **SYMPTOMS & CARE**

Among adults who are currently diagnosed with asthma, half (51.4 percent) had an attack within the past year. For 15.4 percent of these individuals, the attack was severe enough to visit an emergency room or urgent care clinic. A nearly identical share, 15.0 percent, of adults who suffered an asthma attack in the past year saw a doctor, nurse, or other health care professional for urgent treatment of worsening symptoms.

Among all adults who currently have asthma, 46.4 percent have seen a doctor, nurse or other health care professional for routine checkup for their asthma. A substantial share of adults with asthma, but less than a majority (43.9 percent), used prescription asthma medication to prevent an attack from occurring within the previous month. A similar share (40.6 percent) used a prescription asthma inhaler to stop an asthma attack during the previous month.

More than one in four Louisiana adults with asthma (26.6 percent) report that their condition left them unable to work or carry out usual activities at least once during the previous year. A similar share (28.2 percent) report that their asthma made it difficult for them to sleep on at least one occasion in the past month.

These symptoms further compound the socio-economic gaps in experiences with

asthma. Individuals with lower household earnings are not only more likely to be diagnosed with asthma but also more likely to suffer symptoms severe enough to prevent them from working or carrying out other usual activities at some point during the previous year. For example, 38.4 percent of adults with asthma and annual household incomes under \$25,000 were unable to work or perform usual activities on at least one day in the previous year because of their asthma. Among adults with asthma and household incomes of \$75,000 or more, this share is 12.3 percent.

#### CHILDHOOD ASTHMA PREVALENCE

The share of children in Louisiana who currently have asthma (8.2 percent) is statistically indistinguishable from the share of adults.

As with adult asthma, incidence of childhood asthma declines with socio-economic advantages. Nearly one in eight children in households with incomes under \$25,000 have asthma (12.2 percent). The share of children with asthma is closer to one in twenty in households with annual incomes of \$75,000 or more (5.1 percent).

Table 6a: Asthma Symptoms and Care							_		
	Cur	rently diagno				. de	Asth	ma required e	mergency
	0.4	asthma			ma attack in p	-	0.4	care *^	F . D
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	8.1	[7.1,9.2]	288,759	51.4	[43.9,58.9]	121,422	15.4	[10.9,21.4]	44566.0
AGE									
18-24	11.1	[7.2,16.7]	51,702	38.5	[16.9,65.8]	14,641	12.5	[3.6,35.1]	6463.0
25-34	7.7	[5.4,11.0]	51,228	69.0	[47.4,84.6]	25,219	27.4	[13.5,47.8]	14061.0
35-44	6.6	[4.6, 9.5]	38,285	59.8	[39.5,77.1]	21,187	18.3	[7.9,36.6]	6990.0
45-54	7.8	[6.0, 10.2]	46,731	46.2	[32.4,60.6]	17,831	11.5	[5.9,21.2]	5373.0
55-64	7.8	[6.1, 9.9]	46,680	61.1	[47.3,73.3]	24,804	10.4	[4.2,23.5]	4872.0
65 and over	8.1	[6.5,10.0]	54,133	37.9	[26.9,50.3]	17,739	12.6	[6.3,23.4]	6807.0
GENDER									
Male	6.3	[4.9, 8.1]	109,238	39.2	[26.1,54.1]	33,762	9.0	[4.1,18.5]	9802.0
Female	9.7	[8.4,11.3]	179,522	58.4	[50.2,66.2]	87,660	19.4	[13.2,27.4]	34764.0
RACE-ETHNICITY									
White, Non-Hispanic	6.8	[5.8,8.0]	145,920	54.1	[44.8,63.1]	69,134	11.0	[6.7,17.5]	16078.0
Black, Non-Hispanic	10.0	[7.8,12.7]	106,706	45.1	[31.3,59.6]	38,588	20.5	[11.7,33.4]	21885.0
Hispanic	10.5	[5.5,19.0]	12,269	86.4	[42.5,98.2]	6,431	36.1	[12.4,69.3]	4432.0
Other, Non-Hispanic	12.0	[7.3,19.1]	22,100	46.7	[23.0,71.9]	6,673	7.1	[1.0,37.1]	1576.0
Don't know/No answer	2.9	[0.8, 9.7]	1,764	78.5	[18.4,98.3]	596	33.8	[3.8,86.7]	596.0
EDUCATION									
Did not graduate HS	10.7	[7.9,14.3]	67,544	34.0	[20.6,50.6]	17,604	10.7	[4.6,22.9]	7210.0
HS diploma/equivalent	8.6	[6.9,10.7]	103,292	54.0	[41.1,66.4]	47,656	20.6	[12.3,32.3]	21270.0
Some college/2-year college degree	7.8	[6.1,10.0]	79,596	60.0	[46.0,72.5]	38,098	15.2	[7.6,27.8]	12067.0
4-year college degree or higher	5.2	[3.9,6.9]	37,163	55.8	[40.0,70.4]	17,509	10.8	[3.2,30.8]	4019.0
Don't know/No answer	26.1	[6.5,64.3]	1,165	47.6	[6.9,91.7]	554			
HOUSEHOLD INCOME									
Less than \$25,000	11.5	[9.4,14.0]	110,913	61.6	[49.8,72.2]	58,335	26.0	[16.8,37.9]	28805.0
\$25,000-\$49,999	9.5	[7.0,12.8]	62,521	43.3	[27.3,60.9]	21,622	5.4	[2.1,13.0]	3357.0
\$50,000-\$74,999	4.7	[2.8,7.7]	19,434	54.6	[29.2,77.8]	8,160	19.5	[6.5,46.0]	3793.0
\$75,000 or more	5.0	[3.5,7.0]	39,753	56.6	[36.7,74.5]	19,013	9.8	[3.2,26.2]	3876.0
Don't know/No answer	7.7	[5.7,10.3]	56,139	33.3	[19.1,51.5]	14,293	8.4	[3.2,20.3]	4735.0

<sup>\*</sup> Among those with current asthma diagnosis

<sup>^</sup> Visit to emergency room or urgent care center because of asthma

Table 6b: Asthma Symptoms and Care										
	A	sthma required								
		treatment			Routine checkup for			Used prescription to prevent		
		worsening syn	nptoms *		asthma in past year *			attack in past month *		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	
Total	15.0	[10.8,20.4]	43,276	46.4	[39.7,53.3]	134,100	43.9	[37.3,50.7]	126865.0	
AGE										
18-24	4.6	[1.0,18.3]	2,364	37.3	[19.0,60.3]	19,307	35.4	[17.3,58.9]	18317.0	
25-34	18.3	[7.2,39.3]	9,375	36.3	[20.8,55.3]	18,573	32.2	[17.5,51.5]	16498.0	
35-44	26.2	[12.8,46.1]	10,027	53.0	[34.3,70.8]	20,276	38.6	[23.0,56.9]	14769.0	
45-54	7.5	[3.3,15.9]	3,504	44.0	[31.4,57.5]	20,578	45.8	[33.0,59.1]	21386.0	
55-64	21.2	[12.5,33.6]	9,878	57.8	[45.2,69.4]	26,976	55.2	[42.7,67.0]	25754.0	
65 and over	15.0	[8.3,25.7]	8,128	52.4	[41.2,63.5]	28,390	55.7	[44.2,66.5]	30140.0	
GENDER										
Male	9.5	[4.5,19.0]	10,331	46.2	[33.8,59.2]	50,519	39.9	[28.2,52.9]	43600.0	
Female	18.4	[12.9,25.5]	32,945	46.6	[39.1,54.2]	83,581	46.4	[38.9,54.0]	83265.0	
RACE-ETHNICITY										
White, Non-Hispanic	17.0	[11.6,24.4]	24,870	45.5	[37.4,54.0]	66,450	46.3	[38.0,54.7]	67510.0	
Black, Non-Hispanic	13.3	[6.8,24.3]	14,143	49.7	[37.1,62.3]	52,984	43.2	[31.3,56.1]	46140.0	
Hispanic				34.3	[12.1,66.3]	4,204	22.4	[6.6,54.1]	2743.0	
Other, Non-Hispanic	19.3	[6.7,44.5]	4,264	44.6	[22.7,68.9]	9,865	46.6	[24.0,70.8]	10309.0	
Don't know/No answer				33.8	[3.8,86.7]	596	9.3	[0.9,53.0]	163.0	
EDUCATION										
Did not graduate HS	9.4	[4.2,20.0]	6,373	39.9	[26.0,55.6]	26,954	40.2	[26.5,55.6]	27139.0	
HS diploma/equivalent	15.2	[8.3,26.1]	15,660	46.8	[35.5,58.5]	48,351	46.9	[35.7,58.5]	48460.0	
Some college/2-year college degree	20.3	[11.9,32.5]	16,161	42.4	[30.7,55.0]	33,739	45.1	[32.9,57.8]	35862.0	
4-year college degree or higher	12.2	[6.2,22.6]	4,529	64.7	[49.8,77.2]	24,054	39.5	[26.9,53.7]	14687.0	
Don't know/No answer	47.6	[7.0,91.7]	554	86.0	[35.4,98.6]	1,002	61.6	[11.4,95.3]	718.0	
HOUSEHOLD INCOME										
Less than \$25,000	18.8	[11.7,28.9]	20,884	48.0	[37.6,58.6]	53,260	52.0	[41.4,62.4]	57658.0	
\$25,000-\$49,999	6.7	[3.1,13.8]	4,204	39.2	[25.5,54.9]	24,525	44.6	[29.7,60.5]	27886.0	
\$50,000-\$74,999	17.7	[5.8,43.0]	3,437	57.9	[31.1,80.7]	11,255	50.0	[26.2,73.8]	9722.0	
\$75,000 or more	26.2	[13.0,45.9]	10,419	44.9	[28.8,62.1]	17,845	35.6	[21.6,52.7]	14166.0	
Don't know/No answer	7.7	[2.8,19.8]	4,332	48.5	[33.5,63.7]	27,214	31.1	[19.7,45.3]	17434.0	

<sup>\*</sup> Among those with current asthma diagnosis

Table 6c: Asthma Symptoms and Care									
	Use	ed prescription	ı inhaler	Ast	hma limited a	ctivities	As	sthma made sl	eeping
	durin	ig attack in pa	st month *		during past ye	ear *	dif	ficult in past n	nonth *
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	40.6	[34.1,47.3]	117,109	26.6	[21.1,32.9]	76,749	28.2	[22.7,34.4]	81357.0
AGE									
18-24	44.3	[24.3,66.4]	22,898	18.2	[6.6,41.1]	9,387	8.9	[2.7,25.1]	4582.0
25-34	24.3	[11.5,44.1]	12,425	27.0	[13.0,47.7]	13,809	27.0	[13.2,47.4]	13834.0
35-44	32.2	[18.3,50.2]	12,315	27.3	[14.5,45.3]	10,447	40.6	[23.9,59.8]	15544.0
45-54	43.5	[30.9,56.9]	20,316	29.5	[18.9,42.9]	13,779	27.1	[17.2,39.9]	12661.0
55-64	56.2	[43.6,68.1]	26,240	29.7	[19.4,42.5]	13,865	43.6	[31.5,56.5]	20358.0
65 and over	42.3	[31.9,53.5]	22,915	28.6	[19.4,39.9]	15,463	26.6	[18.0,37.3]	14378.0
GENDER									
Male	32.2	[21.3,45.6]	35,226	21.0	[12.6,32.9]	22,930	22.2	[14.0,33.4]	24293.0
Female	45.6	[38.2,53.3]	81,884	30.0	[23.3,37.6]	53,819	31.8	[25.1,39.4]	57064.0
RACE-ETHNICITY									
White, Non-Hispanic	42.7	[34.7,51.1]	62,325	22.4	[16.4,29.7]	32,618	28.8	[21.8,37.1]	42078.0
Black, Non-Hispanic	43.1	[31.1,55.9]	45,944	32.4	[21.7,45.2]	34,528	28.7	[19.3,40.5]	30653.0
Hispanic	30.5	[9.9,63.5]	3,736	37.9	[13.6,70.4]	4,655	25.1	[6.9,60.2]	3082.0
Other, Non-Hispanic	22.4	[9.0,45.7]	4,942	22.4	[8.7,46.5]	4,948	22.4	[8.7,46.5]	4948.0
Don't know/No answer	9.3	[0.9,53.0]	163				33.8	[3.8,86.7]	596.0
EDUCATION									
Did not graduate HS	31.5	[19.4,46.9]	21,297	24.7	[14.5,38.7]	16,675	31.6	[19.9,46.2]	21335.0
HS diploma/equivalent	43.7	[32.7,55.4]	45,171	29.1	[19.5,41.0]	30,086	27.8	[18.9,38.9]	28689.0
Some college/2-year college degree	47.3	[34.9,60.0]	37,622	27.5	[18.0,39.5]	21,869	34.1	[23.4,46.6]	27111.0
4-year college degree or higher	33.1	[21.8,46.8]	12,302	20.4	[9.9,37.2]	7,565	9.9	[5.1,18.4]	3668.0
Don't know/No answer	61.6	[11.4,95.3]	718	47.6	[7.0,91.7]	554	47.6	[7.0,91.7]	554.0
HOUSEHOLD INCOME									
Less than \$25,000	49.3	[38.8,59.9]	54,678	38.4	[28.6,49.3]	42,630	39.3	[29.6,50.0]	43593.0
\$25,000-\$49,999	38.7	[24.6,55.0]	24,214	24.5	[13.4,40.5]	15,307	16.7	[9.6,27.3]	10414.0
\$50,000-\$74,999	43.5	[22.0,67.8]	8,454	35.5	[16.5,60.6]	6,905	36.0	[16.8,61.1]	7005.0
\$75,000 or more	33.4	[20.0,50.2]	13,291	12.3	[5.9,23.8]	4,876	13.4	[5.5,29.1]	5336.0
Don't know/No answer	29.3	[18.1,43.8]	16,472	12.5	[5.7,25.5]	7,031	26.7	[15.1,42.8]	15009.0

<sup>\*</sup> Among those with current asthma diagnosis

## **Diabetes**

Analysis of Section 6 ('Chronic Health Conditions'), Module 1 ('Pre-Diabetes') & Module 2 ('Diabetes') of the 2015 BRFSS Questionnaire

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

The share of Louisiana residents with diabetes is 12.7 percent, more than two percentage points above the national rate of 10.5 percent. Louisiana is the state with the sixth highest rate of diabetes. Furthermore, another 7.5 percent of adult state residents are diagnosed with pre-diabetes 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, but 21.2 percent of individuals between the ages of 55 and 64 have diabetes as do 29.1 percent of individuals 65 years or older.

Among individuals without a high school diploma 20.0 percent have diabetes, while 8.2 percent of college graduates have diabetes. Similarly, 20.5 percent of individuals in the bottom 30 percent of household income have diabetes, but this share falls by more than half to 6.8 percent in the top 30 percent of household income in the state.

Interestingly, a racial gap persists even after controlling for differences in educational attainment and household income. The share of black adult residents of Louisiana with diabetes is 2.9 percentage points higher than that of whites, even after accounting for socio-economic differences between respondents of different races. The gap is six percentage points when incidence is not adjusted for educational attainment and household income.

#### TREATMENT AND MANAGEMENT

Nearly a third of diabetic adults in Louisiana (30.9 percent) are taking insulin. Twice that share (61.3 percent) check their blood for glucose or sugar at least once per day on average. Most (86.9 percent) have seen a doctor, nurse, or other health care professional within the past year about their diabetes. Almost as many (77.1 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 65.5 percent.

Approximately half (51.9 percent) have taken a course in how to manage their diabetes.

About one in five diabetic patients have been told by their doctor that their condition has affected their eyes (21.4 percent).

Table 7a: Diabetes							•		
				D	iagnosed wi				
		ignosed with o			diabetes		_	Taking insu	
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	12.7	[11.6,13.8]	451,323	7.5	[6.5,8.5]	256,917	30.9	[26.8,35.2]	137328.0
AGE									
18-24	0.6	[0.1,4.2]	2,797	4.2	[2.0, 8.7]	18,610			
25-34	2.4	[1.2,4.8]	16,044	4.8	[2.9, 8.0]	29,197	39.9	[14.5,72.3]	6407.0
35-44	7.6	[5.2,10.8]	43,839	6.7	[4.7, 9.4]	37,063	27.4	[14.3,46.0]	11990.0
45-54	11.3	[8.8,14.4]	67,661	8.1	[6.0, 10.9]	47,494	26.8	[17.0,39.5]	17128.0
55-64	21.3	[18.3,24.6]	126,826	11.4	[9.3,14.0]	67,434	38.5	[30.7,46.8]	48551.0
65 and over	29.1	[26.2,32.1]	194,156	8.6	[7.0,10.4]	57,119	27.7	[22.7,33.4]	53252.0
GENDER									
Male	12.7	[11.0,14.5]	217,944	6.2	[5.0,7.7]	101,983	27.3	[21.6,33.9]	58820.0
Female	12.7	[11.3,14.1]	233,379	8.6	[7.3,10.1]	154,934	34.2	[28.9,39.9]	78508.0
RACE-ETHNICITY									
White, Non-Hispanic	11.0	[9.8,12.4]	235,682	7.6	[6.5,8.8]	156,555	31.7	[26.4,37.6]	74265.0
Black, Non-Hispanic	17.1	[14.6,19.8]	181,382	8.1	[6.3,10.4]	85,979	27.5	[21.3,34.7]	49730.0
Hispanic	10.4	[5.7,18.1]	12,125	2.3	[0.7, 7.0]	2,445	47.6	[18.4,78.6]	3737.0
Other, Non-Hispanic	8.7	[5.7,13.1]	16,031	5.2	[2.5,10.4]	8,182	42.4	[23.9,63.2]	6796.0
Don't know/No answer	9.9	[5.2,18.2]	6,103	6.6	[2.1,18.5]	3,754	45.9	[20.1,74.1]	2800.0
EDUCATION									
Did not graduate HS	20.0	[16.5,24.1]	125,539	7.2	[4.9,10.3]	44,238	27.5	[19.6,37.2]	33839.0
HS diploma/equivalent	12.3	[10.6,14.2]	147,893	9.1	[7.4,11.2]	108,391	33.4	[26.8,40.7]	49242.0
Some college/2-year college degree	11.7	[9.8,13.9]	119,238	6.7	[5.3,8.5]	64,979	30.7	[23.1,39.5]	35980.0
4-year college degree or higher	8.2	[6.8,9.9]	58,654	5.9	[4.6, 7.5]	39,308	31.7	[23.3,41.5]	18267.0
Don't know/No answer									
HOUSEHOLD INCOME									
Less than \$25,000	20.5	[18.0,23.4]	197,946	7.5	[5.8,9.5]	70,071	33.9	[27.6,40.8]	66601.0
\$25,000-\$49,999	12.3	[10.0,15.1]	80,921	7.7	[5.8,10.1]	49,676	33.8	[24.3,44.8]	26294.0
\$50,000-\$74,999	9.1	[6.8,12.2]	37,916	7.5	[5.1,10.9]	29,239	27.7	[17.2,41.3]	10495.0
\$75,000 or more	6.8	[5.3,8.6]	53,810	6.5	[4.7,8.9]	49,545	20.6	[12.2,32.7]	11085.0
Don't know/No answer	11.0	[8.9,13.6]	80,731	8.2	[6.2,10.8]	58,386	29.0	[20.4,39.4]	22853.0
* ^							•		

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

Table 7b: Diabetes				1			1		
	Te	st blod sugar			n health care լ				
		once per da	=		diabetes in pa	•		l A1C test in p	ast year *
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	61.3	[56.6,65.7]	272,652	86.9	[82.9,90.1]	386,885	77.1	[72.5,81.1]	343048.0
AGE									
18-24									
25-34	76.7	[42.7,93.6]	12,306	48.6	[18.9,79.3]	7,803	39.8	[15.0,71.2]	6383.0
35-44	41.1	[24.9,59.5]	18,014	94.3	[79.7,98.6]	41,348	82.8	[63.3,93.1]	36287.0
45-54	54.7	[41.4,67.4]	35,007	89.7	[78.6,95.4]	57,365	92.9	[82.3,97.3]	59388.0
55-64	68.0	[60.3,74.9]	85,871	88.6	[80.2,93.7]	111,813	75.9	[66.9,83.1]	95847.0
65 and over	63.2	[57.2,68.8]	121,453	87.7	[83.1,91.2]	168,556	75.5	[69.8,80.5]	145144.0
GENDER									
Male	57.1	[49.7,64.2]	123,063	85.0	[77.7,90.2]	183,044	74.1	[66.4,80.5]	159575.0
Female	65.1	[59.4,70.4]	149,589	88.8	[84.3,92.1]	203,841	79.9	[74.7,84.3]	183473.0
RACE-ETHNICITY									
White, Non-Hispanic	63.0	[57.1,68.5]	147,496	90.2	[86.0,93.2]	211,192	80.9	[75.3,85.5]	189405.0
Black, Non-Hispanic	60.8	[52.7,68.4]	110,074	83.1	[74.6,89.1]	150,311	72.7	[64.4,79.7]	131543.0
Hispanic	45.7	[17.1,77.4]	3,587	95.0	[70.0,99.4]	7,461	79.2	[32.0,96.9]	6221.0
Other, Non-Hispanic	54.1	[33.9,73.1]	8,677	79.3	[55.8,92.1]	12,709	68.8	[46.8,84.7]	11028.0
Don't know/No answer	46.2	[20.3,74.2]	2,817	85.4	[53.8,96.7]	5,212	79.5	[53.0,93.0]	4851.0
EDUCATION									
Did not graduate HS	70.5	[60.9,78.5]	86,636	75.3	[64.2,83.9]	92,602	59.1	[48.5,68.9]	72657.0
HS diploma/equivalent	62.9	[54.9,70.1]	92,693	90.3	[84.1,94.2]	133,097	79.8	[72.7,85.4]	117663.0
Some college/2-year college degree	53.5	[44.3,62.5]	62,684	92.6	[87.3,95.7]	108,370	87.0	[78.8,92.3]	101809.0
4-year college degree or higher	53.2	[43.6,62.5]	30,638	91.7	[85.0,95.6]	52,816	88.4	[81.6,92.9]	50919.0
Don't know/No answer									
HOUSEHOLD INCOME									
Less than \$25,000	66.4	[59.2,72.9]	130,591	83.9	[76.7,89.2]	165,137	71.0		139719.0
\$25,000-\$49,999	58.2	[47.2,68.5]	45,327	91.5	[84.1,95.6]	71,220	79.8	[69.1,87.5]	62129.0
\$50,000-\$74,999	60.4	[44.8,74.1]	22,910	95.5	[88.3,98.4]	36,216	93.9	[86.5,97.4]	35612.0
\$75,000 or more	54.0	[41.6,65.9]	29,053	92.5	[81.7,97.1]	49,748	95.5	[84.5,98.8]	51398.0
Don't know/No answer	56.8	[45.7,67.3]	44,771	81.9	[69.8,89.9]	64,563	68.8	[57.0,78.5]	54191.0

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

Table 7c: Diabetes										
				I	Has class to ma	anage				
	Feet	t checked in pa	ast year*		diabetes*		Diab	Diabetes has affected eyes*		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	
Total	65.5	[60.9,69.9]	289,334	51.9	[47.2,56.5]	230,976	21.4	[17.9,25.3]	95127.0	
AGE										
18-24										
25-34	32.2	[11.5,63.4]	5,169	46.0	[17.3,77.7]	7,384	3.3	[0.4,21.5]	524.0	
35-44	65.4	[45.1,81.3]	27,622	36.7	[21.6,54.8]	16,067	12.0	[4.4,28.7]	5267.0	
45-54	66.9	[53.8,77.8]	41,980	51.2	[38.1,64.1]	32,720	24.3	[15.4,36.2]	15550.0	
55-64	67.6	[59.2,75.0]	85,393	64.1	[55.9,71.5]	80,920	27.6	[20.5,36.0]	34808.0	
65 and over	67.5	[61.7,72.8]	129,170	48.9	[42.9,54.9]	93,884	20.3	[15.8,25.6]	38977.0	
GENDER										
Male	65.3	[57.9,72.0]	140,168	43.5	[36.3,50.9]	93,607	20.9	[15.7,27.3]	45026.0	
Female	65.7	[59.8,71.2]	149,166	59.8	[54.1,65.3]	137,368	21.8	[17.6,26.8]	50102.0	
RACE-ETHNICITY										
White, Non-Hispanic	61.5	[55.5,67.1]	142,752	49.0	[43.1,54.9]	114,745	18.8	[14.7,23.8]	44116.0	
Black, Non-Hispanic	69.8	[61.4,77.0]	125,149	54.7	[46.6,62.5]	98,998	25.6	[19.4,32.8]	46244.0	
Hispanic	54.1	[22.2,83.0]	4,250	49.3	[19.5,79.6]	3,875	4.5	[0.6,27.5]	351.0	
Other, Non-Hispanic	76.8	[58.1,88.7]	12,306	63.0	[42.5,79.7]	10,098	19.0	[7.8,39.4]	3051.0	
Don't know/No answer	79.9	[47.5,94.6]	4,877	53.4	[25.2,79.6]	3,259	22.4	[6.5,54.5]	1365.0	
EDUCATION										
Did not graduate HS	61.6	[51.0,71.1]	74,961	45.5	[35.5,55.8]	55,909	27.8	[19.8,37.6]	34181.0	
HS diploma/equivalent	65.9	[58.1,73.0]	96,888	54.3	[46.7,61.8]	80,103	19.6	[14.4,26.0]	28836.0	
Some college/2-year college degree	68.0	[59.1,75.8]	78,578	55.4	[46.2,64.3]	64,910	18.6	[13.1,25.9]	21819.0	
4-year college degree or higher	68.0	[58.6,76.2]	38,906	52.2	[42.6,61.6]	30,054	17.9	[11.8,26.1]	10292.0	
Don't know/No answer										
HOUSEHOLD INCOME										
Less than \$25,000	64.0	[56.5,70.9]	123,641	51.8	[44.6,59.0]	101,979	22.9	[17.6,29.3]	45113.0	
\$25,000-\$49,999	71.1	[60.0,80.1]	55,299	52.7	[41.8,63.4]	41,046	23.7	[15.9,33.9]	18477.0	
\$50,000-\$74,999	70.0	[55.4,81.4]	26,531	54.1	[39.6,68.0]	20,522	19.1	[9.7,34.1]	7247.0	
\$75,000 or more	62.5	[49.6,73.8]	33,619	47.2	[35.3,59.5]	25,419	14.8	[7.6,26.7]	7955.0	
Don't know/No answer	63.8	[52.9,73.4]	50,244	53.3	[42.2,64.1]	42,009	20.7	[13.8,29.9]	16334.0	

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

## **Arthritis Burden**

Analysis of Section 6 ('Chronic Health Conditions') & Section 12 ('Arthritis Burden') of the 2015 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 is only slightly higher than the national average (25.5 percent).

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, 37.7 percent have been diagnosed. The share drops to 19.5 percent among individuals in the 30 percent of household with the highest income. The same pattern holds for educational attainment. Among college graduates, 19.4 percent have been diagnosed with arthritis or a similar condition, while 40.2 percent of individuals who did not finish high school have been diagnosed with arthritis or related rheumatoid condition.

These conditions are also more frequent among older adults and women. Close to half of Louisiana adults between the ages of 55 and 64 (43.6 percent) have been diagnosed with these conditions; more than half of those who are 65 years of age or older (57.9 percent) have been diagnosed. Below the age of 35, fewer than ten percent of adults have arthritis.

The share of women who have been diagnosed with one of these conditions is 32.0 percent – nine percentage points higher than men, for whom 23.1 percent have been diagnosed. 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.

#### IMPACT ON QUALITY OF LIFE

The Arthritis Burden Section of the 2015 BRFSS includes questions asked specifically to individuals diagnosed with arthritis about their experiences with the condition. Because this section of the BRFSS was administered to a subset of the total sample, the limited number of qualifying participants does not permit statistical estimation of incidence across demographic characteristics. Nevertheless, taken as a whole, this subsample permits overall estimates of the impact of arthritis on the quality of life of those who suffer from this condition.

About half (47.7 percent) of Louisiana adults with arthritis or a similar condition report that their symptoms – such as pain, aching or stiffness – limit their usual activities.

Approximately one-third (34.7 percent) indicate that their symptoms affect their work. And 45.8 percent say symptoms affect normal social activities such as shopping or attending religious gatherings.

Table 8a: Arthritis								
	ъ.	1	e. e. de		1			
	_	nosed with arth		Symptoms limit usual activities ^				
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.		
Total	27.7	[26.2,29.3]	988,522	47.7	[44.6,50.9]	471,770		
AGE								
18-24	4.6	[2.4,8.4]	21,194	15.4	[4.4,41.8]	3,269		
25-34	8.0	[5.8,11.1]	53,178	29.7	[16.6,47.1]	15,771		
35-44	18.2	[14.6,22.5]	105,316	52.4	[40.6,64.0]	55,201		
45-54	27.1	[23.4,31.3]	162,115	50.3	[41.8,58.8]	81,535		
55-64	43.6	[40.0,47.4]	260,261	48.6	[42.9,54.2]	126,363		
65 and over	57.9	[54.7,61.0]	386,458	49.1	[44.9,53.3]	189,630		
GENDER								
Male	23.1	[20.9,25.5]	398,544	41.8	[36.6,47.2]	166,466		
Female	32.0	[29.9,34.2]	589,979	51.7	[48.0,55.5]	305,305		
RACE-ETHNICITY								
White, Non-Hispanic	30.1	[28.2,32.2]	644,872	50.1	[46.3,53.9]	322,949		
Black, Non-Hispanic	24.9	[22.1,28.0]	265,631	44.4	[38.4,50.6]	117,900		
Hispanic	14.0	[8.4,22.3]	16,312	44.4	[22.0,69.4]	7,245		
Other, Non-Hispanic	24.5	[17.9,32.6]	45,188	41.1	[26.7,57.2]	18,577		
Don't know/No answer	26.9	[17.1,39.5]	16,518	30.9	[16.2,50.8]	5,100		
EDUCATION								
Did not graduate HS	40.2	[35.3,45.4]	253,668	53.7	[46.3,60.9]	136,163		
HS diploma/equivalent	27.9	[25.3,30.6]	335,093	46.2	[41.1,51.3]	154,661		
Some college/2-year college								
degree	25.6	[22.9,28.6]	260,467	47.1	[41.2,53.2]	122,782		
4-year college degree or higher	19.4	[17.2,21.7]	138,200	41.7	[35.9,47.7]	57,609		
Don't know/No answer	24.5	[6.1,61.8]	1,094	50.7	[8.5,91.9]	554		
HOUSEHOLD INCOME								
Less than \$25,000	37.7	[34.4,41.2]	364,047	57.9	[52.6,63.0]	210,713		
\$25,000-\$49,999	28.1	[24.7,31.9]	185,013	42.0	[35.4,48.8]	77,641		
\$50,000-\$74,999	21.2	[17.4,25.7]	88,216	45.1	[35.0,55.7]	39,826		
\$75,000 or more	19.5	[16.8,22.6]	155,643	37.6	[29.8,46.1]	58,533		
Don't know/No answer	26.7	[23.3,30.3]	195,603	43.5	[36.7,50.5]	85,057		

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

^ Among adults diagnosed with arthritis

Table 8b: Arthritis				_				
	C	Symptoms offset social activities*						
	=	iptoms affect v		Symptoms affect social activities*				
m . 1	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.		
Total	34.7	[31.8,37.8]	343,503	45.8	[42.7,49.0]	452,944		
AGE								
18-24	10.2	[2.3,35.8]	2,160	18.3	[5.9,44.4]	3,871		
25-34	35.6	[21.5,52.8]	18,940	36.2	[21.8,53.6]	19,238		
35-44	48.6	[36.8,60.6]	51,235	58.4	[46.7,69.3]	61,531		
45-54	45.7	[37.3,54.3]	74,048	47.6	[39.1,56.1]	77,091		
55-64	33.3	[28.3,38.8]	86,752	49.7	[44.0,55.4]	129,278		
65 and over	28.6	[24.9,32.5]	110,367	41.9	[37.9,46.1]	161,935		
GENDER								
Male	28.8	[24.0,34.1]	114,799	36.5	[31.4,41.9]	145,550		
Female	38.8	[35.1,42.6]	228,705	52.1	[48.3,55.9]	307,394		
RACE-ETHNICITY								
White, Non-Hispanic	32.8	[29.2,36.6]	211,638	44.6	[40.9,48.4]	287,706		
Black, Non-Hispanic	41.2	[35.2,47.5]	109,400	50.7	[44.4,57.0]	134,709		
Hispanic	43.1	[20.8,68.6]	7,032	43.3	[21.1,68.5]	7,056		
Other, Non-Hispanic	27.2	[16.2,42.1]	12,311	40.5	[26.0,56.8]	18,288		
Don't know/No answer	18.9	[8.3,37.6]	3,122	31.4	[16.2,52.0]	5,186		
EDUCATION								
Did not graduate HS	45.6	[38.4,53.0]	115,610	57.4	[50.0,64.4]	145,556		
HS diploma/equivalent	32.8	[28.2,37.9]	110,045	43.6	[38.6,48.8]	146,097		
Some college/2-year college								
degree	33.8	[28.4,39.6]	87,917	44.4	[38.6,50.4]	115,614		
4-year college degree or higher	21.7	[17.0,27.1]	29,931	32.7	[27.3,38.5]	45,123		
Don't know/No answer				50.7	[8.5,91.9]	554		
HOUSEHOLD INCOME								
Less than \$25,000	46.0	[40.8,51.2]	167,386	62.3	[57.1,67.2]	226,628		
\$25,000-\$49,999	29.6	[23.6,36.4]	54,693	43.5	[36.7,50.5]	80,455		
\$50,000-\$74,999	29.5	[20.5,40.4]	25,981	30.0	[21.3,40.5]	26,496		
\$75,000 or more	22.4	[15.8,30.6]	34,845	27.7	[20.7,36.2]	43,189		
Don't know/No answer	31.0	[24.8,37.9]	60,599	38.9	[32.4,45.9]	76,176		

<sup>^</sup> Among adults diagnosed with arthritis

## **Other Chronic Conditions**

Analysis of Section 6 ('Chronic Health Conditions')

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.

Heart attacks are more common in Louisiana than in the country as a whole. Overall, 5.4 percent of Louisiana adults report that they have had a heart attack or myocardial infarction compared to 4.3 percent of Americans. A similar share of adults in the state have been diagnosed with angina or coronary heart disease, 5.3 percent. Finally, 4.1 percent report that they have had a

stroke. In the case of each condition, the share of adults across the nation reporting incidence of coronary heart disease or stroke is slightly lower than in the state at 4.0 percent and 3.0 percent respectively.

Risk of cardiovascular disease is highest among older adults. Among Louisiana adults age 65 years or older, 14.1 percent report having had a heart attack, 15.4 percent report coronary heart disease, and 10.0 percent report having had a stroke. In contrast, these incidents are extremely rare among those under the age of 35, typically one percent or less.

Louisiana adults are at greater risk for heart attacks, coronary heart disease, and strokes than Americans as a whole.

Household income is also important predictors of cardiovascular health risks. The incidence of coronary heart disease, for example, is 5.3 percentage points higher among those with household earnings under \$25,000 than among those with household earnings of \$75,000 or more.

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: 7.1 percent versus 3.9 percent.

#### **CANCER**

Louisianans suffer from cancer at a comparable rate as the national population. For example, 5.2 percent of Louisiana adults have had skin cancer as have 5.9 percent of all American adults. Similarly, 7.0 percent of Louisiana adults have had some other type of cancer, as have 6.6 percent of all American adults.

Risk of skin and other types of cancer are related to age, gender, and race. There are very few diagnoses of cancer among those under the age of 45: less than one percent for skin cancer and no more than three percent for other cancers. The incidence of cancer rises steadily over age groups peaking among the elderly. Adults 65 years of age or older have had a diagnosis of skin cancer at a rate of 18.0 percent and other cancers at a rate of 18.8 percent.

Women are less likely than men to have ever had skin cancer (4.3 percent versus 6.1 percent) but are more likely to have ever had other cancers (8.1 percent versus 5.9 percent).

Skin cancer is exceptionally rare among black residents of Louisiana (0.3 percent). Among whites, 7.8 percent of adult residents of the state have had skin cancer. The share of whites who have had other cancers is 8.7 percent, and the racial gap is smaller as 4.8 percent of black Louisiana residents have had other cancers.

#### RESPRIATORY CONDITIONS

There is higher incidence of respiratory conditions such as chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis in Louisiana (7.5 percent) than in the nation as a whole (6.2 percent).

Respiratory conditions are related to age, gender, and socio-economic status. Risk of respiratory conditions increases markedly late in life. Less than five percent of adults

under the age of 45 suffer from COPD, emphysema, or chronic bronchitis, but incidence reaches 13.8 percent among adults 65 years or older. While 6.0 percent of men have ever had one of these conditions, 9.0 percent of women have. College graduates are roughly one fourth as likely to suffer from respiratory conditions (3.1 percent) compared to those without a high school diploma (12.2 percent). Relatedly, individuals with household earnings of \$75,000 or more are significantly less likely to have respiratory conditions (2.9 percent) than those in households with income below \$25,000 (14.3 percent).

#### DEPRESSIVE DISORDER

Louisiana adults are diagnosed with depression at a slightly higher rate than the national adult population (19.9 percent and 17.5 percent respectively).

Women in Louisiana are significantly more likely to be diagnosed with depression than men (24.3 percent versus 15.3 percent). Whites are more likely to be diagnosed with depression than blacks (22.2 percent versus 15.4 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

One in four Louisiana women are diagnosed with a depressive disorder. propensity across groups to seek out a diagnosis and treatment.

The share of individuals without a high school diploma who have been diagnosed with depressive disorders (27.2 percent) is nearly twice as high as that of college graduates (15.2 percent). The same holds for household income. About one-fourth of individuals with household incomes below \$25,000 have been diagnosed with depression (27.5 percent), while one in eight (14.1 percent) of individuals with household income of \$75,000 or more suffer from depression.

#### KIDNEY DISEASE

Kidney disease is a relatively rare diagnosis both in Louisiana and in the United States as a whole. In the state 2.8 percent of adults have been diagnosed with kidney disease, in line with the national rate of 2.7 percent. As with many other chronic conditions, both age and socio-economic status are 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 7.0 percent among those 65 years of age or older.

College graduates are about half as likely to have ever been diagnosed with kidney disease as individuals who never graduated high school (2.0 percent versus 3.7 percent). Similarly, 1.1 percent of individuals in the highest earning households have ever been diagnosed with kidney disease, while 5.0 percent of those in the lowest earning households have.

Table 9a: Chronic Conditions									
		Heart attac	ck	Coronary heart disease			Stroke		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	5.4	[4.7,6.3]	194,004	5.3	[4.6,6.0]	188,396	4.1	[3.5,4.7]	144576.0
AGE									
18-24	0.3	[0.0, 2.2]	1,457				1.1	[0.3, 4.6]	5255.0
25-34	8.0	[0.3, 2.3]	5,353	0.2	[0.0, 0.8]	1,243	1.0	[0.4, 2.2]	6499.0
35-44	4.0	[2.1,7.4]	22,971	2.3	[1.1,4.8]	13,448	1.2	[0.5, 2.5]	6668.0
45-54	2.8	[1.7, 4.6]	16,620	2.9	[1.8,4.9]	17,592	3.3	[2.0,5.3]	19563.0
55-64	8.9	[7.0,11.3]	53,284	8.9	[7.0,11.2]	52,990	6.7	[5.1,8.7]	39903.0
65 and over	14.1	[12.1,16.5]	94,320	15.4	[13.3,17.9]	103,122	10.0	[8.3,12.0]	66687.0
GENDER									
Male	7.1	[5.8,8.5]	121,856	6.0	[5.0,7.3]	104,242	3.7	[2.9,4.8]	64182.0
Female	3.9	[3.2,4.8]	72,148	4.6	[3.8,5.4]	84,154	4.4	[3.6,5.2]	80393.0
RACE-ETHNICITY									
White, Non-Hispanic	6.0	[5.1,7.1]	128,782	5.9	[5.0,6.8]	125,531	3.7	[3.0,4.5]	78899.0
Black, Non-Hispanic	5.0	[3.7,6.7]	52,882	4.4	[3.3,5.9]	47,295	5.0	[3.9,6.5]	53700.0
Hispanic	2.0	[0.6,6.7]	2,297	2.8	[1.1, 7.1]	3,274	1.8	[0.3,11.5]	2076.0
Other, Non-Hispanic	4.1	[2.0,8.3]	7,641	6.0	[3.3,10.7]	11,101	3.0	[1.4,6.3]	5590.0
Don't know/No answer	3.9	[1.5,10.0]	2,403	1.9	[0.6,6.6]	1,195	7.0	[3.0,15.5]	4310.0
EDUCATION									
Did not graduate HS	8.7	[6.3,12.0]	55,128	7.6	[5.6,10.2]	47,913	7.1	[5.2,9.7]	44929.0
HS diploma/equivalent	5.1	[4.0,6.4]	60,750	5.3	[4.2,6.7]	64,031	3.7	[2.9,4.7]	44418.0
Some college/2-year college degree	5.2	[4.1,6.7]	52,984	4.8	[3.8,6.2]	49,247	3.8	[2.9,5.1]	38868.0
4-year college degree or higher	3.5	[2.6,4.7]	24,858	3.8	[2.9,4.9]	26,920	2.3	[1.6,3.3]	16360.0
Don't know/No answer	6.4	[0.8,37.1]	284	6.4	[0.8,37.1]	284			
HOUSEHOLD INCOME									
Less than \$25,000	7.8	[6.3,9.7]	75,624	8.2	[6.7,10.0]	79,010	8.1	[6.7,9.8]	78167.0
\$25,000-\$49,999	5.4	[4.0,7.2]	35,236	6.2	[4.7, 8.2]	40,758	3.7	[2.5,5.3]	24136.0
\$50,000-\$74,999	3.0	[1.9,4.7]	12,385	2.8	[1.8,4.5]	11,835	1.0	[0.5, 2.0]	4352.0
\$75,000 or more	3.4	[2.2,5.3]	27,081	2.9	[2.0,4.2]	22,817	1.0	[0.5, 2.0]	8188.0
Don't know/No answer	6.0	[4.4,8.1]	43,678	4.6	[3.4,6.3]	33,976	4.1	[2.8,5.8]	29734.0

Table 9b: Chronic Conditions										
		Skin cancer			Other cancer			COPD		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	
Total	5.2	[4.6,5.9]	185,129	7.0	[6.2, 7.9]	250,409	7.5	[6.7,8.5]	268557.0	
AGE										
18-24				1.2	[0.4,3.8]	5,811	1.9	[0.7, 4.7]	8745.0	
25-34	8.0	[0.3, 2.0]	4,977	3.1	[1.8, 5.4]	20,467	4.2	[2.6,6.7]	27700.0	
35-44	0.9	[0.3, 2.3]	5,164	2.5	[1.4,4.4]	14,297	3.5	[2.1,5.8]	20347.0	
45-54	3.5	[2.2,5.4]	20,822	6.0	[4.2,8.6]	35,916	8.2	[6.2,10.8]	49139.0	
55-64	5.7	[4.2, 7.8]	34,138	8.1	[6.3,10.4]	48,377	11.8	[9.6,14.4]	70284.0	
65 and over	18.0	[15.6,20.6]	120,029	18.8	[16.5,21.4]	125,541	13.8	[11.8,16.1]	92341.0	
GENDER										
Male	6.1	[5.1,7.3]	105,185	5.9	[4.8, 7.2]	101,489	6.0	[4.9, 7.4]	103555.0	
Female	4.3	[3.6,5.2]	79,944	8.1	[7.0,9.3]	148,921	9.0	[7.8,10.2]	165002.0	
RACE-ETHNICITY										
White, Non-Hispanic	7.8	[6.8,8.9]	167,292	8.7	[7.6,9.8]	185,140	8.0	[6.9,9.1]	170133.0	
Black, Non-Hispanic	0.3	[0.1, 0.8]	3,233	4.8	[3.5,6.4]	50,909	6.5	[5.1,8.3]	69553.0	
Hispanic	6.1	[2.6,13.5]	7,122	3.0	[0.9, 9.3]	3,483	8.4	[3.4,19.1]	9824.0	
Other, Non-Hispanic	3.3	[1.6,6.6]	6,066	4.0	[1.9,8.3]	7,339	7.6	[4.5,12.7]	14090.0	
Don't know/No answer	2.3	[0.7,7.2]	1,416	5.8	[2.5,12.8]	3,539	8.1	[3.7,16.8]	4957.0	
EDUCATION										
Did not graduate HS	4.9	[3.3,7.1]	30,778	10.3	[7.7,13.5]	64,637	12.2	[9.5,15.5]	76660.0	
HS diploma/equivalent	5.0	[4.0,6.2]	60,041	6.8	[5.6,8.2]	81,796	8.0	[6.7,9.6]	96679.0	
Some college/2-year college degree	5.0	[3.8,6.4]	50,443	6.2	[4.8,7.8]	62,742	7.1	[5.7,8.9]	72416.0	
4-year college degree or higher	6.1	[4.9, 7.6]	43,867	5.8	[4.6, 7.2]	41,235	3.1	[2.3,4.1]	21801.0	
Don't know/No answer							22.5	[4.9,62.0]	1002.0	
HOUSEHOLD INCOME										
Less than \$25,000	4.3	[3.3,5.7]	41,768	9.1	[7.4,11.1]	87,524	14.3	[12.2,16.7]	137573.0	
\$25,000-\$49,999	6.1	[4.7, 8.1]	40,394	7.6	[5.9,9.8]	49,911	6.5	[4.9,8.5]	42465.0	
\$50,000-\$74,999	5.0	[3.3,7.4]	20,657	5.4	[3.7,7.8]	22,352	4.8	[3.1,7.3]	19839.0	
\$75,000 or more	5.2	[3.9,7.0]	41,757	5.0	[3.8,6.7]	40,187	2.9	[1.9,4.3]	22977.0	
Don't know/No answer	5.5	[4.3, 7.1]	40,552	6.9	[5.3,8.9]	50,435	6.2	[4.6,8.4]	45703.0	

Table 9c: Chronic Conditions							
	I	Depressive dis		Kidney di	sease		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	
Total	19.9	[18.5,21.4]	710,791	2.8	[2.3,3.3]	99,066	
AGE							
18-24	16.3	[11.9,21.9]	75,756				
25-34	16.4	[13.1,20.5]	108,870	0.7	[0.2, 2.1]	4,380	
35-44	22.4	[18.5,26.9]	129,664	0.6	[0.2,1.3]	3,302	
45-54	22.8	[19.5,26.5]	136,038	2.5	[1.5,4.2]	14,889	
55-64	23.3	[20.4,26.6]	139,221	5.0	[3.6,6.9]	29,661	
65 and over	18.2	[15.9,20.7]	121,241	7.0	[5.6,8.8]	46,833	
GENDER							
Male	15.3	[13.2,17.6]	262,972	2.9	[2.1,3.8]	49,278	
Female	24.3	[22.3,26.4]	447,819	2.7	[2.2,3.4]	49,788	
RACE-ETHNICITY							
White, Non-Hispanic	22.2	[20.4,24.2]	475,742	2.5	[2.0,3.1]	54,032	
Black, Non-Hispanic	15.4	[13.0,18.2]	164,298	3.7	[2.7,5.1]	39,401	
Hispanic	17.6	[10.1,28.8]	20,527	8.0	[0.1, 5.7]	971	
Other, Non-Hispanic	21.0	[14.8,28.9]	38,714	1.9	[0.7,4.8]	3,442	
Don't know/No answer	18.7	[10.6,31.0]	11,510	2.0	[0.5,7.7]	1,219	
EDUCATION							
Did not graduate HS	27.2	[22.8,32.0]	171,217	3.7	[2.4,5.6]	23,133	
HS diploma/equivalent	18.2	[15.9,20.8]	219,299	2.6	[1.9,3.6]	31,355	
Some college/2-year college degree	20.8	[18.2,23.7]	211,274	3.0	[2.2,4.1]	30,453	
4-year college degree or higher	15.2	[13.0,17.7]	108,554	2.0	[1.3, 2.9]	14,124	
Don't know/No answer	10.0	[1.3,49.3]	447				
HOUSEHOLD INCOME							
Less than \$25,000	27.5	[24.5,30.7]	265,335	5.0	[3.8,6.6]	48,095	
\$25,000-\$49,999	20.5	[17.2,24.2]	134,572	2.7	[1.7,4.1]	17,511	
\$50,000-\$74,999	13.1	[9.8,17.2]	54,380	1.4	[0.8,2.5]	5,835	
\$75,000 or more	14.1	[11.5,17.1]	112,008	1.1	[0.6,1.8]	8,656	
Don't know/No answer	19.7	[16.5,23.4]	144,496	2.6	[1.8,3.7]	18,968	

# **Obesity**

Analysis of Section 7 ('Demographics') of the 2015 BRFSS Questionnaire

Obesity 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.

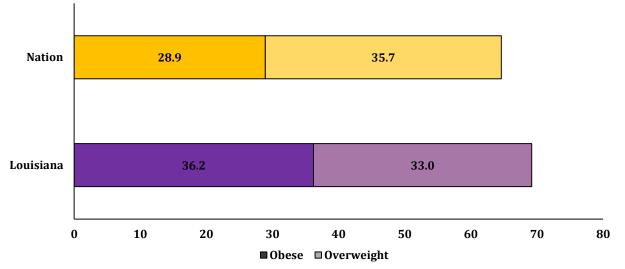
Obesity is substantially more prevalent in Louisiana than in the United States as a whole. Nationally, 35.7 percent of adults are overweight and 28.9 percent are obese. In Louisiana, the shares are 33.0 percent and 36.2 percent. Louisiana ranks second highest among states in obesity.

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 ten percentage points. Black adults in the state are more likely to suffer from obesity than white adults, 43.4 percent versus 34.3 percent. However, this difference disappears when accounting for differences in educational attainment and household income.

#### Significantly more Obesity in Louisiana Relative to United States

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



2015 Behavioral Risk Factor Surveillance System

Table 10: Weight and Obesity								
		Overweigl	ht*	Obese^				
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.		
Total	33.0	[31.2,34.9]	1,187,053	36.2	[34.3,38.1]	1,083,433		
AGE								
18-24	30.3	[24.2,37.2]	122,188	29.0	[22.8,36.2]	127,490		
25-34	32.8	[27.9,38.0]	166,229	28.1	[23.5,33.3]	193,752		
35-44	29.3	[24.8,34.2]	238,517	44.5	[39.3,49.8]	156,999		
45-54	34.7	[30.4,39.2]	230,355	41.6	[37.2,46.2]	191,848		
55-64	32.1	[28.6,35.8]	219,017	39.8	[36.1,43.7]	176,533		
65 and over	37.7	[34.6,41.0]	210,747	33.6	[30.6,36.8]	236,812		
GENDER								
Male	37.1	[34.2,40.0]	589,792	35.9	[33.1,38.9]	608,289		
Female	29.0	[26.8,31.4]	597,261	36.5	[34.0,39.0]	475,144		
RACE-ETHNICITY								
White, Non-Hispanic	33.2	[31.0,35.5]	688,983	34.3	[32.0,36.6]	667,277		
Black, Non-Hispanic	31.4	[27.9,35.2]	414,011	43.4	[39.4,47.5]	299,878		
Hispanic	33.9	[23.3,46.4]	32,444	30.2	[20.6,41.9]	36,448		
Other, Non-Hispanic	41.6	[32.6,51.2]	37,308	22.6	[16.2,30.6]	68,779		
Don't know/No answer	25.5	[12.5,45.0]	14,306	33.0	[19.5,50.1]	11,051		
EDUCATION								
Did not graduate HS	28.4	[23.8,33.4]	227,494	40.2	[34.8,45.9]	160,555		
HS diploma/equivalent	33.5	[30.3,36.8]	435,419	39.2	[35.9,42.6]	371,537		
Some college/2-year college degree	34.0	[30.6,37.7]	332,316	35.2	[31.7,38.8]	321,609		
4-year college degree or higher	34.9	[31.5,38.4]	190,632	29.1	[26.0,32.3]	228,639		
Don't know/No answer	28.4	[6.5,69.3]	1,192	31.0	[4.6,80.7]	1,094		
HOUSEHOLD INCOME								
Less than \$25,000	28.6	[25.3,32.0]	377,352	42.0	[38.3,45.8]	256,400		
\$25,000-\$49,999	33.1	[29.0,37.4]	237,783	37.6	[33.3,42.1]	209,122		
\$50,000-\$74,999	37.8	[32.2,43.7]	136,248	34.2	[28.8,40.1]	150,369		
\$75,000 or more	36.5	[32.8,40.4]	251,122	32.7	[29.1,36.5]	280,475		
Don't know/No answer	32.1	[27.9,36.6]	184,547	31.7	[27.3,36.3]	187,067		

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

^ BMI greater than or equal to 30

# **Disability**

Analysis of Section 7 ('Demographics') of the 2015 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, 22.8 percent of adults report limited activity due to physical, mental, or emotional problems, and 10.2 percent report health problems that require the use of special equipment such as a cane, a wheelchair, a special bed or a special telephone. These are both slightly higher than national shares, which are 20.1 percent and 8.8 percent respectively.

Additionally, 6.8 percent of Louisiana adults have serious difficulty seeing even when wearing glasses, which is two percentage points higher than the national average of 4.5 percent; 14.9 percent of Louisiana adults have difficulty concentrating, remembering or making decisions because of a physical, mental or emotional condition (the national share is 10.2 percent); 18.2 percent have difficulty walking or climbing stairs (the national share is 13.6 percent); 5.3 percent have difficulty dressing or bathing (the national share is 3.8 percent); and 9.6 percent have difficulty doing errands alone such as visiting a doctor's office or shopping (the national share is 6.9 percent).

#### Rates of Disability Frequently Outpace National Averages Percent reporting conditions of disability Limited activity 22.8 Use special equipment Vision impairment 10.2 Difficulty concentrating, remembering or deciding **14.9** Difficulty walking or climbing stairs 18.2 Difficulty dressing or bathing Difficulty doing errands alone 9.6 0 5 25 10 **15** 20 ■ Nation ■ Louisiana 2015 Behavioral Risk Factor Surveillance System

Table 11a: Disability										
	Physical, mental, or emotional			Healt	Health problems require use of			Vision impaired even when		
	pro	problem limits activity		special equipment			wearing glasses			
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	
Total	22.8	[21.3,24.4]	785,917	10.2	[9.2,11.3]	349,363	6.8	[5.9,7.8]	232719.0	
AGE										
18-24	7.1	[4.3,11.6]	31,295	0.4	[0.1, 2.8]	1,750	4.9	[2.5,9.4]	20995.0	
25-34	15.9	[12.4,20.0]	101,431	4.1	[2.4,6.8]	25,968	4.1	[2.6,6.5]	26229.0	
35-44	15.1	[11.6,19.4]	84,245	4.8	[3.0,7.7]	26,812	3.4	[2.1,5.7]	19173.0	
45-54	26.0	[22.3,30.2]	150,329	9.7	[7.3,12.8]	56,027	8.8	[6.7,11.6]	50635.0	
55-64	33.2	[29.8,36.8]	191,985	15.1	[12.5,18.1]	87,257	9.5	[7.4,12.0]	54495.0	
65 and over	35.0	[32.0,38.1]	226,632	23.4	[20.8,26.3]	151,550	9.5	[7.7,11.6]	61192.0	
GENDER										
Male	21.2	[18.9,23.6]	352,861	9.6	[8.1,11.4]	159,100	6.3	[5.0,7.8]	103616.0	
Female	24.4	[22.5,26.4]	433,056	10.7	[9.5,12.1]	190,264	7.3	[6.2,8.6]	129103.0	
RACE-ETHNICITY										
White, Non-Hispanic	24.8	[22.9,26.8]	517,261	9.5	[8.4,10.8]	198,068	6.4	[5.4,7.6]	133456.0	
Black, Non-Hispanic	18.3	[15.7,21.2]	183,422	12.4	[10.3,15.0]	123,465	7.1	[5.5,9.0]	70192.0	
Hispanic	21.6	[13.3,33.1]	25,181	3.9	[1.3,11.5]	4,573	4.8	[1.7,12.4]	5445.0	
Other, Non-Hispanic	27.6	[20.4,36.2]	49,422	10.0	[5.6,17.1]	17,823	9.7	[5.7,16.1]	17192.0	
Don't know/No answer	19.3	[10.8,32.1]	10,633	9.9	[5.0,18.6]	5,435	11.7	[5.0,24.9]	6434.0	
EDUCATION										
Did not graduate HS	32.1	[27.5,37.1]	192,274	16.8	[13.6,20.7]	100,029	13.9	[10.8,17.7]	82752.0	
HS diploma/equivalent	22.2	[19.7,24.8]	257,512	9.7	[8.2,11.5]	112,669	6.7	[5.3,8.5]	78044.0	
Some college/2-year college degree	24.1	[21.3,27.1]	236,493	9.8	[8.0,12.0]	95,542	4.4	[3.4,5.8]	43114.0	
4-year college degree or higher	14.3	[12.3,16.4]	99,084	6.0	[4.8, 7.4]	41,124	4.2	[3.1,5.6]	28809.0	
Don't know/No answer	12.4	[1.6,55.5]	554							
HOUSEHOLD INCOME										
Less than \$25,000	35.0	[31.7,38.4]	329,457	18.0	[15.6,20.7]	169,492	11.6	[9.6,13.9]	108763.0	
\$25,000-\$49,999	21.3	[18.1,24.8]	137,731	9.4	[7.4,11.9]	60,013	5.1	[3.6,7.0]	32284.0	
\$50,000-\$74,999	15.0	[11.6,19.2]	61,694	6.9	[4.6,10.1]	28,206	3.2	[1.9,5.6]	13215.0	
\$75,000 or more	13.0	[10.6,15.8]	102,416	3.7	[2.5,5.3]	28,879	3.2	[2.0,5.0]	24880.0	
Don't know/No answer	23.7	[20.2,27.5]	154,620	9.6	[7.5,12.3]	62,773	8.3	[6.0,11.2]	53577.0	

Table 11b: Disability				1				
	Difficulty concentrating,				ifficulty walk	_		
		nembering or	_		climbing stairs			
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.		
Total	14.9	[13.6,16.4]	508,611	18.2	[16.8,19.6]	616,469		
AGE								
18-24	14.9	[10.6, 20.6]	64,364	4.5	[2.4,8.3]	19,457		
25-34	13.3	[10.1,17.3]	83,461	4.4	[2.7,7.2]	27,462		
35-44	12.6	[9.5,16.5]	70,033	9.9	[7.0,13.8]	55,138		
45-54	15.8	[12.8,19.3]	89,731	18.9	[15.6,22.8]	107,347		
55-64	17.3	[14.6,20.5]	99,598	30.7	[27.3,34.3]	176,054		
65 and over	15.7	[13.4,18.3]	101,424	35.7	[32.7,38.9]	231,011		
GENDER								
Male	11.9	[10.1,14.1]	195,815	15.2	[13.3,17.3]	249,629		
Female	17.7	[15.9,19.7]	312,796	20.9	[19.1,22.8]	366,840		
RACE-ETHNICITY								
White, Non-Hispanic	15.5	[13.8,17.3]	321,012	18.3	[16.7,20.1]	379,437		
Black, Non-Hispanic	13.5	[11.3,16.1]	133,410	18.4	[15.8,21.2]	180,519		
Hispanic	8.3	[3.5,18.6]	9,529	10.1	[4.9,19.8]	11,610		
Other, Non-Hispanic	21.5	[14.6,30.6]	37,997	19.2	[13.1,27.2]	33,475		
Don't know/No answer	12.9	[6.3,24.4]	6,664	22.0	[12.7,35.5]	11,427		
EDUCATION								
Did not graduate HS	24.7	[20.5,29.5]	145,957	32.7	[28.1,37.7]	192,310		
HS diploma/equivalent	16.1	[13.8,18.7]	186,444	17.9	[15.7,20.3]	206,544		
Some college/2-year college degree	14.7	[12.4,17.4]	142,243	16.8	[14.5,19.3]	161,855		
4-year college degree or higher	4.9	[3.7,6.4]	33,413	8.1	[6.7,9.7]	55,206		
Don't know/No answer	12.4	[1.6,55.5]	554	12.4	[1.6,55.5]	554		
HOUSEHOLD INCOME								
Less than \$25,000	24.6	[21.6,27.9]	230,652	32.3	[29.2,35.7]	302,824		
\$25,000-\$49,999	13.2	[10.5,16.4]	83,777	16.4	[13.7,19.5]	103,508		
\$50,000-\$74,999	7.7	[5.0,11.8]	31,197	9.9	[7.3,13.3]	39,837		
\$75,000 or more	5.8	[4.1,8.1]	45,314	6.5	[4.9,8.5]	50,801		
Don't know/No answer	18.2	[15.0,21.9]	117,671	18.6	[15.5,22.1]	119,500		

Table 11c: Disability							
	Difficulty dressing			Difficulty doing			
		or bathir	ıg		errands alone		
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	
Total	5.3	[4.6,6.1]	179,750	9.6	[8.6,10.7]	323,639	
AGE							
18-24				3.8	[1.9, 7.6]	16,342	
25-34	1.7	[0.8, 3.8]	10,776	4.8	[3.0, 7.6]	30,090	
35-44	3.4	[2.0,5.6]	18,691	6.9	[4.8, 9.9]	38,091	
45-54	6.1	[4.3, 8.6]	34,570	9.5	[7.3,12.4]	54,070	
55-64	10.9	[8.7,13.5]	62,086	15.1	[12.5,18.1]	86,035	
65 and over	8.3	[6.7,10.2]	53,628	15.4	[13.1,17.9]	99,013	
GENDER							
Male	4.4	[3.4,5.7]	72,504	6.7	[5.4,8.2]	108,882	
Female	6.1	[5.2,7.2]	107,246	12.3	[10.8,13.9]	214,757	
RACE-ETHNICITY							
White, Non-Hispanic	4.0	[3.3,4.8]	83,329	8.9	[7.8,10.3]	184,573	
Black, Non-Hispanic	7.5	[5.9,9.5]	73,831	11.3	[9.3,13.7]	110,554	
Hispanic	4.0	[1.3,11.7]	4,573	8.4	[4.2,16.1]	9,591	
Other, Non-Hispanic	8.9	[5.0,15.6]	15,613	8.7	[5.1,14.5]	15,152	
Don't know/No answer	4.8	[1.9,11.7]	2,404	7.6	[3.4,16.1]	3,769	
EDUCATION							
Did not graduate HS	8.2	[6.1,11.0]	48,470	19.5	[15.9,23.7]	114,492	
HS diploma/equivalent	5.3	[4.2,6.6]	60,844	9.3	[7.7,11.2]	106,859	
Some college/2-year college degree	5.7	[4.3,7.5]	55,175	8.0	[6.5,9.9]	77,500	
4-year college degree or higher	2.2	[1.5,3.2]	15,261	3.7	[2.7,5.0]	24,789	
Don't know/No answer							
HOUSEHOLD INCOME							
Less than \$25,000	11.5	[9.5,13.8]	107,605	18.7	[16.3,21.5]	174,544	
\$25,000-\$49,999	3.9	[2.7,5.6]	24,793	7.2	[5.4,9.7]	45,698	
\$50,000-\$74,999	1.6	[0.7,3.3]	6,236	2.9	[1.7,5.0]	11,645	
\$75,000 or more	1.4	[0.8, 2.6]	10,924	2.4	[1.5,3.9]	18,774	
Don't know/No answer	4.7	[3.4,6.5]	30,192	11.5	[8.9,14.6]	72,978	

### **Tobacco Use**

Analysis of Section 9 ('Tobacco Use') of the 2015 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 20.6 percent in 2015 – tobacco use remains higher than the national rate of 15.8 percent. Louisiana adults are also more likely to use chewing tobacco, snuff, or snus: 5.7 percent versus 3.6 percent nationally.

Men are more likely than women to use tobacco – 23.1 percent versus 18.2 percent

for smoking cigarettes and 9.9 percent versus 1.7 percent for chewing tobacco, snuff or snus.

The decline in rates of smoking in Louisiana over the period from 2011 to 2015 have been most pronounced among those under the age of 35. The rate fell by eight percentage points for adults age 18 to 24 and by 10.5 percentage points for adults 35 to 44. The sharp decline in smoking among younger adults may indicate fewer tobacco-related health challenges for the state's population in the future.

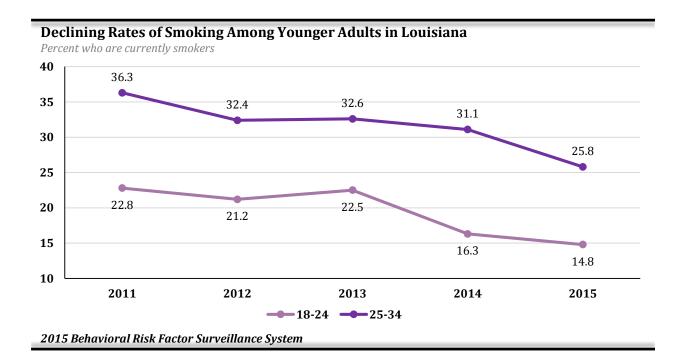


Table 12: Tobacco Use				T		
		Current smo			Use other tol	
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	20.6	[19.0,22.3]	734,331	5.7	[4.8,6.7]	191,166
AGE						
18-24	14.8	[10.5,20.5]	68,908	7.6	[4.6, 12.2]	32,404
25-34	25.8	[21.4,30.8]	171,185	8.3	[5.7,11.9]	51,025
35-44	23.1	[18.9,28.0]	133,806	4.8	[3.0,7.7]	26,484
45-54	24.5	[20.8,28.6]	146,288	5.7	[4.0, 8.1]	32,277
55-64	23.7	[20.6,27.1]	141,131	4.8	[3.4,6.8]	27,312
65 and over	10.9	[9.0,13.2]	73,012	3.4	[2.3,4.9]	21,664
GENDER						
Male	23.1	[20.6,25.9]	398,614	9.9	[8.2,11.9]	161,175
Female	18.2	[16.4,20.2]	335,717	1.7	[1.1,2.6]	29,991
RACE-ETHNICITY						
White, Non-Hispanic	21.3	[19.4,23.5]	456,575	6.8	[5.5,8.2]	139,062
Black, Non-Hispanic	19.4	[16.5,22.7]	206,415	3.0	[2.0,4.5]	29,303
Hispanic	23.1	[14.5,34.7]	26,953	8.3	[3.4,18.8]	9,530
Other, Non-Hispanic	18.5	[12.5,26.6]	34,165	5.3	[2.1,12.5]	9,179
Don't know/No answer	16.6	[8.7,29.4]	10,222	8.5	[2.9,22.3]	4,092
EDUCATION						
Did not graduate HS	33.3	[28.4,38.6]	210,017	5.4	[3.4,8.5]	31,463
HS diploma/equivalent	22.8	[20.1,25.8]	274,268	6.9	[5.3,8.9]	78,772
Some college/2-year college degree	19.7	[17.0,22.8]	200,549	6.3	[4.6,8.7]	60,725
4-year college degree or higher	6.9	[5.5,8.8]	49,497	3.0	[2.1,4.3]	20,205
Don't know/No answer						
HOUSEHOLD INCOME						
Less than \$25,000	29.8	[26.4,33.3]	287,012	4.8	[3.4,6.8]	44,706
\$25,000-\$49,999	20.5	[17.0,24.5]	134,580	6.7	[4.6,9.7]	42,015
\$50,000-\$74,999	24.0	[18.7,30.3]	99,840	5.9	[3.5,9.9]	23,736
\$75,000 or more	13.3	[10.7,16.5]	106,293	7.1	[5.2,9.5]	55,350
Don't know/No answer	14.5	[11.8,17.8]	106,606	4.0	[2.5,6.2]	25,357

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

### Alcohol Use

Analysis of Section 10 ('Alcohol Consumption') of the 2015 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. 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.

Six percent of Louisiana adults are heavy drinkers. The share for the United States as a whole is 5.4 percent. Heavy drinking is most

common among younger adults, and declines precipitously after the age of 54.

Unlike many other health behaviors, there appears to be no relationship between socioeconomic status – measured either as educational attainment or household income – and propensity for heavy drinking.

Binge drinking is no more common in Louisiana than across the country as a whole. Here, 15.7 percent adults report having engaged in binge drinking at some point in the previous month. Nationally, the share is 15.1 percent.

As with heavy drinking, binge drinking is most common among younger adults but declines after the age of 54.

One in five adult males in Louisiana engage in binge drinking.

Table 13: Alcohol use						
		Heavy drin	king*		Binge drinki	ng^
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	6.0	[5.1,7.0]	212,577	15.7	[14.2,17.2]	558,930
AGE						
18-24	7.5	[4.4,12.6]	35,071	23.4	[18.0,29.8]	109,064
25-34	8.1	[5.8,11.2]	53,433	25.0	[20.9,29.7]	165,778
35-44	6.4	[4.3, 9.4]	37,111	19.2	[15.5,23.6]	110,989
45-54	5.8	[3.8,8.6]	34,627	15.8	[12.6,19.6]	94,133
55-64	4.7	[3.4,6.4]	27,926	8.6	[6.7,10.9]	50,991
65 and over	3.7	[2.6,5.1]	24,411	4.2	[3.1,5.6]	27,975
GENDER						
Male	6.5	[5.1,8.2]	112,030	20.4	[18.0,23.1]	352,426
Female	5.5	[4.3,6.8]	100,547	11.2	[9.6,13.0]	206,504
RACE-ETHNICITY						
White, Non-Hispanic	6.8	[5.6,8.2]	144,931	16.7	[14.9,18.7]	356,615
Black, Non-Hispanic	4.5	[3.1,6.6]	48,309	12.5	[10.0,15.4]	132,699
Hispanic	4.2	[1.2, 13.8]	4,859	21.4	[12.7,33.7]	24,952
Other, Non-Hispanic	6.8	[3.4,13.0]	12,536	21.8	[14.7,31.1]	40,183
Don't know/No answer	3.2	[0.4,19.2]	1,942	7.3	[2.6,18.7]	4,482
EDUCATION						
Did not graduate HS	5.5	[3.3,8.9]	34,406	12.3	[8.8,16.9]	77,406
HS diploma/equivalent	5.5	[4.1,7.3]	65,940	14.7	[12.3,17.4]	176,294
Some college/2-year college degree	6.0	[4.4,8.2]	60,961	16.9	[14.2,20.0]	171,636
4-year college degree or higher	7.2	[5.5,9.4]	51,270	18.7	[15.9,21.8]	133,147
Don't know/No answer				10.0	[1.3,49.3]	447
HOUSEHOLD INCOME						
Less than \$25,000	6.3	[4.5,8.8]	60,689	12.7	[10.2,15.8]	122,559
\$25,000-\$49,999	5.8	[4.1,8.2]	38,439	14.6	[11.7,18.1]	96,016
\$50,000-\$74,999	9.1	[5.8,14.2]	37,984	23.7	[18.5,29.8]	98,536
\$75,000 or more	7.7	[5.9,10.0]	61,393	22.8	[19.5,26.6]	181,933
Don't know/No answer	1.9	[1.1,3.2]	14,072	8.2	[6.1,10.8]	59,886

<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

### Fruit and Vegetable Consumption

Analysis of Section 10 ('Fruits and Vegetables') of the 2015 BRFSS Questionnaire

A healthy diet contributes to many positive health outcomes, decreasing the risk of cardiovascular disease and diabetes and improves brain-functioning and perceptions of overall wellbeing.

The 2015 BRFSS survey asked how many times during the previous 30 days the respondent consumed a variety of foods and beverages: Fruit, beans, dark green vegetables (such as broccoli; romaine, chard, or collard greens; or spinach), orange-colored vegetables (such as sweet potatoes, pumpkin, winter squash, or carrots), other vegetables (such as tomatoes, corn, eggplant, peas, lettuce, cabbage, or non-fried white potatoes), and 100% pure fruit juices. These responses are combined to calculate the share of individuals who consume fruit or vegetables regularly.

Fewer than half of Louisiana residents (43.2 percent) eat fruit at least once per day. This falls about ten points below the national share of 52.8 percent. More Louisiana adults eat vegetables every day (58.8 percent), but,

again, the state lags behind the nation as a whole (67.6 percent). Gender and education are predictors of regular fruit consumption. Nearly half of women in Louisiana (46.7 percent) eat fruit on a daily basis, but just 39.4 percent of men do. The share of adults who eat fruit daily rises with higher levels of educational attainment with just 38.8 percent of those who did not finish high school eating fruit this often and 48.0 percent of those with a four-year college degree eating fruit this often.

There are more socio-economic and demographic differences in vegetable consumption. For example, 45.4 percent of adults without a high school diploma eat vegetables daily compared to 72.2 percent of those with a four-year college degree. Whites are more than twenty percentage points more likely to eat vegetables on a daily basis than blacks (65.9 percent versus 44.2 percent).

Fewer than half of Louisiana adults eat fruit on a daily basis.

Table 14: Consuming Fruits and Veg	etables						
		Consume at le			Consume at le		
	se	erving of fruit	per day	serving of vegetables per day			
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	
Total	43.2	[41.3,45.1]	1,540,182	58.8	[56.9,60.6]	2,096,309	
AGE							
18-24	38.9	[32.4,45.8]	181,235	51.4	[44.5,58.2]	239,405	
25-34	42.2	[37.3,47.3]	279,626	60.4	[55.3,65.2]	399,862	
35-44	43.6	[38.6,48.8]	252,189	66.2	[61.1,71.0]	382,904	
45-54	41.7	[37.5,46.1]	249,096	59.8	[55.4,64.1]	357,329	
55-64	40.2	[36.7,43.9]	239,824	56.2	[52.5,59.9]	335,419	
65 and over	50.6	[47.5,53.8]	338,212	57.1	[53.9,60.2]	381,390	
GENDER							
Male	39.4	[36.5,42.3]	679,029	58.2	[55.2,61.1]	1,003,416	
Female	46.7	[44.3,49.1]	861,154	59.3	[56.9,61.7]	1,092,893	
RACE-ETHNICITY							
White, Non-Hispanic	42.6	[40.3,44.9]	910,888	65.9	[63.7,68.1]	1,409,903	
Black, Non-Hispanic	45.4	[41.6,49.2]	483,511	44.2	[40.5,48.0]	471,252	
Hispanic	43.9	[32.8,55.6]	51,259	66.8	[55.0,76.8]	78,029	
Other, Non-Hispanic	43.0	[34.4,52.1]	79,302	59.8	[50.9,68.1]	110,217	
Don't know/No answer	24.8	[14.8,38.4]	15,223	43.8	[29.6,59.1]	26,908	
EDUCATION							
Did not graduate HS	38.8	[33.7,44.1]	244,267	45.4	[40.2,50.8]	286,416	
HS diploma/equivalent	43.3	[40.0,46.6]	520,720	55.2	[51.9,58.5]	664,576	
Some college/2-year college degree	42.3	[38.9,45.9]	430,321	61.9	[58.3,65.3]	629,156	
4-year college degree or higher	48.0	[44.7,51.4]	342,681	72.2	[69.1,75.0]	514,741	
Don't know/No answer	49.2	[14.9,84.2]	2,193	31.8	[8.9,69.2]	1,420	
HOUSEHOLD INCOME							
Less than \$25,000	43.4	[39.8,47.0]	418,408	50.4	[46.8,54.1]	486,577	
\$25,000-\$49,999	45.1	[40.7,49.5]	296,294	60.8	[56.3,65.1]	399,697	
\$50,000-\$74,999	48.9	[43.1,54.8]	203,397	68.7	[63.1,73.8]	285,793	
\$75,000 or more	43.0	[39.2,46.9]	342,705	72.4	[68.6,75.9]	576,676	
Don't know/No answer	38.1	[34.0,42.4]	279,379	47.4	[43.1,51.7]	347,566	

# **Physical Activity**

Analysis of Section 11 ('Exercise') of the 2015 BRFSS Questionnaire

Louisiana adults do not get enough physical activity to meet recommended guidelines for aerobic or muscular health. Generally, Louisiana residents as a whole get less exercise than their peers across the country. In this state, 60.3 percent of adults report participating in physical activities or exercises other than their regular job in the past month. Nationally, 65.8 percent report getting this kind of physical activity.

Louisiana's lag behind the rest of the country may be due to lower levels of household income and educational attainment in this state. Exercise is strongly correlated with both education and income. The share reporting exercise rises from 53.6 percent in the bottom 30 percent of household income to 71.2 percent in the top 30 percent of household income. The exercise gap between college graduates and those who did not finish high school is similar in magnitude, 22.9 percentage points.

There are also gender and age gaps. Among women, 57.9 percent report exercising in the previous month. Among men, 62.9 percent

do. Nearly 70 percent of adults under the age of 35 report getting physical activity outside of work, but the share drops to about 55 percent among those 65 years or older.

For most Louisianans, like most Americans, the physical activity they do get falls well short of recommended guidelines for good health. Less than half of state adult residents meet the recommended guidelines for aerobic health: 38.9 percent. Even fewer meet guidelines for strength: 23. 6 percent. In fact, only about one in seven adults in Louisiana meet the recommendations for both aerobic and strength health: 15.5 percent.

As with physical activity generally, there are variations across age, gender and socio-economic status in the extent to which Louisiana adults meet aerobic recommendations, muscle strengthening recommendation, or both. However these difference are more modest than for physical activity generally, and in no broad demographic subgroup does a majority meet these recommendations.

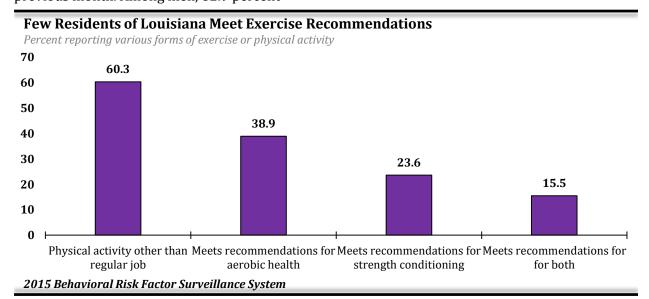


Table 15a: Exercise				T				
		l in physical act	-	Meet r	Meet recommended guidelines for aerobic health			
		an job in past n		0.4				
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.		
Total	60.3	[58.4,62.1]	2,150,956	38.9	[37.1,40.8]	1,389,401		
AGE								
18-24	66.6	[60.0,72.7]	310,216	42.0	[35.3,49.0]	195,561		
25-34	66.9	[62.0,71.5]	443,173	42.1	[37.1,47.2]	278,625		
35-44	63.2	[58.0,68.1]	365,299	36.5	[31.7,41.5]	210,907		
45-54	57.6	[53.1,61.9]	343,780	39.1	[35.0,43.5]	233,744		
55-64	53.5	[49.8,57.1]	318,754	34.4	[31.0,38.0]	205,072		
65 and over	55.4	[52.2,58.5]	369,734	39.8	[36.7,42.9]	265,493		
GENDER								
Male	62.9	[60.0,65.7]	1,084,160	42.1	[39.1,45.1]	725,479		
Female	57.9	[55.5,60.3]	1,066,796	36.0	[33.7,38.4]	663,922		
RACE-ETHNICITY								
White, Non-Hispanic	62.8	[60.5,65.0]	1,342,863	41.2	[39.0,43.5]	882,118		
Black, Non-Hispanic	55.3	[51.5,59.0]	588,920	33.6	[29.9,37.4]	357,593		
Hispanic	56.0	[44.2,67.2]	65,461	38.7	[28.2,50.3]	45,179		
Other, Non-Hispanic	66.7	[58.2,74.3]	123,052	45.6	[36.8,54.6]	84,018		
Don't know/No answer	49.9	[34.8,65.0]	30,660	33.3	[20.8,48.8]	20,494		
EDUCATION								
Did not graduate HS	52.4	[47.0,57.7]	330,185	34.5	[29.4,40.1]	217,697		
HS diploma/equivalent	56.9	[53.6,60.1]	683,920	35.7	[32.5,39.1]	429,829		
Some college/2-year college degree	58.6	[55.0,62.1]	595,493	37.4	[34.1,41.0]	380,563		
4-year college degree or higher	75.3	[72.4,78.1]	537,494	50.4	[47.0,53.8]	359,566		
Don't know/No answer	86.7	[54.6,97.2]	3,865	39.1	[9.6,79.6]	1,746		
HOUSEHOLD INCOME								
Less than \$25,000	53.6	[49.9,57.2]	516,610	33.4	[30.0,37.0]	322,108		
\$25,000-\$49,999	60.5	[56.1,64.7]	397,941	39.8	[35.5,44.2]	261,514		
\$50,000-\$74,999	71.4	[66.0,76.2]	296,741	45.6	[39.8,51.5]	189,623		
\$75,000 or more	71.2	[67.5,74.7]	567,491	47.7	[43.8,51.6]	379,873		
Don't know/No answer	50.8	[46.4,55.1]	372,174	32.2	[28.2,36.6]	236,282		

Table 15b: Exercise								
		commended gui			commended gui			
		rength conditio	_		aerobic health & strength			
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.		
Total	23.6	[21.9,25.3]	840,195	15.5	[14.1,17.1]	554,505		
AGE								
18-24	35.3	[28.9,42.4]	164,580	23.5	[17.7,30.5]	109,620		
25-34	31.6	[27.0,36.6]	209,336	20.8	[16.9,25.3]	137,603		
35-44	24.3	[20.1,29.1]	140,445	15.1	[11.7,19.3]	87,550		
45-54	20.7	[17.5,24.4]	123,809	15.5	[12.6,18.9]	92,521		
55-64	14.9	[12.7,17.5]	89,113	9.3	[7.5,11.4]	55,195		
65 and over	16.9	[14.7,19.4]	112,912	10.8	[9.0,12.9]	72,015		
GENDER								
Male	28.8	[26.0,31.7]	495,808	18.8	[16.4,21.5]	324,179		
Female	18.7	[16.9,20.7]	344,387	12.5	[11.0,14.2]	230,326		
RACE-ETHNICITY								
White, Non-Hispanic	23.4	[21.4,25.5]	500,955	15.0	[13.3,16.8]	320,631		
Black, Non-Hispanic	23.9	[20.6,27.6]	254,824	16.5	[13.5,19.9]	175,568		
Hispanic	19.7	[12.2,30.4]	23,066	12.7	[7.1,21.7]	14,888		
Other, Non-Hispanic	24.9	[18.0,33.5]	45,980	17.9	[11.9,26.1]	33,038		
Don't know/No answer	25.0	[14.1,40.3]	15,369	16.9	[8.0,32.1]	10,380		
EDUCATION								
Did not graduate HS	19.7	[15.2,25.2]	124,435	14.5	[10.4,19.8]	91,096		
HS diploma/equivalent	19.7	[17.0,22.7]	237,022	11.5	[9.3,14.0]	137,987		
Some college/2-year college degree	24.2	[21.1,27.6]	245,965	15.9	[13.3,18.8]	161,165		
4-year college degree or higher	32.6	[29.5,35.9]	232,609	23.0	[20.2,26.1]	164,257		
Don't know/No answer	3.7	[0.4,24.6]	163					
HOUSEHOLD INCOME								
Less than \$25,000	19.0	[16.2,22.2]	183,461	11.7	[9.4,14.5]	113,120		
\$25,000-\$49,999	21.8	[18.3,25.7]	143,146	15.3	[12.1,19.0]	100,392		
\$50,000-\$74,999	28.9	[23.5,35.0]	120,259	18.5	[13.9,24.3]	77,105		
\$75,000 or more	29.9	[26.4,33.6]	238,013	19.9	[17.0,23.1]	158,226		
Don't know/No answer	21.2	[17.5,25.4]	155,315	14.4	[11.1,18.5]	105,663		

#### **Seat Belt Use**

Analysis of Section 13 ('Seatbelt Use') of the 2015 BRFSS Questionnaire

The vast majority of Louisiana adults (77.0 percent) report that they always wear their seatbelt when riding in a car. This is similar to the share of American adults as a whole, which is 77.3 percent.

There are significant differences across age groups. For example, 63.2 percent of adults under the age of 25 always wear a seat belt, but the share among those 65 or older is twenty percentage points higher (83.2 percent).

Women, adults with a college degree and whites are more likely to say they always wear a seatbelt. Among women, 81.0 percent report always wearing their seatbelt. For men, the share is 72.6 percent, an 8.4 percentage point gap. The difference between those without a high school diploma and those with a college degree is 10.1 percentage points. White seat belt use is higher than black seatbelt use by about seven percentage points, but the gap vanishes when controlling for differences in education and other background characteristics.

Table 16: Seat Belt Use			
	A	lways wears :	seatbelt
	%	95% CI	Est. Pop.
Total	77.0	[75.2,78.6]	2,745,192
AGE			
18-24	63.2	[56.3,69.6]	294,408
25-34	73.6	[68.9,77.8]	487,512
35-44	78.3	[73.4,82.4]	452,602
45-54	78.2	[74.2,81.6]	466,712
55-64	81.9	[78.7,84.7]	488,279
65 and over	83.2	[80.8,85.4]	555,679
GENDER			
Male	72.6	[69.8,75.3]	1,252,129
Female	81.0	[78.9,82.9]	1,493,062
RACE-ETHNICITY			
White, Non-Hispanic	79.8	[77.8,81.7]	1,707,220
Black, Non-Hispanic	72.9	[69.3,76.3]	777,354
Hispanic	78.0	[67.0,86.1]	91,164
Other, Non-Hispanic	75.2	[67.0,81.9]	138,705
Don't know/No answer	50.0	[34.9,65.1]	30,749
EDUCATION			
Did not graduate HS	73.5	[68.4,78.0]	462,969
HS diploma/equivalent	75.5	[72.4,78.3]	907,668
Some college/2-year college degree	76.1	[72.7,79.2]	773,843
4-year college degree or higher	83.7	[80.9,86.1]	596,847
Don't know/No answer	86.7	[54.6,97.2]	3,865
HOUSEHOLD INCOME			
Less than \$25,000	77.2	[73.9,80.2]	744,612
\$25,000-\$49,999	76.9	[72.7,80.6]	505,727
\$50,000-\$74,999	79.5	[73.9,84.1]	330,361
\$75,000 or more	82.9	[79.3,85.9]	660,081
Don't know/No answer	68.8	[64.6,72.7]	504,410

### Immunizations among the Elderly

Analysis of Section 14 ('Immunization') of the 2015 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.

Among the elderly population of the state, 50.2 percent have received vaccination against the flu during the previous year, comparable to the national rate for elderly flu vaccination (51.4 percent).

Black seniors in the state, however, lag significantly behind white seniors (40.8 percent versus 53.9 percent). The racial gap is not a reflection of differences in socioeconomic status, as educational attainment and household income are more modestly related to receiving a flu shot among elderly Louisiana residents.

Among this same population of Louisiana residents 65 or older, 60.7 percent have received a pneumonia vaccination at some point in their lives. The nationwide share (58.6 percent) is similar to the state. However, as with flu vaccination among the elderly, a racial gap exists for pneumonia vaccination. Whereas 66.2 percent of white elderly residents of the state have received a pneumonia vaccination, just half of black elderly residents have (50.2 percent). Again, the race disparity in vaccination does not merely reflect differences in socio-economic characteristics. While educational attainment and household earnings are modestly associated with receipt of vaccination, there is a 15.9 percentage point gap between white elderly residents and black elderly residents of the state even after statistically controlling for those other factors.

Table 17: Immunizations among the		vaccine in pa	st vear*	D	neumonia vad	rcine*
	%	95% CI	Est. Pop.	1	95% CI	Est. Pop.
Total	50.2	[47.0,53.3]	349,617	60.7	[57.5,63.8]	423,053
AGE						
18-24						
25-34						
35-44						
45-54						
55-64						
65 and over	50.2	[47.0,53.3]	349,617	60.7	[57.5,63.8]	423,053
GENDER						
Male	53.1	[47.7,58.3]	161,534	60.3	[54.9,65.5]	183,552
Female	47.9	[44.0,51.8]	188,083	61.0	[57.1,64.7]	239,502
RACE-ETHNICITY						
White, Non-Hispanic	53.9	[50.3,57.6]	265,832	66.2	[62.6,69.5]	326,013
Black, Non-Hispanic	40.8	[34.1,47.8]	63,831	50.2	[43.3,57.1]	78,579
Hispanic	70.8	[44.0,88.2]	4,555	53.6	[24.3,80.6]	3,450
Other, Non-Hispanic	56.6	[38.1,73.5]	11,373	52.5	[34.2,70.2]	10,537
Don't know/No answer	18.9	[8.4,37.3]	4,025	21.1	[9.6,40.3]	4,476
EDUCATION						
Did not graduate HS	46.2	[38.5,54.1]	74,710	58.9	[50.8,66.5]	95,276
HS diploma/equivalent	47.5	[42.4,52.7]	116,605	59.2	[53.9,64.2]	145,140
Some college/2-year college degree	56.0	[49.7,62.1]	94,359	61.9	[55.5,67.9]	104,280
4-year college degree or higher	53.8	[47.8,59.6]	63,943	65.2	[59.2,70.7]	77,549
Don't know/No answer				32.3	[5.5,79.6]	810
HOUSEHOLD INCOME						
Less than \$25,000	50.5	[45.0,56.1]	114,330	63.9	[58.4,69.1]	144,559
\$25,000-\$49,999	53.1	[46.5,59.6]	80,134	63.8	[57.2,69.8]	96,221
\$50,000-\$74,999	58.8	[48.6,68.4]	33,135	66.3	[56.2,75.1]	37,346
\$75,000 or more	59.0	[49.7,67.7]	42,683	70.2	[60.7,78.2]	50,792
Don't know/No answer	41.5	[35.4,47.9]	79,334	49.2	[42.7,55.7]	94,136

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

# **HIV/AIDS Screening**

Analysis of Section 18 ('HIV/AIDS') of the 2015 BRFSS Questionnaire

According to recent Center for Disease Control estimates, Baton Rouge and New Orleans rank near the top 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 40.2 percent, while nationally the share is 36.1 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 approximately six in ten saying they have been tested. A lower share of 18-24 year olds have been tested for HIV (38.8 percent), but the least likely age groups to have been tested are age 55 to 64 (28.7 percent) and age 65 or older (14.3 percent).

Nearly half of adults (46.0 percent) in the bottom 30 percent of the distribution of household income in Louisiana have been tested for HIV. The likelihood of having been tested declines further up the income ladder: 39.1 percent of adults with household income in the top 30 percent of the state (\$75,000 or more) have been tested.

Less than a third of whites (31.8 percent) in Louisiana have been tested for HIV, but more than half of blacks (55.3 percent) have been tested. The racial gap does not simply reflect differences in average household income across these groups. Even when statistically accounting for socioeconomic and demographic differences between whites and blacks in the state, blacks are 24.7 percentage points more likely to have been tested.

Table 18: HIV Testing			
		Ever tested fo	or HIV
	%	95% CI	Est. Pop.
Total	40.2	[38.1,42.2]	1,232,397
AGE			
18-24	38.8	[31.6,46.5]	144,666
25-34	58.5	[52.9,63.9]	321,548
35-44	61.5	[56.2,66.6]	317,761
45-54	41.4	[36.9,46.1]	214,771
55-64	28.7	[25.3,32.3]	149,605
65 and over	14.3	[11.9,17.0]	84,046
GENDER			
Male	37.6	[34.5,40.8]	555,103
Female	42.6	[40.0,45.2]	677,294
		_	
RACE-ETHNICITY			_
White, Non-Hispanic	31.8	[29.5,34.3]	603,840
Black, Non-Hispanic	55.3	[51.1,59.4]	476,175
Hispanic	55.0	[42.7,66.8]	59,188
Other, Non-Hispanic	47.9	[38.4,57.5]	78,991
Don't know/No answer	37.1	[22.7,54.1]	14,203
EDUCATION			
Did not graduate HS	37.0	[31.4,42.9]	191,615
HS diploma/equivalent	38.1	[34.5,41.7]	388,713
Some college/2-year college degree	42.8	[39.1,46.7]	381,158
4-year college degree or higher	42.4	[38.8,46.1]	269,719
Don't know/No answer	28.5	[4.3,78.2]	1,192
•			
HOUSEHOLD INCOME			
Less than \$25,000	46.0	[42.2,50.0]	383,614
\$25,000-\$49,999	40.1	[35.5,44.9]	232,456
\$50,000-\$74,999	40.8	[34.9,46.9]	153,841
\$75,000 or more	39.1	[35.1,43.3]	285,867
Don't know/No answer	32.2	[27.7,37.1]	176,618

## Caregiving

Analysis of Module 4 ('Caregiver') of the 2015 BRFSS Questionnaire

In 2015, the Louisiana Department of Health included the optional 'Caregiver' module in the data collection for Behavioral Risk Factor Surveillance System in the state. The module contains questions asking respondents about whether or not they provide regular care or assistance to a friend or family member who has a health problem or disability, frequency of care or assistance, and what kinds of activity they help with.

Approximately one in four Louisiana adults (26.5 percent) provided regular care or assistance for a friend or family member suffering from a health problem or disability during the month before the survey interview. There are few demographic differences in the likelihood of caring for a friend or family member, with the exception of household income. Individuals in the top 30 percent of household income (approximately \$75,000 or more) are slightly less likely to provide regular care or assistance (21.2 percent) then those with lower household earnings (29.0 percent).

Most of these caregivers are providing longterm care or assistance to a friend of family member. Two-thirds (67.5 percent) have provided care or assistance for more than six months, including 30.1 percent who have provided care or assistance for more than five years. Another 14 percent have provided care or assistance for more than one month but less than six months.

Nearly one-fifth (19.0 percent) of these caregivers provide the equivalent of a full work week worth of care or assistance, that is, 40 hours or more per week. An additional 13.2 percent provide 20 to 39 hours of care or assistance per week. Approximately one half (49.2 percent) provide eight or fewer hours of care per week.

The most common health problems, long-term illnesses, or disabilities that require assistance from these caregivers are cancer (9.3 percent) and dementia or other cognitive impairment disorders (8.8 percent). The full range of conditions requiring assistance from these individual also includes arthritis; asthma; chronic respiratory conditions; developmental disabilities, such as autism, Down's Syndrome, and spina bifida; diabetes; heart disease; HIV; mental illness such as anxiety, depression, or schizophrenia; organ failure or diseases; and substance abuse.

In the previous month, more than half (54.2 percent) of these caregivers provided assistance by managing personal care such as giving medications, feeding, dressing, or bathing. More than three-fourths (76.2 percent) managed household tasks such as cleaning, managing money, or preparing meals for the individual to whom they provide care.

Just over a third of these individuals are providing regular care to a parent or parent of a spouse (35.5 percent). Another 10.7 percent provide care for a spouse or same-sex partner, and 8.9 percent provide care to a child. Nearly a third (29.2 percent) provide car to other relatives, such as grandparents, grandchildren, or siblings. Fifteen percent provide care for non-relatives.

Table 19a: Caregiving									
	P	rovide regula	r care	Mo	More than six months*			ours or more	per week*
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.
Total	26.5	[24.7,28.4]	778,572	67.5	[63.6,71.1]	523,873	19.0	[16.0,22.3]	147157.0
AGE									
18-24	21.7	[16.0,28.8]	74,947	62.2	[45.6,76.3]	46,588	5.6	[1.3,20.8]	4161.0
25-34	25.3	[20.3,31.1]	126,482	65.8	[53.3,76.5]	82,572	20.1	[11.3,33.1]	25201.0
35-44	30.8	[25.9,36.1]	150,529	67.3	[57.3,75.8]	100,511	11.6	[6.6,19.6]	17334.0
45-54	30.1	[26.0,34.5]	150,740	65.9	[57.5,73.4]	99,319	24.5	[18.1,32.4]	36961.0
55-64	26.5	[23.2,30.1]	136,701	76.2	[69.8,81.6]	104,210	24.8	[19.0,31.7]	33834.0
65 and over	23.8	[21.0,26.9]	139,173	65.2	[58.1,71.6]	90,673	21.3	[16.1,27.6]	29667.0
GENDER									
Male	24.5	[21.8,27.4]	341,918	69.6	[63.1,75.4]	238,031	11.5	[8.4,15.4]	39207.0
Female	28.4	[26.1,30.8]	436,654	65.8	[60.9,70.3]	285,841	24.9	[20.5,29.8]	107951.0
RACE-ETHNICITY									
White, Non-Hispanic	26.3	[24.1,28.5]	479,173	67.9	[63.2,72.2]	323,690	17.9	[14.5,22.0]	85516.0
Black, Non-Hispanic	27.4	[23.7,31.4]	230,409	64.8	[56.5,72.3]	149,273	19.5	[14.0,26.6]	44904.0
Hispanic	26.6	[16.7,39.5]	25,518	84.8	[62.8,94.9]	21,648	16.0	[5.9,36.7]	4086.0
Other, Non-Hispanic	23.0	[16.1,31.7]	31,978	73.0	[54.7,85.8]	23,346	29.3	[15.3,48.9]	9381.0
Don't know/No answer	32.4	[18.7,49.9]	11,494	51.5	[24.9,77.3]	5,916	28.5	[10.0,58.7]	3271.0
EDUCATION									
Did not graduate HS	24.4	[19.8,29.7]	121,768	73.5	[62.2,82.4]	89,511	20.9	[13.6,30.8]	25410.0
HS diploma/equivalent	26.2	[23.1,29.6]	262,737	75.6	[68.8,81.2]	197,741	24.8	[18.9,31.7]	64892.0
Some college/2-year college degree	30.1	[26.7,33.8]	251,394	62.5	[55.5,69.0]	157,051	15.3	[11.1,20.8]	38497.0
4-year college degree or higher	23.8	[20.8,27.0]	141,164	55.9	[48.2,63.3]	78,316	12.2	[8.6,17.0]	17107.0
Don't know/No answer	36.1	[7.3,80.2]	1,508	83.1	[23.4,98.7]	1,253	83.1	[23.4,98.7]	1253.0
HOUSEHOLD INCOME									
Less than \$25,000	29.2	[25.7,33.0]	233,288	68.0	[60.6,74.6]	158,715	24.7	[18.6,31.9]	57523.0
\$25,000-\$49,999	28.4	[24.3,32.9]	160,657	74.5	[65.8,81.5]	118,833	20.4	[14.7,27.7]	32559.0
\$50,000-\$74,999	29.5	[24.0,35.7]	103,029	70.8	[59.9,79.7]	72,905	12.2	[6.8,21.0]	12560.0
\$75,000 or more	21.2	[18.2,24.7]	147,836	59.4	[50.9,67.4]	87,180	11.2	[7.0,17.5]	16416.0
Don't know/No answer	25.4	[21.4,30.0]	133,762	64.5	[54.4,73.4]	86,240	21.0	[14.1,30.1]	28099.0

<sup>\*</sup> Among those who provide regular care or assistance for a friend or family member suffering from a health problem or disability

Table 19b: Caregiving							
		iged personal		Managed household tasks			
	as m	edications, fe	_	:	such as cleaning or		
	07	dressing*		07	preparing me		
m . 1	<u>%</u>	95% CI	Est. Pop.	%	95% CI	Est. Pop.	
Total	54.2	[50.1,58.2]	417,756	76.2	[72.4,79.5]	585,916	
AGE							
18-24	40.5	[26.0,56.8]	30,343	71.6	[54.5,84.2]	53,687	
25-34	67.3	[55.0,77.6]	84,389	75.3	[61.5,85.3]	93,238	
35-44	53.1	[42.8,63.2]	77,858	84.5	[76.3,90.3]	123,875	
45-54	55.9	[47.5,63.9]	84,229	76.6	[68.7,83.0]	115,221	
55-64	59.2	[51.7,66.3]	79,971	79.4	[72.5,85.0]	107,252	
65 and over	44.0	[37.0,51.2]	60,965	66.9	[59.8,73.2]	92,643	
GENDER							
Male	43.0	[36.4,49.7]	145,547	68.8	[62.0,74.8]	233,061	
Female	62.9	[58.1,67.6]	272,209	82.0	[78.1,85.3]	352,855	
RACE-ETHNICITY							
White, Non-Hispanic	52.2	[47.3,57.1]	247,444	76.3	[71.8,80.3]	361,463	
Black, Non-Hispanic	59.8	[51.3,67.7]	136,454	78.6	[70.9,84.8]	178,080	
Hispanic	47.5	[24.8,71.3]	12,131	69.1	[41.4,87.6]	17,638	
Other, Non-Hispanic	46.8	[29.4,64.9]	14,959	64.0	[44.7,79.6]	20,457	
Don't know/No answer	58.9	[29.9,82.8]	6,767	72.0	[39.2,91.1]	8,279	
EDUCATION							
Did not graduate HS	45.9	[34.7,57.4]	55,566	73.6	[62.6,82.2]	89,104	
HS diploma/equivalent	56.6	[49.2,63.8]	147,131	76.8	[69.5,82.8]	199,514	
Some college/2-year college degree	55.3	[48.2,62.2]	138,490	76.1	[69.5,81.7]	189,236	
4-year college degree or higher	54.4	[46.9,61.7]	75,317	77.3	[70.5,82.9]	106,808	
Don't know/No answer	83.1	[23.4,98.7]	1,253	83.1	[23.4,98.7]	1,253	
WOMEN OF MARKET							
HOUSEHOLD INCOME	<b></b>		40= +0+	04.0	F= 4 0 0 = 0 = 0 =	10610:	
Less than \$25,000	58.6	[51.0,65.7]	135,491	81.0	[74.9,85.9]	186,104	
\$25,000-\$49,999	54.6	[45.3,63.5]	86,763	82.9	[74.6,88.9]	131,583	
\$50,000-\$74,999	58.3	[46.3,69.4]	59,441	71.9	[58.7,82.2]	73,369	
\$75,000 or more	51.9	[43.5,60.2]	75,356	71.5	[63.2,78.6]	103,782	
Don't know/No answer	45.4	[36.0,55.1]	60,705	68.1	[58.1,76.7]	91,077	

<sup>\*</sup> Among those who provide regular care or assistance for a friend or family member suffering from a health problem or disability

# **Cognitive Decline**

Analysis of Module 6 ('Cognitive Decline') of the 2015 BRFSS Questionnaire

In 2015, the Louisiana Department of Health included the optional 'Cognitive Decline' module in the data collection for Behavioral Risk Factor Surveillance System in the state. The module contains questions asking respondents 45 years of age or older about experiencing confusion and memory loss.

Fourteen percent of Louisiana adults 45 years of age or older experienced confusion or memory loss with increasing frequency or severity during the year prior to the survey interview. Interestingly, this share remains stable across all age groups over 44 years.

There are significant differences by socioeconomic status. The shares among individuals without a high school diploma or with household income below \$25,000 are 20.0 percent and 24.7 percent, respectively, while only 6.6 percent of individuals with a four-year college degree and 9.0 percent of individuals with household income of \$75,000 or more have experience worsening confusion or memory loss. Of those experiencing worsening confusion or memory loss over the previous year, 17.9 percent say it "always" or "usually" has caused them to give up day-to-day household activities or chores, such as cooking, cleaning, taking medications, driving, or paying bills. A similar share (16.9 percent) say cognitive decline has "always" or "usually" caused them to need assistance with these day-to-day activities. Yet, among those requiring assistance, 14.5 percent say they "rarely or "never" receive necessary assistance.

Similarly, 18.3 percent say confusion or memory loss interfered with their ability to work, volunteer, or engage in social activities outside the home.

Only 37.7 percent of individuals experiencing worsening confusion or memory loss over the previous year have discussed it with a health care professional.

Table 20a: Cognitive Decline										
	Experienced worsening						"Always" or "usually" need			
	confusion				"Always" or "usually" give up			help		
	or memory loss in past year*			h	household activities^			with day-to-day activities^		
	%	95% CI	Est. Pop.		95% CI	Est. Pop.		95% CI	Est. Pop.	
Total	14.4	[12.8,16.2]	228,967	17.9	[13.6,23.3]	42,913	16.9	[12.7,22.2]	40480.0	
AGE										
18-24										
25-34										
35-44										
45-54	14.5	[11.2,18.5]	71,448	18.1	[9.5,31.5]	13,276	16.4	[8.3,30.0]	12074.0	
55-64	13.4	[11.0,16.4]	68,814	18.2	[11.5,27.7]	13,129	19.9	[13.4,28.6]	14359.0	
65 and over	15.3	[13.1,17.9]	88,704	17.6	[11.9,25.2]	16,508	15.0	[9.4,23.0]	14047.0	
GENDER										
Male	15.0	[12.5,18.0]	110,394	20.0	[12.7,30.0]	22,550	18.1	[11.1,28.2]	20463.0	
Female	13.9	[12.0,16.1]	118,573	16.1	[11.7,21.7]	20,363	15.8	[11.5,21.3]	20018.0	
RACE-ETHNICITY										
White, Non-Hispanic	14.2	[12.4,16.3]	152,446	15.8	[11.4,21.5]	25,514	14.5	[10.3,20.2]	23456.0	
Black, Non-Hispanic	13.5	[10.5,17.1]	55,667	22.2	[13.2,34.7]	12,687	23.1	[14.2,35.3]	13211.0	
Hispanic	18.0	[6.8,39.7]	5,228							
Other, Non-Hispanic	18.8	[9.1,34.9]	10,506	44.8	[13.6,80.7]	4,711	36.3	[8.3,78.2]	3813.0	
Don't know/No answer	25.5	[9.7,52.0]	5,121							
EDUCATION										
Did not graduate HS	24.7	[19.5,30.7]	74,622	16.8	[9.6,27.6]	12,766	12.8	[7.1,22.2]	9753.0	
HS diploma/equivalent	12.6	[10.3,15.2]	70,000	20.2	[13.5,29.1]	14,982	20.2	[13.2,29.8]	15036.0	
Some college/2-year college degree	13.6	[10.8,17.1]	56,743	17.1	[8.6,31.0]	10,315	19.2	[10.4,32.9]	11617.0	
4-year college degree or higher	9.0	[6.8,11.6]	27,601	16.9	[7.7,33.1]	4,850	14.2	[5.8,30.8]	4074.0	
Don't know/No answer										
HOUSEHOLD INCOME										
Less than \$25,000	21.9	[18.3,26.0]	97,865	23.9	[16.2,33.8]	24,021	24.6	[16.9,34.3]	24639.0	
\$25,000-\$49,999	14.3	[11.1,18.2]	45,667	17.5	[9.9,28.9]	8,380	13.8	[7.4,24.3]	6623.0	
\$50,000-\$74,999	10.1	[6.4,15.5]	16,988	15.5	[4.6,40.9]	2,777	8.9	[1.3,42.4]	1595.0	
\$75,000 or more	6.6	[4.6,9.4]	23,358	2.7	[0.7,9.5]	667	4.2	[0.8,19.0]	1028.0	
Don't know/No answer	15.2	[11.7,19.5]	45,090	14.5	[7.2,27.1]	7,069	13.5	[6.4,26.3]	6595.0	
* A .1 A 1.1							•			

<sup>\*</sup> Among those 45 years or older

<sup>^</sup> Among those experiencing worsening confusion or memory loss in past year

		nterfered with olunteering, or activities	Have discussed confusion or memory loss with doctor^			
	%	95% CI	Est. Pop.		95% CI	Est. Pop.
Total	18.3	[14.1,23.6]	43,359	37.7	[32.1,43.7]	89,096
AGE						
18-24						
25-34						
35-44						
45-54	20.8	[11.9,33.8]	14,655	38.5	[26.4,52.1]	27,098
55-64	17.6	[11.7,25.6]	12,667	39.1	[29.7,49.4]	28,177
65 and over	17.1	[11.3,25.0]	16,037	36.1	[28.6,44.3]	33,821
GENDER						
Male	19.4	[12.5,28.8]	21,464	33.3	[24.9,43.0]	36,911
Female	17.5	[12.8,23.3]	21,895	41.6	[34.4,49.2]	52,185
RACE-ETHNICITY						
White, Non-Hispanic	20.9	[15.5,27.5]	33,045	42.4	[35.5,49.6]	67,038
Black, Non-Hispanic	16.9	[9.3,28.6]	9,638	32.0	[21.7,44.5]	18,315
Hispanic				4.3	[0.5,29.6]	223
Other, Non-Hispanic	6.4	[0.8,36.8]	677	33.0	[10.3,67.8]	3,464
Don't know/No answer				1.1	[0.1,9.4]	56
EDUCATION						
Did not graduate HS	18.5	[10.8,29.9]	13,693	22.6	[13.7,34.9]	16,731
HS diploma/equivalent	25.4	[17.5,35.4]	18,862	38.6	[29.4,48.6]	28,659
Some college/2-year college degree	13.7	[7.9,22.7]	8,129	51.8	[39.9,63.4]	30,590
4-year college degree or higher	9.3	[2.7,27.8]	2,675	45.7	[32.6,59.4]	13,116
Total	18.3	[14.1,23.6]	43,359	37.7	[32.1,43.7]	89,096
HOUSEHOLD INCOME						
Less than \$25,000	29.1	[21.1,38.5]	29,161	40.5	[31.3,50.3]	40,599
\$25,000-\$49,999	11.1	[5.4,21.3]	5,312	38.0	[26.9,50.6]	18,228
\$50,000-\$74,999	11.6	[2.5,40.5]	2,078	25.4	[10.3,50.1]	4,546
\$75,000 or more	2.4	[0.5,9.9]	563	40.0	[24.2,58.3]	9,366
Don't know/No answer	13.4	[6.3,26.0]	6,244	35.1	[23.7,48.5]	16,358
Total	18.3	[14.1,23.6]	43,359	37.7	[32.1,43.7]	89,096

<sup>^</sup> Among those experiencing worsening confusion or memory loss in past year

#### **Stress**

Analysis of Module 20 ('Social Context') of the 2015 BRFSS Questionnaire

Stress has important effects on human health - impacting blood pressure, cardiovascular health, mental and emotional health, sleep patterns, diet, the use of alcohol and drugs, and more. The optional Social Context Module, administered in the 2015 BRFSS in Louisiana, includes two measures of how much stress participants feel over financial issues. The first question asks: "How often in the past 12 months would you say you were worried or stressed about having enough money to pay your rent/mortgage?" Response options include: Always, usually, sometimes, rarely, and never. The second question asks: "How often in the past 12 months would you say you were worried or stressed about having enough money to buy nutritious meals?"

Overall, 19.6 percent of Louisiana adults say they are "always" or "usually" stressed or

worried about being able to afford their rent or mortgage. Similarly, 14.4 percent are "always" or "usually" stressed about affording nutritious meals.

Unsurprisingly, there are significant socioeconomic disparities in the experience of stress over costs of housing and nutritious meals. Approximately two in five (38.0 percent) of adults in households in the bottom 30 percent of earnings are "always" or "usually" worried about the cost of housing, while just 6.7 percent of adults with household earnings in the top 30 percent of households express this degree of stress. Likewise, 30.4 percent of adults in households with annual incomes below \$25,000 experience significant stress over the cost of nutritious meals. This share falls to 3.5 percent among adults in households with annual earnings of \$75,000 or more.

Table 21: Stress								
	"Alway	s" or "usually" w	orry		"Always" or "usually" worry			
	about p	aying rent/mort	tgage	about paying for nutritious meals				
	%	95% CI	Est. Pop.	%	95% CI	Est. Pop.		
Total	19.6	[17.9,21.4]	510,442	14.4	[12.9,16.0]	414,039		
AGE								
18-24	18.3	[11.3,28.2]	35,285	14.6	[9.6,21.5]	49,709		
25-34	19.2	[14.7,24.6]	86,521	14.5	[10.6,19.5]	71,068		
35-44	21.2	[16.7,26.4]	94,664	17.8	[13.7,22.8]	85,682		
45-54	25.1	[20.9,29.9]	117,744	16.5	[13.0,20.8]	80,727		
55-64	20.4	[17.3,23.8]	100,563	14.9	[12.3,17.9]	76,052		
65 and over	13.7	[11.3,16.5]	75,664	8.9	[7.0,11.2]	50,801		
GENDER								
Male	17.5	[14.9,20.4]	214,694	13.2	[11.0,15.7]	181,073		
Female	21.5	[19.2,23.9]	295,748	15.4	[13.4,17.6]	232,966		
RACE-ETHNICITY								
White, Non-Hispanic	17.0	[15.0,19.2]	278,181	12.1	[10.5,14.0]	218,178		
Black, Non-Hispanic	23.7	[20.1,27.7]	175,991	16.7	[13.6,20.2]	136,641		
Hispanic	18.8	[10.2,31.9]	16,087	18.7	[10.3,31.6]	17,750		
Other, Non-Hispanic	27.8	[19.0,38.6]	31,718	26.5	[17.9,37.2]	36,423		
Don't know/No answer	30.6	[15.6,51.3]	8,466	14.3	[5.2,33.6]	5,047		
EDUCATION								
Did not graduate HS	33.3	[27.5,39.6]	141,661	25.6	[20.7,31.3]	125,698		
HS diploma/equivalent	20.6	[17.8,23.8]	182,011	14.6	[12.2,17.5]	143,990		
Some college/2-year college								
degree	17.8	[14.9,21.2]	130,353	14.2	[11.6,17.3]	116,105		
4-year college degree or higher	9.9	[7.8,12.5]	55,969	4.7	[3.2,6.9]	27,692		
Don't know/No answer	13.0	[1.5,59.6]	447	13.3	[1.7,58.0]	554		
HOUSEHOLD INCOME								
Less than \$25,000	38.0	[33.9,42.3]	265,189	30.4	[26.7,34.4]	237,813		
\$25,000-\$49,999	16.6	[13.2,20.7]	86,979	10.1	[7.3,13.8]	56,607		
\$50,000-\$74,999	10.8	[7.5,15.3]	34,827	7.0	[4.4,11.0]	23,963		
\$75,000 or more	6.7	[4.7, 9.4]	43,705	3.5	[2.1,5.7]	23,997		
Don't know/No answer	19.8	[15.8,24.5]	79,741	14.0	[10.6,18.2]	71,658		

### **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 2015 BRFSS survey for the state of Louisiana. The findings are based on 4,716 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 2015, 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 2015 BRFSS in Louisiana is 41.2 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 2015 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/2015/pdf/overview\_2015.pdf">https://www.cdc.gov/brfss/annual\_data/2015/pdf/overview\_2015.pdf</a> <a href="https://www.cdc.gov/brfss/annual\_data/2015/pdf/weighting\_the-data\_webpage\_content.pdf">https://www.cdc.gov/brfss/annual\_data/2015/pdf/2015-sdqr.pdf</a>

A copies of the instrument and codebooks are available at:

https://www.cdc.gov/brfss/questionnaires/pdf-ques/2015-brfss-questionnaire-12-29-14.pdf https://www.cdc.gov/brfss/annual\_data/2015/pdf/codebook15\_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