

Cardiovascular Health

Summary / Conclusion: The prevalence rates for Coronary heart disease was highest for Louisiana residents with lower incomes, education levels and the inability to work. The heart attack and stroke rates were also highest for residents with lower incomes, education levels, retired and the inability to work. In 2004, the majority of Louisiana residents indicated that he or she had their first stroke or heart attack between the ages of 45 and 64 years of age. It should be noted that females between the ages of 18 and 44 years are more likely to suffer a stroke when compared to males within the same age category. Intervention groups should focus their efforts on increasing the proportion of Louisiana residents that can recognize all of the early signs or symptoms for stroke and heart attack.

Prevalence of residents that indicated that they have had either a heart attack, stroke or diagnosed with angina / heart disease, overall and select categories. Behavioral Risk Factor Survey 2006

Characteristic+	Heart Attack++			Stroke^			Coronary Heart Disease~		
	Sample size*	%	95% CI	Sample size*	%	95% CI	Sample size*	%	95% CI
Total	361	4.1	[3.6 - 4.6]	287	3.3	[2.8 - 3.8]	432	5	[4.5 - 5.6]
Age									
18-44	18	.67	[.3 - 1.1]	21	1	[.49 - 1.5]	33	1.1	[.67 - 1.6]
45-64	157	5.1	[4.2 - 6]	127	4.3	[3.4 - 5.2]	204	6.9	[5.8 - 8]
65+	186	13	[11 - 15]	139	8.8	[7.2 - 10.4]	195	13.7	[11.7 - 15.8]
Gender									
Male	164	4.9	[4.1 - 5.8]	95	3	[2.2 - 3.7]	165	5.4	[4.5 - 6.3]
Female	197	3.3	[2.8 - 3.8]	192	3.6	[3 - 4.2]	267	4.7	[4 - 5.3]
Race									
White	258	4.4	[3.8 - 5]	182	2.8	[2.3 - 3.3]	323	5.5	[4.8 - 6.2]
Black	77	3.6	[2.6 - 4.5]	84	4.6	[3.4 - 5.8]	76	3.8	[2.7 - 4.9]
Education									
Less than HS Grad	78	6.1	[4.5 - 7.7]	75	6.1	[4.4 - 7.9]	87	6.8	[5.1 - 8.4]
High school grad/GED	130	4.1	[3.3 - 4.9]	91	3.2	[2.4 - 4]	147	5.7	[4.6 - 6.7]
Some college/ College Grad	152	3.5	[2.9 - 4.2]	120	2.5	[2 - 3.1]	222	4.1	[3.4 - 4.8]
HH Income									
<25,000	167	6.8	[5.6 - 7.9]	144	6.6	[5.2 - 7.9]	190	7.9	[6.5 - 9.2]
25,000-34,999	31	3.3	[1.9 - 4.6]	36	3.9	[2.3 - 5.5]	59	4.7	[3 - 6.5]
35,000+	86	2.4	[1.8 - 3]	46	1.2	[.84 - 1.6]	127	3.4	[2.8 - 4.1]
Employment									
Employed	79	1.7	[1.3 - 2.2]	41	0.9	[.6 - 1.2]	115	2.5	[1.9 - 3.1]
Unemployed	15	2.6	[1.1 - 4.1]	13	3.6	[.62 - 6.7]	15	2.6	[1.1 - 4.1]
Homemaker/ Student	13	1.2	[.48 - 2]	14	1.2	[.52 - 1.9]	23	2.5	[1.2 - 3.7]
Retired	169	12.5	[10.5 - 14.5]	137	8.7	[7.1 - 10.3]	182	13.2	[11.2 - 15.2]
Unable to Work	83	12.2	[9.3 - 15.1]	81	15.9	[12 - 19.8]	95	15.7	[12.3 - 19.2]

* Percentages are based on weighted data estimates. Un-weighted sample size (heart attack) = 361. Un-weighted sample size (stroke) = 287. Un-weighted sample size (heart disease) = 432.

+ In this analysis, data for each category are included only for persons for whom the data were available; excluded data were either unknown or refused.

++ The proportion of respondents that indicated that they were told by a healthcare professional that they had a heart attack or myocardial infarction.

^ The proportion of respondents that indicated that they were told by a healthcare professional that they had a stroke.

~ The proportion of respondents that indicated that they were told by a health care professional that they had angina or coronary heart disease.

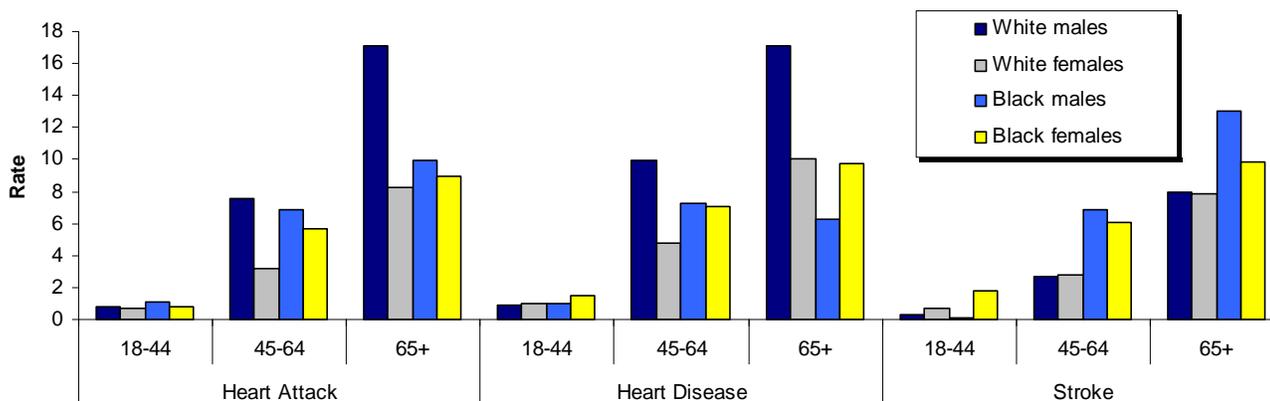
In the United States, heart disease is the number one cause of death for residents. Stroke is the third leading cause of death for residents (National Center for Health Statistics 2004). Coronary heart disease (CHD) accounts for the largest proportion of heart disease. Around 12 million residents have CHD in the United States. The national death rates for CHD show that males have higher mortality rates when compared to females and Blacks have higher CHD mortality rates when compared to Whites.

In Louisiana, heart disease and stroke were the number one and three causes of death respectively for residents which accounted for 32% of all deaths in Louisiana in 2004 (LA Vital Statistics 2004). Louisiana also ranks first in mortality rates for heart disease and third for stroke when compared to other states (NCHS, National Vital Statistics 2003). In 2006, 4.1% of the respondents indicated that they have had a heart attack, 3.3% suffered a stroke and 5% had been diagnosed with heart disease.

In 2006, there were significant associations with the age categories and the outcomes among Louisiana residents. Residents aged 65 years or more were more likely to have CHD, suffered a stroke or

have had a heart attack when compared to residents aged less than 65 years. When observing the gender category for Louisiana residents in 2006, there was not a significant difference between males and females with the outcome of CHD [p=.2219]. Males have higher rates of heart attacks when compared to females. When observing the 18-44 years of age category alone, females were three times more likely to have a stroke compared to males in the same age category [OR=3.6; 95%CI: 3.5-3.7] (2004-2006 LA BRFSS*).

**Age-specific rates of Heart Disease, Stroke and Heart Attacks by race for Louisiana residents
 2004-2006 BRFSS***



*The results from the 2004, 2005, and 2006 BRFSS were combined to form one dataset

From the 2004-2006 time period, White males aged 65 years and above had the highest proportion of respondents that had been told at some point in their life by a health professional that they had a heart attack 17.1% [95% CI: 14.2-20.1] and the highest prevalence for CHD 17.2% [95% CI: 14-20.2] when compared to other groups. Black males aged 65 years and above had the highest proportion among respondents that had been told at some point in their life by a health professional that they had a stroke 13% [95% CI: 7.1–18.8]. Black males aged 65 years and above had the second highest rate for heart attack 10% [95% CI: 4.9-14.9]. White females aged 65 years and above had the second highest rate of CHD 10% [95% CI: 8.4-11.5] and Black females aged 65 years and above had the second highest for stroke 9.8% [95% CI: 5.9-13.8] when compared to other groups.

Respondents for the 2006 survey that did not have an high school diploma/GED had the highest proportions for stroke, CHD, and heart attacks compared to other education levels. Respondents with a household income less than 25,000 per year also had the highest rates for stroke, CHD, and heart attacks compared to households with higher income levels. When observing the employment category for 2006, respondents that indicated that they were retired or unable to work had higher prevalence rates for stroke, CHD, and heart attacks when compared to other categories.

In 2004, the majority of the respondents of the Louisiana BRFSS indicated that they were 45 to 64 years of age when they had their first stroke 50.1% [95% CI: 41.7-58.4] or heart attack 49.7% [95% CI: 43.1-56.3]. The respondents also indicated that 30.8% [95% CI: 25.9-35.6] required outpatient rehabilitation from either a stroke or heart attack, this estimates that 53,938 Louisiana residents in 2004 required outpatient rehabilitation due to a stroke or heart attack (LA BRFSS 2004).

One of the objectives of the Healthy People 2010 initiative is to increase the proportion of adults that can recognize the early symptoms and signs of a heart attack and stroke. In the 2005 BRFSS there was a section that asked a series of questions related to the recognition of heart attack and stroke symptoms. For heart attack symptoms, 91% of the Louisiana residents did not recognize the five symptoms and one incorrect symptom of a heart attack (trouble seeing in both eyes). For stroke symptoms, 85.2% of the respondents did not select the five early signs and recognize the incorrect sign of a stroke (sudden chest pain) (LA BRFSS 2005).