DUVAL COUNTY HEALTH DEPARTMENT

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Center for Health Statistics Report

Heart Disease

Heart Disease: The National Challenge*

Heart disease is the leading cause of death for all people in the United States. Stroke is the third leading cause of death. Heart disease and stroke continue to be major causes of disability. Heart disease and stroke are also major factors that increase health care costs in the United States.

Coronary Heart Disease

Coronary heart disease (CHD or disease of the heart's blood vessels) is the most common form of heart disease. About 12 million people in the United States have CHD. CHD has declined in the U.S. general population over the past 35 years. This decline began in females in the 1950s and in males in the 1960s. But, the lifetime risk for developing CHD is very high in the United States. One of every two males and one of every three females aged 40 years and under will develop CHD sometime in their life.

Strokes

About 600,000 strokes occur each year in the United States, resulting in about 158,000 deaths. Stroke is a major form of cerebrovascular disease (CVD or disease of the brain's blood vessels). About 4 million persons have cerebrovascular disease. Death rates for stroke are highest in the southeastern United States. Like CHD death rates, stroke death rates have declined over the past 30 years. Experts believe the declines are due to improvements in the detection and treatment of high blood pressure (hypertension).

Heart disease and stroke deaths rise significantly after age 65 years, accounting for more than 40 percent of all deaths among persons aged 65 to 74. Almost 75 percent of the nearly 5 million patients with heart failure in the United States are older than 65 years. Hospitalization rates for heart failure continue to increase significantly in those aged 65 years and older.

* From Healthy People 2010, U.S. Department of Health and Human Services .

Inside this issue:

Disparities In Heart Disease And Stroke Deaths

Many people know what a good cholesterol level is, what their blood pressure should be, and that these factors relate to a risk of heart disease and stroke. The average person can expect to live 5.5 years longer today than he or she did 30 years ago. Nearly 4 years of increased life expectancy is due to public health and health care efforts to reduce CHD and stroke. However, not all segments of the population share in these benefits.

In general, the heart disease death rate has been consistently higher in males than in females. Heart disease death is also higher in the African American population than in the white population. Over the past 30 years the CHD death rate has declined differentially by gender and race. In the 1970s, African American females experienced the greatest decline in CHD. This steep decline leveled off in the 1980s. In 1995, the age-adjusted death rate for heart disease was 42 percent higher in African American males than in white males. It was 65 percent higher in African American females than in white females. And the heart disease death rate was almost twice as high in males as in females.

Disparities also exist in treatment outcomes for patients who have heart

(continued on page 5)

Jacksonville Heart and Stroke Health Report Card

Obj. #	Objective	Year	U.S.	FL	Duval	2010 Target
12-1	Reduce coronary heart disease[1] deaths.	1998	208	**215.6**	**254.6**	166.0
		1999		**220.6**	**235.8**	
*12-1a^*	Adults aged 30-44	1998		16.6	16.4	
		1999		18.7	24.9	
*12-1b^*	Adults aged 45-64	1998		147.0	148.9	
		1999		151.1	157.6	
*12-1c^*	Adults aged 65 years and older	1998		1357.6	1601.1	
		1999		1407.3	1450.4	
12-6	Reduce hospitalizations of older adults with congestive heart failure[2] as the principal diagnosis.			N/A (Not available)		
12-6a	Adults aged 65-74 years	1997	13.2	N/A	**17.1**	6.5
		1998			**18.1**	
12-6b	Adults aged 75-84 years	1997	26.7	N/A	**32.9**	13.5
		1998			**34.2**	
12-6c	Adults aged 85 years and older	1997	52.7	N/A	55.8	26.5
		1998			51.8	
12-7	Reduce stroke[3] deaths.	1998	60.0	**50.2**	**72.1**	48.0
		1999		**51.0**	**79.9**	
*12-7a^*	Adults aged 30-44	1998		5.8	8.8	
		1999		5.6	6.6	
*12-7b^*	Adults aged 45-64	1998		29.0	47.6	
		1999		27.7	37.2	
*12-7c^*	Adults aged 65 years and older	1998		324.8	436.5	
		1999		339.9	524.5	

All rates are per 100,000 except Objectives 12-6a through 12-6c where the rate is per 1,000. Mortality Rates are age-adjusted to 2000 US population.

Bolded means that area rates are statistically different from the US rate.

^Not a Healthy People 2010 Objective

[1] Coronary Heart Disease = ICD-9 codes: 402, 410-414 & 429.2; ICD-10 codes: I11, I20-I25

[2] Congestive Heart Failure = ICD-9: 428.0- 428.9

[3] Stroke = ICD-9 codes: 430-434,436-438; ICD–10 codes: I60-I69

A Healthier Jacksonville

by Antoinette Lloyd, M.D., Dir., Duval Co. Healthy People 2010

Higher Cardiovascular Mortality in Duval County

Heart disease is the foremost leading cause of death, and stroke is the third leading cause of death, in Duval County. However, the death rates from these cardiovascular diseases are significantly higher in Duval County, than in the nation and the state of Florida.

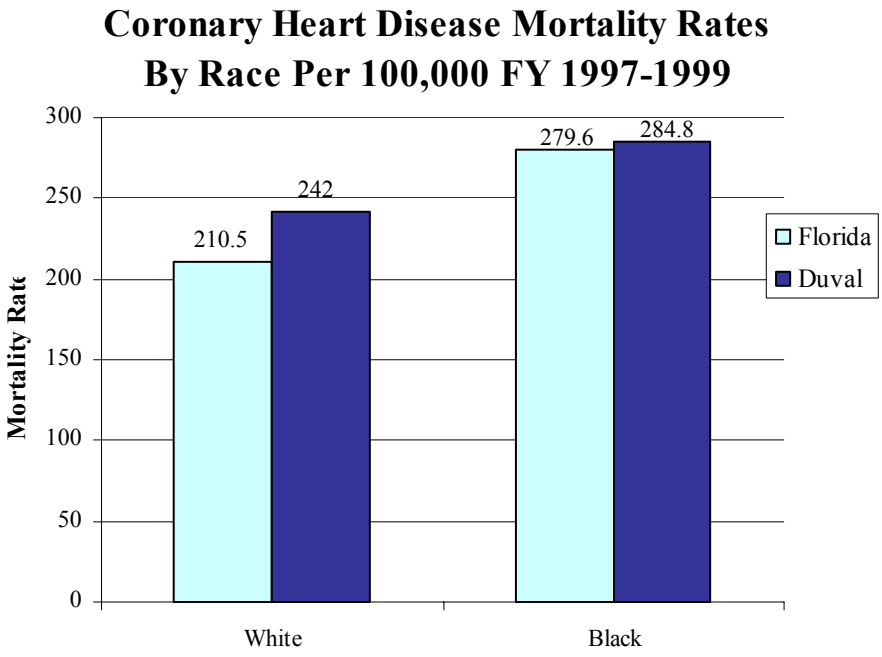
Disparities in Duval County

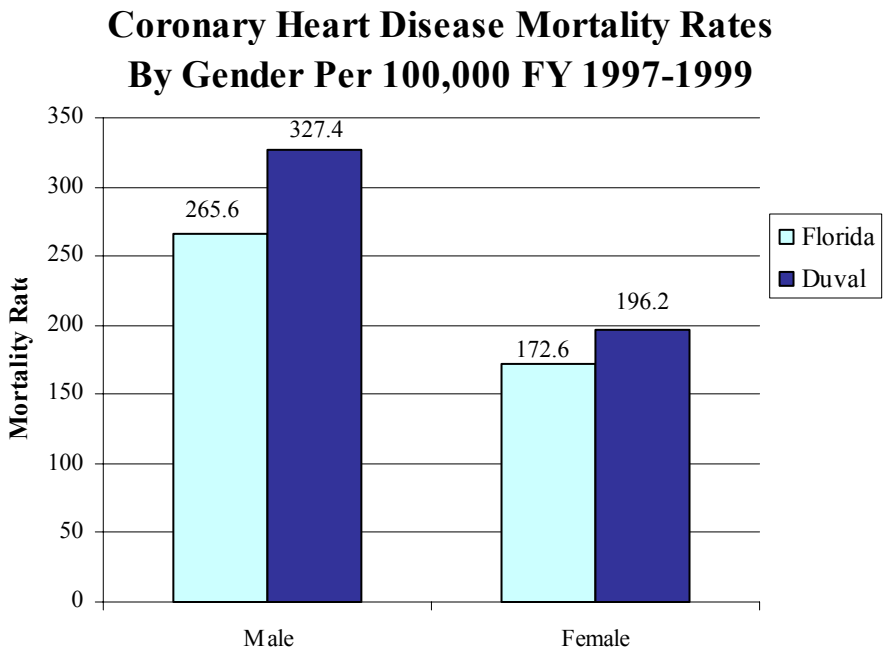
Within Duval County, significant disparities in cardiovascular mortality rates are noted: males are dying at higher rates than females from heart disease and stroke, and blacks are dying at a much higher rate from heart disease and stroke, than whites.

There are also significant disparities noted between areas of Jacksonville, with zip codes 32209, 32206, and 32233 having the worst mortality rates for both heart disease and stroke in Duval County (see maps).

Healthy Jacksonville: A Healthy People 2010 Initiative

Why are people dying from coronary heart disease in Duval County at a higher rate than in the nation? Why are black dying from strokes at a much higher rate than whites in Duval County? Why did the death rate from strokes increase in Duval County in 1999? What can be done to improve the cardiovascular health of all residents in Duval County? The





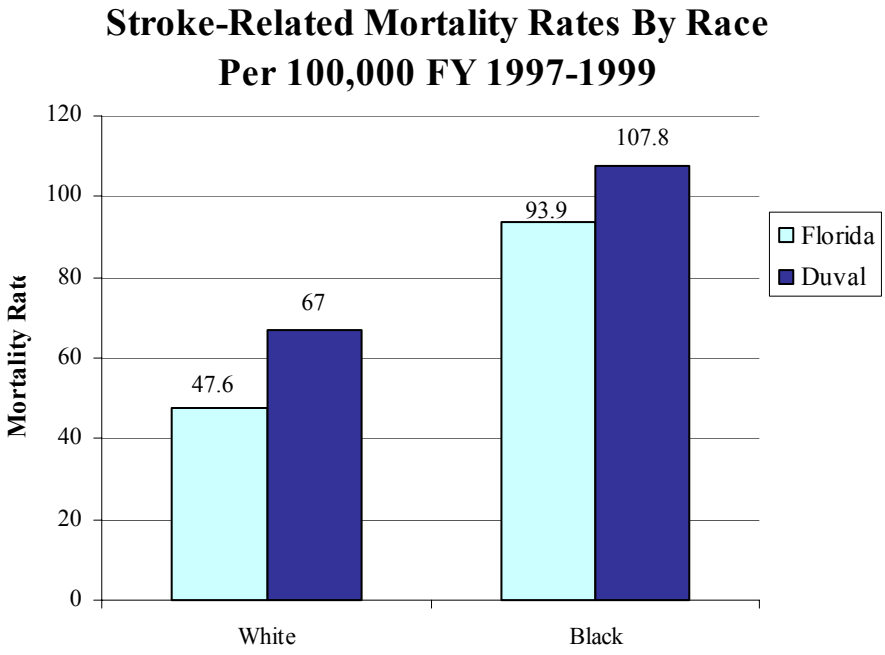
A Healthier Jacksonville (continued from page 3)

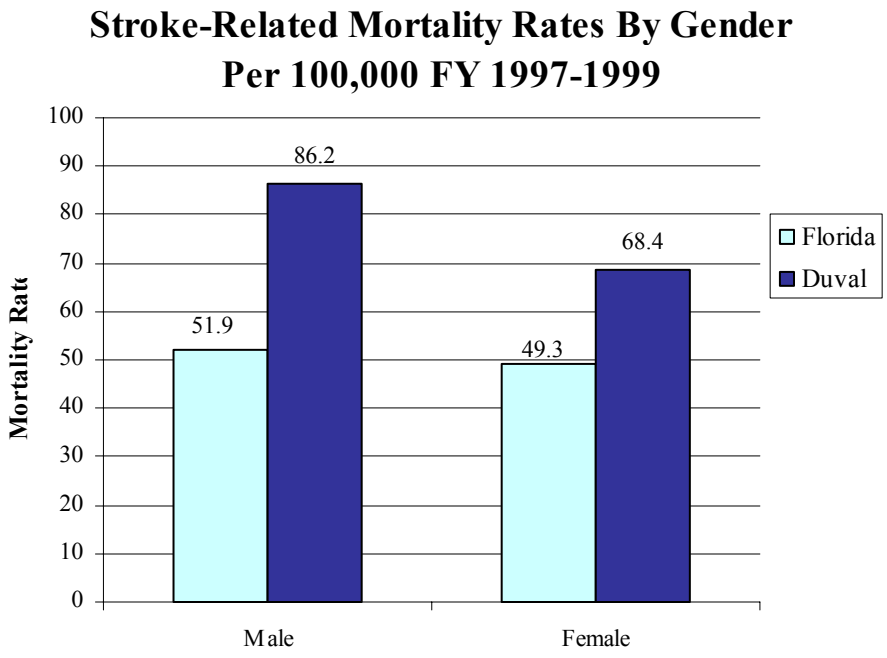
new Healthy Jacksonville Cardiovascular Coalition will address these types of questions.

Healthy Jacksonville is a new city-wide health promotion and disease prevention community initiative coordinated by the Healthy People 2010 Program of Duval County. The goals of Healthy Jacksonville are to increase the quality and years of healthy life for all Duval County residents, and to eliminate health disparities among its populations.

The Healthy Jacksonville Cardiovascular Coalition is in its formative stages. The purpose of this coalition is to develop and implement a strategic plan to significantly improve cardiovascular health in Duval County by the year 2010.

Healthy Jacksonville is a community initiative. Those who are interested in becoming involved in the Cardiovascular Coalition, or would like to help in some other health initiative such as Cancer, Diabetes, Mental Health, HIV/AIDS, Infant Mortality, etc, call the Duval County Healthy People 2010 Program office at (904) 665-2520, and **let's make A Healthier Jacksonville!**





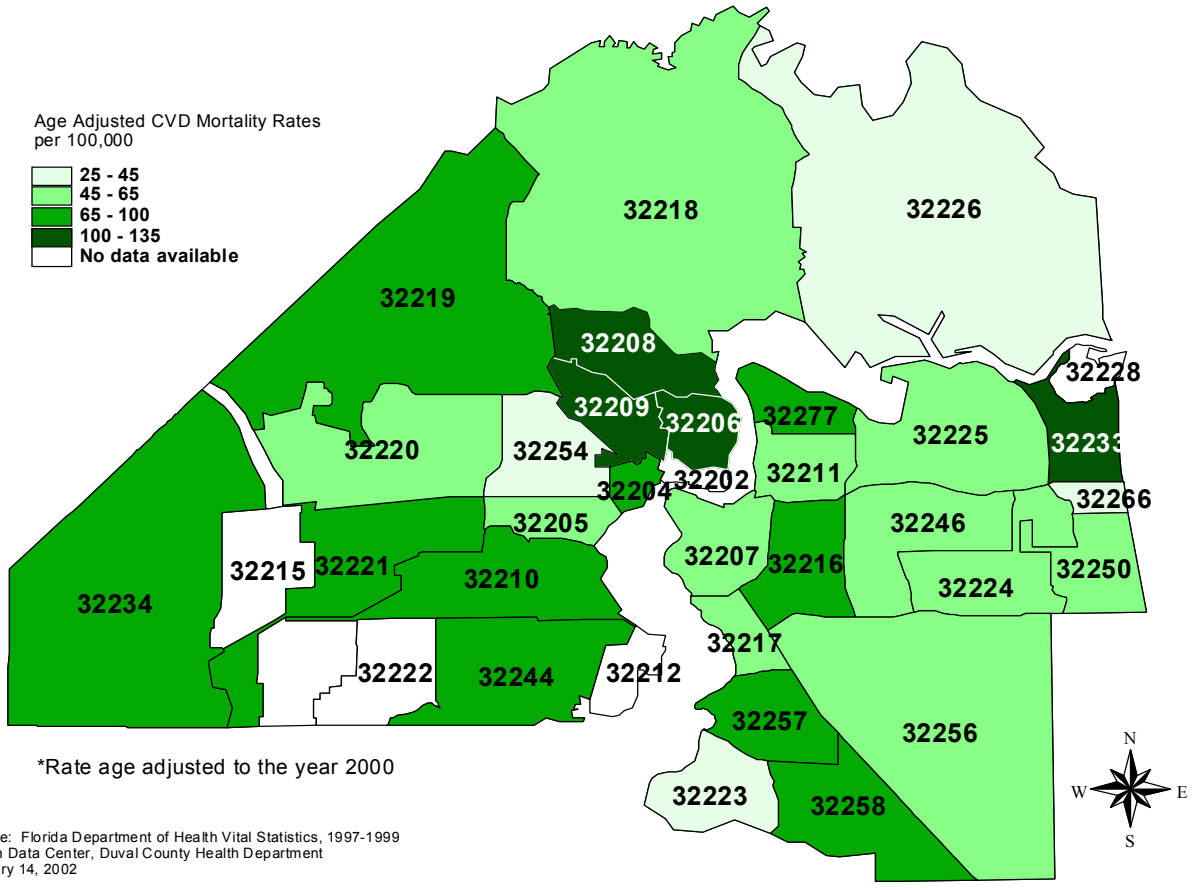
Disparities In Heart Disease and Stroke Deaths (continued from cover)

attacks. Females, in general, have poorer outcomes following a heart attack than do males. More females (44 percent) who have a heart attack die within a year, compared with 27 percent of males. At older ages, females who have a heart attack are twice as likely as males to die within a few weeks. Also, complications are more frequent in females than in males after coronary treatment, such as angioplasty or bypass surgery.

The difference in male and female stroke deaths began to narrow in the 1980s. Although stroke death rates have been decreasing, the decline among African Americans has been less than the decline in the total population. Stroke deaths are highest in African American females born before 1950 and in African American males born after 1950. Declines in the stroke death rate are smallest in African American males. When adjusted for age, stroke deaths are almost 80 percent higher in African Americans than in whites. Moreover, age-specific stroke deaths are higher in African Americans than in whites in all age groups up to age 84 years. Adjusted for age, stroke deaths are about 17 percent higher in males than in females. Age-specific stroke deaths are higher in males than in females throughout all adult age groups.

High blood pressure is nearly 40 percent higher in African Americans than in whites. About 6.4 million African Americans have high blood pressure. The harmful effects of high blood pressure are also more frequent and severe in African Americans.

Age Adjusted Cerebrovascular Disease Mortality Rates*
Duval County
1997-1999



*Rate age adjusted to the year 2000

Source: Florida Department of Health Vital Statistics, 1997-1999
Health Data Center, Duval County Health Department
January 14, 2002

Preventing Heart Disease and Stroke Deaths

Heart disease and stroke have similar causes (shared risk factors). High blood pressure, cigarette smoking, high blood cholesterol, and overweight contribute to both heart disease and stroke. Physical inactivity and diabetes are additional risk factors for heart disease

Research shows that behavior change helps prevent high blood pressure. Behavior change also reduces blood cholesterol. Behaviors that help lower high blood pressure include:
increasing physical activity, maintaining a healthy weight, limiting the consumption of alcohol to moderate levels, reducing the use of salt, and eating a reduced-fat diet high in fruits, vegetables, and low-fat dairy food. Diets low in saturated fat, dietary cholesterol, and total fat, with physical activity and weight control, also can lower blood cholesterol levels.

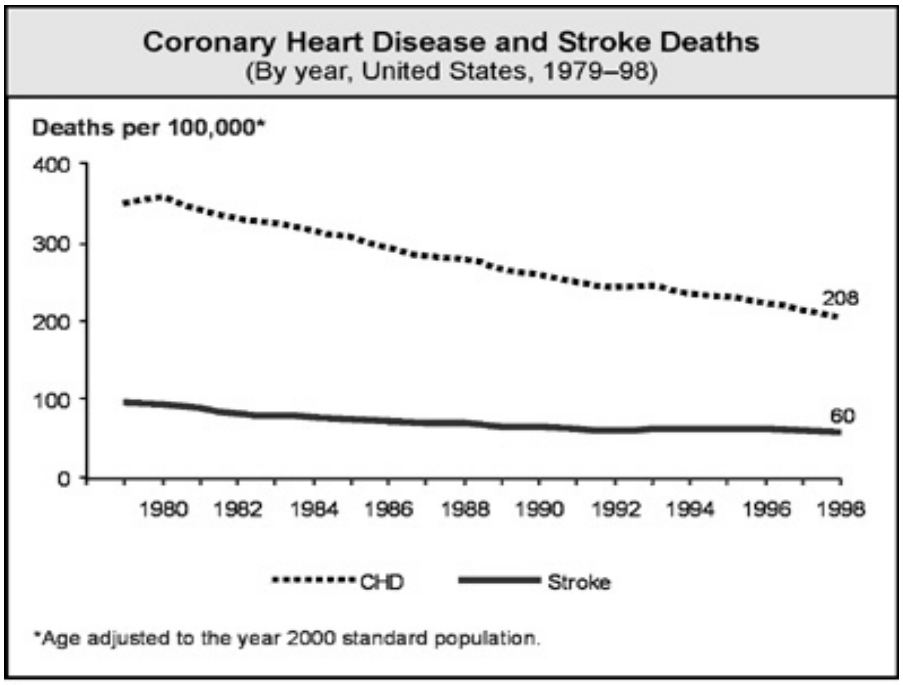
Screening for risk factors, particularly for high blood pressure and high blood cholesterol, is important. Screening identifies people who may be undiagnosed. It helps refer them to ongoing care. A host of studies has shown that diet and medicine can reduce CHD and stroke risk factors, especially high blood pressure and high blood cholesterol. Stopping smoking, increasing physical activity, and maintaining a healthy weight, can be even more effective in lowering these causes of heart disease and stroke.

About 1.1 million persons experience a heart attack each year in the United States. In 1996, 476,000 persons died from heart attacks. About 51 percent were males and 49 percent were females. More than half of these deaths occurred suddenly, within 1 hour of symptom onset, outside the hospital. For those patients who survive a heart attack, delay in treatment can mean increased damage to the heart muscle and poorer outcomes.

The benefits of quick identification and treatment of heart attacks are clear. Early treatment of heart attack patients reduces heart-muscle damage. It improves heart muscle function, and it lowers death rate from the heart attack. Clot-dissolving medicine used during the heart attack have been shown to open the heart artery and get the blood to flow. As with heart attacks, deaths from stroke can be reduced or delayed. Damage from stroke can be minimized when patients are treated with clot-dissolving therapy within 3 hours of some strokes.

Delays in treatment and use of therapies are a problem. Despite evidence that rapid response is critical, most people are treated early enough. The public health challenge is to develop and maintain programs for easier identification and treatment of individuals with heart attacks or strokes.

Prevention programs are needed to increase healthy behaviors as well as to detect and treat existing risk factors. Research has also shown that risk factors for heart disease and stroke develop early in life. Hardening of the arteries already is present in late adolescence. Diabetes in overweight children is on the rise. Hypertension can begin in the early teens. Tobacco use also begins in adolescence. Experts agree; prevention efforts should be expanded in elementary and secondary schools and at the college level.



Source: CDC, NCHS. National Vital Statistics System (NVSS), 1979–98.

Hypertension and Cholesterol Awareness*

Question	Response	National Median Percentage	Florida** Percentage	Duval County** Percentage
About how long has it been since you last had your blood pressure taken by a health professional?	Within past year	88.6	88.7	88.1
Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?	Yes	23.9	27.7	23.0
Have you been told on more than one occasion that your blood pressure was high, or have you been told this only once?	More than once	76.4	76.6	67.8
Have you ever had your blood cholesterol checked?	Yes	73.6	79.0*	77.7*
About how long has it been since you last had your blood cholesterol checked?	Within past year	70.4	74.5	73.4

*Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention, 2000.
** Florida and Duval percentages are based on un-weighted data.

High blood pressure is known as the "silent killer" and remains a major risk factor for coronary heart disease, stroke, and heart failure. About 50 million adults in the United States have high blood pressure. High blood pressure also is more common in older persons. National studies show that people are more and more aware of their high blood pressure. Nevertheless, a large proportion of persons with high blood pressure still are unaware that they have this disorder.

High blood cholesterol is a major risk factor for CHD that can be modified. More than 50 million U.S. adults have blood cholesterol levels that require medical advice and treatment. More than 90 million adults have cholesterol levels that are higher than desirable. Experts recommend that all adults aged 20 years and older have their cholesterol levels checked at least once every 5 years to help them take action to prevent or lower their risk of CHD. The Behavioral Risk Factor Surveillance System (BRFSS) is a survey established by the Centers for Disease Control and Prevention (CDC) that is administered in every state within the US. This survey gathers information about behavioral risk factors associated with premature morbidity and mortality. BRFSS is designed to estimate the statewide prevalence of particular risk factors and this is the first time this type of information has been analyzed to estimate what is occurring in Duval County. These percentages will estimate how Duval County compares to the nation and the state of Florida regarding hypertension and cholesterol behavioral risk factors. The national data reported here are based on the median percentages reported from the states. The Florida and Duval County percentages reported here are based on un-weighted data, meaning there have been no adjustments made for demographic differences in the sample population or adjustments for telephone sampling issues.

Approximately 88% of Duval County residents have had their blood pressure taken in the past year, which is very close to what is occurring at the national and state levels. Twenty-three percent of Duval County residents report they have been told by a doctor or nurse they have high blood pressure. This is slightly lower than the state percentage (27.7%) but very close to what is occurring nationally (23.9%). Of those told they have high blood pressure, nearly 68% of Duval residents report being told more than once. This percentage is lower than both the Florida and national percentage (76.6% and 76.4%, respectively).

Nearly 78% of Duval County residents report ever having their blood cholesterol checked, which is higher than the national median of 73.6. Overall, Florida residents report higher percentages (79%) of having their cholesterol checked compared with the nation. Approximately 73.4% of Duval residents and 74.5% of Florida residents had their cholesterol checked within the past year. This is significantly higher than the national median of 70.4%. Around 30.6% of Duval residents have been told they have high cholesterol, which is similar to the national median of 30.0%. The state of Florida overall, however, has a slightly higher percentage of people who have been told they have high cholesterol.

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DUVAL COUNTY HEALTH DEPARTMENT

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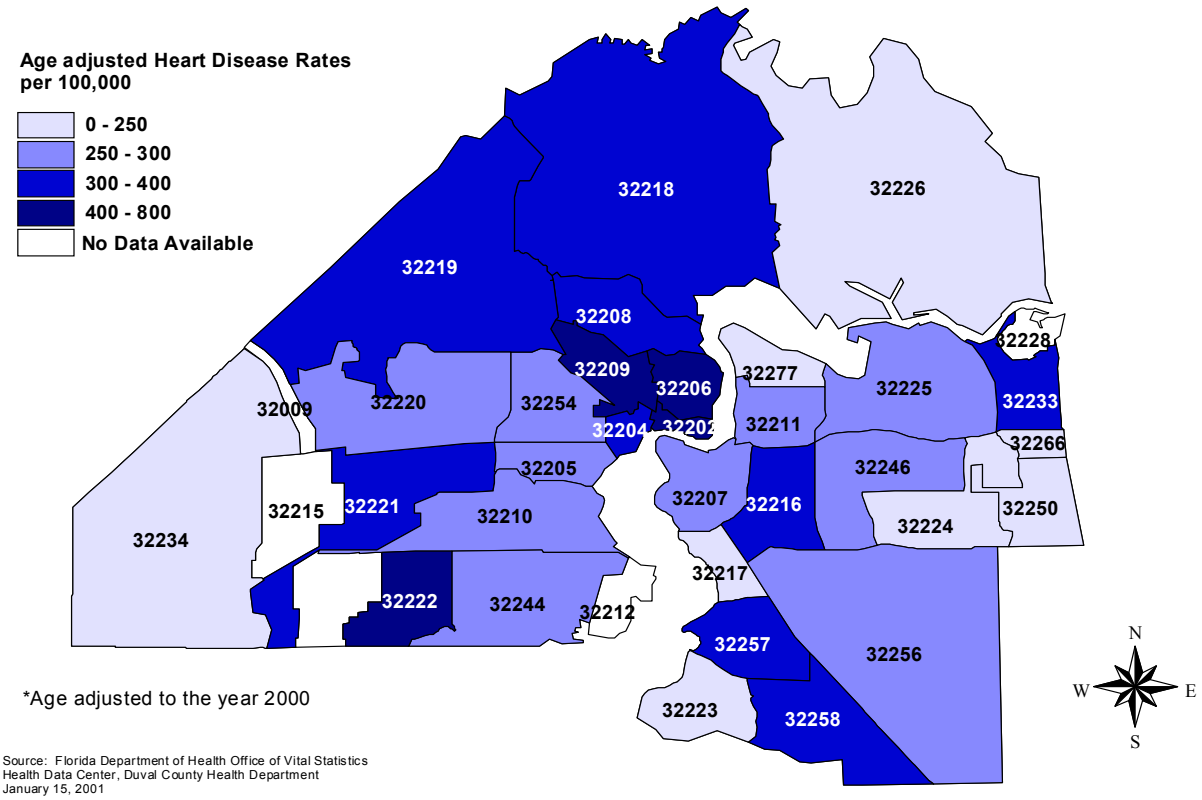
Diseases of the Heart Age Adjusted Mortality Rates*
Duval County, 1997-1999



*Age adjusted to the year 2000

Source: Florida Department of Health Office of Vital Statistics
Health Data Center, Duval County Health Department
January 15, 2001