

# HEALTH STATUS

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This section presents leading causes of death in Florida through the perspectives of chronic disease, maternal and child health, injury and communicable diseases. These health issue areas, however, are not mutually exclusive. For example, infant mortality and preterm births are associated with unintended and teen pregnancy, and diabetes and high blood pressure are risk factors for coronary heart disease. For each health issue, we present available data on disparities in sex, race/ethnicity and education, and county-level maps show the geographic distribution.

## LEADING CAUSES OF DEATH

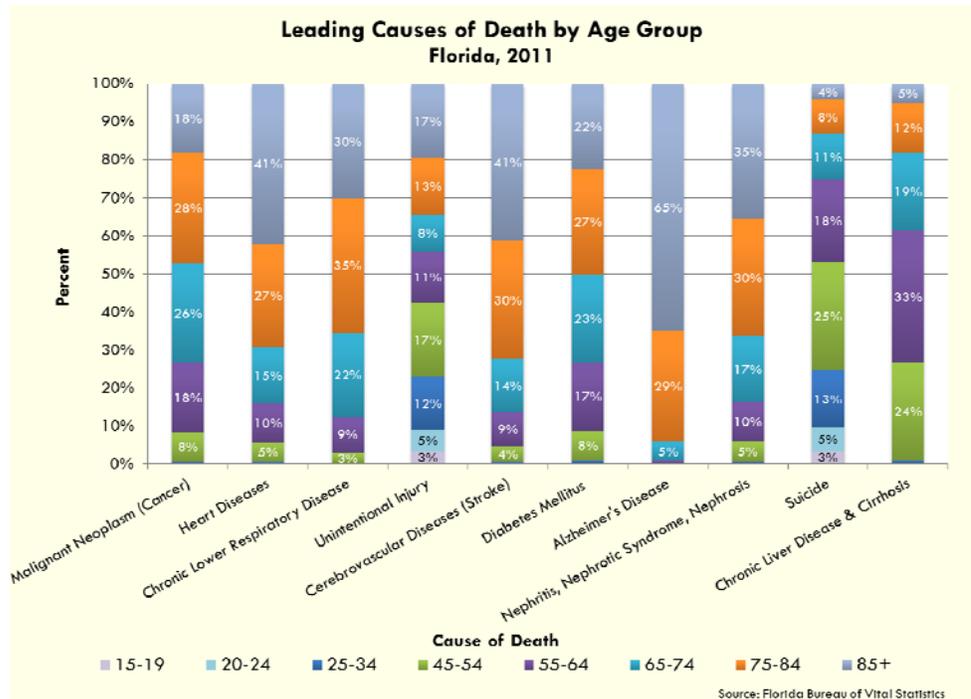
Overall, the top five causes of death in Florida for both males and females are cancer, heart disease, chronic lower respiratory diseases, unintentional injury, and stroke.

In 2011, cancer surpassed heart disease as the leading cause of death in Florida. Much like the rest of the world, chronic diseases account for a majority of the leading causes of death in Florida. In 2011, chronic diseases accounted for six of the ten leading causes of death.

There are differences, however, among age groups. The largest change from 2000 to 2011 came from the reduction of unintentional injuries for ages 1 to 4, 5 to 14, and 15 to 24. For infants (under 1 year old), deaths are most likely to happen shortly after birth, related to causes such as low birthweight, birth asphyxia, infection and congenital malformations. For children ages 1-14, unintentional injury is the leading cause of death. While some of the younger children (ages 1-4) still die of congenital malformations, deaths from unintentional injury, cancer and homicide otherwise dominate this stage of life.

Similarly, people aged 15-34 share the same four top causes of death: unintentional injury, homicide, suicide, and cancer. People aged 35-44 have some of the same causes of death as young adults, such as unintentional injury, but they are also demonstrating some of the mortality of older people such as cancer and heart disease.

Leading Cause of Death	Rank
Cancer	1
Heart Disease	2
Chronic Lower Respiratory Disease	3
Unintentional Injury	4
Stroke	5
Diabetes Mellitus	6
Alzheimer's Disease	7
Nephritis, Nephrosis & Nephrotic Syndrome	8
Suicide	9
Chronic Liver Disease & Cirrhosis	10



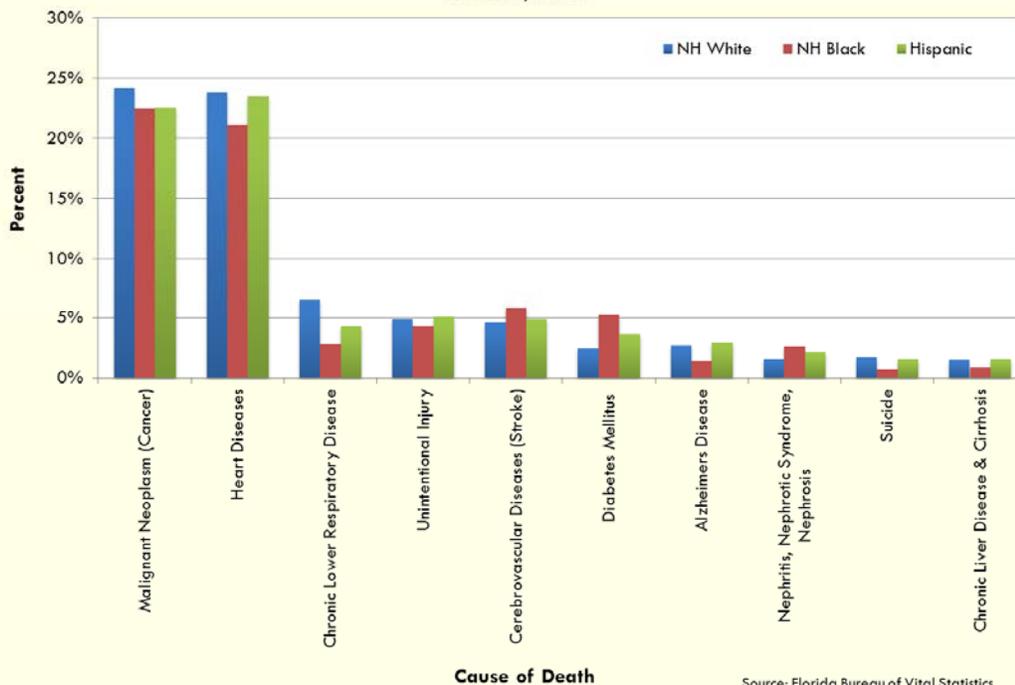
## LEADING CAUSES OF DEATH

By the time Floridians are 45, their leading causes of death are similar to those of much older adults: heart disease, cancer, and cerebrovascular diseases. However, Floridians aged 45-54 are the largest age group to die from unintentional injuries. Most adults who live to be over 85 die of heart disease, cancer, cerebrovascular diseases, chronic lower respiratory disease, or Alzheimer’s disease.

Leading causes of death also differ somewhat by race and ethnicity; however, heart disease and cancer are the top two causes for all race and ethnicities. Non-Hispanic Blacks are affected by stroke, nephritis, nephrotic syndrome and nephrosis, and diabetes more than the other ethnic and racial groups, while chronic lower respiratory disease is more prevalent among non-Hispanic whites, and unintentional injury and Alzheimer’s disease are more prevalent among Hispanics.

- In 2011, cancer surpassed heart disease as the leading cause of death.
- Leading causes of death vary by age group and race/ethnicity.
- Unintentional injuries have been reduced since 2000 for those between 1 and 24 years old.

**Leading Causes of Death by Race/Ethnicity  
Florida, 2011**



- Chronic disease has overtaken communicable diseases as the leading causes of death.

## CHRONIC DISEASE

Chronic disease and disabling conditions such as heart disease, cancer and diabetes are among the most prevalent, costly, and preventable of all health problems. According to the World Health Organization, chronic diseases are diseases of long duration and generally slow progression and account for 63% of all deaths worldwide.<sup>1</sup> In Florida, chronic diseases accounted for six of the top ten causes of death in 2011. Adopting healthy behaviors such as eating nutritious foods, being physically active and avoiding tobacco use can prevent or control the devastating effects of these diseases.

## INJURY

In 2007, Florida ranked 35nd among all states in unintentional injury-related deaths. In 2010, within Florida, it was the fourth leading cause of death among all age groups and the leading cause among those younger than 45. Intentional injuries, such as suicide and homicide, are also among the top 20 causes of death in 2011.

## MATERNAL & CHILD HEALTH

The prenatal period and early years of life are critical to the health, growth, and development of children. Infants and children who encounter health and psychosocial issues in these early stages may never develop to their full potential. Maternal and child health efforts, especially those focused on prevention and early recognition, help reduce medical and social service costs throughout the lifespan, and increase the quality of life for all residents.

## COMMUNICABLE DISEASE

Communicable disease, or infectious disease, were the major killers of Floridians in the early 1900s. Influenza, pneumonia, tuberculosis, syphilis and enteric infections were among the top ten causes of death in the first third of this century and often cut down Floridians in the prime of their youth. In the past century, chronic diseases have overtaken communicable diseases as the leading causes of death, due to advances in the control of infectious disease as well as to lengthened life spans. However, in recent years, certain communicable disease incidence has increased. These diseases will be profiled in this health summary.

## METHODOLOGY AND MEASURES

To understand the health status of Florida, key indicators with help from epidemiologists at the Florida Department of Health were chosen. The Health Status section of this report was created using existing birth, death, surveillance, hospitalization and survey data. In the following section, these key indicators are briefly explained. Trends and county-specific geographic information are visually presented to highlight any disparities that may exist.

Data is presented both in map and tabular format using quartiles—dividing the counties into 4 equal-size groups—ordered from most favorable to least favorable. On the map, each of the four groups is assigned one of four colors based on this ordering; a light quartile always expresses a more favorable health situation while the darkest color represents the least favorable situation.

On each indicator spread, a table on the right displays rates and ratios by sub-group for a reported year. Some indicators may not have data for these sub-groups while others may. The ratio column expresses how many times more likely the sub-group rate is compared to the most favorable rate in the sub-group, or reference group (the reference group ratio column will have 'REF'). For example, if females have a more favorable rate than males, the male ratio column will be displayed, expressing how much more likely males are, compared to their female counterparts, to have this condition. For indicators describing desirable outcomes, such as mammography, this will be expressed similarly, but the ratio will be below 1.0.

For the health status section of this report, mortality will be expressed as rate per 100,000 population, unless otherwise noted. A mortality rate per 100,000 population expresses how many people would die from the specific indicator per 100,000 Florida residents. Rates may also be used for hospitalizations, incidence, and birth data. They will be expressed similarly to the mortality rate.

Age-adjusted rates are standardized to the 2000 U.S. standard population to adjust for differences in age distribution in a population. It is used to standardize populations that have different age distributions so their rates are comparable (i.e., one population may have more elderly individuals than another, so their death rates, unadjusted, may look far worse in comparison than if their rates were age-adjusted). Age-adjusted rates are used throughout this section for better comparability across counties.

Encompassed in our health status are indicators from the Behavioral Risk Factor Surveillance System survey (BRFSS). These are expressed as percentages. Some other indicators, such as births, may also be expressed as percentages.

- This section uses existing birth, death, surveillance, hospitalization, and survey data.
- Each indicator has a two-page spread including text, trends, data tables and a map.

## CORONARY HEART DISEASE

### Coronary Heart Disease Age-Adjusted Mortality Rate 2009

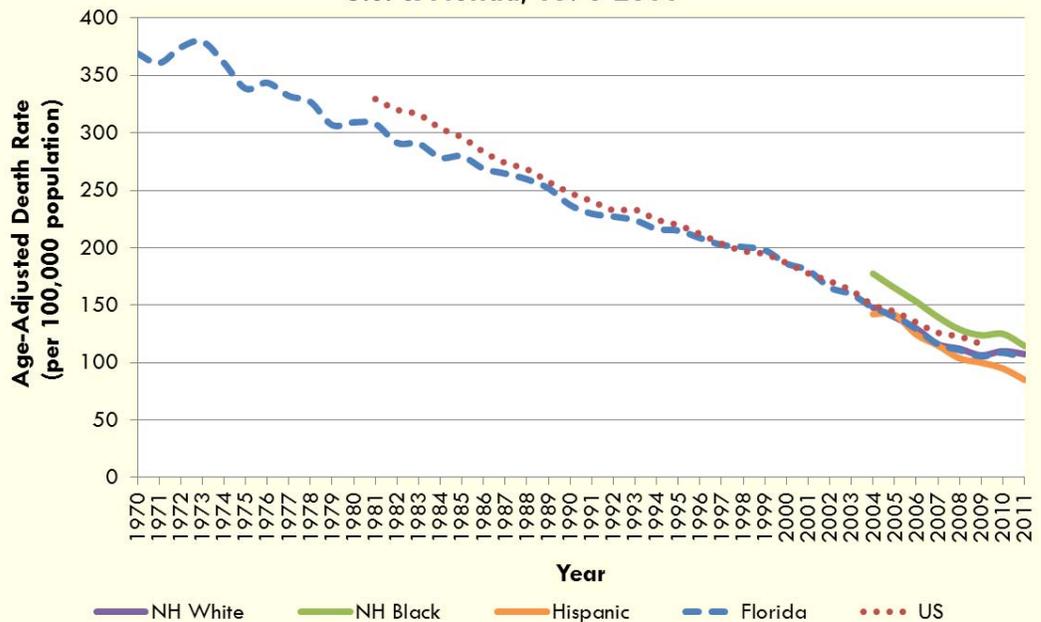
	Rate	Ratio
FL	105.5	REF
U.S.	116.1	1.1
HP2020	100.8	--
Rank	--	--
SEX		
Male	139.9	1.8
Female	77.0	REF
RACE/ETHNICITY		
NH White	106.4	1.1
NH Black	123.8	1.2
Hispanic	100.0	REF
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group

Coronary heart disease (CHD), or coronary artery disease (CAD), is caused by hardening of the arteries, the small blood vessels that supply blood and oxygen to the heart. CHD is the leading cause of death in the U.S. and the second leading cause of death in Florida. Many risk factors are attributable to CHD. Preventable risk factors include diabetes, substance abuse, overweight and obesity, inactivity, and narrowed arteries in other parts of the body. Non-preventable risk factors include aging, genetics, race, and biological sex. While men are more likely to develop CHD, the risk among post-menopausal women is similar to that of men.<sup>2</sup>

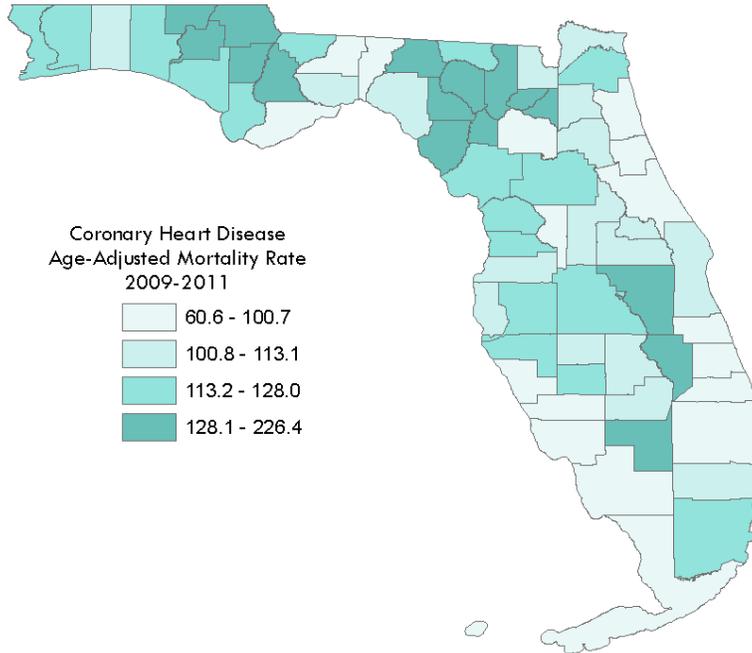
In Florida, there has been a steep decline in CHD deaths since 1970. In 2009, Florida showed a decline in CHD deaths very similar to the decline overall in the U.S.: 105.5 CHD deaths per 100,000 population in Florida compared to 116.1 CHD deaths per 100,000 population in the U.S. Hispanics have a lower rate of CHD deaths compared to non-Hispanic whites and blacks. Men in Florida, however, were 1.8 times more likely than females to die from CHD in 2009.

**Coronary Heart Disease Mortality Rate  
(per 100,000 population)  
U.S. & Florida, 1970-2011**



Source: Florida Bureau of Vital Statistics & CDC HealthData Interactive

# CORONARY HEART DISEASE



Source: Florida Bureau of Vital Statistics

- Coronary heart disease (CHD) is the leading cause of death in the U.S. and the second leading cause of death in Florida.
- In Florida, there has been a sharp decline since 1970 of CHD deaths from 369.2 per 100,000 population to 105.5 in 2009.
- Men in Florida were 1.8 times more likely than females to die from CHD in 2009.

**CORONARY HEART DISEASE MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	90.9	1	Flagler	66.6	1	Lake	112.7	2	Pinellas	111.4	2
Baker	107.5	2	Franklin	94.2	1	Lee	97.5	1	Polk	126.7	3
Bay	124.8	3	Gadsden	115.6	3	Leon	89.6	1	Putnam	113.1	2
Bradford	141.2	4	Gilchrist	133.0	4	Levy	126.8	3	Santa Rosa	121.9	3
Brevard	110.4	2	Glades	110.9	2	Liberty	132.5	4	Sarasota	79.7	1
Broward	104.9	2	Gulf	115.8	3	Madison	168.2	4	Seminole	100.9	2
Calhoun	138.8	4	Hamilton	127.1	3	Manatee	114.1	3	St. Johns	66.5	1
Charlotte	93.7	1	Hardee	101.9	2	Marion	125.0	3	St. Lucie	96.1	1
Citrus	119.1	3	Hendry	140.6	4	Martin	60.6	1	Sumter	99.6	1
Clay	105.8	2	Hernando	128.0	3	Monroe	78.9	1	Suwannee	133.3	4
Collier	74.9	1	Highlands	101.3	2	Nassau	112.3	2	Taylor	104.8	2
Columbia	136.3	4	Hillsborough	113.3	3	Okaloosa	111.6	2	Union	212.9	4
Miami-Dade	114.6	3	Holmes	226.4	4	Okeechobee	140.1	4	Volusia	100.2	1
DeSoto	117.9	3	Indian River	91.0	1	Orange	104.7	2	Wakulla	105.7	2
Dixie	180.4	4	Jackson	148.2	4	Osceola	134.2	4	Walton	126.8	3
Duval	119.9	3	Jefferson	100.7	1	Palm Beach	92.2	1	Washington	170.5	4
Escambia	119.1	3	Lafayette	138.2	4	Pasco	113.0	2			

Source: Florida Bureau of Vital Statistics

# HYPERTENSION

Diagnosed Hypertension (Percent) 2009

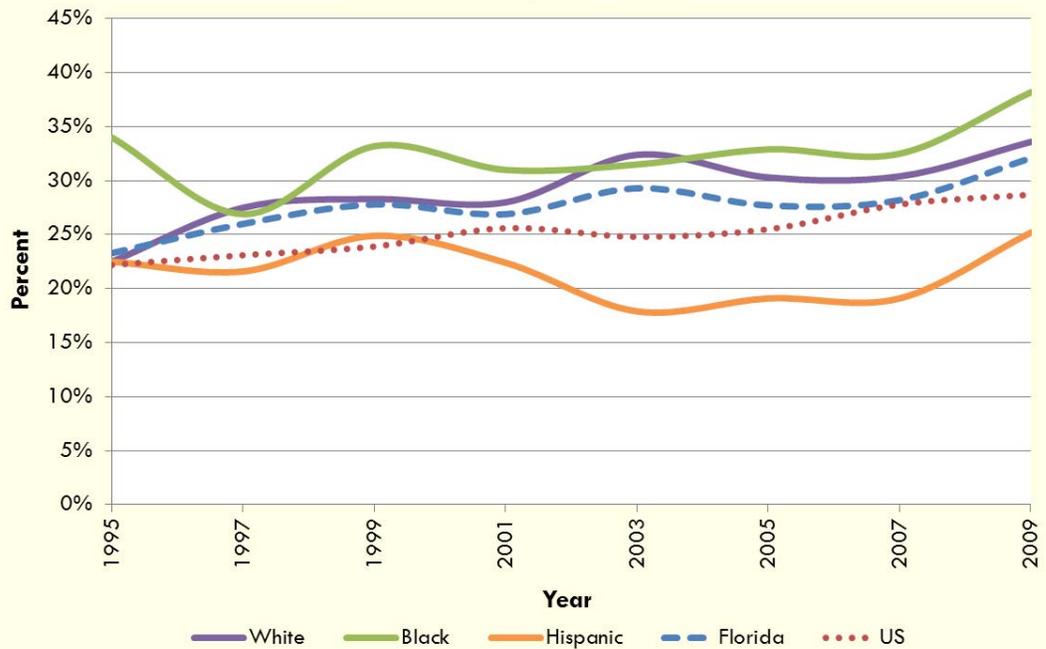
	Rate	Ratio
FL	32.1	1.1
U.S.	28.7	REF
HP2020	26.9	--
Rank	42	--
SEX		
Male	33.8	1.1
Female	30.5	REF
RACE/ETHNICITY		
White	33.6	1.3
Black	38.2	1.5
Hispanic	25.2	REF
EDUCATION		
<HS	39.3	1.4
HS	35.4	1.3
HS+	32.3	1.2
College Grad	27.5	REF

REF= Reference Group

Hypertension, also called high blood pressure, increases the risk of heart attack, heart failure, stroke and kidney disease. Hypertension can be prevented or reduced through eating a healthful diet, maintaining a healthy weight and being physically active.<sup>3</sup>

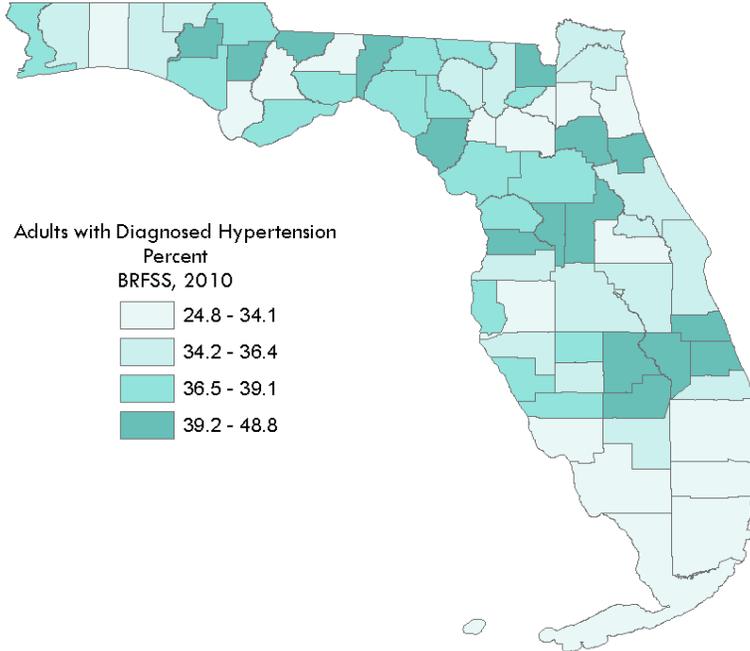
According to the 2009 BRFSS, 32.1% of respondents in Florida indicated that they had been diagnosed with hypertension compared to 28.7% in the U.S. overall. The percentage of Floridians who have been told they have hypertension has increased over the last 15 years and continues to rise. Prevalence differs across subpopulations: 38.2% of black adults, 33.6% of white adults, and 25.9% of Hispanic adults report having been diagnosed with hypertension.

Adults With Diagnosed Hypertension U.S. & Florida, 1995-2009



Source: BRFSS

# HYPERTENSION



Source: Florida Behavioral Risk Factor Survey

- Hypertension increases the risk of heart attack, heart failure, stroke and kidney disease.
- In 2009, 32.1% of Floridians surveyed indicated they had been diagnosed with hypertension. This rate has increased over the last 15 years.
- Black adults in Florida were 1.5 times more likely than Hispanics to be diagnosed with hypertension.

**ADULTS WITH DIAGNOSED HYPERTENSION BY COUNTY**  
(PERCENT; QUARTILE; 2010)  
(1=LOWEST AND 4=HIGHEST)

Alachua	24.8	1	Flagler	43.1	4	Lake	44.1	4	Pinellas	36.6	3
Baker	39.8	4	Franklin	38.1	3	Lee	31.6	1	Polk	36.0	2
Bay	38.8	3	Gadsden	40.2	4	Leon	30.0	1	Putnam	39.8	4
Bradford	33.9	1	Gilchrist	31.8	1	Levy	37.1	3	Santa Rosa	35.7	2
Brevard	36.2	2	Glades	48.8	4	Liberty	31.1	1	Sarasota	37.1	3
Broward	31.1	1	Gulf	32.5	1	Madison	38.7	3	Seminole	35.6	2
Calhoun	39.5	4	Hamilton	36.8	3	Manatee	34.7	2	St. Johns	30.3	1
Charlotte	37.1	3	Hardee	38.9	3	Marion	38.4	3	St. Lucie	42.9	4
Citrus	38.7	3	Hendry	34.5	2	Martin	35.7	2	Sumter	41.2	4
Clay	28.6	1	Hernando	41.8	4	Monroe	33.1	1	Suwannee	34.2	2
Collier	30.9	1	Highlands	43.3	4	Nassau	35.2	2	Taylor	37.9	3
Columbia	35.3	2	Hillsborough	30.6	1	Okaloosa	28.8	1	Union	37.2	3
Miami-Dade	34.1	1	Holmes	34.8	2	Okeechobee	42.1	4	Volusia	34.6	2
DeSoto	34.3	2	Indian River	40.5	4	Orange	34.0	1	Wakulla	36.5	3
Dixie	45.5	4	Jackson	39.1	3	Osceola	34.9	2	Walton	35.4	2
Duval	35.7	2	Jefferson	41.7	4	Palm Beach	29.3	1	Washington	41.0	4
Escambia	36.6	3	Lafayette	37.4	3	Pasco	36.4	2			

Source: Florida Behavioral Risk Factor Survey

## MYOCARDIAL INFARCTION

### Myocardial Infarction Age-Adjusted Mortality Rate 2009

	Rate	Ratio
FL	29.2	1.3
U.S.	37.8	REF
HP2020	--	--
Rank	--	--
SEX		
Male	38.0	1.7
Female	21.8	REF
RACE/ETHNICITY		
NH White	28.7	REF
NH Black	36.0	1.3
Hispanic	31.2	1.1
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

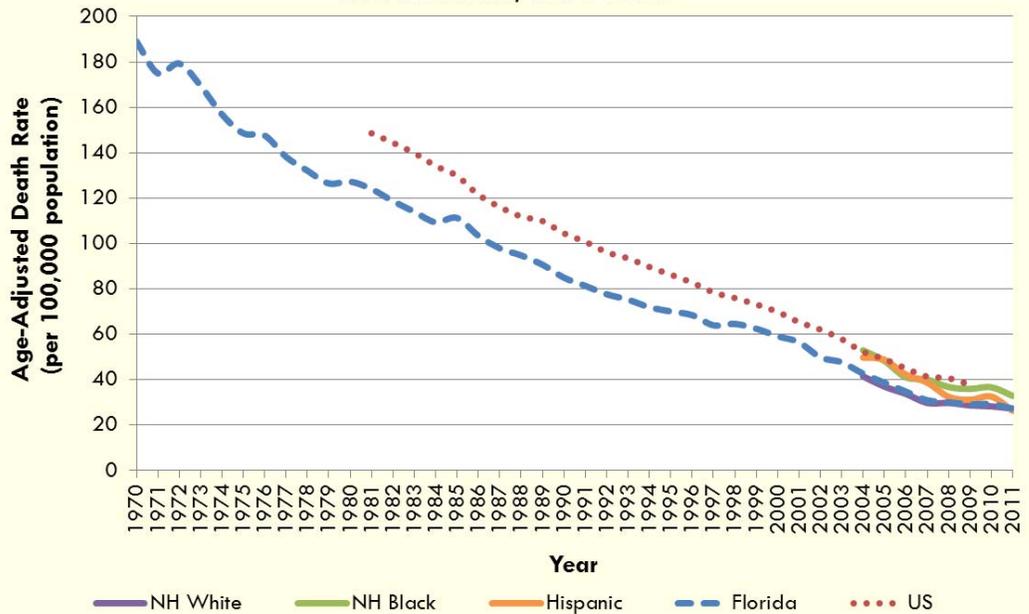
REF= Reference Group

Myocardial infarctions, or heart attack, occur when a section of the heart muscle dies or is damaged because of reduced blood supply. The main cause of a myocardial infarction is coronary artery disease (CAD), which prevents the blood supply from reaching the heart. A less common cause of a myocardial infarction is a severe spasm of a coronary artery. Immediate treatment for a myocardial infarction increases the likelihood of survival.<sup>4</sup>

Those who survive myocardial infarctions are at high risk of having another myocardial infarction, or having a stroke, kidney disorder, or peripheral arterial disease.<sup>4</sup>

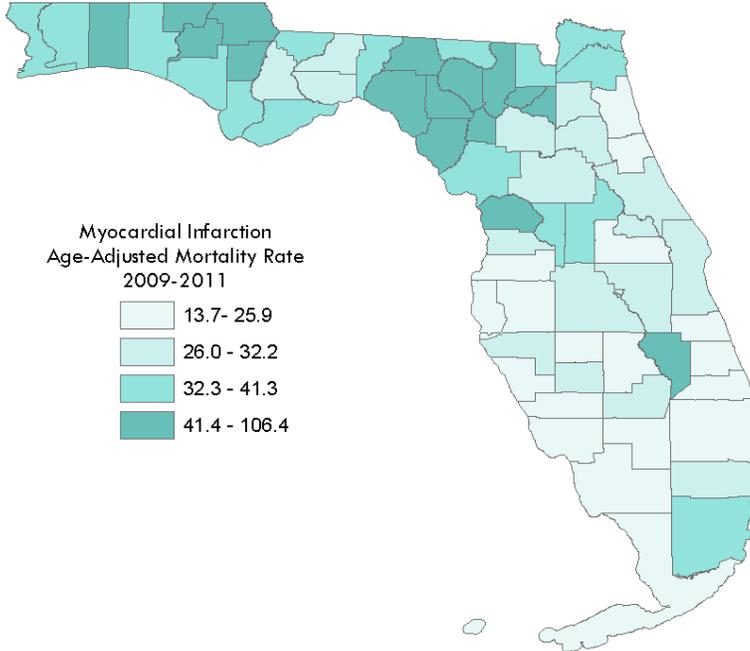
Over the last 40 years, deaths from myocardial infarctions have declined considerably. In 2011, only 27.2 persons per 100,000 population died from a myocardial infarction in Florida, compared to 189 per 100,000 in 1970. Although rates have declined, non-Hispanic blacks are still 1.3 times more likely than non-Hispanic whites to have died from a myocardial infarction.

**Myocardial Infarction Mortality Rate  
(per 100,000 population)  
U.S. & Florida, 1970-2011**



Source: Florida Bureau of Vital Statistics & CDC Health Data Interactive

MYOCARDIAL INFARCTION



Source: Florida Bureau of Vital Statistics

- The main cause of myocardial infarction is coronary artery disease.
- Since 1970, deaths from myocardial infarction have declined from 189 per 100,000 population to 27.2 per 100,000 population in 2011.
- In 2009, non-Hispanic black Floridians were 1.3 times more likely than non-Hispanic white Floridians to die from a myocardial infarction.

**MYOCARDIAL INFARCTION MORTALITY RATE BY COUNTY**  
 (AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
 (1=LOWEST AND 4=HIGHEST)

Alachua	28.2	2	Flagler	22.2	1	Lake	41.3	3	Pinellas	21.7	1
Baker	34.3	3	Franklin	40.9	3	Lee	18.8	1	Polk	30.6	2
Bay	38.6	3	Gadsden	35.4	3	Leon	30.4	2	Putnam	28.5	2
Bradford	42.3	4	Gilchrist	56.6	4	Levy	37.8	3	Santa Rosa	34.9	3
Brevard	30.9	2	Glades	28.5	2	Liberty	32.2	2	Sarasota	19.8	1
Broward	30.9	2	Gulf	35.7	3	Madison	53.2	4	Seminole	26.8	2
Calhoun	51.2	4	Hamilton	40.4	3	Manatee	26.5	2	St. Johns	24.3	1
Charlotte	21.1	1	Hardee	25.9	1	Marion	30.0	2	St. Lucie	22.8	1
Citrus	41.8	4	Hendry	20.7	1	Martin	15.2	1	Sumter	38.6	3
Clay	29.9	2	Hernando	27.8	2	Monroe	25.1	1	Suwannee	53.0	4
Collier	17.7	1	Highlands	25.9	1	Nassau	36.4	3	Taylor	41.6	4
Columbia	48.7	4	Hillsborough	23.2	1	Okaloosa	42.6	4	Union	50.2	4
Miami-Dade	39.1	3	Holmes	67.9	4	Okeechobee	43.9	4	Volusia	27.8	2
DeSoto	29.2	2	Indian River	13.7	1	Orange	25.7	1	Wakulla	26.7	2
Dixie	106.4	4	Jackson	46.6	4	Osceola	27.7	2	Walton	39.8	3
Duval	35.0	3	Jefferson	34.3	3	Palm Beach	24.6	1	Washington	50.2	4
Escambia	33.3	3	Lafayette	55.1	4	Pasco	25.1	1			

Source: Florida Bureau of Vital Statistics

# STROKE

## Stroke Age-Adjusted Mortality Rate 2009

	Rate	Ratio
FL	30.9	REF
U.S.	38.9	1.3
HP2020	33.8	--
Rank	4	--
SEX		
Male	31.0	1.02
Female	30.5	REF
RACE/ETHNICITY		
NH White	29.4	1.1
NH Black	52.9	2.0
Hispanic	26.4	REF
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

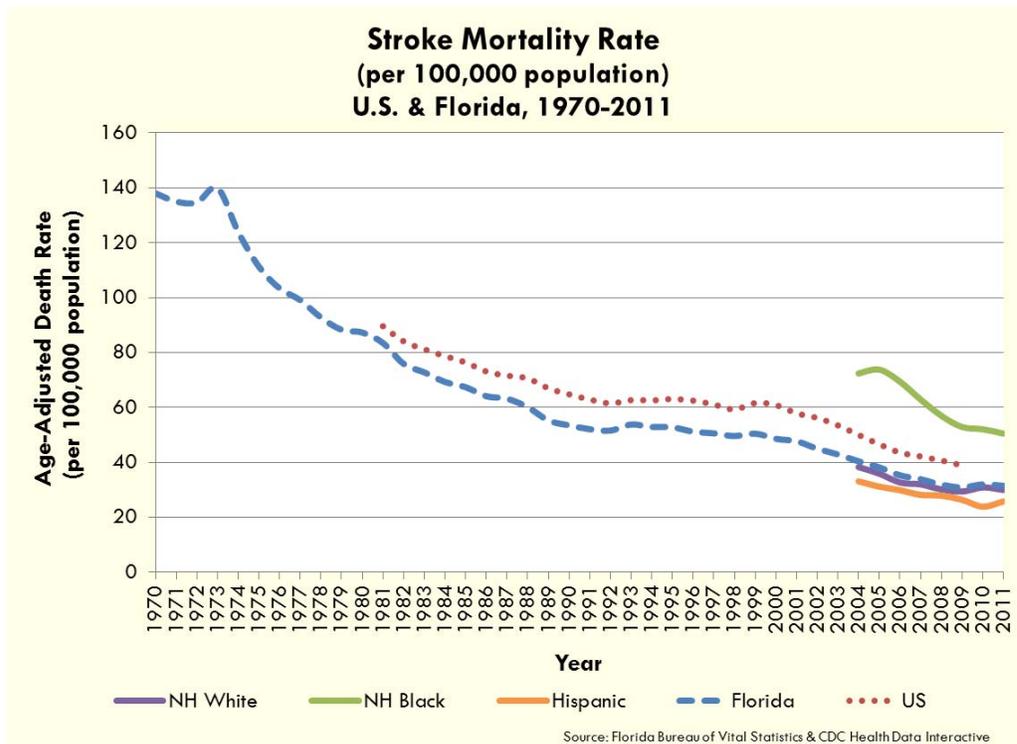
REF= Reference Group

A stroke occurs when either a clot blocks the blood supply in the brain or when a blood vessel bursts in the brain. Stroke is a leading cause of death in the U.S. and the fifth leading cause of death in Florida. Strokes can cause death, or significant disability such as paralysis, speech difficulties, and emotional problems. Immediate treatment can reduce the damage caused by the stroke.<sup>5</sup>

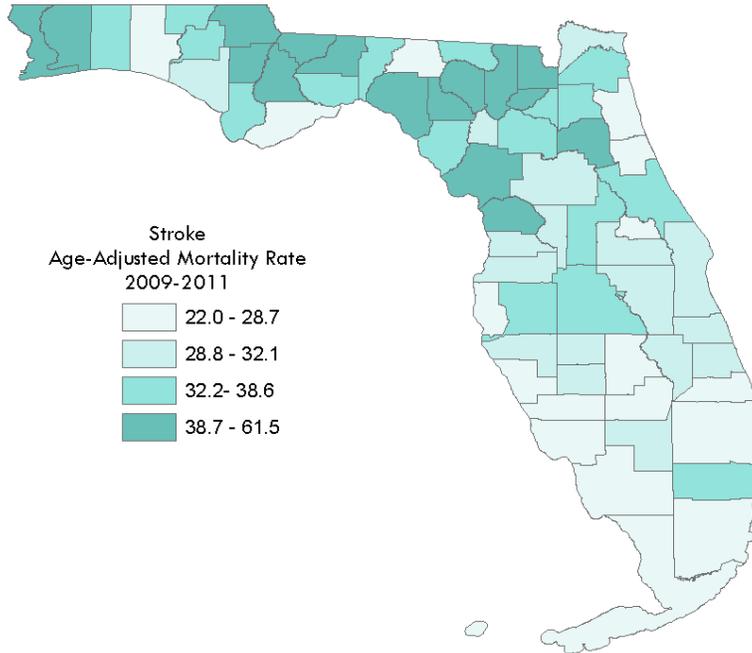
Those who have had a stroke are at a higher risk of having another one. According to the CDC, at least one in every eight stroke survivors will have another stroke within five years. To reduce the risk, stroke survivors should seek treatment for the underlying cause, including heart disease, high blood pressure, atrial fibrillation, high cholesterol, or diabetes.<sup>6</sup>

Compared to other states, Florida has a lower mortality rate for strokes. Deaths from strokes have been declining, paralleling the same trend as the U.S. In the last ten years, the rates of stroke declined sharply. In 2009, the rate was 30.9 per 100,000 population compared to the U.S.'s rate of 38.9 per 100,000 population in the same year.

Non-Hispanic blacks have a significantly higher stroke mortality rate compared to either non-Hispanic whites or Hispanics. Hispanics and non-Hispanic whites had similar age-adjusted mortality rates from 2004 to 2011.



# STROKE



Source: Florida Bureau of Vital Statistics

- Stroke is the fifth leading cause of death in Florida, and a leading cause of death in the U.S.
- At least one in every eight stroke survivors will have another stroke within five years.
- Compared to other states, Florida has a lower mortality rate for stroke.
- In 2009, the mortality rate for stroke in Florida was 30.9 per 100,000 population.
- Non-Hispanic blacks were 2 times more likely to die from a stroke compared to Hispanics in Florida in 2009.

**STROKE MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	38.6	3	Flagler	27.2	1	Lake	32.3	3	Pinellas	26.2	1
Baker	53.5	4	Franklin	27.1	1	Lee	22.0	1	Polk	33.8	3
Bay	32.1	2	Gadsden	48.4	4	Leon	39.6	4	Putnam	47.7	4
Bradford	33.1	3	Gilchrist	31.9	2	Levy	49.6	4	Santa Rosa	39.9	4
Brevard	31.6	2	Glades	23.6	1	Liberty	54.7	4	Sarasota	26.3	1
Broward	35.0	3	Gulf	35.7	3	Madison	26.2	1	Seminole	28.2	1
Calhoun	43.6	4	Hamilton	32.4	3	Manatee	30.3	2	St. Johns	26.4	1
Charlotte	28.6	1	Hardee	31.3	2	Marion	30.8	2	St. Lucie	30.1	2
Citrus	61.5	4	Hendry	31.6	2	Martin	24.6	1	Sumter	29.6	2
Clay	37.6	3	Hernando	29.4	2	Monroe	22.4	1	Suwannee	48.1	4
Collier	26.4	1	Highlands	28.5	1	Nassau	29.4	2	Taylor	46.0	4
Columbia	50.6	4	Hillsborough	32.3	3	Okaloosa	35.4	3	Union	50.9	4
Miami-Dade	28.7	1	Holmes	37.2	3	Okeechobee	29.9	2	Volusia	36.8	3
DeSoto	31.5	2	Indian River	30.4	2	Orange	31.9	2	Wakulla	35.3	3
Dixie	33.0	3	Jackson	49.7	4	Osceola	31.9	2	Walton	28.6	1
Duval	37.9	3	Jefferson	36.7	3	Palm Beach	28.6	1	Washington	37.8	3
Escambia	49.9	4	Lafayette	39.0	4	Pasco	29.7	2			

Source: Florida Bureau of Vital Statistics

# DIABETES

## Diabetes Prevalence (Percent) 2010

	Rate	Ratio
FL	10.4	1.2
U.S.	8.7	REF
HP2020	--	--
Rank	43	--
SEX		
Male	9.0	1.1
Female	8.4	REF
RACE/ETHNICITY		
White	8.0	1.01
Black	13.5	1.7
Hispanic	7.9	REF
EDUCATION		
<HS	14.2	2.4
HS	9.8	1.6
HS+	8.9	1.5
College Grad	6.0	REF

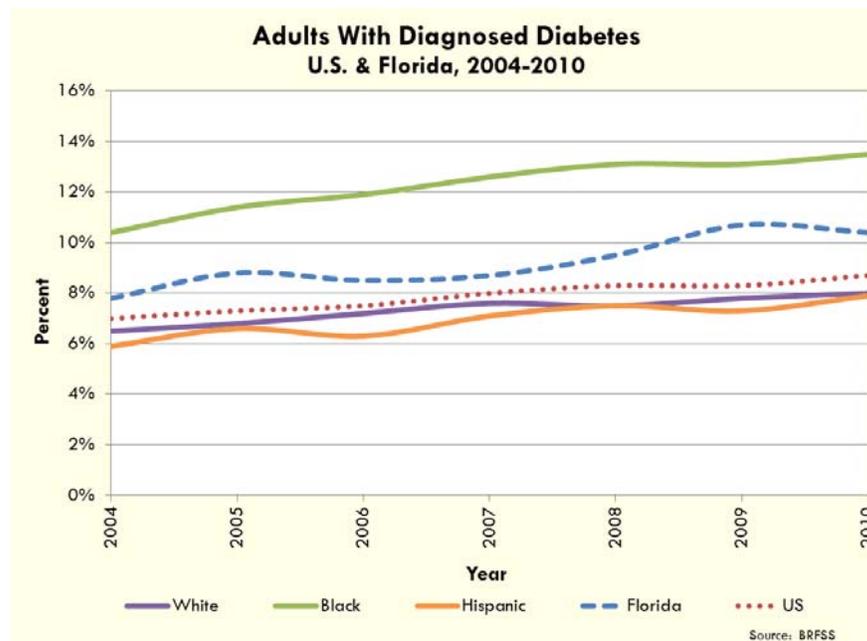
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Diabetes is a metabolic condition which results in excessive amounts of glucose (sugar) in the bloodstream. High blood glucose levels damage the body's blood vessels without providing fuel for the body and can lead to major complications, disability, and premature death. Complications from diabetes include blindness, lower extremity amputations, kidney failure, heart disease, and stroke.<sup>7</sup>

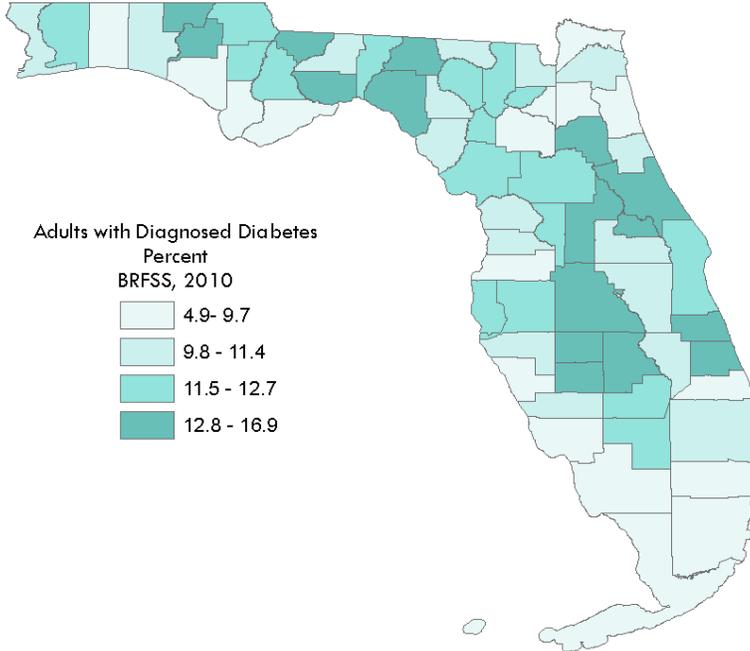
Adequate and regular health care and self-monitoring are critical to prevent and control diabetes-related complications. Routine physician visits, physical activity, diet modification, and diabetes self-management education positively affect health outcomes. Appropriate screening, early intervention, education, and altering personal behaviors are vital in preventing complications.<sup>7</sup>

Certain populations have a disproportionate burden of diabetes. Compared with whites, blacks have higher diabetes death rates, higher rates of hospital discharges with diabetes as the primary diagnosis, and higher non-traumatic lower extremity amputation rates. Persons 65 years of age and older have a higher prevalence of diabetes, and have higher rates of mortality and disability resulting from diabetes compared to their younger counterparts. Research indicates that the elderly and minority populations will experience the most rapid growth in the number of people with diabetes.<sup>7</sup>

In 2010, about 1.5 million Florida adults (10.4% of the adult population) reported having been diagnosed with diabetes. Between 1995 and 2010, the prevalence of diabetes has doubled from 5.3% of the adult population in 1995 to over 10% in 2010. In the U.S., a similar increase has occurred, but at a lower percentage overall. Black Floridians were 1.7 times more likely than Hispanics to be diagnosed with diabetes. Floridians who did not finish high school were 2.4 times more likely than college graduates to be diagnosed.



DIABETES



Adults with Diagnosed Diabetes  
Percent  
BRFSS, 2010

- 4.9- 9.7
- 9.8 - 11.4
- 11.5 - 12.7
- 12.8 - 16.9

Source: Florida Behavioral Risk Factor Survey

**ADULTS WITH DIAGNOSED DIABETES BY COUNTY**  
(PERCENT; QUARTILE; 2010)  
(1=LOWEST AND 4=HIGHEST)

Alachua	4.9	1	Flagler	10.2	2	Lake	13.4	4	Pinellas	12.4	3
Baker	10.5	2	Franklin	8.9	1	Lee	9.0	1	Polk	14.2	4
Bay	8.9	1	Gadsden	16.7	4	Leon	9.8	2	Putnam	14.6	4
Bradford	9.7	1	Gilchrist	11.8	3	Levy	12.3	3	Santa Rosa	12.5	3
Brevard	11.9	3	Glades	11.5	3	Liberty	12.2	3	Sarasota	8.6	1
Broward	6.8	1	Gulf	7.6	1	Madison	13.4	4	Seminole	13.5	4
Calhoun	11.5	3	Hamilton	11.1	2	Manatee	10.8	2	St. Johns	7.1	1
Charlotte	11.2	2	Hardee	16.9	4	Marion	12.2	3	St. Lucie	16.7	4
Citrus	10.0	2	Hendry	12.0	3	Martin	8.0	1	Sumter	11.9	3
Clay	8.8	1	Hernando	11.1	2	Monroe	7.4	1	Suwannee	12.7	3
Collier	9.4	1	Highlands	14.2	4	Nassau	6.8	1	Taylor	15.2	4
Columbia	12.0	3	Hillsborough	11.7	3	Okaloosa	8.8	1	Union	12.3	3
Miami-Dade	9.3	1	Holmes	14.5	4	Okeechobee	11.3	2	Volusia	13.5	4
DeSoto	13.4	4	Indian River	13.5	4	Orange	9.9	2	Wakulla	12.9	4
Dixie	11.1	2	Jackson	11.8	3	Osceola	9.9	2	Walton	10.0	2
Duval	11.4	2	Jefferson	11.9	3	Palm Beach	10.1	2	Washington	13.1	4
Escambia	11.2	2	Lafayette	9.8	2	Pasco	8.5	1			

Source: Florida Behavioral Risk Factor Survey

- High glucose levels damage the body's blood vessels.
- In the U.S., non-Hispanic blacks have higher death, hospitalization and lower extremity amputation rates compared to whites.
- Research indicates the elderly and minority populations will experience the most rapid growth in the number of people with diabetes.
- In 2010, 10.4% of the adult Florida population reported having diabetes.
- Black Floridians were 1.7 times more likely than Hispanics to have been diagnosed with diabetes.
- Floridians who did not finish high school were 2.4 times more likely than those with a college degree to have been diagnosed with diabetes.

# DIABETES

Diabetes  
Age-Adjusted  
Hospitalization Rate  
2010

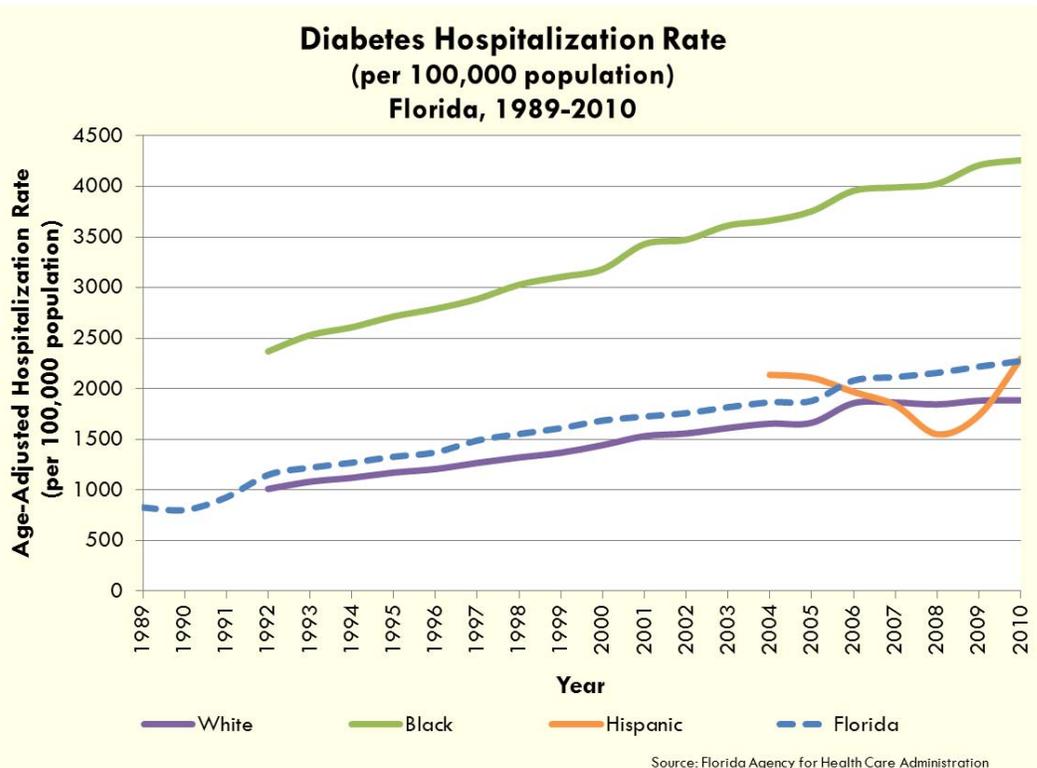
	Rate	Ratio
FL	2274.8	--
U.S.	--	--
HP2020	--	--
Rank	--	--
SEX		
Male	--	--
Female	--	--
RACE/ETHNICITY		
White	1888.0	REF
Black	4259.5	2.3
Hispanic	2296	1.2
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group

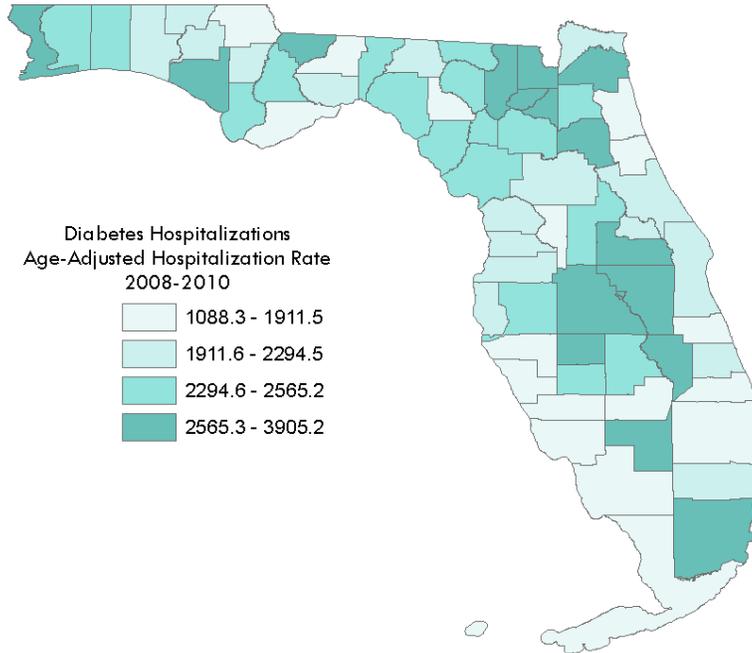
According to the Healthcare Cost & Utilization Project (HCUP), in one year, nearly 30% of patients with diabetes who were hospitalized will be re-hospitalized two or more times due to complications associated with diabetes. These patients with diabetes account for more than half of all diabetes hospital stays in the U.S.<sup>8</sup>

Common diabetes-associated complications include cardiovascular disease and lower extremity disease. Lower extremity amputations are also common among diabetics. Patients with diabetes hospitalized with complications from the disease are 28 times more likely to have an amputation than a non-diabetic.<sup>8</sup>

Hospitalizations from diabetes have increased rapidly over the last 21 years, to a 2010 age-adjusted hospitalization rate of 2274.8 per 100,000 population. Much like the diabetes diagnosis, hospitalizations for diabetes differ by race and ethnicity. Non-Hispanic black Floridians are 2.3 times more likely than white Floridians to be hospitalized for diabetes.



# DIABETES



Source: Florida Agency for Health Care Administration

**DIABETES HOSPITALIZATIONS BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2008-2010)  
(1=LOWEST AND 4=HIGHEST)

Alachua	2468.3	3	Flagler	1536.9	1	Lake	2402.0	3	Pinellas	1967.1	2
Baker	3249.8	4	Franklin	1691.5	1	Lee	1620.2	1	Polk	2865.5	4
Bay	2641.9	4	Gadsden	2855.9	4	Leon	1905.8	1	Putnam	2726.6	4
Bradford	2920.3	4	Gilchrist	2438.7	3	Levy	2528.9	3	Santa Rosa	2565.2	3
Brevard	1990.4	2	Glades	1438.3	1	Liberty	2331.3	3	Sarasota	1139.8	1
Broward	2266.3	2	Gulf	2547.0	3	Madison	2085.1	2	Seminole	2146.2	2
Calhoun	2224.6	2	Hamilton	2450.3	3	Manatee	1577.2	1	St. Johns	1586.9	1
Charlotte	1911.5	1	Hardee	2796.1	4	Marion	2291.3	2	St. Lucie	2171.3	2
Citrus	1993.9	2	Hendry	3353.1	4	Martin	1088.3	1	Sumter	1800.3	1
Clay	2545.8	3	Hernando	2294.5	2	Monroe	1270.7	1	Suwannee	2532.1	3
Collier	1126.4	1	Highlands	2488.3	3	Nassau	2176.5	2	Taylor	2397.9	3
Columbia	2979.0	4	Hillsborough	2496.2	3	Okaloosa	2466.3	3	Union	3781.3	4
Miami-Dade	2682.0	4	Holmes	2041.1	2	Okeechobee	3905.2	4	Volusia	2081.2	2
DeSoto	2385.3	3	Indian River	1527.1	1	Orange	3209.8	4	Wakulla	1958.8	2
Dixie	2398.3	3	Jackson	1810.5	1	Osceola	3119.0	4	Walton	2223.9	2
Duval	3237.4	4	Jefferson	2330.7	3	Palm Beach	1708.2	1	Washington	2196.2	2
Escambia	2713.9	4	Lafayette	1472.9	1	Pasco	2168.2	2			

Source: Florida Agency for Health Care Administration

- In one year, nearly 30% of patients with diabetes who were hospitalized will be re-hospitalized two or more times due to complications associated with diabetes.
- Patients with diabetes hospitalized with complications from the disease are 28 times more likely to have an amputation than a non-diabetic.
- Hospitalizations from diabetes have increased rapidly over the last 21 years, to a 2010 age-adjusted hospitalization rate of 2274.8 per 100,000 population.
- Non-Hispanic black Floridians are 2.3 times more likely than white Floridians to be hospitalized for diabetes.

# DIABETES

## Diabetes Age-Adjusted Mortality Rate 2009

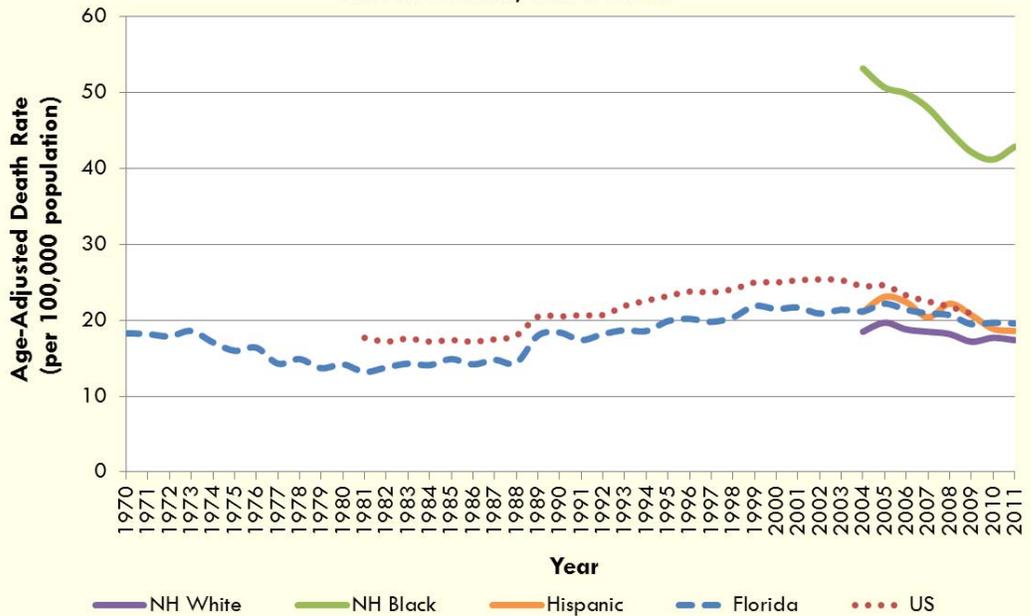
	Rate	Ratio
FL	19.5	REF
U.S.	20.0	1.03
HP2020	--	--
Rank	18	--
<b>SEX</b>		
Male	24.7	1.6
Female	15.0	REF
<b>RACE/ETHNICITY</b>		
NH White	17.2	REF
NH Black	42.2	2.5
Hispanic	20.7	1.2
<b>EDUCATION</b>		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group

In 2011, diabetes was the sixth leading cause of death in Florida, accounting for 5,044 deaths. Between 1995 and 2011, Florida's diabetes age-adjusted death rate was stable. A significant proportion of mortality and morbidity related to diabetes could be prevented by addressing exercise, weight control, smoking prevention and cessation, hypertension prevention, glycemic control, and elimination of barriers to preventive care and treatment.<sup>7</sup>

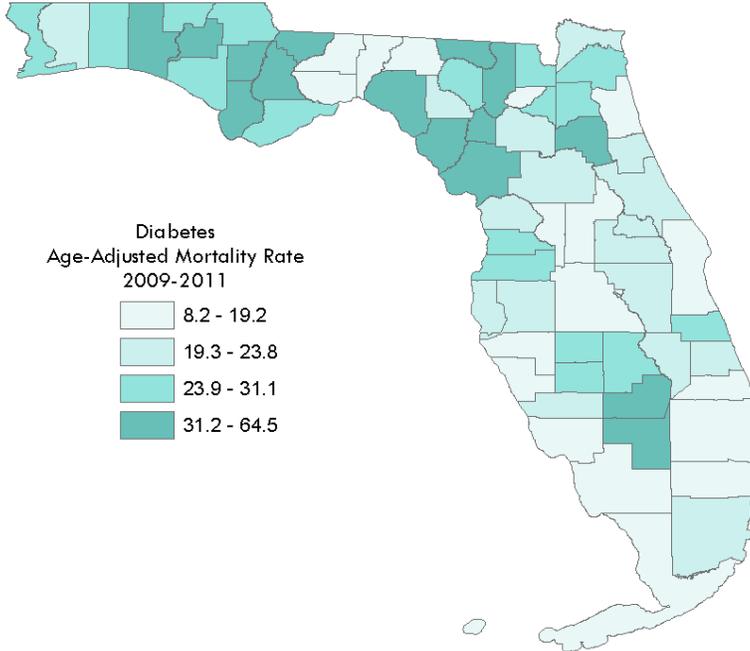
There is a significantly higher diabetes mortality rate among non-Hispanic blacks than either non-Hispanic whites or Hispanics. In 2009, non-Hispanic blacks were 2.5 times more likely than non-Hispanic whites to die from diabetes. Hispanics and non-Hispanic whites have similar age-adjusted mortality rates. Male Floridians were 1.6 times more likely than their female counterparts to die from diabetes in 2009.

**Diabetes Mortality Rate (per 100,000 population) U.S. & Florida, 1970-2011**



Source: Florida Bureau of Vital Statistics & CDC Health Data Interactive

DIABETES



Source: Florida Bureau of Vital Statistics

- Diabetes was the sixth leading cause of death in Florida in 2011.
- In 2009, non-Hispanic blacks were 2.5 times more likely than non-Hispanic whites to die from diabetes in Florida.
- Male Floridians were 1.6 times more likely than female Floridians to die from diabetes in 2009.

**DIABETES MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	23.4	2	Flagler	19.5	2	Lake	19.1	1	Pinellas	20.5	2
Baker	29.6	3	Franklin	25.7	3	Lee	13.5	1	Polk	18.5	1
Bay	25.5	3	Gadsden	40.3	4	Leon	18.5	1	Putnam	34.6	4
Bradford	28.6	3	Gilchrist	31.5	4	Levy	31.9	4	Santa Rosa	21.0	2
Brevard	19.2	1	Glades	31.5	4	Liberty	44.4	4	Sarasota	11.5	1
Broward	14.7	1	Gulf	45.4	4	Madison	19.2	1	Seminole	21.6	2
Calhoun	39.3	4	Hamilton	33.0	4	Manatee	11.7	1	St. Johns	11.3	1
Charlotte	19.5	2	Hardee	27.6	3	Marion	23.8	2	St. Lucie	19.7	2
Citrus	22.5	2	Hendry	35.2	4	Martin	8.2	1	Sumter	16.1	1
Clay	28.1	3	Hernando	31.1	3	Monroe	16.9	1	Suwannee	31.1	3
Collier	9.4	1	Highlands	26.5	3	Nassau	20.0	2	Taylor	64.5	4
Columbia	33.0	4	Hillsborough	23.8	2	Okaloosa	25.4	3	Union	13.0	1
Miami-Dade	21.9	2	Holmes	24.7	3	Okeechobee	19.7	2	Volusia	23.8	2
DeSoto	23.9	3	Indian River	24.1	3	Orange	22.4	2	Wakulla	16.8	1
Dixie	34.6	4	Jackson	24.4	3	Osceola	23.8	2	Walton	35.8	4
Duval	29.8	3	Jefferson	18.7	1	Palm Beach	12.2	1	Washington	39.5	4
Escambia	27.6	3	Lafayette	19.3	2	Pasco	24.9	3			

Source: Florida Bureau of Vital Statistics

## KIDNEY DISEASES

### Kidney Disorders Age-Adjusted Mortality Rate 2009

	Rate	Ratio
FL	11.5	REF
U.S.	14.9	1.3
HP2020	--	--
Rank	--	--
SEX		
Male	14.4	1.6
Female	9.2	REF
RACE/ETHNICITY		
NH White	9.7	REF
NH Black	25.1	2.9
Hispanic	11.1	1.1
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

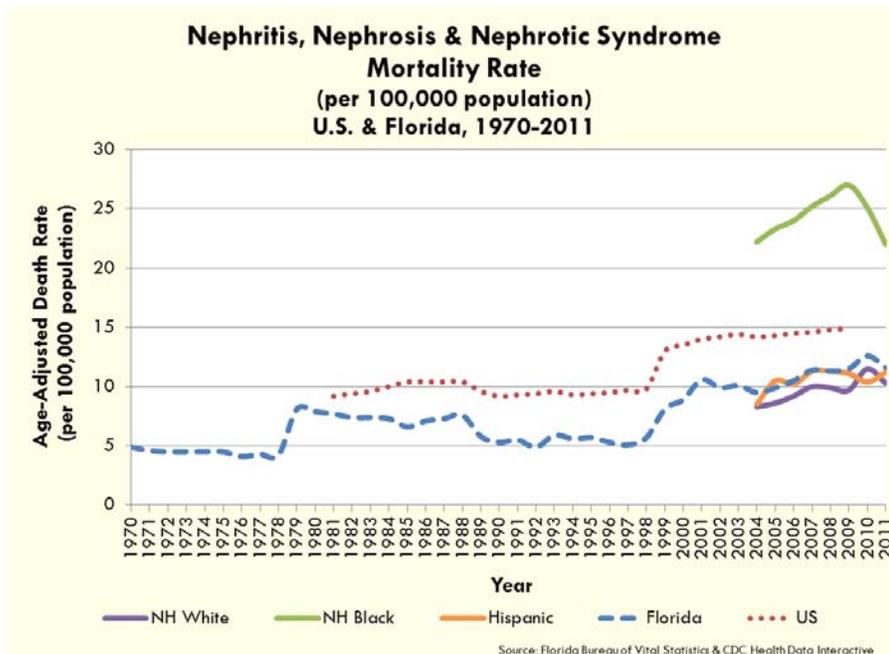
REF= Reference Group

In Florida, kidney diseases are the eighth leading cause of death. This includes nephrosis, nephritis and nephrotic syndrome.

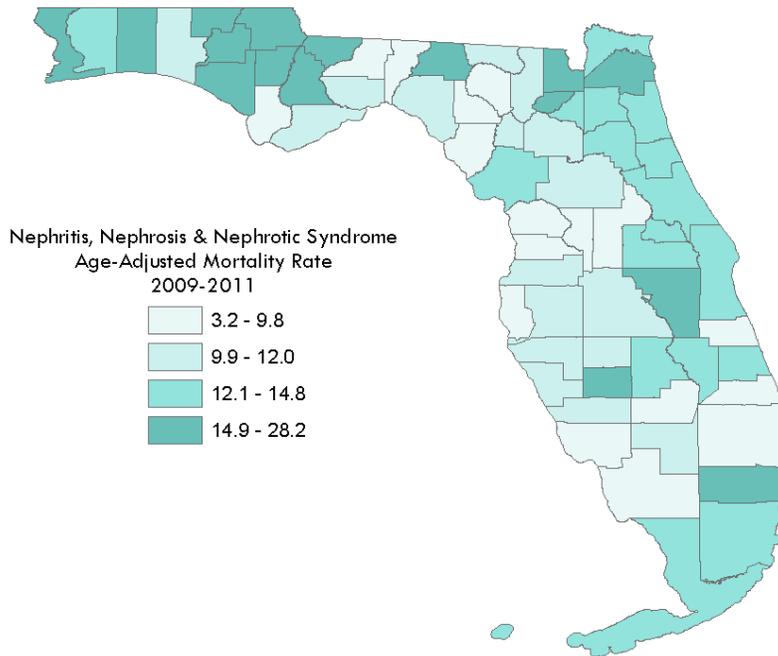
Chronic kidney disease (CKD), or chronic renal disease, includes conditions such as nephritis and nephrosis that damage the kidneys. Ultimately, as the damage continues, the kidneys' ability to keep the body healthy declines. There are many complications that may occur with CKD, such as high blood pressure, anemia, weak bones, poor nutritional health and nerve damage. Having CKD also increases the risk of having heart and blood vessel diseases. Up to two-thirds of all CKD diagnoses are caused from diabetes and high blood pressure. Other causes range from genetic diseases such as polycystic kidney disease to immune disorders such as lupus. Those at high risk for developing CKD are individuals with diabetes, hypertension, or with a family history of kidney disease. Some groups, such as non-Hispanic blacks, Hispanics, Pacific Islanders, Native Americans and those aged 65 and older are at an increased risk of developing CKD as well.<sup>9</sup>

Nephrotic syndrome is caused by different disorders, such as cancer, genetic disorders, immune disorders, infections and use of certain drugs that damage the kidneys. People of all ages can develop nephrotic syndrome. Males are slightly more likely than females to develop it.<sup>10</sup>

Florida has had lower mortality rates for nephritis, nephrosis and nephrotic syndrome than the U.S. overall since 1981. Non-Hispanic blacks in Florida, however, have had higher rates than in the U.S. and other racial or ethnic group. In 2009, non-Hispanic blacks were 2.9 times more likely than non-Hispanic whites to die from these kidney diseases.



KIDNEY DISEASES



Source: Florida Bureau of Vital Statistics

- Kidney disease encompasses nephritis, nephrosis, and nephrotic syndrome.
- Up to two-thirds of all chronic kidney disease diagnoses are caused by diabetes and high blood pressure.
- Florida has a lower rate of deaths from these kidney diseases than the U.S.
- In 2009, non-Hispanic black Floridians were 2.9 times more likely than non-Hispanic white Floridians to die from these kidney diseases.

**NEPHRITIS, NEPHROSIS & NEPHROTIC SYNDROME MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	11.7	2	Flagler	14.8	3	Lake	7.7	1	Pinellas	9.8	1
Baker	28.2	4	Franklin	11.3	2	Lee	7.6	1	Polk	11.8	2
Bay	15.6	4	Gadsden	15.1	4	Leon	9.6	1	Putnam	14.1	3
Bradford	12.1	3	Gilchrist	11.6	2	Levy	14.2	3	Santa Rosa	14.4	3
Brevard	12.4	3	Glades	7.4	1	Liberty	23.5	4	Sarasota	10.4	2
Broward	15.2	4	Gulf	7.0	1	Madison	23.0	4	Seminole	14.6	3
Calhoun	21.4	4	Hamilton	9.9	2	Manatee	11.0	2	St. Johns	12.2	3
Charlotte	10.8	2	Hardee	12.0	2	Marion	11.5	2	St. Lucie	14.0	3
Citrus	8.6	1	Hendry	10.5	2	Martin	5.9	1	Sumter	8.0	1
Clay	14.1	3	Hernando	8.8	1	Monroe	13.9	3	Suwannee	8.5	1
Collier	6.4	1	Highlands	13.5	3	Nassau	12.9	3	Taylor	11.1	2
Columbia	10.1	2	Hillsborough	11.1	2	Okaloosa	24.2	4	Union	22.2	4
Miami-Dade	13.6	3	Holmes	20.8	4	Okeechobee	14.7	3	Volusia	14.1	3
DeSoto	18.6	4	Indian River	4.2	1	Orange	14.6	3	Wakulla	10.7	2
Dixie	3.2	1	Jackson	16.2	4	Osceola	17.8	4	Walton	12.0	2
Duval	16.9	4	Jefferson	6.5	1	Palm Beach	9.2	1	Washington	15.7	4
Escambia	18.0	4	Lafayette	8.3	1	Pasco	10.4	2			

Source: Florida Bureau of Vital Statistics

## CHRONIC LIVER DISEASE & CIRRHOSIS

**Chronic Liver Disease & Cirrhosis  
Age-Adjusted  
Mortality Rate  
2009**

	Rate	Ratio
FL	10.4	1.1
U.S.	9.2	REF
HP2020	8.2	--
Rank	--	--
SEX		
Male	14.3	2.1
Female	6.8	REF
RACE/ETHNICITY		
NH White	12.4	2.3
NH Black	5.4	REF
Hispanic	7.5	1.4
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

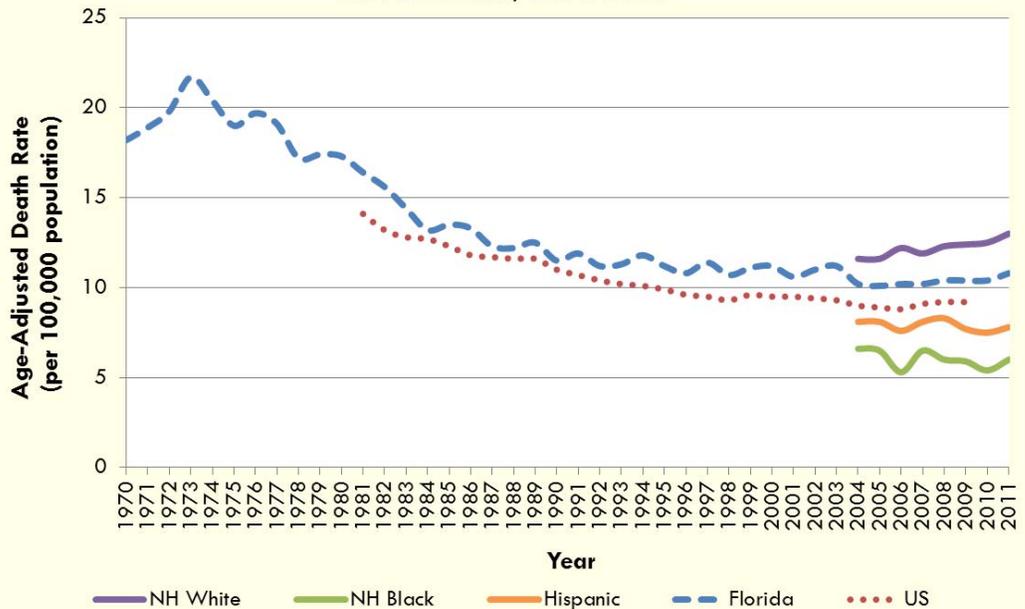
REF= Reference Group

Chronic liver disease and cirrhosis are leading causes of death both in Florida and the U.S. In Florida, chronic liver disease and cirrhosis are the tenth cause of death. Chronic liver disease can be caused by obesity, exposure to Hepatitis B & C virus, and chronic alcoholism.<sup>11</sup> Blood flow is diminished through the liver as scar tissue replaces normal functioning liver tissue. With the loss of healthy, normal liver tissue, the liver cannot process nutrients, hormones, drugs and poisons or produce enough protein.<sup>12</sup>

Although cirrhosis is irreversible and progressive, eating well, eliminating toxins, such as alcohol, taking vitamins and managing complications can delay further damage. However, in serious cases, liver transplantation may be recommended.<sup>12</sup>

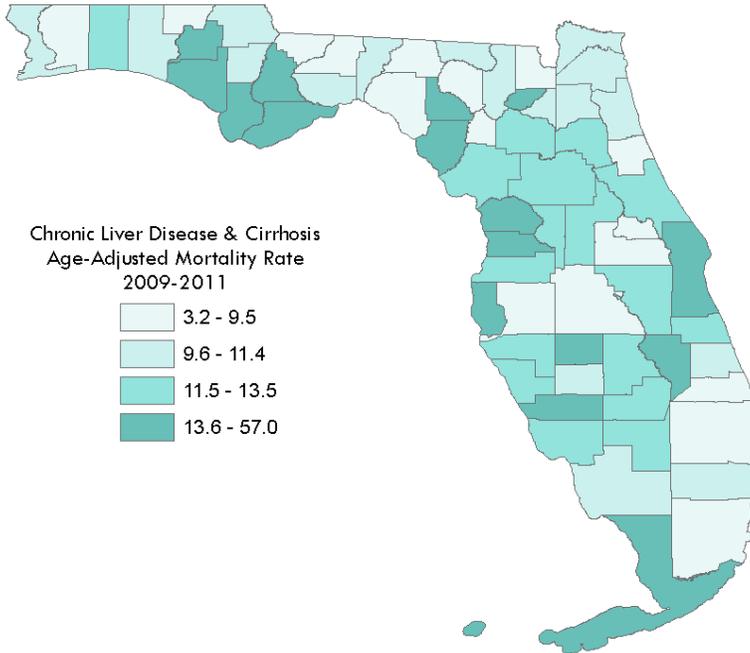
Non-Hispanic white Floridians have higher mortality rates due to chronic liver disease and cirrhosis compared to non-Hispanic black and Hispanic Floridians, as well as the U.S. overall. They were 2.3 times more likely than non-Hispanic blacks to die from chronic liver disease and cirrhosis in 2009. Florida men are also 2.1 times more likely than Florida females to die from these causes in 2009.

**Chronic Liver Disease & Cirrhosis Mortality Rate  
(per 100,000 population)  
U.S. & Florida, 1970-2011**



Source: Florida Bureau of Vital Statistics & CDC Health Data Interactive

CHRONIC LIVER DISEASE & CIRRHOSIS



Source: Florida Bureau of Vital Statistics

- Chronic liver disease and cirrhosis are leading causes of death in Florida and the U.S.
- Non-Hispanic white Floridians were 2.3 times more likely than non-Hispanic black Floridians to die from chronic liver disease or cirrhosis in 2009.
- In 2009, men in Florida were 2.1 times more likely than women to die from chronic liver disease and cirrhosis.

**CHRONIC LIVER DISEASE AND CIRRHOSIS MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	12.0	3	Flagler	8.0	1	Lake	11.7	3	Pinellas	14.4	4
Baker	9.3	1	Franklin	17.3	4	Lee	11.5	3	Polk	9.3	1
Bay	16.2	4	Gadsden	9.1	1	Leon	8.3	1	Putnam	12.4	3
Bradford	9.7	2	Gilchrist	3.2	1	Levy	12.7	3	Santa Rosa	8.6	1
Brevard	15.1	4	Glades	12.0	3	Liberty	15.3	4	Sarasota	13.0	3
Broward	10.0	2	Gulf	14.5	4	Madison	6.5	1	Seminole	7.0	1
Calhoun	11.2	2	Hamilton	11.1	2	Manatee	12.6	3	St. Johns	10.4	2
Charlotte	16.8	4	Hardee	15.1	4	Marion	13.0	3	St. Lucie	10.4	2
Citrus	22.9	4	Hendry	12.5	3	Martin	9.0	1	Sumter	13.5	3
Clay	9.8	2	Hernando	14.6	4	Monroe	20.4	4	Suwannee	7.5	1
Collier	10.6	2	Highlands	13.3	3	Nassau	10.0	2	Taylor	8.0	1
Columbia	10.4	2	Hillsborough	9.1	1	Okaloosa	13.5	3	Union	57.0	4
Miami-Dade	7.5	1	Holmes	9.5	1	Okeechobee	16.5	4	Volusia	13.5	3
DeSoto	11.4	2	Indian River	11.7	3	Orange	7.0	1	Wakulla	9.6	2
Dixie	15.2	4	Jackson	10.3	2	Osceola	11.5	3	Walton	10.2	2
Duval	10.5	2	Jefferson	11.2	2	Palm Beach	8.8	1	Washington	16.7	4
Escambia	9.8	2	Lafayette	20.6	4	Pasco	13.3	3			

Source: Florida Bureau of Vital Statistics

# ALZHEIMER'S DISEASE

## Alzheimer's Disease Age-Adjusted Mortality Rate 2009

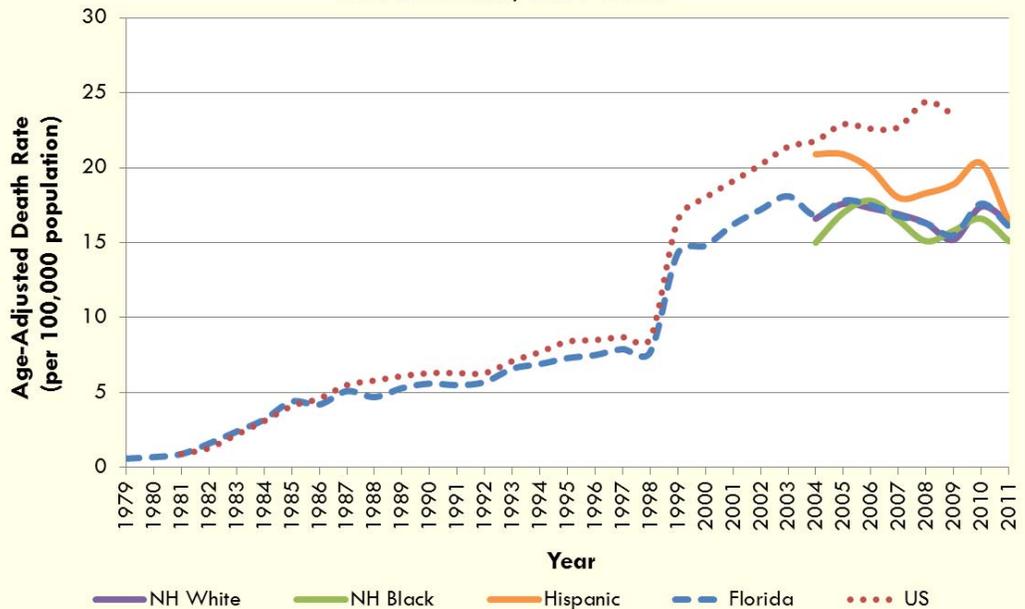
	Rate	Ratio
FL	15.5	REF
U.S.	23.5	1.5
HP2020	--	--
Rank	--	--
SEX		
Male	13.0	REF
Female	17.2	1.3
RACE/ETHNICITY		
NH White	15.2	REF
NH Black	15.8	1.04
Hispanic	18.9	1.2
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group

Alzheimer's disease, a form of dementia, occurs when there is a gradual loss of brain function. It is the seventh leading cause of death in Florida. It typically affects people over the age of 60. Although the cause of Alzheimer's disease is not known, some known associated risk factors include aging, having a close blood relative that has had the disease, and genetics. Some evidence suggests that being female, having high blood pressure for a long time, and a history of head trauma may increase the risk of Alzheimer's.<sup>13</sup>

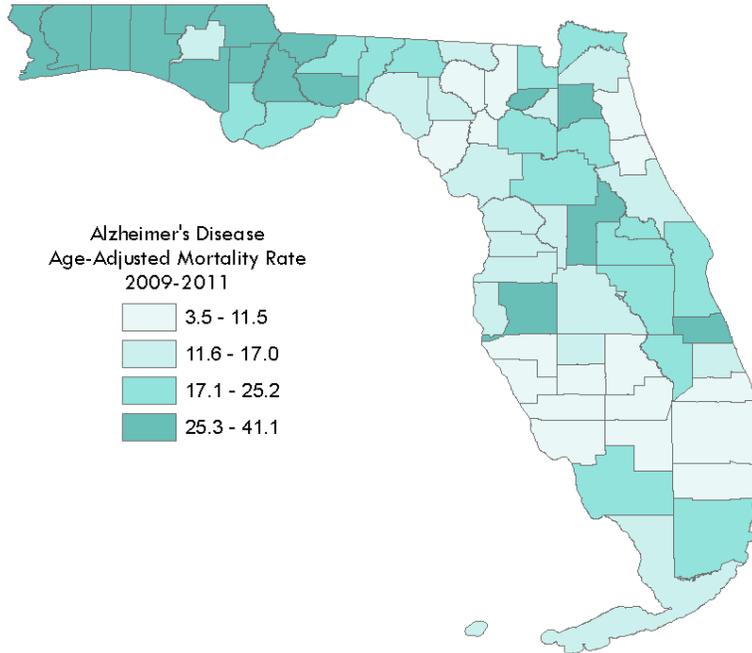
In Florida and the U.S., Alzheimer's disease has increased dramatically since 1979. The mortality rates for Alzheimer's disease are closely parallel for Florida and the U.S. until 2000, when the U.S. rates increased substantially compared to Florida. Racial/Ethnic disparities in death rates disappeared by 2011. Alzheimer's disease mortality varies by sex. In 2009, Florida women were 1.3 times more likely to die from Alzheimer's disease than their male counterparts.

**Alzheimer's Disease Mortality Rate  
(per 100,000 population)  
U.S. & Florida, 1979-2011**



Source: Florida Bureau of Vital Statistics & CDC Health Data Interactive

# ALZHEIMER'S DISEASE



Source: Florida Bureau of Vital Statistics

- Alzheimer's disease was the seventh leading cause of death in Florida in 2011.
- In Florida and the U.S., Alzheimer's disease has increased dramatically since 1979.
- Historic racial/ethnic disparities in death rates disappeared by 2011 in Florida.

**ALZHEIMER'S DISEASE MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	22.2	3	Flagler	10.6	1	Lake	26.5	4	Pinellas	15.5	2
Baker	23.2	3	Franklin	24.2	3	Lee	9.5	1	Polk	12.0	2
Bay	31.0	4	Gadsden	25.5	4	Leon	20.5	3	Putnam	23.9	3
Bradford	14.3	2	Gilchrist	4.7	1	Levy	16.8	2	Santa Rosa	27.9	4
Brevard	21.5	3	Glades	5.7	1	Liberty	41.1	4	Sarasota	11.5	1
Broward	10.6	1	Gulf	22.6	3	Madison	22.7	3	Seminole	24.2	3
Calhoun	29.2	4	Hamilton	14.0	2	Manatee	8.8	1	St. Johns	11.5	1
Charlotte	11.4	1	Hardee	11.8	2	Marion	24.2	3	St. Lucie	16.8	2
Citrus	13.1	2	Hendry	9.7	1	Martin	11.4	1	Sumter	16.4	2
Clay	26.8	4	Hernando	16.2	2	Monroe	13.8	2	Suwannee	9.3	1
Collier	22.8	3	Highlands	9.5	1	Nassau	25.2	3	Taylor	15.7	2
Columbia	9.3	1	Hillsborough	26.6	4	Okaloosa	26.7	4	Union	26.4	4
Miami-Dade	17.2	3	Holmes	25.9	4	Okeechobee	22.7	3	Volusia	17.0	2
DeSoto	3.5	1	Indian River	26.7	4	Orange	20.8	3	Wakulla	27.2	4
Dixie	9.4	1	Jackson	41.1	4	Osceola	18.6	3	Walton	32.2	4
Duval	16.0	2	Jefferson	20.1	3	Palm Beach	11.2	1	Washington	16.8	2
Escambia	28.3	4	Lafayette	15.9	2	Pasco	13.3	2			

Source: Florida Bureau of Vital Statistics

# BREAST CANCER

Women 40+ Who Have Had a Mammogram in the Past Two Years (Percent) 2010

	Rate	Ratio*
FL	77.1	REF
U.S.	75.2	.97
HP2020	81.1	--
Rank	18	--
<b>SEX</b>		
Male	--	--
Female	--	--
<b>RACE/ETHNICITY</b>		
White	77.6	.99
Black	78.5	REF
Hispanic	74.8	.95
<b>EDUCATION</b>		
<HS	66.8	.80
HS	74.0	.89
HS+	75.7	.91
College Grad	83.0	REF

\*Because a high rate for this indicator suggests a more favorable outcome, ratios will be below 1.0.

REF= Reference Group

Breast cancer is an uncontrolled growth of breast cells, or malignant tumor that has developed from cells in the breast.

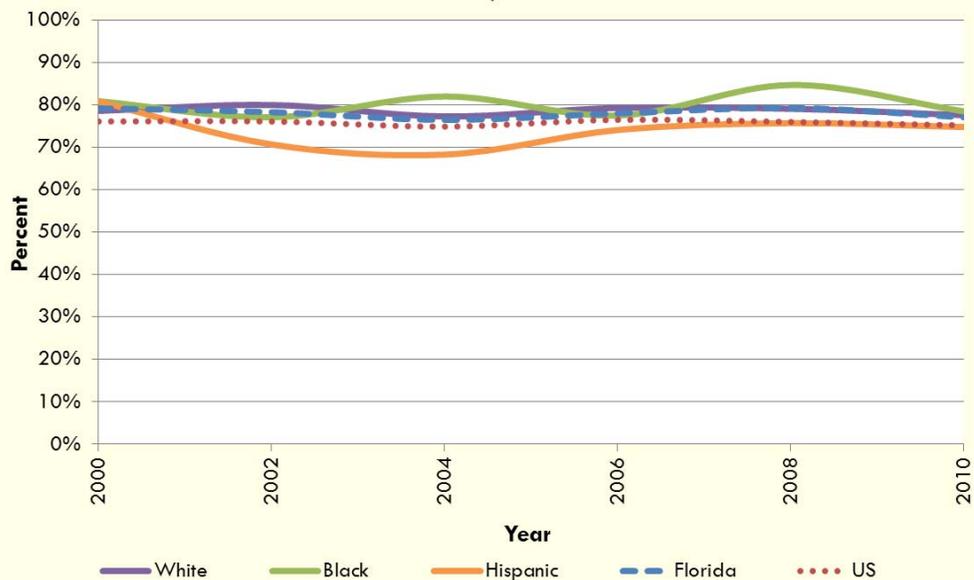
Breast cancer is always caused by a genetic abnormality or a “mistake” in the genetic material; however, only 5-10% of cancers are due to an inherited abnormality. The remaining 90% of breast cancers are due to genetic abnormalities that happen as a result of the aging process.<sup>14</sup>

In 2011, the Institute of Medicine reported that ionizing radiation, exposure to chemicals, combination progesterone-progestin hormone therapy, and greater postmenopausal weight increases chances of developing breast cancer.<sup>15</sup>

To lower the risk of breast cancer or breast cancer recurrence, women should maintain a healthy weight, not smoke, limit alcohol intake and exercise regularly.<sup>14</sup>

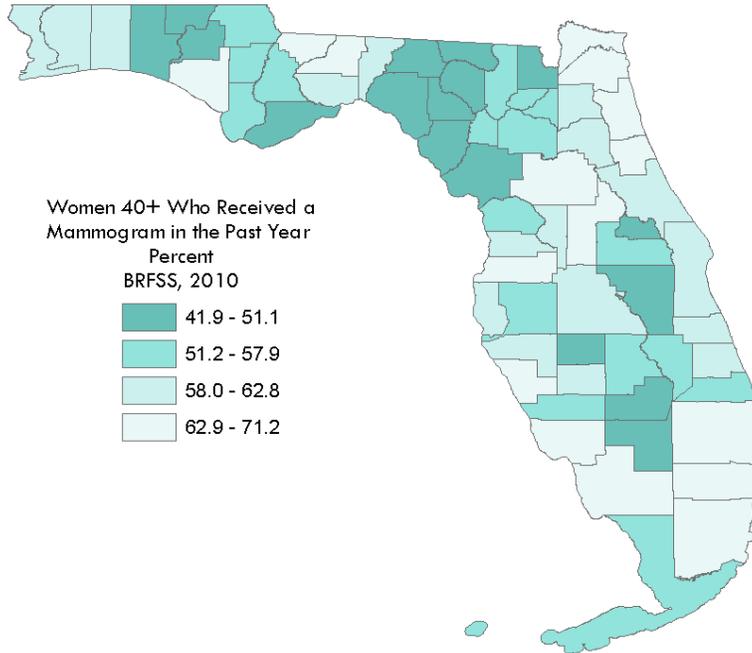
For the last ten years, the percentage of Florida’s women aged 40 and older who have received a mammogram in the past two years has remained stable. While there is little difference in these percentages by race or ethnicity, in 2010, college graduates were more likely than those without a high school education to report having had a mammogram in the previous two years.

**Women 40+ Who Have Had a Mammogram Within the Past Two Years U.S. & Florida, 2000-2010**



Source: BRFSS

BREAST CANCER



Women 40+ Who Received a Mammogram in the Past Year  
Percent  
BRFSS, 2010

- 41.9 - 51.1
- 51.2 - 57.9
- 58.0 - 62.8
- 62.9 - 71.2

Source: Florida Behavioral Risk Factor Survey

- Breast cancer is always caused by a genetic abnormality, however only 5-10% of breast cancer is due to an inherited abnormality. The remaining 90% of breast cancers are due to genetic abnormalities that happen as a result of the aging process.
- The percentage of Floridian women 40 and older who have received a mammogram in the last two years have remained stable over the last ten years with little difference between race or ethnicity.

**WOMEN 40+ WHO RECEIVED A MAMMOGRAM IN THE PAST YEAR BY COUNTY**  
(PERCENT; QUARTILE; 2010)  
(1=LOWEST AND 4=HIGHEST)

Alachua	53.9	3	Flagler	65.4	1	Lake	66.5	1	Pinellas	61.5	2
Baker	47.8	4	Franklin	47.9	4	Lee	62.9	1	Polk	59.9	2
Bay	66.3	1	Gadsden	64.5	1	Leon	66.4	1	Putnam	58.2	2
Bradford	56.1	3	Gilchrist	57.3	3	Levy	50.9	4	Santa Rosa	60.6	2
Brevard	61.9	2	Glades	48.6	4	Liberty	57.1	3	Sarasota	70.6	1
Broward	65.6	1	Gulf	52.2	3	Madison	48.7	4	Seminole	50.5	4
Calhoun	53.0	3	Hamilton	49.3	4	Manatee	62.3	2	St. Johns	66.2	1
Charlotte	53.6	3	Hardee	46.1	4	Marion	62.9	1	St. Lucie	61.9	2
Citrus	57.8	3	Hendry	49.1	4	Martin	57.6	3	Sumter	61.5	2
Clay	58.7	2	Hernando	58.0	2	Monroe	51.9	3	Suwannee	49.0	4
Collier	69.3	1	Highlands	57.9	3	Nassau	63.6	1	Taylor	50.7	4
Columbia	54.7	3	Hillsborough	57.1	3	Okaloosa	61.5	2	Union	55.8	3
Miami-Dade	64.2	1	Holmes	45.2	4	Okeechobee	52.9	3	Volusia	58.4	2
DeSoto	61.2	2	Indian River	59.7	2	Orange	51.2	3	Wakulla	59.3	2
Dixie	41.9	4	Jackson	51.4	3	Osceola	48.6	4	Walton	51.1	4
Duval	64.4	1	Jefferson	59.2	2	Palm Beach	71.2	1	Washington	51.0	4
Escambia	62.8	2	Lafayette	50.5	4	Pasco	63.3	1			

Source: Florida Behavioral Risk Factor Survey

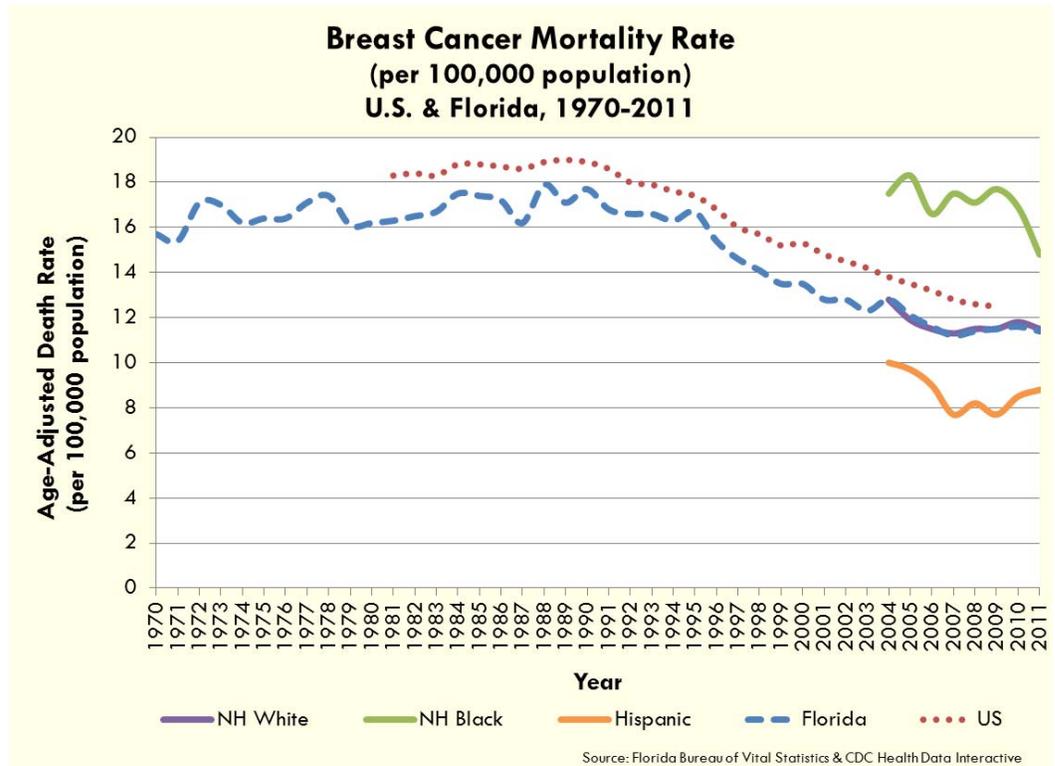
# BREAST CANCER

**Breast Cancer  
Age-Adjusted  
Mortality Rate  
2009**

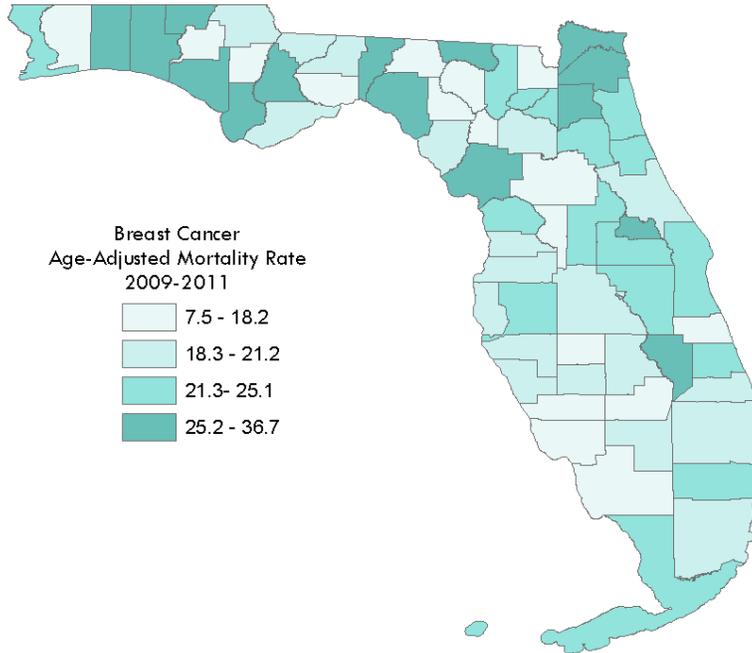
	Rate	Ratio
FL	11.5	REF
U.S.	12.5	1.1
HP2020	--	--
Rank	20	--
<b>SEX</b>		
Male	--	--
Female	--	--
<b>RACE/ETHNICITY</b>		
NH White	11.5	1.4
NH Black	17.7	2.2
Hispanic	8.2	REF
<b>EDUCATION</b>		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group

Since 1981, Florida has a lower mortality rate for breast cancer compared to the U.S. overall. Hispanic women are the least likely to die from breast cancer and non-Hispanic black women are 2.2 times more likely to die from breast cancer than Hispanic women.



BREAST CANCER



Source: Florida Bureau of Vital Statistics

- Non-Hispanic black women in Florida were 2.2 times more likely to die from breast cancer than Hispanic women in Florida in 2009.

**BREAST CANCER MORTALITY RATE BY COUNTY**  
 (AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
 (1=LOWEST AND 4=HIGHEST)

Alachua	21.2	2	Flagler	22.5	3	Lake	23.3	3	Pinellas	20.9	2
Baker	10.8	1	Franklin	19.0	2	Lee	17.1	1	Polk	18.3	2
Bay	26.8	4	Gadsden	19.8	2	Leon	21.2	2	Putnam	25.1	3
Bradford	23.2	3	Gilchrist	13.6	1	Levy	34.6	4	Santa Rosa	18.2	1
Brevard	21.8	3	Glades	16.2	1	Liberty	26.2	4	Sarasota	20.8	2
Broward	21.9	3	Gulf	27.8	4	Madison	7.5	1	Seminole	25.2	4
Calhoun	9.8	1	Hamilton	36.7	4	Manatee	18.6	2	St. Johns	23.8	3
Charlotte	17.5	1	Hardee	14.2	1	Marion	17.9	1	St. Lucie	21.3	3
Citrus	22.0	3	Hendry	19.0	2	Martin	19.4	2	Sumter	14.7	1
Clay	27.1	4	Hernando	19.2	2	Monroe	21.7	3	Suwannee	15.9	1
Collier	17.9	1	Highlands	19.1	2	Nassau	25.5	4	Taylor	35.7	4
Columbia	22.9	3	Hillsborough	23.3	3	Okaloosa	25.7	4	Union	22.4	3
Miami-Dade	19.2	2	Holmes	25.7	4	Okeechobee	33.9	4	Volusia	19.9	2
DeSoto	21.2	2	Indian River	17.5	1	Orange	22.1	3	Wakulla	13.8	1
Dixie	20.6	2	Jackson	19.4	2	Osceola	23.6	3	Walton	26.4	4
Duval	26.5	4	Jefferson	34.4	4	Palm Beach	20.1	2	Washington	11.9	1
Escambia	23.2	3	Lafayette	17.1	1	Pasco	20.5	2			

Source: Florida Bureau of Vital Statistics

## COLORECTAL CANCER

Adults 50+ Who Have Ever Had a Sigmoidoscopy or Colonoscopy (Percent) 2010

	Rate	Ratio*
FL	68.2	REF
U.S.	65.2	.96
HP2020 Rank	70.5 / 17	-- / --
SEX		
Male	67.6	.98
Female	68.8	REF
RACE/ETHNICITY		
White	70.1	REF
Black	63.7	.91
Hispanic	61.6	.88
EDUCATION		
<HS	54.1	.74
HS	63.2	.86
HS+	70.0	.95
College Grad	73.5	REF

\*Because a high rate for this indicator suggests a more favorable outcome, ratios will be below 1.0.

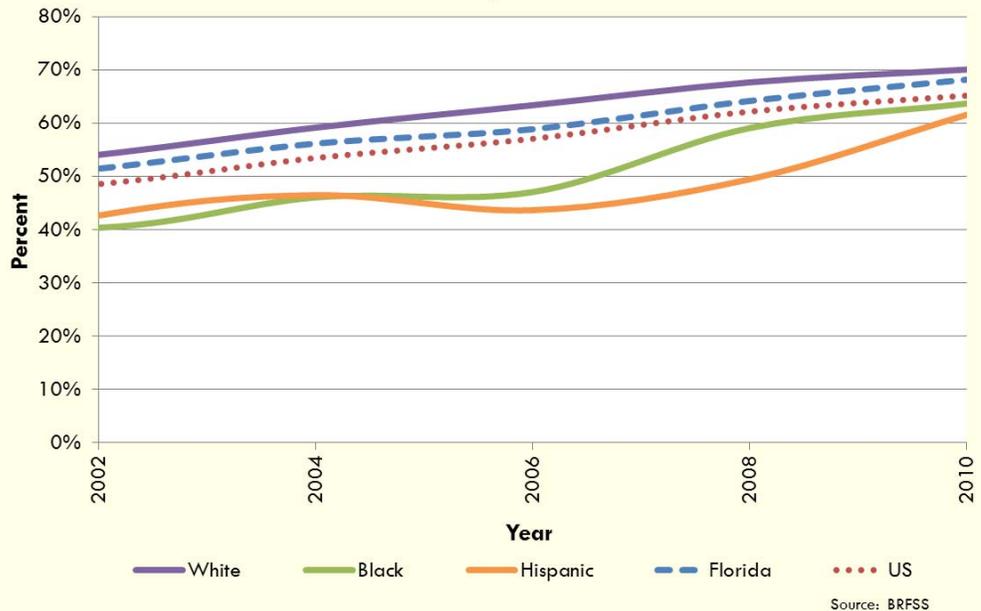
REF= Reference Group

Colorectal cancer, commonly known as colon cancer, occurs when cells in the colon or rectum become abnormal and divide without control, forming a mass called a tumor. Most begin as polyps which can be removed during endoscopy (colonoscopy or sigmoidoscopy) often preventing cancer. Even though colorectal cancer is highly preventable with screening, it is the second leading cause of cancer death in the U.S. after lung cancer. Although the exact cause of colorectal cancer is unknown, risk factors include age, personal history, family history, diet, exercise, smoking, and a medical history of ulcerative colitis or previous polyps.<sup>16</sup> A healthy life style and regular screening are the keys to reducing this common cancer.

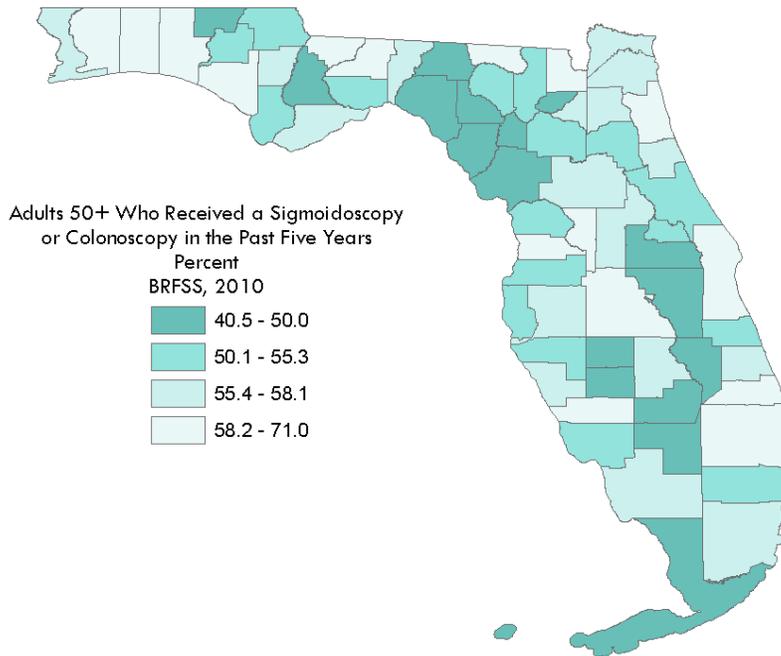
In Florida and the U.S., colorectal cancer incidence has been declining. In 2001, Florida incidence rates dipped below those of the U.S. Screening rates have been increasing but are still much lower than other cancers that are detected by screening, e.g., breast and cervical.

Since 2002, Floridians have had a slightly higher rate of sigmoidoscopy and colonoscopy screening in their lifetime than the U.S. average. In 2010, 60-70% of those aged 50 and older, regardless of race or ethnicity, have had a sigmoidoscopy or colonoscopy in their lifetime.

Adults 50+ Who Have Ever Had a Sigmoidoscopy or Colonoscopy U.S. & Florida, 2002-2010



COLORECTAL CANCER



Source: Florida Behavioral Risk Factor Survey

- Colorectal cancer is the second leading cause of cancer deaths in the U.S.
- Since 2002, Florida has higher than U.S. colorectal cancer screening rates with little difference between race or ethnicity.

**ADULTS 50+ WHO RECEIVED A SIGMOIDOSCOPY OR COLONOSCOPY IN THE PAST FIVE YEARS BY COUNTY**  
(PERCENT; QUARTILE; 2010)  
(1=LOWEST AND 4=HIGHEST)

Alachua	54.5	3	Flagler	57.4	2	Lake	58.1	2	Pinellas	54.1	3
Baker	65.7	1	Franklin	56.3	2	Lee	55.2	3	Polk	62.7	1
Bay	62.9	1	Gadsden	59.8	1	Leon	71.0	1	Putnam	53.7	3
Bradford	55.7	2	Gilchrist	41.5	4	Levy	48.5	4	Santa Rosa	58.6	1
Brevard	59.3	1	Glades	43.7	4	Liberty	45.0	4	Sarasota	57.5	2
Broward	52.3	3	Gulf	53.1	3	Madison	42.9	4	Seminole	53.3	3
Calhoun	55.8	2	Hamilton	59.5	1	Manatee	54.9	3	St. Johns	63.2	1
Charlotte	59.5	1	Hardee	40.5	4	Marion	56.0	2	St. Lucie	55.4	2
Citrus	54.0	3	Hendry	40.5	4	Martin	60.9	1	Sumter	63.7	1
Clay	57.3	2	Hernando	60.0	1	Monroe	45.1	4	Suwannee	50.1	3
Collier	56.3	2	Highlands	57.0	2	Nassau	55.5	2	Taylor	41.5	4
Columbia	50.9	3	Hillsborough	56.7	2	Okaloosa	63.9	1	Union	42.7	4
Miami-Dade	57.6	2	Holmes	43.9	4	Okeechobee	47.7	4	Volusia	54.8	3
DeSoto	48.0	4	Indian River	55.3	3	Orange	49.8	4	Wakulla	53.7	3
Dixie	49.2	4	Jackson	53.2	3	Osceola	50.0	4	Walton	60.7	1
Duval	57.2	2	Jefferson	57.5	2	Palm Beach	62.6	1	Washington	50.5	3
Escambia	58.1	2	Lafayette	42.2	4	Pasco	50.7	3			

Source: Florida Behavioral Risk Factor Survey

## COLORECTAL CANCER

### Colorectal Cancer Age-Adjusted Mortality Rate 2009

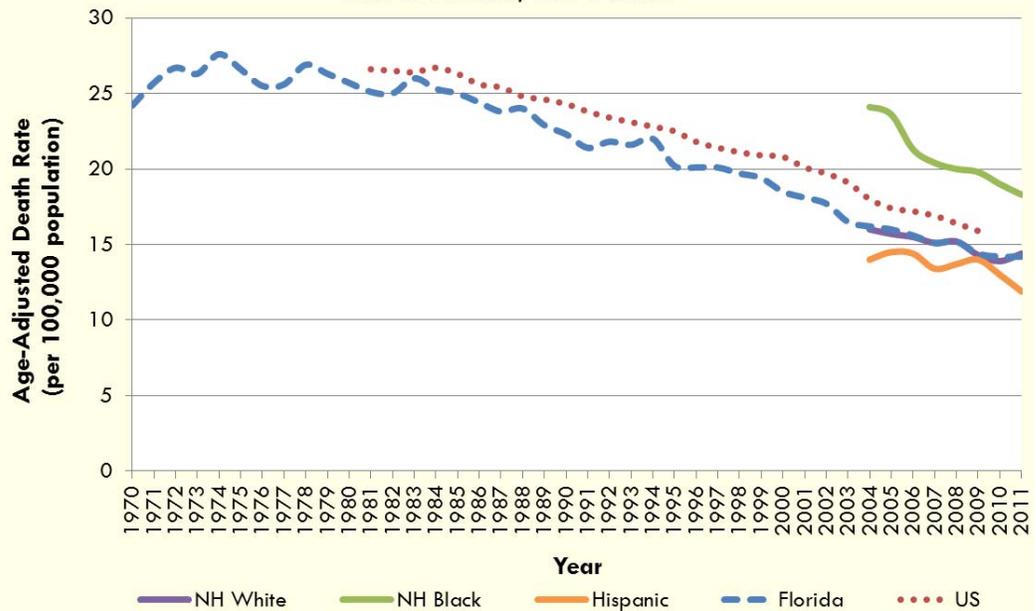
	Rate	Ratio
FL	14.4	REF
U.S.	15.9	1.1
HP2020	14.5	--
Rank	13	--
<b>SEX</b>		
Male	18.1	1.5
Female	12.1	REF
<b>RACE/ETHNICITY</b>		
NH White	14.3	1.02
NH Black	19.8	1.2
Hispanic	14	REF
<b>EDUCATION</b>		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group

Since 1981, Florida has had lower colorectal cancer mortality rates than the U.S. Florida rates have declined over those same years, with an age-adjusted rate of 14.4 per 100,000 population in 2009. This rate is below the national HP2020 goal of 14.5 per 100,000 population.

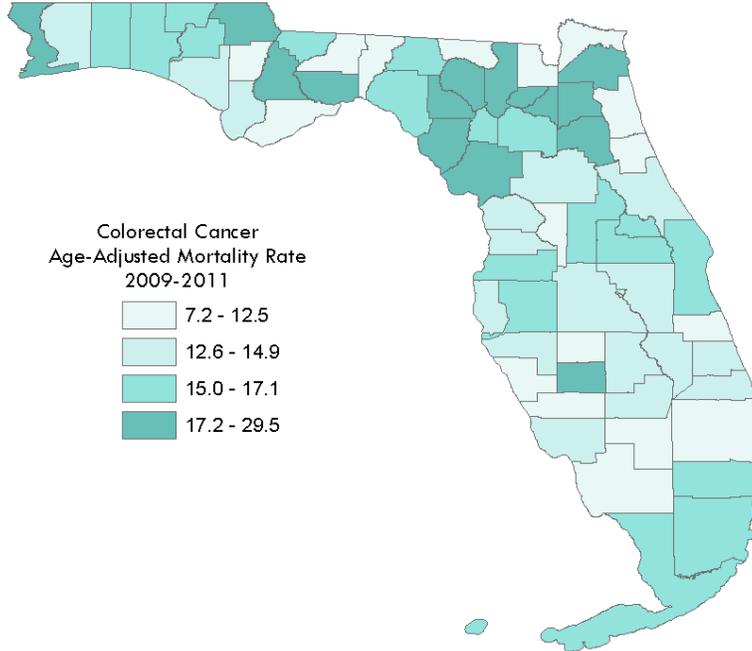
Non-Hispanic blacks have had higher rates of colorectal cancer compared to non-Hispanic whites and Hispanics over the last eight years. In 2009, male Floridians were 1.5 times more likely than their female counterparts to die from colorectal cancer.

**Colorectal Cancer Mortality Rate (per 100,000 population) U.S. & Florida, 1970-2011**



Source: Florida Bureau of Vital Statistics & CDC HealthData Interactive

COLORECTAL CANCER



Source: Florida Bureau of Vital Statistics

- Florida colorectal cancer mortality rates have been below the U.S. average over the last ten years.
- Florida's rates are below the Healthy People 2020 goal of 14.5 per 100,000 population.
- Male Floridians were 1.5 times more likely than female Floridians to die from colorectal cancer in 2009.

**COLORECTAL CANCER MORTALITY RATE BY COUNTY**  
 (AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
 (1=LOWEST AND 4=HIGHEST)

Alachua	15.8	3	Flagler	12.1	1	Lake	15.7	3	Pinellas	14.0	2
Baker	10.0	1	Franklin	10.8	1	Lee	13.1	2	Polk	14.8	2
Bay	12.7	2	Gadsden	17.1	3	Leon	11.8	1	Putnam	19.6	4
Bradford	19.8	4	Gilchrist	15.5	3	Levy	17.3	4	Santa Rosa	14.9	2
Brevard	15.1	3	Glades	13.7	2	Liberty	18.8	4	Sarasota	11.6	1
Broward	15.2	3	Gulf	13.2	2	Madison	15.8	3	Seminole	15.2	3
Calhoun	7.2	1	Hamilton	10.4	1	Manatee	13.4	2	St. Johns	12.1	1
Charlotte	11.4	1	Hardee	10.7	1	Marion	14.6	2	St. Lucie	13.3	2
Citrus	14.2	2	Hendry	12.5	1	Martin	12.7	2	Sumter	11.5	1
Clay	18.1	4	Hernando	13.3	2	Monroe	15.1	3	Suwannee	18.3	4
Collier	9.8	1	Highlands	14.2	2	Nassau	10.7	1	Taylor	16.1	3
Columbia	18.4	4	Hillsborough	15.7	3	Okaloosa	17.1	3	Union	29.5	4
Miami-Dade	15.1	3	Holmes	15.9	3	Okeechobee	14.7	2	Volusia	13.8	2
DeSoto	18.6	4	Indian River	12.5	1	Orange	15.0	3	Wakulla	21.7	4
Dixie	20.3	4	Jackson	21.6	4	Osceola	14.1	2	Walton	16.1	3
Duval	17.2	4	Jefferson	11.9	1	Palm Beach	12.1	1	Washington	15.9	3
Escambia	17.5	4	Lafayette	21.9	4	Pasco	15.4	3			

Source: Florida Bureau of Vital Statistics

## CERVICAL CANCER

Women 18+ Who Have Had a Pap Test Within the Past Three Years (Percent) 2010

	Rate	Ratio*
FL	80.4	.99
U.S.	81.3	REF
HP2020	93.0	--
Rank	33	--
<b>SEX</b>		
Male	--	--
Female	--	--
<b>RACE/ETHNICITY</b>		
White	80.8	.97
Black	82.1	.99
Hispanic	83.1	REF
<b>EDUCATION</b>		
<HS	73.3	.84
HS	73.4	.84
HS+	79.3	.91
College Grad	87.0	REF

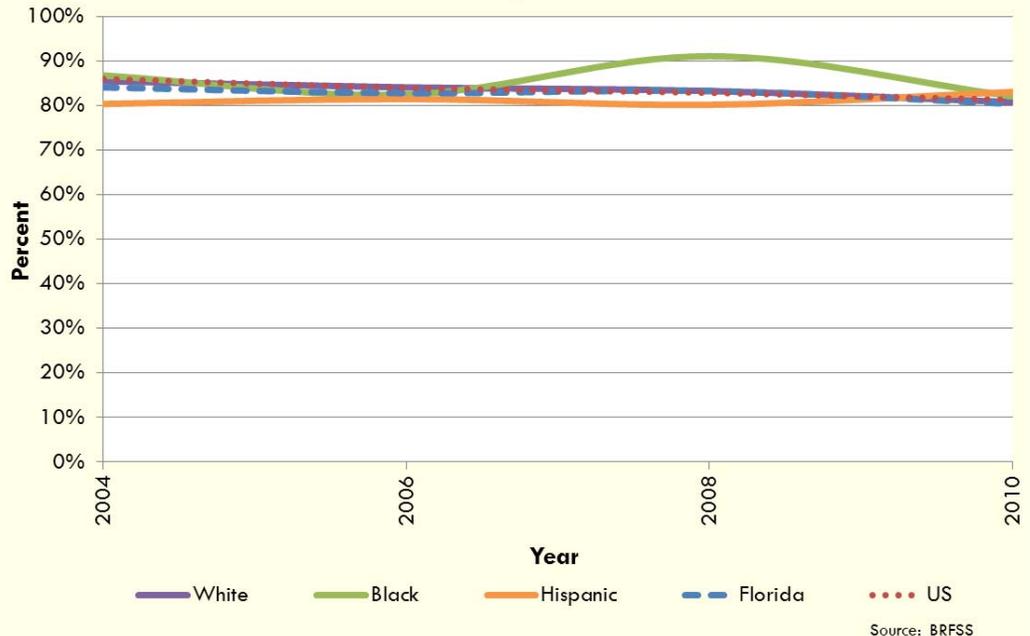
\*Because a high rate for this indicator suggests a more favorable outcome, ratios will be below 1.0.

REF= Reference Group

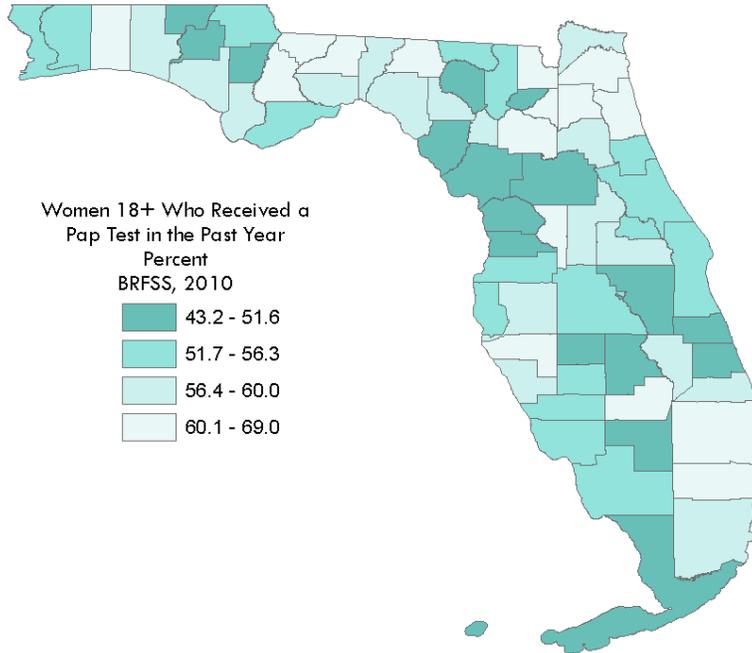
Cervical cancer occurs in the tissues of the cervix, and is usually a slow-growing cancer. The most common cause of cervical cancer is Human Papillomavirus infection (HPV) and cervical cancer cells can be detected with a Pap smear. Women who do not regularly have Pap smears to detect HPV or abnormal cells in the cervix are at increased risk of cervical cancer.<sup>17</sup> Other risk factors include: giving birth to multiple children, having many sexual partners, having first sexual intercourse at a young age, smoking cigarettes, using oral contraceptives, and having a weakened immune system. Cervical cancer does not usually have noticeable symptoms, so yearly check-ups are the best preventative measure.<sup>18</sup>

According to the BRFSS, from 2004 to 2010, Florida and the U.S. had similar rates of women 18 and older who have had a Pap test. In 2010, the U.S. had slightly higher rates than Florida. In 2010, Florida's white women were less likely than both blacks and Hispanics to have had a pap test in the past three years. College graduates were also more likely than any other education level to have had a pap test in the past three years.

**Women 18+ Who Have Had a Pap Test Within the Past Three Years U.S. & Florida, 2004-2010**



CERVICAL CANCER



Women 18+ Who Received a Pap Test in the Past Year  
Percent  
BRFSS, 2010

- 43.2 - 51.6
- 51.7 - 56.3
- 56.4 - 60.0
- 60.1 - 69.0

Source: Florida Behavioral Risk Factor Survey

- The most common cause of cervical cancer is the Human Papillomavirus infection which can be detected by a Pap test.
- From 2004-2010, women 18 and older in the U.S. and Florida had similar rates of having had a Pap test in the past three years.
- Little disparity is shown between race or ethnicity, but women in Florida who have a college degree were 1.2 times more likely than those who had less than a high school diploma to get a Pap test.

WOMEN 18+ WHO RECEIVED A PAP TEST IN THE PAST YEAR BY COUNTY (PERCENT; QUARTILE; 2010) (1=LOWEST AND 4=HIGHEST)											
Alachua	61.5	1	Flagler	54.6	3	Lake	58.1	2	Pinellas	52.4	3
Baker	68.2	1	Franklin	52.4	3	Lee	52.6	3	Polk	52.1	3
Bay	58.5	2	Gadsden	62.8	1	Leon	69.0	1	Putnam	56.6	2
Bradford	63.8	1	Gilchrist	60.0	2	Levy	50.9	4	St. Johns	64.0	1
Brevard	55.5	3	Glades	68.0	1	Liberty	60.5	1	St. Lucie	51.5	4
Broward	61.1	1	Gulf	59.5	2	Madison	61.4	1	Santa Rosa	56.3	3
Calhoun	47.1	4	Hamilton	56.3	3	Manatee	60.4	1	Sarasota	59.3	2
Charlotte	52.6	3	Hardee	43.2	4	Marion	45.7	4	Seminole	56.3	3
Citrus	48.6	4	Hendry	49.6	4	Martin	57.2	2	Sumter	60.2	1
Clay	60.8	1	Hernando	50.1	4	Monroe	50.7	4	Suwannee	51.2	4
Collier	54.1	3	Highlands	51.1	4	Nassau	59.3	2	Taylor	59.0	2
Columbia	56.2	3	Hillsborough	56.6	2	Okaloosa	63.1	1	Union	47.9	4
Miami-Dade	56.9	2	Holmes	51.6	4	Okeechobee	58.0	2	Volusia	56.3	3
DeSoto	52.5	3	Indian River	49.9	4	Orange	57.4	2	Wakulla	58.8	2
Dixie	50.6	4	Jackson	54.7	3	Osceola	50.3	4	Walton	57.1	2
Duval	61.5	1	Jefferson	58.9	2	Palm Beach	61.4	1	Washington	48.3	4
Escambia	55.1	3	Lafayette	59.9	2	Pasco	55.3	3			

Source: Florida Behavioral Risk Factor Survey

# CERVICAL CANCER

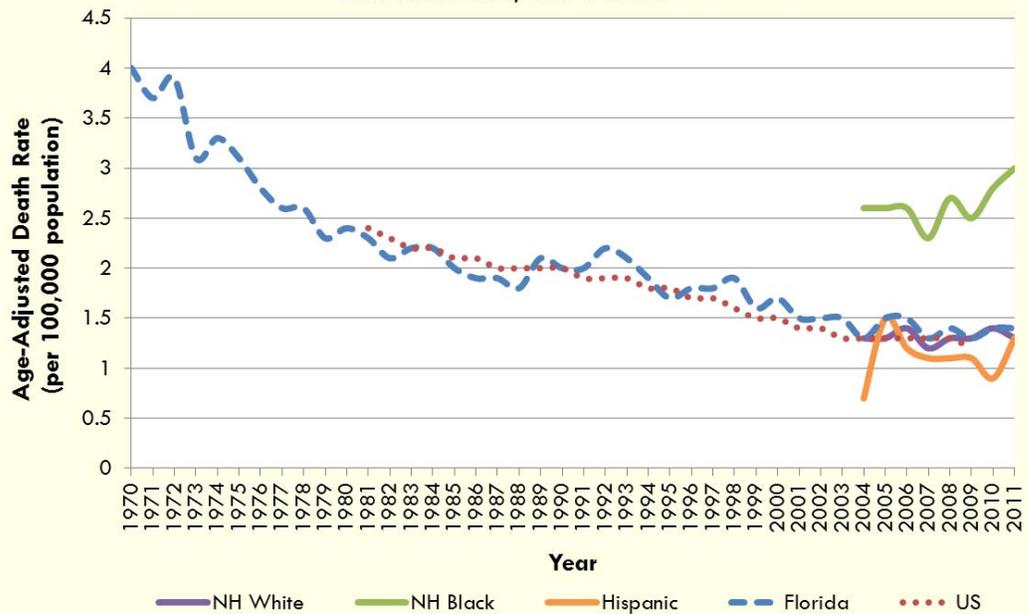
With few deaths from cervical cancer, yearly mortality rates can fluctuate greatly. However, there has been a decline since 1970 in deaths from cervical cancer in both Florida and in the U.S. Over the last ten years in Florida, cervical cancer deaths have been more common among non-Hispanic blacks than non-Hispanic whites and Hispanics. In 2009, non-Hispanic blacks were 2.3 times more likely than Hispanics to die from cervical cancer.

### Cervical Cancer Age-Adjusted Mortality Rate 2009

	Rate	Ratio
FL	1.3	REF
U.S.	2.5	1.9
HP2020	2.2	--
Rank	37	--
<b>SEX</b>		
Male	--	--
Female	--	--
<b>RACE/ETHNICITY</b>		
NH White	1.3	1.2
NH Black	2.5	2.3
Hispanic	1.1	REF
<b>EDUCATION</b>		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

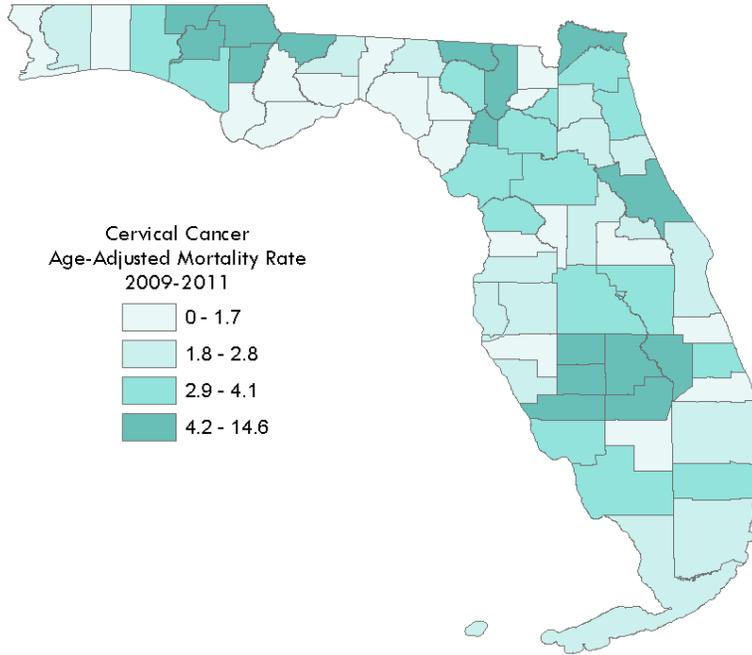
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**Cervical Cancer Mortality Rate (per 100,000 population) U.S. & Florida, 1970-2011**



Source: Florida Bureau of Vital Statistics & CDC Health Data Interactive

CERVICAL CANCER



Source: Florida Bureau of Vital Statistics

- Few deaths occur from cervical cancer each year.
- Non-Hispanic black Floridian women were 2.3 times more likely than Hispanic Floridian women to die from cervical cancer.

**CERVICAL CANCER MORTALITY RATE BY COUNTY**  
 (AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
 (1=LOWEST AND 4=HIGHEST)

Alachua	3.3	3	Flagler	2.0	2	Lake	2.8	2	Pinellas	2.7	2
Baker	0.0	1	Franklin	0.0	1	Lee	2.9	3	Polk	3.2	3
Bay	4.1	3	Gadsden	6.6	4	Leon	2.2	2	Putnam	2.7	2
Bradford	3.9	3	Gilchrist	7.5	4	Levy	3.7	3	Santa Rosa	1.9	2
Brevard	2.3	2	Glades	6.7	4	Liberty	0.0	1	Sarasota	2.7	2
Broward	2.9	3	Gulf	0.0	1	Madison	2.8	2	Seminole	2.6	2
Calhoun	8.2	4	Hamilton	9.2	4	Manatee	1.3	1	St. Johns	3.5	3
Charlotte	5.6	4	Hardee	14.6	4	Marion	3.3	3	St. Lucie	3.4	3
Citrus	3.8	3	Hendry	0.0	1	Martin	1.7	1	Sumter	1.0	1
Clay	2.8	2	Hernando	1.7	1	Monroe	1.8	2	Suwannee	3.0	3
Collier	3.5	3	Highlands	4.9	4	Nassau	5.0	4	Taylor	0.0	1
Columbia	5.1	4	Hillsborough	2.2	2	Okaloosa	1.1	1	Union	0.0	1
Miami-Dade	2.6	2	Holmes	5.4	4	Okeechobee	4.8	4	Volusia	4.5	4
DeSoto	5.3	4	Indian River	1.2	1	Orange	1.7	1	Wakulla	0.0	1
Dixie	0.0	1	Jackson	4.2	4	Osceola	3.2	3	Walton	3.3	3
Duval	3.9	3	Jefferson	0.0	1	Palm Beach	2.1	2	Washington	5.0	4
Escambia	1.6	1	Lafayette	0.0	1	Pasco	2.4	2			

Source: Florida Bureau of Vital Statistics

# LUNG CANCER

## Lung Cancer Age-Adjusted Mortality Rate 2009

	Rate	Ratio
FL	47.3	REF
U.S.	48.4	1.0
HP2020	45.5	--
Rank	21	--
SEX		
Male	62.5	2.8
Female	22.6	REF
RACE/ETHNICITY		
NH White	53.8	2.2
NH Black	39.1	1.6
Hispanic	24.3	REF
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

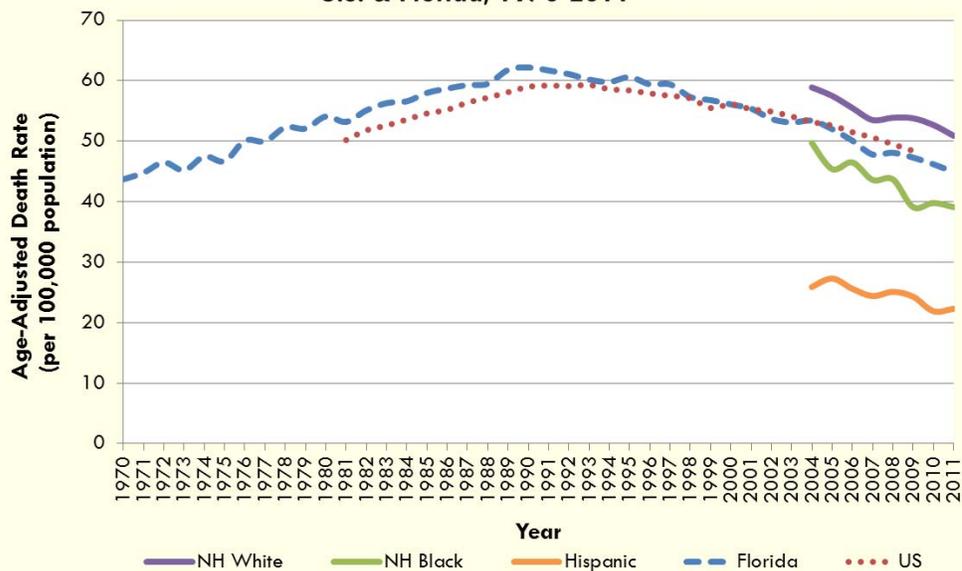
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Lung cancer is the deadliest type of cancer for both men and women. There are two main types of lung cancer: non-small cell and small cell. Non-small cell is the most common type of lung cancer and the slowest growing.<sup>19</sup> Small cell cancer spreads more quickly than non-small cell and is almost always due to cigarette smoking.<sup>20</sup> However, having both types of lung cancer can occur. Lung cancer is rare in people under the age of 45.

Smoking cigarettes is the leading cause of lung cancer, and the risk for developing lung cancer increases depending on the number of cigarettes smoked daily and the age at which smoking started. Other risks for lung cancer include exposure to asbestos, or other cancer-causing chemicals such as coal products, gasoline and diesel exhaust, high levels of air pollution, high levels of arsenic in drinking water, radiation therapy to lungs, radon gas and a family history of lung cancer. Secondhand smoke also increases risk for lung cancer. The American Cancer Society estimates 3,000 nonsmoking adults will die each year from lung cancer related to breathing secondhand smoke.<sup>21</sup>

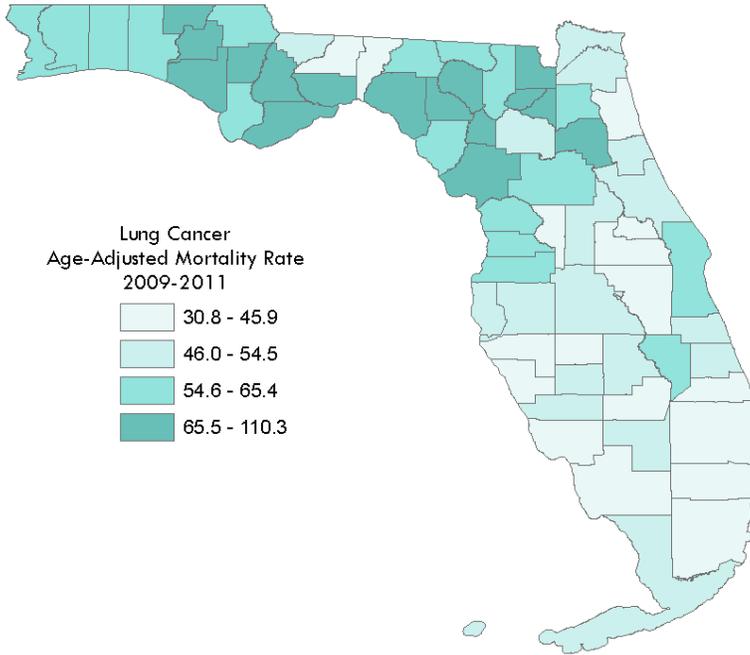
Florida has similar rates as the U.S. for lung cancer mortality. Non-Hispanic whites have higher rates than non-Hispanic blacks or Hispanics, for both the U.S. and Florida overall. Hispanics in Florida have had rates much lower than any other group in Florida. Non-Hispanic whites were 2.2 times more likely than Hispanics to be die from lung cancer in 2009. Florida men are also disproportionately affected by lung cancer mortality. They are 2.8 times more likely than Florida females to die from lung cancer.

**Lung Cancer Mortality Rate (per 100,000 population) U.S. & Florida, 1970-2011**



Source: Florida Bureau of Vital Statistics & CDC Health Data Interactive

LUNG CANCER



Source: Florida Bureau of Vital Statistics

- Smoking cigarettes is the leading cause of lung cancer deaths.
- The risk of developing lung cancer increases depending on how many cigarettes are smoked daily and the age smoking started.
- Florida and the U.S. have similar rates for lung cancer mortality.
- Non-Hispanic whites in Florida were 2.2 times more likely than Hispanics to die from lung cancer in 2009.
- Males in Florida were 2.8 times more likely than females in Florida to die from lung cancer in 2009.

**LUNG CANCER MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	52.3	2	Flagler	49.9	2	Lake	50.9	2	Pinellas	51.1	2
Baker	65.6	4	Franklin	87.8	4	Lee	39.1	1	Polk	52.5	2
Bay	66.5	4	Gadsden	50.0	2	Leon	41.9	1	Putnam	68.2	4
Bradford	72.3	4	Gilchrist	68.6	4	Levy	83.1	4	Santa Rosa	65.4	3
Brevard	55.1	3	Glades	41.4	1	Liberty	77.9	4	Sarasota	42.3	1
Broward	39.8	1	Gulf	64.4	3	Madison	59.6	3	Seminole	44.8	1
Calhoun	66.9	4	Hamilton	57.5	3	Manatee	42.7	1	St. Johns	43.6	1
Charlotte	47.7	2	Hardee	42.8	1	Marion	59.1	3	St. Lucie	49.2	2
Citrus	65.1	3	Hendry	52.0	2	Martin	41.6	1	Sumter	45.9	1
Clay	61.5	3	Hernando	56.0	3	Monroe	46.1	2	Suwannee	70.9	4
Collier	31.4	1	Highlands	47.7	2	Nassau	52.9	2	Taylor	66.3	4
Columbia	58.3	3	Hillsborough	48.2	2	Okaloosa	59.4	3	Union	110.3	4
Miami-Dade	30.8	1	Holmes	66.3	4	Okeechobee	61.5	3	Volusia	54.0	2
DeSoto	52.7	2	Indian River	52.0	2	Orange	43.8	1	Wakulla	74.2	4
Dixie	63.4	3	Jackson	57.6	3	Osceola	36.1	1	Walton	57.7	3
Duval	54.5	2	Jefferson	43.0	1	Palm Beach	38.2	1	Washington	68.1	4
Escambia	59.0	3	Lafayette	108.6	4	Pasco	56.5	3			

Source: Florida Bureau of Vital Statistics

# PROSTATE CANCER

Men 40+ Who Have Had a PSA Test Within the Past Two Years (Percent) 2010

	Rate	Ratio*
FL	63.0	REF
U.S.	53.2	.84
HP2020	--	--
Rank	1	--
<b>SEX</b>		
Male	--	--
Female	--	--
<b>RACE/ETHNICITY</b>		
White	65.2	REF
Black	61.8	.95
Hispanic	52.4	.80
<b>EDUCATION</b>		
<HS	47.4	.70
HS	59.5	.88
HS+	61.8	.91
College Grad	67.6	REF

\*Because a high rate for this indicator suggests a more favorable outcome, ratios will be below 1.0.

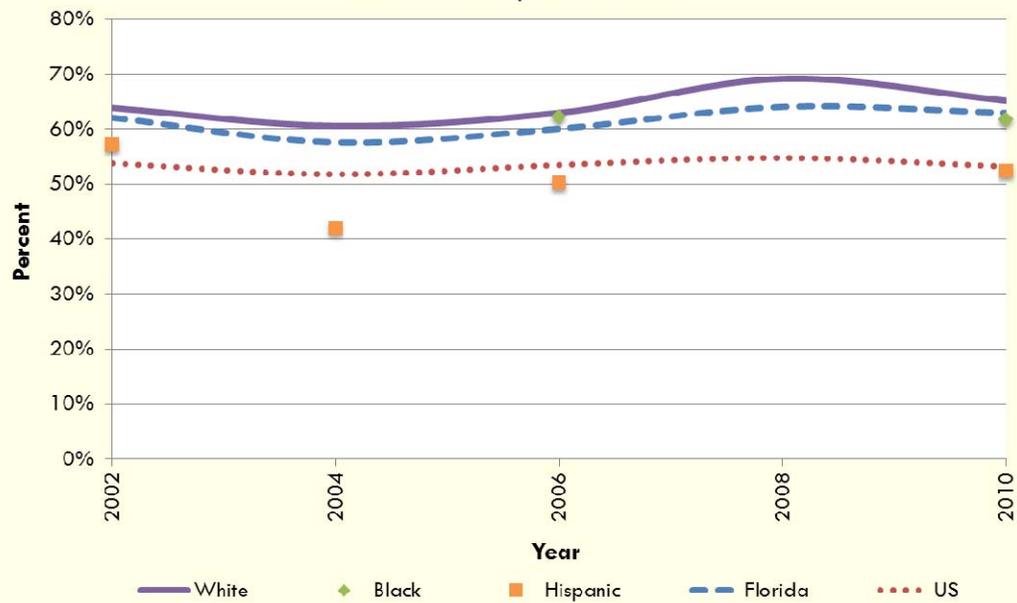
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Prostate cancer is the most common cause of death in men over 75 years. However, Black men are at a higher risk of developing prostate cancer at any age. Some risk factors for prostate cancer include men who have been exposed to Agent Orange or cadmium, drink alcohol excessively, and eat a high-fat (especially animal fat) diet. Some occupations can increase the risk of prostate cancer. Farmers, painters and tire plant workers share an elevated risk as do men over the age of 60 and having had a father or brother with prostate cancer.<sup>22</sup>

Prostate cancer is usually diagnosed by a biopsy of the prostate after a high blood PSA level is detected or a rectal exam showed a larger prostate or a hard, uneven surface.

According to the 2010 BRFSS, 63% of men in Florida had a PSA test in the past two years compared to the U.S. average of 53.2%. Hispanic males were less likely than white males 40 and older to have had a PSA test within the past two years in Florida. Floridians with lower education levels are also less likely to get a PSA test within the past two years compared to college graduates.

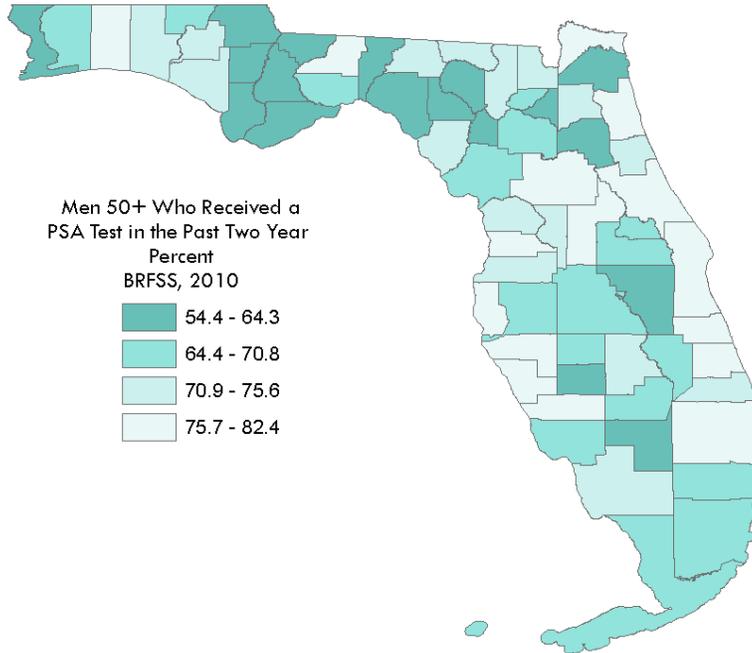
Men 40+ Who Have Had a PSA Test Within the Past Two Years U.S. & Florida, 2002-2010



Note: Trend lines are not available for NH Black or Hispanic because there was insufficient data for 2002, 2004 & 2008

Source: BRFSS

PROSTATE CANCER



Source: Florida Behavioral Risk Factor Survey

- In 2010, 63% of men 40 and older in Florida had a PSA test within the past two years, compared to the U.S. average of 53.2%.
- White male Floridians were 1.2 times more likely than Hispanic men to get a PSA test.
- Florida males with lower educational attainment are less likely to get a PSA test compared to college graduates.

**MEN 50+ WHO RECEIVED A PSA TEST IN THE PAST TWO YEARS BY COUNTY**  
(PERCENT; QUARTILE; 2010)  
(1=LOWEST AND 4=HIGHEST)

Alachua	68.0	3	Flagler	72.1	2	Lake	79.4	1	Pinellas	80.5	1
Baker	75.2	2	Franklin	62.6	4	Lee	70.8	2	Polk	69.5	3
Bay	72.2	2	Gadsden	60.5	4	Leon	77.9	1	Putnam	64.3	4
Bradford	56.1	4	Gilchrist	61.8	4	Levy	69.2	3	Santa Rosa	69.4	3
Brevard	79.4	1	Glades	65.2	3	Liberty	58.1	4	Sarasota	80.7	1
Broward	66.6	3	Gulf	62.7	4	Madison	72.3	2	Seminole	70.2	3
Calhoun	63.2	4	Hamilton	75.6	2	Manatee	76.1	1	St. Johns	79.3	1
Charlotte	77.8	1	Hardee	64.4	3	Marion	82.4	1	St. Lucie	77.3	1
Citrus	73.2	2	Hendry	55.8	4	Martin	74.7	2	Sumter	74.5	2
Clay	74.4	2	Hernando	80.0	1	Monroe	66.9	3	Suwannee	59.3	4
Collier	74.3	2	Highlands	74.4	2	Nassau	77.8	1	Taylor	61.7	4
Columbia	71.9	2	Hillsborough	67.9	3	Okaloosa	79.4	1	Union	68.2	3
Miami-Dade	69.5	3	Holmes	68.8	3	Okeechobee	66.4	3	Volusia	77.7	1
DeSoto	62.5	4	Indian River	79.6	1	Orange	69.1	3	Wakulla	68.1	3
Dixie	71.5	2	Jackson	61.8	4	Osceola	64.3	4	Walton	71.1	2
Duval	63.4	4	Jefferson	63.5	4	Palm Beach	79.0	1	Washington	73.1	2
Escambia	63.8	4	Lafayette	54.4	4	Pasco	75.4	2			

Source: Florida Behavioral Risk Factor Survey

# PROSTATE CANCER

## Prostate Cancer Age-Adjusted Mortality Rate 2009

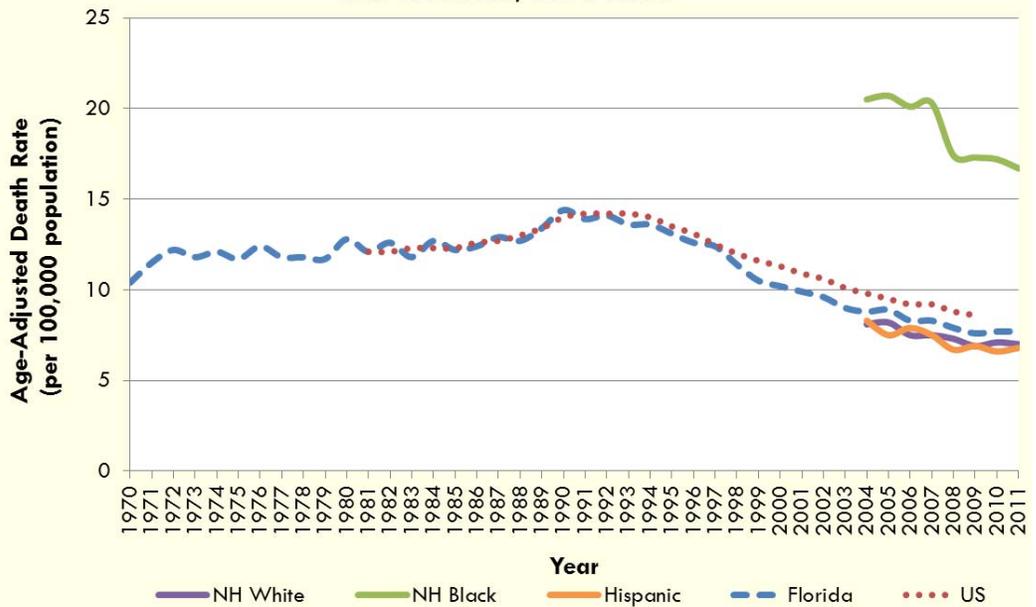
	Rate	Ratio
FL	7.6	REF
U.S.	8.6	1.1
HP2020	--	--
Rank	4	--
<b>SEX</b>		
Male	--	--
Female	--	--
<b>RACE/ETHNICITY</b>		
NH White	6.9	REF
NH Black	17.3	2.5
Hispanic	6.9	REF
<b>EDUCATION</b>		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group

Florida's prostate cancer mortality rate has mirrored the U.S. since 1981. In 1997, the mortality rate dipped slightly below the U.S., where it has since stayed. In 2011, 7.7 per 100,000 population died of prostate cancer in Florida. Florida is ranked the fourth best state in the U.S. for prostate cancer mortality.

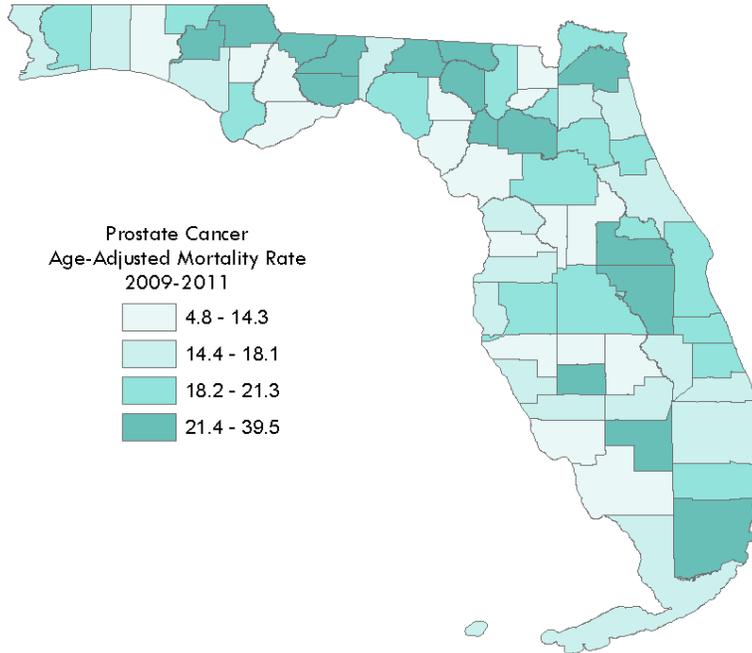
Over the last eight years, non-Hispanic whites and Hispanics had similar mortality rates for prostate cancer. Non-Hispanic blacks, however, have had higher rates of prostate cancer compared to non-Hispanic whites and Hispanics in Florida. Non-Hispanic blacks were 2.5 times more likely than non-Hispanic whites and Hispanics to die of prostate cancer in 2009.

**Prostate Cancer Mortality Rate (per 100,000 population) U.S. & Florida, 1970-2011**



Source: Florida Bureau of Vital Statistics & CDC Health Data Interactive

PROSTATE CANCER



Source: Florida Bureau of Vital Statistics

- Prostate cancer is the most common cause of cancer deaths in men over 75 years.
- Farmers, painters and tire plant workers run a higher risk of developing prostate cancer.
- Florida's mortality rate for prostate cancer has been slightly below the U.S. average for the past ten years.
- Non-Hispanic black Floridians were 2.5 times more likely than non-Hispanic white Floridians and Hispanics to die from prostate cancer in 2009.

**PROSTATE CANCER MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	21.9	4	Flagler	21.3	3	Lake	13.8	1	Pinellas	16.1	2
Baker	6.7	1	Franklin	4.8	1	Lee	13.9	1	Polk	18.9	3
Bay	15.9	2	Gadsden	30.9	4	Leon	29.6	4	Putnam	20.3	3
Bradford	18.9	3	Gilchrist	24.9	4	Levy	12.2	1	Santa Rosa	19.4	3
Brevard	19.2	3	Glades	14.4	2	Liberty	11.0	1	Sarasota	16.0	2
Broward	19.7	3	Gulf	21.0	3	Madison	24.5	4	Seminole	19.4	3
Calhoun	14.0	1	Hamilton	39.5	4	Manatee	13.4	1	St. Johns	16.0	2
Charlotte	14.4	2	Hardee	12.7	1	Marion	20.5	3	St. Lucie	19.4	3
Citrus	17.3	2	Hendry	23.3	4	Martin	17.5	2	Sumter	13.1	1
Clay	17.5	2	Hernando	13.4	1	Monroe	14.6	2	Suwannee	21.8	4
Collier	13.4	1	Highlands	14.3	1	Nassau	18.6	3	Taylor	18.5	3
Columbia	19.9	3	Hillsborough	18.9	3	Okaloosa	17.5	2	Union	12.8	1
Miami-Dade	22.0	4	Holmes	18.6	3	Okeechobee	16.0	2	Volusia	17.1	2
DeSoto	21.6	4	Indian River	20.9	3	Orange	22.9	4	Wakulla	28.3	4
Dixie	9.3	1	Jackson	27.3	4	Osceola	21.8	4	Walton	13.3	1
Duval	23.9	4	Jefferson	14.6	2	Palm Beach	15.5	2	Washington	32.4	4
Escambia	18.1	2	Lafayette	12.7	1	Pasco	14.4	2			

Source: Florida Bureau of Vital Statistics

# ASTHMA

## Asthma Age-Adjusted Hospitalization Rate 2010

	Rate	Ratio
FL	777.9	--
U.S.	--	--
HP2020	--	--
Rank	--	--
SEX		
Male	--	--
Female	--	--
RACE/ETHNICITY		
White	659.9	REF
Black	1213.5	1.8
Hispanic	697.6	1.1
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

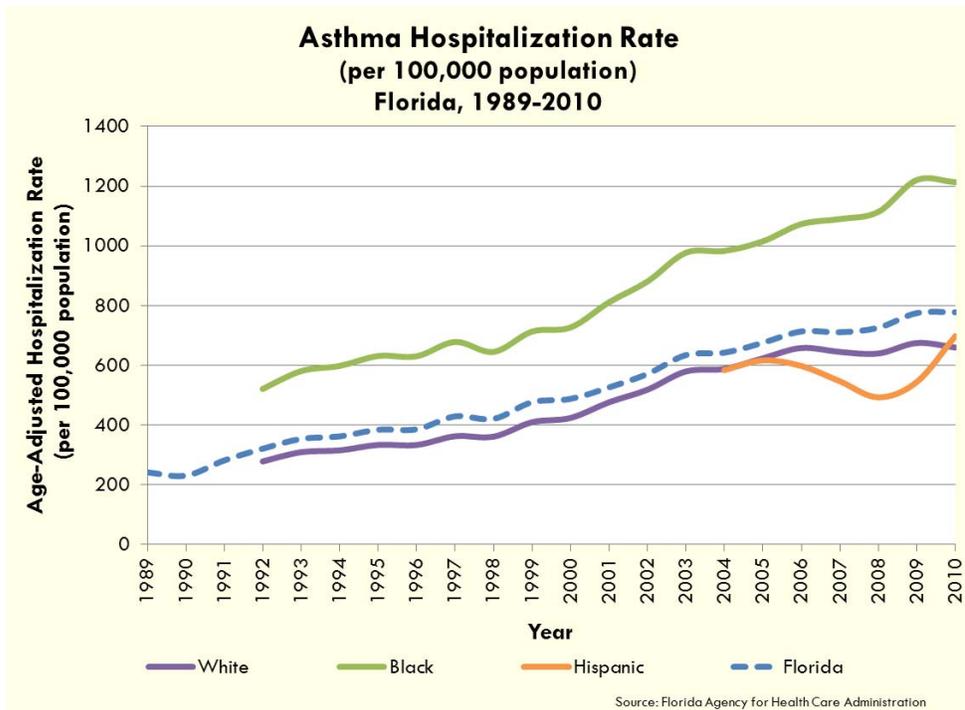
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Asthma is a chronic respiratory disease, which can cause wheezing, breathlessness, chest tightness, and coughing, and can greatly limit an individual's quality of life and level of productivity. According to the CDC, about 1 in 12 adults in Florida currently have asthma, and that number is increasing each year, mirroring national statistics. The number of people diagnosed with asthma grew by 4.3 million from 2001 to 2009 in the U.S.<sup>23</sup>

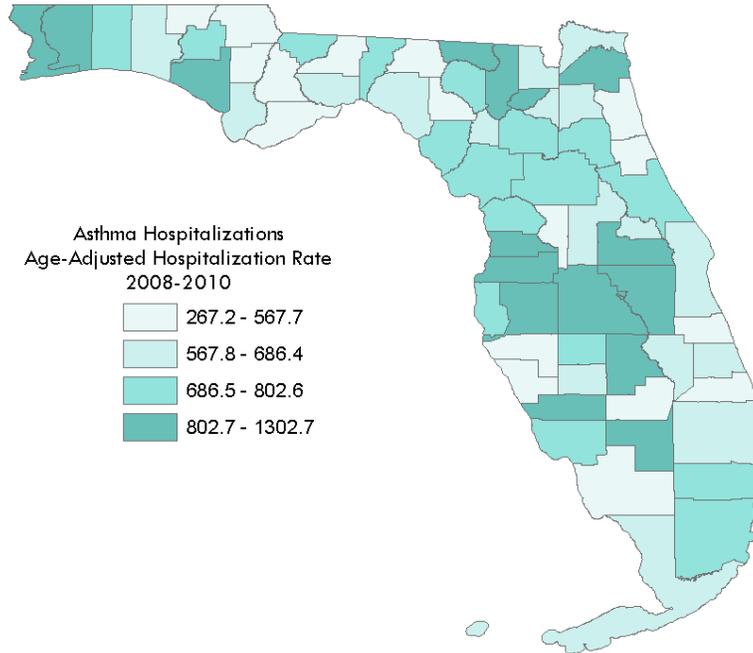
Asthma is a leading cause of school absenteeism and impacts work productivity. Adults with asthma miss work due to their symptoms, and adults of children with asthma miss work to stay home with sick children. Nationally, on average, children missed four days of school and adults missed five days of work because of asthma in 2008.<sup>23</sup>

Environmental factors are a major contributor to asthma symptoms. These include tobacco smoke, mold and outdoor air pollution.

Florida statistics show a steady increase in hospitalizations due to asthma, quadrupling from 241.8 per 100,000 population in 1989 to 777.9 per 100,000 in 2010. The age-adjusted rate of asthma-related hospitalizations for blacks was almost two times the rate for non-Hispanic whites in 2010.



# ASTHMA



Source: Florida Agency for Health Care Administration

**ASTHMA HOSPITALIZATIONS BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUANTILE; 2008-2010)  
(1=LOWEST AND 4=HIGHEST)

Alachua	757.5	3	Flagler	491.7	1	Lake	679.2	2	Pinellas	770.1	3
Baker	651.9	2	Franklin	554.0	1	Lee	750.0	3	Polk	1057.3	4
Bay	945.3	4	Gadsden	740.8	3	Leon	567.7	1	Putnam	763.0	3
Bradford	649.0	2	Gilchrist	686.4	2	Levy	791.3	3	Santa Rosa	838.8	4
Brevard	680.3	2	Glades	267.2	1	Liberty	499.8	1	Sarasota	493.0	1
Broward	729.5	3	Gulf	686.1	2	Madison	484.2	1	Seminole	634.5	2
Calhoun	563.4	1	Hamilton	870.4	4	Manatee	547.3	1	St. Johns	445.0	1
Charlotte	942.1	4	Hardee	771.6	3	Marion	793.9	3	St. Lucie	571.3	2
Citrus	752.7	3	Hendry	811.8	4	Martin	406.3	1	Sumter	522.8	1
Clay	669.3	2	Hernando	894.3	4	Monroe	568.6	2	Suwannee	802.6	3
Collier	509.8	1	Highlands	1052.1	4	Nassau	635.2	2	Taylor	588.3	2
Columbia	987.1	4	Hillsborough	1020.9	4	Okaloosa	788.1	3	Union	1302.7	4
Miami-Dade	792.6	3	Holmes	466.6	1	Okeechobee	673.2	2	Volusia	759.4	3
DeSoto	664.7	2	Indian River	377.0	1	Orange	922.6	4	Wakulla	590.7	2
Dixie	725.2	3	Jackson	387.5	1	Osceola	1018.6	4	Walton	569.0	2
Duval	927.6	4	Jefferson	692.1	3	Palm Beach	653.4	2	Washington	701.8	3
Escambia	915.8	4	Lafayette	486.5	1	Pasco	845.9	4			

Source: Florida Agency for Health Care Administration

- According to the CDC, one in twelve adults in Florida currently have asthma. That number is increasing each year.
- Nationally, on average, children missed four days of school and adults missed five days of work because of asthma in 2008.
- The age-adjusted hospitalization rate for black Floridians with asthma was 1.8 times the rate for white Floridians in 2010.
- There has been a steady increase in hospitalizations due to asthma, quadrupling from 1989 to 2010.

## ADULT OBESITY

### Adults Who Are Obese (Percent) 2010

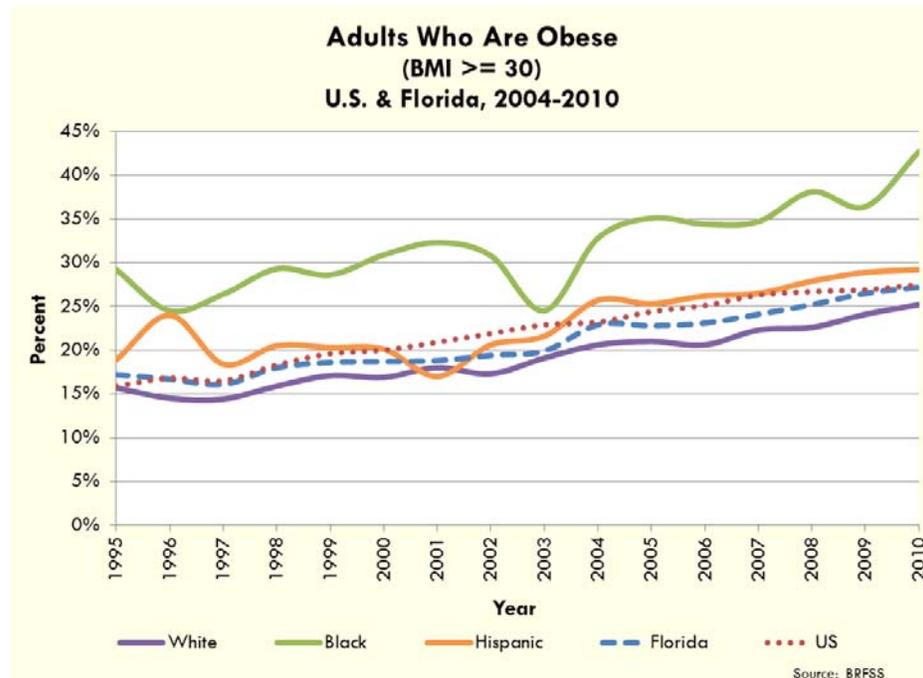
	Rate	Ratio
FL	27.2	REF
U.S.	27.5	1.0
HP2020	30.6	--
Rank	24	--
SEX		
Male	29.8	1.2
Female	24.7	REF
RACE/ETHNICITY		
White	25.2	REF
Black	42.7	1.7
Hispanic	29.2	1.2
EDUCATION		
<HS	37.7	1.7
HS	29.0	1.3
HS+	29.6	1.3
College Grad	22.2	REF

REF= Reference Group

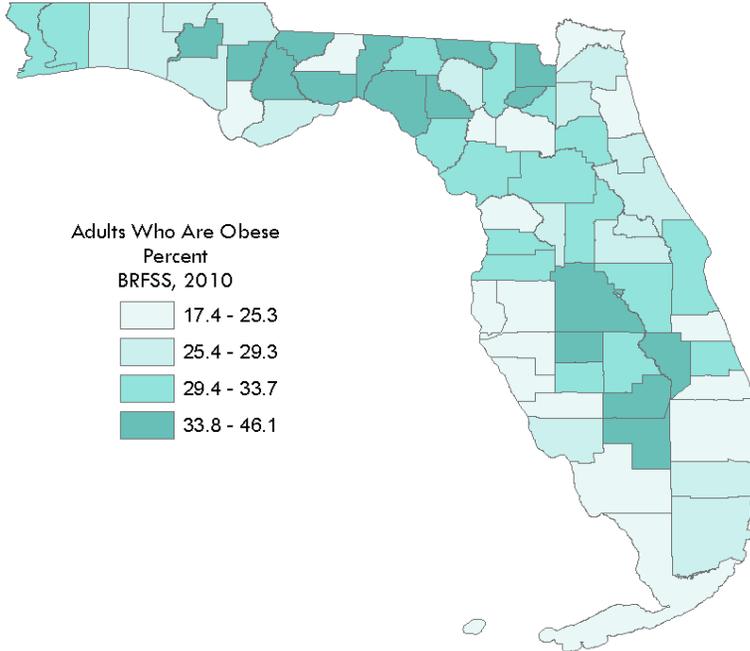
Nearly two-thirds of all adults in Florida are overweight or obese, a figure which has increased by 10.5 percent over the last 15 years. In the BRFSS, obesity is not a subset of overweight, but a distinct category for adults. Overweight is defined as a body mass index of 25.0 to 29.9 and obese is defined as a body mass index of 30 or more.

Accompanying this increase in obesity is a parallel epidemic of the chronic diseases associated with obesity such as diabetes, heart attacks, congestive heart failure, kidney failure, blindness, neuropathy, and limb amputation. The costs of treating the chronic diseases associated with obesity are enormous and will become an even greater problem as Florida's population ages and the proportion of the population with chronic diseases grows.<sup>24</sup> Prevention of obesity requires both individually-focused and community-focused activities such as designing neighborhoods in ways that encourage walking and other physical activities that can reduce the risk of obesity.

Major differences exist between adult racial and ethnic groups in the proportions that are obese. All racial and ethnic groups have seen an increase in obesity. More than a third of blacks (42.7%) were obese in 2010, an increase of 18.2% since 2004. Whites were about half as likely to be obese as blacks in 2010. Floridians who have less than a high school education are also more likely than those with a college degree to be obese.



# ADULT OBESITY



Source: Florida Behavioral Risk Factor Survey

- Nearly two-thirds of all adults in Florida are overweight or obese.
- Many chronic diseases associated with obesity are increasing as well.
- Black Floridians were 1.7 times more likely than white Floridians to be obese in 2010.
- Floridians who have less than a high school education are more likely than those with a college degree to be obese.

## ADULTS WHO ARE OBESE BY COUNTY (PERCENT; QUARTILE; 2010) (1=LOWEST AND 4=HIGHEST)

Alachua	21.6	1	Flagler	29.3	2	Lake	29.8	3	Pinellas	24.0	1
Baker	36.0	4	Franklin	27.0	2	Lee	27.3	2	Polk	37.6	4
Bay	28.2	2	Gadsden	36.6	4	Leon	21.7	1	Putnam	31.3	3
Bradford	30.4	3	Gilchrist	24.7	1	Levy	32.1	3	St. Johns	22.0	1
Brevard	30.7	3	Glades	39.6	4	Liberty	40.1	4	St. Lucie	31.4	3
Broward	28.0	2	Gulf	23.2	1	Madison	32.8	3	Santa Rosa	29.8	3
Calhoun	34.7	4	Hamilton	44.8	4	Manatee	22.5	1	Sarasota	20.8	1
Charlotte	21.7	1	Hardee	46.1	4	Marion	33.7	3	Seminole	26.4	2
Citrus	23.4	1	Hendry	38.0	4	Martin	21.1	1	Sumter	27.2	2
Clay	25.9	2	Hernando	29.8	3	Monroe	17.4	1	Suwannee	27.4	2
Collier	22.4	1	Highlands	30.3	3	Nassau	23.8	1	Taylor	40.2	4
Columbia	30.9	3	Hillsborough	25.3	1	Okaloosa	28.8	2	Union	42.0	4
Miami-Dade	29.3	2	Holmes	28.2	2	Okeechobee	38.1	4	Volusia	26.8	2
DeSoto	33.4	3	Indian River	24.1	1	Orange	27.8	2	Wakulla	37.5	4
Dixie	32.8	3	Jackson	29.2	2	Osceola	31.9	3	Walton	28.6	2
Duval	28.4	2	Jefferson	36.3	4	Palm Beach	19.4	1	Washington	35.0	4
Escambia	29.7	3	Lafayette	41.7	4	Pasco	30.6	3			

Source: Florida Behavioral Risk Factor Survey

## MOTOR VEHICLE INJURIES

### Motor Vehicle Injury Age-Adjusted Mortality Rate 2010

	Rate	Ratio
FL	12.5	1.1
U.S.	11.2	REF
HP2020	12.4	--
Rank	--	--
SEX		
Male	17.9	2.5
Female	7.3	REF
RACE/ETHNICITY		
NH White	13.5	1.2
NH Black	12.5	1.1
Hispanic	11.0	REF
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group

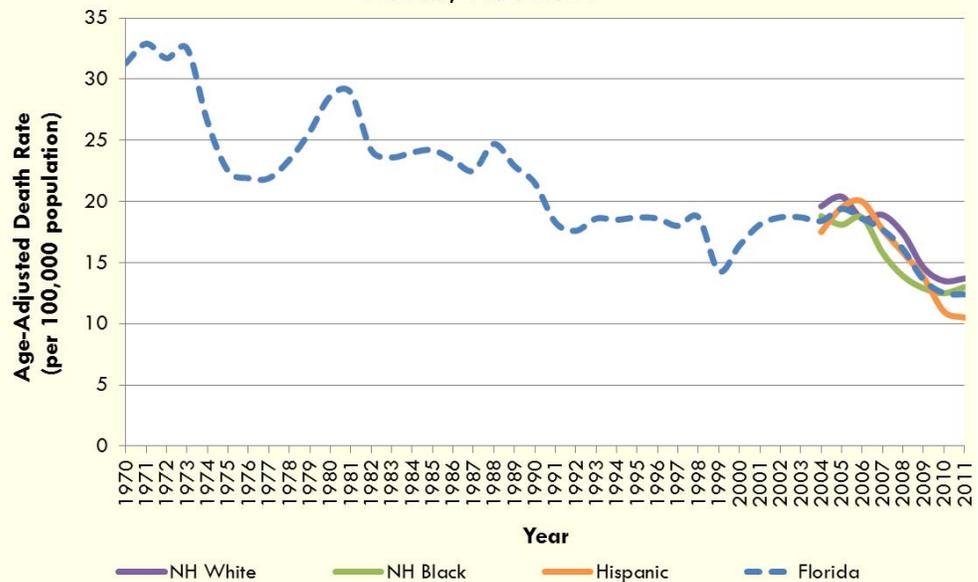
According to the CDC, motor vehicle-related injuries are the leading cause of death for people between the ages of 5 and 34, and road traffic crashes are the leading cause of death for people between the ages of 15 and 29 worldwide.<sup>25</sup> In 2010, motor vehicle crashes killed nearly 33,000 people in the U.S. and 2,449 in Florida.<sup>26,27</sup>

Motor vehicle traffic crashes not only injure drivers and passengers of motor vehicles but also motorcyclists, pedalcyclists, pedestrians and others. In 2010, Florida had 162,690 non-fatal emergency department visits and 13,901 non-fatal hospitalizations from motor-vehicle traffic incidents.<sup>28</sup>

The CDC identified motor-vehicle injuries as a winnable battle with further effort and support for evidence-based, cost-effective strategies that can be implemented now with a focus in three areas: seat belt usage, teen driving safety and reductions in alcohol-impaired driving.<sup>29</sup>

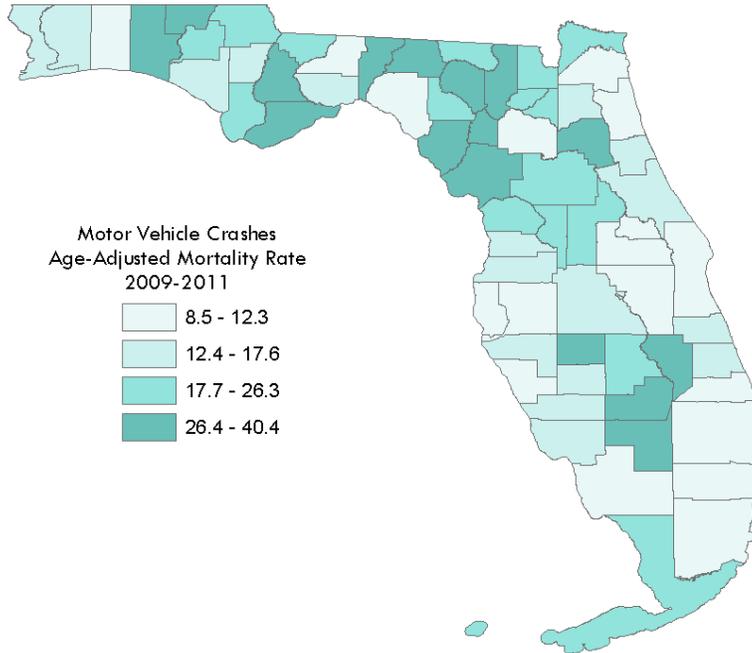
In Florida, motor vehicle crashes have declined since 2007 to a rate of 12.5 per 100,000 population in 2010. Hispanics had the lowest rates of mortality with a rate of 11 per 100,000 population. Male Floridians were 2.5 times more likely than their female counterparts to die from a motor vehicle crash in 2010.

**Motor Vehicle Crashes Mortality Rate  
(per 100,000 population)  
Florida, 1970-2011**



Source: Florida Bureau of Vital Statistics

# MOTOR VEHICLE INJURIES



Source: Florida Bureau of Vital Statistics

**MOTOR VEHICLE CRASH MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	10.5	1	Flagler	17.6	2	Lake	19.5	3	Pinellas	11.5	1
Baker	23.6	3	Franklin	27.6	4	Lee	14.1	2	Polk	15.0	2
Bay	12.9	2	Gadsden	18.6	3	Leon	10.0	1	Putnam	33.3	4
Bradford	26.3	3	Gilchrist	37.1	4	Levy	40.4	4	Santa Rosa	16.4	2
Brevard	12.3	1	Glades	32.5	4	Liberty	30.6	4	Sarasota	11.0	1
Broward	10.7	1	Gulf	24.4	3	Madison	33.8	4	Seminole	8.5	1
Calhoun	14.7	2	Hamilton	19.6	3	Manatee	12.8	2	St. Johns	11.8	1
Charlotte	17.1	2	Hardee	27.6	4	Marion	19.1	3	St. Lucie	12.9	2
Citrus	24.7	3	Hendry	27.8	4	Martin	11.0	1	Sumter	17.7	3
Clay	12.7	2	Hernando	17.4	2	Monroe	19.3	3	Suwannee	29.7	4
Collier	11.5	1	Highlands	19.3	3	Nassau	18.8	3	Taylor	11.1	1
Columbia	28.0	4	Hillsborough	12.2	1	Okaloosa	11.2	1	Union	24.7	3
Miami-Dade	10.7	1	Holmes	26.8	4	Okeechobee	27.3	4	Volusia	17.4	2
DeSoto	16.5	2	Indian River	15.2	2	Orange	10.5	1	Wakulla	15.7	2
Dixie	33.1	4	Jackson	25.4	3	Osceola	11.7	1	Walton	27.9	4
Duval	12.3	1	Jefferson	34.6	4	Palm Beach	11.0	1	Washington	22.8	3
Escambia	12.4	2	Lafayette	18.5	3	Pasco	15.6	2			

Source: Florida Bureau of Vital Statistics

- Motor vehicle-related injuries are the leading cause of death for people between the ages of 5 and 34 worldwide.
- The injured can include the driver, passengers, motorcyclists, pedalcyclists and pedestrians.
- In Florida, motor vehicle crashes have declined since 2007 to a rate of 12.4 per 100,000 population in 2011.
- Male Floridians were 2.9 times more likely than their female counterparts to die from motor vehicle crashes in 2011.

## BICYCLE INJURIES

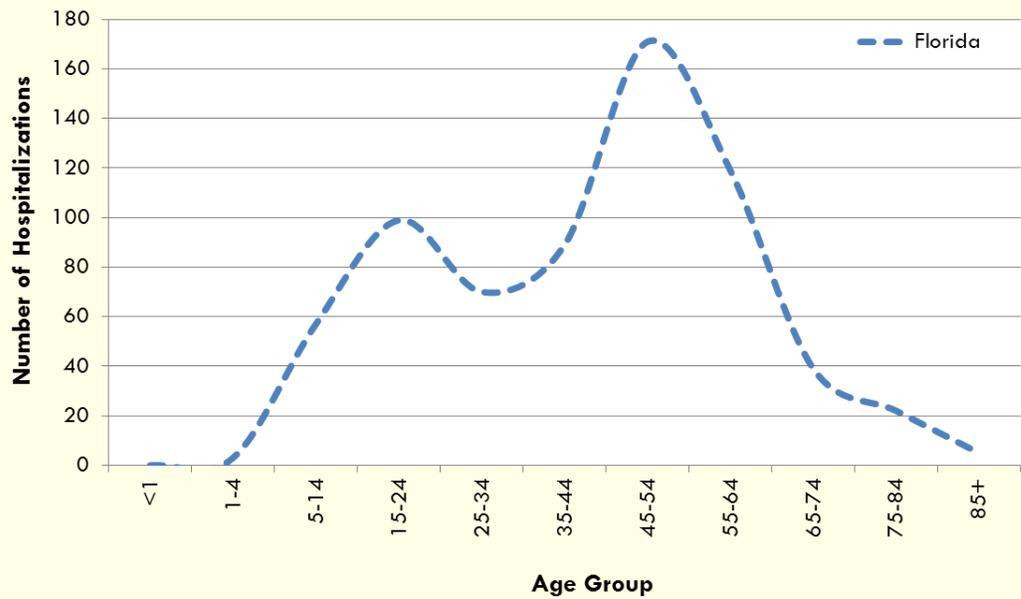
**Bicycle Injury  
Age-Adjusted  
Hospitalization Rate  
2010**

	Rate	Ratio
FL	3.6	--
U.S.	--	--
HP2020	--	--
Rank	--	--
<b>SEX</b>		
Male	--	--
Female	--	--
<b>RACE/ETHNICITY</b>		
NH White	--	--
NH Black	--	--
Hispanic	--	--
<b>EDUCATION</b>		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

Bicycle safety has become an important health issue in Florida and the U.S. Infrastructure for safe bicycle riding has become increasingly more important, especially on high speed roads. Florida is one of 17 states that has enacted a three-foot law with regard to the spatial relationship between cyclists and automobiles.<sup>30</sup> One purpose of this law is to reduce bicycle and car crashes. The law states that drivers must grant cyclists a three-foot clearance at all times. Failure to do so can result in a citation by law enforcement.<sup>30</sup>

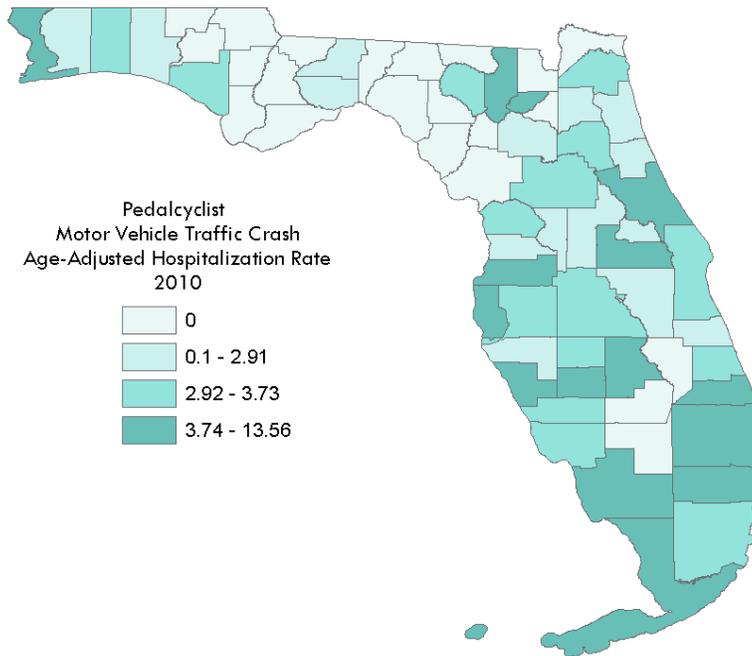
A pedalcyclist is an operator of a machine that is run solely on pedals and is most commonly a bicycle. Injury hospitalizations for pedalcyclists were highest among residents between the ages of 35-64 and peaked in the 45-54 age group. The age-adjusted hospitalization rate for pedalcyclists was 3.6 per 100,000 population in 2010.

**Non-Fatal Motor Vehicle Traffic Bicycle Injury  
Hospitalizations  
Florida, 2010**



Source: Florida Office of Injury Prevention

BICYCLE INJURIES



Source: Florida Injury Prevention Program

- Bicycle safety is an important health issue in Florida and the U.S.
- Florida has a three-foot law to increase safety on roadways between bicycles and automobiles.
- Injury hospitalizations for pedalcyclists were highest among Florida residents between the ages of 35-64, with a peak for the 45-54 age group.

**PEDALCYCLIST HOSPITALIZATION RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2010)  
(1=LOWEST AND 4=HIGHEST)

Alachua	1.5	2	Flagler	2.0	2	Lake	1.0	2	Pinellas	5.6	4
Baker	0.0	1	Franklin	0.0	1	Lee	3.5	3	Polk	3.3	3
Bay	3.5	3	Gadsden	0.0	1	Leon	2.0	2	Putnam	3.0	3
Bradford	0.0	1	Gilchrist	0.0	1	Levy	0.0	1	Santa Rosa	0.6	2
Brevard	3.5	3	Glades	0.0	1	Liberty	0.0	1	Sarasota	4.5	4
Broward	3.9	4	Gulf	0.0	1	Madison	0.0	1	Seminole	2.4	2
Calhoun	0.0	1	Hamilton	0.0	1	Manatee	2.2	2	St. Johns	2.0	2
Charlotte	3.0	3	Hardee	3.2	3	Marion	3.1	3	St. Lucie	3.1	3
Citrus	3.2	3	Hendry	0.0	1	Martin	6.2	4	Sumter	1.5	2
Clay	2.3	2	Hernando	1.5	2	Monroe	13.6	4	Suwannee	3.1	3
Collier	5.5	4	Highlands	6.5	4	Nassau	0.0	1	Taylor	0.0	1
Columbia	4.9	4	Hillsborough	3.6	3	Okaloosa	3.6	3	Union	6.4	4
Miami-Dade	3.7	3	Holmes	0.0	1	Okeechobee	0.0	1	Volusia	4.8	4
DeSoto	6.2	4	Indian River	2.9	2	Orange	4.7	4	Wakulla	2.7	2
Dixie	0.0	1	Jackson	0.0	1	Osceola	2.7	2	Walton	1.4	2
Duval	3.0	3	Jefferson	0.0	1	Palm Beach	4.1	4	Washington	0.0	1
Escambia	4.8	4	Lafayette	0.0	1	Pasco	3.9	4			

Source: Florida Injury Prevention Program

## BICYCLE INJURIES

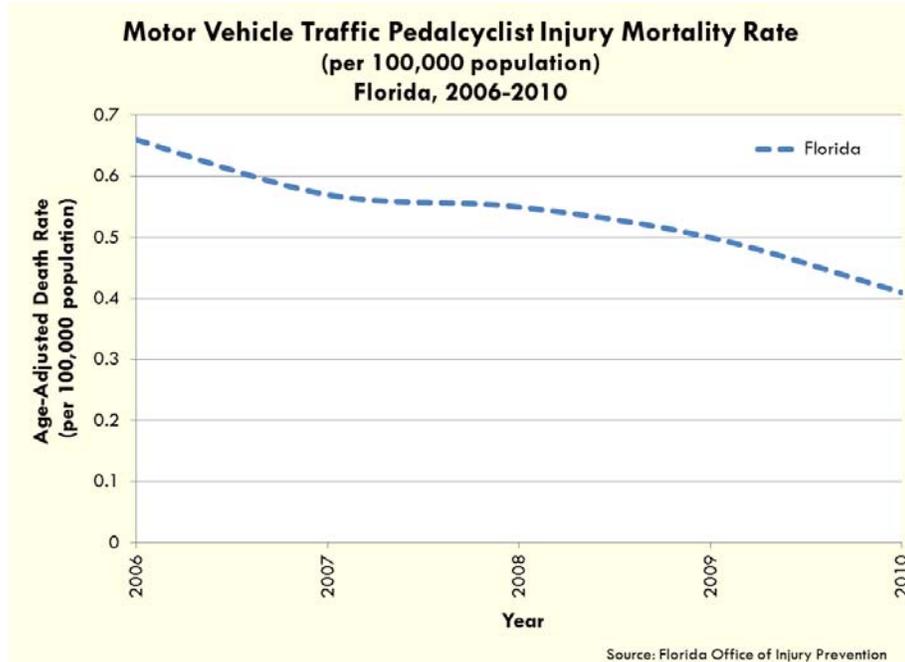
### Bicycle Injury Age-Adjusted Mortality Rate 2010

	Rate	Ratio
FL	.41	2.1
U.S.	.20*	REF
HP2020	.22	--
Rank	50	--
SEX		
Male	--	--
Female	--	--
RACE/ETHNICITY		
NH White	--	--
NH Black	--	--
Hispanic	--	--
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

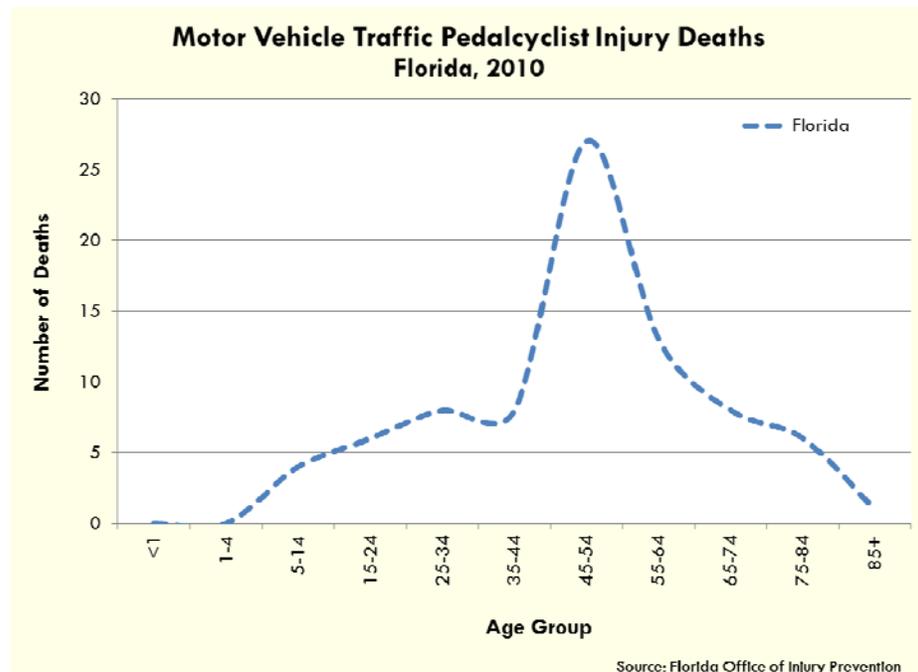
\*Crude rate per 100,000

REF= Reference Group

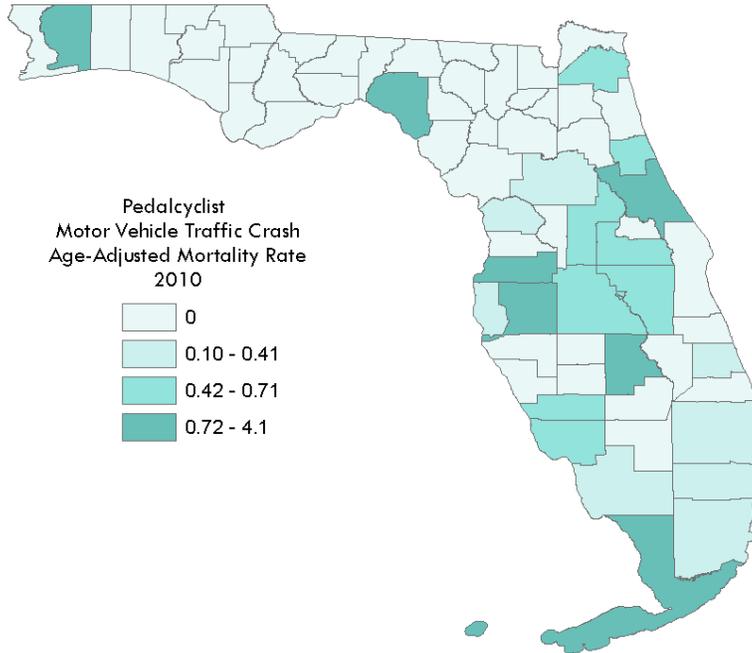
Over a six-year period, the number of deaths has had a decrease from 124 deaths in 2005 to 81 deaths in 2010. Yet in 2010, Florida is ranked second highest for bicycle fatalities across the nation.<sup>31</sup>



The age group most affected by pedalcyclist deaths are those 45-54 years old in Florida with 27 deaths in 2010.



BICYCLE INJURIES



Source: Florida Injury Prevention Program

- In 2010, Florida ranked second in bicycle fatalities in the nation.
- From 2005 to 2010, the number of deaths to pedalcyclists in motor-vehicle traffic crashes declined slightly.
- The age group most affected by pedalcyclists deaths are those 45 to 54 years old in 2010.

**PEDALCYCLIST MORTALITY RATE BY COUNTY**  
 (AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2010)  
 (1=LOWEST AND 4=HIGHEST)

Alachua	0.0	1	Flagler	0.6	3	Lake	0.7	3	Pinellas	0.3	2
Baker	0.0	1	Franklin	0.0	1	Lee	0.7	3	Polk	0.4	3
Bay	0.0	1	Gadsden	0.0	1	Leon	0.0	1	Putnam	0.0	1
Bradford	0.0	1	Gilchrist	0.0	1	Levy	0.0	1	Santa Rosa	1.6	2
Brevard	0.0	1	Glades	0.0	1	Liberty	0.0	1	Sarasota	0.0	1
Broward	0.3	2	Gulf	0.0	1	Madison	0.0	1	Seminole	0.0	1
Calhoun	0.0	1	Hamilton	0.0	1	Manatee	0.0	1	St. Johns	0.0	1
Charlotte	0.6	3	Hardee	0.0	1	Marion	0.3	2	St. Lucie	0.2	2
Citrus	0.4	2	Hendry	0.0	1	Martin	0.0	1	Sumter	0.0	1
Clay	0.0	1	Hernando	0.0	1	Monroe	3.0	2	Suwannee	0.0	1
Collier	0.2	2	Highlands	1.6	2	Nassau	0.0	1	Taylor	4.1	2
Columbia	0.0	1	Hillsborough	1.1	2	Okaloosa	0.0	1	Union	0.0	1
Miami-Dade	0.4	2	Holmes	0.0	1	Okeechobee	0.0	1	Volusia	0.9	2
DeSoto	0.0	1	Indian River	0.0	1	Orange	0.5	3	Wakulla	0.0	1
Dixie	0.0	1	Jackson	0.0	1	Osceola	0.7	3	Walton	0.0	1
Duval	0.5	3	Jefferson	0.0	1	Palm Beach	0.4	2	Washington	0.0	1
Escambia	0.0	1	Lafayette	0.0	1	Pasco	1.1	2			

Source: Florida Injury Prevention Program

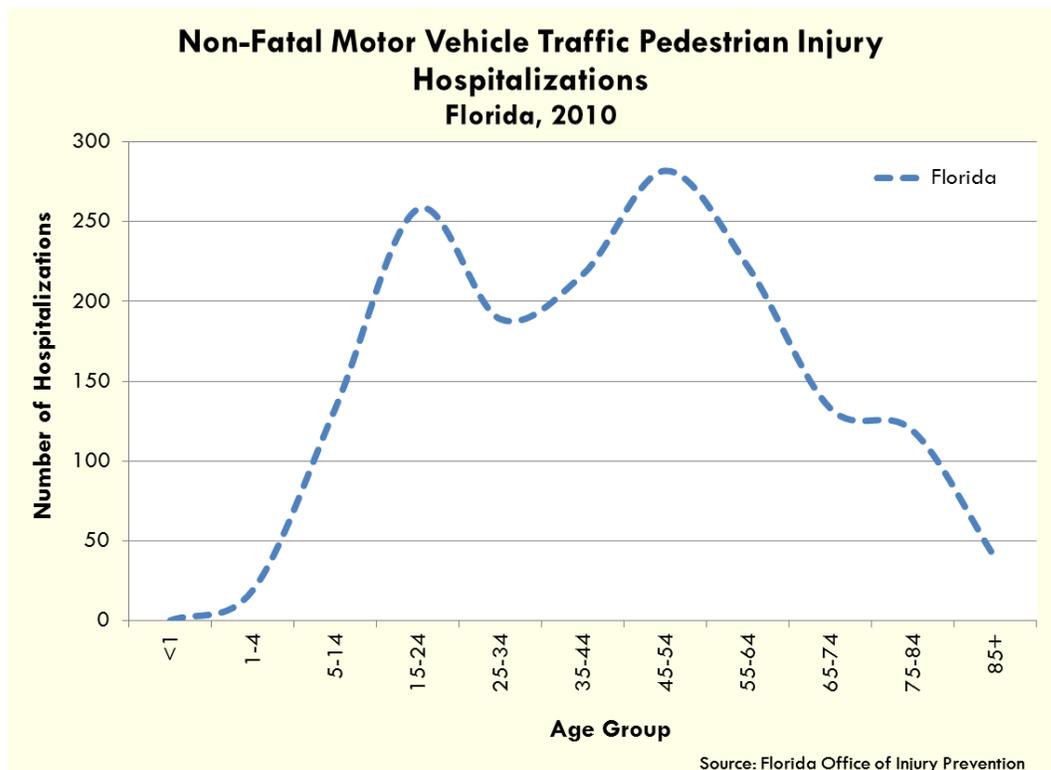
## PEDESTRIAN INJURIES

**Pedestrian Injury  
Age-Adjusted  
Hospitalization Rate  
2010**

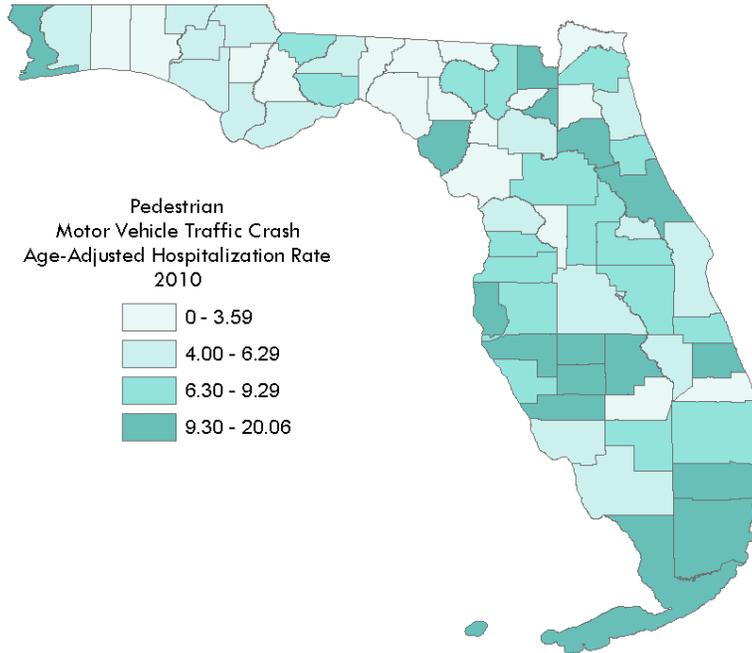
	Rate	Ratio
FL	8.6	--
U.S.	--	--
HP2020	--	--
Rank	--	--
<b>SEX</b>		
Male	--	--
Female	--	--
<b>RACE/ETHNICITY</b>		
NH White	--	--
NH Black	--	--
Hispanic	--	--
<b>EDUCATION</b>		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

Pedestrian safety is an important health concern. The CDC estimated that, in 2008, there was one crash-related pedestrian death every 2 hours and an injury every 8 minutes in the U.S. Pedestrians are also 1.5 times more likely than passenger vehicle occupants to be killed in a car crash on each trip. Older adults, children, and pedestrians who are alcohol-impaired are at a higher risk of being injured or killed. Higher vehicle speeds increase both the likelihood of a pedestrian being struck by a car and the severity of the injury. The most common location for a pedestrian or bicycle fatality is at night in non-intersection locations in urban areas.<sup>32</sup>

Pedestrian injury hospitalizations vary by age group in Florida. In 2010, peaks were seen for those aged 15-24 and 45-54.



PEDESTRIAN INJURIES



Source: Florida Injury Prevention Program

- In 2008, there was one crash-related pedestrian death every two hours, and an injury every eight minutes in the U.S.
- Pedestrian injury hospitalizations vary by age group, with peaks seen in the 15-24 and 45-54 age groups.

**PEDESTRIAN HOSPITALIZATION RATE BY COUNTY**  
 (AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2010)  
 (1=LOWEST AND 4=HIGHEST)

Alachua	6.0	2	Flagler	7.4	3	Lake	6.5	3	Pinellas	11.3	4
Baker	14.4	4	Franklin	5.1	2	Lee	5.4	2	Polk	6.0	2
Bay	5.7	2	Gadsden	6.8	3	Leon	3.9	2	Putnam	10.6	4
Bradford	9.5	4	Gilchrist	0.0	1	Levy	3.6	1	Santa Rosa	6.3	2
Brevard	4.3	2	Glades	0.0	1	Liberty	0.0	1	Sarasota	9.2	3
Broward	10.9	4	Gulf	4.1	2	Madison	0.0	1	Seminole	6.0	2
Calhoun	0.0	1	Hamilton	0.0	1	Manatee	11.0	4	St. Johns	5.3	2
Charlotte	10.9	4	Hardee	10.9	4	Marion	6.9	3	St. Lucie	10.4	4
Citrus	4.5	2	Hendry	7.8	3	Martin	2.9	1	Sumter	2.5	1
Clay	2.7	1	Hernando	8.0	3	Monroe	9.6	4	Suwannee	8.2	3
Collier	4.3	2	Highlands	15.0	4	Nassau	2.5	1	Taylor	0.0	1
Columbia	6.9	3	Hillsborough	6.7	3	Okaloosa	3.4	1	Union	0.0	1
Miami-Dade	14.7	4	Holmes	5.6	2	Okeechobee	4.9	2	Volusia	9.8	4
DeSoto	9.6	4	Indian River	6.9	3	Orange	9.3	3	Wakulla	8.4	3
Dixie	20.1	4	Jackson	3.9	2	Osceola	6.6	3	Walton	2.1	1
Duval	8.0	3	Jefferson	0.0	1	Palm Beach	9.1	3	Washington	3.8	2
Escambia	13.0	4	Lafayette	0.0	1	Pasco	8.9	3			

Source: Florida Injury Prevention Program

## PEDESTRIAN INJURIES

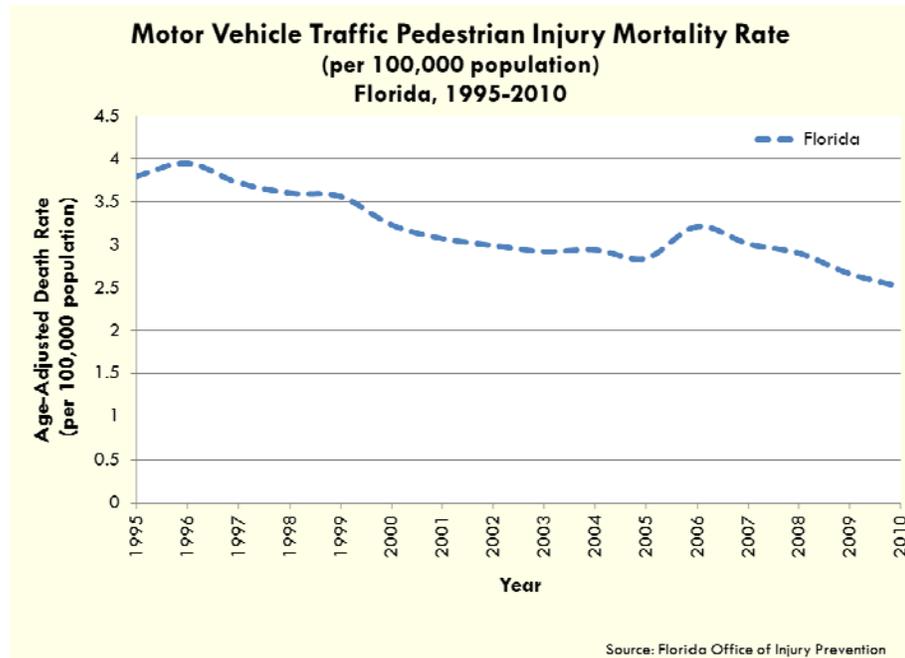
### Pedestrian Injury Age-Adjusted Mortality Rate 2010

	Rate	Ratio
FL	2.5	1.8
U.S.	1.4*	REF
HP2020	1.3	--
Rank	50	--
SEX		
Male	--	--
Female	--	--
RACE/ETHNICITY		
NH White	--	--
NH Black	--	--
Hispanic	--	--
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

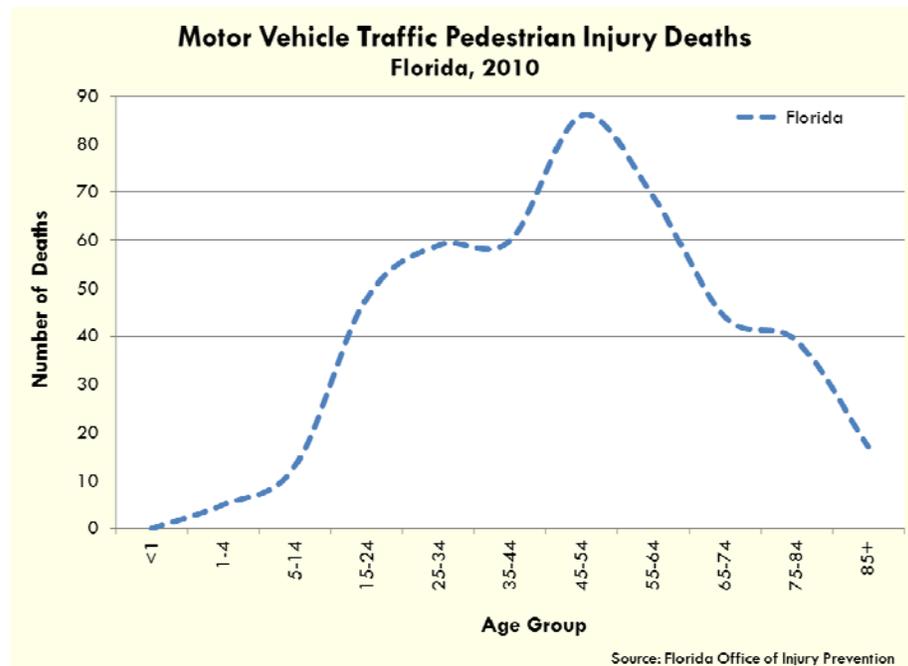
\*Crude rate per 100,000

REF= Reference Group

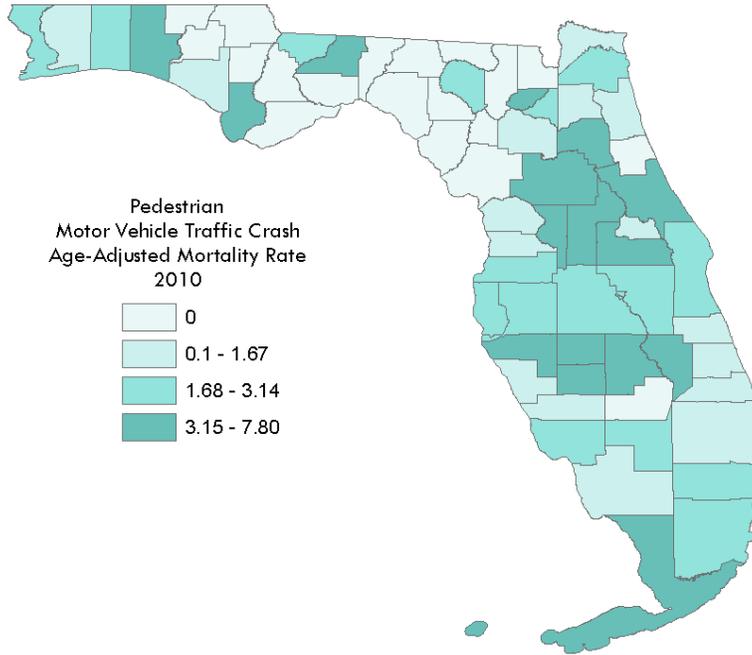
Florida is ranked the second highest state for pedestrian deaths and, over the last 16 years, has stayed in the top five.<sup>31</sup> However, the rate of pedestrian deaths has declined over this same 16-year period with a 2010 rate of 2.51 per 100,000 population.



The age group most affected by pedestrian deaths in 2010 are those 45-54 years old in Florida, similar to pedalcyclists.



PEDESTRIAN INJURIES



Source: Florida Injury Prevention Program

- In 2010, Florida is ranked second in pedestrian deaths in the nation. Over the last 16 years, its been ranked in the top five.
- The mortality rate, however, has declined over this same 16 years.
- Similar to pedacyclists, Floridians 45-54 years old are the most affected by pedestrian deaths.

**PEDESTRIAN MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2010)  
(1=LOWEST AND 4=HIGHEST)

Alachua	0.8	2	Flagler	0.0	1	Lake	3.2	4	Pinellas	2.2	3
Baker	0.0	1	Franklin	0.0	1	Lee	2.5	3	Polk	1.7	3
Bay	0.7	2	Gadsden	2.0	3	Leon	3.5	4	Putnam	4.5	4
Bradford	2.6	3	Gilchrist	0.0	1	Levy	0.0	1	Santa Rosa	1.3	2
Brevard	2.1	3	Glades	0.0	1	Liberty	0.0	1	Sarasota	1.0	2
Broward	2.3	3	Gulf	5.4	4	Madison	0.0	1	Seminole	1.6	2
Calhoun	0.0	1	Hamilton	0.0	1	Manatee	3.6	4	St. Johns	0.3	2
Charlotte	0.3	2	Hardee	4.7	4	Marion	3.2	4	St. Lucie	1.7	2
Citrus	1.1	2	Hendry	2.9	3	Martin	1.2	2	Sumter	4.5	4
Clay	1.1	2	Hernando	1.6	2	Monroe	7.8	4	Suwannee	2.3	3
Collier	1.2	2	Highlands	4.1	4	Nassau	1.2	2	Taylor	0.0	1
Columbia	0.0	1	Hillsborough	2.7	3	Okaloosa	2.0	3	Union	5.1	4
Miami-Dade	2.7	3	Holmes	0.0	1	Okeechobee	5.2	4	Volusia	3.8	4
DeSoto	3.7	4	Indian River	1.3	2	Orange	3.4	4	Wakulla	0.0	1
Dixie	0.0	1	Jackson	0.0	1	Osceola	1.8	3	Walton	3.7	4
Duval	2.3	3	Jefferson	0.0	1	Palm Beach	1.2	2	Washington	0.0	1
Escambia	3.1	3	Lafayette	0.0	1	Pasco	2.8	3			

Source: Florida Injury Prevention Program

## SENIOR FALLS

### Senior Fall Age-Specific Mortality Rate 2011

	Rate	Ratio
FL	59.7	--
U.S.	--	--
HP2020 Rank	45.3	--
SEX		
Male	56.3	REF
Female	63.8	1.1
RACE/ETHNICITY		
NH White	69.5	3.3
NH Black	20.8	REF
Hispanic	31.4	1.5
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

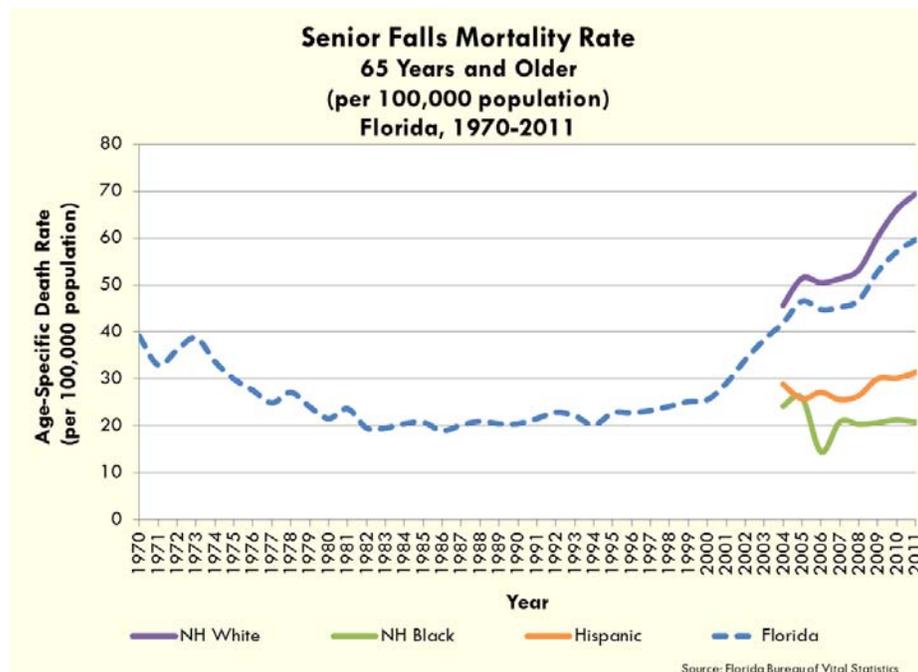
REF= Reference Group

Among adults 65 and older, or seniors, falls threaten health and independence. A fall can significantly limit the ability to remain self-sufficient. Each year, one in every three seniors falls. These falls can cause moderate to severe injuries and can increase the risk of early death. Among seniors, falls are the leading cause of injury death in the U.S., and falls are the most common cause of traumatic brain injuries. However, falls are largely preventable.<sup>33</sup>

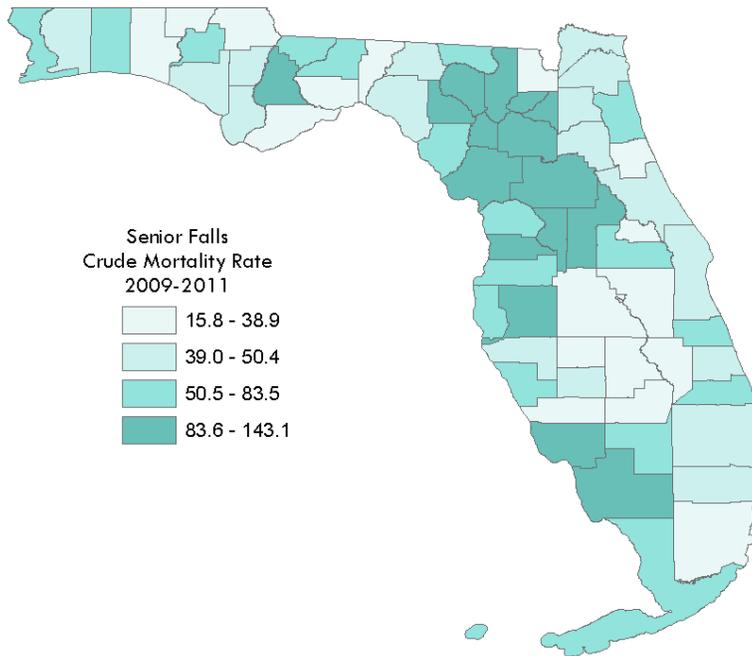
To reduce the risk of falling, seniors should exercise regularly, ask their health care professionals to review their medicines, have their eyes checked at least once a year, and safeguard their homes by reducing tripping hazards, adding grab bars in the bathroom and stair railings, and improving lighting in their homes. To reduce the risk of a hip fracture, seniors should get adequate calcium and vitamin D, perform weight-bearing exercises, and be screened and treated for osteoporosis.<sup>33</sup>

With a large 65-and-older population in Florida, falls among seniors is a key issue. Falls are the leading cause of fatal and non-fatal injuries among this population in Florida and result in significant physical, personal, social and economic burdens. The rate of fatal unintentional falls among seniors is increasing as are hospitalizations due to falls.

The rate of fatal falls among seniors has been on the rise since 1996 with a rate of 56.3 per 100,000 population in 2011. Non-Hispanic white senior Floridians were 3.3 times more likely to die from a fall than their non-Hispanic black counterparts in 2011.



# SENIOR FALLS



Source: Florida Bureau of Vital Statistics

- Each year, one in three adults 65 and older fall.
- Among adults 65 and older, falls are the leading cause of death in the U.S. and the leading cause of fatal or non-fatal injury in Florida.
- The rate of fatal falls in Florida has been on the rise since 1996.
- Non-Hispanic white senior Floridians were 2.3 times more likely to die from a fall in 2011 than their non-Hispanic black counterparts.

**SENIOR FALLS MORTALITY RATE BY COUNTY**  
(CRUDE RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	127.1	4	Flagler	33.9	1	Lake	99.1	4	Pinellas	79.0	3
Baker	22.0	1	Franklin	15.8	1	Lee	86.3	4	Polk	36.4	1
Bay	42.2	2	Gadsden	55.9	3	Leon	71.1	3	Putnam	48.9	2
Bradford	88.4	4	Gilchrist	92.5	4	Levy	103.8	4	Santa Rosa	45.7	2
Brevard	44.6	2	Glades	37.8	1	Liberty	143.1	4	Sarasota	51.3	3
Broward	40.9	2	Gulf	50.2	2	Madison	42.9	2	Seminole	35.9	1
Calhoun	43.3	2	Hamilton	67.8	3	Manatee	41.1	2	St. Johns	54.9	3
Charlotte	29.3	1	Hardee	27.2	1	Marion	83.6	4	St. Lucie	47.5	2
Citrus	83.5	3	Hendry	72.5	3	Martin	55.2	3	Sumter	84.7	4
Clay	42.7	2	Hernando	119.3	4	Monroe	54.1	3	Suwannee	100.0	4
Collier	92.0	4	Highlands	34.3	1	Nassau	47.0	2	Taylor	47.7	2
Columbia	94.1	4	Hillsborough	88.4	4	Okaloosa	71.7	3	Union	87.0	4
Miami-Dade	32.3	1	Holmes	28.9	1	Okeechobee	38.9	1	Volusia	50.4	2
DeSoto	41.0	2	Indian River	65.3	3	Orange	51.0	3	Wakulla	37.0	1
Dixie	61.9	3	Jackson	29.2	1	Osceola	38.5	1	Walton	35.1	1
Duval	43.7	2	Jefferson	27.3	1	Palm Beach	42.9	2	Washington	51.1	3
Escambia	53.8	3	Lafayette	90.1	4	Pasco	60.7	3			

Source: Florida Bureau of Vital Statistics

## CHILDHOOD DROWNINGS

### Childhood Drowning Age-Specific Mortality Rate 2011

	Rate	Ratio
FL	7.3	--
U.S.	--	--
HP2020	--	--
Rank	--	--
SEX		
Male	6.1	REF
Female	8.4	1.4
RACE/ETHNICITY		
NH White	8.0	1.3
NH Black	9.1	1.4
Hispanic	6.4	REF
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

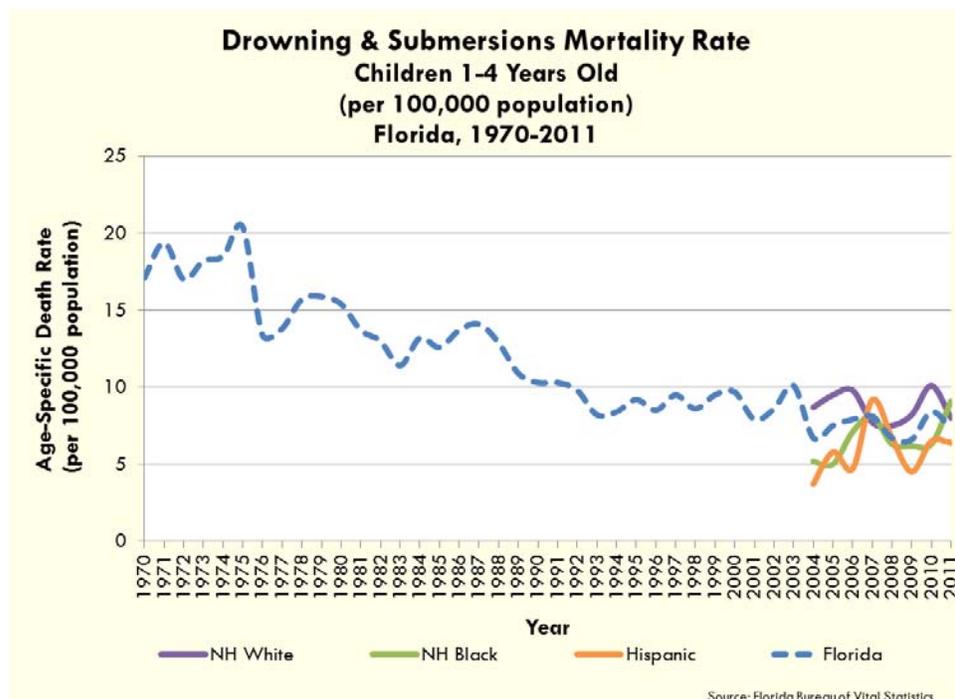
REF= Reference Group

According to the CDC, every day two children 14 years or younger dies unintentionally from drowning. It is the second leading cause of unintentional injury among children aged 1 to 14. Drownings are not just disproportional by age but also by race. The fatal drowning rate of black children ages 5 to 14 is 3.1 times those of white children in the same age group. American Indian and Alaskan Native children fatality rates are 2.3 times higher than that for white children. This difference can be attributed to access to water and social and cultural issues such as participation in water activities.<sup>34</sup>

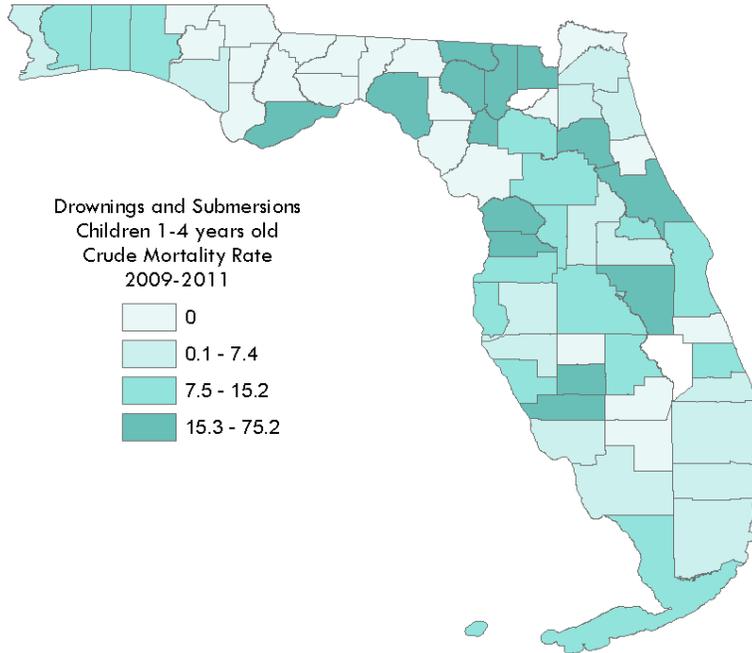
Risk factors for drowning include lack of supervision and barriers, access to natural water settings, lack of life jacket use in recreational boating, alcohol use and seizure disorders. According to the CDC, participation in formal swimming lessons can reduce the risk of drowning by 88% among children aged 1 to 4 years.<sup>34</sup>

Enough children drown each year in Florida to fill three to four preschool classrooms. Male children aged 1 to 4 were more likely than females to be hospitalized and to die from a drowning in Florida. Of children aged 1 to 4, 68% of the victims drown in a swimming pool, 8% in a bathtub, and 13% in natural/open water.

Over the last eight years, drowning fatalities for children aged 1 to 4 have stayed between six and eight per 100,000 population. With the small number of occurrences overall, yearly rates fluctuate widely among racial and ethnic groups.



# CHILDHOOD DROWNINGS



Source: Florida Bureau of Vital Statistics

## CHILDHOOD DROWNINGS & SUBMERSIONS MORTALITY RATE BY COUNTY (CRUDE RATE PER 100,000 POPULATION; QUARTILE; 2009-2011) (1=LOWEST AND 4=HIGHEST)

Alachua	9.7	3	Flagler	0.0	1	Lake	2.6	2	Pinellas	9.6	3
Baker	21.5	4	Franklin	75.2	4	Lee	7.4	2	Polk	7.5	3
Bay	3.9	2	Gadsden	0.0	1	Leon	0.0	1	Putnam	27.0	4
Bradford	0.0	1	Gilchrist	46.2	4	Levy	0.0	1	Santa Rosa	13.7	3
Brevard	10.9	3	Glades	0.0	1	Liberty	0.0	1	Sarasota	8.6	3
Broward	6.7	2	Gulf	0.0	1	Madison	0.0	1	Seminole	8.7	3
Calhoun	0.0	1	Hamilton	57.6	4	Manatee	4.6	2	St. Johns	4.2	2
Charlotte	36.4	4	Hardee	0.0	1	Marion	12.2	3	St. Lucie	7.6	3
Citrus	31.2	4	Hendry	0.0	1	Martin	6.7	2	Sumter	15.2	3
Clay	3.5	2	Hernando	20.3	4	Monroe	13.2	3	Suwannee	33.9	4
Collier	7.3	2	Highlands	8.6	3	Nassau	0.0	1	Taylor	66.3	4
Columbia	30.1	4	Hillsborough	6.3	2	Okaloosa	14.8	3	Union	0.0	1
Miami-Dade	3.5	2	Holmes	0.0	1	Okeechobee	0.0	1	Volusia	15.5	4
DeSoto	19.2	4	Indian River	0.0	1	Orange	4.3	2	Wakulla	0.0	1
Dixie	0.0	1	Jackson	0.0	1	Osceola	16.8	4	Walton	13.1	3
Duval	7.0	2	Jefferson	0.0	1	Palm Beach	4.7	2	Washington	0.0	1
Escambia	6.6	2	Lafayette	0.0	1	Pasco	11.5	3			

Source: Florida Bureau of Vital Statistics

- Every day, two children 14 years or younger dies unintentionally from drowning.
- Enough children drown each year in Florida to fill three to four preschool classrooms.
- Mortality rates for children have declined since 1970 in Florida, and over the last eight years, the rate has stayed between 6-8 per 100,000 population.
- In 2011, male children in Florida between the ages of 1 and 4 were 1.4 times more likely than females to die from a drowning.

# SUICIDE

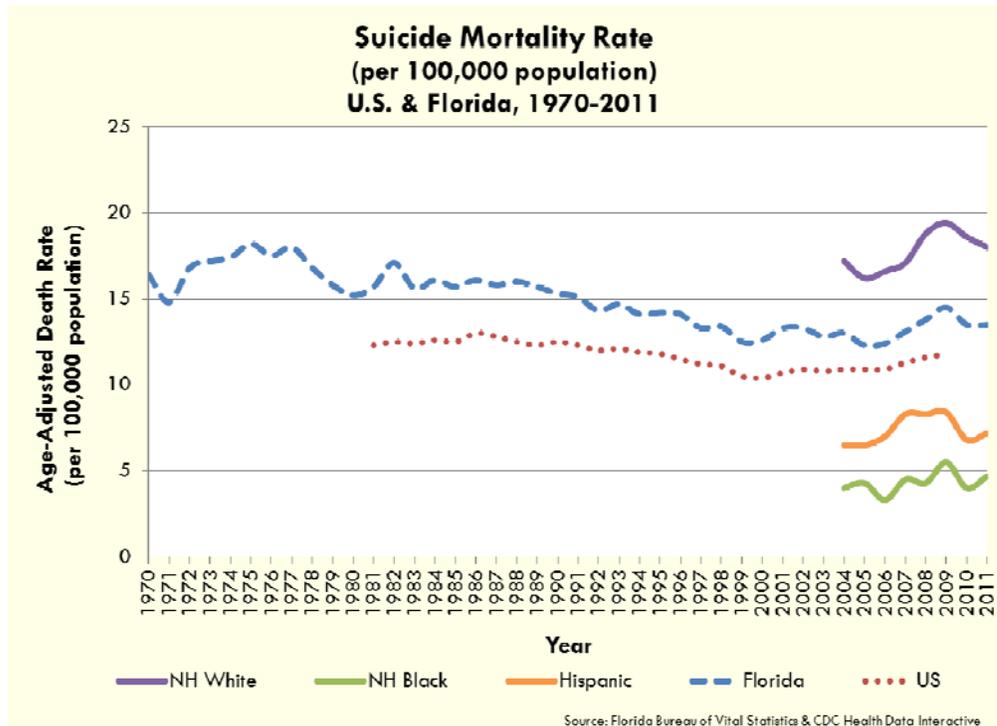
## Suicide Age-Adjusted Mortality Rate 2009

	Rate	Ratio
FL	14.5	--
U.S.	11.8	REF
HP2020	10.2	--
Rank	38	--
<b>SEX</b>		
Male	21.9	3.8
Female	5.7	REF
<b>RACE/ETHNICITY</b>		
NH White	18.0	3.8
NH Black	4.7	REF
Hispanic	7.2	1.5
<b>EDUCATION</b>		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

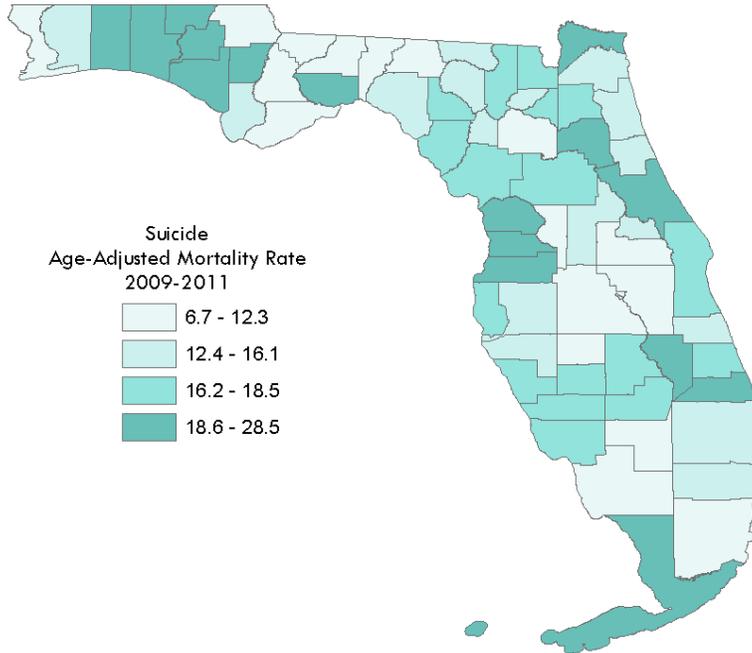
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Suicide, according to the CDC, is a death caused by self-directed injurious behavior with any intent to die as a result of the behavior.<sup>35</sup> Suicide is the fifth leading cause of death in Florida, and a national public health problem. There are many possible risk factors leading up to a suicide attempt. These include a family history of suicide or child maltreatment, previous attempts, history of mental illness or alcohol or substance abuse, feeling hopeless, impulsive or aggressive tendencies, cultural or religious beliefs, local epidemics of suicide, isolation, inability to access mental health treatment, financial, social, relational or work loss, physical illness, and ease of access to lethal suicide methods. Along with risk factors, there are some preventative factors for suicide such as effective clinical care for mental, physical and substance abuse, access to clinical interventions, clinical, family and community support, problem solving, conflict resolution and nonviolent dispute handling skills, and cultural and religious beliefs that discourage suicide and support self-preservation.<sup>36</sup>

In Florida, there has been little change in the suicide rate since 1970. Florida has a higher rate than the U.S. average. Non-Hispanic white Floridians are 3.8 times more likely than their non-Hispanic black counterparts to die from suicide. Male Floridians are also 3.8 times more likely than their female counterparts to die from suicide.



SUICIDE



Source: Florida Bureau of Vital Statistics

- Suicide is the fifth leading cause of death in Florida.
- In Florida, there has been little change in the suicide mortality rate since 1970.
- In 2009, non-Hispanic white Floridians were 3.8 times more likely than their non-Hispanic black counterparts to commit suicide.
- Male Floridians were also 3.8 times more likely than female Floridians to commit suicide in 2009.

**SUICIDE MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	11.9	1	Flagler	15.5	2	Lake	15.3	2	Pinellas	17.7	3
Baker	16.9	3	Franklin	7.9	1	Lee	16.2	3	Polk	12.0	1
Bay	19.4	4	Gadsden	9.6	1	Leon	12.2	1	Putnam	20.1	4
Bradford	17.6	3	Gilchrist	13.7	2	Levy	17.9	3	Santa Rosa	15.6	2
Brevard	17.8	3	Glades	16.9	3	Liberty	6.7	1	Sarasota	18.0	3
Broward	12.5	2	Gulf	15.5	2	Madison	6.9	1	Seminole	13.2	2
Calhoun	28.5	4	Hamilton	12.8	2	Manatee	16.1	2	St. Johns	15.9	2
Charlotte	16.6	3	Hardee	7.2	1	Marion	16.8	3	St. Lucie	16.5	3
Citrus	25.9	4	Hendry	10.0	1	Martin	19.1	4	Sumter	8.5	1
Clay	17.0	3	Hernando	20.8	4	Monroe	23.8	4	Suwannee	12.9	2
Collier	12.2	1	Highlands	17.3	3	Nassau	19.7	4	Taylor	15.6	2
Columbia	16.6	3	Hillsborough	12.9	2	Okaloosa	20.2	4	Union	13.6	2
Miami-Dade	8.3	1	Holmes	19.1	4	Okeechobee	19.9	4	Volusia	18.6	4
DeSoto	17.0	3	Indian River	13.8	2	Orange	10.0	1	Wakulla	21.8	4
Dixie	18.5	3	Jackson	11.4	1	Osceola	11.0	1	Walton	20.3	4
Duval	14.6	2	Jefferson	10.3	1	Palm Beach	13.7	2	Washington	22.4	4
Escambia	12.3	1	Lafayette	18.5	3	Pasco	19.8	4			

Source: Florida Bureau of Vital Statistics

## LIVE BIRTHS

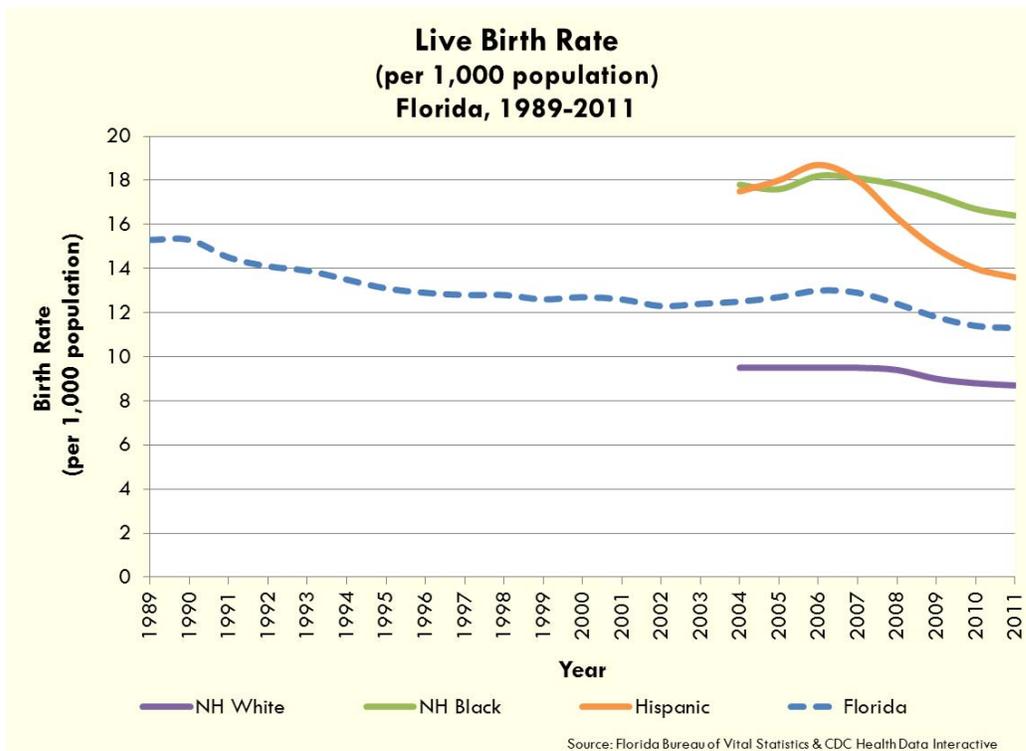
### Live Birth Rate 2011

	Rate	Ratio
FL	13.6	1.2
U.S.	11.3	REF
HP2020 Rank	--	--
INFANT'S SEX		
Male	11.8	1.1
Female	10.8	REF
RACE/ETHNICITY		
NH White	8.7	REF
NH Black	16.4	1.9
Hispanic	13.6	1.6
MOTHER'S EDUCATION		
<HS	1.8	REF
HS	3.5	1.9
HS+	3.2	1.8
College Grad	2.7	1.5

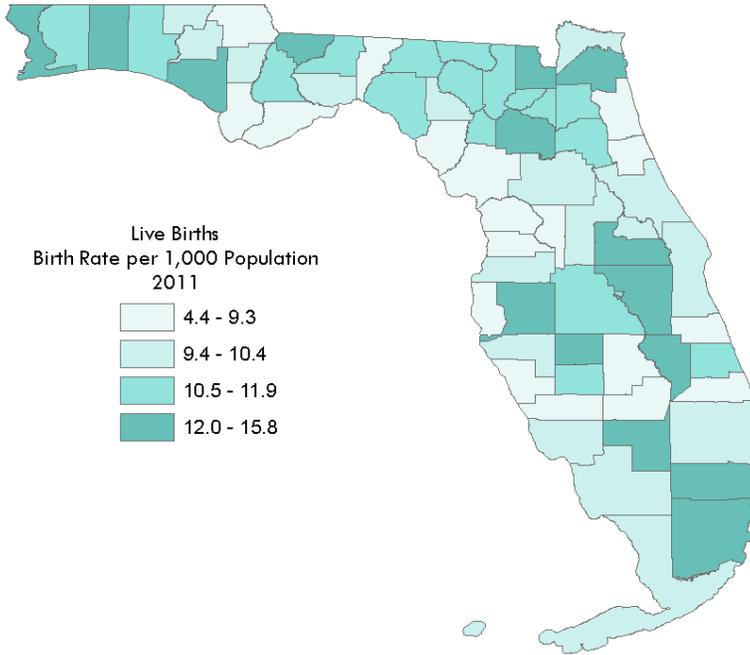
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Births are an essential part of population growth and demographic composition in Florida. Live births refer to births in Florida that did not result in a stillbirth.

Overall, there has been a decline in the Florida birth rate since 2008. Non-Hispanic blacks are 1.9 times more likely and Hispanics are 1.6 times more likely to have a live birth than their non-Hispanic white counterpart. Women who did not finish high school have a birth rate of only 1.8 per 1,000 population in Florida, compared to those with a high school diploma who had a rate of 3.5 per 1,000 population.



LIVE BIRTHS



Source: Florida Bureau of Vital Statistics

- Births are an essential part of population growth and demographic composition.
- There has been a decline in births since 2008 in Florida.
- In 2011, non-Hispanic black women in Florida were 1.9 times more likely to have a live birth than their non-Hispanic white counterparts.
- Women who did not finish high school had a birth rate of only 1.8 per 1,000 population compared to those with a high school diploma who had a rate of 3.5 per 1,000 population.

**LIVE BIRTH RATE BY COUNTY**  
(BIRTH RATE PER 1,000 POPULATION; QUARTILE; 2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	12.0	4	Flagler	8.1	1	Lake	9.8	2	Pinellas	9.0	1
Baker	12.7	4	Franklin	8.7	1	Lee	10.0	2	Polk	11.9	3
Bay	12.7	4	Gadsden	12.4	4	Leon	11.0	3	Putnam	11.4	3
Bradford	11.3	3	Gilchrist	10.5	3	Levy	9.3	1	Santa Rosa	11.9	3
Brevard	9.5	2	Glades	5.7	1	Liberty	10.7	3	Sarasota	7.7	1
Broward	12.0	4	Gulf	8.7	1	Madison	11.1	3	Seminole	10.4	2
Calhoun	10.3	2	Hamilton	10.5	3	Manatee	10.3	2	St. Johns	9.3	1
Charlotte	6.1	1	Hardee	14.1	4	Marion	10.1	2	St. Lucie	10.7	3
Citrus	7.7	1	Hendry	15.8	4	Martin	8.1	1	Sumter	4.4	1
Clay	10.9	3	Hernando	9.0	1	Monroe	9.9	2	Suwannee	11.1	3
Collier	9.9	2	Highlands	9.3	1	Nassau	10.3	2	Taylor	10.8	3
Columbia	11.4	3	Hillsborough	13.3	4	Okaloosa	14.5	4	Union	11.0	3
Miami-Dade	12.4	4	Holmes	9.6	2	Okeechobee	13.3	4	Volusia	9.4	2
DeSoto	11.2	3	Indian River	9.2	1	Orange	13.3	4	Wakulla	9.9	2
Dixie	9.1	1	Jackson	9.3	1	Osceola	13.7	4	Walton	11.3	3
Duval	14.3	4	Jefferson	8.6	1	Palm Beach	10.4	2	Washington	9.6	2
Escambia	12.8	4	Lafayette	9.8	2	Pasco	10.1	2			

Source: Florida Bureau of Vital Statistics

## TEEN PREGNANCIES

### Teen Birth Rate 2011

	Rate	Ratio
FL	29.1	--
U.S.	--	--
HP2020	--	--
Rank	--	--
INFANT'S SEX		
Male	15.5	1.08
Female	14.3	REF
RACE/ETHNICITY		
NH White	21.7	REF
NH Black	47.2	2.2
Hispanic	29.8	1.4
MOTHER'S EDUCATION		
<HS	16.5	7.2
HS	10.8	4.7
HS+	2.3	REF
College Grad	N/A	

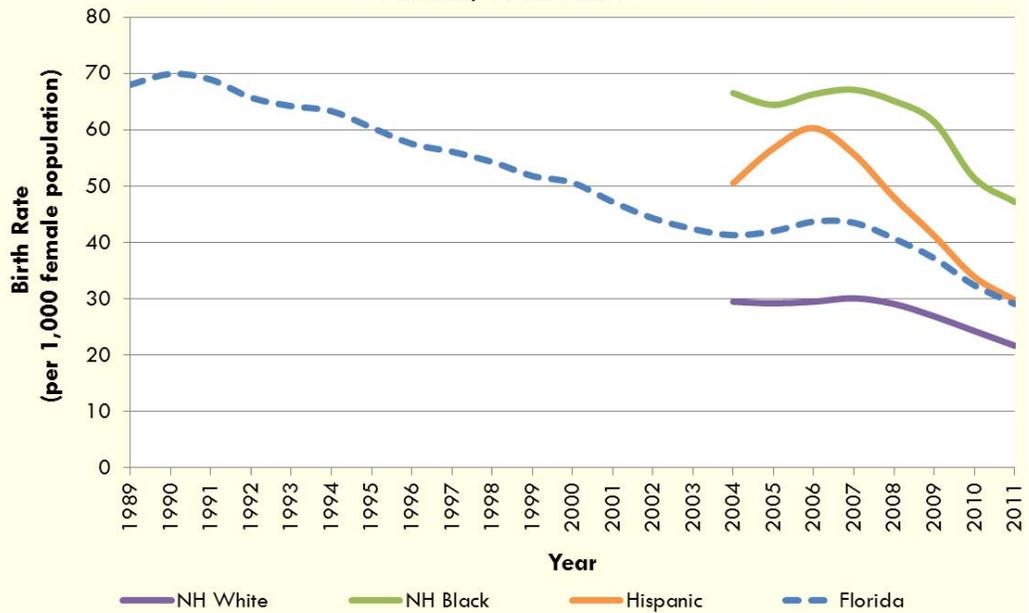
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Teen pregnancy refers to a pregnancy to a teen under the age of 20 years. In the U.S., there has been an overall decline in teen births for all races and ethnicities. Though it is unclear what the cause of the decline is, some evidence suggests that teens appear to be less sexually active, and those who are sexually active appear to be using contraception more than in previous years.<sup>37</sup>

There are strong social and economic disparities between mothers who have children in their teens and those who have them later in life. Pregnant teens are more likely to drop out of high school early, with only about 50% of teen mothers receiving a high school diploma by 22 years of age. Children born to teen mothers are more likely to have lower school achievement and drop out, have more health problems, be incarcerated at some time during adolescence, give birth as teenagers, and face unemployment as young adults.<sup>37</sup>

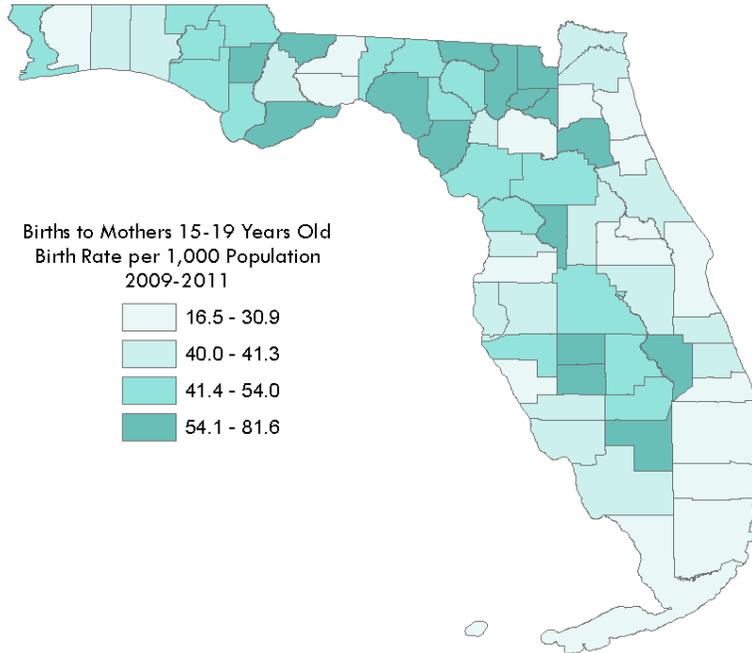
In 2011, the birth rate for teen mothers ages 15 to 19 was 29.1 per 1,000 Florida females. Births to teens 15-19-years-old have declined over the last five years. Non-Hispanic blacks are 2.2 times more likely and Hispanics are 1.4 times more likely to have a teen birth compared to non-Hispanic whites.

**Teen (15-19) Birth Rate (per 1,000 female population) Florida, 1989-2011**



Source: Florida Bureau of Vital Statistics

# TEEN PREGNANCIES



Source: Florida Bureau of Vital Statistics

- In the U.S., there has been an overall decline in teen births for all races and ethnicities.
- Only about 50% of teen mothers receive their high school diploma by 22 years of age.
- In Florida, births to teens 15-19-years-old have declined over the last five years.
- Non-Hispanic black teens in Florida were 2.2 times more likely to have a teen birth compared non-Hispanic white teens.

**TEEN (15-19) BIRTH RATE BY COUNTY**  
(BIRTH RATE PER 1,000 POPULATION; QUARTILE; 2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	20.7	1	Flagler	30.4	1	Lake	40.6	2	Pinellas	32.5	2
Baker	60.0	4	Franklin	81.6	4	Lee	35.0	2	Polk	48.2	3
Bay	53.7	3	Gadsden	62.8	4	Leon	16.5	1	Putnam	65.6	4
Bradford	59.2	4	Gilchrist	39.6	2	Levy	45.7	3	Santa Rosa	30.2	1
Brevard	26.1	1	Glades	46.0	3	Liberty	40.0	2	Sarasota	28.2	1
Broward	24.9	1	Gulf	51.7	3	Madison	42.9	3	Seminole	21.6	1
Calhoun	54.8	4	Hamilton	81.2	4	Manatee	44.0	3	St. Johns	18.9	1
Charlotte	32.1	2	Hardee	81.0	4	Marion	46.9	3	St. Lucie	35.6	2
Citrus	41.9	3	Hendry	65.5	4	Martin	28.7	1	Sumter	54.6	4
Clay	27.8	1	Hernando	33.5	2	Monroe	23.2	1	Suwannee	54.0	3
Collier	32.6	2	Highlands	49.0	3	Nassau	39.3	2	Taylor	69.7	4
Columbia	57.9	4	Hillsborough	38.2	2	Okaloosa	38.7	2	Union	57.9	4
Miami-Dade	27.8	1	Holmes	49.7	3	Okeechobee	67.5	4	Volusia	33.0	2
DeSoto	61.8	4	Indian River	34.7	2	Orange	30.7	1	Wakulla	30.9	1
Dixie	56.4	4	Jackson	43.9	3	Osceola	35.5	2	Walton	39.3	2
Duval	41.3	2	Jefferson	43.1	3	Palm Beach	26.9	1	Washington	53.0	3
Escambia	44.8	3	Lafayette	47.7	3	Pasco	30.1	1			

Source: Florida Bureau of Vital Statistics

## LOW BIRTHWEIGHT

### Low Birthweight Births (Percent) 2011

	Rate	Ratio
FL	8.7	--
U.S.	--	--
HP2020	8.2	--
Rank	--	--
INFANT'S SEX		
Male	8.0	REF
Female	9.5	1.2
RACE/ETHNICITY		
NH White	7.3	REF
NH Black	13.3	1.8
Hispanic	7.3	1.0
MOTHER'S EDUCATION		
<HS	10.0	1.4
HS	9.5	1.3
HS+	8.1	1.1
College Grad	7.3	REF

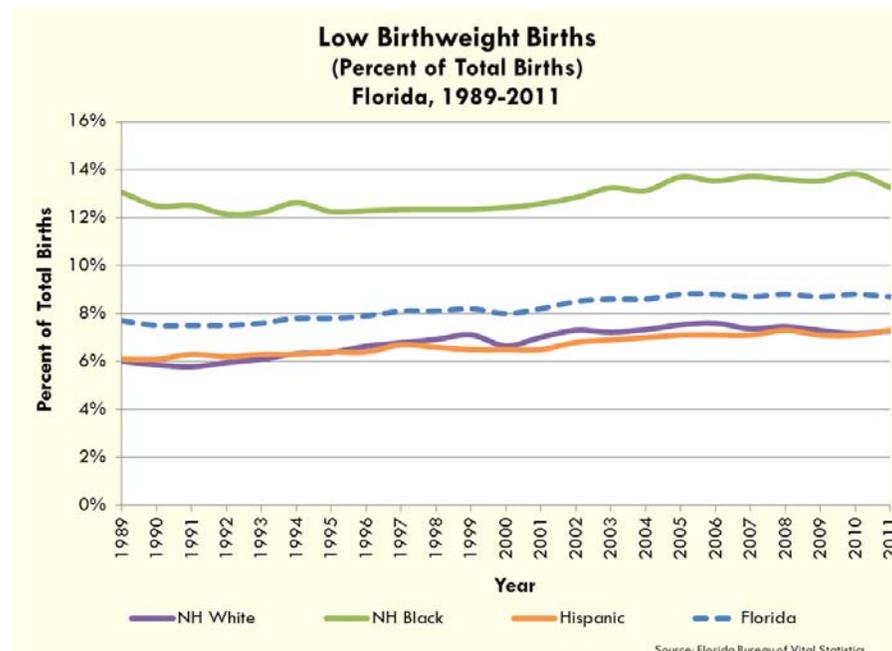
REF= Reference Group

Low birthweight births, or births to infants under 2,500 grams (5 lbs. 8 oz.), is an important health indicator. The CDC suggests that it is the single most important factor affecting neonatal mortality and a significant determinant of post-neonatal mortality. Those babies who survive are at an increased risk for future health problems and disabilities.<sup>38</sup>

According to the March of Dimes, one in every twelve babies in the U.S. is born with low birthweight. The mortality risk, however, has been reduced due to medical care advances. There are two main reasons babies can be born with low birth weight. The first is prematurity, or births before 37 completed weeks of pregnancy. According to March of Dimes, about 67% of low birthweight babies are premature. The second reason is fetal growth restriction, or the fetus being small for gestational age. Possible reasons for growth restriction may be births to a smaller than average mother or issues with growth in-utero.<sup>39</sup>

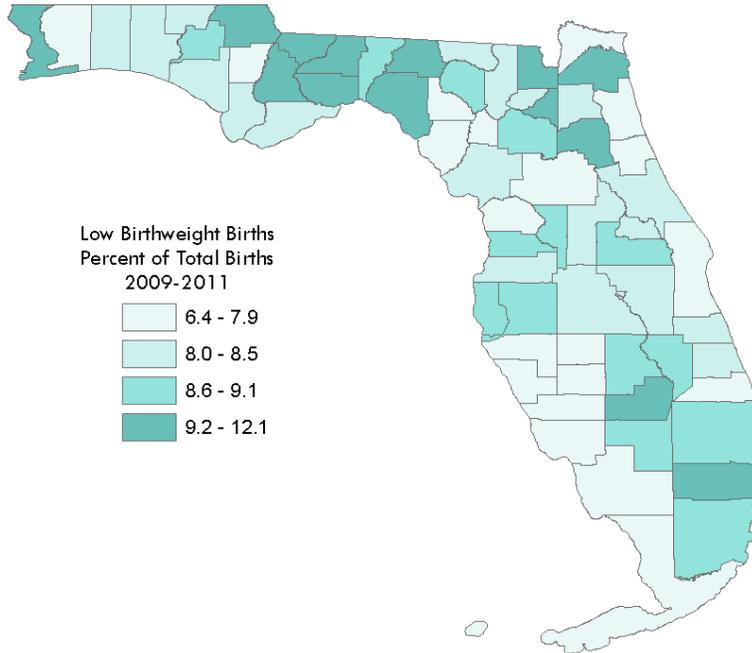
Some risk factors associated with low birthweight births are having a premature baby previously, abnormalities of the uterus or cervix, having a multiple birth pregnancy, birth defects, infection or chronic health problems in the mother, smoking, alcohol or illicit drug use, infections in the fetus, placental problems or inadequate maternal weight gain. Some socio-economic factors, such as low income and low educational attainment may also influence the possibility of having a low birthweight baby. Black women and women under 17 or over 35 years old also have an increased risk of having a low birthweight baby.<sup>39</sup>

In Florida, low birthweight births have stayed somewhat stable, with a slight increase over the last ten years. In 2011, non-Hispanic blacks were 1.8 times more likely than non-Hispanic whites or Hispanics to have a low birthweight baby. Non-Hispanic whites and Hispanics have had similar rates over the last 24 years.



Source: Florida Bureau of Vital Statistics

LOW BIRTHWEIGHT



Source: Florida Bureau of Vital Statistics

**LOW BIRTHWEIGHT BIRTHS BY COUNTY**  
(PERCENT OF TOTAL BIRTHS; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	8.6	3	Flagler	7.9	1	Lake	8.1	2	Pinellas	8.6	3
Baker	10.2	4	Franklin	8.2	2	Lee	7.9	1	Polk	8.1	2
Bay	8.5	2	Gadsden	11.3	4	Leon	9.5	4	Putnam	9.7	4
Bradford	10.2	4	Gilchrist	6.5	1	Levy	8.5	2	Santa Rosa	7.5	1
Brevard	7.5	1	Glades	10.2	4	Liberty	9.6	4	Sarasota	7.5	1
Broward	9.4	4	Gulf	8.4	2	Madison	12.1	4	Seminole	8.5	2
Calhoun	7.7	1	Hamilton	8.5	2	Manatee	7.9	1	St. Johns	6.4	1
Charlotte	7.6	1	Hardee	7.3	1	Marion	7.8	1	St. Lucie	8.4	2
Citrus	7.3	1	Hendry	8.8	3	Martin	7.6	1	Sumter	9.1	3
Clay	8.2	2	Hernando	8.7	3	Monroe	6.8	1	Suwannee	9.1	3
Collier	7.5	1	Highlands	8.8	3	Nassau	7.9	1	Taylor	9.4	4
Columbia	8.5	2	Hillsborough	9.0	3	Okaloosa	8.1	2	Union	8.4	2
Miami-Dade	8.9	3	Holmes	8.4	2	Okeechobee	8.6	3	Volusia	8.5	2
DeSoto	7.5	1	Indian River	8.2	2	Orange	9.1	3	Wakulla	9.4	4
Dixie	7.1	1	Jackson	9.7	4	Osceola	8.2	2	Walton	8.0	2
Duval	9.4	4	Jefferson	8.8	3	Palm Beach	9.1	3	Washington	8.9	3
Escambia	10.3	4	Lafayette	7.1	1	Pasco	8.3	2			

Source: Florida Bureau of Vital Statistics

- Low birthweight, the CDC suggests, is the single most important factor affecting neonatal mortality and a significant determinant of post-natal mortality.
- One in every twelve babies in the U.S. is born low birthweight and 67% of low birthweight babies are premature.
- In Florida, rates for low birthweight have stayed relatively stable since 1989, with a slight increase in the last ten years.
- In 2011, non-Hispanic black women were 1.8 times more likely than non-Hispanic white and Hispanic women to deliver a low birthweight baby in Florida.

## PRETERM BIRTHS

### Preterm Births (Percent) 2011

	Rate	Ratio
FL	13.4	--
U.S.	--	--
HP2020	11.4	--
Rank	--	--
INFANT'S SEX		
Male	13.8	1.1
Female	12.9	REF
RACE/ETHNICITY		
NH White	11.5	REF
NH Black	17.9	1.6
Hispanic	13.2	1.1
MOTHER'S EDUCATION		
<HS	15.6	1.4
HS	14.7	1.3
HS+	12.7	1.2
College Grad	10.9	REF

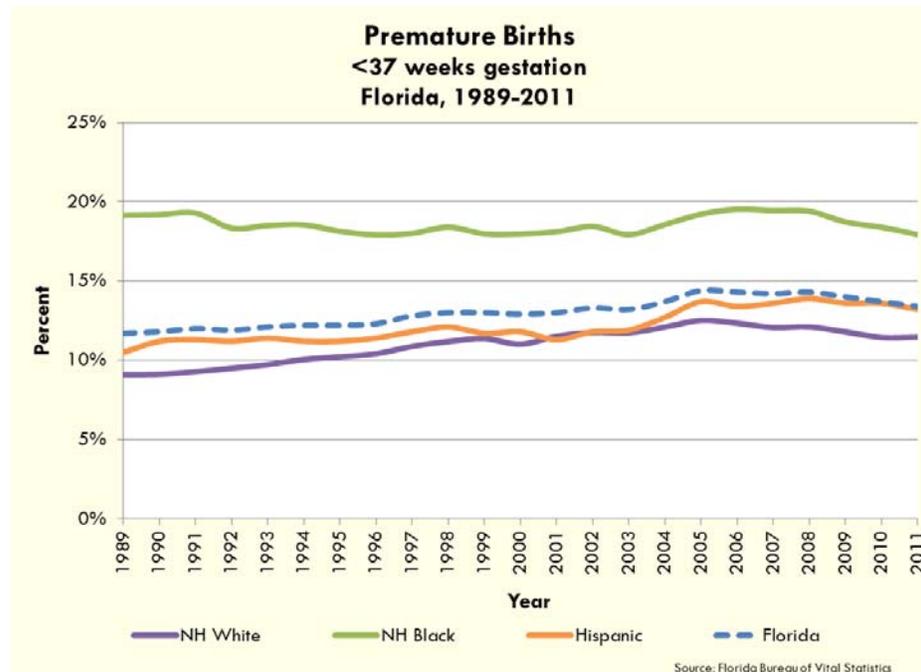
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Preterm births, or births before 37 weeks of gestation, can cause major health complications for babies. Births before full gestation have lower chances of survival and higher chances of short and long term health problems when compared to term births (37 or more weeks of gestation). The CDC estimates that one in every eight births are born preterm each year, which equates to more than a half million babies in the U.S. Preterm delivery is the leading cause of infant deaths and is a risk factor for lifelong neurological and developmental disabilities.<sup>40</sup>

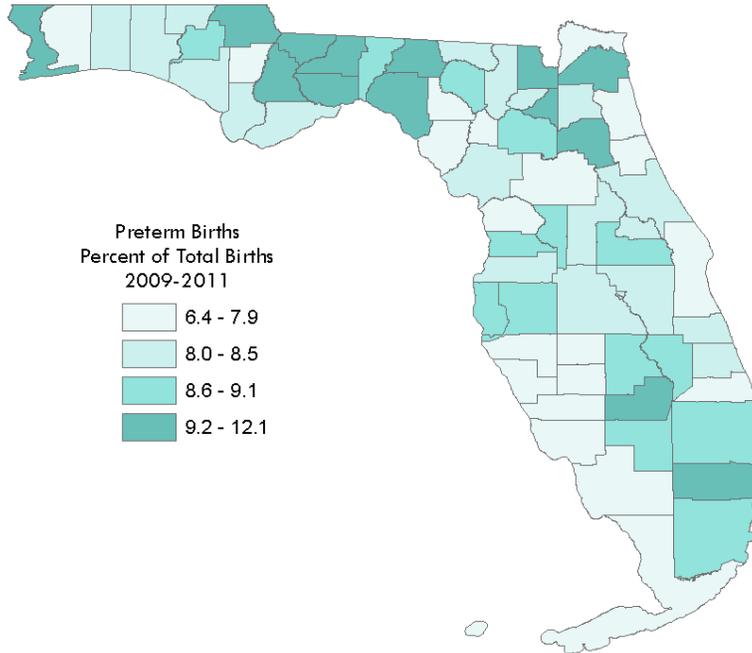
Most preterm deliveries occur spontaneously and without a known cause. Some preterm births, however, are at the decision of the physician who is concerned with the health of the mother or the baby. Some preterm babies require special care and stay in neonatal intensive care units (NICUs).<sup>40</sup>

There are a few known factors that put mothers at risk for preterm deliveries. These include carrying more than one baby, having a previous preterm birth, issues with the mother's uterus or cervix, chronic health problems in the mother (such as high blood pressure and diabetes), extremely high levels of stress, certain infections, birth defects, being underweight before pregnancy, obesity, short time between pregnancies, cigarette smoking, and drug or alcohol use during pregnancy. Also, women who are black, unmarried, or have low socioeconomic status are at an increased risk of having a preterm birth.<sup>40</sup>

Since 1989, preterm births in Florida have remained between 13 and 14% of all births, with a rate of 13.4% in 2011. The prevalence of preterm birth in Florida is highest among non-Hispanic black women, which has been between 1.5 and two times higher than the prevalence among non-Hispanic white women over the last 24 years.



PRETERM BIRTHS



Source: Florida Bureau of Vital Statistics

- The CDC estimates one in every eight infants are born preterm each year in the U.S.
- Preterm delivery is the leading cause of infant death in the U.S.
- Since 1989, preterm births in Florida have stayed stable around 13.4%.
- Non-Hispanic black women in Florida were 1.6 times more likely than their non-Hispanic white counterparts to have a preterm birth in 2011.

**PRETERM BIRTHS BY COUNTY**  
(PERCENT OF TOTAL BIRTHS; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	8.6	3	Flagler	7.9	1	Lake	8.1	2	Pinellas	8.6	3
Baker	10.2	4	Franklin	8.2	2	Lee	7.9	1	Polk	8.1	2
Bay	8.5	2	Gadsden	11.3	4	Leon	9.5	4	Putnam	9.7	4
Bradford	10.2	4	Gilchrist	6.5	1	Levy	8.5	2	Santa Rosa	7.5	1
Brevard	7.5	1	Glades	10.2	4	Liberty	9.6	4	Sarasota	7.5	1
Broward	9.4	4	Gulf	8.4	2	Madison	12.1	4	Seminole	8.5	2
Calhoun	7.7	1	Hamilton	8.5	2	Manatee	7.9	1	St. Johns	6.4	1
Charlotte	7.6	1	Hardee	7.3	1	Marion	7.8	1	St. Lucie	8.4	2
Citrus	7.3	1	Hendry	8.8	3	Martin	7.6	1	Sumter	9.1	3
Clay	8.2	2	Hernando	8.7	3	Monroe	6.8	1	Suwannee	9.1	3
Collier	7.5	1	Highlands	8.8	3	Nassau	7.9	1	Taylor	9.4	4
Columbia	8.5	2	Hillsborough	9.0	3	Okaloosa	8.1	2	Union	8.4	2
Miami-Dade	8.9	3	Holmes	8.4	2	Okeechobee	8.6	3	Volusia	8.5	2
DeSoto	7.5	1	Indian River	8.2	2	Orange	9.1	3	Wakulla	9.4	4
Dixie	7.1	1	Jackson	9.7	4	Osceola	8.2	2	Walton	8.0	2
Duval	9.4	4	Jefferson	8.8	3	Palm Beach	9.1	3	Washington	8.9	3
Escambia	10.3	4	Lafayette	7.1	1	Pasco	8.3	2			

Source: Florida Bureau of Vital Statistics

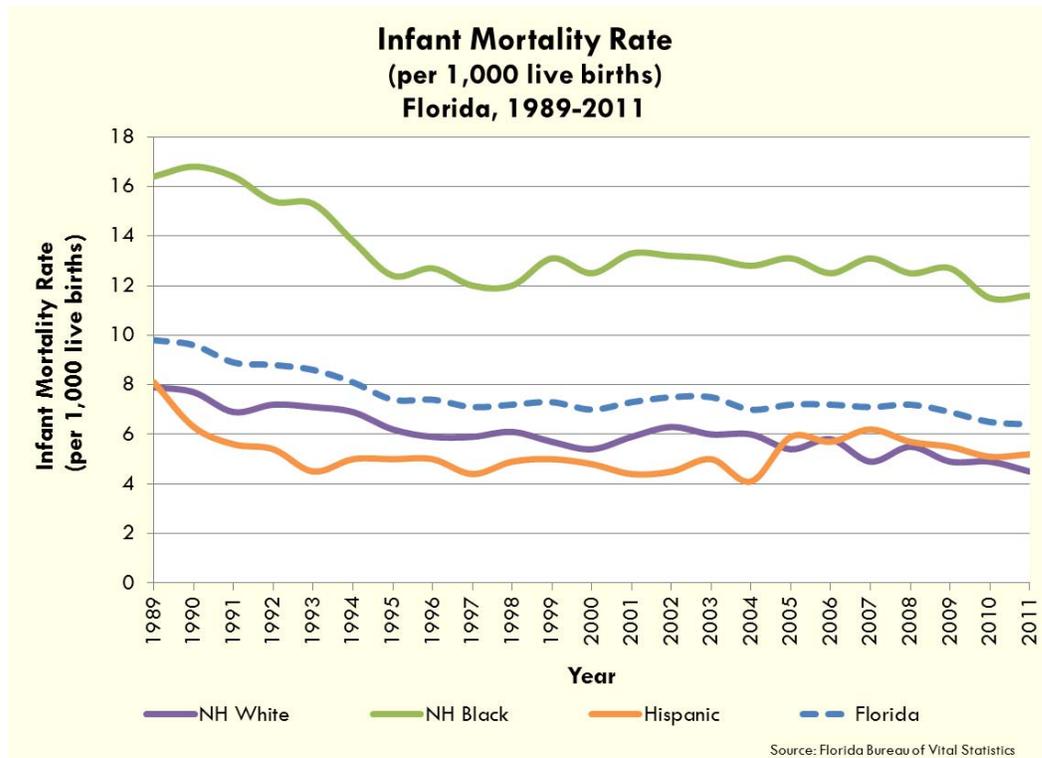
## INFANT MORTALITY

Infant mortality refers to deaths to babies in their first year (0-364 days) of life. It is often calculated as a rate, which indicates the death rate of live-born babies during the first year of life. We measure this to reflect the health and well-being of the population's women of reproductive age and their infants as well as the quality of the healthcare available. It also is used to help identify areas in need and designate available resources.

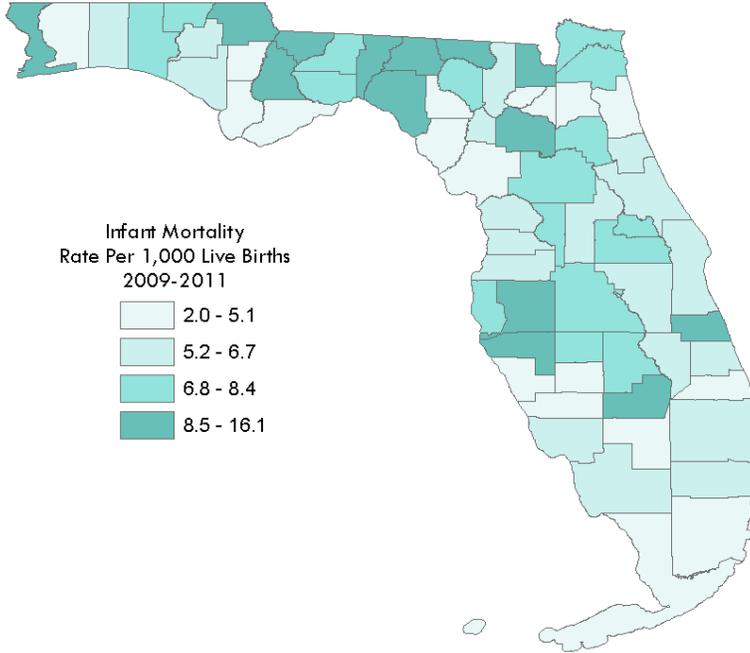
Since 1995, Florida's total infant mortality rates has stayed relatively stable. Non-Hispanic black infants have had higher rates of mortality than any other race or ethnicity for the last 24 years. In 2011, non-Hispanic black infants were 2.6 times more likely than non-Hispanic white infants to die. In 2005, the Hispanic infant mortality rate bypassed that of non-Hispanic whites.

Infant Mortality Rate 2011		
	Rate	Ratio
FL	6.4	--
U.S.	--	--
HP2020	6.0	--
Rank	--	--
INFANT'S SEX		
Male	--	--
Female	--	--
RACE/ETHNICITY		
NH White	4.5	REF
NH Black	11.6	2.6
Hispanic	5.2	1.2
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group



INFANT MORTALITY



Source: Florida Bureau of Vital Statistics

- The infant mortality rate is used to reflect the health and well-being of women of reproductive age and their infants as well as the quality of the healthcare available.
- Since 1995, the infant mortality rate has stayed relatively stable in Florida.
- In 2011, non-Hispanic black infants were 2.6 times more likely than non-Hispanic white infants in Florida to die.

**INFANT MORTALITY RATE BY COUNTY**  
(RATE PER 1,000 LIVE BIRTHS; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	8.7	4	Flagler	6.3	2	Lake	5.7	2	Pinellas	7.9	3
Baker	15.0	4	Franklin	2.9	1	Lee	5.4	2	Polk	7.4	3
Bay	6.7	2	Gadsden	9.7	4	Leon	7.7	3	Putnam	7.8	3
Bradford	5.1	1	Gilchrist	5.4	2	Levy	2.4	1	Santa Rosa	4.8	1
Brevard	6.7	2	Glades	8.5	4	Liberty	16.1	4	Sarasota	4.7	1
Broward	6.2	2	Gulf	5.1	1	Madison	12.2	4	Seminole	7.0	3
Calhoun	2.1	1	Hamilton	13.5	4	Manatee	8.7	4	St. Johns	4.4	1
Charlotte	4.7	1	Hardee	8.4	3	Marion	7.7	3	St. Lucie	6.3	2
Citrus	6.5	2	Hendry	4.8	1	Martin	3.1	1	Sumter	8.1	3
Clay	4.2	1	Hernando	6.7	2	Monroe	4.7	1	Suwannee	7.5	3
Collier	6.2	2	Highlands	8.0	3	Nassau	7.8	3	Taylor	12.5	4
Columbia	6.1	2	Hillsborough	8.5	4	Okaloosa	6.5	2	Union	2.0	1
Miami-Dade	5.0	1	Holmes	8.0	3	Okeechobee	5.5	2	Volusia	6.1	2
DeSoto	3.1	1	Indian River	8.6	4	Orange	7.2	3	Wakulla	8.4	3
Dixie	4.0	1	Jackson	9.3	4	Osceola	6.3	2	Walton	6.8	3
Duval	7.9	3	Jefferson	12.2	4	Palm Beach	5.9	2	Washington	5.4	2
Escambia	9.2	4	Lafayette	4.0	1	Pasco	5.9	2			

Source: Florida Bureau of Vital Statistics

## BREASTFEEDING

### Breastfeeding Initiation (Percent) 2011

	Rate	Ratio*
FL	79.6	--
U.S.	--	--
HP2020	81.9	--
Rank	--	--
INFANT'S SEX		
Male	79.5	1.0
Female	79.7	REF
RACE/ETHNICITY		
NH White	80.3	.93
NH Black	67.9	.79
Hispanic	86.3	REF
EDUCATION		
<HS	66.2	.71
HS	73.0	.79
HS+	83.7	.90
College Grad	92.6	REF

\*Because a high rate for this indicator suggests a more favorable outcome, ratios will be below 1.0.

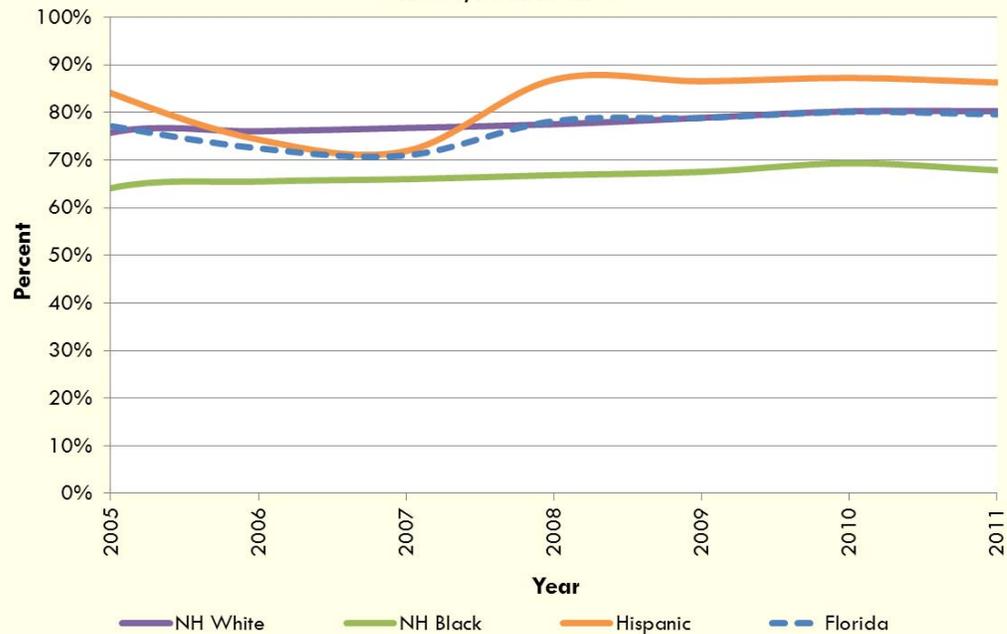
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Breastfeeding a child at birth reduces the risk of that child becoming obese, provides protection against illnesses, and lowers future health and medical costs. Breastfeeding for nine months reduces a baby's odds of becoming overweight by more than 30%. Mothers who breastfeed also have a lower risk of developing breast and ovarian cancers.<sup>41</sup>

In the U.S., most mothers initiate breastfeeding their baby at birth. However, within the first week of the child's life, half have already been given formula, and by nine months, only 31% of babies are breastfeeding at all. It has been shown that hospital staff and breastfeeding counselors help in the success of breastfeeding.<sup>41</sup>

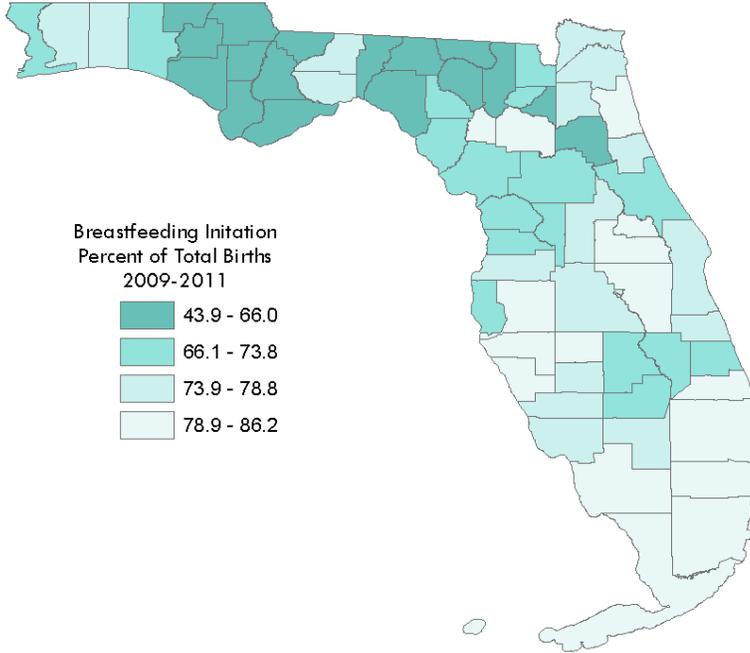
In Florida, close to 80% of all babies born in 2011 were breastfed initially. The breastfeeding initiation rate for non-Hispanic white babies is lower than for Hispanic babies, and non-Hispanic blacks initiate breastfeeding at rates lower than both Hispanics and non-Hispanic whites. Mothers with a college degree had higher initiation rates than those without a high school diploma.

**Breastfeeding Initiation While Hospitalized for Birth  
Florida, 2005-2011**



Source: Florida Bureau of Vital Statistics

BREASTFEEDING



Source: Florida Bureau of Vital Statistics

- Breastfeeding for nine months reduces the baby's odds of becoming overweight by more than 30%.
- In Florida, close to 80% of all babies born in 2011 were breastfed initially.
- Hispanic mothers were more likely than Non-Hispanic black or white mothers to initiate breastfeeding in 2011 in Florida.
- Mothers with a college degree had higher initiation rates than those without a high school diploma.

**BREASTFEEDING INITIATION BY COUNTY**  
(PERCENT OF TOTAL BIRTHS; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	79.9	4	Flagler	74.2	3	Lake	76.3	3	Pinellas	73.8	2
Baker	66.7	2	Franklin	60.9	1	Lee	78.3	3	Polk	75.4	3
Bay	63.9	1	Gadsden	65.5	1	Leon	78.7	3	Putnam	61.8	1
Bradford	63.7	1	Gilchrist	79.2	4	Levy	73.2	2	Santa Rosa	78.2	3
Brevard	74.8	3	Glades	72.9	2	Liberty	58.2	1	Sarasota	83.4	4
Broward	83.5	4	Gulf	59.1	1	Madison	59.6	1	Seminole	85.1	4
Calhoun	57.8	1	Hamilton	43.9	1	Manatee	79.4	4	St. Johns	84.4	4
Charlotte	77.0	3	Hardee	79.9	4	Marion	71.6	2	St. Lucie	73.5	2
Citrus	71.5	2	Hendry	75.0	3	Martin	81.5	4	Sumter	67.4	2
Clay	78.8	3	Hernando	68.2	2	Monroe	86.2	4	Suwannee	66.0	1
Collier	86.0	4	Highlands	71.6	2	Nassau	75.6	3	Taylor	62.2	1
Columbia	63.7	1	Hillsborough	80.0	4	Okaloosa	78.1	3	Union	68.2	2
Miami-Dade	85.9	4	Holmes	45.3	1	Okeechobee	73.7	2	Volusia	72.8	2
DeSoto	75.6	3	Indian River	75.9	3	Orange	86.1	4	Wakulla	76.7	3
Dixie	66.2	2	Jackson	45.5	1	Osceola	81.5	4	Walton	71.7	2
Duval	77.0	3	Jefferson	64.5	1	Palm Beach	82.7	4	Washington	47.8	1
Escambia	71.1	2	Lafayette	69.4	2	Pasco	74.9	3			

Source: Florida Bureau of Vital Statistics

# HIV

## HIV Case Rate 2011

	Rate	Ratio
FL	31.9	--
U.S.	--	--
HP2020	--	--
Rank	50	--
<b>SEX</b>		
Male	34.4	1.8
Female	19.0	REF
<b>RACE/ETHNICITY</b>		
NH White	16.9	REF
NH Black	94.8	5.6
Hispanic	31.6	1.9
<b>EDUCATION</b>		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group

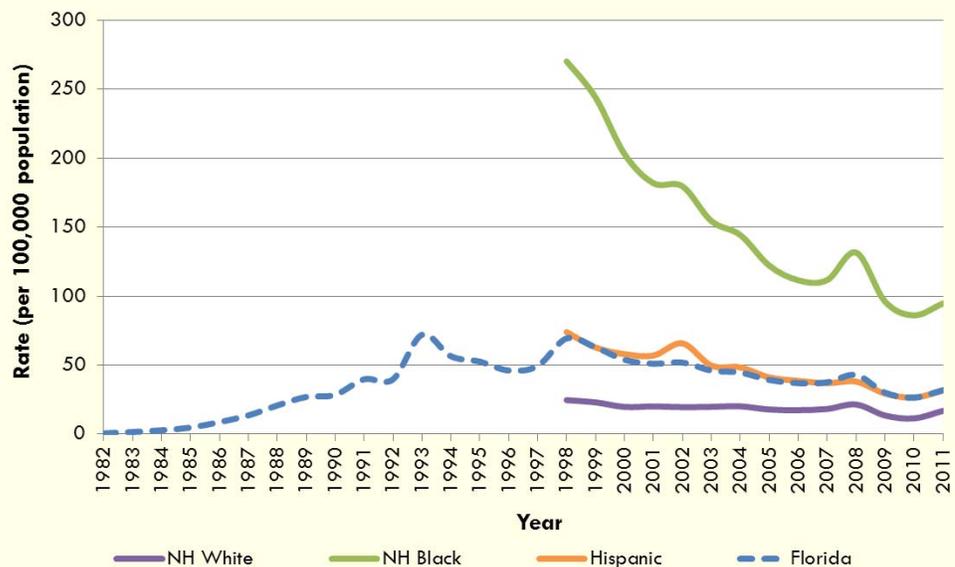
HIV, or human immunodeficiency virus, infects and then kills CD4+ T-cells which are a type of immune cell found in the blood. These immune cells help the body fight diseases. AIDS, or acquired immune deficiency syndrome, refers to the late stage of an HIV infection when the immune system is severely damaged by HIV and has difficulty fighting common diseases and certain cancers. Before the discovery of anti-retroviral medications introduced in the mid-1990s, HIV-infected individuals would acquire AIDS within a few years. Today, individuals can live with HIV for decades before AIDS develops.

Risk of contracting HIV can come from having unprotected sex with an infected person, having multiple sex partners, having an STD, sharing intravenous drug equipment and being born to an infected mother. To prevent acquiring HIV, the CDC recommends abstaining from sexual activity, using condoms correctly and consistently, treating other STDs, and not injecting drugs.<sup>42</sup>

Florida is ranked second highest in the U.S. for the number of new HIV cases reported in 2010, and third highest for the number of new AIDS diagnoses reported. Although people continue to be diagnosed with HIV at a high rate in Florida, there has been a general decline in newly identified infections over the past decades to a rate of 31.9 infections per 100,000 population in 2011. There was a slight increase in reported cases in 2002 subsequent to a large statewide initiative aimed at testing individuals for HIV. Additionally, in 2007 there were significant changes to the reporting rules for HIV which led to more infections being reported.

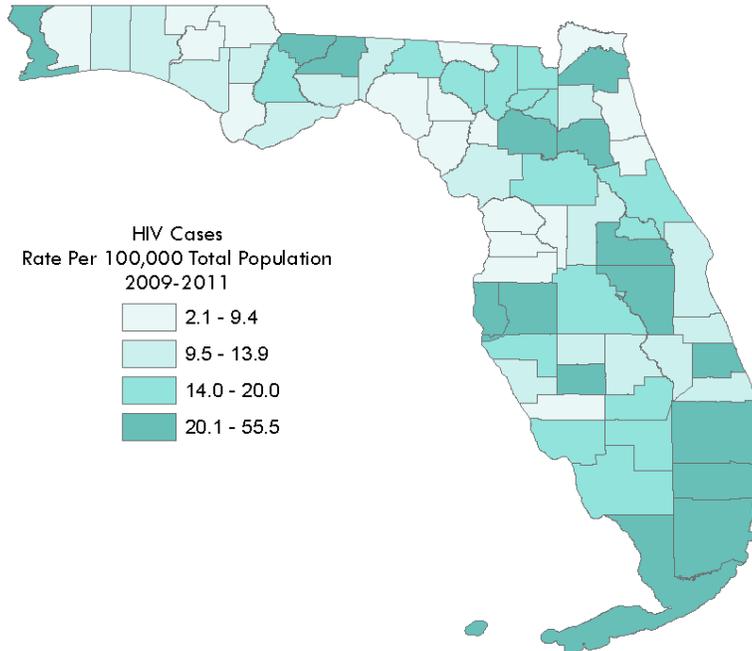
In 2011, non-Hispanic black Floridians were 5.6 times more likely than non-Hispanic white Floridians to have HIV.

**HIV Case Rate (per 100,000 population) Florida, 1982-2011**



Source: Florida Bureau of HIV/AIDS

# HIV



Source: Florida Bureau of HIV/AIDS

- In 2011, non-Hispanic black Floridians were 5.6 times more likely than non-Hispanic white Floridians to be diagnosed with HIV.
- In 2010, Florida ranked second highest in the U.S. for the number of new HIV cases reported and third highest for AIDS diagnoses.
- Although HIV diagnoses are increasing, the rate of new infections over the past decade has declined.

**HIV CASE RATE BY COUNTY**  
(RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	23.9	4	Flagler	7.7	1	Lake	12.7	2	Pinellas	22.2	4
Baker	18.5	3	Franklin	11.5	2	Lee	15.8	3	Polk	19.0	3
Bay	13.8	2	Gadsden	36.8	4	Leon	31.1	4	Putnam	22.0	4
Bradford	16.3	3	Gilchrist	3.9	1	Levy	13.9	2	Santa Rosa	6.8	1
Brevard	11.0	2	Glades	15.6	3	Liberty	20.0	3	Sarasota	10.4	2
Broward	55.5	4	Gulf	2.1	1	Madison	15.5	3	Seminole	15.5	3
Calhoun	13.6	2	Hamilton	9.0	1	Manatee	14.4	3	St. Johns	7.9	1
Charlotte	7.7	1	Hardee	10.9	2	Marion	14.5	3	St. Lucie	28.9	4
Citrus	4.7	1	Hendry	14.3	3	Martin	10.0	2	Sumter	6.0	1
Clay	12.6	2	Hernando	7.5	1	Monroe	34.2	4	Suwannee	14.2	3
Collier	14.2	3	Highlands	11.1	2	Nassau	7.3	1	Taylor	7.4	1
Columbia	14.8	3	Hillsborough	28.1	4	Okaloosa	10.8	2	Union	17.2	3
Miami-Dade	54.3	4	Holmes	5.0	1	Okeechobee	10.8	2	Volusia	15.5	3
DeSoto	23.0	4	Indian River	12.3	2	Orange	41.4	4	Wakulla	10.9	2
Dixie	8.1	1	Jackson	9.4	1	Osceola	22.2	4	Walton	13.3	2
Duval	43.3	4	Jefferson	11.3	2	Palm Beach	27.4	4	Washington	9.4	1
Escambia	24.1	4	Lafayette	7.7	1	Pasco	9.0	1			

Source: Florida Bureau of HIV/AIDS

# HIV/AIDS

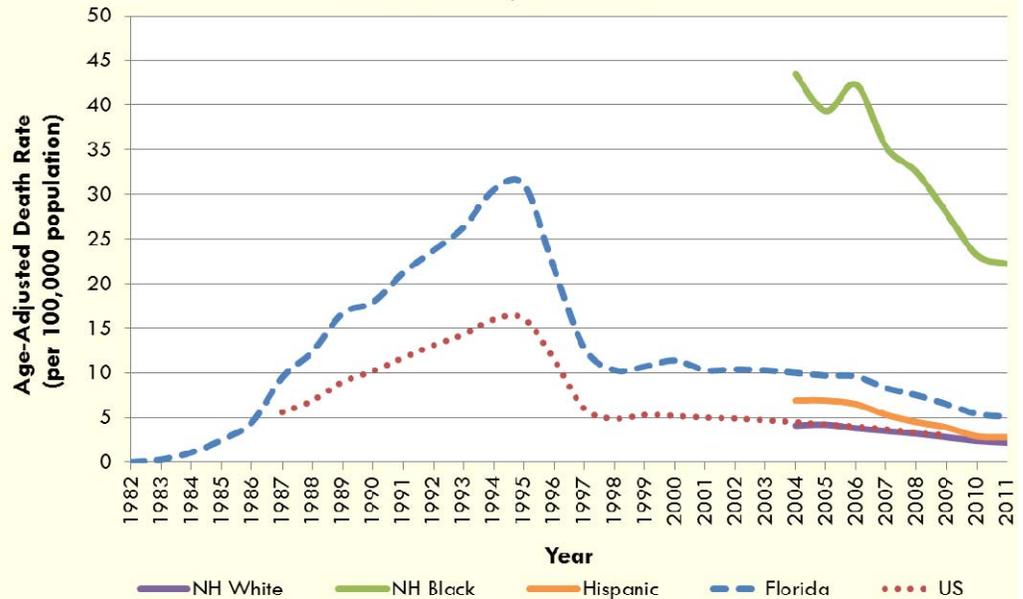
## HIV/AIDS Age-Adjusted Mortality Rate 2009

	Rate	Ratio
FL	6.5	2.2
U.S.	3.0	REF
HP2020	3.3	--
Rank	49	--
<b>SEX</b>		
Male	8.8	2.0
Female	4.4	REF
<b>RACE/ETHNICITY</b>		
NH White	2.8	REF
NH Black	27.9	10.0
Hispanic	3.9	1.4
<b>EDUCATION</b>		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group

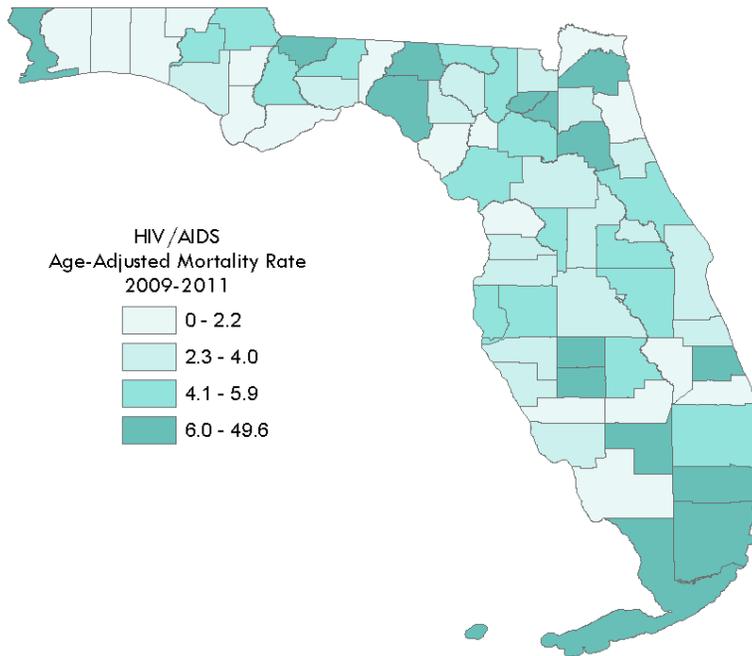
Since the beginning of the HIV/AIDS epidemic, the black population has been disproportionately affected, not only in Florida but across the U.S. This is true for both incidence and death. In the mid-1990s, the deaths in Florida peaked and then rapidly declined. This corresponds to the introduction of highly active antiretroviral therapy (HAART) which led to better clinical outcomes for those with HIV infection, in all subgroups. Nevertheless, the 2009 age-adjusted mortality rate for non-Hispanic blacks in Florida was 27.9 per 100,000 population while for non-Hispanic whites the rate was 2.8 per 100,000 population, a ten-fold difference. Florida men were two times more likely than females in Florida in 2009 to die from HIV/AIDS.

**HIV/AIDS Mortality Rate  
(per 100,000 population)  
U.S. & Florida, 1982-2011**



Source: Florida Bureau of Vital Statistics & CDC Health Data Interactive

# HIV/AIDS



Source: Florida Bureau of Vital Statistics

- The black population in the U.S. and Florida have been disproportionately affected by HIV/AIDS.
- In 2009, non-Hispanic black Floridians were 10 times more likely than non-Hispanic white Floridians to die from HIV/AIDS.
- Florida men were two times more likely than their female counterparts to die from HIV/AIDS in 2009.

**HIV/AIDS MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	5.7	3	Flagler	4.0	2	Lake	3.9	2	Pinellas	4.9	3
Baker	3.4	2	Franklin	0.0	1	Lee	2.6	2	Polk	3.9	2
Bay	2.5	2	Gadsden	10.7	4	Leon	5.5	3	Putnam	8.5	4
Bradford	6.1	4	Gilchrist	1.3	1	Levy	4.2	3	Santa Rosa	2.0	1
Brevard	3.3	2	Glades	0.0	1	Liberty	4.1	3	Sarasota	2.4	2
Broward	9.0	4	Gulf	0.0	1	Madison	13.8	4	Seminole	2.3	2
Calhoun	2.2	1	Hamilton	4.9	3	Manatee	3.4	2	St. Johns	1.8	1
Charlotte	2.1	1	Hardee	9.7	4	Marion	3.0	2	St. Lucie	6.8	4
Citrus	0.7	1	Hendry	10.1	4	Martin	1.9	1	Sumter	4.6	3
Clay	2.3	2	Hernando	3.5	2	Monroe	9.7	4	Suwannee	3.3	2
Collier	2.2	1	Highlands	5.4	3	Nassau	1.8	1	Taylor	6.3	4
Columbia	5.2	3	Hillsborough	5.3	3	Okaloosa	1.9	1	Union	49.6	4
Miami-Dade	9.7	4	Holmes	1.6	1	Okeechobee	0.8	1	Volusia	4.2	3
DeSoto	6.9	4	Indian River	2.5	2	Orange	5.4	3	Wakulla	3.1	2
Dixie	1.9	1	Jackson	5.2	3	Osceola	4.1	3	Walton	1.6	1
Duval	9.3	4	Jefferson	0.0	1	Palm Beach	5.9	3	Washington	5.8	3
Escambia	6.0	4	Lafayette	4.0	2	Pasco	2.9	2			

Source: Florida Bureau of Vital Statistics

# CHLAMYDIA

## Chlamydia

### Incidence Rate

	Rate	Ratio
FL	401.3	--
U.S.	--	--
HP2020	--	--
Rank	--	--
SEX		
Male	223.9	REF
Female	560.6	2.5
RACE/ETHNICITY		
NH White	167.2	REF
NH Black	962.9	5.8
Hispanic	262.4	1.6
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group

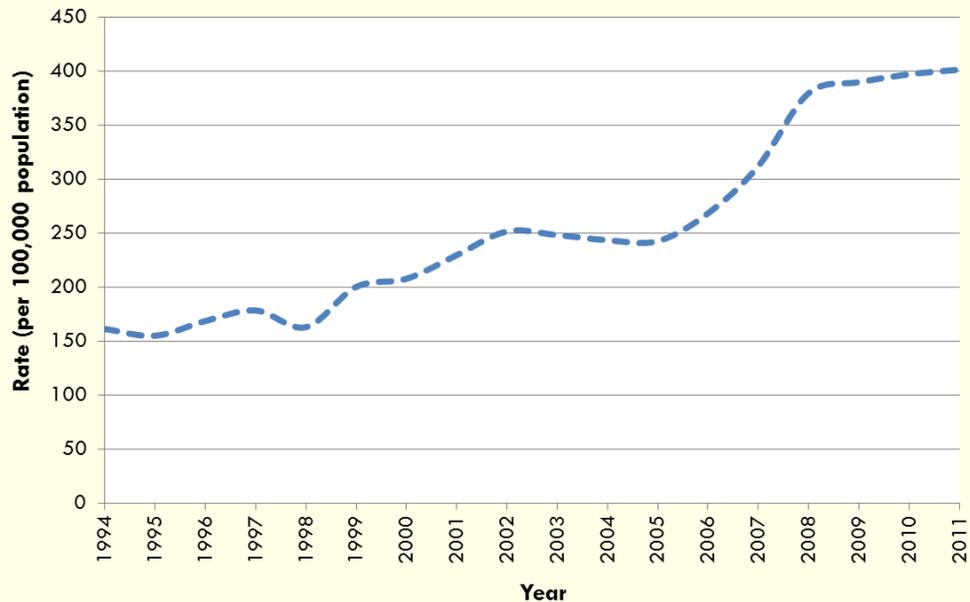
Chlamydia is the most commonly reported sexually transmitted infection (STI) in the U.S and is asymptomatic.<sup>43</sup> It is caused by a bacteria, *chlamydia trachomatis*, and most commonly spread through vaginal, anal or oral sex.<sup>44</sup> In 2010, 1,307,893 cases of chlamydia were reported to CDC. The risk for contracting chlamydia increases with the number of sexual partners. Teenage girls and young women, however, are at a particularly high risk because their cervixes are not yet fully matured.<sup>44</sup>

Complications in women, such as infertility and pelvic inflammatory disease, can occur if the chlamydia infection is not treated. Having chlamydia also increases the chances of becoming infected with HIV if exposure occurs. To prevent possible complications from an untreated infection, it is suggested that sexually active women 25 years and younger receive testing for chlamydia at least once annually, and older women should be screened if they have had a new sexual partner or multiple sexual partners.<sup>43,44</sup>

Male complications are rare; however, infections can spread to the epididymis and cause pain, fever, and infrequently, sterility.

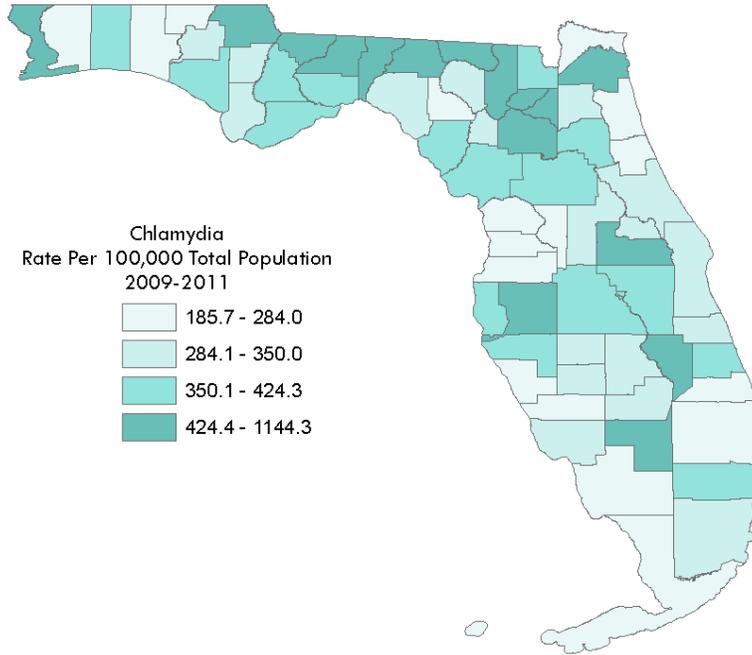
In Florida, the incidence rate for chlamydia has increased from 161.3 per 100,000 population in 1970 to 401.3 per 100,000 in 2011. In 2011, females in Florida were 2.5 times more likely than their male counterparts to have chlamydia. Non-Hispanic black Floridians were 5.8 times more likely than non-Hispanic white Floridians to have chlamydia in 2011.

**Chlamydia Incidence Rate**  
(per 100,000 population)  
Florida, 1994-2011



Source: Florida Bureau of STD Prevention & Control

# CHLAMYDIA



Source: Florida Bureau of STD Prevention & Control

- Chlamydia is the most common sexually transmitted infection in the U.S.
- Having chlamydia increases the chances of contracting HIV if exposed.
- In Florida, the incidence rate of chlamydia infections has increased since 1994, to 401.3 per 100,000 population.
- In 2011, Non-Hispanic black Floridians were 5.8 times more likely than non-Hispanic white Floridians to have chlamydia.

**CHLAMYDIA CASES BY COUNTY**  
(RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	703.0	4	Flagler	263.4	1	Lake	293.4	2	Pinellas	424.3	3
Baker	408.3	3	Franklin	409.7	3	Lee	316.6	2	Polk	400.0	3
Bay	389.1	3	Gadsden	1144.3	4	Leon	1030.1	4	Putnam	412.8	3
Bradford	473.6	4	Gilchrist	317.1	2	Levy	413.0	3	Santa Rosa	216.4	1
Brevard	292.7	2	Glades	306.8	2	Liberty	399.6	3	Sarasota	243.3	1
Broward	400.3	3	Gulf	317.2	2	Madison	594.2	4	Seminole	335.2	2
Calhoun	304.6	2	Hamilton	777.6	4	Manatee	355.1	3	St. Johns	192.8	1
Charlotte	187.3	1	Hardee	350.0	2	Marion	395.8	3	St. Lucie	363.5	3
Citrus	236.5	1	Hendry	523.8	4	Martin	213.8	1	Sumter	210.2	1
Clay	323.8	2	Hernando	201.5	1	Monroe	185.7	1	Suwannee	350.0	2
Collier	225.4	1	Highlands	310.2	2	Nassau	270.1	1	Taylor	340.5	2
Columbia	424.8	4	Hillsborough	566.5	4	Okaloosa	411.3	3	Union	554.0	4
Miami-Dade	343.8	2	Holmes	284.0	1	Okeechobee	475.6	4	Volusia	330.3	2
DeSoto	321.3	2	Indian River	308.5	2	Orange	527.6	4	Wakulla	405.0	3
Dixie	382.4	3	Jackson	511.0	4	Osceola	391.8	3	Walton	246.0	1
Duval	664.5	4	Jefferson	564.4	4	Palm Beach	276.5	1	Washington	296.3	2
Escambia	571.2	4	Lafayette	214.6	1	Pasco	210.4	1			

Source: Florida Bureau of STD Prevention & Control

# GONORRHEA

## Gonorrhea

### Incidence Rate

	Rate	Ratio
FL	104.0	--
U.S.	--	--
HP2020	--	--
Rank	--	--
SEX		
Male	104.5	1.01
Female	103.4	REF
RACE/ETHNICITY		
NH White	33.0	REF
NH Black	330.6	10.0
Hispanic	44.8	1.4
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

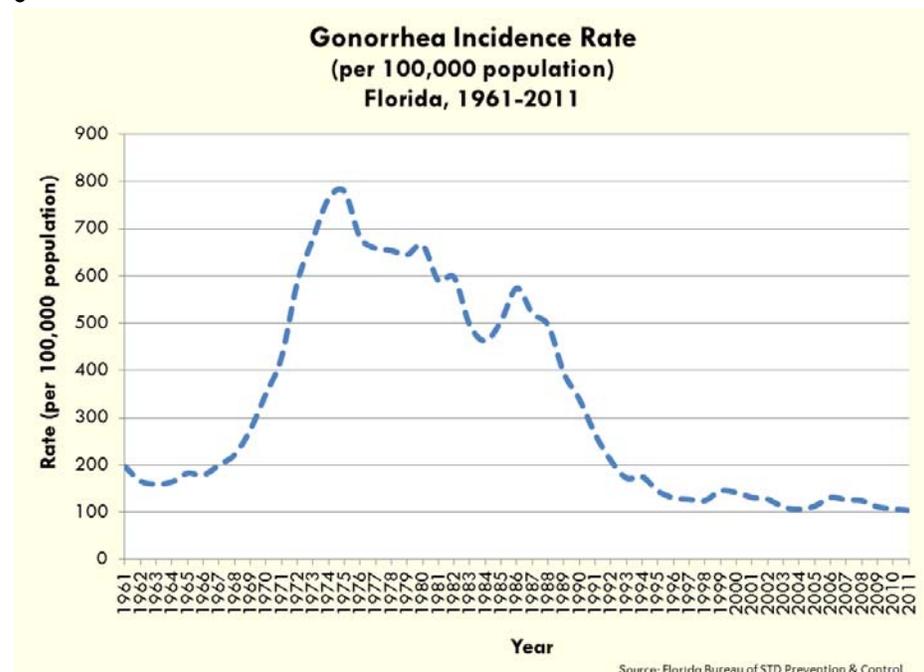
REF= Reference Group

Gonorrhea is a common sexually transmitted infection caused by the bacteria *Neisseria gonorrhoeae*. It can be spread by contact with the mouth, vagina, penis, or anus.<sup>45</sup> It grows easily in warm, moist areas of the reproductive tract of men and women. According to the CDC, 309,341 cases of gonorrhea were reported in 2010. However, they estimate that annually more than 700,000 people in the U.S. get new gonorrhea infections but less than half of those infections are reported to the CDC.<sup>46</sup> Despite overall decreases in disease incidence, emerging cephalosporin-resistant gonorrhea has garnered national attention. While sexually active individuals are at risk of contracting gonorrhea, this risk lessens with condom use and having a monogamous sexual relationship.<sup>45</sup> Sexually active black individuals, young adults and teenagers have had the highest rates of gonorrhea infections.<sup>46</sup>

Much like chlamydia, untreated gonorrhea can cause complications such as pelvic inflammatory disease in women and epididymitis in men. It also can cause fertility issues such as infertility or an increased risk of ectopic pregnancy among women and sterility among men. Having gonorrhea also increases the chances of becoming infected with HIV if exposure occurs.<sup>46</sup>

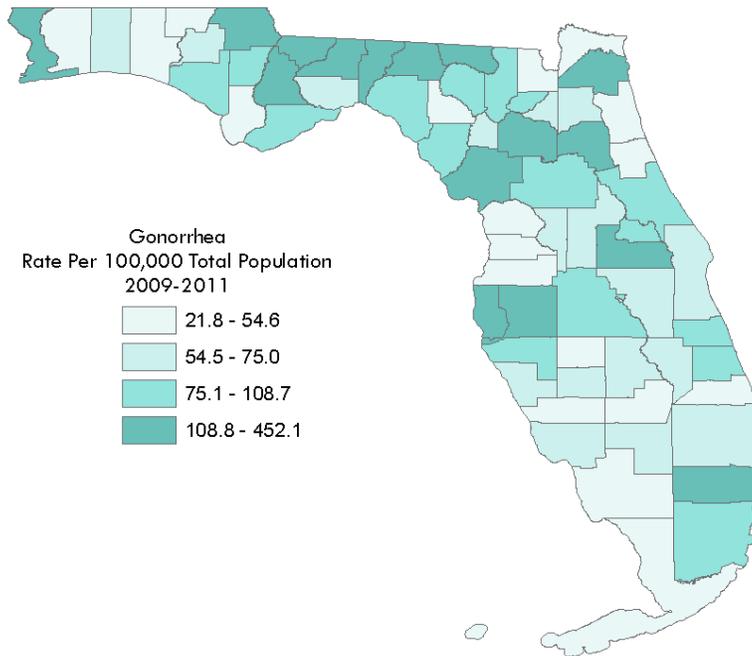
Testing for gonorrhea is suggested for sexually active individuals, especially those who have multiple sexual partners or have another sexually transmitted infection. It is reported that about half the women with gonorrhea are also infected with chlamydia.<sup>45</sup>

Rates for gonorrhea have declined steeply since 1986, from 574.5 per 100,000 population, to 104 per 100,000 population in 2011. In 2011, non-Hispanic black Floridians were 10 times more likely than non-Hispanic white Floridians to have gonorrhea.



Source: Florida Bureau of STD Prevention & Control

# GONORRHEA



Source: Florida Bureau of STD Prevention & Control

- The CDC estimates that less than half of all new gonorrhea infections are reported.
- Rates for gonorrhea have declined steeply since 1986, from a rate of 574.5 per 100,000 population to 104.0 per 100,000 population in 2011.
- In 2011, non-Hispanic black Floridians were 10 times more likely than non-Hispanic white Floridians to have gonorrhea.

**GONORRHEA CASES BY COUNTY**  
(RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	195.9	4	Flagler	37.9	1	Lake	75.0	2	Pinellas	140.7	4
Baker	54.3	1	Franklin	89.4	3	Lee	71.8	2	Polk	84.7	3
Bay	108.7	3	Gadsden	452.1	4	Leon	337.5	4	Putnam	130.1	4
Bradford	63.8	2	Gilchrist	61.1	2	Levy	131.7	4	Santa Rosa	34.5	1
Brevard	60.9	2	Glades	54.6	1	Liberty	155.8	4	Sarasota	63.5	2
Broward	119.2	4	Gulf	54.6	1	Madison	171.0	4	Seminole	82.9	3
Calhoun	106.8	3	Hamilton	160.0	4	Manatee	96.2	3	St. Johns	30.4	1
Charlotte	26.4	1	Hardee	41.0	1	Marion	102.1	3	St. Lucie	96.2	3
Citrus	42.2	1	Hendry	74.0	2	Martin	28.2	1	Sumter	67.2	2
Clay	55.3	2	Hernando	29.7	1	Monroe	32.4	1	Suwannee	93.2	3
Collier	23.3	1	Highlands	60.3	2	Nassau	43.2	1	Taylor	103.6	3
Columbia	106.2	3	Hillsborough	170.9	4	Okaloosa	71.5	2	Union	79.8	3
Miami-Dade	95.1	3	Holmes	35.1	1	Okeechobee	55.9	2	Volusia	87.5	3
DeSoto	55.6	2	Indian River	85.9	3	Orange	152.0	4	Wakulla	61.9	2
Dixie	105.8	3	Jackson	139.6	4	Osceola	58.6	2	Walton	21.8	1
Duval	214.5	4	Jefferson	179.1	4	Palm Beach	68.4	2	Washington	56.6	2
Escambia	199.6	4	Lafayette	38.3	1	Pasco	46.9	1			

Source: Florida Bureau of STD Prevention & Control

## INFECTIOUS SYPHILIS

### Infectious Syphilis

#### Incidence Rate

	Rate	Ratio
FL	6.6	--
U.S.	--	--
HP2020	--	--
Rank	--	--
SEX		
Male	12.1	8.6
Female	1.4	REF
RACE/ETHNICITY		
NH White	4.2	REF
NH Black	13.0	3.1
Hispanic	7.5	1.8
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group

Syphilis is a sexually transmitted infection caused by the *Treponerna pallidum* bacteria. It is transmitted through contact with a syphilis sore, which usually occurs in the external genitals, vagina, anus or in the rectum but can also occur on the lips and in the mouth.<sup>47</sup> Untreated syphilis during pregnancy can result in perinatal death.<sup>48</sup>

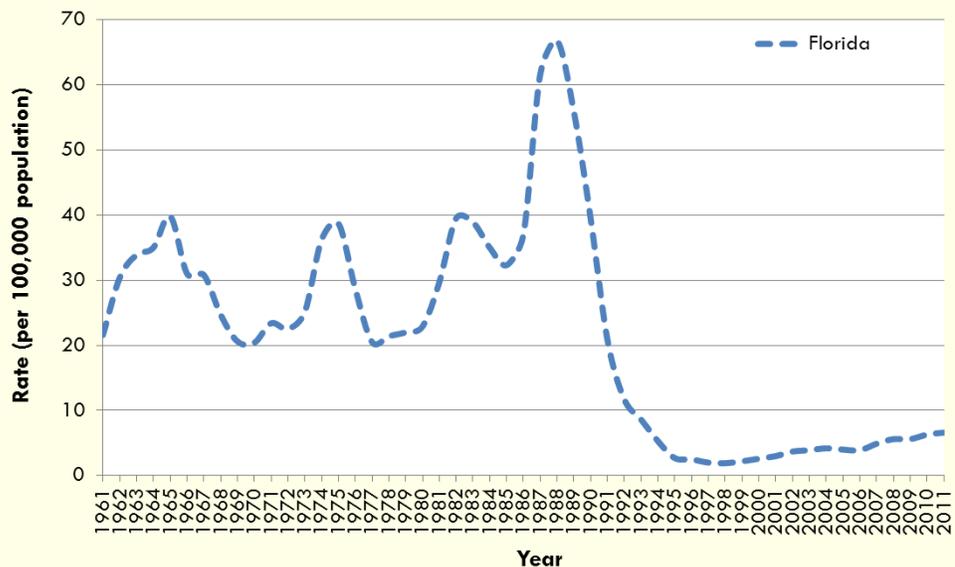
The presence of genital ulcers associated with syphilis infection increases the likelihood of HIV transmission 2 to 5 fold.<sup>49</sup> In 2011, 41% of persons with infectious syphilis infection in HIV positive persons signals an increased risk of HIV transmission to negative partners or an increased risk of neurologic disease among HIV infected partners if left untreated.<sup>50,51</sup>

Although there are many stages of syphilis, primary and secondary (P & S) syphilis is the most common measure based on accuracy of disease etiology. In these stages, patients are symptomatic, so definitive testing can be done to identify the infection.

In Florida, rates for infectious syphilis, or primary and secondary syphilis, have plummeted since 1988, from 66.8 per 100,000 population to 6.6 per 100,000 population in 2011. However, the rate for infectious syphilis has been increasing since 1998, when the rate was its lowest, at 1.9 per 100,000 population.

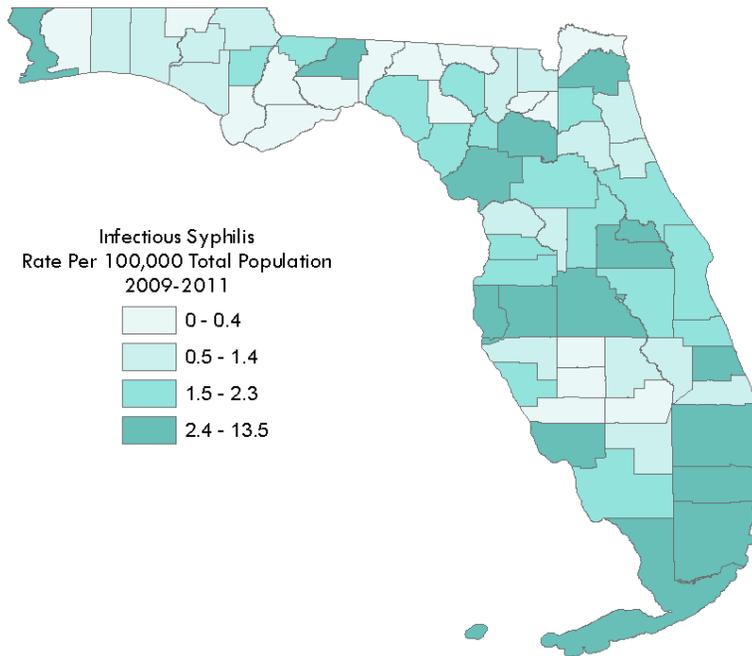
In 2011, male Floridians were 8.6 times more likely to have infectious syphilis than female Floridians. Non-Hispanic black Floridians are also more likely than their non-Hispanic white counterparts to have infectious syphilis in Florida.

**Infectious Syphilis Incidence Rate  
(per 100,000 population)  
Florida, 1961-2011**



Source: Florida Bureau of STD Prevention & Control

# INFECTIOUS SYPHILIS



Source: Florida Bureau of STD Prevention & Control

**INFECTIOUS SYPHILIS RATE BY COUNTY**  
(RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	5.4	4	Flagler	0.7	2	Lake	1.9	3	Pinellas	6.9	4
Baker	1.2	2	Franklin	0.0	1	Lee	2.9	4	Polk	6.4	4
Bay	0.8	2	Gadsden	2.1	3	Leon	6.0	4	Putnam	1.3	2
Bradford	0.0	1	Gilchrist	2.0	3	Levy	2.5	4	Santa Rosa	0.4	1
Brevard	1.6	3	Glades	0.0	1	Liberty	0.0	1	Sarasota	2.0	3
Broward	12.0	4	Gulf	0.0	1	Madison	0.0	1	Seminole	4.6	4
Calhoun	2.3	3	Hamilton	0.0	1	Manatee	1.3	2	St. Johns	0.7	2
Charlotte	0.4	1	Hardee	0.0	1	Marion	1.8	3	St. Lucie	3.1	4
Citrus	0.7	2	Hendry	0.8	2	Martin	1.4	2	Sumter	0.7	2
Clay	1.6	3	Hernando	1.5	3	Monroe	4.6	4	Suwannee	1.6	3
Collier	1.6	3	Highlands	1.3	2	Nassau	0.0	1	Taylor	1.5	3
Columbia	1.0	2	Hillsborough	9.3	4	Okaloosa	0.7	2	Union	0.0	1
Miami-Dade	13.5	4	Holmes	0.0	1	Okeechobee	0.8	2	Volusia	2.2	3
DeSoto	0.0	1	Indian River	2.2	3	Orange	8.6	4	Wakulla	0.0	1
Dixie	2.0	3	Jackson	1.3	2	Osceola	1.5	3	Walton	0.6	2
Duval	5.4	4	Jefferson	0.0	1	Palm Beach	4.0	4	Washington	1.3	2
Escambia	10.9	4	Lafayette	0.0	1	Pasco	1.5	3			

Source: Florida Bureau of STD Prevention & Control

- Primary and secondary syphilis are the most common measure of syphilis based on accuracy of the disease etiology.
- In Florida, primary and secondary syphilis infection rates have plummeted since 1988, from 66.8 per 100,000 to 6.6 per 100,000 population in 2011.
- Rates have slightly increased since 1998 from 1.9 per 100,000 to 6.6 per 100,000 in 2011.
- In 2011, male Floridians were 8.6 times more likely to have infectious syphilis than female Floridians.

# TUBERCULOSIS

## Tuberculosis Incidence Rate 2011

	Rate	Ratio
FL	4.0	--
U.S.	--	--
HP2020 Rank	1.0	--
	--	--
SEX		
Male	--	--
Female	--	--
RACE/ETHNICITY		
NH White	--	--
NH Black	--	--
Hispanic	--	--
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

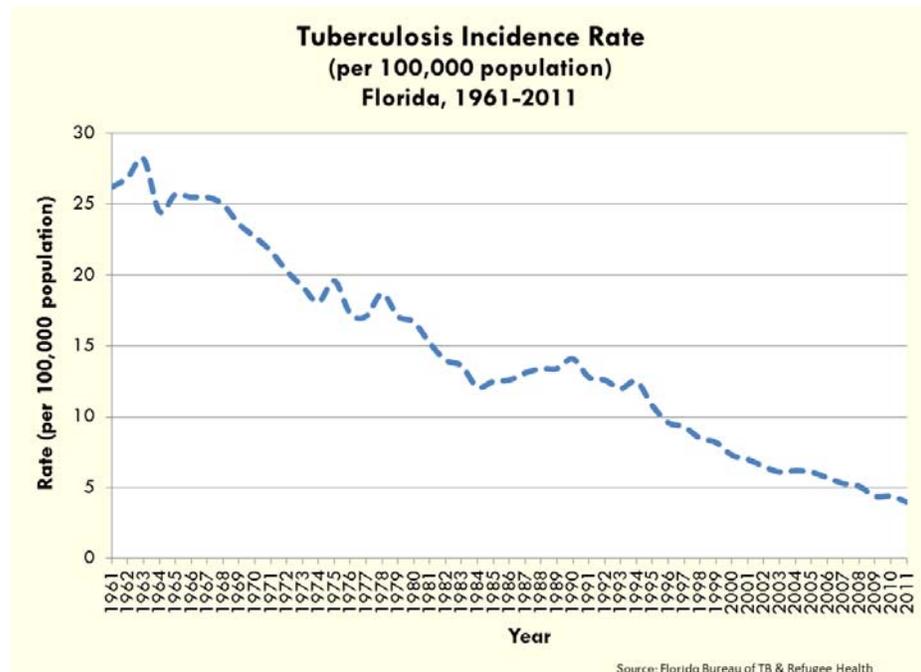
Tuberculosis (TB) is a curable infectious disease caused by an organism identified as being part of the *Mycobacterium tuberculosis* complex group of organisms (*M. tuberculosis*, *M. bovis*, *M. africanum*, *M. canettii*, *M. microti*). TB usually infects the lungs and can spread to other organs.<sup>52</sup> TB is spread through air droplets from an infected person if they speak, sing, cough or sneeze.<sup>53</sup> Not all carriers of TB are symptomatic, and the infection can be dormant for years. However, most cases of infectious TB are from past exposures that have become reactivated.<sup>52</sup>

TB is a preventable, treatable, and curable disease; and, not everyone infected with TB will develop active TB disease. Tuberculin skin testing is the primary public health method used to test people who may have been exposed to TB or who work with at-risk populations. Additionally, there are blood tests, interferon gamma release assays, which are commercially available for testing for TB infection. These assays are gaining use by public health agencies as the cost of these tests decreases.<sup>52</sup>

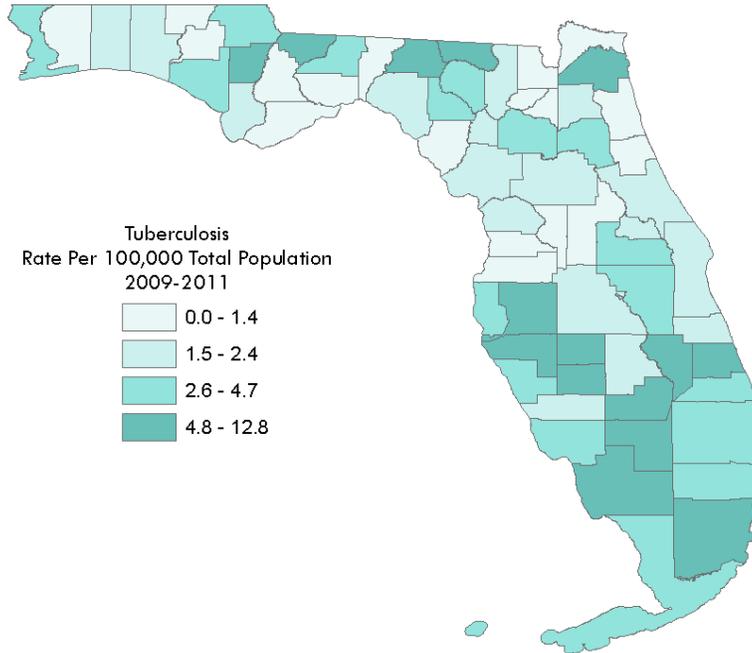
A person with active TB will have symptoms such as coughing with or without blood, excessive sweating, fatigue, fever, and unintentional weight loss.<sup>52</sup>

Risk factors that have been reported to increase the likelihood of contracting TB if exposed to the bacterium include: frequent contact with TB-infected individuals, poor nutrition, having a weak immune system, being elderly or less than one year old, and living in unsanitary or crowded conditions.<sup>52</sup>

Tuberculosis cases in Florida have been on a decline since 1961. In 2011, the tuberculosis incidence rate was 4.0 per 100,000 population.



# TUBERCULOSIS



Source: Florida Bureau of TB & Refugee Health

- Most cases of infectious tuberculosis are from past exposures that have become reactivated.
- Tuberculosis incidence rates have declined since 1961, to a rate of 4.0 per 100,000 population in 2011.

**TUBERCULOSIS RATE BY COUNTY**  
(RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	2.6	3	Flagler	1.4	1	Lake	1.3	1	Pinellas	2.8	3
Baker	0.0	1	Franklin	0.0	1	Lee	4.4	3	Polk	2.3	2
Bay	4.3	3	Gadsden	12.8	4	Leon	2.8	3	Putnam	2.7	3
Bradford	1.2	1	Gilchrist	2.0	2	Levy	1.6	2	Santa Rosa	0.9	1
Brevard	1.7	2	Glades	10.4	4	Liberty	0.0	1	Sarasota	3.5	3
Broward	4.3	3	Gulf	2.1	2	Madison	6.9	4	Seminole	2.4	2
Calhoun	9.1	4	Hamilton	6.8	4	Manatee	4.9	4	St. Johns	1.4	1
Charlotte	2.3	2	Hardee	9.7	4	Marion	2.1	2	St. Lucie	5.0	4
Citrus	2.1	2	Hendry	10.1	4	Martin	3.4	3	Sumter	1.4	1
Clay	2.3	2	Hernando	1.2	1	Monroe	4.1	3	Suwannee	4.0	3
Collier	7.8	4	Highlands	2.4	2	Nassau	1.4	1	Taylor	1.5	2
Columbia	2.0	2	Hillsborough	5.8	4	Okaloosa	2.4	2	Union	0.0	1
Miami-Dade	6.2	4	Holmes	0.0	1	Okeechobee	7.5	4	Volusia	1.8	2
DeSoto	7.7	4	Indian River	2.2	2	Orange	4.7	3	Wakulla	0.0	1
Dixie	0.0	1	Jackson	4.7	3	Osceola	3.0	3	Walton	2.4	2
Duval	9.0	4	Jefferson	0.0	1	Palm Beach	4.7	3	Washington	1.3	1
Escambia	2.8	3	Lafayette	3.8	3	Pasco	1.4	1			

Source: Florida Bureau of TB & Refugee Health

## ENTERIC DISEASES

### Enteric Diseases Incidence Rate 2011

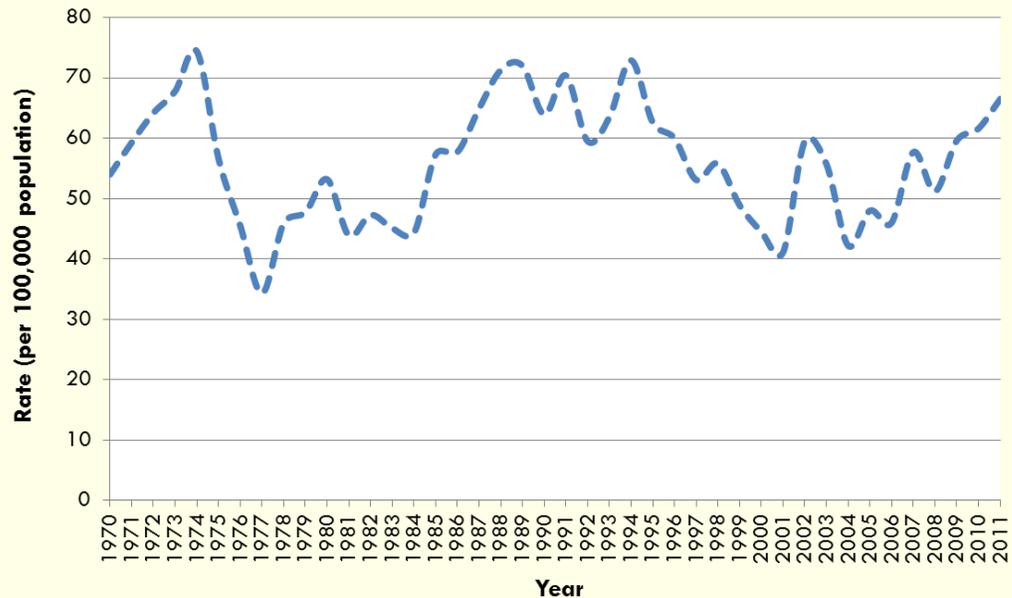
	Rate	Ratio
FL	66.5	--
U.S.	--	--
HP2020	--	--
Rank	--	--
SEX		
Male	--	--
Female	--	--
RACE/ETHNICITY		
NH White	--	--
NH Black	--	--
Hispanic	--	--
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

Enteric diseases\* refer to viral and bacterial infections that occur when an outside pathogen is transmitted into the body. Enteric pathogens can cause symptoms such as gastroenteritis to systemic infections. These pathogens can also increase risks of long-term complications such as malnutrition and immunological complications.<sup>54</sup>

Enteric diseases are usually linked to contaminated food or water but can also be linked to fecal-oral transmission. Prevention of enteric diseases include frequent hand and surface washing, avoiding cross-contamination, cooking foods at the right temperature, and refrigerating foods promptly.<sup>55</sup>

In Florida, enteric disease incidence rates have been very unstable over the last 42 years. Since 2009, however, there has been a steady increase in enteric disease incidence rates and in 2011, the incidence rate was 66.5 per 100,000 population.

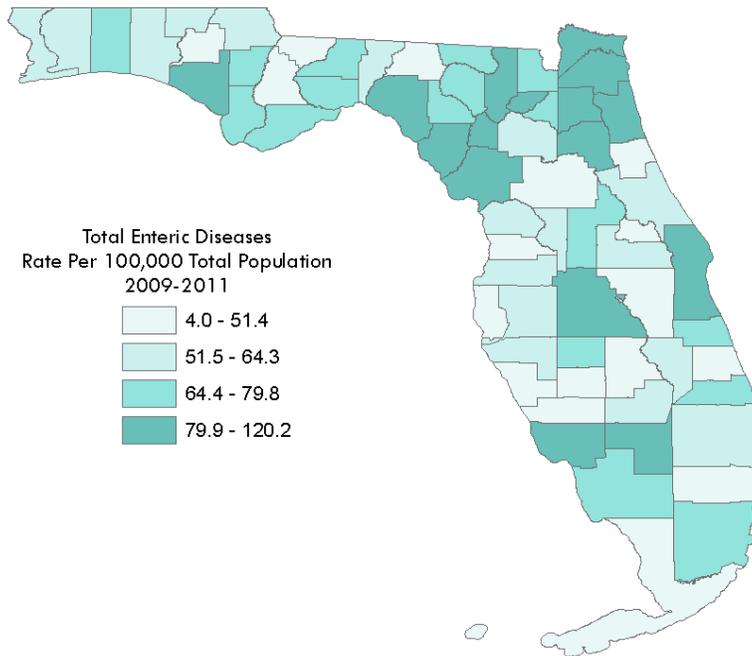
**Enteric Disease Incidence Rate (per 100,000 population) Florida, 1970-2011**



Source: Florida Bureau of Epidemiology

\*Enteric Disease includes: *Campylobacteriosis*, *Giardiasis*, *Hepatitis A*, *Salmonellosis* and *Shigellosis*. Beginning in 2007, data includes both probable and confirmed cases.

ENTERIC DISEASES



Source: Florida Bureau of Epidemiology

- Enteric diseases are usually linked to contaminated food and water.
- In Florida, incidence rates have been very unstable.
- In 2009, however, there has been a steady increase in enteric disease incidence, to a rate of 66.5 per 100,000 in 2011.

**TOTAL ENTERIC DISEASE RATE BY COUNTY**  
(RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	64.3	2	Flagler	31.0	1	Lake	78.6	3	Pinellas	46.1	1
Baker	65.4	3	Franklin	69.2	3	Lee	83.9	4	Polk	85.3	4
Bay	95.1	4	Gadsden	46.1	1	Leon	65.4	3	Putnam	114.4	4
Bradford	73.1	3	Gilchrist	120.2	4	Levy	90.0	4	Santa Rosa	60.8	2
Brevard	84.6	4	Glades	59.8	2	Liberty	4.0	1	Sarasota	39.6	1
Broward	51.4	1	Gulf	79.8	3	Madison	12.1	1	Seminole	41.9	1
Calhoun	72.7	3	Hamilton	65.4	3	Manatee	57.9	2	St. Johns	83.1	4
Charlotte	51.4	1	Hardee	68.8	3	Marion	48.1	1	St. Lucie	43.3	1
Citrus	57.3	2	Hendry	99.2	4	Martin	65.6	3	Sumter	57.0	2
Clay	85.4	4	Hernando	37.1	1	Monroe	42.9	1	Suwannee	70.3	3
Collier	74.9	3	Highlands	35.7	1	Nassau	89.1	4	Taylor	79.9	4
Columbia	93.9	4	Hillsborough	59.7	2	Okaloosa	65.5	3	Union	84.1	4
Miami-Dade	68.6	3	Holmes	56.8	2	Okeechobee	53.4	2	Volusia	64.0	2
DeSoto	37.4	1	Indian River	69.5	3	Orange	56.3	2	Wakulla	77.1	3
Dixie	97.6	4	Jackson	54.8	2	Osceola	49.9	1	Walton	64.1	2
Duval	83.1	4	Jefferson	61.2	2	Palm Beach	53.8	2	Washington	51.2	1
Escambia	59.9	2	Lafayette	65.2	3	Pasco	55.4	2			

Source: Florida Bureau of Epidemiology

## VIRAL HEPATITIS

### Viral Hepatitis Age-Adjusted Mortality Rate 2009

	Rate	Ratio
FL	2.7	1.2
U.S.	2.2	REF
HP2020	--	--
Rank	--	--
SEX		
Male	4.0	2.4
Female	1.7	REF
RACE/ETHNICITY		
NH White	3.0	1.3
NH Black	2.3	REF
Hispanic	2.4	1.04
EDUCATION		
<HS	--	--
HS	--	--
HS+	--	--
College Grad	--	--

REF= Reference Group

Viral hepatitis is the leading cause of liver cancer in the U.S. It also is the most common reason for liver transplants. Hepatitis A, B, and C are the most common types of hepatitis, however hepatitis D and E also exist.<sup>56</sup>

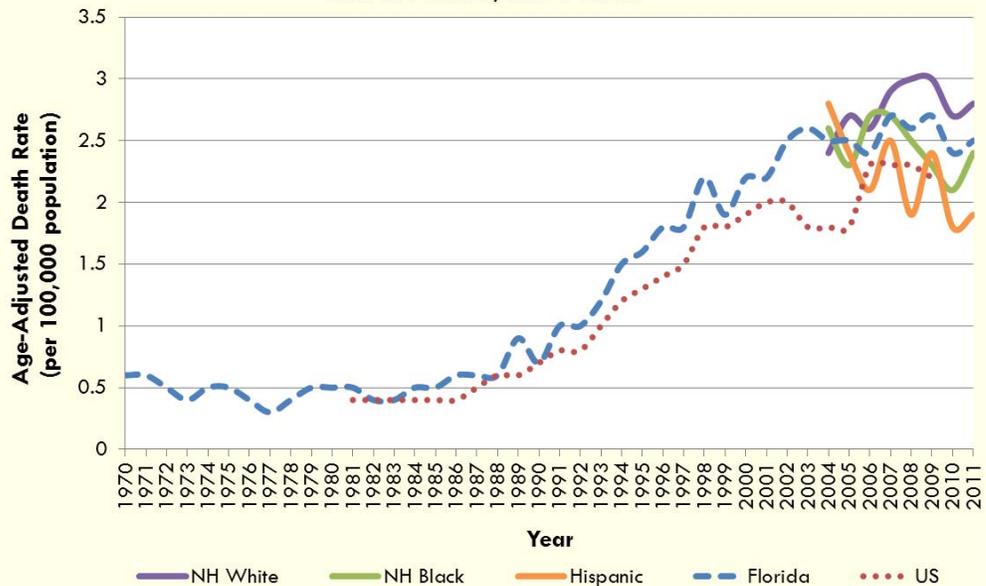
Hepatitis is an inflammation of the liver, usually caused by a virus. It can be either acute or chronic and can cause liver cancer, liver failure and liver damage.<sup>57</sup> Viral hepatitis is the leading cause of death in people infected with HIV and the mortality rate reflects the health and well-being of the population as well as the quality of the health care available.<sup>58</sup>

Risk factors linked to viral hepatitis include exposure to blood or body fluids, contact with an infected person, inadequate sanitation or poor hygiene, underlying liver disease, use of alcohol and tobacco, and presence of HIV or a fatty liver.<sup>59</sup>

In Florida, the mortality rate from viral hepatitis has increased since the 1983 rate of .04 per 100,000 population to a rate of 2.5 per 100,000 in 2011. Florida has paralleled the increase seen in the nation.

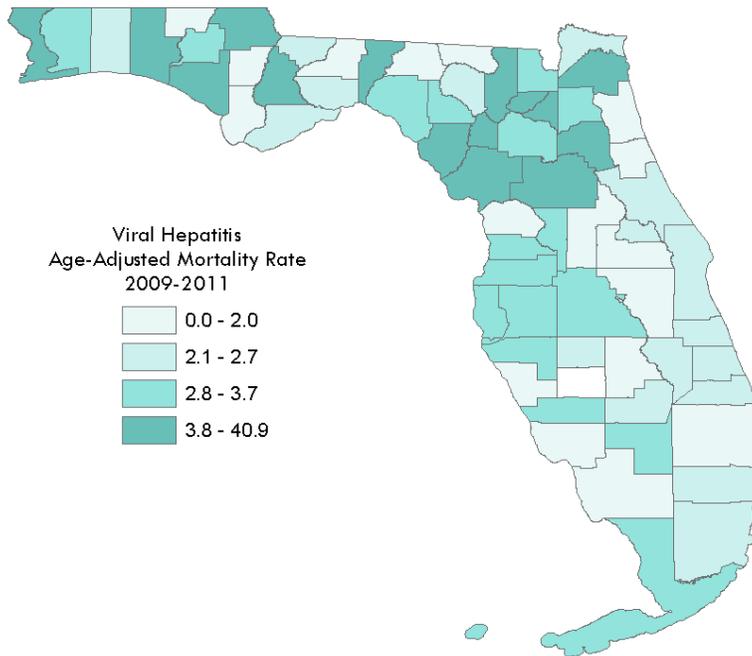
Because of the small number of cases of viral hepatitis, it can be difficult to interpret data. However, non-Hispanic white Floridians have had higher rates of hepatitis than non-Hispanic blacks or Hispanics over the last eight years. Men are also more likely than their female counterparts to die from viral hepatitis in Florida.

**Viral Hepatitis Mortality Rate (per 100,000 population) U.S. & Florida, 1970-2011**



Source: Florida Bureau of Vital Statistics & CDC HealthData Interactive

VIRAL HEPATITIS



Source: Florida Bureau of Vital Statistics

- Viral hepatitis is the leading cause of liver cancer in the U.S. and the most common reason for liver transplants.
- Viral hepatitis is the leading cause of death in HIV-infected individuals.
- Since 1983, Florida's mortality rate for viral hepatitis has increased from .04 per 100,000 to 2.5 per 100,000 in 2011.
- Florida males were 2.4 times more likely than Florida females to die from viral hepatitis.

**VIRAL HEPATITIS MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	2.9	3	Flagler	1.9	1	Lake	1.9	1	Pinellas	3.3	3
Baker	3.0	3	Franklin	2.7	2	Lee	1.5	1	Polk	2.9	3
Bay	4.9	4	Gadsden	2.3	2	Leon	2.0	1	Putnam	6.3	4
Bradford	5.3	4	Gilchrist	5.8	4	Levy	6.3	4	Santa Rosa	3.7	3
Brevard	2.1	2	Glades	2.7	2	Liberty	4.0	4	Sarasota	1.3	1
Broward	2.1	2	Gulf	1.4	1	Madison	0.0	1	Seminole	2.4	2
Calhoun	1.7	1	Hamilton	0.0	1	Manatee	2.8	3	St. Johns	1.5	1
Charlotte	3.0	3	Hardee	2.2	2	Marion	4.0	4	St. Lucie	2.3	2
Citrus	1.8	1	Hendry	3.7	3	Martin	2.2	2	Sumter	3.2	3
Clay	3.2	3	Hernando	2.8	3	Monroe	2.8	3	Suwannee	2.1	2
Collier	1.4	1	Highlands	1.3	1	Nassau	2.5	2	Taylor	2.9	3
Columbia	6.5	4	Hillsborough	3.2	3	Okaloosa	2.1	2	Union	40.9	4
Miami-Dade	2.2	2	Holmes	1.3	1	Okeechobee	2.3	2	Volusia	2.6	2
Desoto	3.7	3	Indian River	2.4	2	Orange	1.9	1	Wakulla	2.4	2
Dixie	5.2	4	Jackson	4.0	4	Osceola	1.2	1	Walton	5.4	4
Duval	3.8	4	Jefferson	6.0	4	Palm Beach	2.0	1	Washington	3.5	3
Escambia	4.2	4	Lafayette	3.3	3	Pasco	2.9	3			

Note: Each county rate includes prison population.

Source: Florida Bureau of Vital Statistics

# INFLUENZA

## Adults 65+ Who Received a Flu Shot in the Past Year (Percent) 2010

	Rate	Ratio*
FL	65.6	.97
U.S.	67.5	REF
HP2020	90.0	--
Rank	38	--

### SEX

Male	68.4	REF
Female	67.3	.98

### RACE/ETHNICITY

White	70.0	REF
Black	41.6	.59
Hispanic	44.1	.63

### EDUCATION

<HS	61.2	.85
HS	66.9	.93
HS+	68.0	.94
College Grad	72.1	REF

\*Because a high rate for this indicator suggests a more favorable outcome, ratios will be below 1.0.

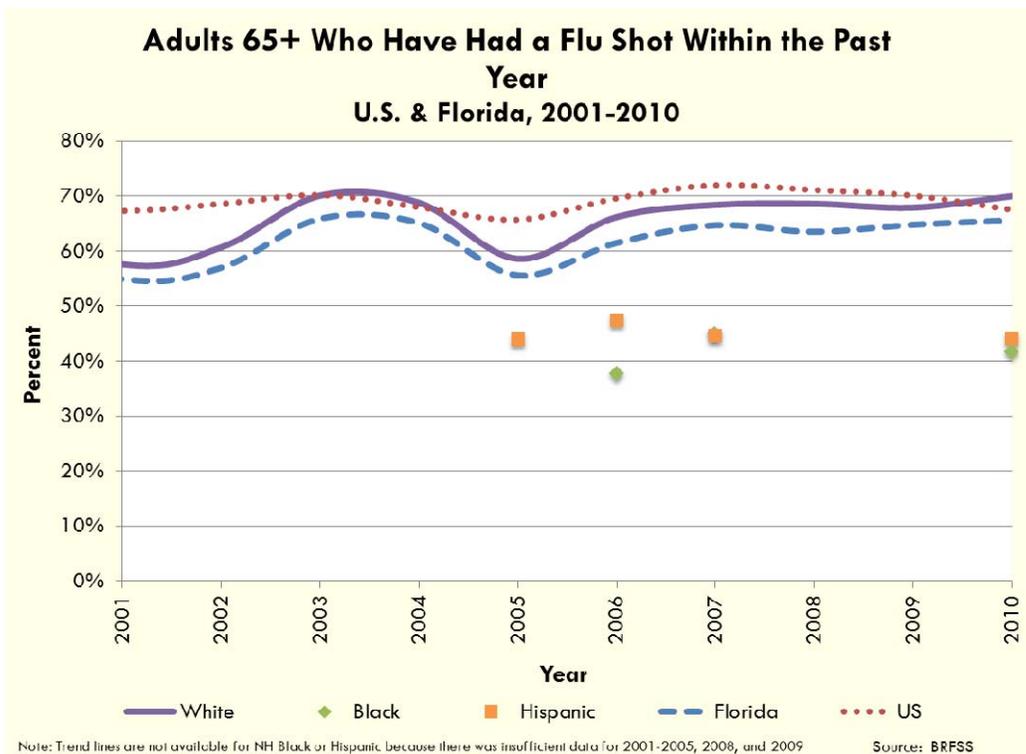
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Influenza, also known as the flu, is a contagious respiratory illness caused by the influenza virus. Influenza illness is typically characterized by symptoms such as fever, cough, and sore throat. Influenza illness normally resolves on its own, but it can lead to more severe outcomes such as hospitalization or death. Populations at highest risk of severe complications from influenza illness are adults aged 65 and over, children less than age 5, and people with underlying health conditions. Ways to prevent flu transmission include frequent handwashing, covering coughs and sneezes, and staying home when sick. One of the best ways to keep from getting the flu is by getting a yearly influenza vaccination.<sup>60</sup>

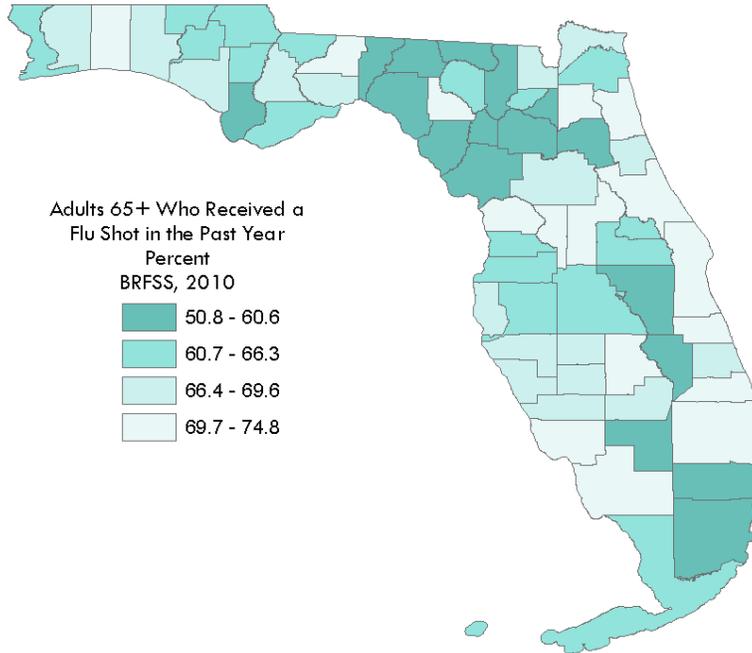
All Americans older than 6 months should receive an influenza vaccination. Vaccination is especially important in adults age 65 and older because of their increased risk of severe illness.

The number of adults 65 and older who received a flu shot in the past year has increased slightly since 2005, but is still below the U.S. averages. Florida is still far from the Healthy People 2020 goal of 90% vaccinated each year, with a 2010 rate of 65.6%.

White Floridians over 65 years of age were much more likely to have had a flu shot than both blacks and Hispanics in 2010. Adults 65 and older with a college degree were also more likely than those with less than a high school diploma to have had a flu shot.



# INFLUENZA



Source: Florida Behavioral Risk Factor Survey

**ADULTS 65+ WHO RECEIVED A FLU SHOT IN THE PAST YEAR BY COUNTY**  
(PERCENT; QUARTILE; 2010)  
(1=LOWEST AND 4=HIGHEST)

Alachua	56.6	4	Flagler	67.0	2	Lake	71.9	1	Pinellas	68.1	2
Baker	67.7	2	Franklin	65.3	3	Lee	72.9	1	Polk	62.1	3
Bay	68.9	2	Gadsden	61.0	3	Leon	73.9	1	Putnam	54.9	4
Bradford	51.6	4	Gilchrist	57.4	4	Levy	51.9	4	Santa Rosa	66.9	2
Brevard	70.5	1	Glades	69.6	2	Liberty	68.5	2	Sarasota	69.6	2
Broward	60.6	4	Gulf	55.4	4	Madison	52.3	4	Seminole	61.3	3
Calhoun	63.4	3	Hamilton	56.4	4	Manatee	68.1	2	St. Johns	76.4	1
Charlotte	67.5	2	Hardee	67.2	2	Marion	68.1	2	St. Lucie	72.6	2
Citrus	72.4	1	Hendry	60.2	4	Martin	70.6	1	Sumter	74.6	1
Clay	69.9	1	Hernando	61.5	3	Monroe	66.3	3	Suwannee	61.3	3
Collier	74.8	1	Highlands	70.2	1	Nassau	66.8	2	Taylor	59.3	4
Columbia	60.3	4	Hillsborough	63.3	3	Okaloosa	70.7	1	Union	65.9	3
Miami-Dade	50.8	4	Holmes	62.6	3	Okeechobee	60.2	4	Volusia	74.5	1
DeSoto	67.5	2	Indian River	71.8	1	Orange	61.7	3	Wakulla	68.4	2
Dixie	51.7	4	Jackson	64.8	3	Osceola	56.0	4	Walton	68.3	2
Duval	60.9	3	Jefferson	53.6	4	Palm Beach	73.7	1	Washington	61.6	3
Escambia	62.4	3	Lafayette	72.3	1	Pasco	64.4	3			

Source: Florida Behavioral Risk Factor Survey

- According to the CDC, the best way to prevent the flu is to get vaccinated each year.
- The number of adults ages 65 and older who received a flu shot in the past year has increased slightly since 2005 but is still below U.S. averages and the Healthy People 2020 goal.
- White Floridians ages 65 and older were 1.7 times more likely than their black counterparts to get a flu shot in the past year.
- Adult Floridians ages 65 and older with college degrees were more likely than those with lower educational attainment to have gotten a flu shot.

# PNEUMONIA

## Adults 65+ Who Have Ever Received a Pneumonia Vaccine (Percent) 2010

	Rate	Ratio*
FL	69.9	REF
U.S.	68.8	.98
HP2020	90.0	--
Rank	23	--
SEX		
Male	67.2	.95
Female	70.7	REF
RACE/ETHNICITY		
White	71.2	REF
Black	56.9	.80
Hispanic	57.5	.81
EDUCATION		
<HS	65.1	.91
HS	69.6	.97
HS+	71.4	REF
College Grad	70.2	.98

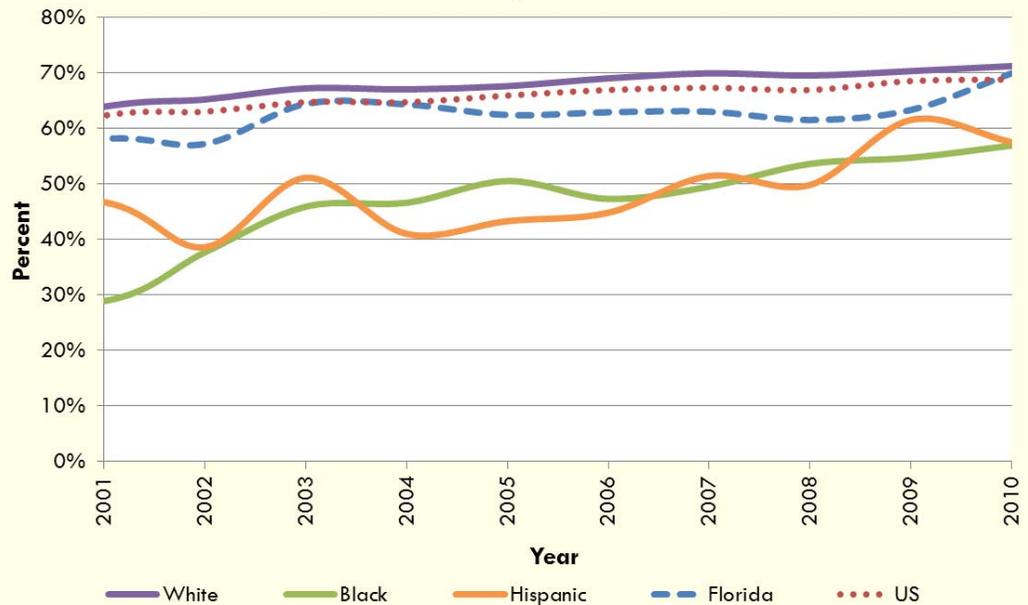
\*Because a high rate for this indicator suggests a more favorable outcome, ratios will be below 1.0.

REF= Reference Group

Pneumonia, a possible complication of the flu, can be a life-threatening illness. Pneumonia is an infection of the lungs, which can cause mild to severe illness in people of all ages. Populations at the highest risk are similar to those at higher risk of influenza: the elderly, young children, those with pre-existing respiratory illnesses, and those with compromised immune systems. The CDC recommends being vaccinated to prevent the possibility of contracting pneumonia.<sup>61</sup>

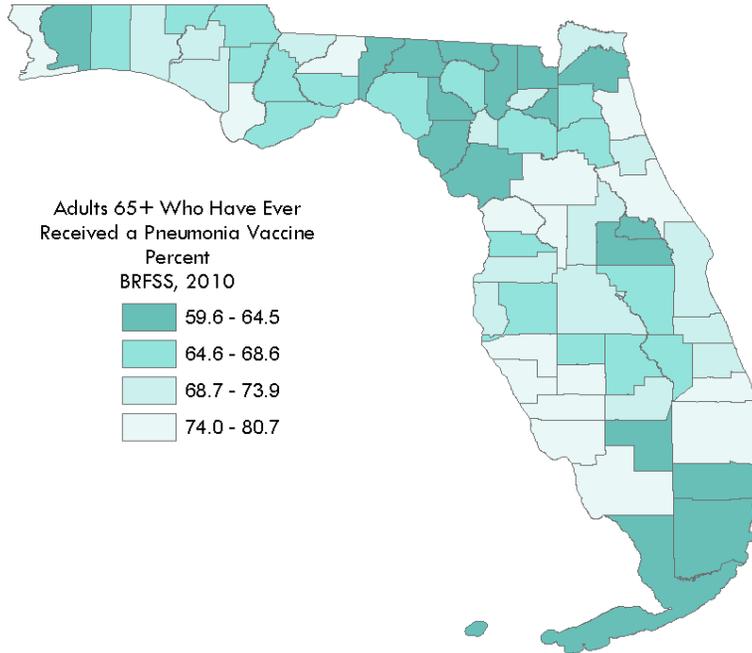
Compared to the U.S. average, Florida has a lower rate of adults 65 and older who have been vaccinated to prevent pneumonia. In 2010, 69.9% of Florida residents 65 and older had been vaccinated, far below the 90% goal set by HP 2020.

### Adults 65+ Who Have Ever Had a Pneumonia Vaccination U.S. & Florida, 2001-2010



Source: BRFSS

# PNEUMONIA



Source: Florida Behavioral Risk Factor Survey

- The CDC recommends being vaccinated to prevent the possibility of contracting pneumonia.
- For over ten years, Florida has had lower rates than the U.S. overall for adults 65 and older who have ever had a pneumonia vaccination.
- The Florida and U.S. rates are far below the Healthy People 2020 goal of 90% of adults 65 and older being vaccinated.
- White Floridians had a higher rate of vaccination compared to black or Hispanic Floridians.

**ADULTS 65+ WHO HAVE EVER RECEIVED A PNEUMONIA VACCINE BY COUNTY**  
(PERCENT; QUARTILE; 2010)  
(1=LOWEST AND 4=HIGHEST)

Alachua	66.4	3	Flagler	72.2	2	Lake	73.9	2	Pinellas	71.6	2
Baker	62.9	4	Franklin	66.5	3	Lee	76.2	1	Polk	68.8	2
Bay	73.0	2	Gadsden	73.3	2	Leon	74.0	1	Putnam	67.3	3
Bradford	63.1	4	Gilchrist	72.0	2	Levy	59.7	4	Santa Rosa	64.5	4
Brevard	69.1	2	Glades	73.6	2	Liberty	67.0	3	Sarasota	76.2	1
Broward	63.2	4	Gulf	76.0	1	Madison	62.1	4	Seminole	63.8	4
Calhoun	68.0	3	Hamilton	63.4	4	Manatee	74.9	1	St. Johns	70.1	1
Charlotte	75.6	1	Hardee	68.5	3	Marion	76.9	1	St. Lucie	66.6	2
Citrus	75.5	1	Hendry	64.4	4	Martin	75.9	1	Sumter	79.2	1
Clay	67.7	3	Hernando	67.9	3	Monroe	61.4	4	Suwannee	67.0	3
Collier	80.7	1	Highlands	68.6	3	Nassau	70.8	2	Taylor	65.6	3
Columbia	64.0	4	Hillsborough	68.6	3	Okaloosa	66.7	3	Union	71.9	2
Miami-Dade	62.4	4	Holmes	68.6	3	Okeechobee	67.6	3	Volusia	77.3	1
DeSoto	77.4	1	Indian River	73.1	2	Orange	61.6	4	Wakulla	68.2	3
Dixie	63.6	4	Jackson	65.1	3	Osceola	65.2	3	Walton	70.7	2
Duval	59.6	4	Jefferson	61.7	4	Palm Beach	74.7	1	Washington	69.1	2
Escambia	75.9	1	Lafayette	62.2	4	Pasco	69.7	2			

Source: Florida Behavioral Risk Factor Survey

# PNEUMONIA

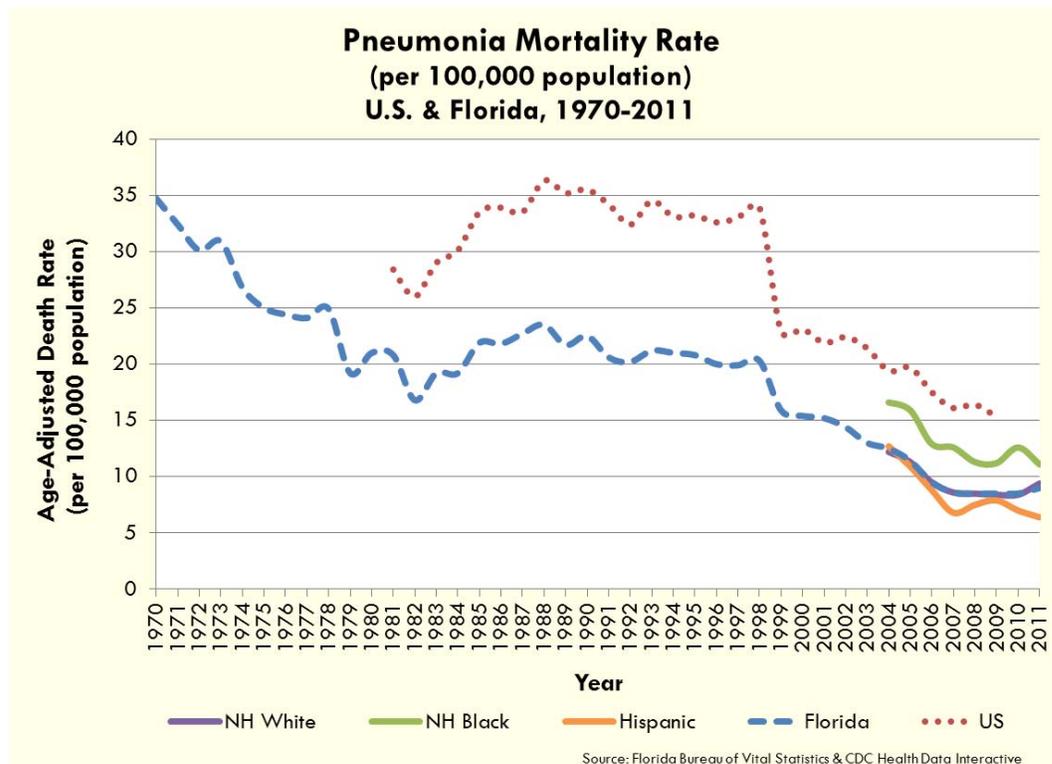
**Pneumonia  
Age-Adjusted  
Mortality Rate  
2009**

	Rate	Ratio
FL	32.1	1.1
U.S.	28.7	REF
HP2020	26.9	--
Rank	42	--
<b>SEX</b>		
Male	33.8	1.1
Female	30.5	REF
<b>RACE/ETHNICITY</b>		
NH White	33.6	1.3
NH Black	38.2	1.5
Hispanic	25.2	REF
<b>EDUCATION</b>		
<HS	39.3	1.4
HS	35.4	1.3
HS+	32.3	1.2
College Grad	27.5	REF

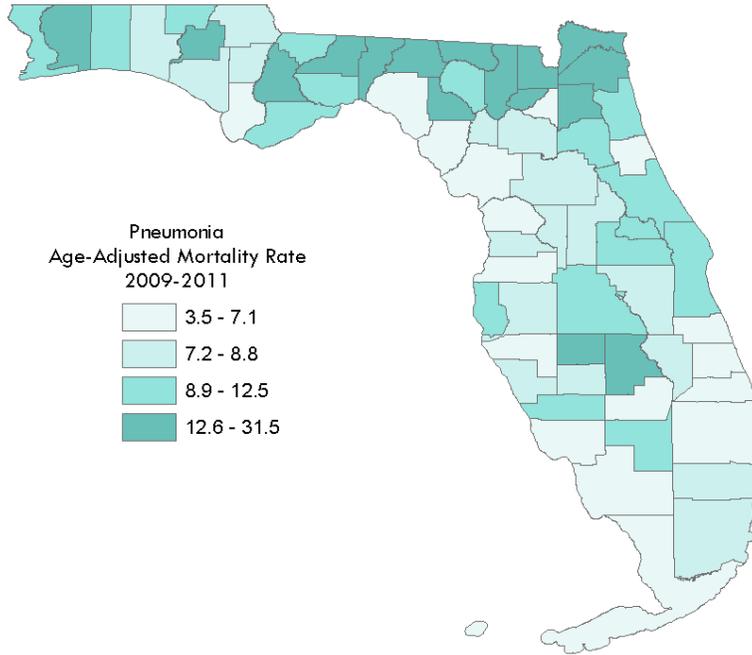
REF= Reference Group

According to the World Health Organization, pneumonia is the single largest cause of death for children in the world.<sup>62</sup> Men who are diagnosed with community-acquired pneumonia are 30% more likely than women to die from the condition, even when the severity of the illness is the same. Older adults, young children and those with weakened immune systems are also more likely to die from pneumonia.<sup>63</sup>

Since 1970, the mortality rate for pneumonia has declined from 34.7 per 100,000 population in 1970 to 6.4 per 100,000 in 2011. Compared to the U.S. national averages from 1970 to 2009, Florida has always had a lower mortality rate for pneumonia. Hispanics have had lower rates than non-Hispanic whites or blacks in Florida since 2004. In 2009, non-Hispanic blacks were 1.5 times more likely than Hispanics to die from pneumonia. Also, Floridians without a high school diploma were 1.4 times more likely to die from pneumonia than those with a college degree.



PNEUMONIA



Source: Florida Bureau of Vital Statistics

**PNEUMONIA MORTALITY RATE BY COUNTY**  
(AGE-ADJUSTED RATE PER 100,000 POPULATION; QUARTILE; 2009-2011)  
(1=LOWEST AND 4=HIGHEST)

Alachua	7.7	2	Flagler	6.3	1	Lake	8.0	2	Pinellas	8.9	3
Baker	22.0	4	Franklin	11.0	3	Lee	6.1	1	Polk	11.8	3
Bay	8.7	2	Gadsden	10.7	3	Leon	16.3	4	Putnam	11.8	3
Bradford	6.0	1	Gilchrist	8.3	2	Levy	6.4	1	Santa Rosa	13.1	4
Brevard	9.7	3	Glades	5.7	1	Liberty	27.9	4	Sarasota	8.0	2
Broward	7.6	2	Gulf	7.1	1	Madison	22.1	4	Seminole	10.7	3
Calhoun	7.8	2	Hamilton	21.7	4	Manatee	4.5	1	St. Johns	11.8	3
Charlotte	10.7	3	Hardee	14.2	4	Marion	7.7	2	St. Lucie	7.1	1
Citrus	5.6	1	Hendry	10.4	3	Martin	4.9	1	Sumter	8.2	2
Clay	14.4	4	Hernando	7.9	2	Monroe	5.5	1	Suwannee	12.5	3
Collier	3.5	1	Highlands	13.8	4	Nassau	21.5	4	Taylor	6.6	1
Columbia	15.9	4	Hillsborough	8.6	2	Okaloosa	11.1	3	Union	18.3	4
Miami-Dade	8.4	2	Holmes	11.6	3	Okeechobee	8.8	2	Volusia	11.7	3
DeSoto	8.8	2	Indian River	6.4	1	Orange	10.9	3	Wakulla	9.0	3
Dixie	5.9	1	Jackson	8.5	2	Osceola	8.7	2	Walton	7.8	2
Duval	18.0	4	Jefferson	31.5	4	Palm Beach	6.4	1	Washington	23.0	4
Escambia	11.0	3	Lafayette	14.5	4	Pasco	5.4	1			

Source: Florida Bureau of Vital Statistics

- Worldwide, pneumonia is the single largest cause of death for children.
- In the U.S., men are more likely to die from community-acquired pneumonia than women with the same case severity.
- Since 1970, mortality rates for pneumonia have declined from 34.7 per 100,000 to 6.4 per 100,000 in 2011.
- Compared to the U.S., Florida has always had lower rates of pneumonia mortality.
- Non-Hispanic black Floridians were 1.5 times more likely than Hispanic Floridians to die from pneumonia.

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