



Health outcome indicators reveal how medical conditions impact a community and are useful in assessing community health when compared to benchmarks or outcomes in other regions.

There are numerous health outcome indicators, yet there is not a uniformly accepted data set. Indicator selection may be influenced by areas of perceived concern, anecdotal evidence or an attempt by a community to determine the general health of the population.

There are various ways to track health status and utilization of each depends on the specific information sought. The mortality rate depicts how many people per population die from the disease or condition in a given year. Prevalence is how many people at any one time have a disease and incidence is the number of new cases of a disease. Most of our health status indicators are reported as age-adjusted mortality rates but where that does not apply, it is noted.

The most commonly accepted health outcome indicators include prevalence of chronic disease. In the U.S., 70% of deaths each year are related to chronic disease such as diabetes, cardiovascular and respiratory diseases and cancer.¹⁹ Other health status measures, although not among the primary causes of death in the U.S., often lead to chronic disease and are

70%
of American deaths
result from chronic
disease

also indicative of the health of the community. As is the case nationwide, chronic disease is the leading cause of death in the Tampa Bay region.

Chronic Disease Indicators

The number of people *dying* from chronic disease in the last decade has fallen at the regional, state and national levels while the number of people *living* with chronic disease has increased. Chronic disease is widespread and impacts everyone, either directly or indirectly. A review of the data confirms that chronic disease is a primary cause of our overall decline in health status. The National Center

for Chronic Disease Prevention and Health Promotion (CDC) noted in its 2009 report, **The Power of Prevention** *Chronic disease...the public health challenge of the 21st century*, that:

- In 2005, 133 million Americans – almost one out of every two adults had at least one chronic illness
- Approximately a quarter of those with chronic conditions have one or more limitations on their daily activity
- Health disparities in chronic disease incidence and mortality are widespread among members of racial and ethnic minority populations
- Mental illnesses and chronic diseases are closely related
- In addition to the vast number of Americans suffering from a chronic disease, the cost to society for treating these conditions is enormous and continues to grow. In 2009, the direct medical expenditures for cardiovascular disease and stroke alone reached \$313.8 billion.²⁰

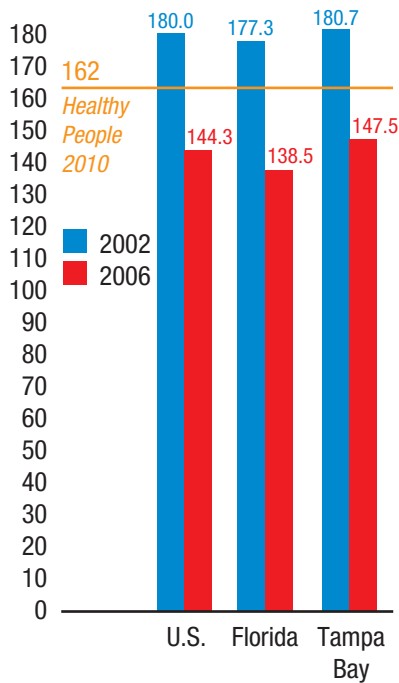
Cardiovascular Disease

Cardiovascular disease kills more Americans each year than any other disease. Cardiovascular disease refers to a variety of heart and blood vessel diseases, including coronary heart disease, hypertension and stroke. Risk factors include high cholesterol, high blood pressure, tobacco use, physical inactivity, diabetes, excess weight and obesity.

This indicator is measured by the death rate per 100,000 people due to coronary heart disease, one type of cardiovascular disease. The *Healthy People 2010* target was 162 deaths per 100,000 people. The U.S. figure in 2006 was 144.3 deaths for every 100,000 people, 138.5 cardiovascular disease deaths per 100,000 people in Florida, and 147.3 per 100,000 people in Tampa Bay.

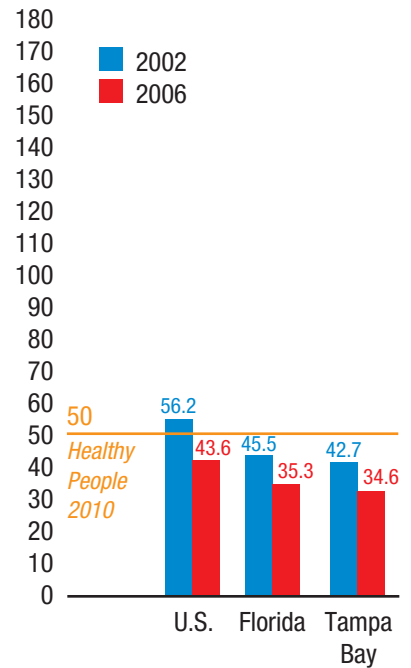
Coronary Heart Disease

Deaths per 100,000 (age-adjusted)



Stroke

Deaths per 100,000 (age-adjusted)



Stroke ranks

3rd

among the leading causes of death and disability in the U.S.

Stroke

Each year, approximately 795,000 people in the U.S. will suffer a new or recurrent stroke. Although people of all ages may have strokes, the risk more than doubles with each decade of life after age 55.²¹

This indicator is the death rate per 100,000 population due to stroke. The *Healthy People 2010* national health target was to reduce the stroke death rate to 50 deaths per 100,000 population. In 2006, the U.S. rate was 43.6 deaths per 100,000 people, a reduction from 56.2 in 2002. Florida's stroke mortality rate of 35.3 was also lower than its 2002 rate of 45.5. The stroke mortality rate in Tampa Bay declined from 42.7 deaths per 100,000 in 2002, to 34.6 deaths in 2006, lower than both the U.S. and Florida rates for the same year.

Spotlight: American Heart Association: Go Red For Women

Cardiovascular disease claims the lives of nearly 500,000 American women each year. To dispel the myths and raise awareness of heart disease as the number one killer of women, the American Heart Association created *Go Red For Women*, a passionate, emotional, social initiative designed to empower women to take charge of their heart health. It challenges them to know their risk for heart disease and take action to reduce their personal risk. It also gives them the tools they need to lead a heart-healthy life.



In a 2008 survey, Lakeland/Polk County was the second LEAST heart-friendly city of its size in the nation. The AHA of Tampa Bay is determined to improve those numbers by changing behavior. Since July 2009, they have registered 3,600 women in their *Go Red for Women* campaign and documented that 86% have made at least one change in behavior since signing on.

www.goredforwomen.org

Cancer

Cancer Deaths

Nationally, death rates from all cancers and from the four leading causes of cancer deaths (lung, colorectal, female breast, and prostate) declined.

This indicator measures the death rate per 100,000 due to cancer. While less than the U.S. rate, 180.7 in 2006, and trending downward, the Tampa Bay mortality rate of 177.0 was higher than the state of Florida rate of 171.9.

Lung Cancer

More people die from lung cancer than any other type of cancer. In 2002, lung cancer accounted for more deaths than breast cancer, prostate cancer and colon cancer combined.

The *Healthy People 2010* national health target was to reduce the lung cancer death rate to 43.3 deaths per 100,000 population. For the last year data is available, in 2006, the national rate was 51.5. Florida's lung cancer mortality rate was 51.2 and Tampa Bay's rate was 55.7 per 100,000 population.

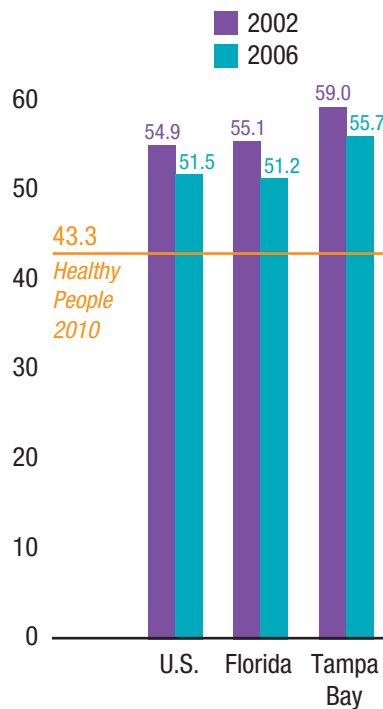
Breast Cancer

Breast cancer is the most common type of cancer among women in the U.S. other than skin cancer. Based on rates from 2005-2007, one in eight female babies born today will be diagnosed with breast cancer at some time during their lifetime.²²

This indicator shows the death rate per 100,000 females due to breast cancer. The *Healthy People 2010* national health target was to reduce the breast cancer death rate to 22.3 deaths per 100,000 females. By 2006, the nation, the state and Tampa Bay had all met the *Healthy People 2010* goal with 21.5 deaths per 100,000 females in the U.S. and Florida and 21.6 in Tampa Bay.

Lung Cancer

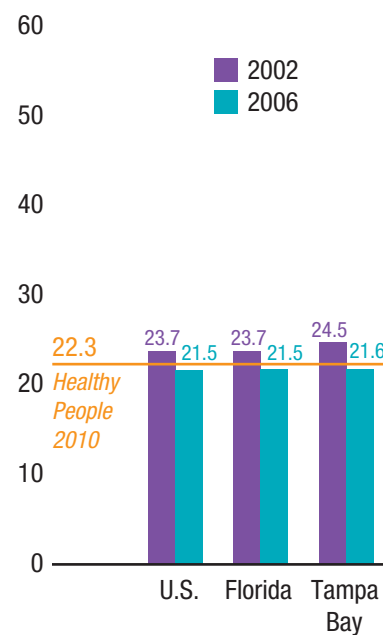
Deaths per 100,000 (age-adjusted)



Cancer is the 2nd leading cause of death in the U.S.

Breast Cancer

Deaths per 100,000 (age-adjusted)



Asthma Prevalence

Asthma is a condition where a person's air passages become inflamed and the narrowing of the respiratory passages makes it difficult to breathe. Asthma is often brought on by exposure to inhaled allergens (like dust, pollen, cigarette smoke, pollution and animal dander) or by exertion and stress. There is no cure for asthma but, for most people, the symptoms can be managed through prevention strategies including minimizing exposure to allergens and other triggers, and a combination of quick-relief and long-term controller medications.

In Tampa Bay in 2007, 7.6% of adults were told by a health care provider that they had asthma compared to 8.2% in the U.S. and 6.2% in Florida.

Spotlight: Tampa Bay Community Cancer Network

The Tampa Bay Community Cancer Network is a collaborative network of academic and community-based organizations and is one of 25 Community Networks Programs across the country funded by the National Cancer Institute's Center to Reduce Cancer Health Disparities.

The network is made of local community-based health centers, nonprofit organizations, faith-based groups, adult education and literacy groups, and the Moffitt Cancer Center, as an NCI designated Cancer Center. Together, the goal is to create and implement sustainable and effective community-based interventions to impact cancer disparities in the Tampa Bay area.

www.tbccn.org

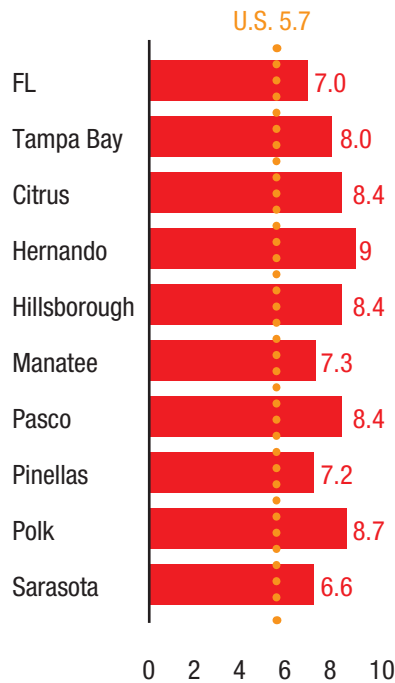
Diabetes Prevalence

In 2007, the American Diabetes Association reported that 17.9 million Americans have been diagnosed with diabetes, 5.7 million Americans have diabetes but have not yet been diagnosed, and 57 million Americans are pre-diabetic, meaning their blood glucose levels are higher than normal and they are at increased risk for developing type 2 diabetes.²³ Diabetes disproportionately affects minority populations and the elderly. Its incidence is likely to increase as minority populations grow and the U.S. population becomes older.

This indicator shows the age-adjusted percentage of adults that have ever been diagnosed with diabetes. Even while adjusting for age, the Tampa Bay and Florida percentage, 8.0% and 7.9% respectively, was significantly higher than the national rate of 5.7%.

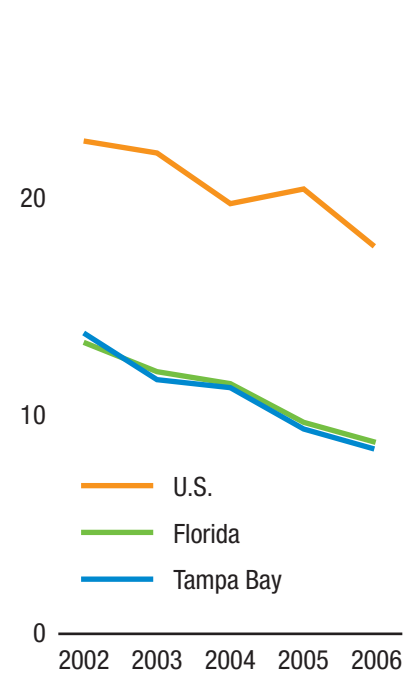
Diabetes Prevalence

2007 - % of adults ≥ 20 yrs old



Pneumonia/Influenza

Deaths per 100,000 (age-adjusted)



57

million Americans are pre-diabetic

Non-chronic Disease Indicators

Pneumonia/Influenza

In 2006, influenza and pneumonia ranked eighth among the leading causes of death in the United States. The two diseases are traditionally reported together, as pneumonia is frequently a complication of influenza. Influenza is a contagious disease caused by a virus. Pneumonia is a serious infection of the lungs that develops when the immune system is weakened. Persons most at risk include the elderly, the very young, and the immunocompromised.

The death rate has decreased significantly since 2002 in the U.S., Florida and Tampa Bay. In 2006, Tampa Bay had 8.8 deaths per 100,000, well under the national average of 17.8.

Spotlight: FAB Families

Fit, Active, Black (FAB) Families is funded by the Department of Health and Human Services Community Partnership to Eliminate Health Disparities. FAB Families is a coalition of seven community partners that address disparities with diabetes and childhood/adolescent overweight/obesity among African Americans in St. Petersburg.



One unique program, administered by the Midtown Health Council, is the Under the Tree Project. According to Gwendolyn Reese, part of the African-American culture is to “meet under the tree.” On the south side of St. Petersburg, a number of African-American men and women meet under trees in the area. In an effort to reach out to these individuals, some of who do not seek routine medical care, a health care professional regularly goes to these trees and checks their blood pressure, blood sugar and cholesterol. The health care volunteer (typically a nurse or pharmacist) seeing the individuals often leaves behind decks of cards and leaflet information containing health information about diabetes, stroke and other chronic illnesses. The health care team also visits other areas throughout the Mid-Town community such as restaurants, beauty and barber shops.

www.stpetefabfamilies.com

Behavioral Health

The National Alliance for Mental Illness (NAMI) recently released its 2009 report card of states and Florida received an overall “D” grade. According to the report, Floridians living with mental illness face uphill battles to get appropriate services due to a lack of funding and a shortage of mental health providers. The report’s authors noted concern with Florida’s insufficient efforts to address cultural competence and the inadequate supply of mental health professionals.²⁴

Suicide Deaths

Suicide is a major, preventable public health problem. In 2006, suicide was the 11th leading cause of death in the United States.²⁵

This indicator shows the age-adjusted death rate per 100,000 people due to suicide. In Tampa Bay, 14.9 deaths occur per 100,000 people compared to 12.6 in Florida and 10.9 in the U.S. The *Healthy People 2010* national health target was to reduce the suicide rate to 4.8 deaths per 100,000 population.

Between 2002 and 2006, the suicide rate *increased* in Tampa Bay while decreasing both nationally and in Florida. The rate of suicide in Tampa Bay in 2006 was more than three times greater than the *Healthy People 2010* target.

Although there are a number of inpatient and outpatient settings in the region for behavioral health issues such as depression, cognitive disorders, suicidal tendencies and substance abuse and addiction, the region’s high rate of suicide is alarming and deserves attention.

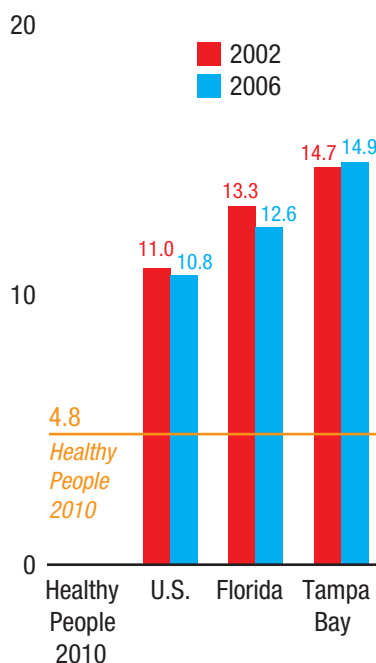


D

Grade given to Florida for care of adults with mental illness

Suicide Deaths

Deaths per 100,000 (age-adjusted)



Spotlight: American Foundation for Suicide Prevention

The Sarasota Chapter of the American Foundation for Suicide Prevention (AFSP) serves the following counties in Southwest Florida: Charlotte, Collier, DeSoto, Glades, Hendry, Hillsborough, Lee, Manatee, Pasco, Pinellas and Sarasota. AFSP is the leading national not-for-profit organization exclusively dedicated to understanding and preventing suicide through research, education and advocacy, and to reaching out to people with mental disorders and those impacted by suicide. Combining local and national efforts, this chapter promotes educating the community toward suicide prevention, intervention and postvention.

www.afsp.org

Spotlight: Operation PAR

Operation PAR cares for families and individuals impacted by substance abuse and mental illness and serves Pinellas, Pasco and Manatee counties. More than 13,000 individuals a year receive intervention and treatment services and another 40,000 participants are impacted annually by the agency’s messages of substance abuse awareness, education, prevention, research and information and referral. Despite this volume, the number of facilities/programs does not meet the need and many go without treatment.

www.operationpar.org

Maternal, Fetal and Infant Health

Infant deaths

The leading causes of death among infants are birth defects, pre-term delivery, low birth weight, Sudden Infant Death Syndrome (SIDS) and maternal complications during pregnancy.

This indicator measures the mortality rate in deaths per 1,000 live births for infants within their first year of life. The *Healthy People 2010* national health target was to reduce the infant mortality rate to 4.5 deaths per 1,000 live births. Tampa Bay and Florida had higher death rates with 7.5 and 7.2 deaths respectively.

8.5%

of Tampa Bay newborns weighed less than 5 lbs. 8 oz.

Low Birth Weight

Low birth weight is most often associated with a baby being born too soon (prior to 37 weeks gestation) and/or being too small for gestational age. Babies born with a low birth weight are more likely than babies of normal weight to have underdeveloped lungs and other organs that require specialized medical care. A common cause of low birth weight is poor nutritional status of mother prior to and during pregnancy.²⁶

This indicator is the percentage of births in which the newborn weighed less than 2,500 grams (5 lbs., 8 oz.). The *Healthy People 2010* national health target was to reduce the proportion of infants born with low birth weight to 5.0%. Between 2004 and 2008, Tampa Bay, Florida and the U.S. consistently ranged between 8.0 and 9.0%.

Births to Female Teens <15 yrs old

Babies born to this population are more likely to be born prematurely, be of low birth weight and more likely to die in their first year of life than babies of women in their twenties and thirties.²⁷

This indicator shows the number of births per 1,000 to female teens who were less than 15 years old when they delivered a baby. The state of Florida registered 0.6 births per 1,000 teen mothers and Tampa Bay at 0.7, though this rate varied widely within our region from 0-0.2 in Citrus, Hernando and Pasco; 0.5 in Pinellas and Sarasota; 0.8 in Hillsborough and Polk; and 1.3 in Manatee County.

Sexually Transmitted Diseases

Despite the burdens, costs, complications, and preventable nature of STDs, they remain a significant public health problem. STDs can cause harmful, often irreversible, and costly clinical complications such as reproductive health problems, fetal and perinatal health problems, and cancer.

This indicator is the reported number of cases for three sexually transmitted diseases, chlamydia, gonorrhea, syphilis (STDs). Florida and Tampa Bay are slightly lower than the U.S. at 514 cases per 100,000, yet the growth rate of the disease is greater in Tampa Bay than the national average. There is also a significant variation between counties from a low of 207 cases in Pasco County to a high of 717 cases in Hillsborough County.

Spotlight: Healthy Start Coalition Infant Mortality Campaign

Florida law requires that every pregnant woman and every newborn is screened by a health professional to identify those at risk of poor birth, health and developmental outcomes. There are 30 Healthy Start Coalitions throughout the state. Each coalition receives funding from the state. Services can include prenatal counseling, perinatal counseling, education on birthing and breastfeeding classes, visiting home nurses, referrals for the Women, Infant and Children program, Medicaid applications, mental health services, and housing needs.



The Pinellas County Healthy Start Coalition, as part of a statewide campaign, has studied fetal/infant mortality and determined that the main cause of death for Pinellas County babies is prematurity (babies born before 37 weeks). Prematurity has been linked to conditions related to the mother's health such as:

- Infections
- Chronic Disease
- Obesity
- Smoking

Spotlight: Text4baby

The Florida Department of Health and the National Healthy Mothers and Healthy Babies Coalition will soon launch "Text4baby", an integrated mobile phone technology with timely health information for pregnant women and new moms. Women who sign up for the service will receive free text messages each week, timed to their due date or baby's date of birth. The messages focus on a variety of topics critical to maternal and child health, including birth defects prevention, immunization, nutrition, seasonal flu, mental health, oral health and safe sleep. Text4baby messages also connect women to prenatal and infant care.

