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# Community Health Status Profile Report 2012



Hardee County Health Department

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# Introduction

The Hardee County Health Status Profile Report was developed to provide an overview of key health indicators and to highlight the major health and social issues affecting the health status and quality of life for Hardee County.

Community health needs assessment has a central part to play by enabling community partners and policy makers to identify the health care needs in our community and align strategic efforts aimed at improving the health of all residents in Hardee County.

Health outcomes are measures that describe our current health status. This report looks broadly at the leading causes of death and illness, health behaviors, socio-economic factors, and our physical environment. Communities must collectively take action to ensure the health of residents.

The Hardee County Health Department has been in operation for more than 60 years and follows the mission established by the Florida Department of Health: To protect and promote the health of all people in Hardee County. Locally, the Hardee County Health Department strives to provide quality public health services in Hardee County through prevention, partnership, and preparedness.

The focus on prevention and partnership are related to the statement of purpose to promote the improvement of minority health outcomes and the elimination of health disparities through the development of closely coordinated community-based and neighborhood based projects. An executive lead team representing department and clinic managers, administrative services, clinical nursing, environmental health, emergency preparedness, wellness and public relations meets weekly to chart the Hardee County Health Department's course both internally and in the community.

The local health department is the main source of pediatric and GYN/OB health care in the county. It is the goal of the Hardee County Health Department to ensure the health and safety of its residents through these programs and initiatives, including education and prevention of diabetes, pre-diabetes, and obesity related chronic illnesses through community health education services, and maintaining an infrastructure for endurance through policy and system changes.

The Hardee County Health Department has vast experience in changing social norms in the county, which is evident through numerous programs and initiatives such as the tobacco free initiative and related policy changes throughout the county. STD, HIV/AIDS initiative of wearing a condom and getting tested regularly, hepatitis - getting tested and vaccinated initiative, and injury prevention program of wearing a bicycle helmet. The wellness program for having routine BMI/BIA checks, healthy eating, exercise, cancer and asthma prevention. The Healthy Start program which assists women with breastfeeding, getting children immunized, don't drink/smoke while pregnant, CPR, crib safety, and car seat safety. The Environmental Health program which advises the 'clear/clean septic system regularly' slogan, controls mosquitoes, and tracks rabies and animal bites.



# MAJOR FINDINGS

Hardee County is less fortunate in that economic and educational attainment indicators show less than acceptable trends. Per capita income in Hardee County has consistently stayed in the poverty level.

Hardee has a higher percentage of families with female head of household living in poverty than Florida. In Hardee County the high school graduation rate is much lower (59.9%) than Florida (89.3%). Higher levels of poverty and lower educational attainment are related to poorer health outcomes. Within Hardee County there are still considerable disparities in many health indicators, especially those related to birth outcomes, access to care, and negative health behaviors. Interventions specifically targeted to disparate groups are necessary to reverse negative health trends.

## *Hardee County residents display many encouraging health protective factors.*

The percentage of adults with good to excellent overall health in Hardee is significantly higher than for the state. A significant number of residents who were surveyed, rate their overall health as good to excellent. A large majority of residents are “very satisfied” or “satisfied” with their lives and this holds true for both men and women in all age groups.

In Hardee County health care resources vary by location and income. The declining economy and increasing unemployment rate is negatively impacting health insurance coverage. Data indicate that there is a disparity in access to health care with more difficult access for low income, younger, and uninsured or underinsured individuals. Access to care is also limited due to the lack of physicians and specialists in Hardee County. Access to dental care is of concern for the entire county and dental care for patients of all ages covered by Florida Medicaid is severely limited.

Federal designation as a Health Professional Shortage Area documents a shortage of health care providers as well as the existence of barriers to accessing care including lack of public transportation, travel time and distance to the next source of undesignated care and high poverty.

## *Unhealthy lifestyles put Hardee residents at increased risk for disease and death.*

A significant percentage of residents of Hardee County are overweight or obese, with the percentage of obese residents on the rise. This is a trend that can be seen in all age groups and both sexes, with rates of obesity consistently increasing from elementary school through adulthood. A healthy lifestyle involves many choices and many Hardee County residents report not eating enough fruits and vegetables, nor getting enough physical exercise. Improved health habits may reduce the risk of premature disease and death.

In Hardee County tobacco use is high compared to Florida and the U.S. This holds true for men and women of all races and ages. Of special concern is that women who are pregnant continue to smoke at alarming rates. Tobacco use contributes to the high rates of asthma and lung diseases among Hardee County Residents.

Heavy drinking and binge drinking are higher in men than in women, but this behavior is reported in students beginning in middle school, increases among high school students, and continues into adulthood. Additional areas of concern for Hardee County include significant increases in domestic violence rates and increases in homelessness (especially among women and children).

## *Racial disparities for birth outcomes, repeat births to teens, and preterm delivery place mothers and infants at risk.*

There are significant disparities in birth outcomes among women in the U.S., Florida, and Hardee County. Black infants are more likely to be born at lower birth weights and before term. These infants are more likely to die at birth or in their first year of life; to need longer hospitalizations for medical complications; and to experience developmental delays or other health problems. There are multi-factorial causes of this disparity for black women and infants. Interventions targeting these disparities require additional research into specific causes of these disparities, as well as, creation of unique, targeted intervention and health education programs.

Teen mothers, especially those who have repeat births before they complete high school are less likely to attain educational goals and be able to support themselves and their children. There is an economic impact on the community when this happens. Many studies have been conducted to identify best practices to help teenage mothers avoid a subsequent pregnancy. The most successful programs help teenage mothers delay second births and become self-sufficient. Programs that help teens adopt an overall health focus and that have a strong family planning component are most successful in reducing repeat teen pregnancy rates.

In the last six weeks of pregnancy, 34 weeks until full term, a baby's brain adds connections needed for balance, coordination, learning and social functioning. During this period, the baby's brain almost doubles in size. Babies born before term are more likely to have feeding problems because they can't coordinate sucking, swallowing and breathing as well as full term babies.

Almost one in every ten teenaged girls in Hardee County has had a child, according to the statistics, which ranks them #1 in teen births for the state, which is not a good thing. Teen pregnancy is associated with poor prenatal care and pre-term delivery. Pregnant teens are more likely than older women to receive late or no prenatal care, have gestational hypertension and anemia, and achieve poor maternal weight gain. They are also more likely to have a pre-term delivery and low birth weight, increasing the risk of child developmental delay, illness, and mortality.



# Healthy People 2010

Data for this report was reviewed for Hardee County, as well as State of Florida, and compared to the Healthy People 2010 (HP 2010) goals and objectives. Healthy People 2010: Understanding and Improving Health is a set of national leading health goals that focus on key health improvement activities.

Healthy People 2010 is about improving health at the local, community, state and national level. These objectives are part of a systematic approach toward overall health improvement and quality of life. Whether this systematic approach is used to improve health on a national level or to organize community action on a certain health issue, such as a campaign to help people quit smoking, the goals remain the same.

The goals provide focus and direction, and serve as a guide for creating a plan for health improvement. Throughout this report, Healthy People 2010 goals and objectives are provided as a means for comparison. While Healthy People 2020 goals and objectives have been released, the data that is available is for the decade ending in 2010, therefore this report shows the progress the county made in attaining the 2010 goals.

As one reviews the data included in this report, it can be seen that in some health areas Hardee County achieved the Healthy People 2010 goals. For some goals we failed to reach Healthy People 2010 goals and will need to strive even harder to reach the Healthy People Goals 2020 goals.

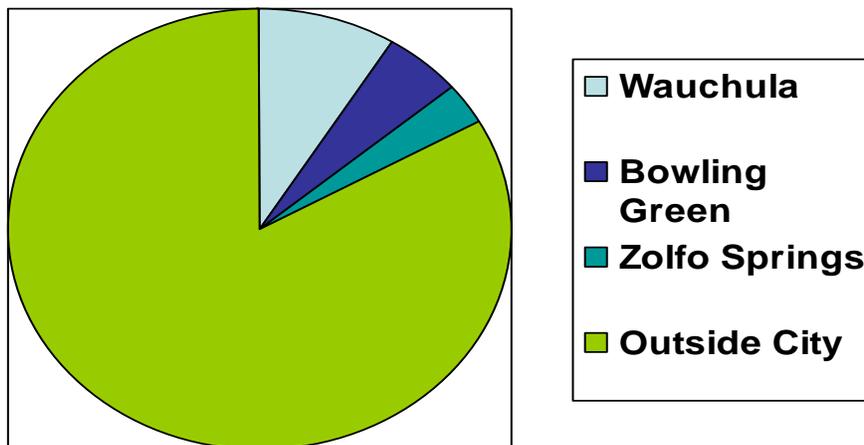
# Demographics

Hardee County is east of Bradenton and south of Lakeland-Winter Haven. The county is bordered by Polk, Manatee, De Soto, and Highlands counties. The county has 1 square mile of water. The average January temperature is 63.0 degrees F, and the average August temperature is 82.3 degrees F. The average annual rainfall is 58.07 inches.

Hardee County was established in 1921 from a portion of De Soto county and named for Cary Augustus Hardee, who was governor the year the county was formed. Wauchula was the site of a military post built during the Seminole Wars.

Hardee County is a socio-economically disadvantaged, rural, agricultural county that is also officially designated as a health professional shortage area by the US Department of Health and Human Services. Hardee consists of 605 square miles with two cities, Wauchula, Bowling Green, one town, Zolfo Springs and no metropolitan area.

Hardee County has an estimated 28,000 residents (according to The Bureau of Economic and Business Research, University of Florida,) which is less than 1% of the states population, with 83% of the population living outside the cities. Hardee County's major industry is agriculture, including cattle, citrus, cucumber, eggplant, peppers and tomatoes, and is located in Florida's Heartland, roughly 72 miles southeast of Tampa. Due to its rural nature, the area has significant barriers to accessing health care.

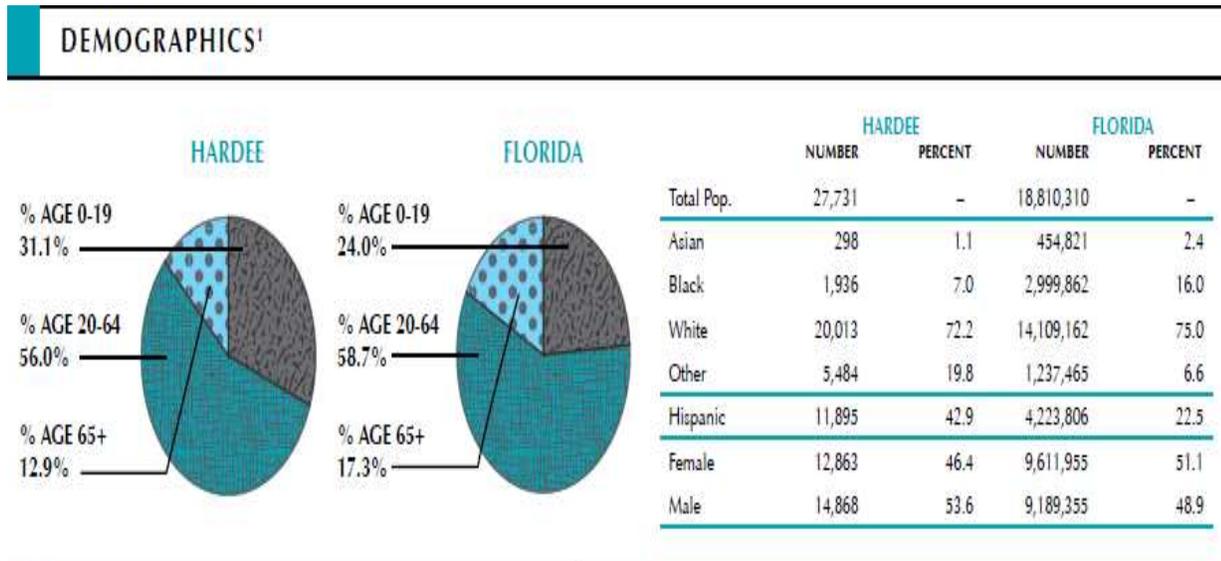


Hardee County

# Population Characteristics

The U.S. Census Bureau shows that 19.5% of the total population is below the federal poverty level, (much higher than the State at 11.9% and the US at 12.7%). Only 58% of the residents over age 25 in Hardee County have a high school diploma. As of 2007, Hardee County joined the list of counties with minorities in the majority, with a 6.5% decrease in the white population between the years of 2000-2007 and a 23.5% increase in the Hispanic population during the same time period. Persons of Hispanic or Latino origin (of any race) total 41.6% in Hardee County (FL 20.2%, US 14.8%).

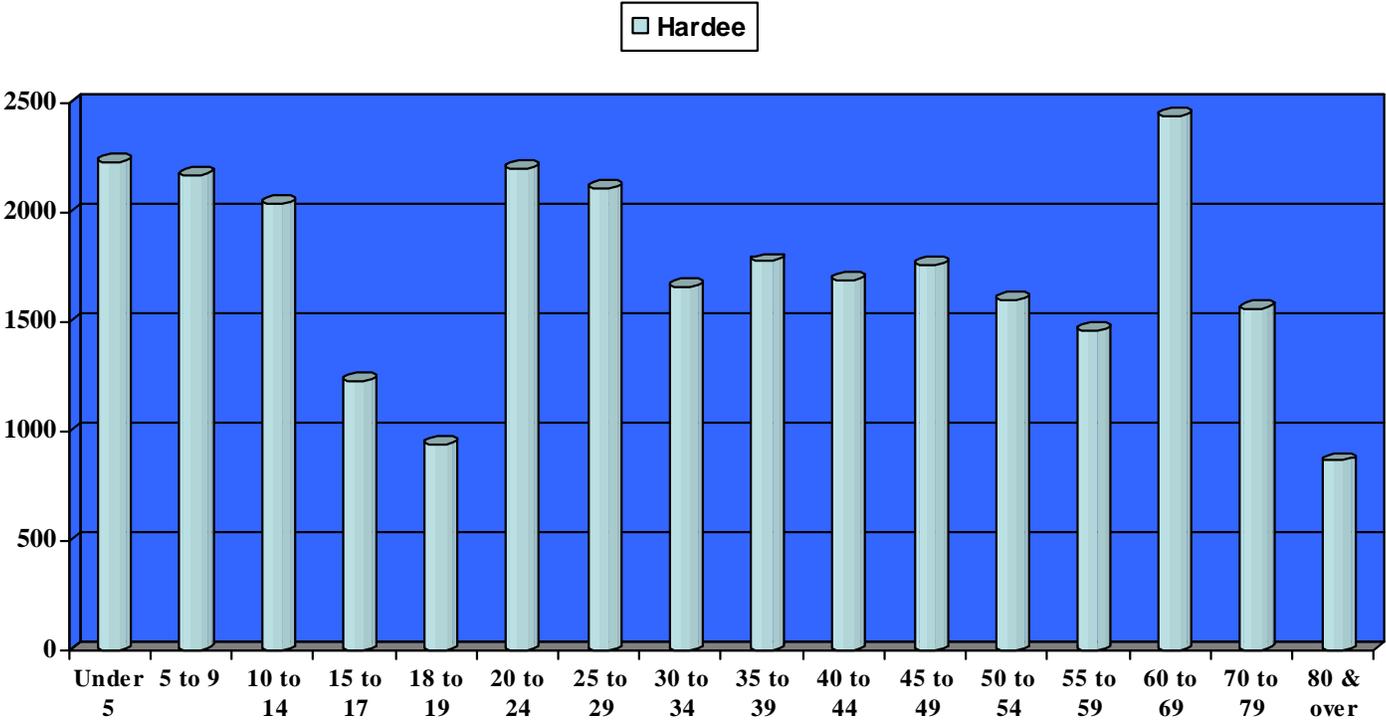
Overall, minorities comprise 52% of the total population in Hardee County; 41% Hispanic, 9.6% Black and 1.4% American Indian or Asian/Pacific Islander. Almost a third (32.1%) of all households in Hardee County are non-English speaking (FL 23.1%, US 17.9%).



# Age Distribution

According to the 2010 Census, Hardee County's population aged 18 and older represented 72.3 percent of the total population. With the Median Age being 32.8.

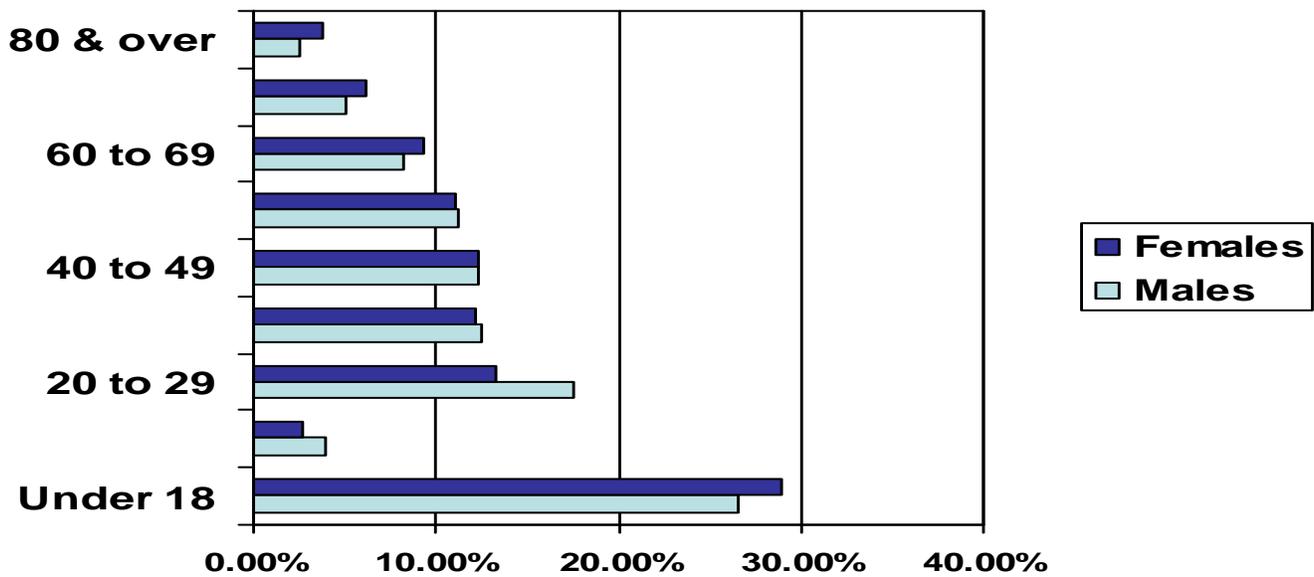
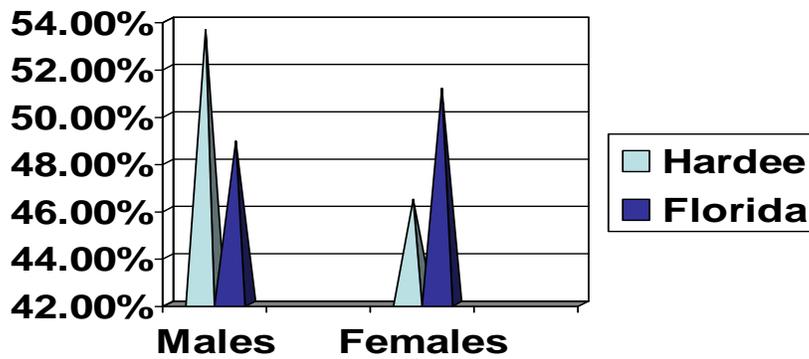
Population by Age Groups, Hardee, 2010



# Gender

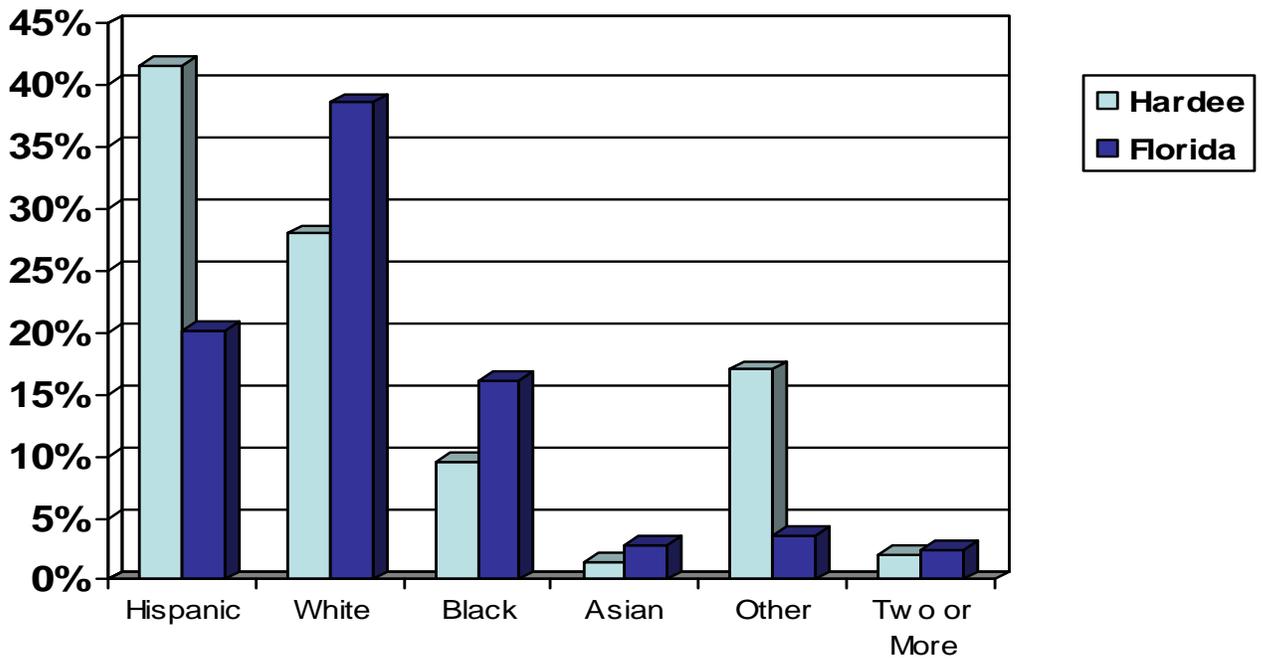
According to the 2010 Census, Hardee has more males (53.6%) than females (46.4%). This differs from Florida which has more females (51.1%) than males (48.9%).

## Gender Comparison, Florida and Hardee, 2010



# Race

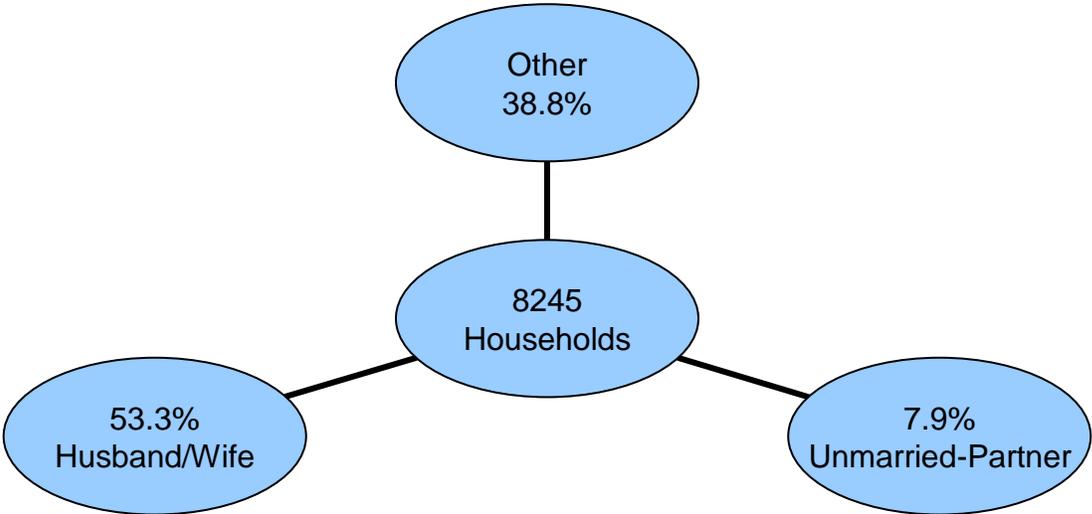
As of 2007, Hardee County joined the list of counties with minorities in the majority, with a 6.5% decrease in the white population between the years of 2000-2007 and a 23.5% increase in the Hispanic populations during the same time period. Persons of Hispanic or Latino origin (of any race) total 41.6% in Hardee County (FL 20.2%). Overall, minorities comprise 52% of the total population in Hardee County; 41% Hispanic, 9.6% Black and 1.4% American Indian or Asian/Pacific Islander.



# Socio-Economic Characteristics

## Households and Families

The 2010 US Census estimates that there were 8,245 households in Hardee County. The average household size was 3.12 people. Families made up 53.3% of the households in Hardee County.



## NATIVITY AND LANGUAGE

Among people at least 5 years old living in Hardee County in 2005-2009, 40.5% spoke a language other than English at home. Again, this is significantly higher than Florida (25.8%) and the U.S. (19.6%). Of those speaking a language other than English at home, 75% spoke Spanish and 25% spoke some other language, with 41% that they did not speak English “very well.”

## PER CAPITA INCOME

Per capita income, also known as income per person, is a measure of all sources of income in an economy, such as a country, state, or county. It does not measure income distribution rather it is used to measure standard of living or of the financial health of a population. Per capita income has analytical limitations. One such limitation is the skewing of the figures that result from a wealthy group of individuals in a smaller population group. A change in per capita income over a period of time may be a more important indicator of the relative economic health of a particular population than a look at per capita income for a particular period of time.

The following table illustrates the per capita income of Hardee County in comparison to the State of Florida as well as the United States. Per capita income has grown at a slower rate in Hardee County than the rest of Florida and the U.S. since 2000.

|  | Hardee<br>2006-2010 | FLORIDA  |
|--|---------------------|----------|
| Per Capita Income (\$)   | \$14,668            | \$26,551 |
| Median Household Income (\$)                                   | \$37,466            | \$47,661 |
| Percent with high school diploma or higher (%)                 | 59.9                | 85.3     |
| Percent with Bachelor's degree or higher (%)                   | 7.5                 | 25.9     |
| Percent Unemployed (%)   | 11.3                | 8.9      |
| Percentage of People whose income is below the poverty level   | 26.1                | 13.8     |
| Percentage of Families whose income is below the poverty level | 19.0                | 9.9      |

# Overall Health Status

## Overweight And Obesity

Overweight and obesity are both labels for ranges of weight that are greater than what is generally considered healthy for a given height. The terms also identify ranges of weight that have been shown to increase the likelihood of certain diseases and other health problems. The risk for the following conditions increases as weight increases into the overweight or obese range: coronary heart disease, Type 2 diabetes, certain cancers (breast, colon, uterus), hypertension, high cholesterol or high triglycerides, stroke, liver and gall bladder disease, sleep apnea and breathing problems, osteoarthritis and gynecological problems.

Overweight and obesity result from an energy imbalance. This involves eating too many calories and not getting enough physical activity. Body weight is the result of genes, metabolism, behavior, environment, culture, and socioeconomic status. Behavior and environment play a large role causing people to be overweight and obese. These are the greatest areas for prevention and treatment actions.

According to the Robert Wood Johnson Foundation, Hardee County has an inactivity rate of 31% vs. 26% for Florida and Adult Obesity is 37% vs. the Florida average of 26%.

## Poor Diet and Lack of Activity

A healthy lifestyle involves many choices. Among them, choosing a balanced diet or eating plan. Regular physical activity helps improve your overall health and fitness, and reduces your risk for many chronic diseases.

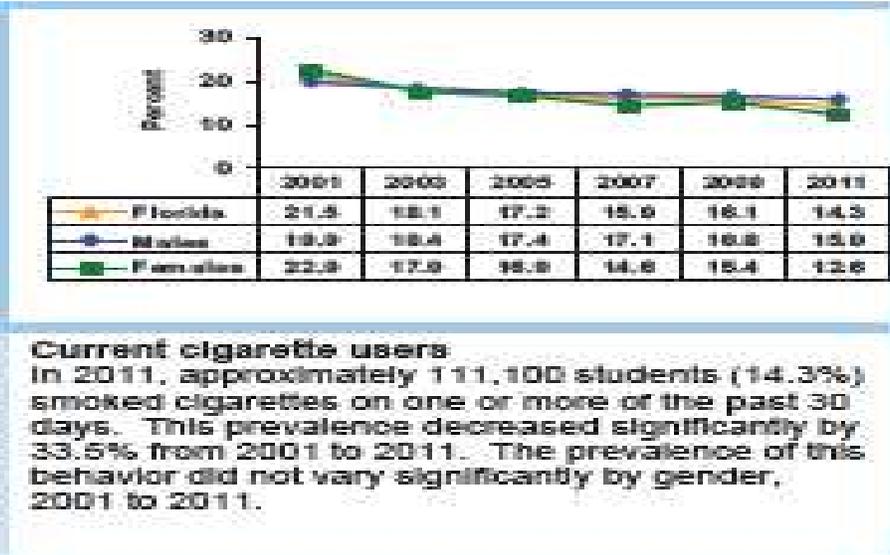
According to the Dietary Guidelines for Americans, a health eating plan:

- emphasizes fruits, vegetables, whole grains, and fat-free or low-fat milk and milk products
- Includes lean meats, poultry, fish, beans, eggs and nuts,
- Is low in saturated fats, trans fats, cholesterol, salt (sodium) and added sugars, and
- Stays within your daily caloric needs

To meet the guidelines for aerobic activity, basically anything counts, as long as it's done at a moderate-or vigorous-intensity for at least 10 minutes at a time. Approximately 31% of Hardee County adults are sedentary.

# Tobacco Use

A 2010 BRFSS Data Report for Hardee County concerning tobacco use shows that 15.3% (4243 persons) of adults currently smoke. Upon further inspection, it appears that women (18.5%), Blacks (26.7%), and White Women (23.5%) are disproportionally current smokers. It also appears individuals with less than a High School diploma (24.7%), an income of \$25,000 - \$49,999 (17.0%), and those who are not married or a couple (16.3%) smoke more than their counterparts. Additionally, the 45 – 64 age group smokes more than other age groups in Hardee County. A review of the 2008 Florida Youth Tobacco Survey shows that Hardee County Middle School students are twice as likely than youth Statewide to have used cigarettes (10.5% Hardee, 5.0% State), cigars (9.6% Hardee, 5.3% State) or smokeless tobacco (6.2% Hardee, 3.0% State) one or more of the past 30 days. While Hardee Middle School students were twice as likely to have received comprehensive tobacco use education (31.0% Hardee, 16.1% State), High School students in Hardee County are not receiving the education (6.7% Hardee, 8.6% State). Hardee contains 3 public low income multi-unit dwellings in which 15% of the population dwells.



## Heavy or Binge Drinking (Alcohol Consumption)

The percentage of adults who reported engaging in heavy or binge drinking in Hardee County is 8%, which is equal to the National Benchmark and significantly lower than the state average of 16%.

Heavy and binge drinking rates are higher in men than women. Rates are highest in residents without high school level education and unmarried individuals.

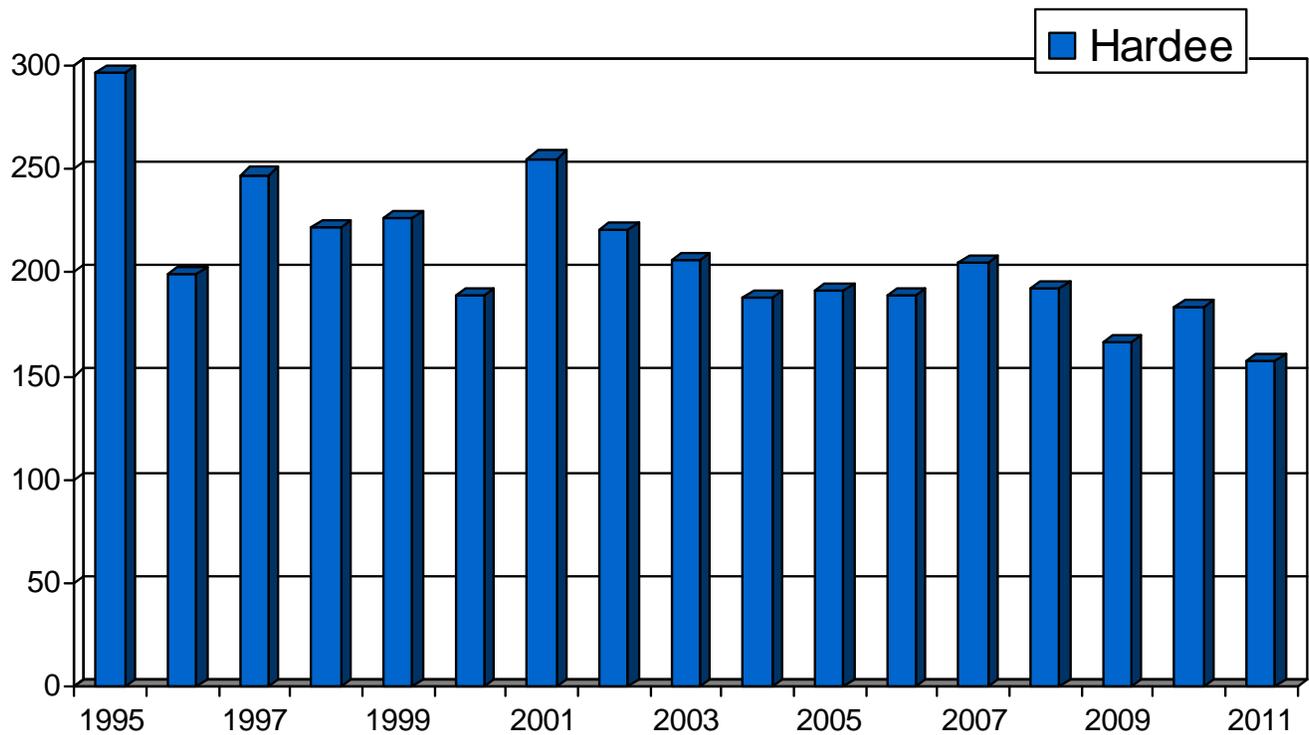
## Domestic Violence

Domestic violence is a serious and preventable issue that affects millions of Americans across our nation. Domestic violence is a term that describes physical, sexual, or psychological harm by a current or former spouse, partner or family member. Domestic violence varies in frequency and severity. It can range from one hit that may or may not impact the victim to a chronic, severe beating.

Domestic violence has serious consequences for its victim and can include severe adverse health conditions, psychological consequences including depression and low self-esteem, social consequences such as isolation from friends and family, and engaging in high-risk sexual behavior, harmful substances abuse, and unhealthy diet-related behaviors.

Total domestic violence offenses have decreased 15% in 2011 from 2010, down from 183 to 157 reported incidents. These numbers only reflect the reported numbers, not the incidents that don't get reported.

## Domestic Violence Offenses



## Homelessness

Hardee County has approximately 1,410 homeless persons, this makes up about 5% of our county population. A homeless person is a person sleeping in a place not meant for human habitation or in an emergency shelter, and a person in transitional housing for homeless persons who originally came for the street or an emergency shelter.

Hardee County has seen an increase in the homeless rates due to the closing of G.Pierce Woods mental facility in 2002 that had housed these individuals.

# Foster Care

Over 500,000 children in the U.S. currently reside in some form of foster care. Placements in foster care have dramatically increased over the past 10 years. Hardee County has no provisions for foster care and children are taken out of the county. Some reasons infants and children are removed from their homes are abuse and neglect, severe behavioral problems in the child and/or a variety of parental problems, just as abandonment, illness (physical or emotional), incarcerations, AIDS, alcohol/substance abuse, and death.

In Florida each year, there are between 9,000 and 10,000 children who are removed from their home. Of these children about 11.3% are infants less than one year of age.

Being removed from their home and placed in foster care is a difficult and stressful experience for an child, and is a community issue of significance in Hardee County. Many of these children have suffered some form of serious abuse or neglect. Children in foster care often struggle with the following issues:

- Blaming themselves and feeling guilty about removal from their birth parents
- Wishing to return to birth parents even if they were abused by them
- Feeling unwanted if awaiting adoption for a long time
- Feeling helpless about multiple changes in foster parents over time
- Having mixed emotions about attaching to foster parents
- Feeling insecure and uncertain about their future
- Reluctantly acknowledging positive feelings for foster parents

In the US, up to 80% of children in foster care have chronic health conditions and/or behavioral, emotional, and developmental concerns. That rate is more than four times the rate (13.9%) of all children with special health care needs in the U.S. population. Consistent with their special health care needs, children in foster care are eligible for Medicaid. Medicaid spending in the most recent year for which data are available was more than three times higher for children in foster care than for other children, and totaled \$3.8 billion for the U.S.

Children in foster care receive inadequate health care due, in part, to the placement instability combined with limited coordination and information-sharing between service providers. On average, children in the U.S. placed in foster care experience one to two changes in foster homes per year. Placement changes are usually accompanied by changes in physicians and other health care providers, resulting in incomplete health information that is spread across many different sites. In turn, children in foster care frequently receive incomplete and /or duplicate immunizations and lack proper ongoing primary care, including regular assessments of their healthy development and emotional status, along with needed treatment.

## Suicide

Suicide is a serious public health problem that can have lasting harmful effects on individuals, families, and communities. While its causes are complex and determined by multiple factors, the goal of suicide prevention is simple: Reduce factors that increase risk (i.e. risk factors) and increase factors that promote resilience (i.e. protective factors). Ideally, prevention addresses all levels of influence: individual, relationship, community, and societal. Effective prevention strategies are needed to promote awareness of suicide and encourage a commitment to social change.

Suicide has been decreasing in Hardee County (10.6%) since 2006, and is lower than the overall state (14.7%) rates. Suicide ranked as the 9<sup>th</sup> leading cause of death in FL in 2009 and does not make the top 10 leading causes of death in the United States.



# Risky Youth Behaviors

The Youth Risk Behavior Survey (YRBS) is a statewide, school-based confidential survey of Florida's public high school students. The purpose of the YRBS is to monitor priority health-risk behaviors that contribute substantially to the leading causes of death, disability, and social problems among youth, which contribute to patterns in adulthood. State data collection for the YRBS does not include county-level data. In 2001, the YRBS became part of the Florida Youth Survey (FYS), which includes the Florida Youth Tobacco Survey (FYTS), Youth Physical Activity and Nutrition Survey (YPANS), and Florida Youth Substance Abuse Survey (FYSAS). The Hardee County School District started participating in the FYTS and the FYSAS surveys in 2006.

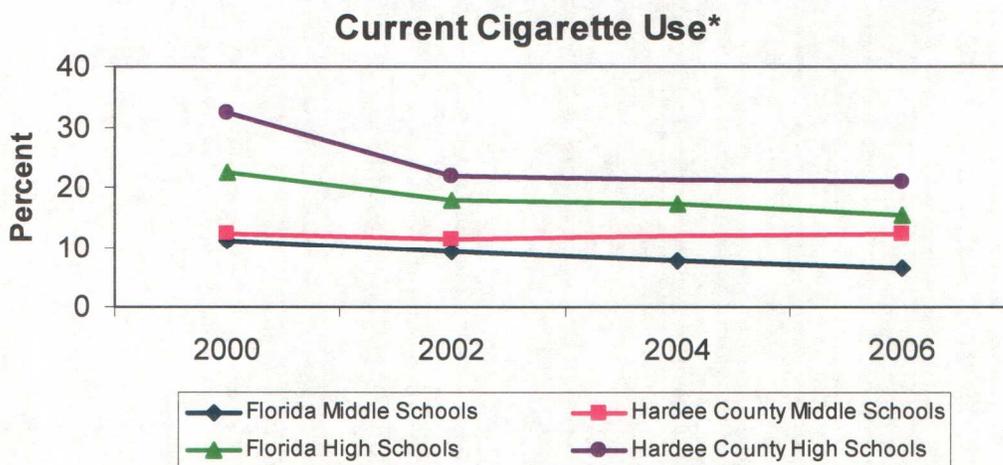
In Hardee County, 368 middle school students and 239 high school students in 2 public schools completed the 2006 FYTS. This report presents the county level data in 2000, 2002, and 2006. State and county prevalence from 2000 and 2002 were included for comparison. The county level data and state level data are weighted to represent the entire population of Hardee County public middle and high school students and Florida public middle and high school students respectively. This data can be used by county health departments, school districts, and other community organizations and citizens to estimate the magnitude of youth tobacco use in Hardee County, as well as to compare tobacco use, attitudes, and related behaviors in Hardee County to those for Florida as a whole.

## Tobacco Use

Current tobacco use is defined as having used any form of tobacco, on one or more of the past 30 days. Any form of tobacco includes cigarettes, cigars, smokeless or chewing tobacco, and specialty tobacco such as pipe tobacco, Bidis (small brown cigarettes from India), or Kreteks more commonly known as “clove cigarettes.” Overall tobacco use among Hardee County middle school students has decreased by 4.6 percent from 19.8 percent in 2000 to 18.9 percent in 2006. Overall tobacco use among Hardee County high school students has decreased by 9.7 percent from 41.7 percent in 2000 to 37.7 percent in 2006.

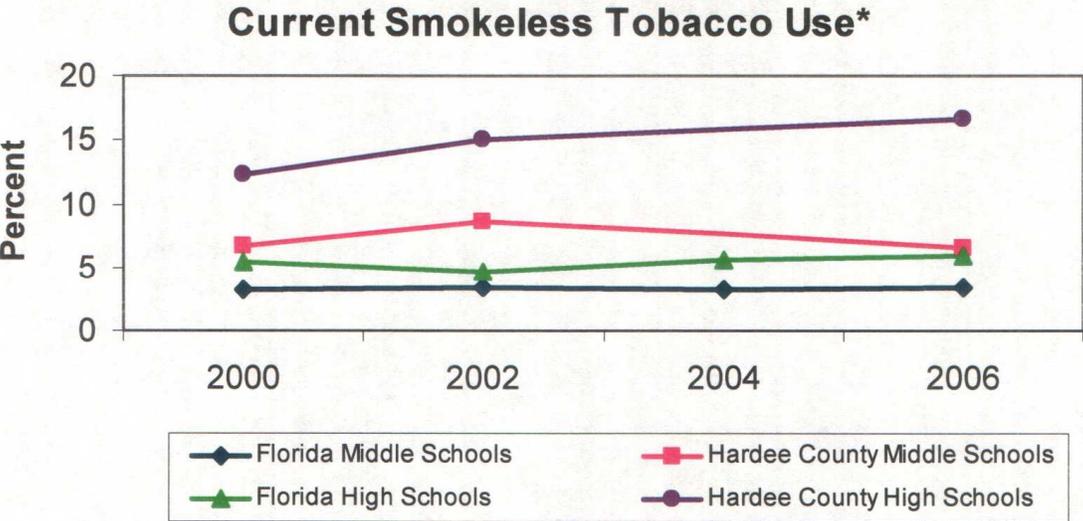
Current cigarette use is defined as having smoked a cigarette on one or more of the past 30 days. The prevalence of cigarette use among Hardee County middle school students has remained stable from 2000 (12.4%) to 2006 (12.3%). The prevalence of cigarette use among Hardee County high school students has decreased by 35.2% to 32.3% in 2000 to 20.9% in 2006.

A report by The Institute of Medicine finds even brief exposure to secondhand smoke can trigger a heart attack. Tobacco smoke can cause health problems not only for smokers, but also for people around them. Breathing secondhand smoke increases a person’s risk for a heart attack and other heart conditions. Never smoking or stopping smoking, maintaining a healthy weight, consuming a healthy diet, and getting regular moderate physical activity are the best weapons to fight heart diseases.



# Smokeless Tobacco Use

Current smokeless tobacco use is defined as having used smokeless tobacco on one or more of the past 30 days. The prevalence of smokeless tobacco use among Hardee County middle school students has decreased by 2.9 percent from 6.8 percent in 2000 to 6.6 percent in 2006. The prevalence of smokeless tobacco use among Hardee County high school students has increased by 35.8 percent from 12.3 percent in 2000 to 16.7 percent in 2006.

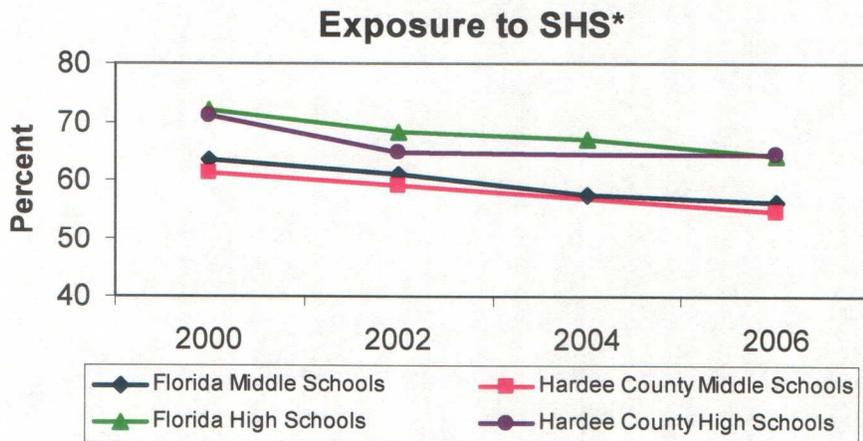


## Secondhand Smoke Exposure

Secondhand smoke (SHS), also known as environmental tobacco smoke (ETS), refers to a combination of side-stream smoke (smoke that is emitted from the end of a lit cigarette, pipe, or cigar) and main-stream smoke (smoke exhaled by a smoker). SHS is the third leading cause of preventable death in the United States. In 2003, Florida passed the Florida Clean Indoor Air Act, which bans smoking in workplaces to try to reduce the number of Floridians negatively impacted by the effects of SHS.

## Exposure to Secondhand Smoke

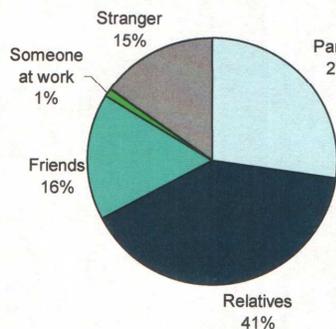
The prevalence of exposure to SHS among Hardee County middle school students has decreased by 10.8 percent from 61.2 percent in 2000 to 54.6 percent in 2006. The prevalence of exposure to SHS among Hardee County high school students has decreased by 9.5 percent from 71.2 percent in 2000 to 64.4 percent in 2006.



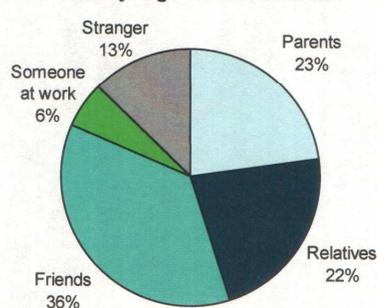
### Source of Secondhand Smoke Exposure: 2006 Survey Data

The two charts below show the different people who were the source of SHS exposure for both Hardee County middle and high school students. Middle school students were most likely to be exposed to SHS by their relatives while high school students were most likely to be exposed to SHS by their friends.

**Hardee County Middle School Students**



**Hardee County High School Students**



## Youth Substance Use

The 2010 Florida Youth Substance Abuse (FYSA) surveys students in middle and high school on the use of alcohol and other substances. The drug of choice for middle school and high school students for Hardee County is alcohol. In Hardee County, 39.8% of middle school students and 63.8% of high school students report having used alcohol in their lifetimes.

Among high school drinkers in Hardee, the usual source of alcohol within the past 30 days is someone buying (20.7%) or someone giving the minor the alcohol (52.5%). Most of the high school drinking within the past 30 days has occurred in another persons' home (56.9%). On the days that high school students drank in the past 30 days, over 56.2% averaged 3 or more drinks for occasion.

Another form of alcohol misuse is called binge drinking. The generally accepted definition of binge drinking in the United States is the consumption of five or more drinks in a row by men (or four or more drinks in a row by women) at least once in the previous 2 weeks. Heavy binge drinking includes three or more such episodes in 2 weeks. Binge drinking among teens is often a result of peer pressure. Marketing of alcoholic beverages and bars make drinking seem attractive and fun.

In Hardee County, binge drinking among middle school students is 9.1%, which is higher than the state average of 6.9%. Binge drinking among high school students is higher than among middle school students at just 34.8% and is higher than the rest of the state. Binge drinking by middle school students in both Florida and Hardee County exceed the Healthy People 2010 goal of <3.1%. Binge drinking among Florida and Hardee County students is over 10 times the Healthy People 2010 goal of <3.1%. Binge drinking may impair a teens ability to make good choices about their health and safety such as driving and having unprotected sex. This issue of concern in our community carries over in the adult population.

## Gambling

Gambling is a serious problem among Florida school-aged youth. Over 51% of Hardee and Florida youth report gambling in the past 12 months. Males in Hardee are more likely to gamble in the past 12 months (53.2%) than women (40.8%). Middle school students in Hardee are more likely to report gambling in the past 12 months (54.8%) than high school students (50.5%). Arguing about gambling in the past 12 months is higher among Hardee middle school students (15.9%) than high school students (12.1%).

## Bullying

Bullying has received much national attention in the last 10 years. Physical and verbal bullying remains more common among Hardee and Florida youth than cyber bullying. Sadly, 31.6% of middle school students and 14.3% of high school students worry about bullying. Reports of being kicked or shoved in the past 30 days in Hardee middle school students is over 14% and just over 7.2% for Hardee high school students. In Hardee County, being teased or taunted in the past 30 days exceeds 36% for middle school students and 19% for high school students. Over 17% of middle school students and about 12.5% of high school students admit to physically bullying others in the past 30 days. Verbal bullying others in the past 30 days is more common in Hardee with nearly 30% of middle school students and 17.4% of high school students admitting to this behavior. This pattern of behavior is sadly mirrored through out all Florida Counties.

## Physical Activity and Overweight

As of 2007, 18.3 percent of children and teens, age 10 to 17, were considered obese in Florida. Approximately 21.9% of Florida's population is under the age of 18, making up to 750,000 young people at risk of developing serious medical conditions. Hardee county ranks the highest in the state in obesity at 35.6%. Only two counties in the state of Florida were under 20%.

## Potentially Avoidable Hospitalizations

Asthma is a lung disease that makes breathing difficult. It is a chronic disease, like diabetes or heart problems that does not go away, but can be controlled. Common asthma symptoms include: cough, tight feeling in the chest, wheezing, activity limitation and feeling tired. According to the American Lung Association students with asthma miss more than 14 million school days every year due to illness. Asthma often becomes more difficult to manage in teens because of the rebelliousness and need for independence that comes with adolescence. Children who have been responsibly managing their asthma for years may start to have more problems with symptoms as they enter adolescence. This could be because of hormonal changes, or it could be because of changes in their attitude and behavior. Teens are often sensitive about anything that they think makes them different from their friends. They are also more independent and so may be exposed to more asthma triggers such as environmental triggers at friends' homes or tobacco smoke. Teens often experiment with tobacco and drug use that may aggravate asthma symptoms.

Asthma hospitalization is potentially avoidable by following an asthma control plan put in place by the child's physician and acted upon by parents, children, and schools. Hospitalization (rates per 100,000 for the three year period 2007-2009) for young children ages 5-11 years in Hardee County who have asthma (59.4) are lower than in other parts of the state (387.3). The rate for Florida adolescents actually drops to 314.1 compared to younger children. Florida lags well behind the Healthy People 2010 goal of no more than 77 asthma hospitalizations per 100,000 children ages 5 – 18 years.

## Diabetes

Diabetes is one of the most common chronic diseases among children in the United States. When diabetes strikes during childhood, it is usually assumed to be Type 1, or juvenile-onset, diabetes. Type 1 diabetes develops when the body's immune system destroys pancreatic cells that make the hormone insulin that regulates blood sugar. It normally strikes children and young adults. People with Type 1 diabetes must have daily insulin injections to survive. In the last two decades, Type 2 diabetes, formerly known as adult-onset diabetes, has been reported among U.S. children and adolescents with increasing frequency. Type 2 diabetes begins when the body develops a resistance to insulin and no longer uses the insulin properly. As the need for insulin rises, the pancreas gradually loses its ability to produce sufficient amounts of insulin to regulate blood sugar.



# Death Indicators

## LEADING CAUSES OF DEATH – ALL AGES

Leading causes of death reflects the number of deaths. The leading cause of death in Hardee County is cancer, whereas the leading cause of death in Florida and the U.S. is heart disease. In addition, unintentional injuries are the 4<sup>th</sup> leading cause of death in Hardee and Florida and the 5<sup>th</sup> leading cause of death for the nation. Stroke is the 5<sup>th</sup> leading cause of death in Hardee and Florida but the 3<sup>rd</sup> leading cause of death in the nation.

### LEADING CAUSES OF DEATH<sup>5</sup>

| CAUSE                             | 2008-2010 |                         | FLORIDA 2008-2010 |                         |
|-----------------------------------|-----------|-------------------------|-------------------|-------------------------|
|                                   | NUMBER    | AGE-ADJUSTED DEATH RATE | NUMBER            | AGE-ADJUSTED DEATH RATE |
| All Causes                        | 608       | 695.1                   | 512,836.0         | 660.7                   |
| Heart Disease                     | 130.0     | 144.9                   | 124,374.0         | 150.8                   |
| Cancer                            | 144.0     | 169.7                   | 122,249.0         | 160.2                   |
| Stroke                            | 28.0      | 30.7                    | 25,181.0          | 30.5                    |
| Diabetes                          | 24.0      | 28.6                    | 15,045.0          | 19.6                    |
| All Unintentional Injuries        | 42.0      | 50.5                    | 26,341.0          | 42.7                    |
| Chronic Lower Respiratory Disease | 46.0      | 50.5                    | 30,585.0          | 37.7                    |
| Motor Vehicle Crashes             | 26.0      | 32.5                    | 8,078.0           | 14.0                    |

## LEADING CAUSES OF DEATH – BY AGE GROUPS

The leading cause of death varies by age group and also by county and state.

For infants less than 1 year, conditions associated with complications in the prenatal period are the leading cause of death. This includes disorders related to being born too early and of low birth weight, maternal complications of pregnancy affecting the newborn, complications of the placenta cord and membranes affecting the newborn, bacterial sepsis or respiratory distress of the newborn, to list a few.

For ages 1 – 44 years, the leading cause of death is unintentional injuries. The leading cause of unintentional injuries is motor vehicle crashes and unintentional poisoning.

For ages 45 – 79 years, the leading cause of death is cancer. The leading cancers for men are lung, prostate and colorectal. For women, the leading cancers are lung, breast, and colorectal.

For ages 80 years and older, the leading cause of death is heart diseases. Coronary heart disease is the most common form of heart disease.

### Cancer Deaths

The three leading cancers for men are lung, prostate, and colorectal. For women, the leading cancers are lung, breast, and colorectal. The 2009-2011 age adjusted death rate for all cancers for Hardee County Residents is 165.5/100,000 compared to the State of Florida's age-adjusted death rate for all cancers 161.1/100,000.

# Prostate Cancer

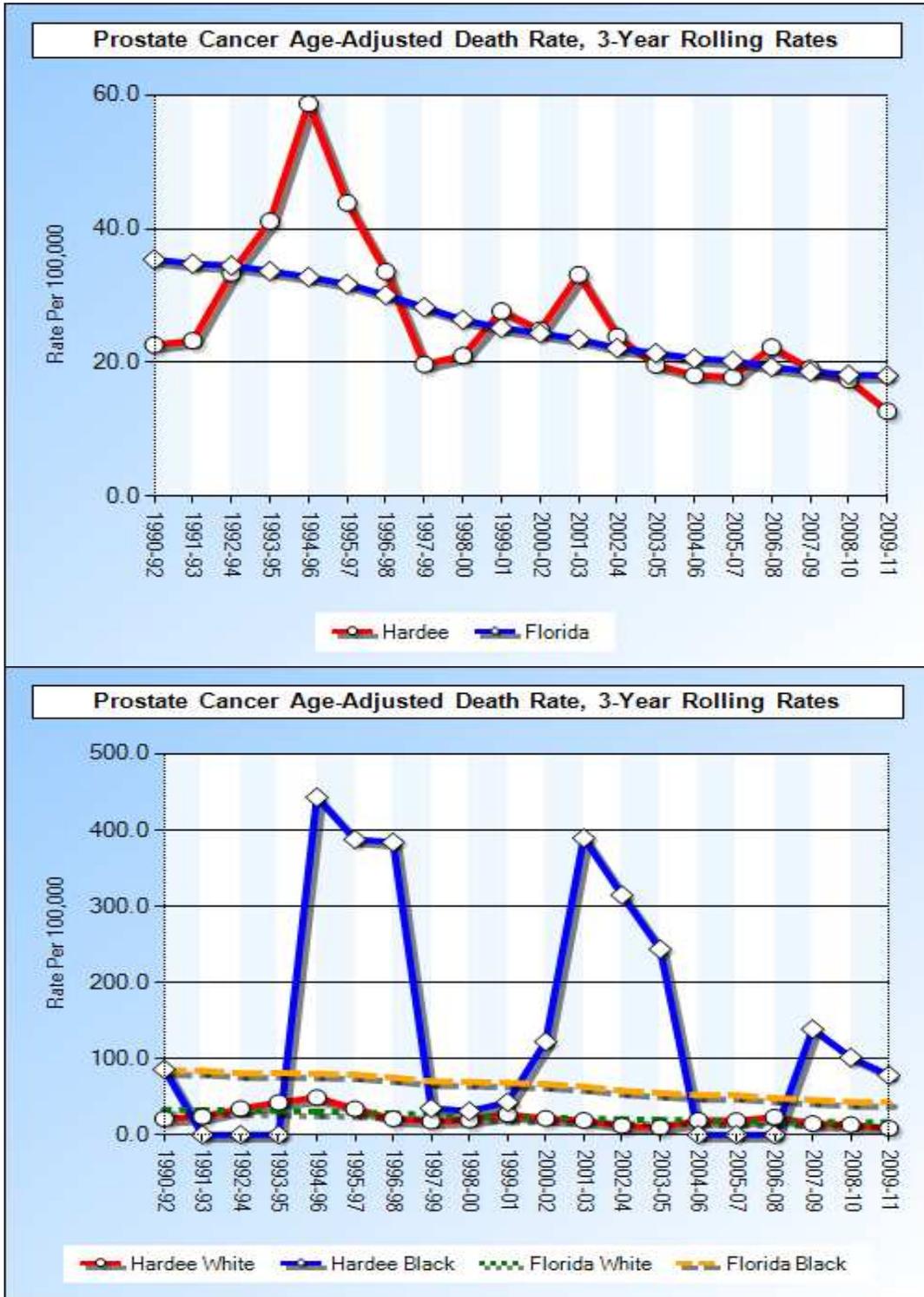
Prostate cancer rates in Florida have been changing rapidly since the introduction of improved screening techniques in the late 80's. These changes may be due to increased detection of cases that would have previously gone undetected, or there may be changes in the rate at which men get prostate cancer. The answer as to which of these is the case is not definitive at present, but there are data that seem to indicate that most of the change is due to increased detection rather than changes in the rate of the disease.

In the U.S., prostate cancer is the most commonly diagnosed cancer in men, and second only to lung cancer in the number of cancer deaths. There is no way to know which men will get prostate cancer. However, it is known that men have a greater chance of getting prostate cancer if they are 50 years old or older, are African-American, or have a father, brother, or son who has had prostate cancer. The 2007-2009 age-adjusted prostate cancer death rate for Hardee County residents is 12.7/100,000 versus Florida at 18/100,000.

The 2009-2011 age-adjusted prostate cancer death rate for black residents in Hardee County is 78.1/100,000 compared to black Florida residents 42.5/100,000. The 2009-2011 age-adjusted prostate cancer death rate for white residents in Hardee County is 8.4/100,000 compared to white Florida residents 16.3/100,000.

Tests that are commonly used to screen for prostate cancer are the digital exam and a prostate specific antigen test. However, not all medical experts agree that screening for prostate cancer saves lives. Currently, there is not enough credible evidence to decide if the potential benefit of prostate cancer screening outweighs the potential risks. The potential benefit of prostate cancer screening is early detection of cancer, which may make treatment more effective. Potential risks include false positive test results (the test says you have cancer when you do not), treatment of prostate cancers that may never affect a man's health, and mild to serious side effects from treatment of prostate cancer. Screening for prostate cancer is best decided between a physician and the patient based on knowledge of the patient's risk factors for prostate cancer.

# Prostate



## Breast Cancer

Although many women get breast cancer, it is not a common cause of death. Heart disease is the number one cause of death among women age 40 and above, followed by stroke, lung cancer, and lung diseases. Breast cancer is the fifth leading cause of death for women in the United States.

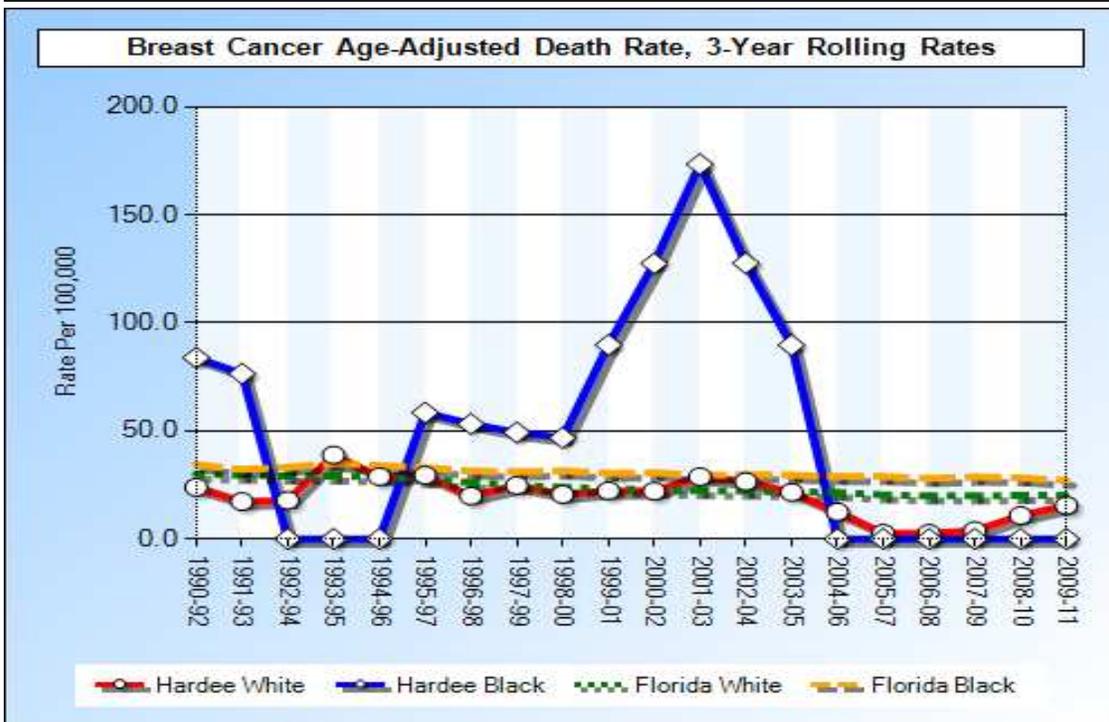
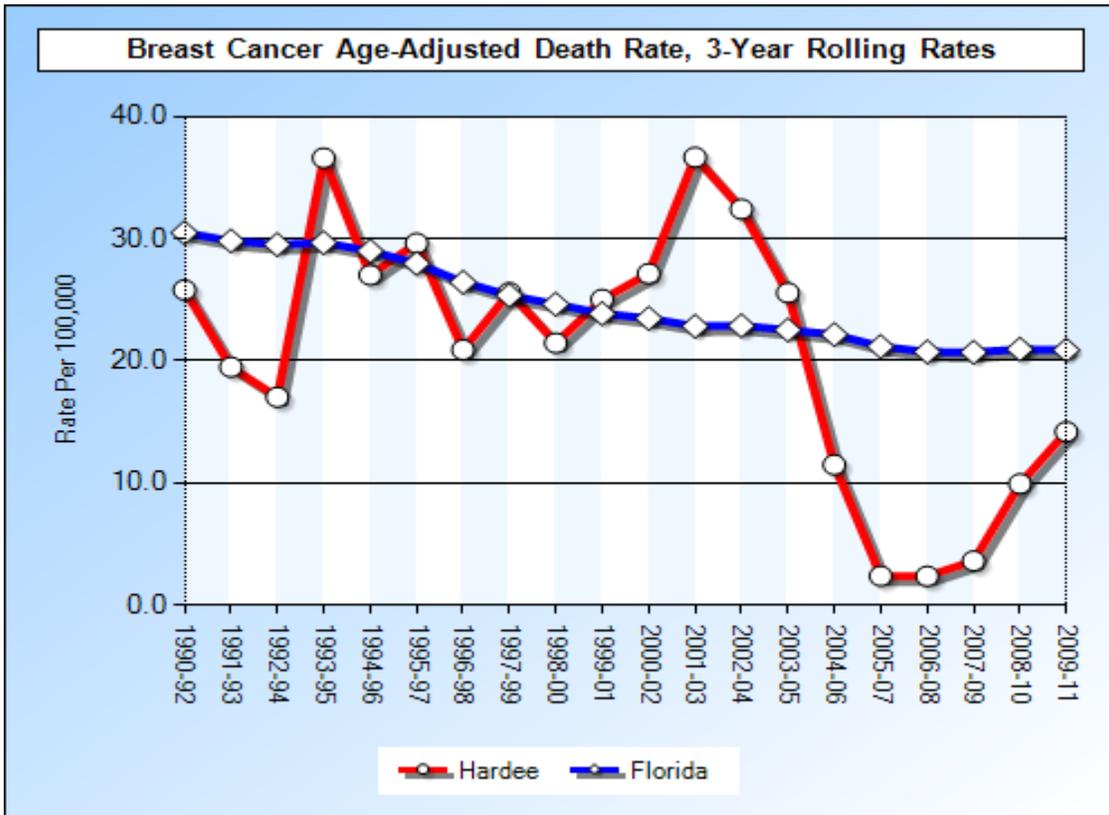
Death rates from breast cancer have declined dramatically over the past twenty years. In 1990-92, the age-adjusted breast cancer death rate was 25.8/100,000 women in Hardee County and 30.5/100,000 in Florida. By 2009-2011, the age-adjusted breast cancer death rate had dropped to 14.2/100,000 women in Hardee County and 20.9/100,000 in Florida.

White women that are Hardee County residents have a slightly lower rate of breast cancer deaths compared to white women that are Florida residents. The 2009-2011 age-adjusted breast cancer death rate for white women that are Hardee County residents is 15.4/100,000 versus white women that are Florida residents which is 20.2/100,000.

According to Florida Charts, since 2006 no black female Hardee County residents have died from breast cancer. The 2003/2005 age-adjusted breast cancer death rate for black women that are Florida Residents is 89.7/100,000 versus 2004-2011 age-adjusted breast cancer death rate for black women that are Hardee County residents is 0/100,000.

Regular mammograms are the best tests doctors have to find breast cancer early, sometimes up to three years before it can be felt. A mammogram is a special type X-ray of the breast. When breast cancer is found early, many women go on to live long and healthy lives. Having regular mammograms can lower the risk of dying from breast cancer. For women age 50 to 74 years, a screening mammogram at least every two years is currently recommended by the Centers for Disease Control. Women age 40 to 49 years should talk to their doctor about when and how often a screening mammogram should be scheduled.

# Breast



## Colorectal Cancer

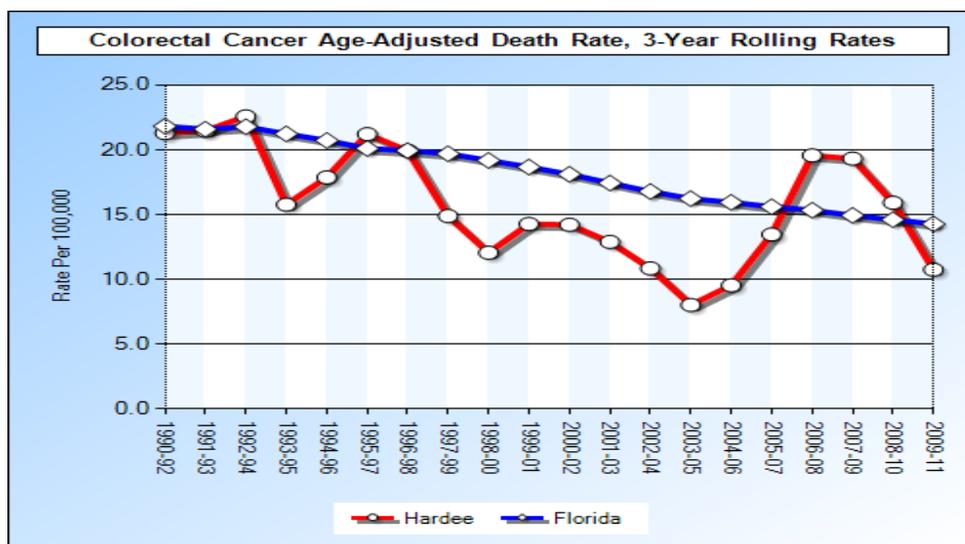
Colorectal Cancer is cancer that occurs in the colon or rectum. Sometimes it is called colon cancer. The colon is the large intestine or large bowel. The rectum is the passageway that connects the colon to the anus. The 2009-2011 age-adjusted colorectal death rate for Hardee County is 10.7/100,000 versus Florida at 14.3/100,000.

The 2009-2011 age-adjusted colorectal cancer death rate for Black Hardee County residents is 24.6/100,000 compared to Black Florida residents which is 18/100,000. White Hardee County residents have a slightly lower colorectal cancer death rate than the State of Florida residents. The 2009-2011 age-adjusted colorectal cancer death rate for White Hardee County residents is 8.9/100,000 versus White Florida residents which is 13.9/100,000.

Colorectal cancer is the second leading cancer killer in the United States, but it doesn't have to be. If everyone age 50 years or older had regular screening tests, at least 60% of deaths from this cancer could be avoided. Both men and women can get it. It most often found in people 50 or older. The risk increases with age. The risk for colorectal cancer may be higher than average if:

- The individual or close relative has had colorectal polyps or colorectal cancer.
- The individual has inflammatory bowel disease.
- The individual has a genetic syndrome such as familial adenomatous polyposis (FAP) or hereditary nonpolyposis colorectal cancer.

People at high-risk for colorectal cancer may need earlier or more frequent tests than other people. Colorectal cancer usually starts from polyps in the colon or rectum. A polyp is a growth that shouldn't be there. Over time, some polyps can turn into cancer. Screening tests can find polyps, so they can be removed before they turn into cancer. The decline in colorectal cancer deaths can be attributed to earlier detection and treatment.



Hardee County

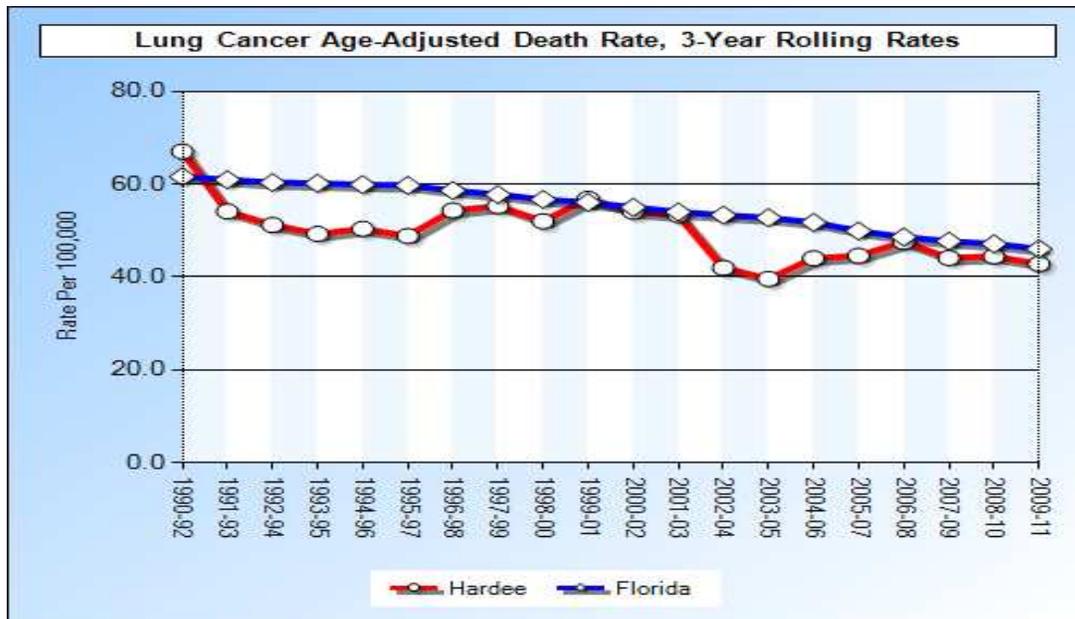
# Lung Cancer

More people in the United States die from lung cancer than any other type of cancer. This is true for both men and women. In the United States, deaths from lung cancer represent about one out of every six deaths from cancer.

Hardee County has a lower rate of lung cancer deaths than the State of Florida. The 2009-2011 age-adjusted lung cancer rate for Hardee County residents is 42.8/100,000 compared to Florida's residents which is 46.1/100,000. Florida attained the Health People 2010 goal of no more than 43.3/100,000 lung cancer deaths.

The 2009-2011 age-adjusted lung cancer death rate for Black Hardee County residents is 47.1/100,000 versus Black residents of Florida which is 37.4/100,000. The age-adjusted lung cancer death rate for White Hardee County residents is 41.5/100,000 compared to White Florida residents which is 47.6/100,000.

Smoking is the number one cause of lung cancer with 90% of cases in men and 80% of cases in women attributable to smoking.



Hardee County

## HEART DISEASES

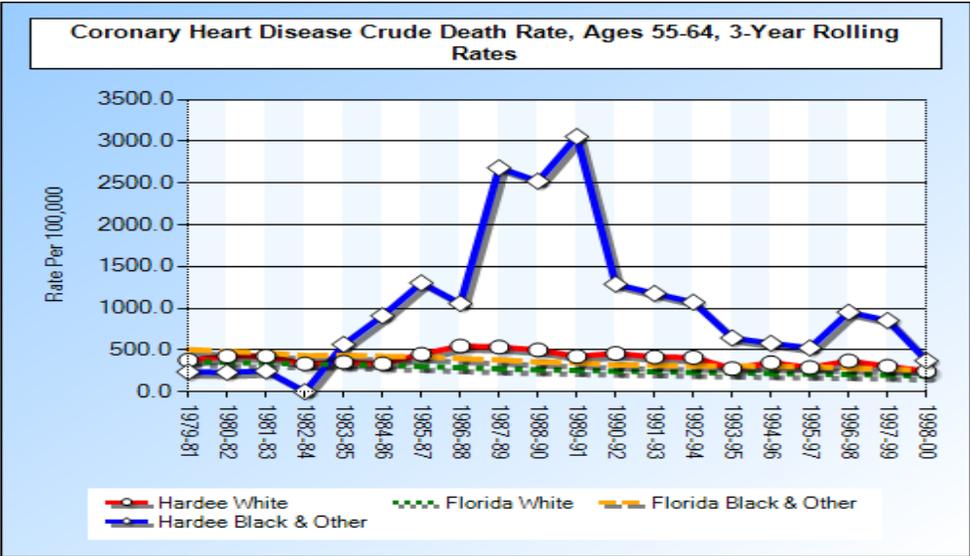
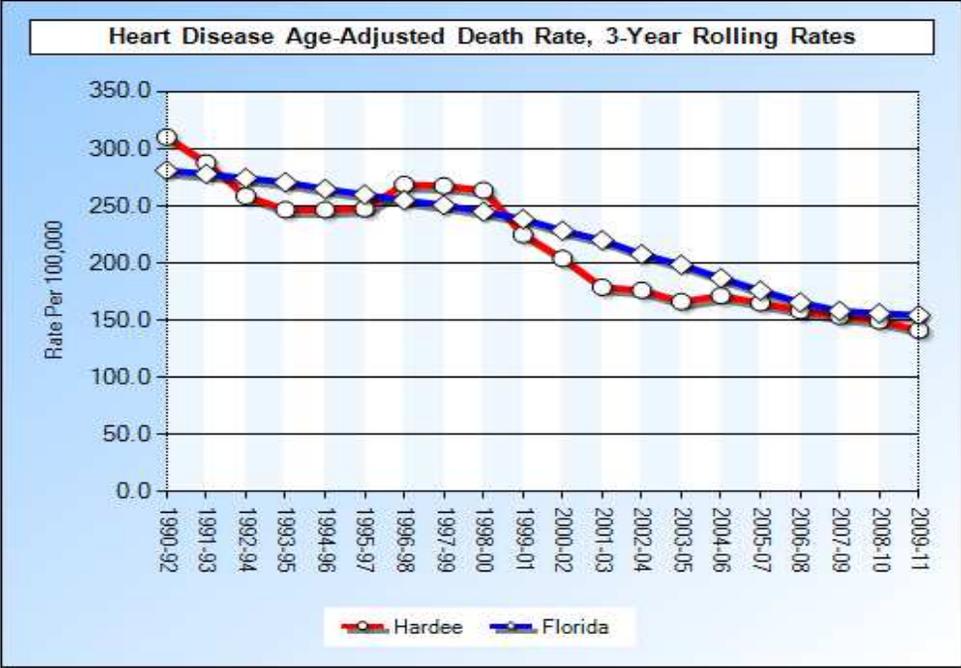
Heart diseases are the leading causes of death in Florida and the U.S. and the second leading cause of death in Hardee.

The most common heart disease in the U.S. is coronary heart disease, which often appears as a heart attack. In 2010, an estimated 785,000 Americans had a coronary attack, and about 470,000 had a recurrent attack. About every 25 seconds, an American will have a coronary event, and about one every minute will die from one.

In the U.S. in 2007, heart disease was the cause of death in 309,821 American men. The average age for a first heart attack for men is 66 years. Almost half of men who have a heart attack under age 65 die within 8 years. Between 70% and 89% of sudden cardiac events occur in men.

Although heart disease is sometimes thought of as a “man’s disease,” it is the leading cause of death for both women and men in the U.S. and women account for nearly 50% of heart disease deaths. In 2007, heart disease was the cause of death in 306,246 women in the United States. Heart disease is often perceived as an “older woman’s disease,” and it is the leading cause of death among women aged 65 years and older. However, heart disease is the third leading cause of death among women age 25-44 years and the second leading cause of death among women age 45-64 years.

In Hardee County and Florida, deaths from heart diseases have significantly declined over the past 20 years with death rates in Hardee consistent with statewide death rates for the past 5-7 years. In addition, Hardee has attained the Healthy People 2010 goal of no more than 119 heart diseases deaths per 100,000 with a 3-year age-adjusted heart diseases rate in 2007-2009 of 141.1/100,000.



## Heart Disease

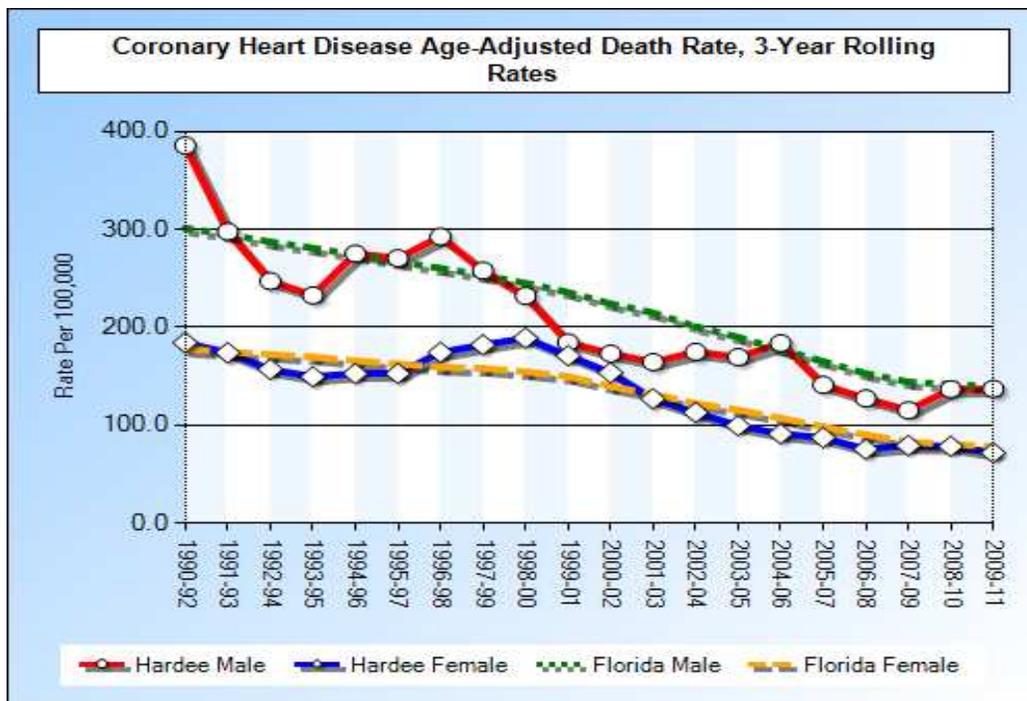
Deaths from coronary heart disease have followed a similar pattern as heart diseases overall for Hardee and Florida, including men and women as well as black and white. However, the 2007-2009 age-adjusted death rate from myocardial infarctions ( or heart attacks) in Hardee County (32.7/100,000) continues to significantly exceed the state rate(25.9/100,000). Hardee County has seen a 26% reduction in heart attacks deaths between the years of 2000-2009, while Florida has seen a 42% reduction in heart attacks deaths.

While heart attack death rates have declined for Hardee County men and women over the past decade, they have not declined as rapidly as for Florida men and women. Hardee County men have had a 22% decline in heart attack deaths compared to 45% for men in Florida. Hardee County women have had a 32% decline in heart attack deaths, while the women of Florida have had a 48% decline.

This pattern is different for black Hardee residents. Black Hardee residents have seen a 38% decline in heart attack death rates between 2000-2009 and while somewhat lower than the decline for black Floridians (49%), black Hardee residents actually have a lower rate of heart attack death (16.7/100,000) than black Floridians (35/100,000). However white Hardee residents have only seen a 16.0% decline in heart attack death rates compared to 46% decline for white Floridians and white Hardee residents have a higher rate of heart attack deaths (47.3/100,000) than white Floridians (29/100,000).

High cholesterol, high blood pressure, obesity, diabetes, tobacco use, unhealthy diet, physical inactivity, and secondhand smoke are modifiable risk factors associated with heart diseases. A report by The Institute of Medicine finds even brief exposure to secondhand smoke can trigger a heart attack. Tobacco smoke can cause health problems not only for smokers, but also for people around them. Breathing secondhand smoke increases a person's risk for a heart attack and other heart conditions. Never smoking or stopping smoking, maintaining a healthy weight, consuming a healthy diet, and getting regular moderate physical activity are the best weapons to fight heart diseases.

This pattern of significantly declining death rates from heart diseases is also seen for black men and women. Black Hardee residents have seen a 37% decline in heart disease mortality between 2000 and 2009 compared to a 29.5% reduction in heart disease mortality for white Hardee residents for the same time period. For 2007-2009, the age-adjusted death rate from heart diseases in Hardee for blacks (141.1/100,000) is lower than the death rate from heart diseases for white Hardee residents (160.2/100,000) and is significantly lower than black Floridians (190.3/100,000). The Healthy People 2010 goal of no more than 162 heart diseases deaths per 100,000 has essentially been attained for Hardee.



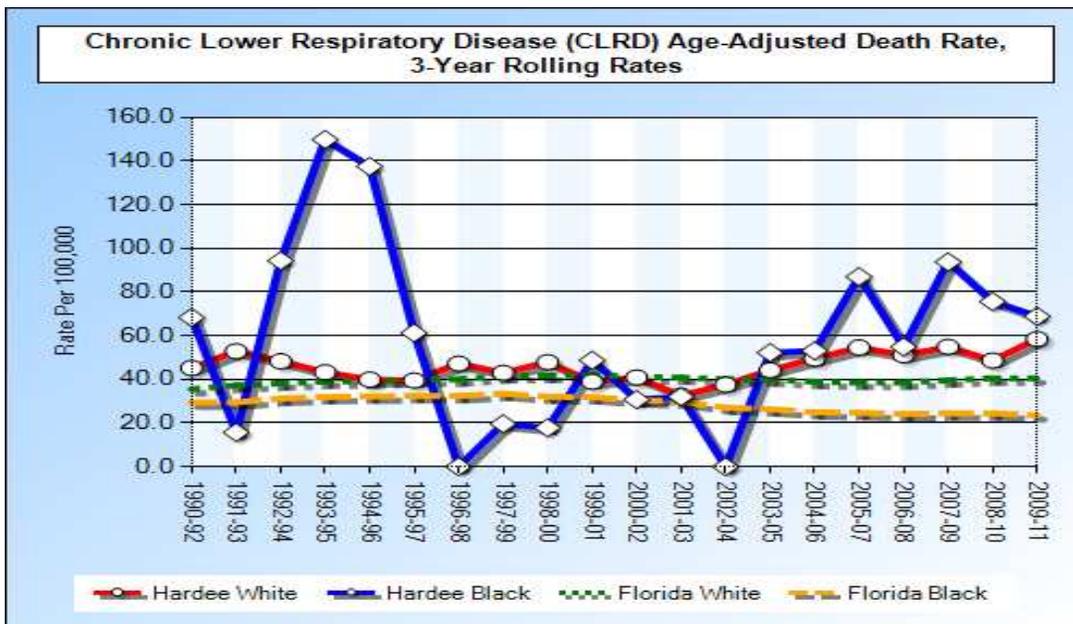
# CHRONIC LOWER RESPIRATORY DISEASES

Chronic Lower Respiratory Diseases (CLRD), many times called Chronic Obstructive Pulmonary Disease (COPD), refers to a group of diseases that cause airflow blockage and breathing-related problems. CLRD generally includes chronic bronchitis and emphysema, although some forms of asthma can also include a component of CLRD.

Chronic bronchitis is defined as a chronic productive cough for three months in each of two successive years in a patient in whom other causes of chronic cough have been excluded. Emphysema is defined as abnormal and permanent enlargement of the smallest airspaces in the lungs and is accompanied by destruction of these small airspace walls. This reduces the number of small air sacs and keeps some of the oxygen entering the lungs from reaching the bloodstream.

For people with chronic bronchitis or emphysema breathing is difficult. Neither disease strikes suddenly and the symptoms of both are often ignored until the disease process is advanced. The leading cause of CLRD is smoking.

Although both Hardee and Florida attained the Healthy People 2010 goal of no more than 62.3 CLRD deaths per 100,000, Hardee residents have a significantly lower rate of CLRD deaths than Floridians. While the trend for CLRD deaths in Florida is relatively stable over time, Hardee deaths from CLRD are increasing.



## Risk factors for chronic bronchitis and emphysema include the following.

**Smoking.** Chronic bronchitis and emphysema are most likely to develop in cigarette smokers, but cigar and pipe smokers also are susceptible, and the risk for all types of smokers increases with the number of years and amount of tobacco smoked.

**Age.** Although the lung damage that occurs in chronic bronchitis and emphysema develops gradually, most people with tobacco-related CLRD begin to experience symptoms of the disease between the ages of 40 and 60.

**Exposure to secondhand smoke.** Secondhand smoke, also known as passive or environmental tobacco smoke, is smoke that is inadvertently inhaled from someone else's cigarette, pipe or cigar. Being around secondhand smoke increases the risk of chronic bronchitis and emphysema.

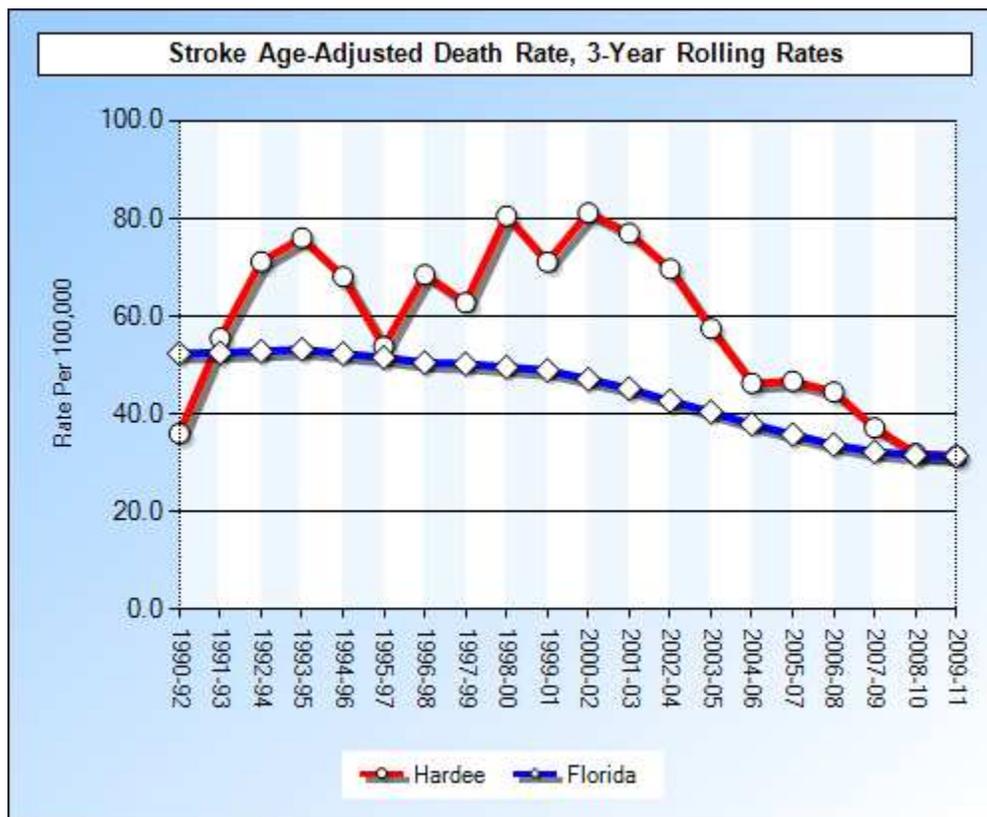
**Occupational exposure to fumes or dust.** Breathing fumes from certain chemicals or dust from grain, cotton, wood, or mining products, increases the risk of developing CLRD. This risk is even greater for those who also smoke.

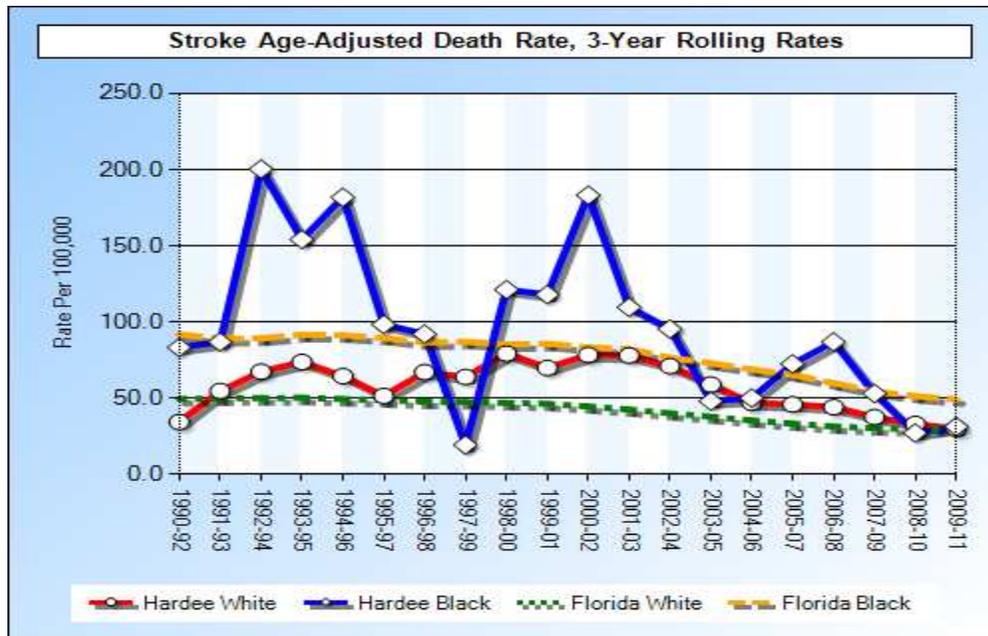
**Exposure to indoor and outdoor pollution.** Breathing indoor pollutants, such as fumes from heating fuel, as well as outdoor pollutants, car exhaust for instance, increases risk of developing CLRD.

# STROKE

Stroke is the fifth leading cause of death for Hardee County and Florida. A stroke occurs when a clot blocks the blood supply to the brain or when a blood vessel in the brain bursts. Stroke can cause death or significant disability, such as paralysis, speech difficulties, and emotional problems. Ischemic strokes, which occur when blood clots block the blood vessels to the brain, are the most common type of stroke, representing about 85% of all strokes. Stroke is a leading cause of serious long-term disability. Although stroke risk increases with age, strokes can and do occur at any age. Nearly one quarter of strokes occur in people under the age of 65. The country's highest death rates due to stroke are in the southeastern United States.

In Hardee County, the death rate from stroke in the late 1980's and early 1990's was lower than Florida. There was a sharp rise in stroke death rates during the late 1990's and early 2000's. Hardee County (86%) is almost double the rate of stroke deaths in Florida (42.4%) and the United States(56%). These rates are based per 100,000 persons.





Stroke can be prevented by making healthy lifestyle choices and managing medical problems. Choosing healthy meal and snack options can help avoid stroke and its complications. Eating foods low in saturated fat and cholesterol and high in fiber as well as fresh fruits and vegetables can help prevent high blood cholesterol. Limiting salt or sodium in your diet can lower blood pressure. Being overweight or obese can increase the risk for stroke. Physical activity can help maintain a healthy weight and lower cholesterol and blood pressure. Cigarette smoking greatly increases the risk for stroke. Avoid drinking too much alcohol, which causes high blood pressure.

People with high cholesterol, high blood pressure, diabetes, or heart disease, can take steps to lower the risk for stroke. These include cholesterol checks at least every five years, regular blood pressure checks, managing diabetes and closely monitoring blood sugar, and taking all medications prescribed to treat high cholesterol, high blood pressure and diabetes.

Finally, when symptoms of a stroke occur, early action is the key to survival and reducing disability. In a 2005 survey of Americans, while most respondents 93% recognized sudden numbness on one side as a symptom of stroke, only 38% were aware of all major symptoms and knew to call 9-1-1 when someone was having a stroke. Patients who arrive at the emergency room within three hours of their first symptoms tend to be healthier three months after a stroke than those whose care was delayed.

# UNINTENTIONAL INJURIES

## THE LEADING CAUSE OF UNINTENTIONAL INJURY DEATH VARIES BY AGE.

An unintentional injury is defined as an injury not intended as self-harm or as intentional harm to another person. It is a general term that refers to harm caused by falls, drowning, blows, burns, motor vehicle crashes, etc. In the U.S., millions of people injure themselves every year. Injury mortality rates reflect the health and well-being of the population as well as the quality of the health care available. For Hardee County, Florida, and the U.S., the leading cause of death for ages 1-44 is unintentional injuries.

## INFANTS LESS THAN 1 YEAR

Infants in Florida who die before their first birthday from unintentional injury are most commonly suffocated. Suffocation was the leading cause of unintentional injury death for infants in Florida in 2009. In Florida, 95 infants died by suffocation in 2009. Adults rolling over on infants while co-sleeping in either a chair or bed is the most common mechanism of suffocation. Other mechanisms include infants suffocating in bedding or toys placed in cribs, infant carriers/swings, or playpens. Hardee County only had 1 out of 6 infants die due to suffocation.

## YOUNG CHILDREN 1 – 4 YEARS OLD

The leading cause of unintentional injury for this age group in Florida in 2009 was drowning. Florida leads the country in drowning deaths of young children. Drowning can be a silent catastrophe, one that can happen in the few minutes it takes to answer a phone call, run inside for a towel or put in a load of laundry. In 2008, 71% of drowning deaths occurred in residential swimming pools. However, motor vehicle crashes are the leading cause of death to Hardee County children ages 1-4.

Hardee County 2010 drowning deaths were 0 however, there were 3 near drowning incidents reported. For the past decade, Hardee County's three-year average for drowning deaths was less than two for this age group.

### Multiple layers of protection are the key to prevention:

The first layer is supervision, meaning that someone is always watching young children when they are in the water.

The second layer is barrier protection. All pools should have at least one layer of barriers and preferably more, even if the pool owner doesn't have any children. Young children should never be allowed in a pool area unless under the supervision of an attentive adult.

The third layer is emergency preparedness. Everyone should know CPR, including child CPR, and have easy access to a phone to call 911.



## CHILDREN, ADOLESCENTS, AND YOUNG ADULTS

The leading cause of unintentional injury death for ages 5 – 24 in Florida and in Hardee in 2010 was motor vehicle crashes. Approximately 3-5 young Hardee County youth die every year in motor vehicle accidents.

Thousands of Floridians are killed each year in preventable motor vehicle crashes. The following evidence based strategies are proven to save lives and money.

Primary enforcement seat belt law that covers all seating positions. Strong child passenger safety policies that require age and size appropriate child safety and booster seats.

Comprehensive graduated drivers licensing (GDL) system to help young drivers gain experience under lower-risk conditions. Universal motorcycle helmet law that requires all riders to wear helmets.

## ADULTS 25 – 64 YEARS OLD

In the U.S., unintentional poisoning deaths have increased 145% since 1999, with 93% of these deaths the result of drug overdose—most commonly from opioid pain medications such as methadone, hydrocodone, or oxycodone.

Of the most populous states in the nation, California and New York have some of the lowest rates of unintentional poisonings from opioid drugs while Florida has one of the highest rates. Among emergency department visits for the misuse or abuse of drugs, legal drugs have caught up with illegal drugs. In addition, men are more likely to die of unintentional poisoning than women in this age group.

The leading cause of unintentional injury death in Florida in 2009 for adults 25 – 64 years of age is unintentional poisoning. Motor Vehicle Crash deaths for age 25-64 years seem to be the leading cause of unintentional injury deaths for Hardee County.



## Unintentional Fires

Thanks to advances in fire safety, rescue, and prevention, deaths from fires have declined over the years to the low rates seen today, both nationally and in Florida,<sup>1</sup> However, significant disparities still exist, as Florida's seniors ages 75 and over had 2-3 times the death rate from unintentional fire-related injuries in 2005 than the general population. In 2005:

There were 133 unintentional fire-related deaths and 501 unintentional fire-related hospitalizations of Florida residents.

Males made up 66% of unintentional fire-related deaths and 76% of unintentional fire-related hospitalizations, while females made up 34% of unintentional fire-related deaths and 24% of unintentional fire-related hospitalizations.

Whites made up more than two-thirds of unintentional fire-related deaths and hospitalizations, and Hispanics made up 8% of deaths and 12% of hospitalizations. Blacks made up 15% of unintentional fire-related hospitalizations and 20% of unintentional fire-related deaths.

Eighty-seven percent (87%) of fatal unintentional fire-related injuries and at least 23% of unintentional fire-related injuries resulting in hospitalization occurred at home (62% of hospitalizations did not indicate place of fire occurrence).

Females ages 85 and over had the highest unintentional fire-related death rate that was 3 times higher than the general population rate. Males ages 15-19 had the highest unintentional fire-related hospitalization rate that was 2.5 times higher than the general population rate.

Hardee County's national incident fire reporting systems (NIFRS) year end call volume data for 2009 breaks down into the following:

- Fire Calls 265
- Overpressure/Explosion 2
- Rescue/EMS 1,989
- Hazardous Condition 103
- Service Call 88
- Good Intent 371
- False Alarm/False Call 176
- Special 9
- Other/Unclassified 75
- **Grand Total Calls 3,078**

## Unintentional Falls

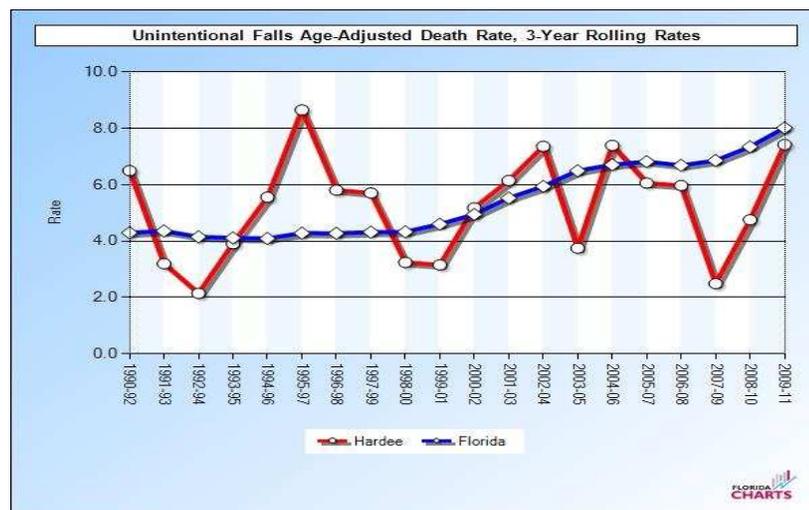
Fall-related injuries occur most often among the elderly, especially after age 75. With 17% of Florida's resident population aged 65 and older in 2005, fall-related injuries are a significant cause of injury mortality and morbidity, especially hospitalizations, that is only expected to increase in coming years, as the state's senior population continues to grow. In 2005: There were 1,685 deaths and 46,236 hospitalizations due to unintentional fall-related injuries of Florida residents.

Unintentional fall-related deaths made up 14% of all injury deaths and 19% of all unintentional injury deaths. Unintentional falls were the leading cause of all injury hospitalizations (40%) and the leading cause of all unintentional injury hospitalizations (55%).

Males made up 53% of unintentional fall-related deaths, but only 36% of hospitalizations. Females made up 47% of unintentional fall-related deaths, but 64% of hospitalizations. Whites made up 86% of unintentional fall-related deaths, Hispanics 8%, and Blacks 5%. Similarly, Whites made up 81% of unintentional fall-related hospitalizations, Hispanics 12%, and Blacks 5%.

Over three-quarters of fatal unintentional falls and one-quarter of hospitalized unintentional falls occurred at home or in residential institutions (two-thirds of hospitalizations did not indicate place of fall occurrence). After age 65, the rates of fall-related deaths and hospitalizations increase exponentially to their highest rates. Males ages 65 and over had the highest unintentional fall-related death rates, while females ages 65 and over had the highest unintentional fall-related hospitalization rates.

Hardee County has varied over the last 20 years at being below state level, equal to state level and above state level. As of 2011, Hardee County 7.6% was slightly below state level (8%).



Hardee County

# Motor Vehicle Accidents

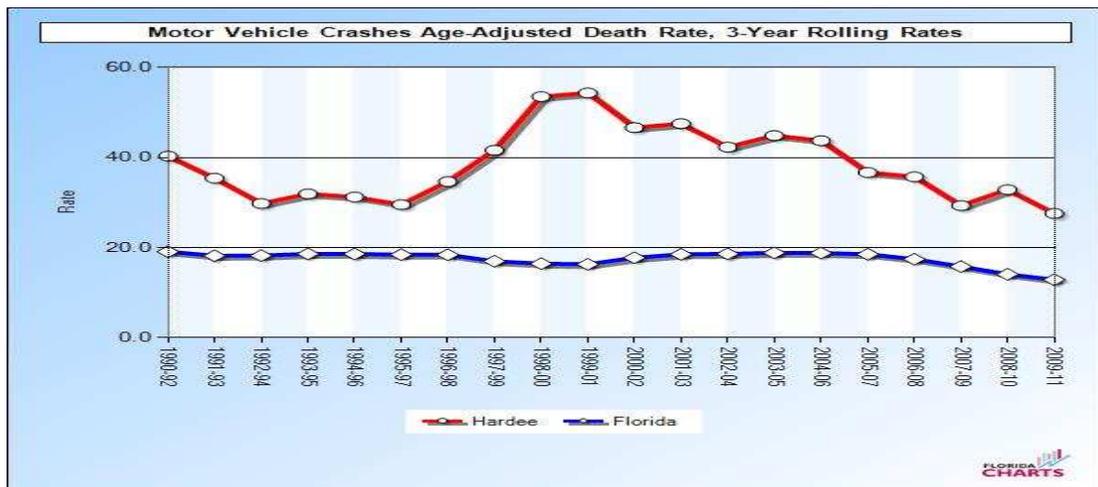
Between 1999-2004, Florida had the highest motor vehicle traffic injury death rate among the five largest states in the nation (California, Texas, New York, Florida, and Illinois) that was 23% higher than the national rate.<sup>1</sup> A study released in 2004 found that five of the top 10 most dangerous cities in the nation for pedestrians were in Florida.<sup>2</sup> A secondary enforcement seat belt law, lack of a child booster seat law, and the repeal of a universal motorcycle helmet law in 2000 present additional challenges to traffic safety in Florida's motoring environment. In 2005: There were 3,491 deaths and 16,893 hospitalizations of Florida residents due to motor vehicle accidents.

Males made up 72% of motor vehicle accident-related deaths and 64% of motor vehicle accident-related hospitalizations. Females made up 28% of motor vehicle-related deaths and 36% of motor vehicle-related hospitalizations.

Motor vehicle occupants made up 68% of motor vehicle accident-related deaths, pedestrians 16%, motorcyclists 13%, and pedal cyclists 3%. Motor vehicle occupants made up 70% of motor vehicle accident-related hospitalizations, motorcyclists 17%, pedestrians 10%, and pedal cyclists 3%.

Males ages 20-24 had the highest motor vehicle accident-related death and hospitalization rates.

Hardee County, although has had a declining trend in the last decade still remains the most leading cause of death for 24-65 year olds. Hardee rates at 27.6 % while the State rates at 12.9% as of 2011.



## Traumatic Brain Injuries

Traumatic brain injury (TBI) is one of the leading types of injury to the body. Thirty-one percent (31%) of all injury deaths of Florida residents in 2005 had a TBI diagnosis documented as a contributing cause of death, and 14% of all hospitalizations for injuries had TBI documented as a principal or secondary diagnosis. In addition, there are an unknown number of mild TBI cases in the general population that go untreated and undiagnosed. In 2005:

There were 3,911 deaths of Florida residents in which a TBI diagnosis was documented as an immediate and/or contributing cause of death. There were 16,859 hospitalizations for injuries of Florida residents in which TBI was documented as a principal or secondary diagnosis.

Males made up almost three-quarters of TBI deaths and almost two-thirds of TBI hospitalizations, while females made up more than one-quarter of TBI deaths and more than one-third of TBI hospitalizations.

Whites made up nearly three-quarters of TBI deaths, Hispanics 13%, and Blacks 11%. Similarly, Whites made up 69% of TBI hospitalizations, Hispanics 15%, and Blacks 11%.

The top three mechanisms of TBI deaths were motor vehicle traffic and non-traffic (33%), firearms (31%), and falls (23%). The top three mechanisms of TBI resulting in hospitalizations were falls (33%), motor vehicle traffic and non-traffic (31%), and struck by/against (7%), while 18% of TBI hospitalizations did not indicate a mechanism of injury.

Traumatic brain injury-related death and hospitalization rates increase exponentially after age 65. Males ages 85 and up had the highest rates overall.

Hardee County has one of two Private Brain Injury facilities in the State of Florida. People from all over the United States and the Caribbean come to this facility to recover the best they can from a brain injury.

## NON-FATAL UNINTENTIONAL INJURIES REQUIRING AN EMERGENCY DEPARTMENT VISIT

Unintentional injury is a frequent reason for a visit to the emergency room. In Florida in 2009, falls were the most common reason for a visit to the emergency room for all ages. Falls are the leading cause of an emergency room visit for infants, children 1 – 9 years, and adults 25 years and older.

In 2009, unintentional injuries resulted in 137 visits to an emergency department for Hardee residents. The age-adjusted rate for emergency room use for unintentional injuries is higher in Hardee (498.8/100,000) than Florida (413.8/100,000).

Just over 36% of emergency department visits in Hardee County in 2009 were for unintentional falls. This percentage varies greatly by age. For adults 65 years and older, 75% of emergency department visits are for falls. Falls account for almost 93% of emergency department visits for adults age 75 years and older.

For children ages 14 and younger, playground-related falls are the leading cause of emergency department visits. About 45% of playground-related falls are severe including fractures, internal injuries, concussion, dislocations, and amputations. The majority of nonfatal injuries related to playground equipment occur on public playgrounds, including schools and child care centers. The majority of injuries on public playgrounds occur on climbing equipment. On home playgrounds, swings are responsible for most injuries.

While all children are at risk, girls sustain injuries (55%) slightly more often than boys (45%). Children ages 5 to 9 have higher rates of emergency department visits for playground injuries than any other age group.

In order to prevent children from sustaining injuries related to falls, all playground equipment should be properly designed and maintained. There should always be a safe, soft landing surface below playground equipment. Children who participate in active sports such as biking and skateboarding should wear protective gear such as wrist guards, knee and elbow pads, and a helmet. Finally adult supervision is the key to prevention. Young children should be supervised at all times around fall hazards, such as stairs and playground equipment, whether play is occurring at home or on a public or private playground.

Preventing falls in working age adults focuses on slip, trip, and fall prevention in the workplace. Workplace falls can occur in any workplace setting from construction sites, to retail stores, or even healthcare settings. A comprehensive fall prevention plan should be in place in all workplace settings. Preventing falls in older adults can be accomplished through regular exercise to maintain muscle mass, with a focus on weight bearing exercise to maintain strength and balance. In addition, physicians should review all prescription and over the counter medications with older adults to minimize interactions that can lead to dizziness or drowsiness.

# COMMUNICABLE DISEASES

Communicable diseases, sometimes called infectious diseases, are illnesses caused by organisms such as bacteria, viruses, fungi, and parasites. Communicable diseases may be transmitted from one person to another. Transmission may occur from one infected person directly to another, from an animal to a human, or from an inanimate object such as a doorknob to a person.

The state of Florida has over 90 diseases that are mandated by Florida Administrative Code to be reported to the local county health departments. Since communicable diseases can spread rapidly and easily, the Hardee County Health Department continuously monitors those reports. Most disease reports involve a single case or family. Rapid response and follow up to cases is necessary to prevent widespread infection and epidemics.

Cases reported in Hardee County most often include hepatitis, enteric diseases, and some vaccine preventable diseases. Hepatitis cases generally account for 60-65% of the annual reportable diseases in Hardee. Enteric diseases, usually caused by salmonella, are second, followed with smaller numbers of vaccine-preventable diseases.

Epidemics are the occurrence of more cases than would be expected in a certain timeframe. Outbreaks are epidemics limited to a localized increase in the incidence of the disease. Hardee County outbreak investigations in the past three years have involved noroviruses, varicella, and pertussis.

The Hardee County Health Department strives to promote the health of Hardee County residents and visitors by working with community partners to limit the spread of infectious diseases such as Salmonella, E-coli, Chicken pox, Rabies and more. Epidemiology programs are responsible for investigating infectious disease occurrences, tracking disease trends, providing screening and treatment options, and developing outreach and educational activities to increase awareness about disease prevention efforts.

## ENTERIC DISEASE

Enteric infections are infections that cause gastrointestinal symptoms such as diarrhea and vomiting. These infections can be caused by ingestion of food or water that is contaminated with a bacteria, virus, or protozoa.

Thorough case investigation with food sources, dietary intake, travel history, and water exposure is needed to help determine the source of infection. Food and waterborne investigations may be performed jointly with other regulatory agencies in the state. Florida and Hardee County have seen an increase in the rate of enteric disease since 2008.

## HEPATITIS

Hepatitis is an inflammation of the liver caused by a group of viruses. The most common types are Hepatitis A, Hepatitis B, and Hepatitis C. Hepatitis is the leading cause of liver cancer and the most common reason for liver transplantation. There are common symptoms with all types of hepatitis, but the infectious route varies.

For instance, Hepatitis A is transmitted by a fecal-oral route and may come from contaminated food or water. Hepatitis B may be sexually transmitted. Hepatitis C transmission is most commonly seen with the sharing of needles. Chronic Hepatitis C is the most commonly reported communicable disease in Hardee County.

While hepatitis incidence rates have declined in Florida between 2008-2010, they have also declined during the same time period in Hardee County.

## SEXUALLY TRANSMITTED DISEASE

Sexually transmitted diseases or infections (STD/STI) are among the most common of reportable diseases. They are spread from person to person through sexual contact. The rate of STD/STI in Florida has increased between 2001 and 2010 while the rate of STD/STI in Hardee has decreased.

Chlamydia is the most frequently reported STD in the state and in Hardee County. Chlamydia often has no symptoms and may be transmitted unknowingly to sexual partners. Left untreated, Chlamydia can lead to infertility in women. Treatment for Chlamydia should also include sexual partners, to prevent recurrence of the disease. Following a relatively stable rate between 2003 and 2006, chlamydia rates across the state and in Hardee County are now on the rise.



## Gonorrhea

Gonorrhea is also a bacterial STD that can be treated with antibiotics, although antibiotic drug resistant strains of gonorrhea are always emerging requiring practitioners to stay current on appropriate treatment of gonorrhea. Following decreases in the incidence of gonorrhea during the mid part of the decade, rates of gonorrhea in 2010 were nearly as high as in 2001. Hardee County had 9 reported cases for 2010.

## Syphilis

Syphilis is a bacterial STD that occurs in multiple stages. Early symptoms include open lesions and rash and may progress later to disorders of the nervous system and heart if not treated properly with appropriate antibiotics. Syphilis cases in Hardee County remain much lower than in other parts of the state.



## HIV/AIDS

The Human Immunodeficiency Virus (HIV) that causes Acquired Immune Deficiency Syndrome (AIDS) continues to be a significant public health issue. HIV is spread through sexual contact, needle sharing, breastfeeding, and during pregnancy and birth. By the end of 2007, the estimated number of adults and adolescents living with AIDS in the United States was highest in the South and Northeast and lowest in the Midwest. Of the 455,000 plus adults, adolescents and children living with AIDS in the 50 states and the District of Columbia in 2007 approximately 40% lived in the South. Of the AIDS deaths in 2007, 50% died in the South.

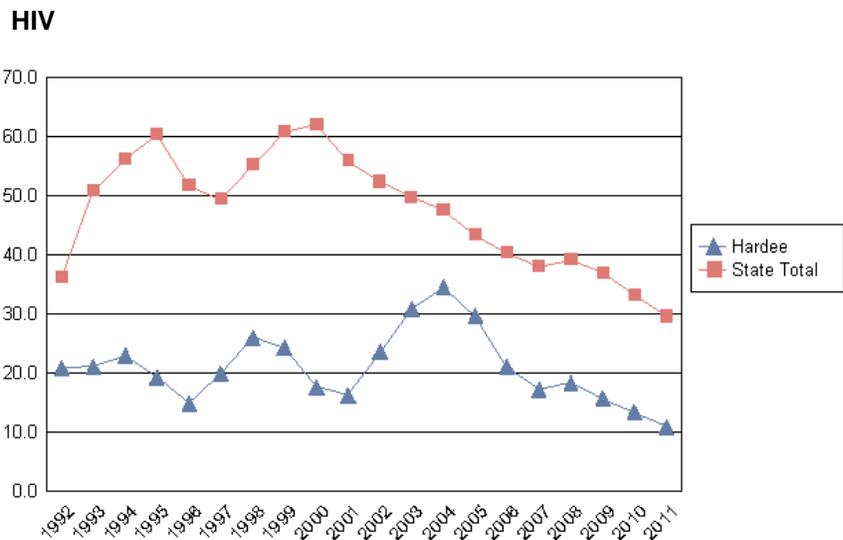
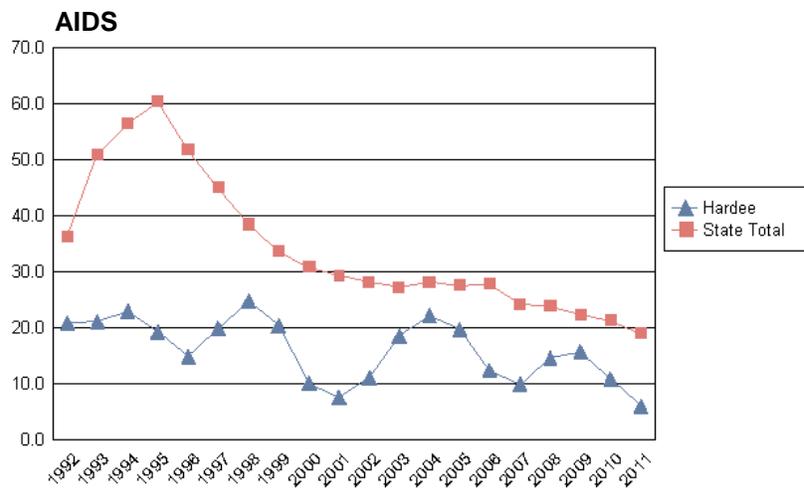
The Centers for Disease Control and Prevention (CDC) estimates that more than one million people are living with HIV in the United States. One in five (21%) of those people living with HIV is unaware of their infection. Although the transmission of HIV has declined significant since the 1980s, new infections continue at far too high a level with an estimated 56,300 Americans becoming infected with HIV each year.

Since 2006, the CDC recommends that in all health care setting, screening for HIV infection should be performed routinely for all patients aged 13 – 64 years unless the health care provider can document an HIV infection rate of <0.1% in their practice population. Any patient diagnosed with TB and all patients seeking treatment for sexually transmitted diseases should be routinely screened for HIV during each visit. All pregnant women in the United States should be screened for HIV infection at least once and. Health care providers should subsequently test all persons likely to be at high risk for HIV annually.

Persons likely to be at high risk include injection drug users and their sex partners, persons who exchange sex for money or drugs, 63 sex partners of HIV-infected persons, and men having sex with men or heterosexual persons who themselves or who sex partners have had more than one sex partner since their most recent HIV test.

Effective anti-retroviral treatments exist for persons living with HIV/AIDS and have changed the course of the infection with people living significantly longer changing the management of HIV/AIDS from an acute infectious disease process into a chronic, life-long illness.

The rate of HIV/AIDS cases in Hardee (14 combined cases) is significantly lower than the state (48 combined cases) overall (per 100,000). The spike in reported HIV cases in both Hardee and Florida in 2007 reflected enhanced reporting laws that were implemented in November 2006 and the expansion of electronic lab reporting in 2007.



# TUBERCULOSIS

Tuberculosis (TB) is a bacterial infection caused by *Mycobacterium tuberculosis*. The TB bacteria usually attack the lungs, but can attack any part of the body. If not treated properly, TB can be fatal. TB bacteria are expelled into the air when a person with active TB infection coughs, sneezes, speaks or sings. Not everyone infected with TB bacteria becomes sick. As a result, two TB-related conditions exist: latent TB infection and active TB disease.

When the TB bacteria live in the body without making the person sick, this is called **latent TB infection (LTBI)**. In most people who breathe in TB bacteria and become infected, the body is able to fight the bacteria to stop them from growing. People with latent TB infection do not feel sick and do not have any symptoms. The only sign of TB infection is a positive reaction to the tuberculin skin test. People with latent TB infection are not infectious and cannot spread TB bacteria to others. However, if TB bacteria become active in the body and multiply, the person will get sick with TB disease. TB disease results when the TB bacteria become active. This happens when the immune system can't stop them from growing.

When TB bacteria are active (multiplying in the body), this is called TB disease. TB disease will makes people sick. People with TB disease may spread the bacteria to people they spend time with every day.

Many people who have latent TB infection never develop TB disease. Some people develop TB disease soon after becoming infected (within weeks) before their immune system can fight the TB bacteria. Other people may get sick years later, when their immune system becomes weak for another reason.

For persons whose immune systems are weak, especially those with HIV infection, the risk of developing TB disease is much higher than for persons with normal immune systems.

The rate of TB in Florida has been decreasing in the last 20 years. Hardee County TB rates are historically lower than Florida's, but remained steady between 1996 and 2007. In the past 3 years, rates of TB cases have begun to decline in Hardee County. All cases of TB are reported to the Hardee County Health Department and co-managed with local physicians regardless on income status or insurance status. Currently there are 86 patients in therapy for TB.

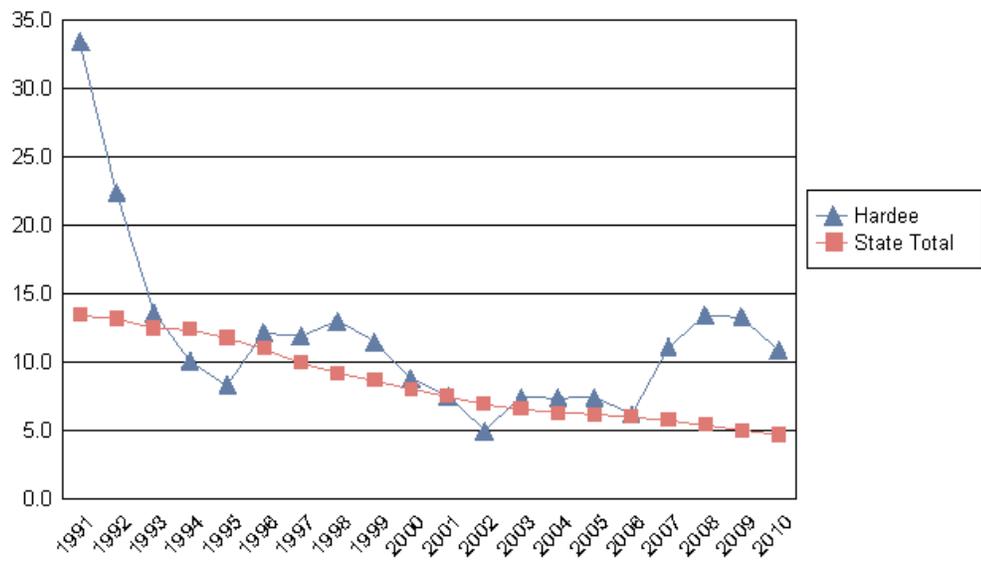
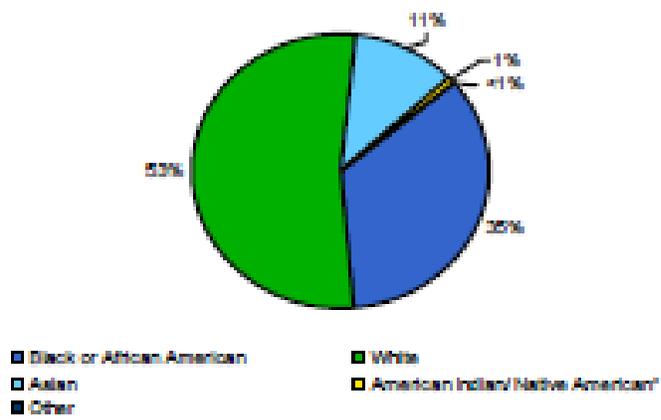


Figure 3. Tuberculosis Cases by Race, Florida, 2010



# MATERNAL AND CHILD HEALTH

The health of women of child-bearing age, infants and children is of great importance to a community's well being. The health of this segment of the population predicts the health of the next generation. Maternal and child health addresses many issues:

- those that affect pregnant and postpartum women,
- those that affect infants' health,
- those that affect infant survival such as infant mortality rates,
- birth outcomes and prevention of birth defects,
- access to preventive care, and
- fetal, perinatal and other infant deaths.

## WOMEN OF CHILD-BEARING AGE: BIRTH RATES

In Florida and in Hardee County, the birth rate has dropped over the past ten years (1999-2009). In 2010 the birth rate in Hardee County was less than 1% (435) of the states births. In 2010, there were more than 214,500 births in the state of Florida. The need for Healthy Start services increased, which is an indicator of the difficult times faced by pregnant women, new moms, and families.

# PRENATAL CARE

Women in Hardee County fail to meet the Healthy People 2010 goal of 90% of births with prenatal care in the first three months of pregnancy. In Hardee County, 60% of women enter prenatal care in the first three months of pregnancy. Florida has higher rates of entry into prenatal care at 77%.

Another way to assess the adequacy of prenatal care is the Kotelchuck Index. The Kotelchuck Index uses two pieces of information obtained from birth certificate data-when prenatal care began (initiation) and the number of prenatal visits from when prenatal care began until delivery (received services). The Kotelchuck index classifies the adequacy of initiation as follows.

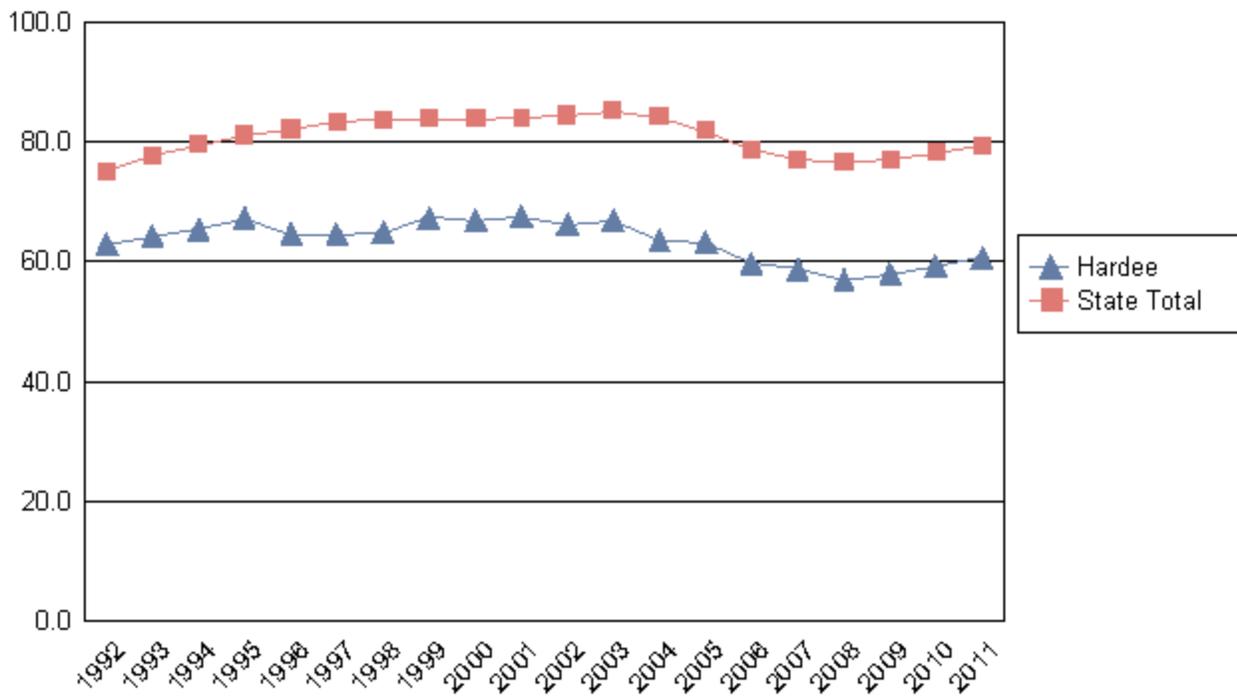
- Pregnancy months 1 and 2
- Months 3 and 4
- Months 5 and 6
- Months 7 to 9

To classify the adequacy of received services, the number of prenatal visits is compared to the expected number of visits for the period between when care began and the delivery date. The expected number of visits is based on the American College of Obstetricians and Gynecologists prenatal care standards for uncomplicated pregnancies and is adjusted for the gestational age when care began and for the gestational age at delivery.

A ratio of observed-to-expected visits is calculated and grouped into four categories.

1. Inadequate (received less than 50% of expected visits)
2. Intermediate (50%-79%)
3. Adequate (80%-109%)
4. Adequate Plus (110% or more)

The final Kotelchuck index measure combines these two items into a single summary score. The profiles define adequate prenatal care as a score of 80% or greater on the Kotelchuck Index. Receiving early prenatal care can help detect health problems of the mother, which when treated, can lead to better birth outcomes. There are also some types of health conditions of the infant that can be detected and treated while the mother is still pregnant.



Hardee County Verses State Totals for Births with Prenatal Care in First Trimester

## INFANT MORTALITY

Infant mortality is defined as the death of any child less than one year of age. Infant mortality and birth weight statistics are used extensively in public health. These statistics are especially useful because of their relevance as maternal and child health indicators and because of their ease of availability. These data are also virtually 100 percent complete since they are recorded for every birth and death that occurs in the state.

Despite the dramatic decline in infant mortality during the 20th century, the U.S. infant mortality rate has reached a plateau in the first few years of the 21st century. The U.S. infant mortality rate is higher than rates in most other developed countries. The relative position of the United States in comparison to countries with the lowest infant mortality rates, is worsening. In 2004, the 67 United States ranked 29th in the world in infant mortality, tied with Poland and Slovakia. Previously, the United States international ranking in infant mortality was 12th in 1960 and 23d in 1990. In 2004 (the latest year that data are available for all countries), the United States ranked 29th in the world in infant mortality, tied with Poland and Slovakia (5).

Infant mortality is defined as a death in the first year of life. In Hardee County, the infant mortality rate was at 13.8, which reflects 6 infant deaths. This rate is highly variable number in a county with less than 500 births a year. When we review the deaths in our community, every year we find that these losses were primarily to women who did not seek prenatal care, were not screened for Healthy Start, and did not receive services that could have had a potential positive impact on the mother, baby, and family.

There are large differences in infant mortality rates by race and ethnicity. Non-Hispanic black, American Indian or Alaska Native, and Puerto Rican women have the highest infant mortality rates; rates are lowest for Asian or Pacific Islander, Central and South American, and Cuban women.

Preterm birth has a considerable impact on the U.S. and state infant mortality rate. The plateau in the U.S. infant mortality rate from 2000 to 2005 is due to an increase in the percentage of infants born preterm (including very preterm and late preterm), together with a lack of decline in the infant mortality rate for very preterm infants. There has also been an increase in the relative impact of preterm-related causes of death.

In 2005, 36.5% of infant deaths in the United States were due to preterm-related causes of death, a 5% increase since 2000. Florida has shown a decline in infant mortality over the past ten years while Hardee County infant mortality rates have stayed at about the same level.

## Infant Mortality

One way to measure how well a county is doing with infant mortality is to compare actual infant deaths to expected infant deaths. A certain number of infants can be expected to die based on the unique demographics or population characteristics of each area. Concerns are raised when the number of actual infant deaths is significantly higher than would be expected.

In Hardee County, due to the relatively small number of total births, the actual versus expected infant death rate varies from year to year. Community issues such as access to care, education, and support for women of child bearing age are important issues to address to help ensure the best possible birth outcomes. Several things can predict birth outcome. Some of these include mother's age, race, marital status, educational level, smoking status, alcohol or drug use, entry into prenatal care, and whether the infant is born before full term (37 weeks of gestation). Three areas of concern related to women of child-bearing age in Hardee County that can be modified are women who smoke during pregnancy, repeat births to teens (15-19 years old), and late preterm delivery (babies born between 37-39 weeks gestation).

## LOW BIRTH WEIGHT

Low birth weight is closely associated with fetal death, infant death and disability, inhibited growth and cognitive (brain) development, and chronic diseases later in life. Low birth weight is defined as a birth weight of less than 5 lb 8 oz. Low birth weight can occur when an infant is born preterm (before 37 weeks of gestation). It can also happen if the infant does not grow well within the uterus. This might be caused by birth defects, problems with the placenta that keep it from providing adequate oxygen and nutrients to the fetus, or infections during pregnancy that affect the fetus. Some risk factors in the mother that may lead to low birth weight include young age, multiple pregnancies, birth of low birth weight infants in previous pregnancies, poor nutrition, heart disease or high blood pressure, drug addiction, alcohol abuse, insufficient prenatal care, or smoking during pregnancy.

Hardee County compares poorly with state and national rates for the number of low birth weight infants born. In Hardee County in 2010, the rate of babies born at a low birth weight was 2.5, which may have contributed to the higher infant mortality rate. Prematurity is the leading cause of infant death in our community. Neither Florida nor Hardee County attained the Healthy People 2010 goal of 5% of babies born at low birth weight. Nationally, the increase in multiple births, more than half of which are delivered at low birth weight, has strongly influenced the increase in low birth weight; however, rates of low birth weight are also on the rise for single births.

## Low Birth Weight

There exists perplexing racial disparities in birth weight and infant survival. Across the U.S., rates of low birth weight and of preterm delivery have been higher among African American women than among whites for many years. African American babies are twice as likely to be low birth weight as well as twice as likely to die in the first year of life as compared to white babies. Despite considerable research over the last 20 years, the reasons for these differences remain obscure. However puzzling, the numbers reveal that there exists a real vulnerability of African American women to preterm labor and delivery.

In Hardee County and in the state of Florida, low birth weight births are on the rise, and racial disparities still exist.

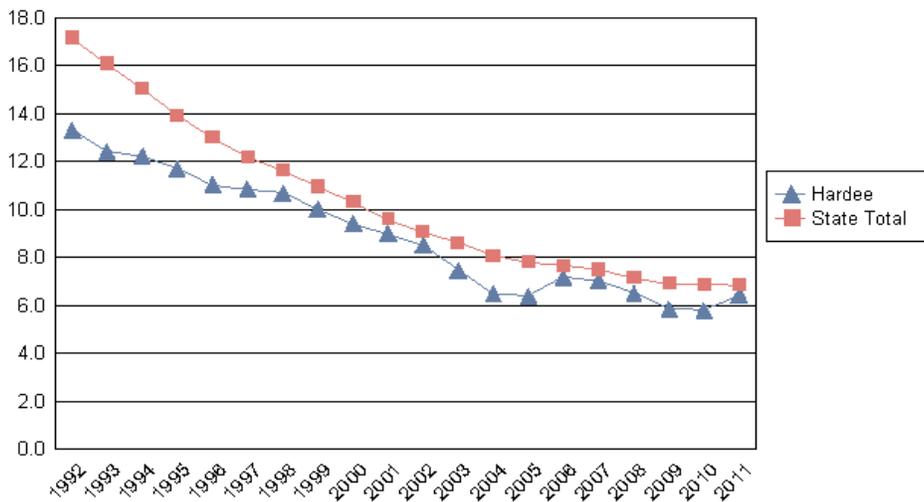
Low birth weight, the leading cause of infant death is largely preventable. However, given the complicated health and social problems often associated with women who deliver low birth weight infants, there remain no easy solutions. Effective preventive programs blend health care, health education, environmental modification and public policy in an effort to create a culture supporting a prudent lifestyle.

Numerous barriers often stand between pregnant women and children and receiving the care they need. For example, the inability to pay for services causes many women to delay or even forgo prenatal care. Frequently, women are not aware of the importance of prenatal or preventive care. In addition, women and their families are often overwhelmed by the stresses of poverty. Recent studies are now focusing on the relationship between stress and poor birth outcomes, especially in high-risk women.

# SMOKING DURING PREGNANCY

Women who smoke during pregnancy are twice as likely to give birth to low birth weight infants. There is also an increased risk of having a low-birth weight infant if the mother is exposed to second-hand smoke.

Hardee County has a slightly lower number of smokers compared to the state as a whole. In Hardee County, smoking during pregnancy is a serious concern with 6.8% of women reporting smoking during pregnancy for the years 2007-2009. There has been slight changes in the percentage of women smoking during pregnancy for the past 5 years. Hardee County's pregnant women are on average with the State's percentage to smoke during pregnancy as pregnant women in Florida (6.9%).



## BIRTHS TO TEENS

Although the U.S. teenage birthrate has fallen dramatically by 18% from its peak in 1991 to an all-time low level, and the rate of second births to teenagers nationally has fallen by a full 21% during this period, repeat births to teens in Hardee County are still unacceptably high. Repeat births to teens age 15-17 years are of utmost concern. Younger teen mothers are less likely to complete high school and college. Lower educational attainment of the mother is related to poorer health outcomes for the child. Over the past ten years, repeat births to teens age 15-17 years in Florida have steadily declined from a rolling three year rate of over 16% to just under 10%. In Hardee County between 1990 and 2008 Hardee County repeat births to teens age 15-17 years have stayed steady. Almost one in every ten teenaged girls in Hardee County has had a child, according to the statistics, which ranks them #1 in teen births for the state, which is not a good sign.

Many studies have been conducted to determine solutions to this national problem and to identify best practices to help teenage mothers avoid a subsequent pregnancy. The most successful programs help teenage mothers delay second births and become self-sufficient. Programs that help teens adopt an overall health focus-and that have a strong family planning component-are most successful in reducing repeat teen pregnancy rates

## GESTATIONAL AGE AT BIRTH

Infants born at full term are more likely to be healthy. Preterm birth (being born before 37 weeks gestation), is the number one cause of infant death in the first 28 days of life. Hardee County at 14.2% is about the same percent of births less than 37 weeks gestation as the state at 14.1%, however both Hardee County and the state fail to attain Healthy People 2010 goals of 7.6%.

Preterm birth is responsible for over one third of all infant mortality. Sadly, one in four preterm infants may have long-term neurodevelopment problems and preterm infants are more likely to have higher rates of chronic diseases as adults.

The preterm birth period is further divided as births before 34 weeks gestation and births between 34 – 36 weeks gestation. In the United States, 71% of preterm births occur between 34-36 weeks gestation. These are now called late preterm births. However, late preterm infants are still preterm, but due to tremendous advances in neonatal care many people have become less concerned about delivering a baby at 34 weeks or later. Infants born between 37-38 weeks are now called early term and only infants born between 39-41 weeks are called full term.

## GESTATIONAL AGE AT BIRTH

A national study commissioned by a large health care insurance company surveyed insured women to understand their beliefs about the meaning of full term birth and the safety of delivery at various gestational ages. The survey population was 58% white, 93% married or partnered, 77% with a yearly income of at least \$50,000, 69% held a college degree, and about 50% were employed full-time. When asked "At what gestational age do you believe the baby is considered full-term?" nearly 25% chose 34-36 weeks. Another 50% chose 37-38 weeks and only 25% chose 39-40 weeks. When women were asked "What is the earliest point in the pregnancy that it is safe to deliver the baby, should there be no other medical complications requiring early delivery?" more than 50% chose 34-36 weeks. Only 7.6% chose 39-40 weeks which is considered full term. This is of grave concern.

In the last 6 weeks of pregnancy, 3 weeks until full term, a baby's brain adds connections needed for balance, coordination, learning and social functioning. During this period, the baby's brain almost doubles in size.

Babies born before term are more likely to have feeding problems because they can't coordinate sucking, swallowing and breathing as well as full term babies. Babies born between 34 weeks and term are more likely to have breathing problems than full-term babies and are more likely to die of sudden infant death syndrome (SIDS). Babies born between 34-36 weeks gestation are 7 times more likely to have respiratory distress than term infants. Babies born at 37 weeks are twice as likely to need a ventilator and 20 times more likely at 34 weeks.

In Hardee County over the past 10 years, fewer babies were born at full-term. However, this appears to be due to more babies being born early term, than late preterm. The rate of late preterm births in Hardee County was 9.5% in 2004-2006, increased to 9.7% in 2005-2007 and has decreased again in 2006-2008 to 9.5%. This rate is below the state of Florida rate of 10.0%.

# VACCINE-PREVENTABLE DISEASES

Vaccine-preventable diseases have a costly impact, resulting in doctor's visits, hospitalizations, and premature deaths. Sick children can also cause parents to lose time from work. According to the Centers for Disease Control and Prevention (CDC), disease prevention is the key to public health. It is always better to prevent a disease than to treat it. Vaccines prevent disease in the people who receive them and protect those who come into contact with unvaccinated individuals. Vaccines help prevent infectious diseases and save lives.

Florida law mandates childhood vaccinations for childcare and school entry. In Florida, the following vaccine preventable disease vaccinations (VPDs) are required: Diphtheria, Tetanus, Pertussis, Polio, Haemophilus Influenza Type b, Hepatitis B, Measles, Mumps and Rubella, and Varicella (chicken pox). While vaccination coverage has greatly reduced the number of VPDs, these diseases are still a potential threat to the community.

Immunizing individual children also helps to protect the health of our community, especially those people who are not immunized. People who are not immunized include those who are too young to be vaccinated (e.g., children less than a year old cannot receive the measles vaccine but can be infected by the measles virus), those who cannot be vaccinated for medical reasons (e.g., children with leukemia), and those whose bodies cannot make an adequate response to vaccination. Also protected, therefore, are people who received a vaccine, but who have not developed immunity. In addition, people who are sick will be less likely to be exposed to disease germs that can be passed around by unvaccinated children. Immunization also slows down or stops disease outbreaks. Vaccine-preventable disease levels are at or near record lows. Even though most infants and toddlers have received all recommended vaccines by age 2, many under-immunized children remain, leaving the potential for outbreaks of disease. Many adolescents and adults are under immunized as well, missing opportunities to protect themselves against diseases such as Hepatitis B, influenza, and pneumococcal disease.

# Vaccine-Preventable Disease

In Florida, immunization services have been enhanced, missed opportunities to vaccinate decreased, and linkages with other public health programs, such as WIC, improved. These activities have resulted in a significant decrease in the incidence of vaccine-preventable diseases. Hardee County (97.7%) with up to 95% of children at age 5 being fully immunized, Hardee County is ranked at number 11 out of 67 counties., Hardee County compares favorably to the state (91.3%) in the number of kindergarten students who are fully immunized. Both Hardee County (97.7%) and the state (84%) exceed the Healthy People 2010 goal of 80% of children who are fully immunized at 24 months of age.

The Hardee County School Health Program provides a RN/LPN and Health Support Technician for every regular education public school in Hardee County. This health team coverage allows the RN/LPN to take a "public health" approach to school nursing.

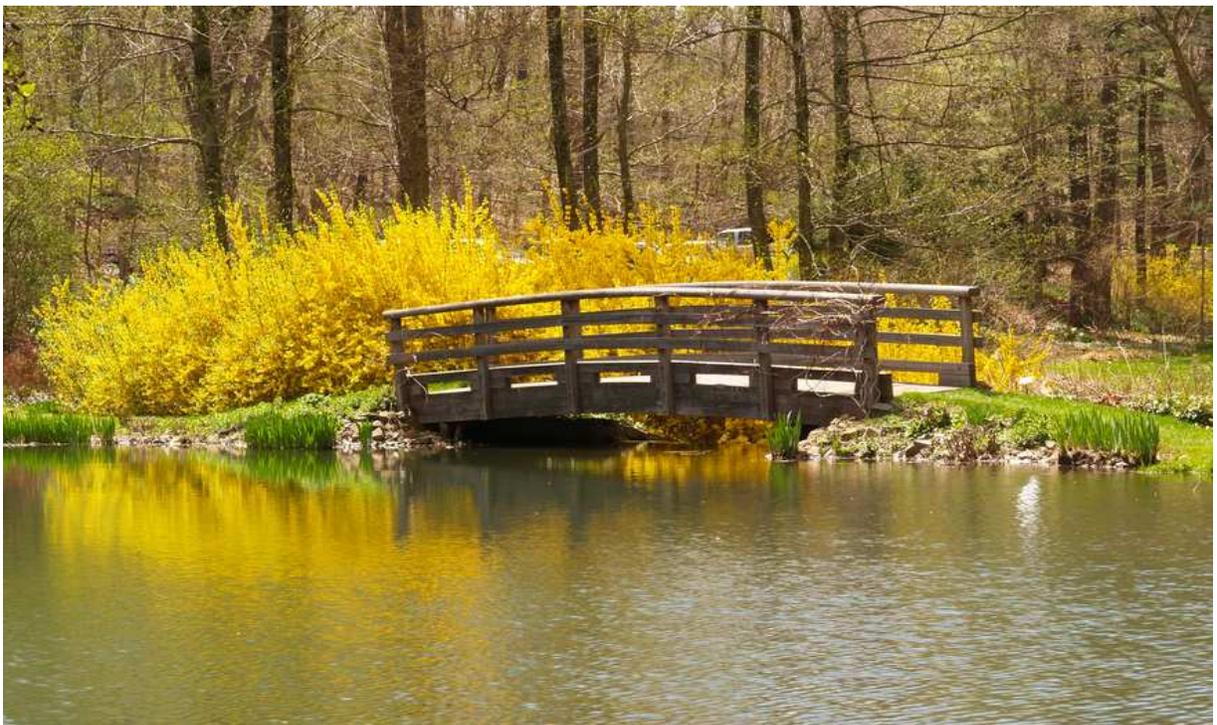
The mission of School Health is to enhance learning by promoting health and wellness for children in Hardee County.

The strength of the School Health Department is found in its caring, creative, committed and competent staff who are making a positive impact on the health of students and children in Hardee County. Our department serves children in Pre-K, Headstart, and public/private schools.

# ENVIRONMENTAL HEALTH

Humans interact with the environment constantly. These interactions affect quality of life, years of healthy life lived, and health disparities. Environmental health consists of preventing or controlling disease, injury, and disability related to the interactions between people and their environment. Maintaining a healthy environment is central to increasing quality of life and years of healthy life.

Poor environmental quality has its greatest impact on people whose health status is already at risk. Therefore, environmental health must address the societal and environmental factors that increase the likelihood of exposure and disease. In Florida, Public Health Environmental Health programs in each county monitor and protect the health of the citizens through education and maintenance of a healthy environment. These programs monitor conditions within the community that could present a threat to health and safety of the public.



Hardee County

## SEPTIC SYSTEMS

Surface and ground water quality applies to both drinking water and recreational waters. Contamination by infectious agents or chemicals can cause mild to severe illness. Protecting water sources and minimizing exposure to contaminated water sources are important parts of environmental health.

Nearly one in four households in the United States depends on an individual septic (onsite) system (referred to as an onsite system) or small community cluster system to treat wastewater. In far too many cases, these systems are installed and largely forgotten - until problems arise. It is recognized that adequately managed decentralized wastewater systems are a cost-effective and long-term option for meeting public health and water quality goals, particularly in less densely populated areas. The difference between failure and success is the implementation of an effective wastewater management program. Such a program, if properly executed, can protect public health, preserve valuable water resources, and maintain economic vitality in a community.

The septic systems permitted and inspected by the health department are a major component of wastewater management in Hardee County. The septic systems permitted and inspected by the health department are a major component of wastewater management in Hardee County. It is estimated that 75% of the population in the rural region of the county currently utilize septic systems.

### **New Septic System Installations, Hardee County**

All septic systems have a limited life expectancy so one can expect that they will fail at some point in time.

Failing septic systems can expose individuals and communities to sewage. Sewage contains pathogens and viruses that can cause disease. Sewage can also contaminate ground and surface water possibly polluting wells, rivers, streams, and creeks.

# WATER QUALITY

Hardee County covers approximately 605 square miles. Major watercourses in the county include the Peace River and Charlie Creek.

## DRINKING WATER

Public water systems, mainly utilizing the Florida Aquifer, provide potable drinking water to 15% of Hardee County residents less than the Healthy People 2010 goal to increase the proportion of persons served by community water systems with drinking water that meets the regulations of the Safe Drinking Water Act to 95%. Most residents of Hardee County drink water from private wells.

## FLUORIDATION

For 65 years, community water fluoridation has been a safe and healthy way to effectively prevent tooth decay. CDC has recognized water fluoridation as one of 10 great public health achievements of the 20<sup>th</sup> century. Nearly all naturally occurring water sources contain fluoride—a mineral that has been proven to prevent, and even reverse, tooth decay.

Tooth decay is caused by certain bacteria in the mouth. When a person eats sugar and other refined carbohydrates, these bacteria produce acid that removes minerals from the surface of the tooth. Fluoride helps to re-mineralize tooth surfaces and prevents cavities from continuing to form.

Water fluoridation prevents tooth decay mainly by providing teeth with frequent contact with low levels of fluoride throughout each day and throughout life. Even today, with other available sources of fluoride, studies show that water fluoridation reduces tooth decay by about 25 percent over a person's lifetime.

Community water fluoridation is not only safe and effective, but it is also cost-saving and the least expensive way to deliver the benefits of fluoride to all residents of a community. This method of fluoride delivery benefits all people regardless of age, income, education, or socioeconomic status. A person's income and ability to get routine dental care are not barriers since all residents of a community can enjoy fluoride's protective benefits just by drinking tap water and consuming foods and beverages prepared with it.

The U.S. Department of Health and Human Services now defines optimal fluoride levels in drinking water to be 0.7 milligrams of fluoride per liter of water. Approximately 15% of all residents in Hardee County receive optimal amounts of fluoride from their drinking water source. Public water systems with naturally- occurring optimal amounts of fluoride in the water they provide are City of Wauchula, Town of Zolfo Springs and City of Bowling Green.

## AIR QUALITY

Outdoor air quality is measured by the Air Quality Index (AQI), a national system of gauging the condition of outside air with potential to harm human health. The AQI measures carbon monoxide, nitrogen dioxide, sulfur dioxide, ozone, lead, and particulate matter.

Particulate matter consists of dust, soot, and unburned fuel suspended in the air. Think of the AQI as a yardstick that runs from 0 to 500. The higher the AQI value, the greater the level of air pollution, and the greater the health concern. For example, an AQI value of 50 represents good air quality with little potential to affect public health, while an AQI value over 300 represents hazardous air quality. An AQI value of 100 generally corresponds to the national air quality standard for the pollutant, which is the level the EPA has set to protect public health. AQI values below 100 are generally thought of as satisfactory. When AQI values are above 100, air quality is considered to be unhealthy-at first for certain sensitive groups of people, then for everyone as AQI values get higher. Hardee County has good air quality.

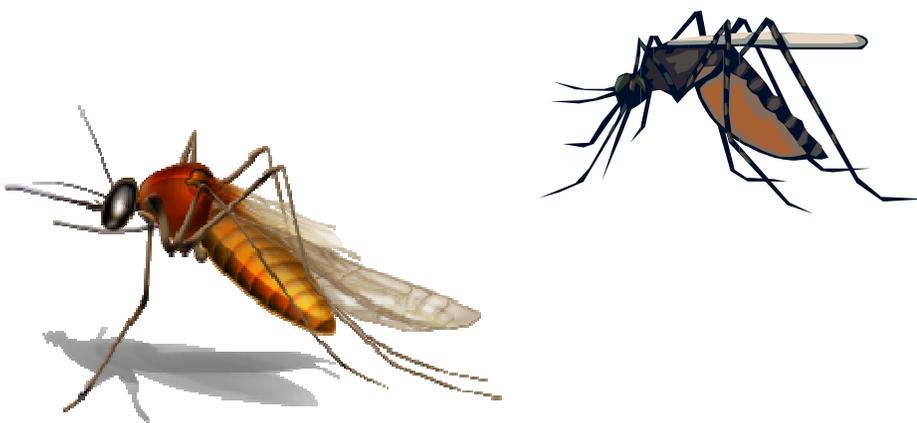
# ENVIRONMENTAL EPIDEMIOLOGY

## MOSQUITO-BORNE ILLNESSES

Vector-borne diseases consist of bacterial and viral diseases transmitted by mosquitoes, ticks, and fleas.

Mosquito-borne illnesses are of particular concern due to our climate and ecology. Of the 80 mosquito species found in Florida, approximately 30 species may be found in Hardee County. Adult mosquitoes vary in size, ranging from about 1/8 inch to about 1-1/2 inches. The Asian Tiger Mosquito is common around homes since its invasion into Hardee County, and is one of the smaller mosquitoes. Other mosquitoes frequently found in yards or homes are usually bigger. Mosquitoes share similar habits, but each has a distinct lifestyle. Fortunately, not very many of these species are major pests or disease carriers.

Environmental Health conducts investigations and abatement of sanitary nuisances that have the potential for breeding mosquitoes and other known disease-causing vectors. Environmental Health works closely with Hardee County to minimize the risk of human infection through education and other prevention and control activities through spraying and educational information. Sentinel chicken serology is performed by placing chickens in an area over an extended period of time and testing their blood for the presence of antibodies to viruses..



## RABIES

Rabies is a deadly virus. Every year, an estimated 40,000 people in the U.S. receive a series of shots known as post-exposure prophylaxis due to potential exposure to rabies. The U.S. public health cost associated with rabies is more than \$300 million a year.

Environmental Health conducts rabies surveillance for Hardee County. People usually get rabies when they are bitten or scratched by an animal that has the virus.

In the U.S., the animals that often get rabies are wild. Although only animal-related injuries requiring rabies treatment are reportable to the Florida Department of Health, animal bites and scratches are reportable to the Hardee County Health Department.

Environmental Health attempts to locate the animal and observes it during the required quarantine period. In 2011 Hardee County Health Department investigated over 56 reports of suspected rabies exposures and or animal bites.



## FOOD HYGIENE

The regulatory oversight of food operations in Florida is divided amongst four state agencies. Environmental Health monitors the food operations located in some institutional settings (ex: schools and correctional facilities), civic & fraternal organizations, theaters (that limit their menu to drinks, candy, popcorn, hotdogs, and nachos), bars, and lounges that don't prepare food. The Department of Children and Families monitors food operations in child care centers. Restaurants are inspected by the Department of Business and Professional Regulation, and grocery and convenience stores by the Department of Agriculture and Consumer Services. In Hardee County, Environmental Health permitted 21 facilities and conducted over 93 inspections in 2011.



# CONCLUSION

Governments across the United States and in Florida are faced with rising demands for health care, limited resources and increasing inequalities in health.

Community health needs assessment has a central part to play, enabling practitioners, managers and policy-makers to identify those in greatest need and to ensure that health care resources are used to maximize health improvement. This health status report is a vital health care planning tool to be used by the local community health system. This document uses data to identify priority health needs and can be used to help the community target resources to address inequalities or needs for improvement. It also allows us, as a community, to celebrate the many positive conditions and trends that lead to good health for our entire population and to build on these successes.

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