

FLORIDA

DEPARTMENT OF HEALTH



in Okaloosa County

Community Health Assessment
2013



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Community Health Status Report
2013



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EXECUTIVE SUMMARY

Public health is about many things – health behaviors, primary and preventive care, access to services, deaths and births, populations at particular risk, life expectancy reports of health, and environmental health. Public health is what we, as a community, do to ensure that conditions exist that promote health. It is not only about the absence of illness, but about the presence of conditions that promote physical, mental, and emotional well-being for everyone in the community to the greatest extent possible within available resources.

Our goal in developing this Community Health Status Report is to provide an overview of key health indicators for Okaloosa County. Community health needs assessment has a central part to play by enabling community partners and policymakers to identify the most pressing health care needs in our community, to ensure that health care resources are used to maximize health improvement and to encourage dialogue about actions that can be taken to improve our community's health. This report was designed not only for public health professionals but also for members of the community who are interested in the health of their community.

Communities must collectively take action to ensure that citizens remain healthy. One organization or entity alone cannot do this task. This report represents a gamut of health status indicators from multiple sources for use in determining which community health issues are of concern in Okaloosa County, and in which areas we excel.

Methodology

In August 2011, The Florida Department of Health in Okaloosa initiated a community-wide strategic planning process with the goal to improve community health and maximize the use of community health resources. The model chosen for this process was the *Mobilizing for Action through Planning and Partnerships* (MAPP) model. MAPP was developed by the *National Association of County and City Health Officials* (NACCHO), in collaboration with the *Centers for Disease Control and Prevention* (CDC). The MAPP model is made up of four assessments, the Community Health Status Assessment, Community Strengths and Themes Assessment, the Local Public Health System Assessment and the Forces of Change Assessment.



MAPP provides a framework to create and implement a community health improvement plan that focuses on long-term strategies that address multiple factors that affect health in a community. The resulting community health improvement plan is designed to use existing resources wisely, consider unique local conditions and needs, and form effective partnerships for action. Through the four MAPP assessments, we were able to consider the activities of all public health system partners, thus assessing the activities of all public, private and voluntary entities that contribute to public health within the community. An overview of the assessments and their findings is listed below. (Please see CHA Appendix A: Community Partners for a list of participants who have contributed to the MAPP process).

The Health of Okaloosa County: A Status Report, was created in order to highlight the major health and social issues affecting the health status and quality of life in Okaloosa County. A secondary goal of this report is to provide insight into some areas that the County Health Department and community partners may wish to consider focusing our strategic efforts on in order to create a Community Health Improvement Plan (CHIP). A CHIP, by way of targeted health intervention and advocacy will help entities in Okaloosa County work collaboratively to improve the health of all Okaloosans.

Forces of Change, In December 2011 key community partners in Okaloosa County were brought together and asked to brainstorm the “Forces of Change” that are occurring or might occur in our community that affect the health of our community, our local quality of life, or could impact our local public health system. Participants then identified specific opportunities and/or threats generated by these forces. These forces and their impact will be incorporated into our Community Health Improvement strategic planning process.

Local Public Health System Performance Assessment, In August 2011, over sixty community partners were brought together to assess and score our local public health system according to the National Public Health Performance Standards Program. The National Public Health Performance Standards Program assessments are intended to help users answer questions such as “What are the activities and capacities of our public health system?” and “How well are we providing the Essential Public Health Services in our jurisdiction?” The dialogue that occurs in answering these questions can help to identify strengths and weaknesses and determine opportunities for improvement.

Community Themes and Strengths Assessment, In November 2011 the Florida Department of Health in Okaloosa commissioned a study assessing perceptions and attitudes towards quality of life and quality of health in Okaloosa County. To complete this study, Haas Center staff conducted surveys measuring perceptions of health and economic issues and five focus groups measuring attitudes and perceptions of quality of life and health in the area. Utilizing data from surveys and focus groups, Haas Center staff members were able to gauge the perceptions and attitudes towards quality of life and quality of health within Okaloosa County.

On page 4 you will find a graphical overview of the health issues that were identified through the four MAPP assessments.

Community Health Assessment and Group Evaluation (CHANGE) Tool, the Florida Department of Health in Okaloosa began the CHANGE Tool process in July 2012. The CHANGE Tool was used to gain a picture of the policy, systems, and environmental change strategies currently in place throughout the community; develop a community action plan for improving policies, systems, and the environment to support healthy lifestyles; and assist with prioritizing community needs and allocating available resources. (Please see CHA Appendix B: Assets and Needs for a list of CHANGE Tool team members and a list of community needs and assets identified through the use of the CHANGE Tool.)

Distribution to the Community

A goal of the Community Health Assessment is to make the gathered data and information accessible not only to partners, stakeholders and other agencies that have an interest in public health, but also to the wider community. Through this goal we hope that the residents of Okaloosa County will gain an overall picture of what health is like in Okaloosa County, and become engaged in areas where there are opportunities for improvement.

The Community Health Assessment is distributed in two phases. During the first phase the preliminary findings were shared with area partners, stakeholders and agencies, and feedback has been welcome (please see Appendix C: Distribution Points for a list of organizations who were supplied with the preliminary findings). The four MAPP Assessments that make up the Community Health Assessment are also posted on the Florida Department of Health in Okaloosa County website (www.healthyokaloosa.com) and can be reviewed by the public who visit our website.

During the second phase of the distribution process, a complete Community Health Assessment will be made available to the residents of Okaloosa County through the posting of the entire document on the Florida Department of Health in Okaloosa County webpage, and hard copies will be provided to the public libraries in Okaloosa County. A feedback form will be available on the FDOH-Okaloosa website so that community members can provide input. (Please see Appendix C: Distribution Points for a list of final points of distribution).

Community Health Status Assessment

Chronic Diseases and Risks

- CLRD, Diabetes, Cancer
- Overweight and obesity are priorities as 64% of Okaloosa County residents fall into these categories
- Tobacco as nearly 1 in 5 Okaloosa County adults currently smoke
- Homelessness has seen a 22% rise since 2005

Access to Health Care

- Uninsured and underinsured
- Shortage of medical and dental providers who accept Medicaid or self pay

Suicide

Youth Risk Behaviors

- Higher rate than state average for tobacco use
- Gambling
- Overweight/Obesity

Community Themes and Strengths Assessment

Chronic Diseases and Risks

- Obesity
- Diabetes
- Tobacco and drug use

Access to Health Care

- Funding challenges
- Infrastructure

Local Public Health System Assessment

ES #3: Inform, educate, and empower people about health issues

ES #4: Mobilize community partnership to identify and solve health problems

ES #7: Link people to needed personal health services and assure the provision of health care when otherwise unavailable

ES #9: Evaluate effectiveness, accessibility, and quality of personal and population-based health services

Forces of Change Assessment

Inadequate funding presents a barrier to services

Growing population is putting a strain on the available resources and infrastructure

Strategic Priorities

Access to Care

Nutrition and Physical Activity

Tobacco

MAJOR FINDINGS

Education and income set Okaloosa County apart.

Okaloosa County is fortunate in that economic and educational attainment indicators show positive trends. Per capita income in Okaloosa County has grown at a faster rate in our county than the rest of Florida and the U.S. since 2000; growth of median household income has outpaced that of the state and nation during the same decade; and we have a lower percentage of people living in poverty than in Florida and the United States. Okaloosa has a higher percentage of families with female head of household living in poverty than Florida. In Okaloosa County the high school graduation rate is much higher than Florida. Okaloosa residents are more highly educated than the state as a whole. Lower levels of poverty and higher educational attainment are related to better health outcomes. However, within Okaloosa 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.

The Okaloosa County population is aging.

The number of people in Okaloosa County 65 years and older has increased in the past decade. This aging of Okaloosa County has led to an increase in the median age from 36.8 years in 2000 to 38.3 years in 2010. Despite the aging trend, Okaloosa continues to have a lower median age than Florida (40.7 years). As the population begins to age the rates of both chronic disease and deaths from all major causes may increase as well.

Okaloosa County residents display many encouraging health protective factors.

The percentage of adults with good to excellent overall health in Okaloosa 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, all education levels, and all income levels. Okaloosa also reports that a high percentage of high school/GED graduates and married couples report they always or usually receive the social and emotional support that they need.

In Okaloosa 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 Okaloosa 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 (HPSA) 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. Medically Underserved Areas (MUA) are areas or populations with too few primary care providers, high infant mortality, high poverty and/or high elderly populations. Okaloosa County has two HPSAs: Okaloosa Correctional Institution; and the North Okaloosa areas of Baker, Crestview, and Laurel Hill as well as some census tracts within the City of Ft. Walton Beach. We have one MUA in the North Okaloosa areas of Baker and Laurel Hill.

Unhealthy lifestyles put Okaloosa residents at increased risk for disease and death.

A significant percentage of residents of Okaloosa 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 Okaloosans 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 Okaloosa 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 Okaloosans.

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. The sobering reality is that nearly 1,500 residents drive under the influence on our roadways every month. The impact on our county is seen by higher rates of alcohol-related motor vehicle crashes and alcohol-related motor vehicle deaths than the state.

Additional areas of concern for Okaloosa County include significant increases in domestic violence rates, increases in homelessness (especially among women and children), significant numbers of infants and children in foster care, and significant increases in death from suicide (especially among males).

In Okaloosa County the leading cause of death by standard age group is the same as for Florida and United States. The leading cause of death varies by age group.

- **For infants less than 1 year**, conditions associated with complications in the perinatal 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.

Okaloosa County residents have high rates of lung cancer and chronic lower respiratory diseases and are at increased risk for premature death.

Also of concern is the rate of lung cancer deaths in Okaloosa which is higher than Florida. This trend has remained for the past twenty years. Unlike many other causes of death, black Okaloosa residents actually have a lower rate of lung cancer death than white Okaloosa residents.

Chronic lower respiratory diseases (CLRD) are a group of diseases that cause airflow blockage and breathing-related problems and include chronic bronchitis, emphysema, and some forms of asthma. Okaloosans have a significantly higher rate of deaths from CLRD and the death rate from these conditions is rising.

Smoking is the number one cause of lung cancer with 90% of cases in men and 80% of cases in women attributable to smoking. CLRD is more likely to occur among people who smoke or are exposed to second hand smoke. Okaloosa has a higher percentage of adults who smoke compared to Florida and the U.S., and while the tobacco use rates are declining they are not declining as rapidly as the U.S. and Florida.

Unintentional deaths from suffocation, drowning, accidental poisoning and falls are increasing in Okaloosa County.

Unintentional deaths (deaths caused by accidents) vary by age group.

- In Okaloosa County the number of **infants** who die from **suffocation** is on the rise. Adult's rolling over on infants while co-sleeping in either a chair or bed is the most common mechanism of suffocation.

- **Drowning** is the leading cause of unintentional injury deaths for Okaloosa's **one to four year olds** and drowning deaths are on the rise. These deaths most commonly occur in residential swimming pools.
- **Motor vehicle crash deaths** kill more children and young adults between the ages of **5-24** years. The death rate from motor vehicle crashes among this population remains stable with 6-12 deaths per year.
- For adults age **25-64** there has been an alarming increase in deaths from **unintentional poisoning** with 93% of these deaths resulting from drug overdose-most commonly from opioid pain medications such as methadone, hydrocodone, or oxycodone. Florida has one of the highest rates of unintentional poisonings from opioid drugs and this rate has dramatically increased in Okaloosa County with unintentional poisoning now surpassing motor vehicle crashes as the leading cause of death among this age group.
- Among those age **65 and older**, **falls** are the leading cause of injury death. The death rates from falls among older men and women have risen sharply over the past decade and risk of dying from a fall for the elderly is increasing in Okaloosa County. Falls among all age groups are the most common cause of non-fatal injuries requiring emergency department visits.

Residents of Okaloosa County have lower rates of some very serious communicable diseases compared to Florida. 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. Certain communicable diseases are required to be reported to the health department. Okaloosa County has very low rates of gonorrhea, syphilis, HIV/AIDS, and tuberculosis.

Reportable communicable diseases on the rise in Okaloosa County include salmonella, hepatitis C, and chlamydia. Salmonella is an enteric infectious disease caused by consuming the bacteria in food. The incidence of salmonella is increasing in Okaloosa County. Salmonella infection can be prevented by proper food storage and handling techniques and good hand hygiene. Hepatitis C is a viral infection of the liver that causes severe liver damage over time. Hepatitis C incidence is increasing in Okaloosa County. The time of exposure to the virus until the disease is diagnosed can be decades, so identifying an individual's source of the virus is usually not possible. The most common route of exposure to Hepatitis C is from sharing needles. Chlamydia is the most commonly reported sexually transmitted disease in Okaloosa County. Chlamydia often has no symptoms and is transmitted through sexual contact with an infected person. Left untreated it can lead to infertility in women. Chlamydia is a bacterial infection and can and should be treated to prevent the spread of the disease. Chlamydia rates in Okaloosa County are on the rise. Prevention includes practicing safe sex or abstaining from sexual contact.

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 Okaloosa 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.

After a steady decline at the beginning of the decade, in 2006 repeat births to teens for women ages 15-17 years and 18-19 years began to rise and continue to rise in Okaloosa County. 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. In Okaloosa County over the past 10 years, fewer babies are born at full-term. However, this appears to be due to more babies being born early term, than late preterm. The percentage of babies born very preterm remains concerning.

In Okaloosa County, beach water quality and public swimming water quality are crucial to tourism and to the health of our community -- and both can be improved.

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 preserving the environment and ensuring that tourism remains a viable industry in our county. In North Okaloosa County a large number of residents rely on septic systems. These systems, if properly maintained, are a viable source of waste water management, however failing septic systems can expose individuals and communities to disease causing sewage through contamination of ground and surface water into wells, rivers, streams, lakes, bays, and bayous.

The Florida Department of Health in Okaloosa tests 12 public bathing sites for the presence of fecal coliform and enterococci contamination. Water samples collected at Garniers Park had the 3rd highest percentage (42%) of samples exceeding State standards by location in Florida. Water samples in Okaloosa County exceeded acceptable levels of bacterial contamination 8% of the time resulting in Okaloosa County being ranked 8th highest among Florida's 34 coastal counties. Swimming is one of the most popular recreational activities in the United States and Okaloosa County has approximately 480 public pools and spas. Unfortunately, the number of pools and spas that failed inspection has doubled in Okaloosa County from 2006-2010.

Throughout this report we will highlight the health challenges facing Okaloosa County residents. This information has been gathered from various data sources. It is anticipated that this report will help Okaloosa County to create a shared community vision for overall health improvement for Okaloosa County residents.

Healthy People 2010

Data for this report was reviewed for Okaloosa 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.

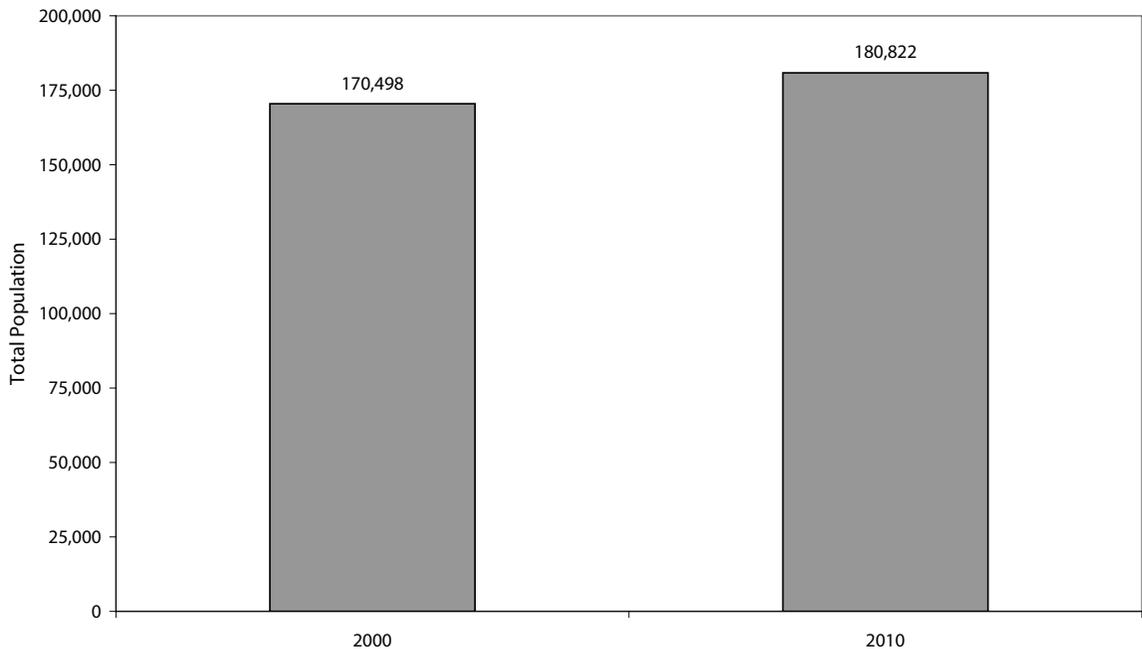
The goals provide focus and direction, and serve as a guide for creating a plan for health improvement. Throughout this report, *Healthy People 2010* goals and objectives are provided as a means for comparison. While Healthy People 2020 goals and objectives have been released, the data that are available are 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 Okaloosa 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.

POPULATION CHARACTERISTICS

RESIDENT POPULATION

According to the 2010 United States Census, Okaloosa County has an estimated population of 180,822 individuals. This represents 0.96% of Florida’s population and growth of 6.1% over the past decade. Okaloosa is the 26th most populous of the 67 Florida counties in 2010 down from the 24th most populous in 2000. During that same decade, Florida saw a 17.6% increase in population.

Figure 1: Okaloosa Population Comparison, 2000 vs 2010



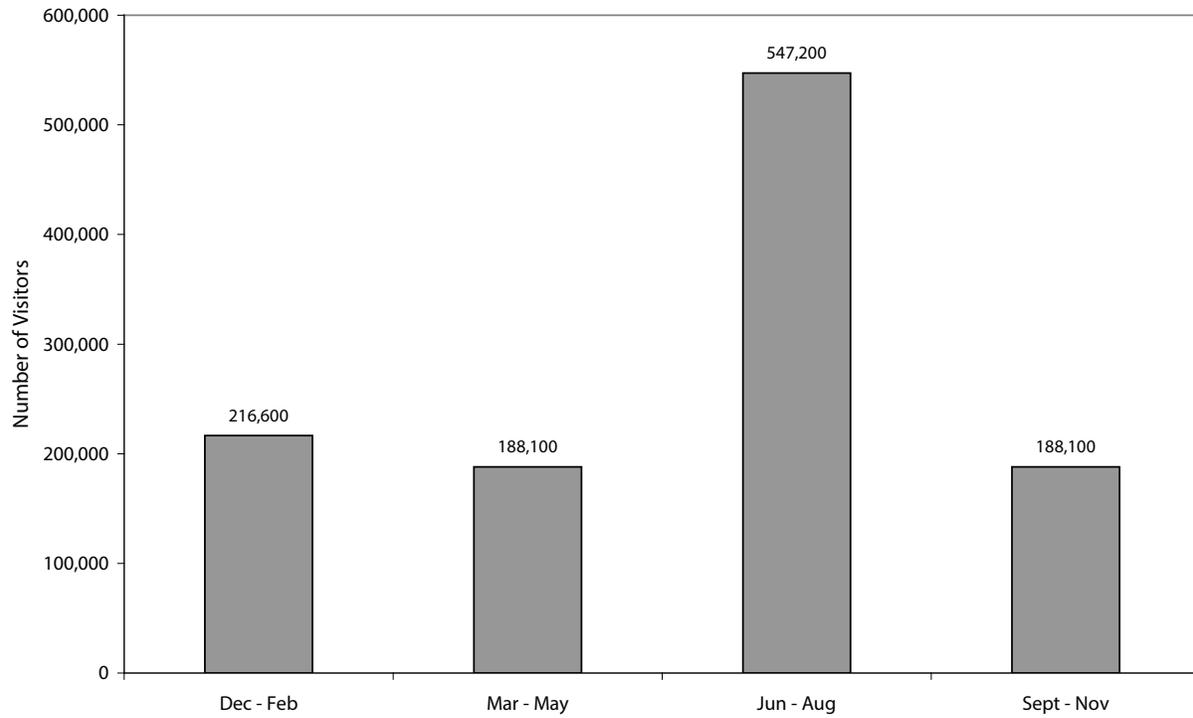
Source: Florida Legislative Office of Economic and Demographic Research, Census File 2010

VISITOR POPULATION

Okaloosa is home to Florida’s Emerald Coast and the vacation destinations of Destin, Okaloosa Island, and Fort Walton Beach. Okaloosa County is the second most popular drive-to destination in Florida, after Orlando/Orange County. Okaloosa County has 24 miles of pristine white-sand beaches stretching along the Gulf of Mexico. This sand, made up of pure Appalachian quartz, remains remarkably cool even in the heat of summer, and gives the waters here their trademark emerald-green color by reflecting sunlight back up through the surf. With these remarkable beaches and water, tourism draws many additional people to the county on a year round basis.

In 2009, 1.14 million visitors came to Okaloosa for at least an overnight stay. The average visitor spent 4 nights in the county. Summer is the high season in Northwest Florida with over 48% (~547,200) of the visitors coming between June and August. This surge of visitors almost doubles the population during the summer months. December through February is the “snowbird season” with ~216,600 (19%) visitors. The shoulder seasons of March – May and September – November bring another 188,100 visitors respectively. The non-resident population impacts public safety planning including emergency preparedness planning and response as well as impacting law enforcement, emergency medical services, and other healthcare services.

Figure 2: Visitors to Okaloosa County, 2009

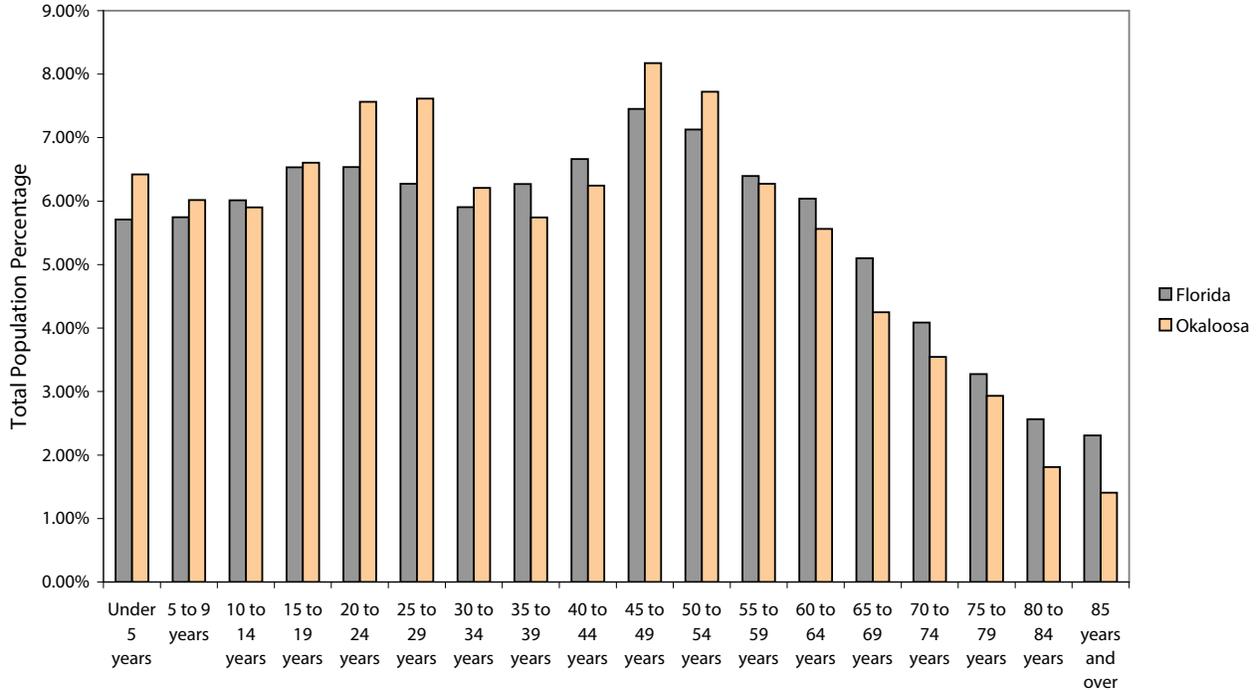


Source: HAAS Center for Business Research and Economic Development; *The Economic Impact of Tourism on the Okaloosa County Economy Report 2009*

AGE DISTRIBUTION

Like Florida, most people in Okaloosa County in 2010 are in the 45-54 age groups. Okaloosa has 61.1% of its population between ages 20-64 years while only 58.7% of Floridians are in this age group. According to the 2010 Census, Okaloosa has fewer people 65 years and older, 13.9%, compared to Florida at 17.3%.

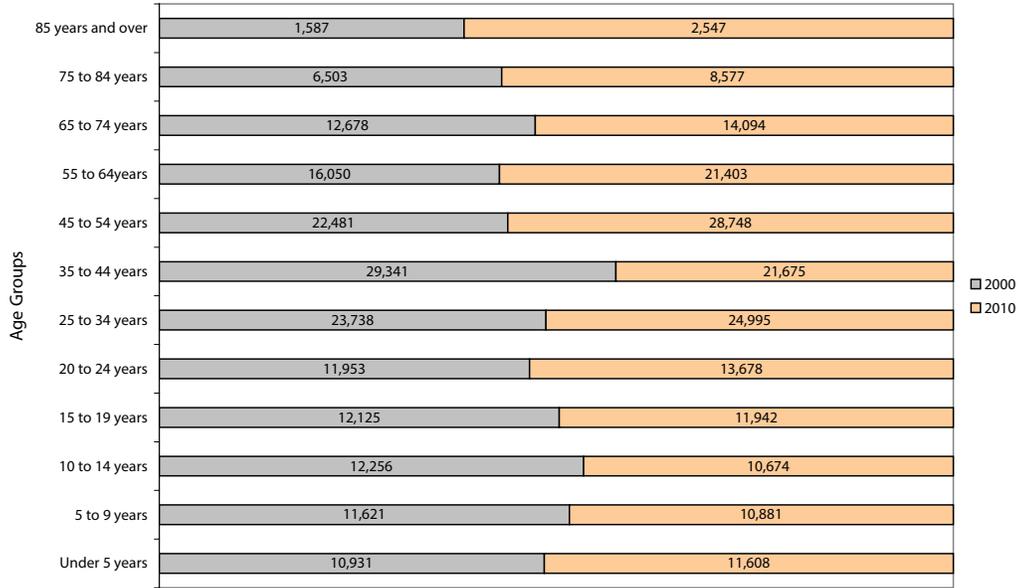
Figure 3: Population Comparison by Age Groups, Florida and Okaloosa, 2010



Source: Florida Legislative Office of Economic and Demographic Research, Census File 2010

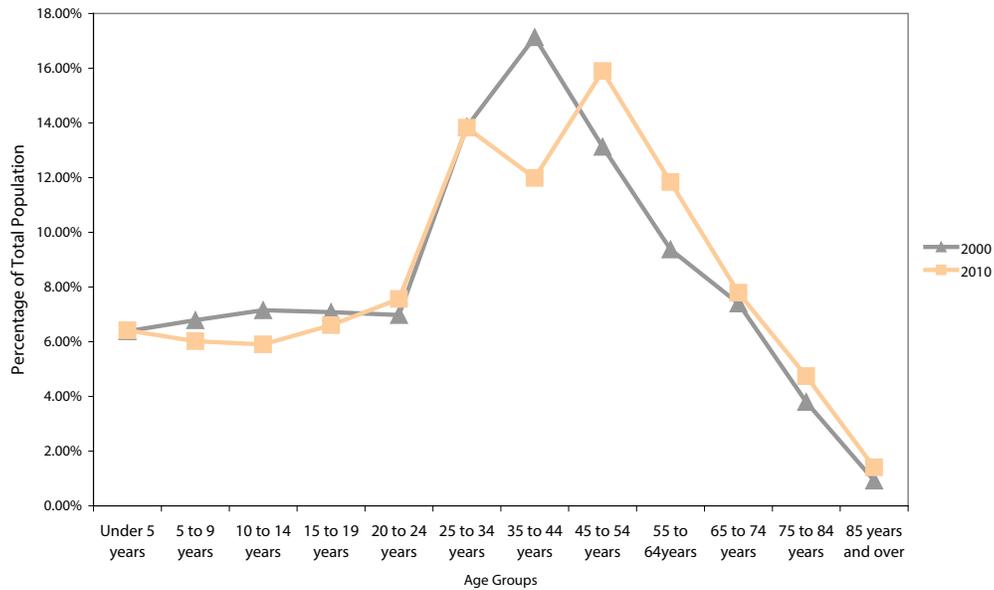
While the percentage of children less than 5 years in the total population has remained similar between 2000 and 2010, the number of children less than 5 years grew by 6.2% from 2000 to 2010. Okaloosa has experienced a decline in the school-aged population from just over 21% of the population in 2000 to 18.5% in 2010, which represents about a 7% decline in the number of children in this population group since 2000. The working age population has grown modestly during this same decade from 60.5% to 61.1% of the population. This represents a 6.7% growth in the number of people in the working age population group. The number of people age 65 and older has increased by 21.4% in the past decade.

Figure 4: Population Distribution by Age Group, Okaloosa County, 2000 vs 2010



Source: Florida Legislative Office of Economic and Demographic Research, Census File 2010

Figure 5: The Aging of Okaloosa County



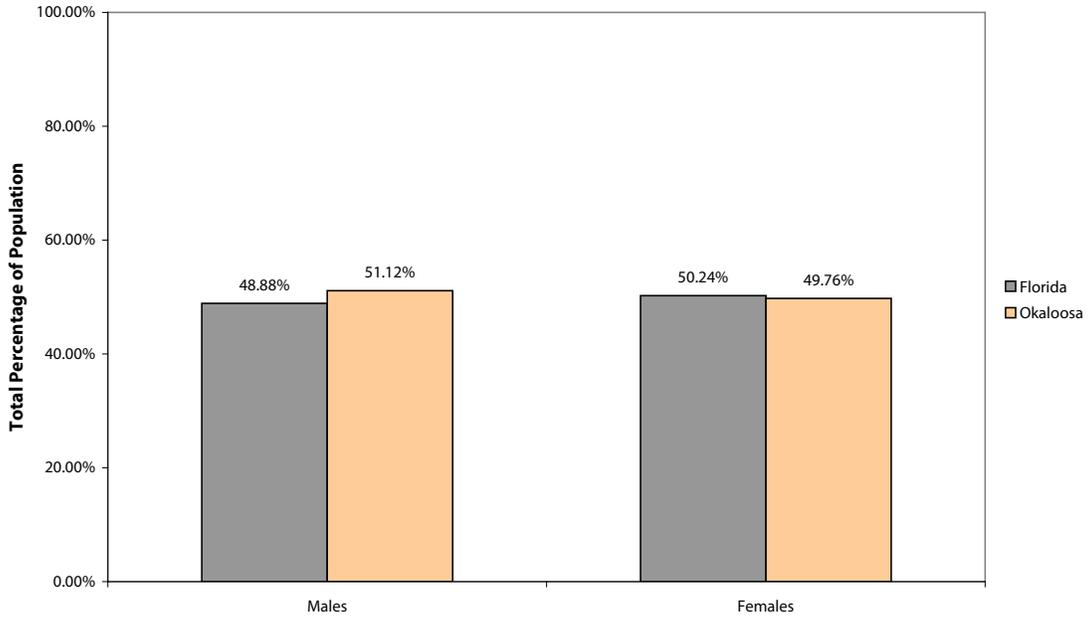
Source: Florida Legislative Office of Economic and Demographic Research, Census File 2010

This aging of Okaloosa County has led to an increase in the median age from 36.8 years in 2000 to 38.3 years in 2010. Despite the aging trend, Okaloosa continues to have a lower median age than Florida (40.7 years). The median age of visitors to Okaloosa County is older than the county’s median age at 42 years.

GENDER

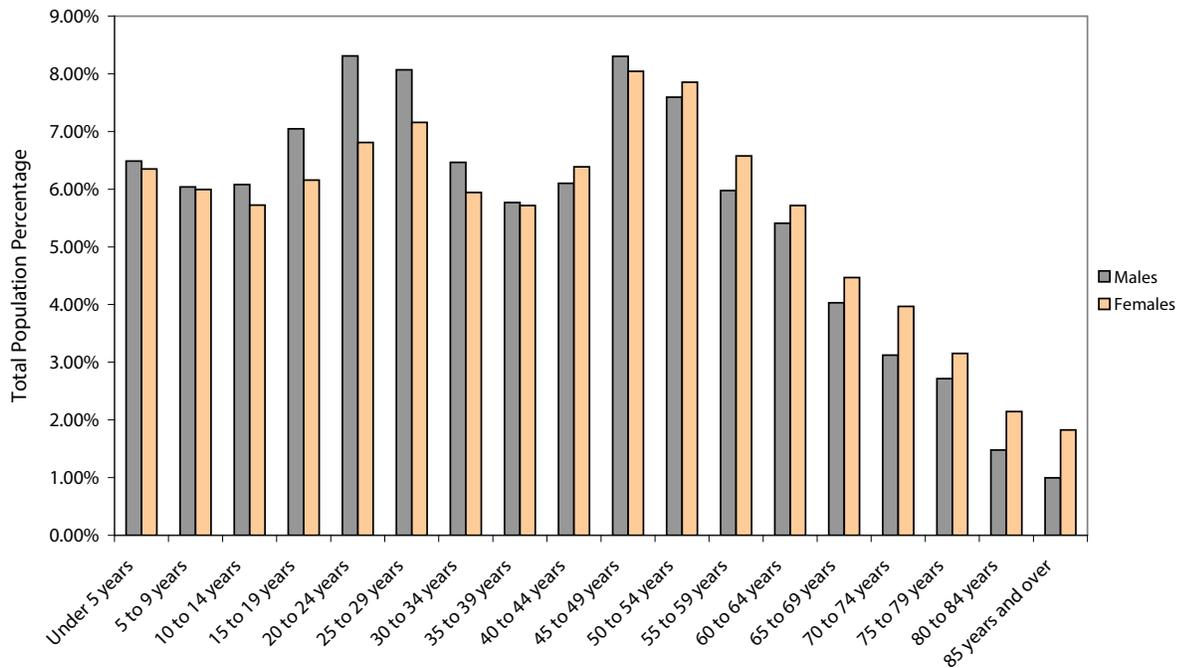
According to the 2010 Census, Okaloosa has more males (50.2%) than females (49.8%). This differs from Florida which has more females (51.1%) than males (48.9%).

Figure 6: Gender Comparison, Florida and Okaloosa, 2010



Source: Florida Legislative Office of Economic and Demographic Research, Census File 2010

Figure 7: Gender Comparison by Age Groups, Okaloosa, 2010



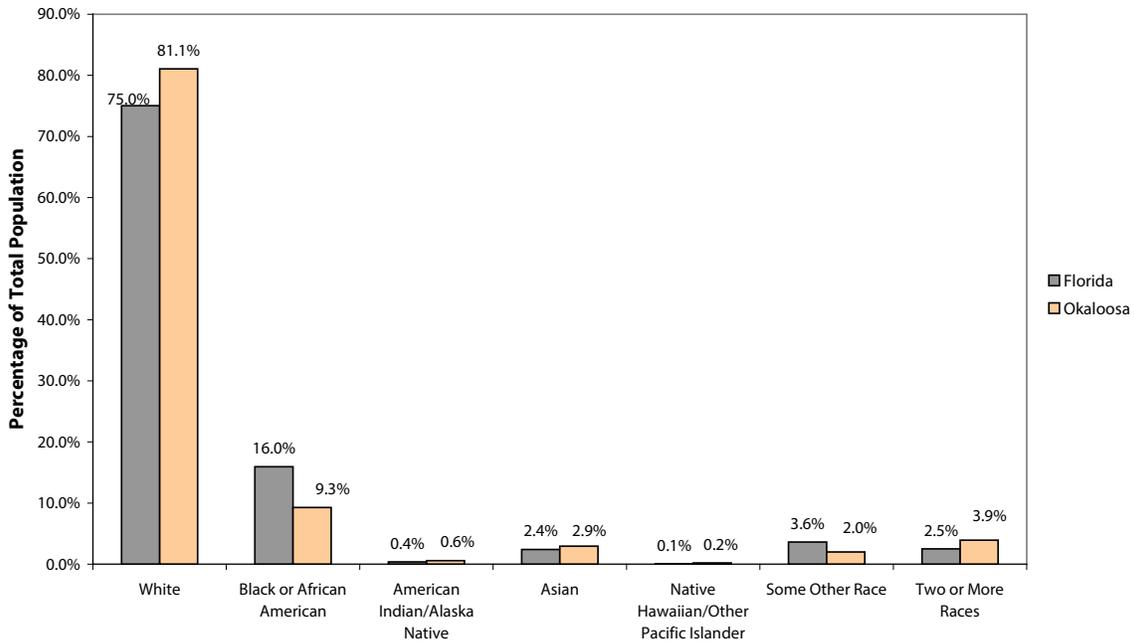
Source: Florida Legislative Office of Economic and Demographic Research, Census File 2010

In Okaloosa, males outnumber females from birth to age 49. For ages 50 and older, females outnumber males with the largest gender gap occurring for ages 70 and older.

RACE

The predominant race group in Okaloosa is white (81.1%), followed by black or African American (9.3%) and people who identify with two or more races (3.9%).

Figure 8: Race Comparison, Florida and Okaloosa, 2010

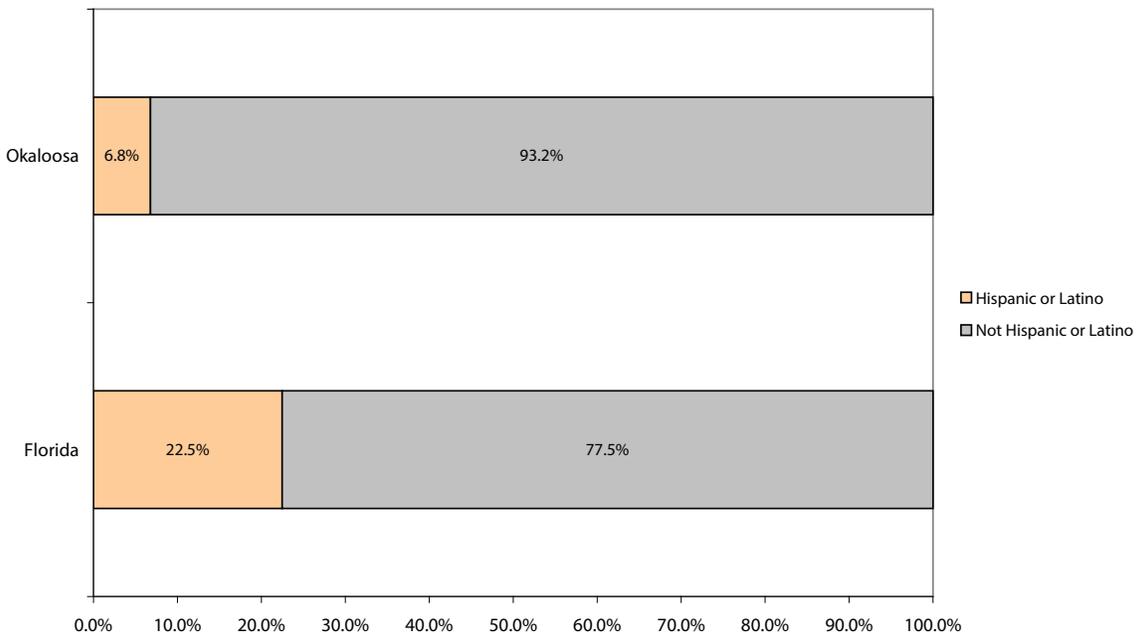


Source: Florida Legislative Office of Economic and Demographic Research, Census File 2010

ETHNICITY

Okaloosa County's predominant ethnicity is non-Hispanic. The Hispanic population in Okaloosa County is a significantly smaller percentage of the population than in Florida.

Figure 9: Ethnicity Comparison, Florida and Okaloosa, 2010



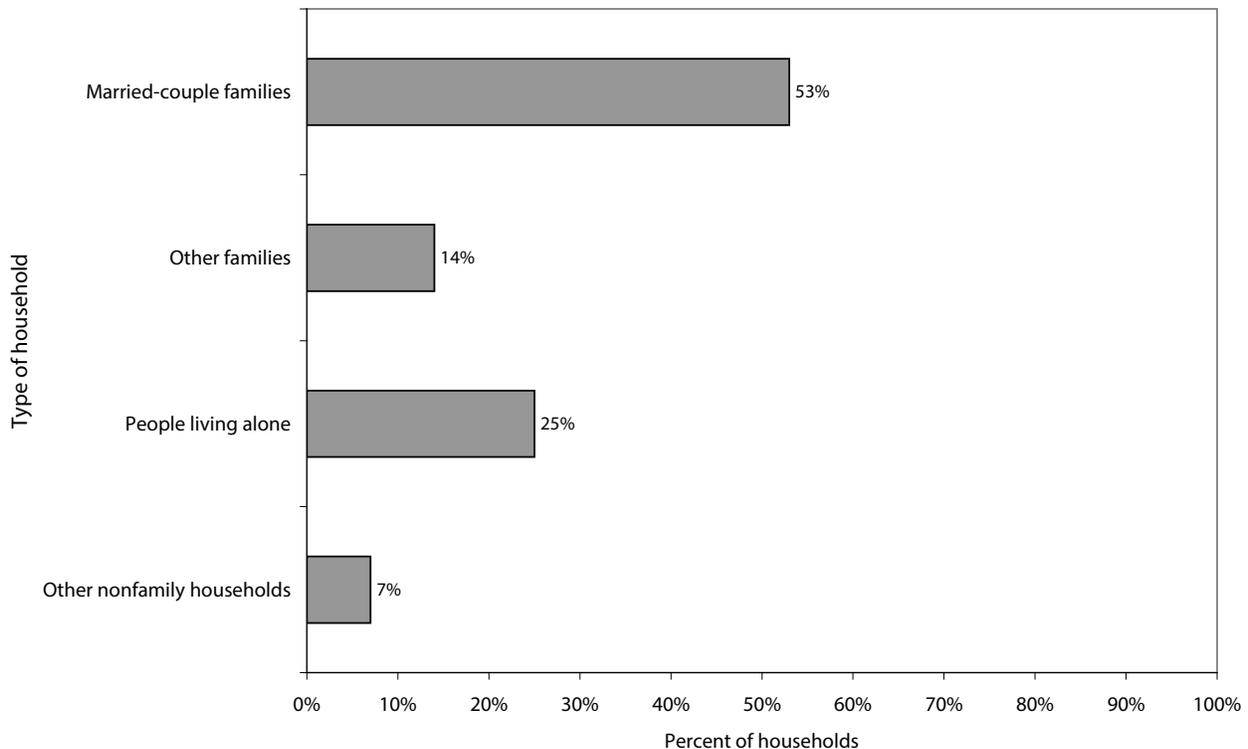
Source: Florida Legislative Office of Economic and Demographic Research, Census File 2010

SOCIO-ECONOMIC CHARACTERISTICS

HOUSEHOLDS AND FAMILIES

The U.S. Census American Community Survey 2005-2009 estimates there were 74,014 households in Okaloosa County. The average household size was 2.4 people. Families made up 67% of the households in Okaloosa County. This includes both married-couple families (53%) and other families (14%). Non-family households made up 33% of all households in Okaloosa. Most of the non-family households were people living alone, but some were composed of people living in households in which no one was related to the householder.

Figure 10: Types of Households in Okaloosa County, 2005-2009



Source: U.S. Census Bureau, 2005-2009 American Community Survey, 5-Year Estimates

NATIVITY AND LANGUAGE

Seven percent of people living in Okaloosa County in 2005-2009 were foreign born. This is significantly lower than for Florida (18.7%) and the U.S. (12.4%). Of the remaining 93% of the population who were born in the U.S. only 31% of Okaloosa residents were born in Florida.

Among people at least 5 years old living in Okaloosa County in 2005-2009, 9% spoke a language other than English at home. Again, this is significantly lower than Florida (25.8%) and the U.S. (19.6%). Of those speaking a language other than English at home, 52% spoke Spanish and 48% spoke some other language, with 41% reporting 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 Okaloosa County in comparison to the State of Florida as well as the United States. Per capita income has grown at a faster rate in Okaloosa County than the rest of Florida and the U.S. since 2000.

Table 1: Per Capita Income

Year	Okaloosa County	State of Florida	United States
2000	\$20,918	\$21,557	\$21,587
2005-2009	\$28,361	\$26,503	\$27,041
<i>Increase</i>	35.6%	22.9%	25.3%

Source: U.S. Census Bureau, 2000 and 2005-2009 (5-Year Estimates), American Community Survey

MEDIAN HOUSEHOLD INCOME

Median household income is the more widely accepted indicator of the economic distribution of income since it is not dramatically affected by unusually high or low income levels. The figure divides households into two equal groups, half of the households having income above the median, and half having household income below.

The following table illustrates the median household income for Okaloosa County in comparison to the Florida and the United States. Growth of median household income in Okaloosa County has outpaced that of the state and the nation since 2000.

Table 2: Median Household Income

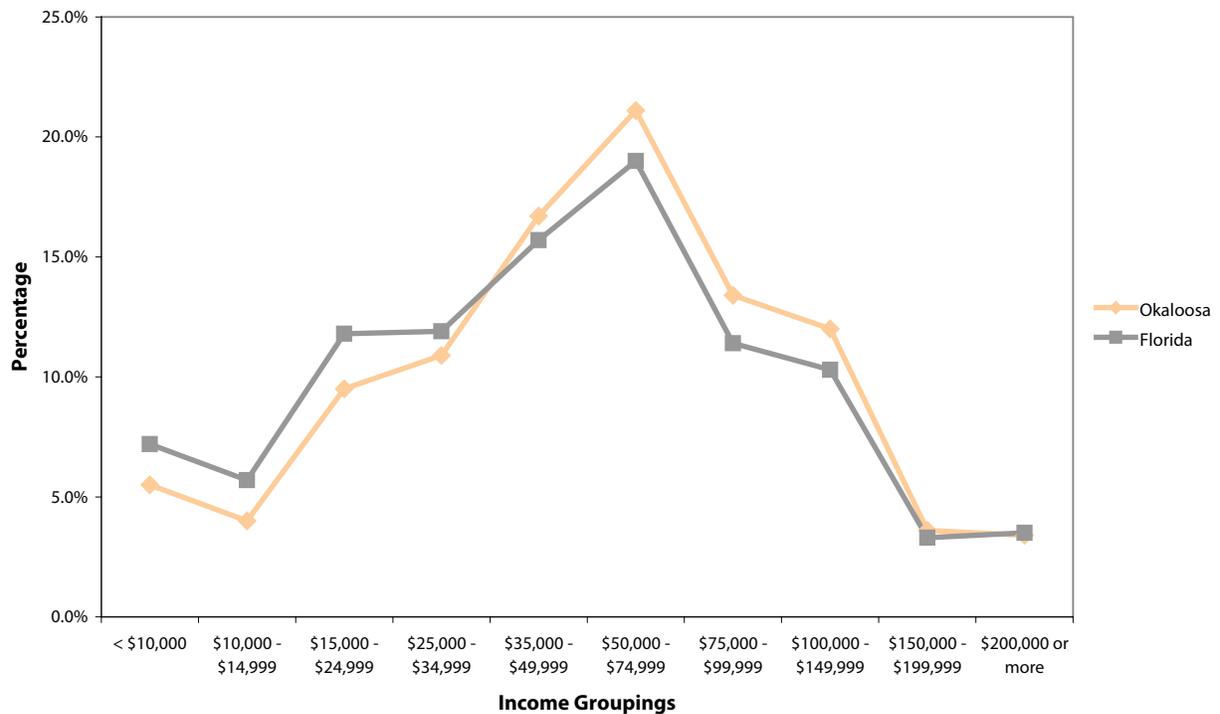
Year	Okaloosa County	State of Florida	United States
2000	\$41,474	\$38,819	\$41,994
2005-2009	\$53,741	\$47,450	\$51,425
<i>Increase</i>	29.6%	22.2%	22.5%

Source: U.S. Census Bureau, 2000 and 2005-2009 (5-Year Estimates), American Community Survey

DISTRIBUTION OF HOUSEHOLD INCOME

Okaloosa County residents fare better than Florida residents in household income distribution. Okaloosa has a lower percentage of households living below a household income and benefits of \$15,000 per year (9.5%) than Florida (12.9%). More than 51% of Okaloosa households have income and benefits of \$35,000 - \$99,999 as compared to 46.1% of Floridians. Twelve percent of Okaloosa households have income and benefits of \$100,000 - \$149,999 compared to only 10.3% of Floridians.

Figure 11: Distribution of Household Income, Okaloosa and Florida, 2005-2009



Source: U.S. Census Bureau, 2005-2009 American Community Survey, 5-Year Estimates

POVERTY AND PUBLIC ASSISTANCE ESTIMATES

Living in poverty means a family of four has a gross annual income of less than \$22,351 in 2011. Okaloosa County has a lower percentage of people living at or below poverty than Florida and the United States. In addition, Okaloosa County has a lower rate of Food Stamp utilization (6.2%) than either Florida (7.5%) or the U.S. (8.5%). However, Okaloosa has a higher percentage of families with a female head of household living in poverty (27.4%) than Florida (25.5%). The table below provides a comparison of Okaloosa, Florida, and the U.S. for various poverty estimates.

Table 3: Percentages of Population Living in Poverty

Measure	Okaloosa County	State of Florida	United States
All People	10.4%	13.2%	13.5%
Families with children < 18 yrs	13.1%	15.0%	15.3%
Married couples with children <18 yrs	4.3%	6.7%	6.3%
Female head of household with children < 18 yrs	35.3%	33.2%	37.1%
People 65 yrs & older	6.9%	10.1%	9.8%

Source: U.S. Census Bureau, 2005-2009 American Community Survey, 5-Year Estimates

LABOR FORCE

The labor force in Okaloosa County numbered 95,867 for those individuals age 16 years and older, according to the 2005-2009 American Community Survey from the United States Census Bureau. Approximately 89% of the labor force is civilian, and 11% is military. The labor force is 55% male and 45% female. At the time of this American Community Survey, approximately 5.7% of the civilian labor force was unemployed.

Of the employed civilian labor force, the leading occupation group was management, professional and other related occupations (35.5%), followed by sales and office occupations (25%), service occupations (20.2%), construction, extraction, maintenance and repair occupations (11.6%), and production, transportation, and material moving occupations (7.2%). Less than 0.5% of Okaloosa's civilian employed labor force works in farming, fishing, and forestry occupations.

Of the employed civilian labor force, the greatest majority are private wage and salary workers (74.3%). Another 19.8% of the employed civilian labor force works in government. Less than 6% of Okaloosa residents are self-employed in their own business.

INDUSTRY PROFILE

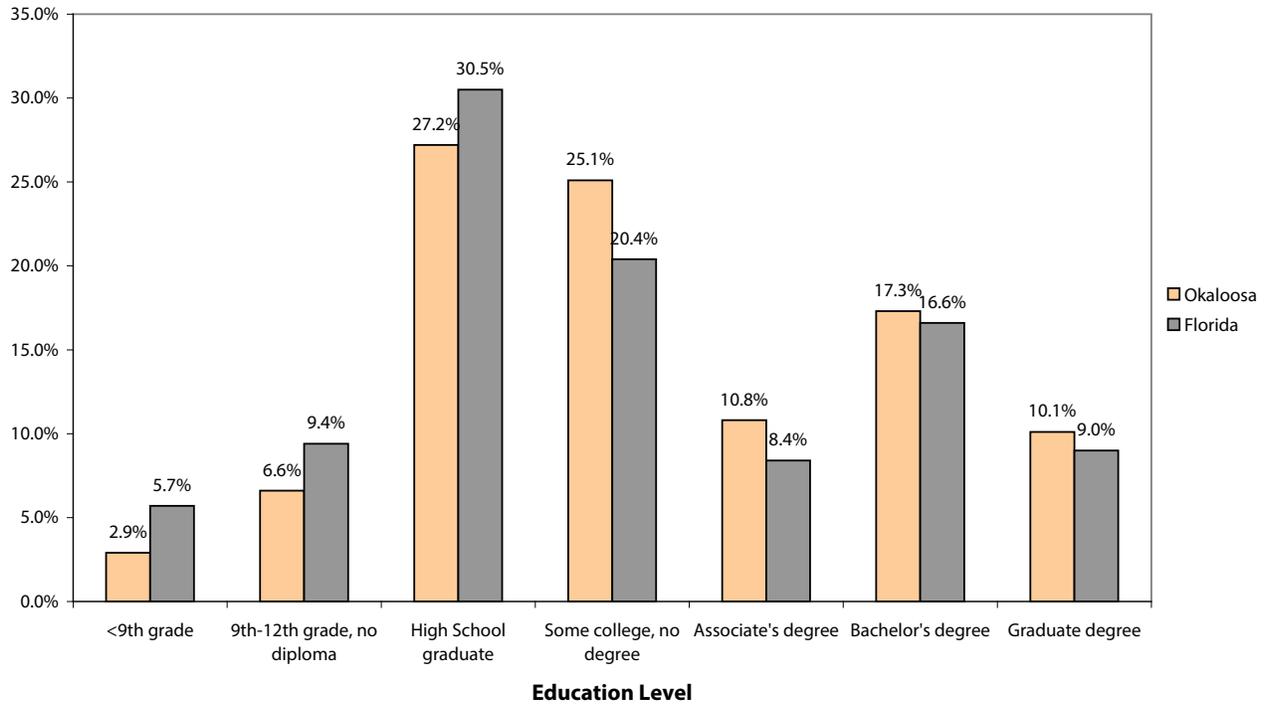
In Okaloosa County, the major industry employers are: educational services, health care, and social assistance. The industries with at least 5% of the civilian employed labor force are, in rank order:

1. Educational services, health care, and social assistance	17.0%
2. Professional, scientific, management, administrative, waste management services	12.9%
3. Retail trade	12.5%
4. Arts, entertainment, recreation, accommodation and food services	12.4%
5. Public administration	11.4%
6. Construction	9.0%
7. Finance, insurance, real estate, rental and leasing	7.3%
8. Manufacturing	5.2%

EDUCATIONAL ATTAINMENT

In Okaloosa County, the high school graduation rate is 91.7% compared to a high school graduation rate in Florida of 75.4%. For the adult population 25 years and over, 90.5% of people in Okaloosa are high school graduates or higher, compared to 84.9% in Florida. Residents of Okaloosa County are more likely to have participated in some form of education beyond a high school diploma (63.3%), compared to the state (54.4%). Residents of Okaloosa County are more likely to have attained a degree of Bachelor or higher (27.5%) compared to the state (25.6%).

Figure 12: Educational Attainment Population, 25 years and over, Okaloosa and Florida



Source: US Census Bureau, American Community Survey, 2005-2009 ACS 5-yr estimates

QUALITY OF LIFE AND HEALTH BEHAVIORS

The health of our community is strongly influenced by people’s perceptions of the quality of their life and the choices they make that impact their health. Community health is impacted by many things including: education level of the population, availability of jobs; the quality of the environment; and other social, behavioral, and mental health considerations.

The Florida Department of Health has been collecting and reporting health behavior data since 1986 using the Behavioral Risk Factor Surveillance Survey (BRFSS), a statewide telephone survey of Florida adults. It is the only source of state-specific, population-based estimates of the prevalence of various health and health risk behaviors. The purpose of this survey is to gather information regarding personal health behaviors, selected medical conditions, and the prevalence of preventive health care practices among Florida adults.

Over 39,000 interviews were completed statewide in 2010, with a target sample size of 500 completed surveys in each county. The 2010 BRFSS provides Okaloosa County with a rich data source to estimate the prevalence of personal health behaviors that contribute to morbidity and mortality among adults in Okaloosa. This report presents the survey data on a variety of issues related to health status, health care access, lifestyle, chronic illnesses, and disease prevention practice.

QUALITY OF LIFE AND OVERALL HEALTH STATUS

As a community of individuals, Okaloosa County residents display many encouraging protective factors that we can build upon to improve the health of our citizens.

The percentage of adults with good to excellent overall health in Okaloosa (88.5%) is significantly higher than for the state (82.9%). Okaloosa women (90.6%) are significantly more likely to rate their overall health as good to excellent compared to Florida’s women (82.3%). Both white (89.5%) and black (92.8%) Okaloosans are significantly more likely to rate their overall health as good compared to white (84.2%) and black (79.8%) Floridians. In addition Okaloosa white women (92.1%) are more likely to have good to excellent overall health than Florida white women (84.1%) and significantly more Okaloosa women report overall good to excellent health in 2010 than in 2007 (83.5%). Persons 18-44 years, persons with a high school education or GED, and unmarried persons in Okaloosa are significantly more likely to report good to excellent health overall than their Florida counterparts.

Table 4: Percentage of Adults with Good to Excellent Overall Health, 2010

	Okaloosa	Florida
All	88.5	82.9
White	89.5	82.3
Black	92.8	79.8
White Women	92.1	84.1
H.S. / GED	87.7	76.6
Not Married / Not Couple	87	77.9

The percentage of Okaloosa adults who are “very satisfied” or “satisfied with their lives is 95% and ranks comparably to Florida adults. These high levels of satisfaction with life hold for men, women, all age groups, education levels, income or marital groups. Notably, Okaloosans with a high school education or GED (98%) are significantly more likely to report “very satisfied” or “satisfied” than their Florida counterparts (92.2%). In addition, Okaloosans with income range of \$25,000 - \$49,999 (98.6%) are significantly more likely to be “very satisfied” or “satisfied” than their Florida counterparts (94.1%).

The percentage of adults who always or usually receive the social and emotional support they need is high at 83%. Okaloosa reports a significantly higher percentage of high school/GED graduates (85.7%) and married couples (90%) who always or usually receive the social and emotional support that they need than their Florida counterparts (74.5% and 84.6%, respectively).

Nearly 90% of Okaloosa report good physical health and almost 88% of Okaloosans report good mental health.

HEALTH INSURANCE COVERAGE

The 2010 Behavior Risk Factor Surveillance Survey (BRFSS) for Okaloosa reports that 85.9% of adults in Okaloosa County have any type of health insurance coverage. This reflects a 2.9% reduction in access to health insurance coverage since the 2007 BRFSS report. Over 80% of adults reported having a personal doctor in the 2010 Behavior Risk Factor Surveillance Survey for Okaloosa; again this percentage is deceptive and varies by age, annual income and marital status. In excess of 94% of Okaloosa adults with an annual household income of \$50,000 report having a personal doctor, a significant increase from 2007 when only 77% of adults in this income range reporting having a personal doctor. In contrast, 65% of adults with an annual income of less than \$25,000 reported having a personal doctor. Almost 90% of married couples report having a personal doctor compared to only 64% of unmarried adults. Similarly, people 18-44 years are less likely to report having a personal doctor (71%) compared to middle-aged adults 45-64 years (85%) and older adults 65 years and older (96.5%).

In addition, 33.5% of adults with an annual income less than \$25,000 per year reported not being *able to see a doctor at least once in the past year due to cost*, while for all Okaloosa adult's it was only 10.5%.

Okaloosa adults with an annual household income of \$50,000 or more report *health insurance coverage* in excess of 98%, an increase from 2007 when only 96% of adults in this income range reported having health insurance. In contrast, less than 60% of adults with an annual income of less than \$25,000 reporting having health insurance, a 10.8% reduction since the 2007 BRFSS report. Over 91% of married couples report having health insurance compared to only 76% of unmarried adults. Similarly, people 18-44 years are less likely to report having health insurance (76%) compared to middle-aged adults 45-64 years (89.9%) and older adults 65 years and older (100%). Sadly, young adults in Okaloosa age 18-44 years have seen a 12.4% decrease in health insurance coverage between 2007 and 2010.

The *percentage of adults who had a medical checkup in the past year* was in excess of 69% for the county. Over 80% of those earning \$50,000 and over 89% of those over 65 years of age had had a medical checkup, however, less than 40% of adults earning less than \$25,000 a year reported having a checkup. These data indicate a disparate access to care in Okaloosa County, with more difficult access for low income, younger, and uninsured individuals.

HEALTH CARE RESOURCES

HEALTH CARE FACILITIES: ACUTE CARE HOSPITALS

Okaloosa County has three for-profit hospitals located geographically within the borders of the county. The county does not house a not-for-profit hospital. Fort Walton Beach Medical Center (FWBMC) is the largest hospital facility in Okaloosa County. Located in Fort Walton Beach, the hospital lists 179 acute care beds, 48 adult psychiatric beds, and 10 level II neonatal intensive care beds. The FWBMC is the county's only Baker Act receiving hospital and has the only psychiatric and neonatal intensive care beds. FWBMC also has the only adult open-heart surgery capability. FWBMC has an off-site emergency department located in Destin, in addition to the emergency department in the Fort Walton Beach facility.

North Okaloosa Medical Center, located in Crestview, in the north end of the county, is the second largest hospital facility with 110 beds. North Okaloosa Medical Center also provides adult cardiovascular services (without open heart surgery), obstetric services (without a neonatal intensive care unit), and an emergency department.

Twin Cities Hospital (TCH) in Niceville has 65 beds. TCH does not provide obstetric services, but does have an emergency department.

The total number of hospital beds for Okaloosa County according to Florida Charts is 456. In Okaloosa County in 2009, there were 231.9 hospital beds per 100,000 residents, compared to 319.1/100,000 for the state during the same time period.

HEALTH CARE FACILITIES: SKILLED NURSING FACILITIES

There are eight skilled care nursing facilities in Okaloosa County providing a total of 899 beds.

CRESTVIEW

Parthenon Healthcare of Crestview	180 beds
Shoal Creek Rehabilitation Center	120 beds
Silvercrest Manor	60 beds

Destin

Destin Healthcare and Rehabilitation Center	119 beds
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Fort Walton Beach

Emerald Coast Center	120 beds
Parthenon Healthcare of FWB	120 beds
Westwood Healthcare Center	60 beds

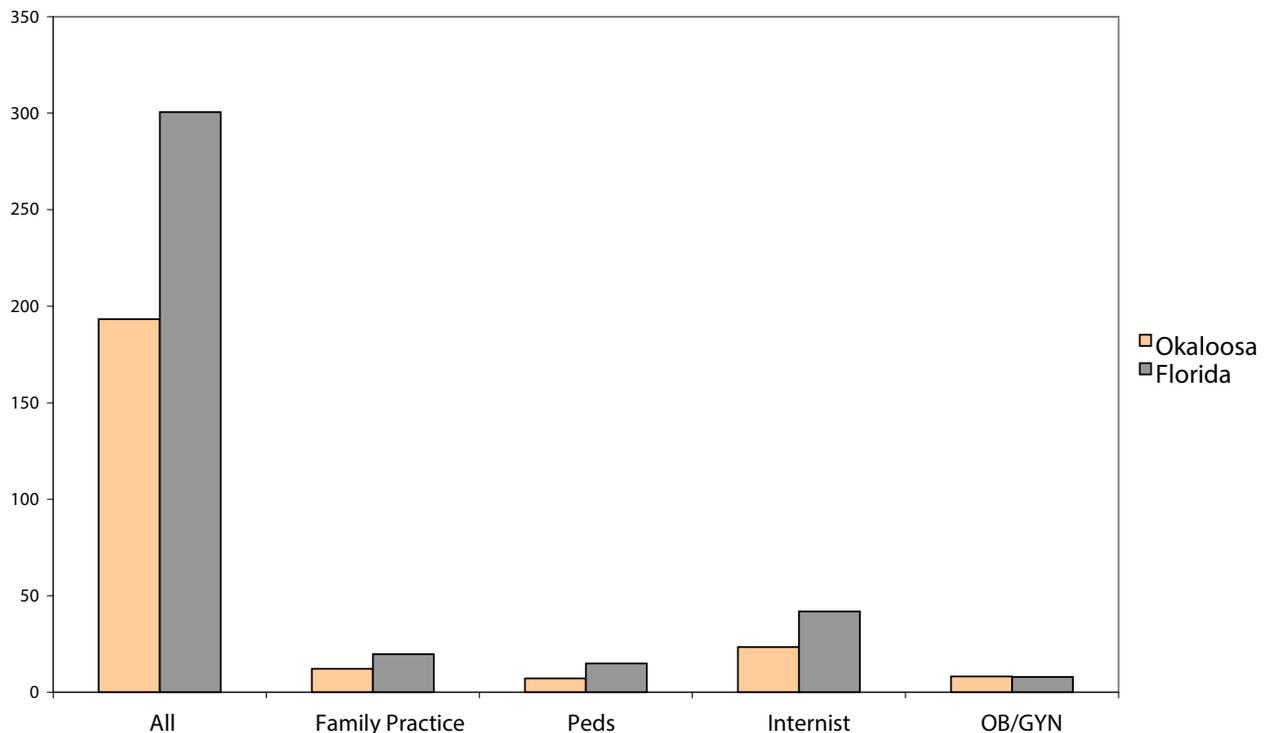
Niceville

Manor at Bluewater Bay	120 beds
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HEALTH CARE PROVIDERS: PHYSICIANS

Okaloosa County has significantly fewer total licensed physicians than counties of similar population size and the rate of licensed physicians in Okaloosa County per 100,000 people is significantly lower than that for the state of Florida. This holds true across all the primary care disciplines, with Okaloosa County having very low numbers of family physicians, pediatricians, and internists. Only the number of licensed Obstetrician Gynecologists is at the state rate per 100,000 after a significant decline in the statewide number of these specialists during the last annual measurement period.

Figure 13: Licensed Health Care Providers per 100,000 Population, 2009



Source: Florida Department of Health; Division of Medical Quality Assurance

The number of licensed primary care providers in all disciplines in Okaloosa County has declined from 2007 through 2009.

Table 5: Primary Care Providers, Okaloosa County

	Okaloosa Total 2007	Okaloosa Total 2008	Okaloosa Total 2009
All Physicians	375	380	380
Family Practice	44	53	24
Peds	22	21	14
Internist	53	55	46
OB/GYN	17	17	16

HEALTH CARE PROVIDERS: DENTISTS

Okaloosa County is significantly below the state rate of total licensed dentists. Access to dental care for patients covered by Florida Medicaid is severely restricted. For 2009, the total number of licensed dentists in the county was 104. This number has increased slightly over the past three years (94 in 2007, and 92 in 2008). The rate for the state of Florida is 61.9 dentists per 100,000 population, while the Okaloosa County rate is only 52.9/100,000.

The 2010 Florida BRFSS report asked adults several questions that related to access to dental care in Okaloosa County. The percentage of Okaloosa County adults who reported that they *visited a dentist or a dental clinic in the past year* exceeded 70%. The percentage of adults who *had their teeth cleaned in the past year* exceeded 68%. These overall numbers need to be seen in light of the further breakdown that demonstrates that less than 38% of those with annual income of \$25,000 or less had visited a dentist and only 30.1% of these income level individuals reported having their teeth cleaned. In the higher income level of annual income of \$50,000 or more, greater than 85% had seen a dentist and had their teeth cleaned. These data seem to indicate a disparity in dental access within the county with greater access for adults in higher income levels.

HEALTH RESOURCES: SHORTAGE DESIGNATIONS & UNDERSERVED AREAS

The United States Department of Health and Human Services Health Resources and Services Administration (HRSA) collects information and classifies areas of the country regarding the availability of health care services. There are two types of health professional shortage designations: Health Professional Shortage Areas (HPSAs) and Medically Underserved Areas or Populations (MUAs/MUPs). Both designations consider primary care physician-to-population ratios, other high-need indicators (poverty levels, percent of the population that is elderly, infant death rate and rate of low birth weight), and barriers to access care.

HEALTH PROFESSIONAL SHORTAGE AREAS include the following.

- Urban and rural geographic areas
- Population groups
- Facilities with shortages of health professionals

Federal designation as a HPSA documents a shortage of health care providers (primary care, dental or mental health) 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. To be eligible for designation, a geographic area or a population group (a low income or migrant population) must have a population-to-physician ratio greater than 3,000 to one.

HPSAs are designated by HRSA as having shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), demographic (low income population) or institutional (comprehensive health center, federally qualified health center or other public facility).

MEDICALLY UNDERSERVED AREAS AND POPULATIONS are another measure of medical under service as defined by the U.S. Department of Health and Human Services.

- **Medically Underserved Areas (MUAs)** are areas or populations designated by HRSA as having: too few primary care providers, high infant mortality, high poverty and/or high elderly population. MUAs may be a whole county or a group of contiguous counties, a group of county or civil divisions or a group of urban census tracts in which residents have a shortage of personal health services.
- **Medically Underserved Populations (MUPs)** may include groups of persons who face economic, cultural or linguistic barriers to health care.

A geographic designation for the whole county means there is a shortage of providers (primary care physicians, dentists, mental health professionals) for everyone living in the county, regardless of ability to pay for services through insurance or other means. A geographic area within a county means there is a shortage of health care providers for everyone living in that area of the county. Finally, a special population designation for the whole county (or parts of counties) means there is a shortage of providers to meet the needs of low income, migrant or other special populations because the existing providers do not serve these patients.

OKALOOSA COUNTY HPSA AND MUA DESIGNATIONS

- The **Okaloosa Correctional Institution** is designated as a Primary Medical Care, Dental, and Mental Health HPSA.
- The **low income population group residing in the North Okaloosa areas of Baker, Crestview, and Laurel Hill** are designated as both Primary Medical Care and Dental HPSAs, while the **low income population residing in multiple census tracts within the city of Fort Walton Beach** are designated as Primary Medical Care HPSAs.
- The Baker and Laurel Hill service area is designated as an MUA.

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.

Overall, nearly two-thirds of the Okaloosa adults are overweight (35.2%) or obese (28.8%). This is a 1% decrease since 2007. However, while the percentage of overweight Okaloosa adults has decreased 10.5%, the percentage of obese adults has risen 9.5%. Since 2007, the greatest decrease in overweight adults has been for men. In 2007 nearly 55% of adult men were overweight compared to 38.5% in 2010. Sadly, the percentage of obese adult men increased from 21.9% in 2007 to 33.4% in 2010. This pattern holds for Okaloosa adult women with overweight women dropping from 36% in 2007 to 31.9% in 2010 and obese women increasing from 16.6% in 2007 to 24.2% in 2010. For Okaloosa adults age 45-64 years there has been a significant increase in the percentage of obese adults from 22.4% in 2007 to 38.7% in 2010.

When overweight and obese statistics are combined for Okaloosa, men (71.8%) are more likely than women (56%) to be overweight or obese. Okaloosa adults age 45-64 years are significantly more likely to be overweight or obese than their similarly aged Florida counterparts.

POOR DIET & 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 healthy 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 calorie 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. Unfortunately, less than one third of Okaloosa residents eat the recommended five servings of fruit and vegetables each day. Approximately 22% of our residents are sedentary and nearly 60% of Okaloosans have jobs where there is no physical activity.

TOBACCO USE

Okaloosa County has made significant progress in the percentage of adults who currently smoke over the last 3 years. In 2007, over 24% of our residents smoked; in 2010 that percentage is down to 19.2%. As encouraging as that decrease is, nearly 1 of every 5 adults in our county still currently smoke, and more Okaloosa adults smoke than in the state (17.1%). Smoking rates are similar in men and women, with a larger percentage decrease from 2007 in the men's smoking rates. Smoking rates are higher among black Okaloosa residents than among white residents; unlike the state average which shows higher rates in white smokers.

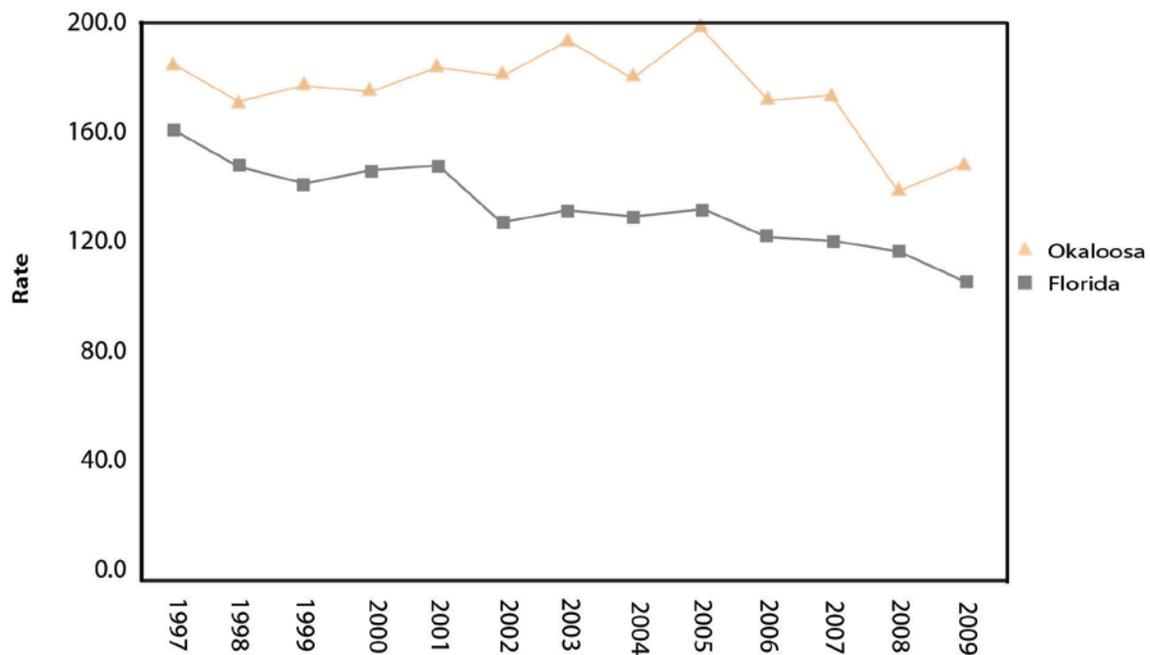
In Okaloosa, smoking rates are nearly double for residents with incomes below \$50,000 a year, compared to those who earn over \$50,000, and for unmarried individuals compared to married individuals. Okaloosa ranks in the bottom 25% of counties for percentage of former smokers. Only about one quarter of adults in our county are former smokers and 57% of our current smokers report trying to quit in 2010.

HEAVY OR BINGE DRINKING (OR ALCOHOL CONSUMPTION)

The percentage of adults who reported engaging in heavy or binge drinking declined by one third (from over 18% in 2007 to 12% in 2010) and is below the state average of 15%. Heavy and binge drinking rates are higher in men than in women. Rates are highest in residents with high school level education and unmarried individuals. Interestingly, rates increase with income and decrease with age in our community.

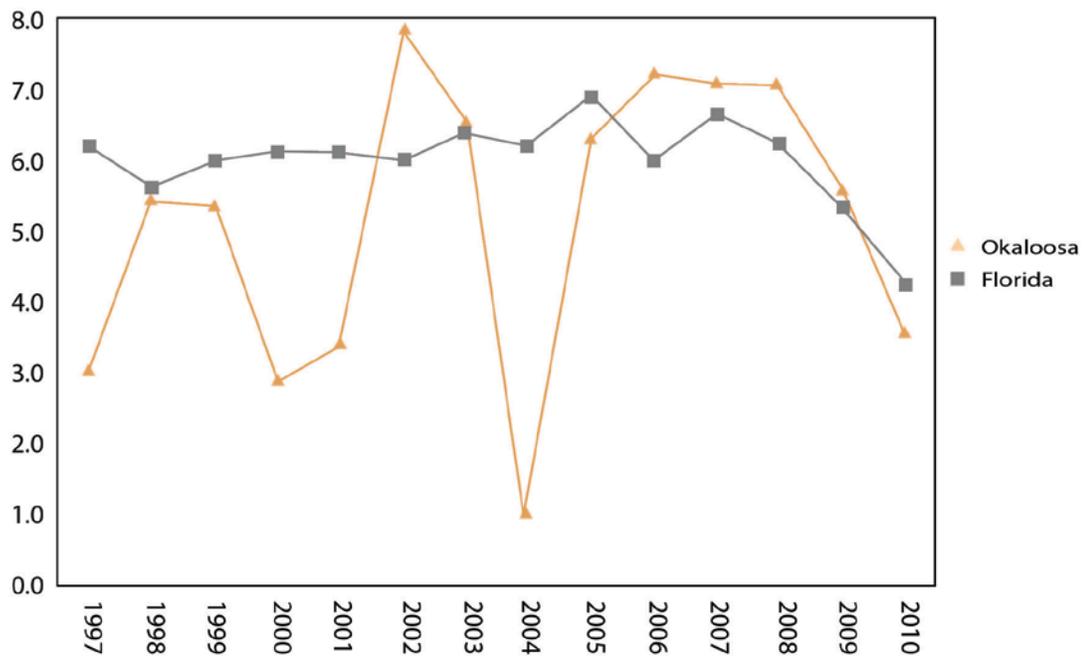
The percentage of adults who report they have driven a vehicle after consuming too many alcoholic beverages in the last 30 days seems low at 1%. The sobering reality is that our 1% rate translates into nearly 1,500 residents who are driving under the influence on our roadways every month! The impact on our county is seen by higher rates of alcohol-related motor vehicle crashes and alcohol-related motor vehicle deaths than the state.

Figure 14: Alcohol-Related Motor Vehicle Crashes



Source: Florida Department of Health in Okaloosa, 2011

Figure 15: Alcohol-Related Motor Vehicle Deaths



Source: Florida Department of Health in Okaloosa, 2011

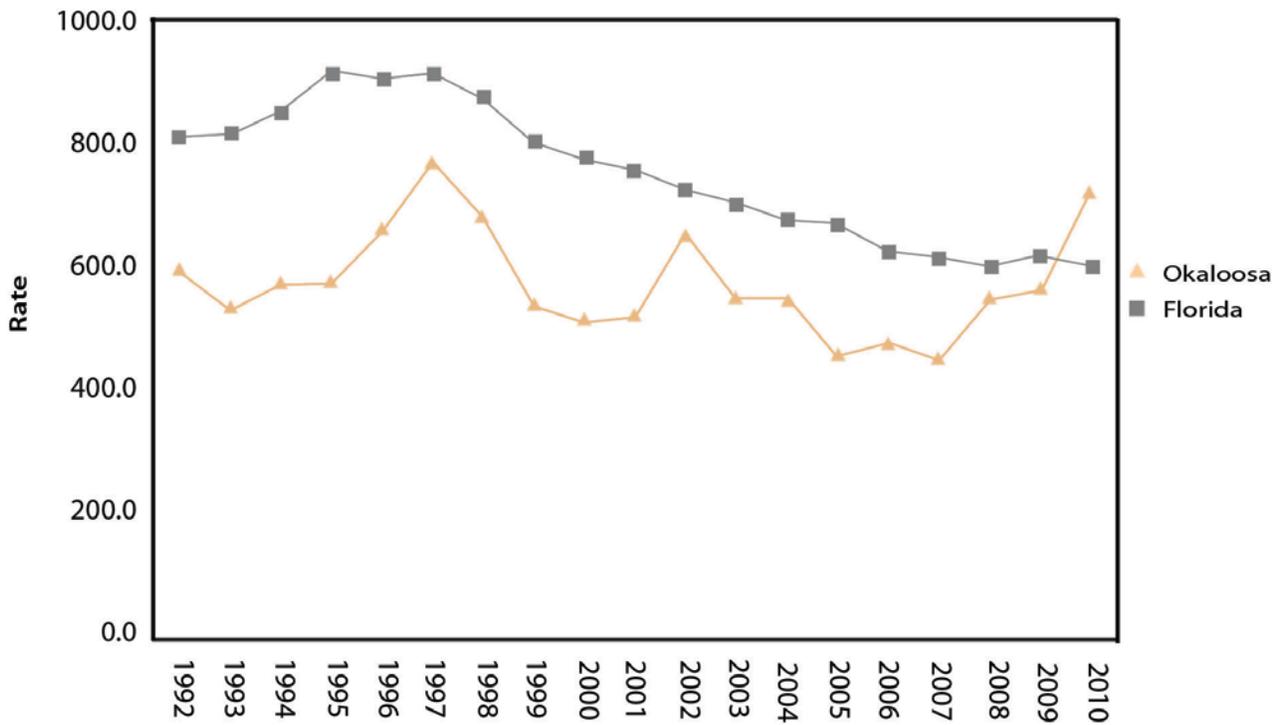
DOMESTIC VIOLENCE

Domestic violence is a serious and preventable problem that affects millions of Americans. Domestic violence is a term that describes physical, sexual, or psychological harm by a current or former spouse or partner. Domestic violence varies in frequency and severity. It can range from one hit that may or may not impact the victim to 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 risen dramatically in Okaloosa County since 2007 and now exceed overall Florida rates.

Figure 16: Total Domestic Violence Offenses



Source: Florida Department of Health in Okaloosa, 2011

HOMELESSNESS

Okaloosa has 2,764 homeless persons. 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 from the street or an emergency shelter.

Recently, Okaloosa has experienced an increase in unemployment (from around 3-4% to 9%), along with increased underemployment (full-time cut to part-time) -- driving up family homelessness. About 20% of Okaloosa County residents spend more than 50% of their income on housing, and local jobs in the tourist industry are often seasonal, part-time and/or unskilled.

Our homeless population has seen a 16% increase from last year, and an overall 22% increase since 2005. It is well accepted that homeless individuals are typically undercounted, so we know that the actual numbers of homeless individuals is higher than the numbers reported in our community. In 2011, over half of our homeless were children, over half are women, and approximately 20% were veterans. The number of chronically homeless has decreased in our community by almost 20% over the last year, thanks to the dedication of the many homeless service providers in our community.

Figure 17: Homeless Percentages, Okaloosa County

Sex 45.1% are male 54.8% are female	Disabling Conditions 37.7% have disabling conditions
Age 50.4% are children under 18 years old 43.2% are 18-60 years old 4.8% are elderly (over 60 years old)	Causes of Homelessness 50.7% due to employment/financial reasons 7.7% due to housing issues 16.4% due to medical disability problems 2.8% due to forced to relocate from home 0.3% due to recent immigration
Veteran 17.9% are veterans	

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. 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, such as abandonment, illness (physical or emotional), incarceration, 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. In Okaloosa County the number of infants in foster care is 18.5%, which is much higher than state rates. Okaloosa County also has more children ages 1-5 years (9.4%) in foster care than the state (6.0%).

Being removed from their home and placed in foster care is a difficult and stressful experience for any child, and is a community issue of significance in Okaloosa County because of the large percentage of children in foster care. 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

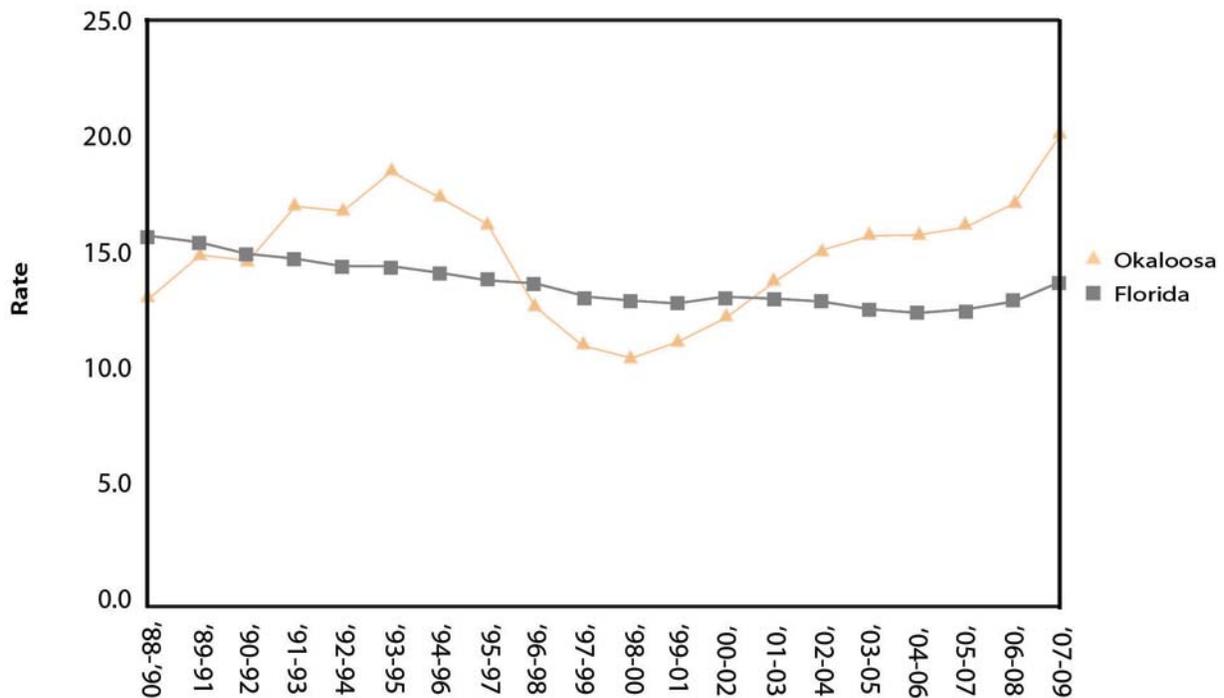
In the U.S., up to 80% of children in foster care have chronic health conditions and/or behavioral, emotional, and developmental concerns. That rate is more than four times the rate (13.9%) of all children with special health care needs in the U.S. population. Consistent with their special health care needs, children in foster care account for a disproportionate share of health care spending. Virtually all 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 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 has been increasing in Okaloosa County since 2000, and is significantly higher than the overall state rates. For 2005-2009 suicide was the 8th leading cause of death in our county. Suicide ranked as the 9th leading cause of death in FL in 2009 and does not make the top 10 leading causes of death in the United States.

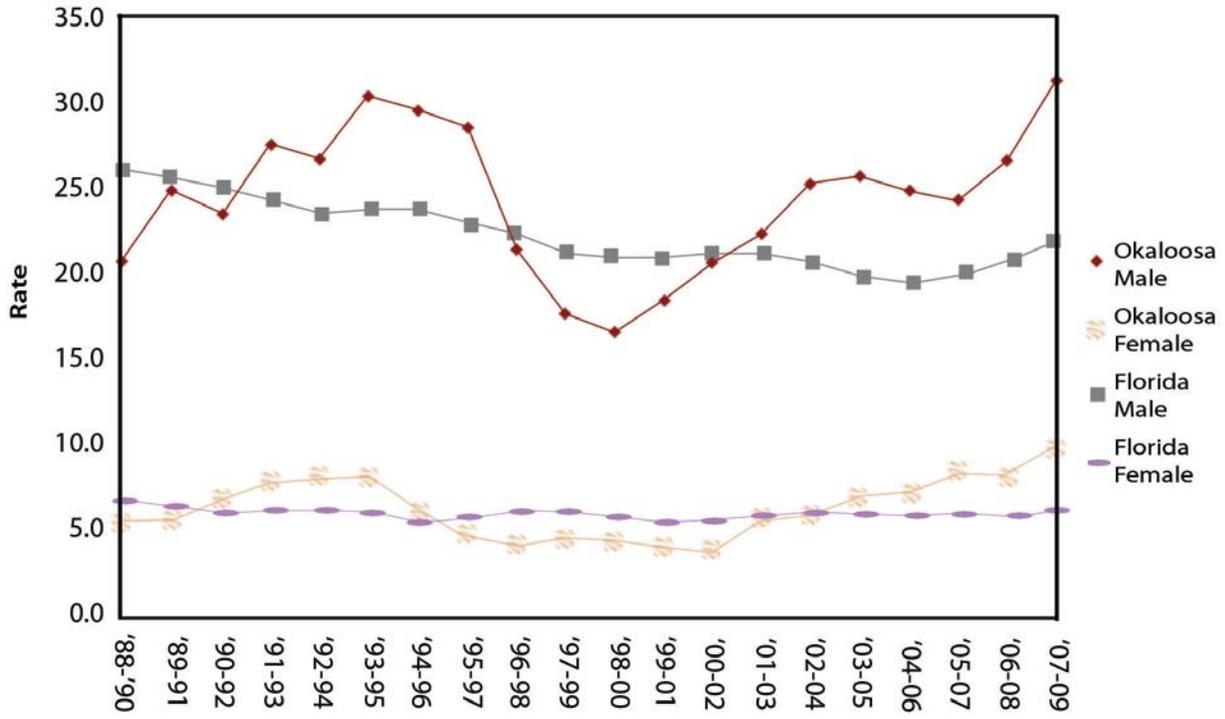
Figure 18: Suicide (All Means) Age-Adjusted Death Rate, 3-Year Rolling Rates



Source: Florida Department of Health

While the rate of death from suicide is higher for both males and females in Okaloosa, male suicides are significantly higher than the state and have been increasing since the late 1990s.

Figure 19: Suicide (All Means) Age-Adjusted Death Rate, 3-Year Rolling Rates



Source: Florida Department of Health

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 Okaloosa County School District started participating in the FYTS and the FYSAS surveys in 2008.

TOBACCO USAGE

Data from the 2010 Florida Youth Tobacco Survey shows that Okaloosa County middle and high school students generally behave comparable to their Florida counterparts when it comes to the use of tobacco products, except in a few circumstances. Despite decades of knowing the dangers of tobacco on health, 9.1% of Okaloosa middle school students and 28% of Okaloosa high school students report using either cigarettes, cigars or smokeless tobacco on one or more days in the past 30 days. In Okaloosa County, cigarette and smokeless tobacco usage almost triples between middle school and high school, while the use of cigars almost quadruples. Six percent of middle school students report smoking cigarettes while 17.5% of high school students smoke cigarettes. The Healthy People 2010 goal for high school student smokers is 8% or less and Okaloosa students smoke at almost twice that rate.

Okaloosa high school students are significantly more likely to report use of smokeless tobacco on one or more of the past 30 days (10.7%) than their Florida counterparts (6.4%). Both the Okaloosa and Florida failed to attain the Healthy People 2010 goal of <1% of high school students using smokeless tobacco.

Okaloosa middle school students are significantly more likely to report exposure to second hand smoke during the past 7 days (54.9%) than their Florida counterparts (47%). In addition, Okaloosa middle school students are significantly more likely to report that smoking is allowed in the home (15.1%) than their Florida counterparts (11.2%). Finally, Okaloosa high school students are significantly less likely to report receiving comprehensive tobacco use prevention education (4.8%) than their Florida counterparts (7.4%).

In Okaloosa middle school students 68% of students report they are "committed never smokers", but by high school only a little over half of the students (53.1%) still identify as being committed to never smoke. Again both the state and county failed to attain the Healthy People 2010 goal of 95% of students being committed to never smoke.

Significant opportunities exist for the community to encourage and promote positive health behaviors around tobacco usage in order to reduce cigarette smoking and other tobacco usage among our school-aged youth.

YOUTH SUBSTANCE USE

The 2010 Florida Youth Substance Abuse (FYSA) survey 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 in Okaloosa County is alcohol. In Okaloosa County, 33.4% of middle school students and 61.5% of high school students report having used alcohol in their lifetimes. The percent of adolescents in Okaloosa County who report no alcohol use in the past thirty days is comparable to the state of Florida as a whole at about 85% for middle school students and 65% for high school students. That is an improvement over the 2008 FYSA survey in which 82% of middle school students and 60% of high school students reported no alcohol use in the past 30 days. On the other hand, that means that in 2010 slightly more than 15% of middle school students and 35% of high school students in Okaloosa County admit to underage drinking in the past month. The Healthy People 2010 goal is for 91% of students to not use alcohol. Both the state and the county failed to attain this goal for middle school and high school students.

Among high school drinkers in Okaloosa, the usual source of alcohol within the past 30 days is someone buying (29.9%) or someone giving the minor the alcohol (45.9%). Most of the high school drinking within the past 30 days has occurred in another person's home (60.8%). On the days that high school students drank in the past 30 days, over 59% averaged 3 or more drinks per 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 Okaloosa County, binge drinking among middle school students is relatively uncommon at 6.7%, which is about the same as the state at 6.9%. Binge drinking among high school students is almost three times higher than among middle school students at just 19.6% and is equal to the rest of the state. Binge drinking by middle school students in both Florida and Okaloosa County exceed the Healthy People 2010 goal of <3.1% by almost double. Binge drinking among Florida and Okaloosa high school students is over six times the Healthy People 2010 goal of <3.1%. Binge drinking may impair a teen's 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 into the adult population.

After alcohol and cigarettes, the next most common substance of abuse for 10-17 year old children is marijuana or hashish. Ten percent (10%) of 10-14 year olds and 35.7% of 15-17 year olds report ever using marijuana or hashish in their lifetime. Only a small percentage of Okaloosa County middle school students (5.3%) report using marijuana/hashish in the past thirty days, but marijuana/hashish use by high school students (16.5%) is more than three times higher. Marijuana and hashish use among Okaloosa County students is similar to the state rates for middle school (5.7%) and for high school (18.6%) However, both Florida and Okaloosa County fail to meet Healthy People 2010 goal of <7% of students reporting using marijuana/hashish in the past 30 days.

GAMBLING

Gambling is a serious problem among Florida school-aged youth. Over 52% of Okaloosa and Florida youth report gambling in the past 12 months. Males in Okaloosa are more likely to gamble in the past 12 months (64.5%) than females (39.3%). Middle school students in Okaloosa are more likely to report gambling in the past 12 months (58.3%) than high school students (48.5%). Arguing about gambling in the past 12 months is almost twice as likely among Okaloosa middle school students (18.6%) as it is among high school students (9.8%). Both these trends are mirrored by other Florida youth.

BULLYING

Bullying has received much national attention in the last 10 years. Physical and verbal bullying remains more common among Okaloosa and Florida youth than cyber bullying. Sadly, 22.3% of Okaloosa youth worry about bullying. Bullying is more common in 10 –14 year old children (28.3%) than in 15 –17 year old children (17.5%). Reports of being kicked or shoved in the past 30 days in Okaloosa middle school students is over 22% and just over 10% for Okaloosa high school students. In Okaloosa County, being teased or taunted in the past 30 days exceeds 44% for middle school students and 26% for high school students. Over 16% of middle school students and about 9% of high school students admit to physically bullying others in the past 30 days. Verbally bullying others in the past 30 days is more common in Okaloosa with nearly 25% of middle school students and 14% of high school students admitting to this behavior. This pattern of behavior is sadly mirrored through out all Florida counties.

PHYSICAL ACTIVITY AND OVERWEIGHT

Fewer Okaloosa County middle school students (25%) report not getting vigorous physical activity than students in Florida as a whole (31.6%) however those positive habits begin to decrease as students reach high school. High school students in Okaloosa County (38.9%) and in the state (40.6%) report getting less vigorous physical than middle school students and high school students fail to meet the Healthy People 2010 goal of 15% reporting insufficient vigorous physical activity.

While Okaloosa County has a lower percent of both middle school and high school students who are overweight, once again there are more high school students than middle school students who are overweight. The Healthy People 2010 goal is 5% or less of middle and high school students will be overweight. In Okaloosa 8.4% of middle school students and 10.8% of high school students are overweight and far exceed the goal. Lower physical activity is related to increases in overweight and obesity. This is a trend that should be addressed in by our community.

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 Okaloosa County who have asthma (291.7) are lower than in other parts of the state (387.3). Rates for Okaloosa older children between the ages of 12-18 years with asthma are much worse at 447.7. 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. Okaloosa ranks in the bottom 25% of Florida counties in asthma hospitalization for children ages 12 –18 years.

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.

Diabetes hospitalization is potentially avoidable by following a diabetes management plan put in place by the child 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 Okaloosa County who have diabetes (67.3) are higher than in other parts of the state (41.4). Rates for Okaloosa older children between the ages of 12-18 years with diabetes are much worse at 165/100,000. The rate for Florida adolescents is 121.4/100,000. Okaloosa ranks in the bottom 25% of Florida counties for avoidable hospitalizations for diabetes for children ages 5 – 18 years.

DEATH INDICATORS

LEADING CAUSES OF DEATH – ALL AGES

Leading causes of death reflects the number of deaths in rank order. The leading cause of death in Okaloosa County is cancer, whereas the leading cause of death in Florida and the U.S. is heart disease. Both Okaloosa County and Florida rank **suicide** as one of the leading causes of death. Suicide does not make the top 10 leading causes of death for residents of the country overall. In addition, **unintentional injuries** are the 4th leading cause of death in Okaloosa and Florida and the 5th leading cause of death for the nation. **Stroke** is the 5th leading cause of death in Okaloosa and Florida but the 3rd leading cause of death in the nation.

Table 6: Top 10 Causes of Death for Residents of Okaloosa County, Florida, and the United States

Okaloosa 2005-2009	Florida 2009	United States 2009
Cancer	Heart diseases	Heart diseases
Heart diseases	Cancer	Cancer
Chronic lower respiratory disease	Chronic lower respiratory disease	Stroke (cerebrovascular diseases)
Unintentional injuries	Unintentional injuries	Chronic lower respiratory disease
Stroke (cerebrovascular diseases)	Stroke (cerebrovascular diseases)	Unintentional injuries
Alzheimer’s disease	Diabetes	Alzheimer’s disease
Diabetes	Alzheimer’s disease	Diabetes
Suicide	Kidney diseases	Influenza & pneumonia
Kidney diseases	Suicide	Kidney diseases
Influenza & pneumonia	Influenza & pneumonia	Septicemia

Source: Florida Data: Florida Department of Health; Office of Planning, Evaluation, and Data Analysis; United States Data: National Vital Statistics System, National Center for Health Statistics, CDC.

LEADING CAUSES OF DEATH – BY AGE GROUPS

The leading cause of death varies by age group. However, the leading cause of death by standard age groups is the same for Okaloosa, Florida, and the United States.

- For infants less than 1 year, conditions associated with complications in the perinatal 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.

MEASURING DEATH THROUGH RATES

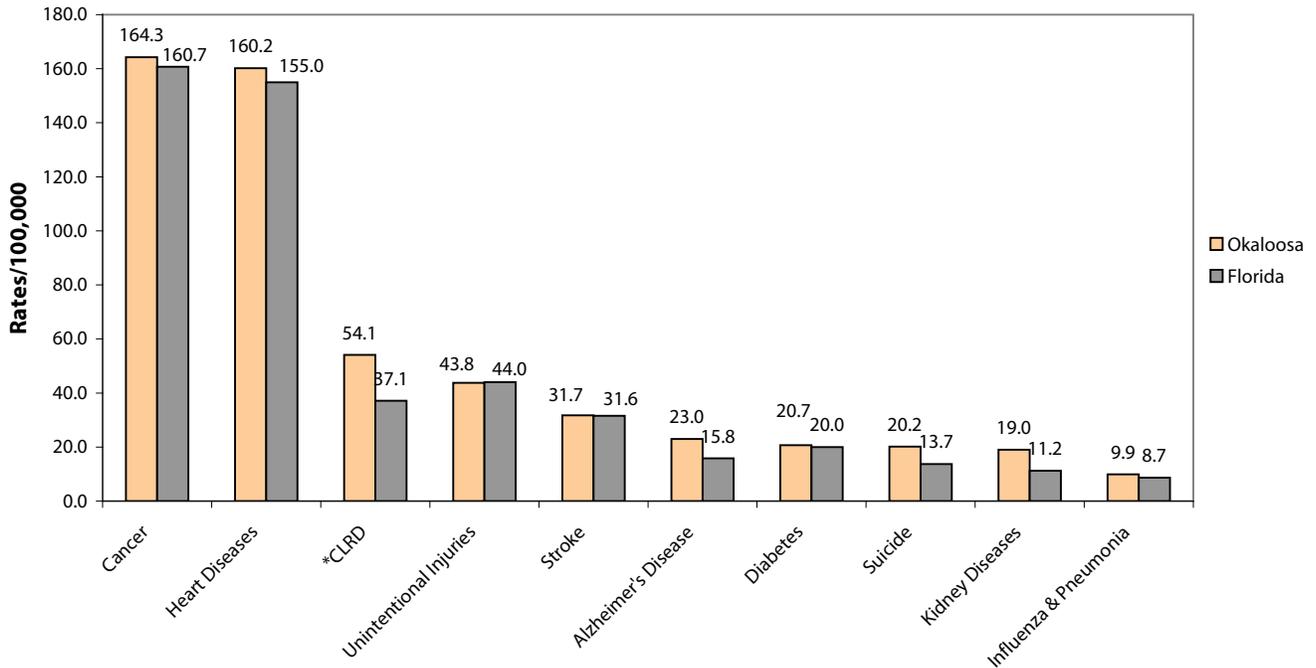
There are limitations to the use of the leading causes of death since this ranking of deaths relies on counting the number of deaths. A better indicator of death patterns is the *age-adjusted death rate*. The age-adjusted death rate is good for examining changes in the risk of death over a period of time when the age distribution of the population is changing. Also, age-adjusted death rates are better indicators of relative risk when comparing mortality across geographic areas or between sex or race subgroups of the population that have different age compositions.

When assessing deaths within an age group, the crude death rate is used. For the purposes of this document, death rates are shown as 3-year rolling averages.

MAJOR CAUSES OF DEATH USING AGE-ADJUSTED DEATH RATES

The major causes of death in Okaloosa and Florida using the age-adjusted death rate per 100,000 people (3-year rolling average; 2007-2009) are as follows.

Figure 20: Major Causes of Death, 3-Year Age-Adjusted Death Rates per 100,000, Okaloosa & Florida, 2007-2009



*CLRD: Chronic Lower Respiratory Diseases

Source: Florida Department of Health; Bureau of Vital Statistics

Okaloosa and Florida attained the Healthy People 2010 goal for heart diseases deaths of no more than 162 per 100,000. Okaloosa has a higher rate of death for chronic lower respiratory diseases (CLRD) than Florida, yet both Okaloosa and Florida attained the Healthy People 2010 goal for CLRD deaths of no more than 62.3/100,000 population. Both Okaloosa and Florida failed to attain the Healthy People 2010 goal of no more than 5 suicide deaths per 100,000. Okaloosa has a higher suicide death rate (20.2 per 100,000 deaths) than Florida (13.7 per 100,000 deaths).

CANCER DEATHS

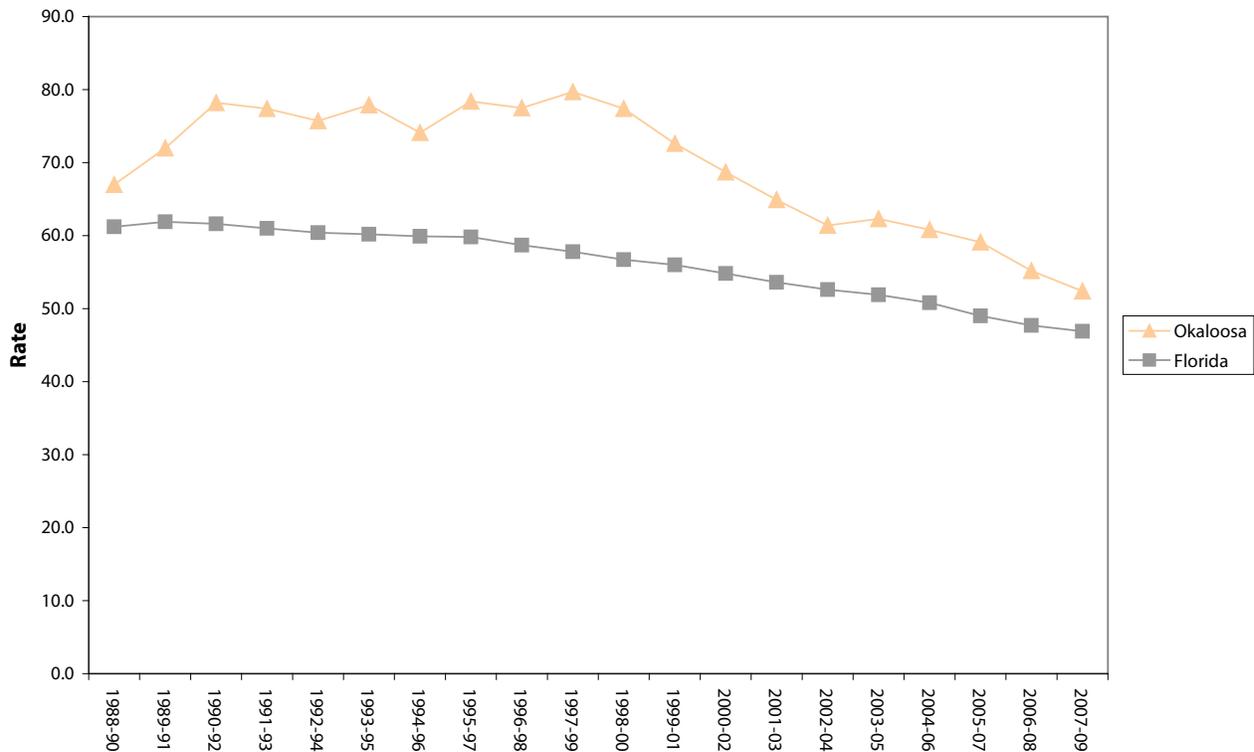
The three leading cancers for men are lung, prostate and colorectal. For women, the leading cancers are lung, breast, and colorectal.

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.

Okaloosa has a higher rate of lung cancer death than Florida and this trend has remained unchanged for the past twenty years. The rate of death for lung cancer has steadily declined in Okaloosa County since the late 1990's. The age-adjusted lung cancer death rate (2007-2009) for Okaloosa residents is 52.4/100,000 versus Florida at 46.9/100,000. Both Okaloosa and Florida failed to attain the Healthy People 2010 goal of no more than 43.3 lung cancer deaths per 100,000.

Figure 21: Lung Cancer Age-Adjusted Death Rate, 3-Year Rolling Rates, Okaloosa vs Florida

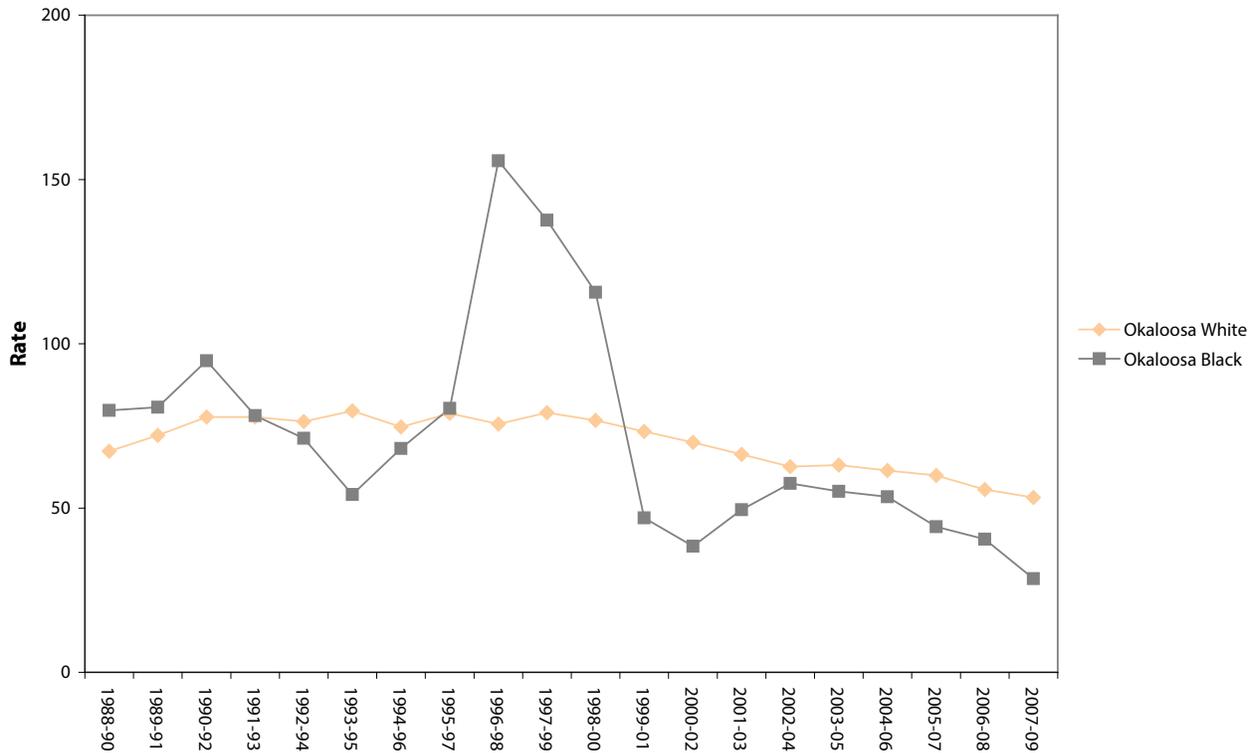


Source: Florida Department of Health; Bureau of Vital Statistics

Except for a period in the late 1980s and mid-1990s, black Okaloosa residents have had a lower rate of lung cancer death than white Okaloosa residents. The age-adjusted lung cancer death rate for black Okaloosans for 2007-2009 is 28.5/100,000 compared to the same time period for black Floridians of 30/100,000. Black Okaloosa and black Florida residents' death rate from lung cancer attained the Healthy People 2010 goal of no more than 43.3 lung cancer deaths per 100,000.

White Okaloosa residents have a higher rate of lung cancer death than white Florida residents. The age-adjusted lung cancer death rate for white Okaloosans for 2007-2009 is 53.2/100,000 compared to the same time period for white Floridians of 47.9/100,000. White Okaloosa and white Florida residents' death rate from lung cancer failed to attain the Healthy People 2010 goal of no more than 43.3 lung cancer deaths per 100,000.

Figure 22: Lung Cancer Age-Adjusted Death Rate, 3-Year Rolling Rates



Source: Florida Department of Health; Bureau of Vital Statistics

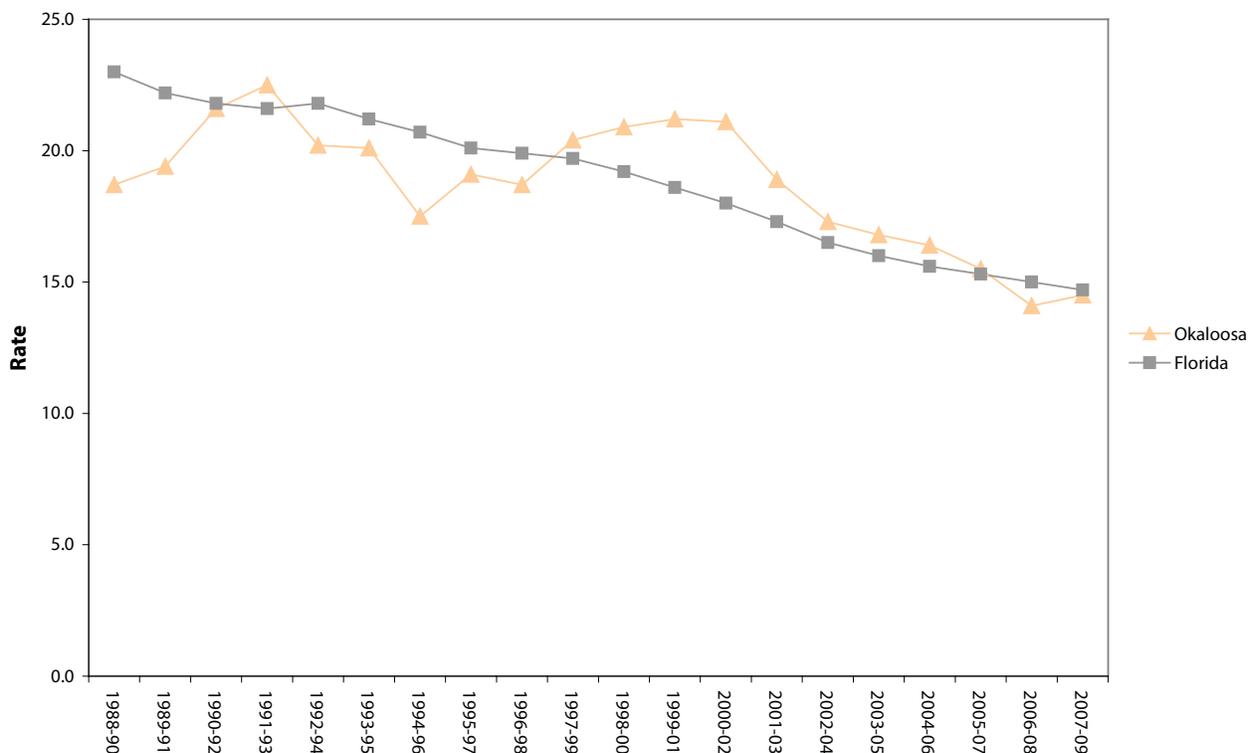
Smoking is the number one cause of lung cancer with 90% of cases in men and 80% of cases in women attributable to smoking. The 2007 Behavioral Risk Factor Surveillance Survey showed that Okaloosa had a higher percentage of adults who smoke (24%) than Florida (19.3%). The rate of smoking was double the Healthy People 2010 goal of no more than 12% of adult smokers. By the 2010 Behavioral Risk Factor Surveillance Survey, Okaloosa smokers had dropped to 19.2%. However while Okaloosa still has a higher percentage of smokers than Florida (17.1%), Okaloosa saw a greater percentage reduction in smoking (4.8%) than Florida (2.2%). In 2007, Okaloosa women greater than 17 years of age who reported smoking was 21.9% compared to Florida at 17.5%. By 2010, the percentage of Okaloosa women greater than 17 years of age who were current smokers had dropped by only 2.4% to 19.5%. Okaloosa men had a greater reduction in smoking between 2007 and 2010 than Okaloosa women. Okaloosa men currently smoking dropped 7.3% between 2007 and 2010 from 26.2% to 18.9%. Okaloosa now has a larger percentage of the female population smoking than the male population.

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.

Okaloosa and Florida have similar rates of colorectal cancer, especially over the last decade. The age-adjusted colorectal death rate (2007-2009) for Okaloosa residents is 14.5/100,000 versus Florida at 14.7/100,000. Both Okaloosa and Florida failed to attain the Healthy People 2010 colorectal cancer death rate of no more than 13.7/100,000.

Figure 23: Colorectal Cancer Age-Adjusted Death Rate, 3-Year Rolling Rates, Okaloosa vs Florida

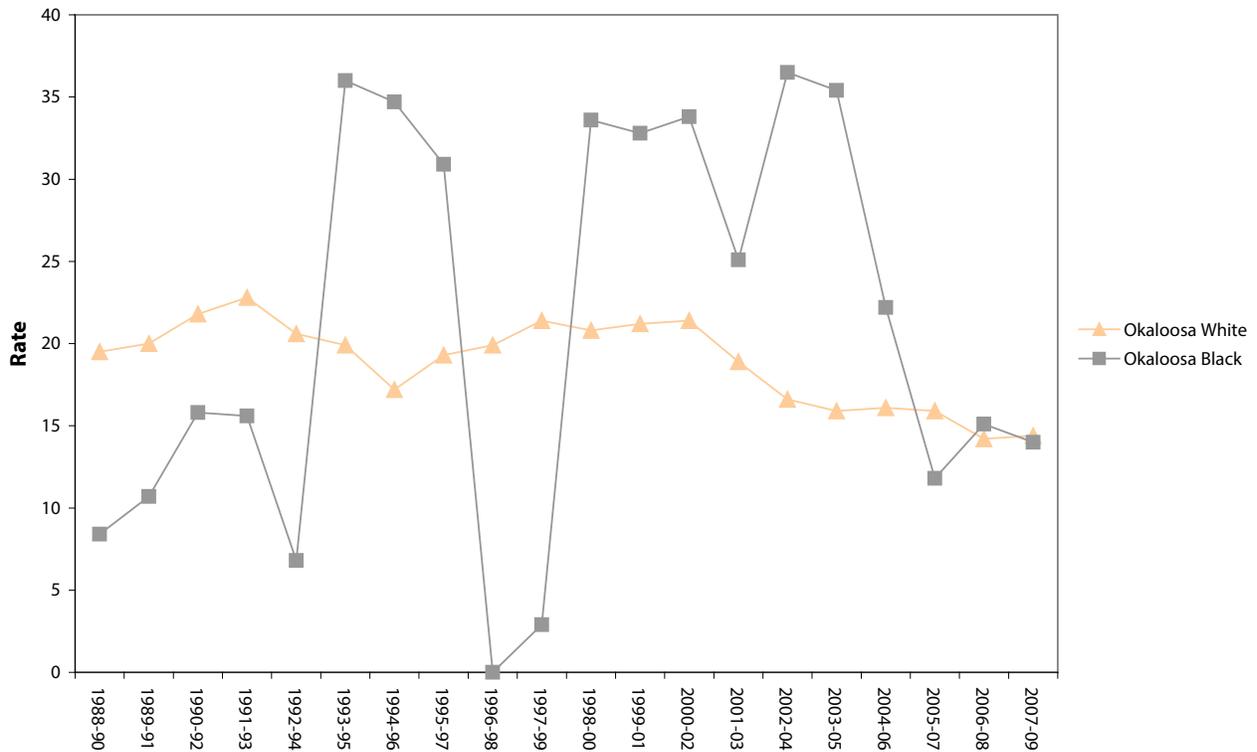


Source: Florida Department of Health; Bureau of Vital Statistics

Due to a low number of deaths from colorectal cancer in the black population in Okaloosa, 3-year age-adjusted colorectal cancer death rates are highly variable, making it difficult to interpret the death rate trend. The age-adjusted colorectal cancer death rate for black Okaloosans for 2007-2009 is 14/100,000 compared to the same time period for black Floridians of 18.5/100,000. Black Okaloosa and black Florida residents' death rate from colorectal cancer failed to attain the Healthy People 2010 goal of no more than 13.7 colorectal cancer deaths per 100,000.

White Okaloosa residents have a similar rate of colorectal cancer death as white Florida residents. The 2007-2009 age-adjusted colorectal cancer death rate for white Okaloosans is 14.4/100,000 versus white Floridians at 14.2/100,000. White Okaloosa and white Florida residents' death rate from colorectal cancer failed to attain the Healthy People 2010 goal of no more than 13.7 colorectal cancer deaths per 100,000.

Figure 24: Colorectal Cancer Age-Adjusted Death Rate, 3-Year Rolling Rates



Source: Florida Department of Health; Bureau of Vital Statistics

Colorectal cancer is the second leading cancer killer in the U.S., 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 is 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 a close relative has had colorectal polypsis 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.

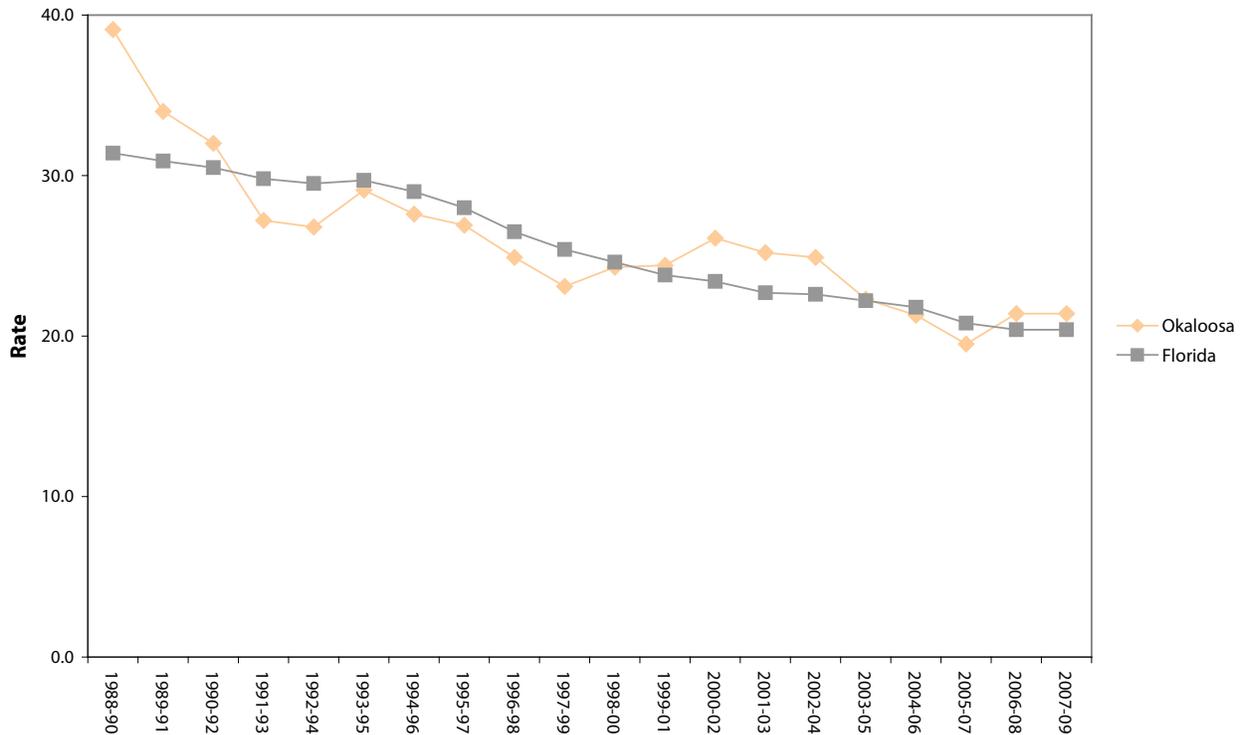
People at high-risk for colorectal cancer may need earlier or more frequent tests than other people. Colorectal cancer usually starts from polyps in the colon or rectum. A *polyp* is a growth that shouldn't be there. Over time, some polyps can turn into cancer. Screening tests can find polyps, so they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

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 1988-90, the age-adjusted breast cancer death rate was 39.1 per 100,000 women in Okaloosa and 31.4 per 100,000 women in Florida. By 2007-2009, the age-adjusted breast cancer death rate had dropped to 21.4 per 100,000 women in Okaloosa and 20.4 per 100,000 women in Florida. This is a 45% reduction in death rates due to breast cancer for Okaloosa women and a 35% reduction for Florida's women.

Figure 25: Breast Cancer Age-Adjusted Death Rate, 3-Year Rolling Rates, Okaloosa vs Florida

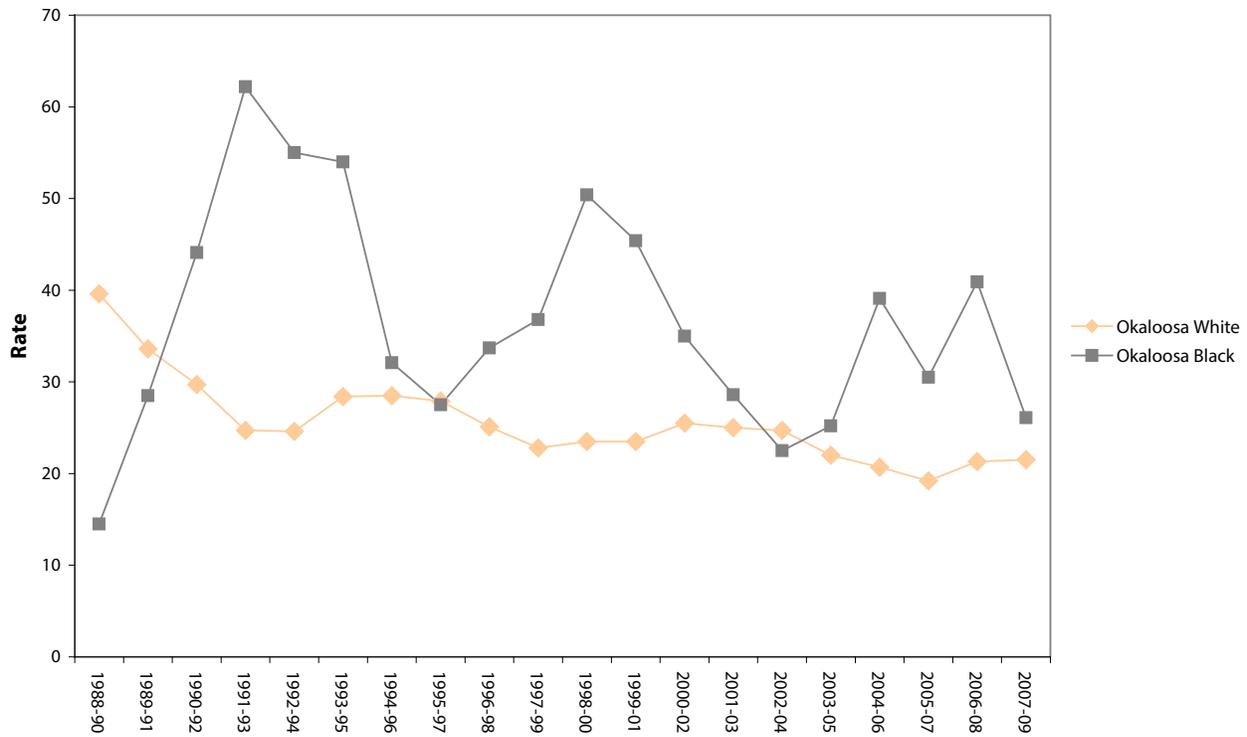


Source: Florida Department of Health; Bureau of Vital Statistics

Due to a small number of deaths from breast cancer among black women in Okaloosa, the 3-year rolling average age-adjusted breast cancer death rates are highly variable; however the overall trend is that black Okaloosa women are more likely to die of breast cancer than white women in Okaloosa. The 2007-2009 age-adjusted breast cancer death rate for black Okaloosa women is 26.1/100,000 as compared to black Florida women at 27.9/100,000. Black Okaloosa and black Florida women's death rates from breast cancer failed to attain the Healthy People 2010 goal of no more than 21.3 breast cancer deaths per 100,000 women.

White Okaloosa residents have a slightly higher rate of breast cancer death compared to white Florida residents. The 2007-2009 age-adjusted breast cancer death rate for white Okaloosa women is 21.5/100,000 versus white Florida women at 19.3/100,000. White Okaloosa women's death rate from breast cancer failed to attain the Healthy People 2010 goal of no more than 21.3 breast cancer deaths per 100,000 women. However, white Florida women's death rate from breast cancer attained the Healthy People 2010 goal of no more than 21.3 breast cancer deaths per 100,000 women.

Figure 26: Breast Cancer Age-Adjusted Death Rate, 3-Year Rolling Rates



Source: Florida Department of Health; Bureau of Vital Statistics

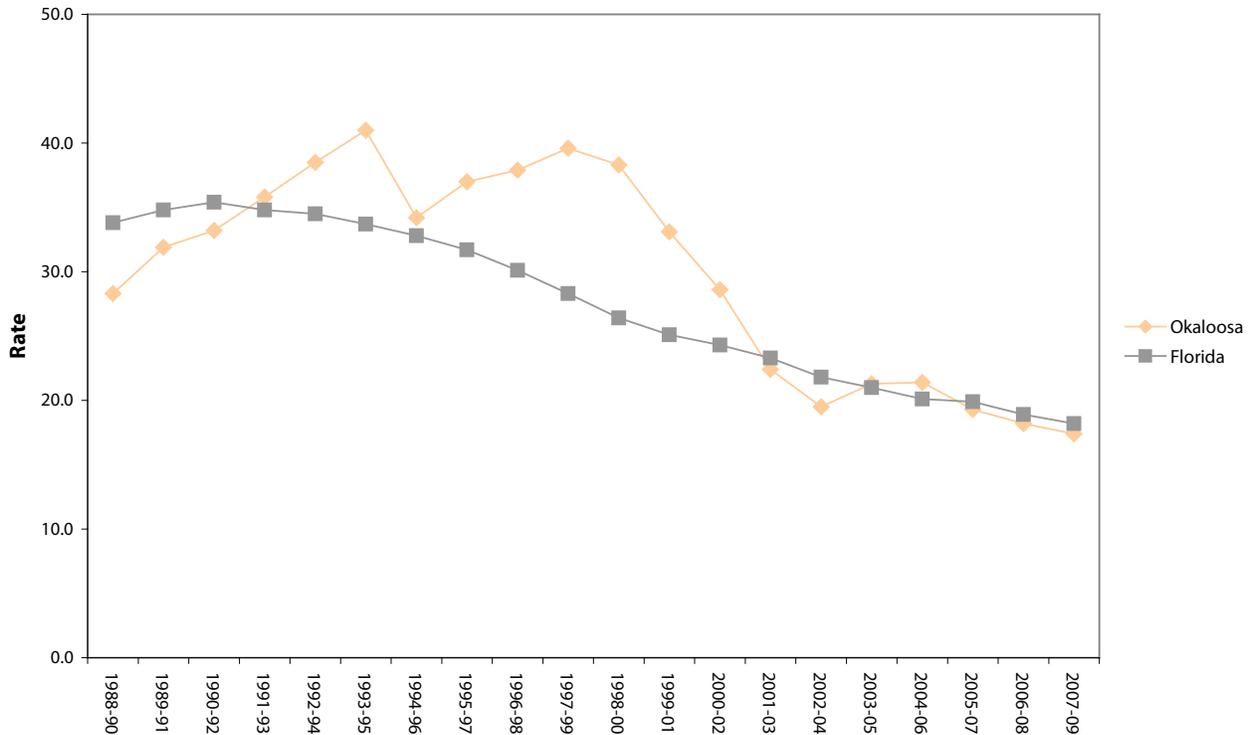
Regular mammograms are the best tests doctors have to find breast cancer early, sometimes up to three years before it can be felt. A mammogram is a special type X-ray of the breast. When breast cancer is found early, many women go on to live long and healthy lives. Having regular mammograms can lower 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 40–49 years should talk to their doctor about when and how often a screening mammogram should be scheduled.

PROSTATE CANCER

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.

For most of the past decade, Okaloosa and Florida men have had similar rates of prostate cancer. Death rates from prostate cancer declined dramatically in Okaloosa since the mid-1990s. The 2007-2009 age-adjusted prostate cancer death rate for Okaloosa residents is 17.4/100,000 versus Florida at 18.2/100,000. Both Okaloosa and Florida attained the Healthy People 2010 prostate cancer death rate of no more than 28.2/100,000.

Figure 27: Prostate Cancer Age-Adjusted Death Rate, 3-Year Rolling Rates, Okaloosa vs Florida

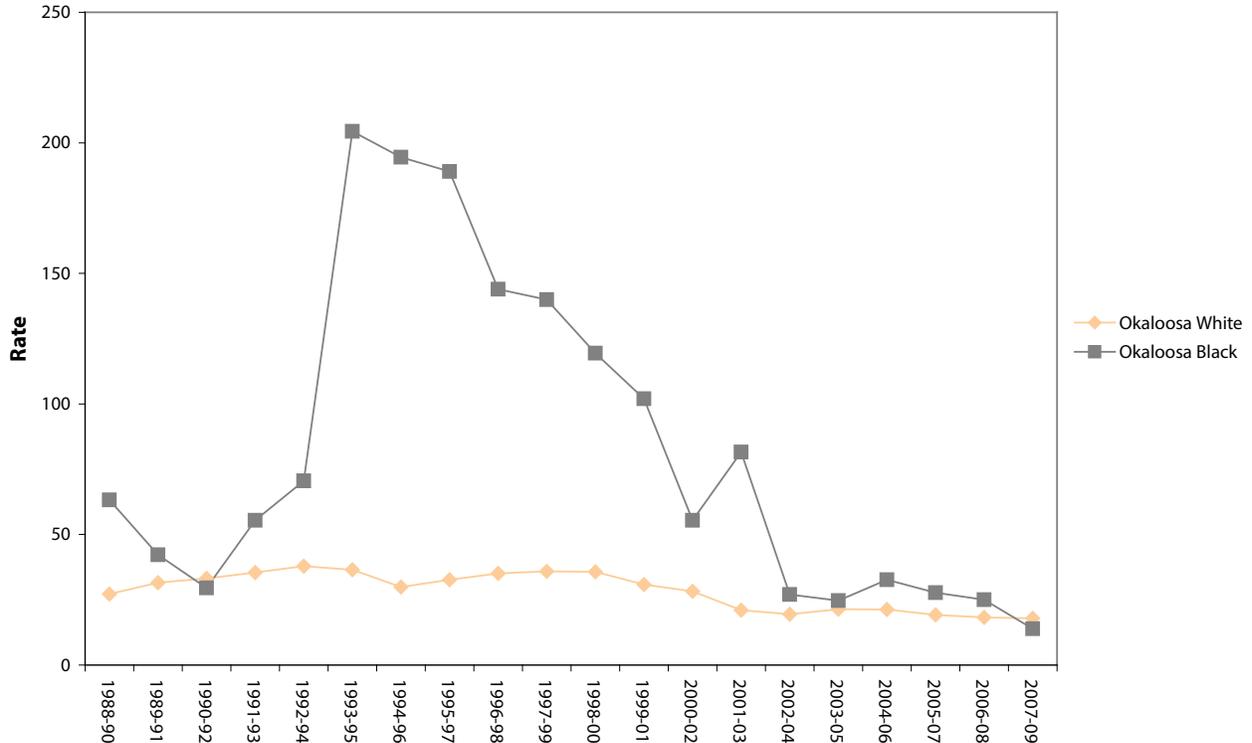


Source: Florida Department of Health; Bureau of Vital Statistics

Due to a low number of deaths from prostate cancer in the black population in Okaloosa, 3-year age-adjusted colorectal cancer death rates are not reliable, making it difficult to interpret the death rate trend. The 2007-2009 age-adjusted prostate cancer death rate for black Okaloosans is 13.9/100,000 compared to black Floridians of 44.9/100,000. Black Okaloosa residents' death rate from prostate cancer for the time period 2007-2009 attained the Healthy People 2010 goal of no more than 28.2 prostate cancer deaths per 100,000. However for the preceding time period 2006-2008, black Okaloosan prostate cancer death rate was 25.5/100,000 failing to attain the Healthy People 2010 goal. Black Floridian's death rate from prostate cancer (44.4/100,000) failed to attain the Healthy People 2010 goal.

White Okaloosa residents have a slightly higher rate of prostate cancer death as compared to white Florida residents. The 2007-2009 age-adjusted prostate cancer death rate for white Okaloosans is 17.9/100,000 versus white Floridians at 16.4/100,000. White Okaloosa and white Florida residents' death rate from prostate cancer attained the Healthy People 2010 goal of no more than 28.2 prostate cancer deaths per 100,000.

Figure 28: Prostate Cancer Age-Adjusted Death Rate, 3-Year Rolling Rates



Source: Florida Department of Health; Bureau of Vital Statistics

Tests that are commonly used to screen for prostate cancer are the digital rectal 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.

HEART DISEASES

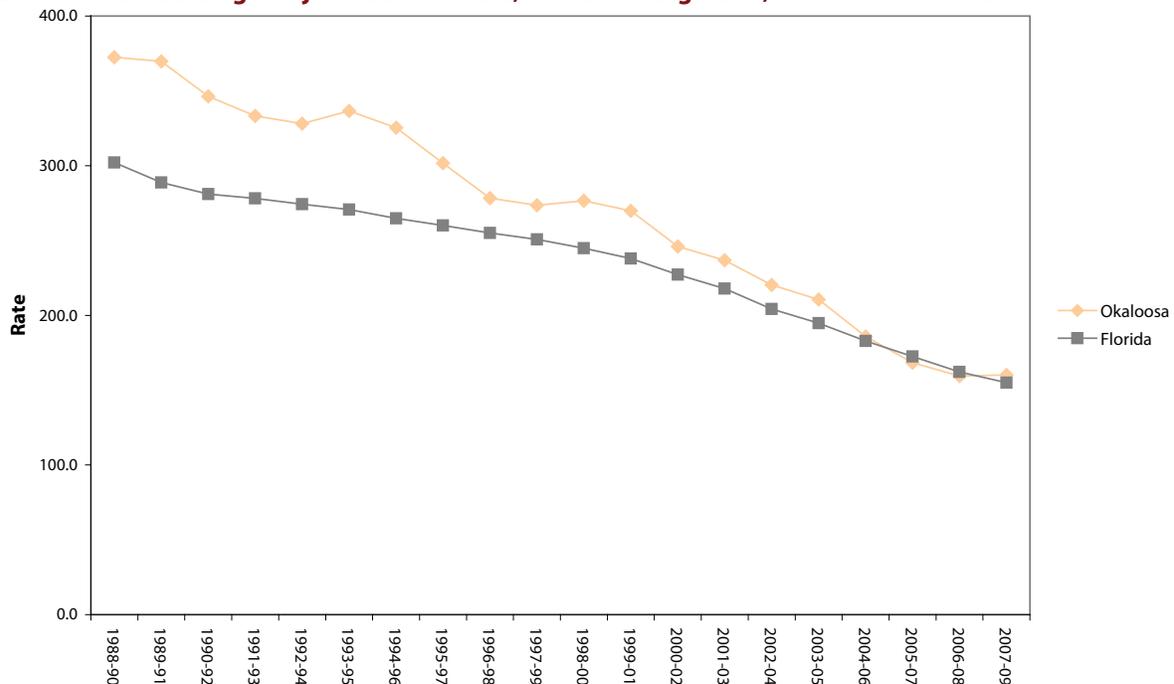
Heart diseases are the leading cause of death in Florida and the U.S. and the second leading cause of death in Okaloosa. The most common heart disease in the U.S. is coronary heart disease, which often appears as a heart attack. In 2010, an estimated 785,000 Americans had a new coronary attack, and about 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 Okaloosa County and Florida, deaths from heart diseases have significantly declined over the past 20 years with death rates in Okaloosa consistent with statewide death rates for the past 5 – 7 years. In addition, Okaloosa has attained the Healthy People 2010 goal of no more than 162 heart diseases deaths per 100,000 with a 3-year age-adjusted heart diseases death rate in 2007-2009 of 160.2/100,000.

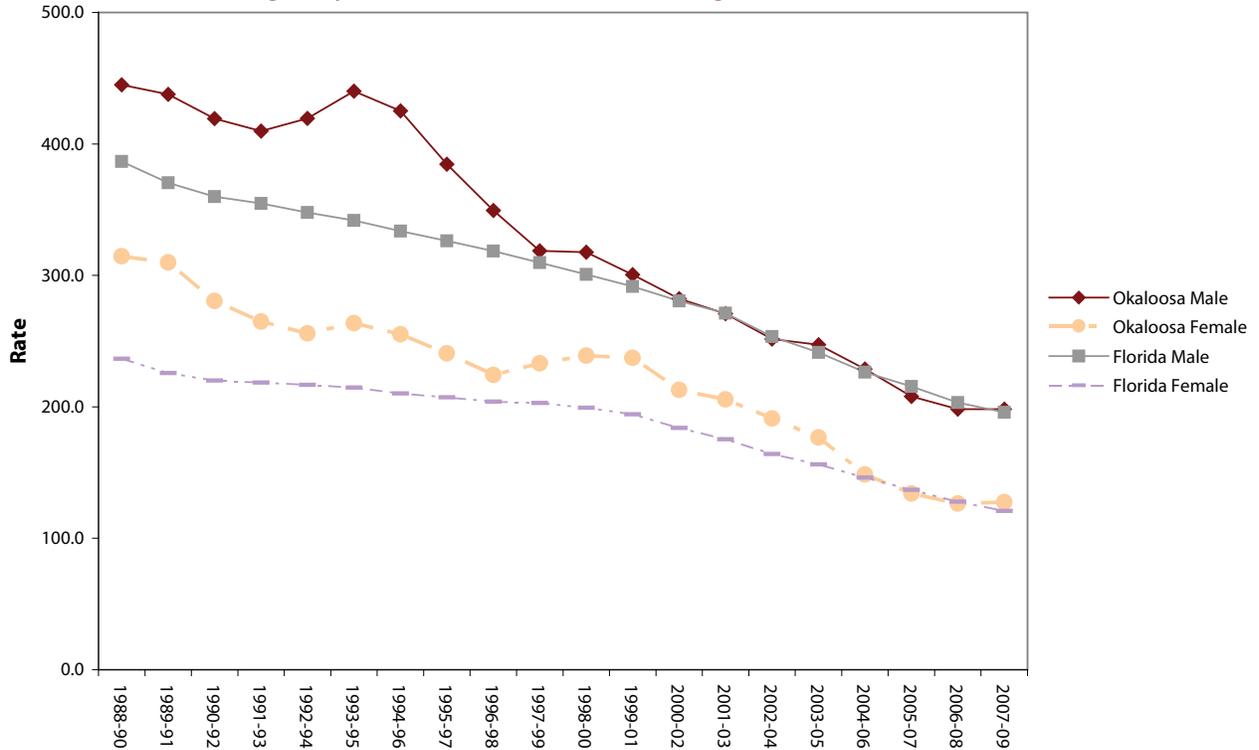
Figure 29: Heart Disease Age-Adjusted Death Rate, 3-Year Rolling Rates, Okaloosa vs Florida



Source: Florida Department of Health; Bureau of Vital Statistics

This pattern of significantly declining death rates from heart diseases is seen for men and women in both Okaloosa and Florida. Mortality from heart diseases has decline 30% between 2000 and 2009 for men and 40% for women.

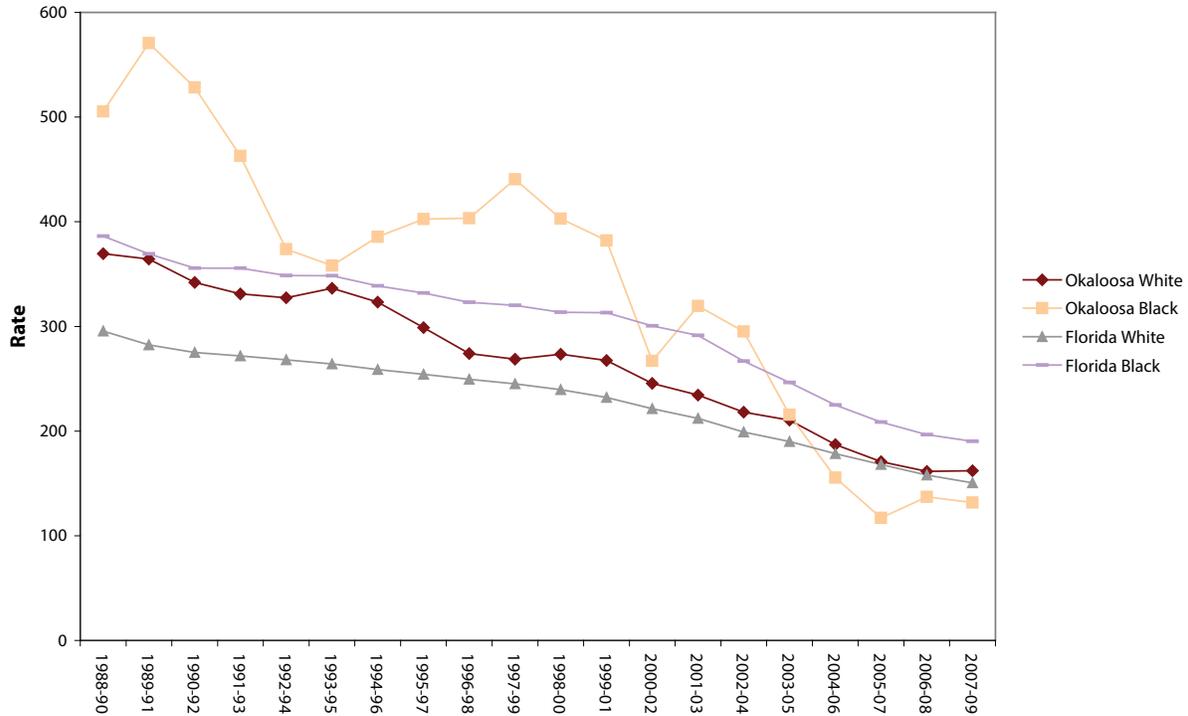
Figure 30: Heart Disease Age-Adjusted Death Rate, 3-Year Rolling Rates, Gender



Source: Florida Department of Health; Bureau of Vital Statistics

This pattern of significantly declining death rates from heart diseases is also seen for black men and women. Black Okaloosans have seen a 51% decline in heart disease mortality between 2000 and 2009 compared to a 29.5% reduction in heart disease mortality for white Okaloosans for the same time period. For 2007-2009, the age-adjusted death rate from heart diseases in Okaloosa for blacks (131.8/100,000) is lower than the death rate from heart diseases for white Okaloosans (162.1/100,000), and is significantly lower than black Floridians (190.3/100,000). The Healthy People 2010 goal of no more than 162 heart disease deaths per 100,000 has essentially been attained for Okaloosa.

Figure 31: Heart Disease Age-Adjusted Death Rate, 3-Year Rolling Rates, Race



Source: Florida Department of Health; Bureau of Vital Statistics

Deaths from coronary heart disease have followed a similar pattern as heart diseases overall for Okaloosa 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 Okaloosa County (46.4/100,000) continues to significantly exceed the state rate (29.5/100,000). Okaloosa County has seen a 28% reduction in heart attack deaths between the years of 2000-2009, while Florida has seen a 42% reduction in heart attack deaths.

While heart attack death rates have declined for Okaloosa men and women over the past decade, they have not declined as rapidly as for Florida men and women. Okaloosa men have had a 23.3% decline in heart attack deaths compared to 45% for men in Florida. Okaloosa women have had a 34% decline in heart attack deaths, while the women of Florida have had a 48% decline.

This pattern is different for black Okaloosans. Black Okaloosans have seen a 42% decline in heart attack death rates between 2000-2009 and while somewhat lower than the decline for black Floridians (49%), black Okaloosans actually have a lower rate of heart attack death (27.4/100,000) than black Floridians (35/100,000). However white Okaloosans have only seen a 28% decline in heart attack death rates compared to a 46% decline for white Floridians and white Okaloosans 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.

CHRONIC LOWER RESPIRATORY DISEASES

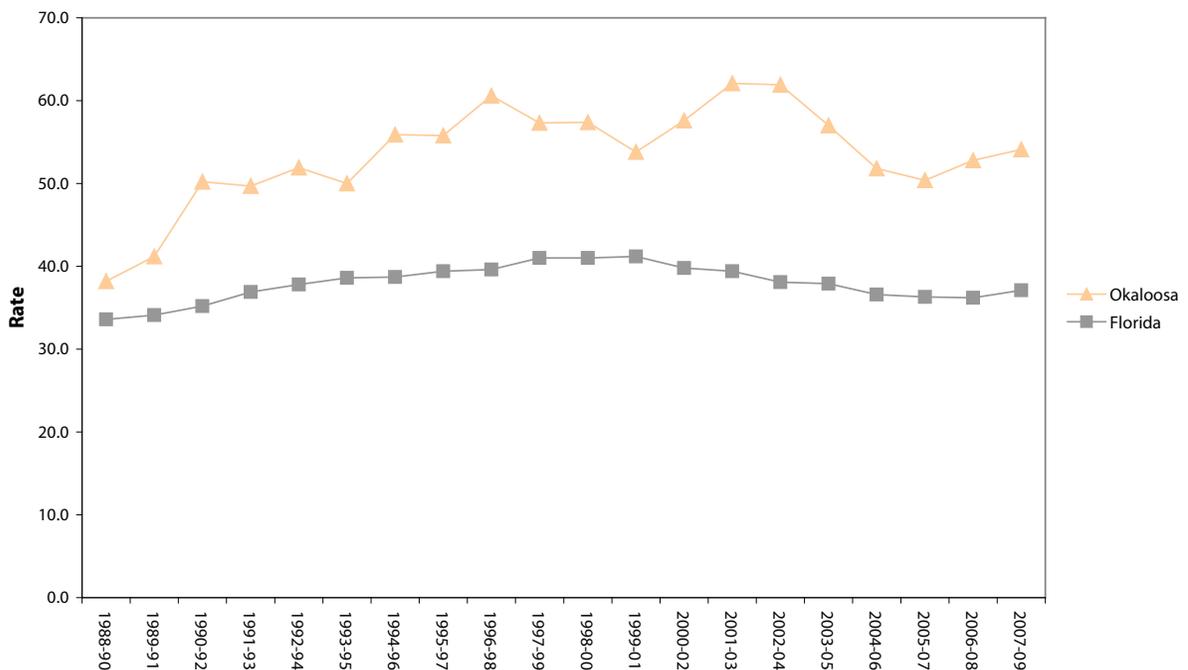
Chronic Lower Respiratory Diseases (CLRD), many times called Chronic Obstructive Pulmonary Disease (COPD), refers to a group of diseases that cause airflow blockage and breathing-related problems. CLRD generally includes chronic bronchitis and emphysema, although some forms of asthma can also include 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 Okaloosa and Florida attained the Healthy People 2010 goal of no more than 62.3 CLRD deaths per 100,000, Okaloosans have a significantly higher rate of CLRD deaths than Floridians. While the trend for CLRD deaths in Florida is relatively stable over time, Okaloosa deaths from CLRD are increasing. The age-adjusted CLRD death rate (2007-2009) for Okaloosa residents is 54.1/100,000 versus Florida at 37.1/100,000.

Figure 32: Chronic Lower Respiratory Disease (CLRD) Age-Adjusted Death Rate, 3-Year Rolling Rates

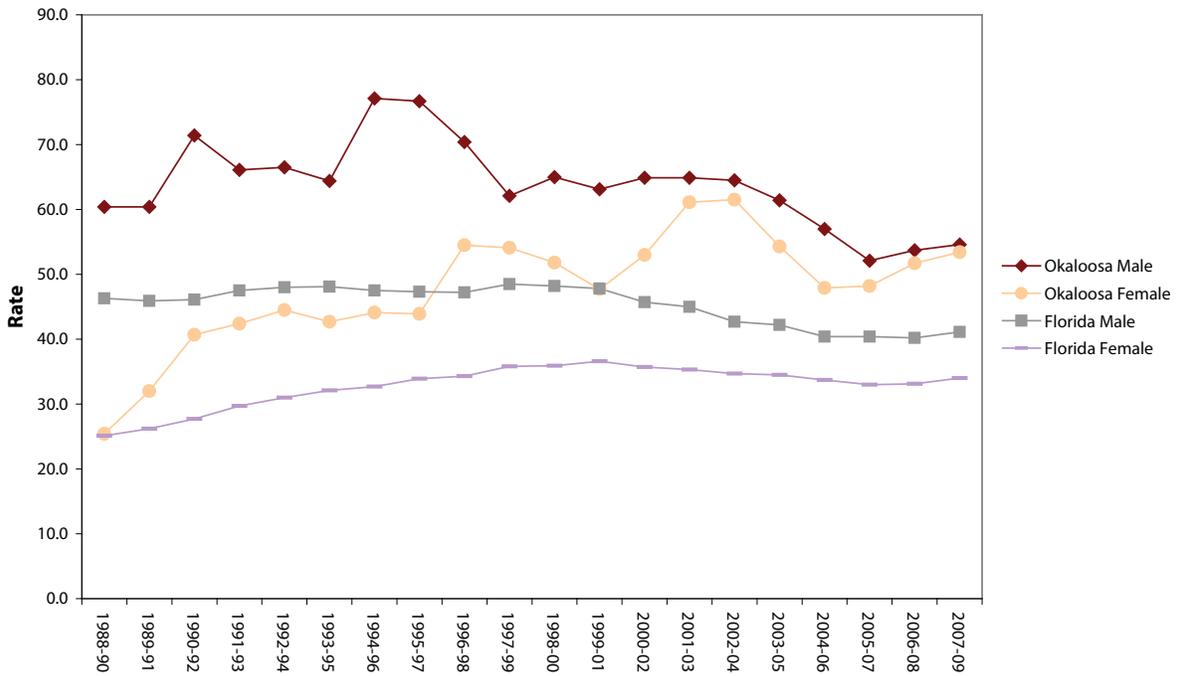


Source: Florida Department of Health; Bureau of Vital Statistics

Sadly, Okaloosa fares poorly compared to the state for CLRD death rates for men and women. While CLRD death rates for Okaloosa men have declined over the past twenty years and more specifically in the last ten years, Okaloosa men are still more likely to die from CLRD than men in Florida. For Okaloosa and Florida women, rates of death from CLRD have increased over the last twenty years although more significantly for

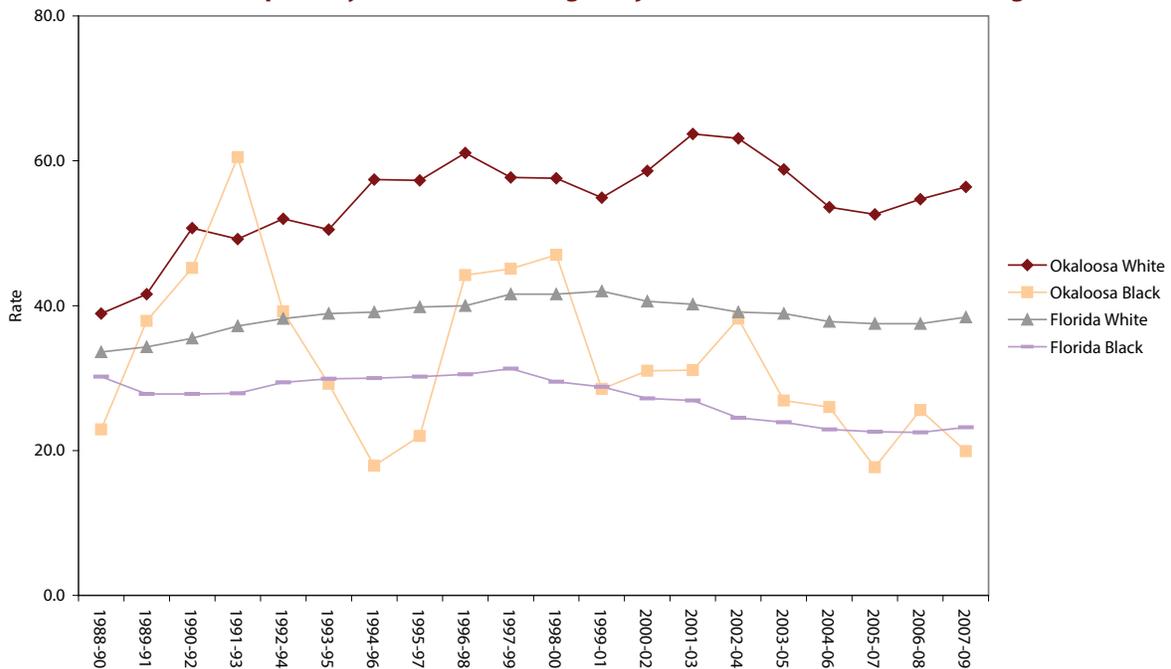
Okaloosa women (110%) than for women in Florida (35%). These statistics are probably a reflection of the fact that more Okaloosa men and women smoke than Florida men and women.

Figure 33: Chronic Lower Respiratory Disease (CLRD) Age-Adjusted Death Rate, 3-Year Rolling Rates



Source: Florida Department of Health; Bureau of Vital Statistics

Figure 34: Chronic Lower Respiratory Disease (CLRD) Age-Adjusted Death Rate, 3-Year Rolling Rates



Source: Florida Department of Health; Bureau of Vital Statistics

Due to a low number of deaths from CLRD in the black population in Okaloosa, 3-year age-adjusted CLRD death rates are not reliable, making it difficult to interpret the death rate trend. The age-adjusted CLRD death rate for black Okaloosans for 2007-2009 is 9.1/100,000 compared to the same time period for black Floridians of 23.8/100,000. The age-adjusted CLRD death rate for black Okaloosans for 2006-2008 of 20.0/100,000 more closely mirrored black Floridians for that same time period at 23.2/100,000. Black Okaloosa residents' death rate from CLRD for the time period 2006-2008 and 2007-2009 attained the Healthy People 2010 goal of no more than 62.3 CLRD deaths per 100,000. Black Floridian's death rate from CLRD for 2007-2009 (23.8/100,000) attained the Healthy People 2010 goal.

White Okaloosa residents have a much higher rate of CLRD death than white Florida residents and black Okaloosans, and the trend has been increasing. The age-adjusted CLRD death rate for white Okaloosans for 2007-2009 is 56.4/100,000 versus white Floridians for 2007-2009 at 38.4/100,000. White Okaloosa and white Florida residents' death rate from CLRD, however, attained the Healthy People 2010 goal of no more than 62.3 CLRD deaths per 100,000.

Risk factors for chronic bronchitis and emphysema include the following.

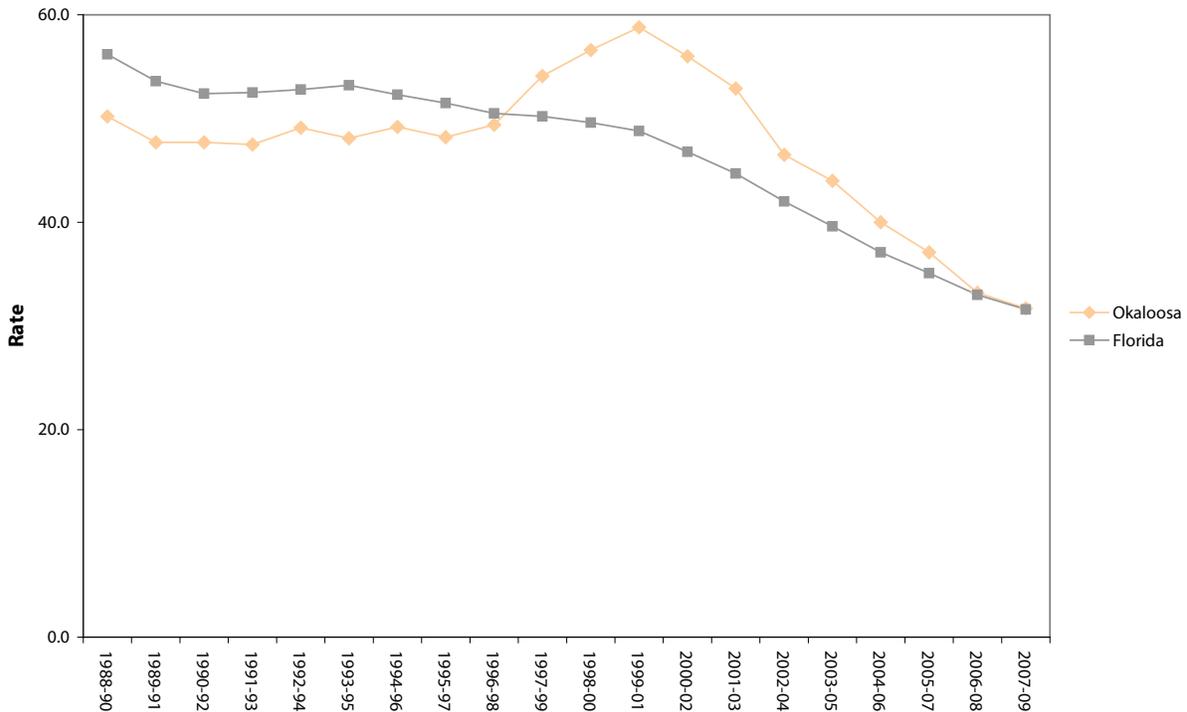
- **Smoking.** Chronic bronchitis and emphysema are most likely to develop in cigarette smokers, but cigar and pipe smokers also are susceptible, and the risk for all types of smokers increases with the number of years and amount of tobacco smoked.
- **Age.** Although the lung damage that occurs in chronic 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 Okaloosans and Floridians. 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 Okaloosa 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. By 2002, the stroke rate was dropping and has dropped 43% between 2000 and 2009. Okaloosa stroke death rates are now comparable to Florida's stroke death rates. Both Okaloosa and Florida have a 2007-2009 age-adjusted stroke death rate of 31.7 and 31.6/100,000 respectively and both attained the Healthy People 2010 goal of no more than 50 stroke deaths per 100,000.

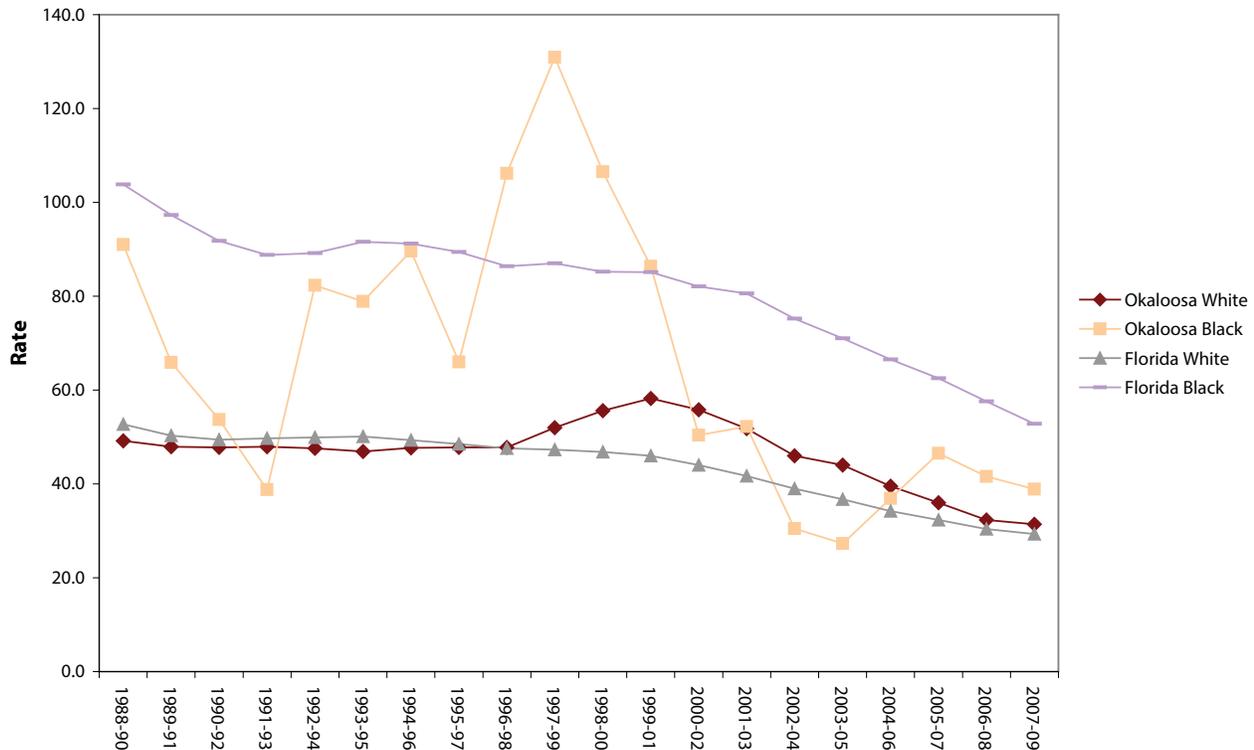
Figure 35: Stroke Age-Adjusted Death Rate, 3-Year Rolling Rates



Source: Florida Department of Health; Bureau of Vital Statistics

This pattern of declining death rates from stroke is also seen for Black Okaloosans. Black Okaloosans have had a 23% decline in stroke mortality between 2000 and 2009 compared to a 44% reduction in stroke mortality for white Okaloosans for the same time period. The death rate from stroke for 2007-2009 in Okaloosa for blacks (38.9/100,000) is still higher than the death rate from stroke for white Okaloosans (31.4/100,000) but is significantly lower than black Floridians (52.8/100,000). The Healthy People 2010 goal of no more than 50 stroke deaths per 100,000 has been attained for Okaloosa white and black population but only for Florida's white population.

Figure 36: Stroke Age-Adjusted Death Rate, 3-Year Rolling Rates, Race



Source: Florida Department of Health; Bureau of Vital Statistics

The Hispanic death rate from stroke has only been measured since 2004. With very low numbers of deaths and a short time period, the 3-year age-adjusted stroke death rates are not reliable, making it difficult to interpret the death rate trend. However, unlike the United States, Okaloosa’s Hispanic population has a higher stroke death rate than Okaloosa’s black population.

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. Drinking too much alcohol, which causes high blood pressure, can increase the risk for stroke.

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 Okaloosa 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 and Okaloosa 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. In Okaloosa County over the past three years (2007-2009), 10 infants have died from suffocation. Adult's 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.

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.

Okaloosa County's three-year average for drowning deaths in the late 1980s through 1990s was *zero to one* drowning deaths for one- to four-year-olds. For the past decade, Okaloosa's three-year average for drowning deaths was *two to three* drowning deaths for this age group. Drowning is the leading cause of unintentional injury deaths for Okaloosa's one to four year olds.

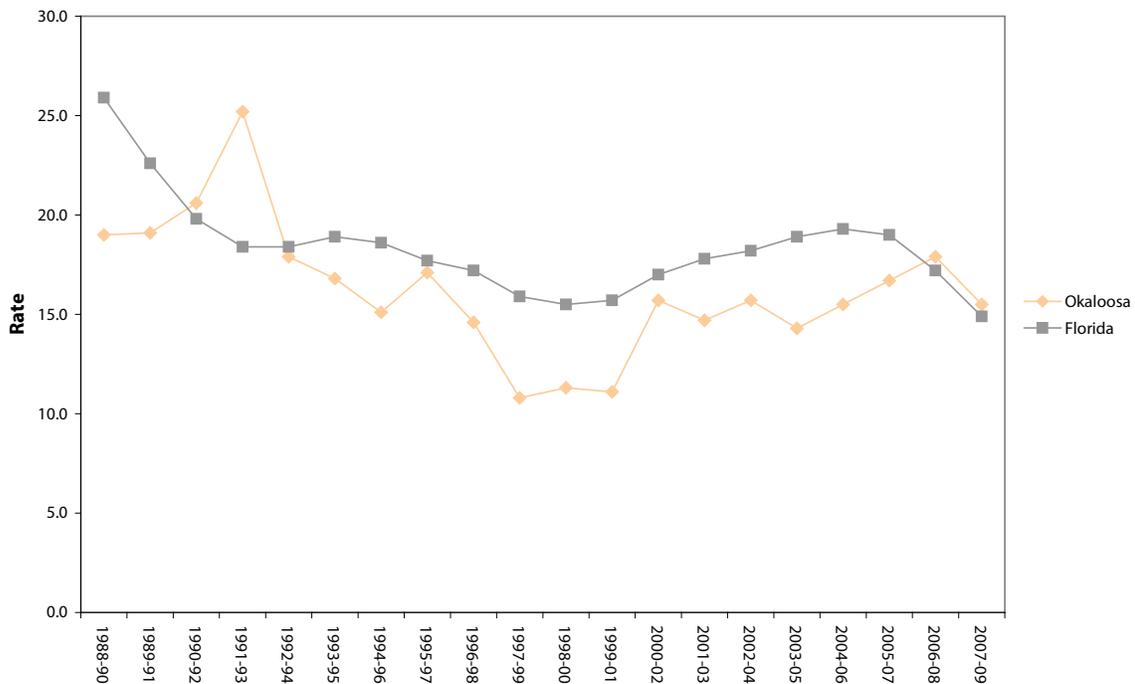
Multiple layers of protection are the key to prevention:

- 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 a 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 Okaloosa in 2009 was motor vehicle crashes. In Okaloosa in the early 1990s, motor vehicle crash deaths started to decline, and reached its lowest point in 1999-2001 with a motor vehicle crash death rate of 11.1/100,000 for the 5 – 24 year age group. Since that time, the death rate has climbed and as of 2007-2009, the Okaloosa motor vehicle crash death rate for this age group was 15.5/100,000. Approximately 6 – 12 young Okaloosans die every year in motor vehicle accidents.

Figure 37: Motor Vehicle Crashes Crude Death Rate, Ages 5-24, 3-Year Rolling Rates



Source: Florida Department of Health; Bureau of Vital Statistics

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

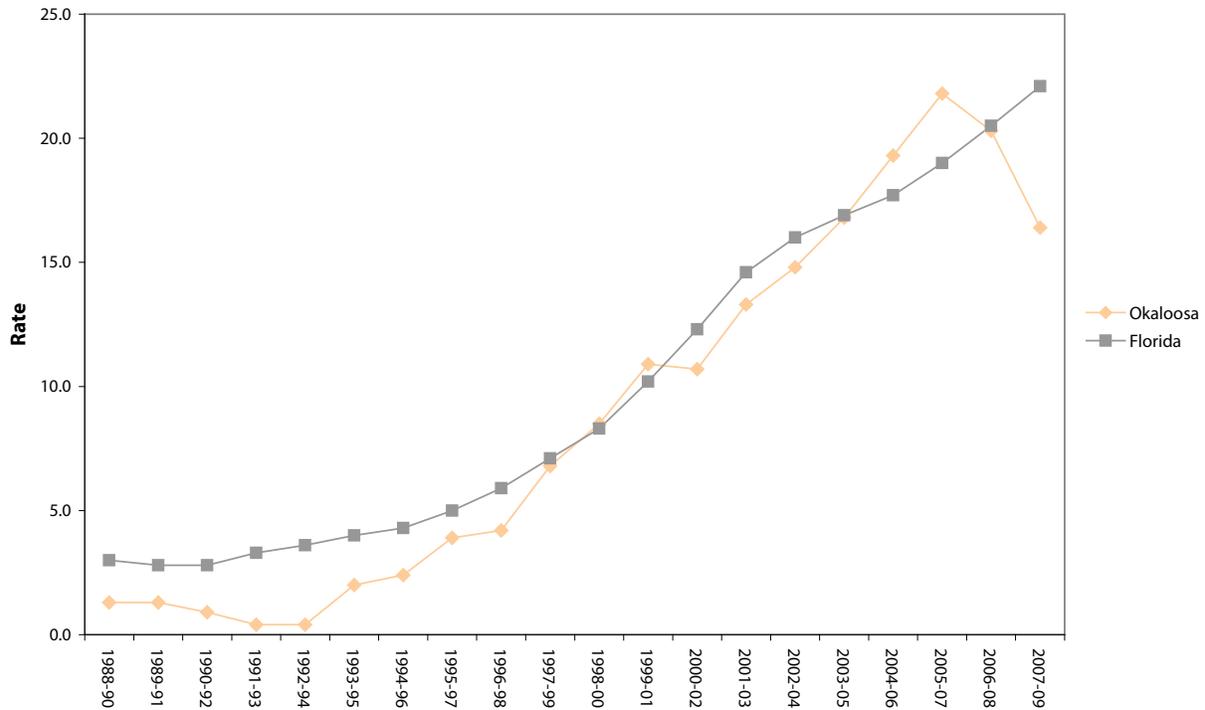
- Primary enforcement seat belt law that covers all seating positions.
- Strong child passenger safety policies that require age- and size-appropriate child safety and booster seats.
- Comprehensive graduated drivers licensing (GDL) system to help young drivers gain experience under lower-risk conditions.
- 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. For 2005 – 2009, unintentional poisoning was the leading cause of unintentional injury death for Okaloosans age 25 – 64 years. The rate of death from unintentional poisoning has dramatically risen since the late 1990s. For 4 of the past 5 years since 2009, unintentional poisoning deaths for age 25-64 years exceeded motor vehicle crash deaths as the leading cause of unintentional injury death. Over the past decade, 10-25 Okaloosans age 25-64 died from unintentional poisoning each year.

Figure 38: Unintentional Poisoning Crude Death Rate, Ages 25-64, 3-Year Rolling Rates



Source: Florida Department of Health; Bureau of Vital Statistics

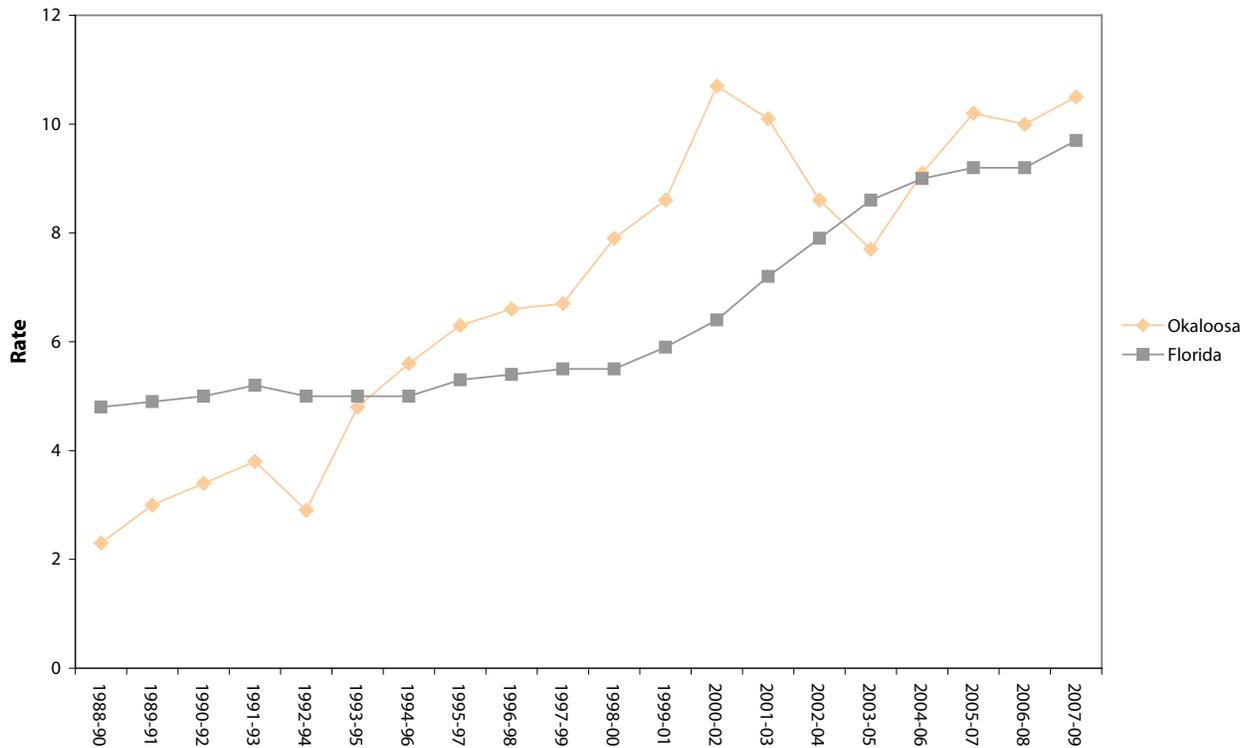
There are numerous promising interventions and expert opinion on how to interrupt this alarming trend. However, more research is needed to understand the impact of these promising interventions on decreasing unintentional drug poisoning. State prescription drug monitoring programs are one of the promising interventions along with education of physicians on the use of alternative therapies before using opioid pain medications, limiting the time period for the use of these medications, and avoiding the use of prolonged opioid pain medication for noncancer chronic pain especially in people younger than 65 years.

ADULTS 65 YEARS AND OLDER

In the U.S., one out of three adults age 65 and older falls each year. Among those age 65 and older, falls are the leading cause of injury death. The death rates from falls among older men and women have risen sharply over the past decade. In the U.S. in 2007, 81% of fall deaths were among people 65 and older. Men are more likely to die from a fall. After adjusting for age, the fall fatality rate in 2007 was 46% higher for men than for women. Older whites are 2.5 times more likely to die from falls as their black counterparts. The risk of dying from a fall in the elderly increases with each decade after age 65 years.

In Okaloosa and Florida, unintentional falls are the leading cause of injury death for people over age 65 years. The 2007-2009 age-adjusted death rate due to unintentional falls for people over 65 years is 10.5/100,000 for Okaloosa, and 9.7/100,000 for Florida. The death rate from unintentional falls for the elderly is increasing in Okaloosa and Florida.

Figure 39: Unintentional Falls Crude Death Rate, Ages 65 Years and Older, 3-Year Rolling Rates



Source: Florida Department of Health; Bureau of Vital Statistics

Florida follows the national trend of more men over age 65 years dying from falls than women over age 65 years. In the late 1980's and early 1990's Okaloosa's older men and women were less likely to die from falls than their Florida counterparts. However over the last 15 years, the death rate from unintentional falls in Okaloosa's older men and women has risen sharply. In addition, Okaloosa's older women for the three year period of 2007-2009, died at a rate similar to Okaloosa's and Florida's older men.

Table 7: Unintentional Injury Fall Death Rates for Adults 65 Years and Older '07-'09, 3-Year Rolling Rates per 100,000, Okaloosa and Florida

	Okaloosa	Florida
Men	10.2	10.6
Women	10.8	8.8

Source: Florida Department of Health; Bureau of Vital Statistics

The chance of falling and of being seriously injured or dying in a fall increases with age. In the U.S. in 2009, the rate of fall injuries for adults 85 and older was almost four times that for adults 65 to 74. People age 75 and older who fall are four to five times more likely than those age 65 to 74 to be admitted to a long-term care facility for a year or longer.

In Okaloosa, adults 75 years and older are at increased risk of death from falls as compared to their Florida counterparts. Okaloosa is in the bottom 25% of Florida counties for deaths due to falls for adults 75 years and older.

Table 8: Unintentional Injury Fall Death Rates for Adults 75 Years and Older '07-'09, 3-Year Rolling Rates per 100,000, Okaloosa and Florida

	Okaloosa	Florida
Men	100.6	93.4
Women	123.2	72.0

Source: Florida Department of Health; Bureau of Vital Statistics

The most common reason for hospitalization from an unintentional injury for adults 65 years and older is falls. In 2009 in Okaloosa County, of the 433 unintentional injuries to adults 65 years and older requiring hospitalization, 359 (83%) were due to falls.

Older adults can take several steps to protect their independence and reduce their chances of falling. Tips to do so include the following.

- **Exercise regularly.** It's important that the exercises focus on increasing leg strength and improving balance. Tai Chi programs are especially good.
- **Ask a doctor or pharmacist to review medicines** —both prescription and over-the-counter—to reduce side effects and interactions that may cause dizziness or drowsiness.
- **Have eyes checked by an eye doctor** at least once a year, and update eyeglasses to maximize vision.
- **Make homes safer** by reducing tripping hazards, adding grab bars and railings, and improving lighting.

Hip fracture is a frequent consequence of a fall in older people. Hip fracture is also related to hospital and nursing home admission. There are some ways to reduce hip fracture risk related to falls:

- get adequate calcium and vitamin D in the diet,
- undertake a program of weight bearing exercise, and
- get screened and treated for osteoporosis.

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 unintentional injury that resulted in a visit to the emergency room for all ages. Falls are the leading cause of an unintentional injury emergency room visit for infants, children 1 – 9 years, and adults 25 years and older.

In 2009, unintentional injuries resulted in 17,783 visits to an emergency department for Okaloosa residents. The age-adjusted rate for emergency room use for unintentional injuries is higher in Okaloosa (9,226.84/100,000) than Florida (7,786.06/100,000).

In 2009, more than 27% of unintentional injury emergency department visits were for falls. This percentage varies greatly by age. In Okaloosa, for infants, children (1 – 14 years) and adults (25 years and older), falls are the leading reason for an emergency department visit for an unintentional injury. For adults 65 years and older, 55% of unintentional injury emergency department visits are for falls. Falls account for almost 63% of unintentional injury emergency department visits for adults age 75 years and older. The age-adjusted rate for emergency room use for unintentional falls is higher in Okaloosa (2,496.16/100,000) than Florida (2,198.67/100,000).

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 (~75%) 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 in-line skating 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. Older adults should have their eyes checked frequently to maximize their vision. Finally, older adults should maximize home safety by removing all slip, trip, and fall hazards from their homes and installing grab bars and railings in all high risk fall areas in their home.

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 Florida Department of Health in Okaloosa 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.

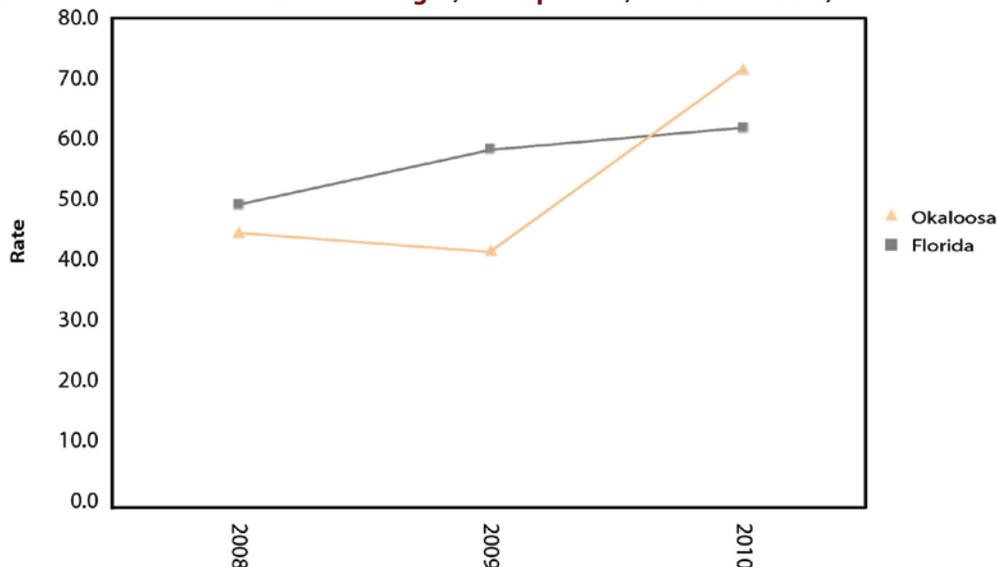
Cases reported in Okaloosa County most often include hepatitis, enteric diseases, and some vaccine preventable diseases. Hepatitis cases generally account for 60-65% of the annual reportable diseases in Okaloosa. Enteric diseases, usually caused by salmonella, are second, followed with smaller numbers 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. Okaloosa County outbreak investigations in the past three years have involved noroviruses, varicella, and pertussis.

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 Okaloosa County have seen an increase in the rate of enteric disease since 2008.

Figure 40: Enteric Disease Incidence Rate for All Ages, Rates per 100,000 for All Races, All Sexes

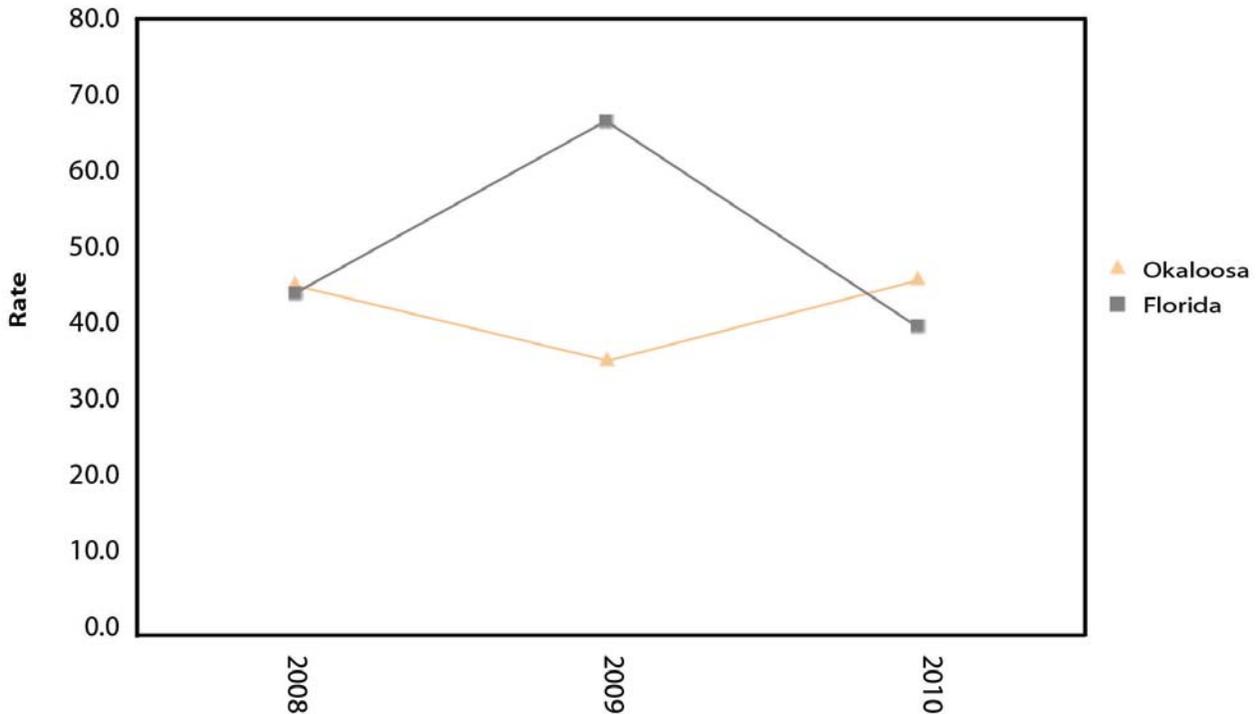


Source: Florida Department of Health; Merlin Registry System

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

Figure 41: Hepatitis Incidence Rate for All Ages, Rates per 100,000 for All Races, All Sexes

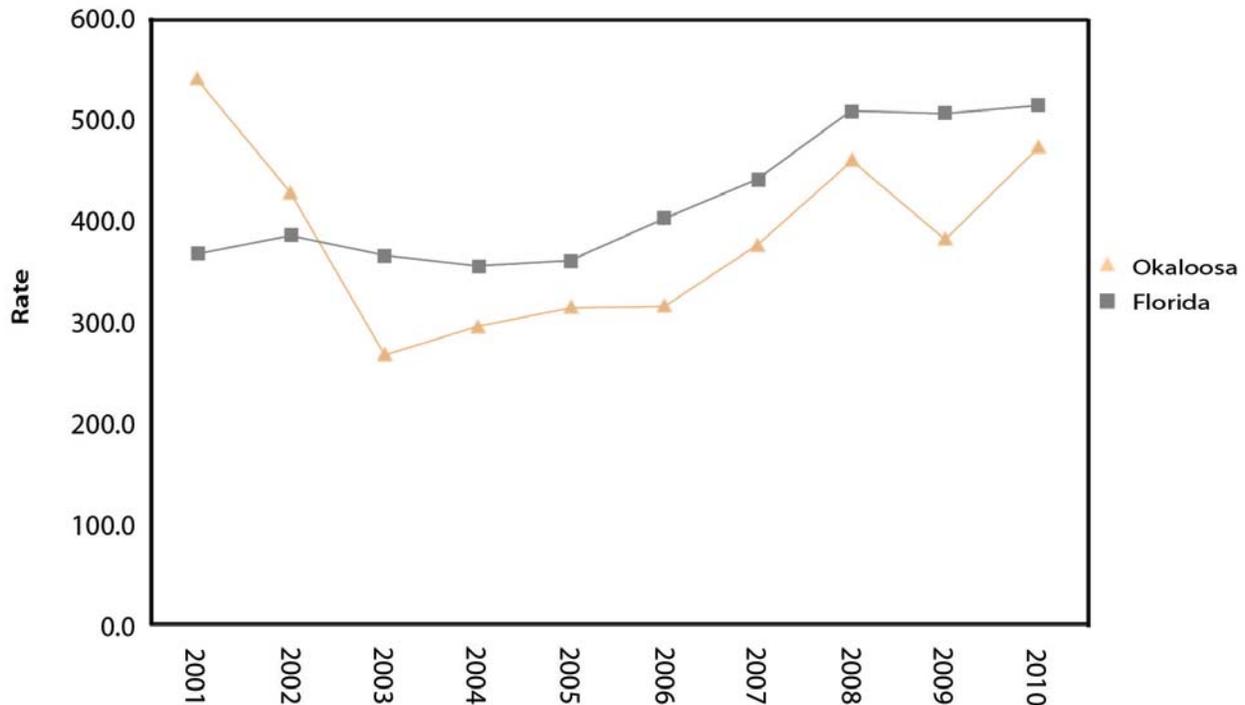


Source: Florida Department of Health; Merlin Registry System

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. In Florida, the rate of STD/STI has increased between 2001 and 2010. In Okaloosa, however, the rate of STD/STI decreased early in the 2000s, but has steadily increased since that time.

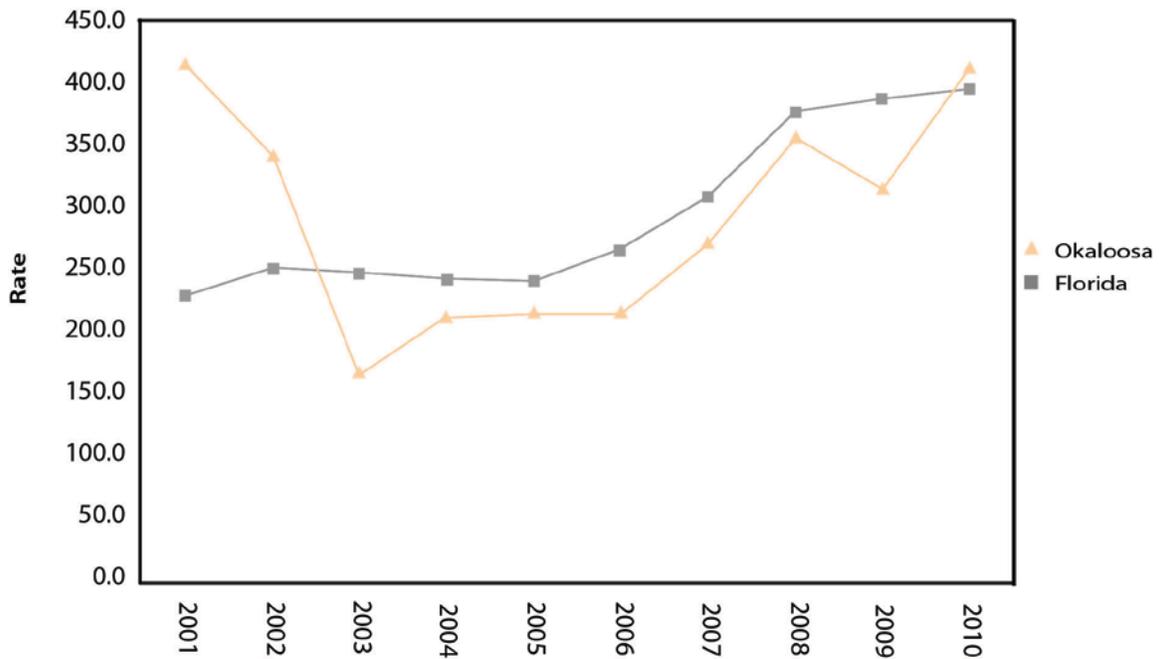
Figure 42: Total Gonorrhea, Chlamydia, & Infectious Syphilis, Ten Year Rates per 100,000, All Races, All Sexes



Source: Florida Department of Health; Bureau of STD Prevention & Control

Chlamydia is the most frequently reported STD in the state and in Okaloosa 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 Okaloosa County are now on the rise.

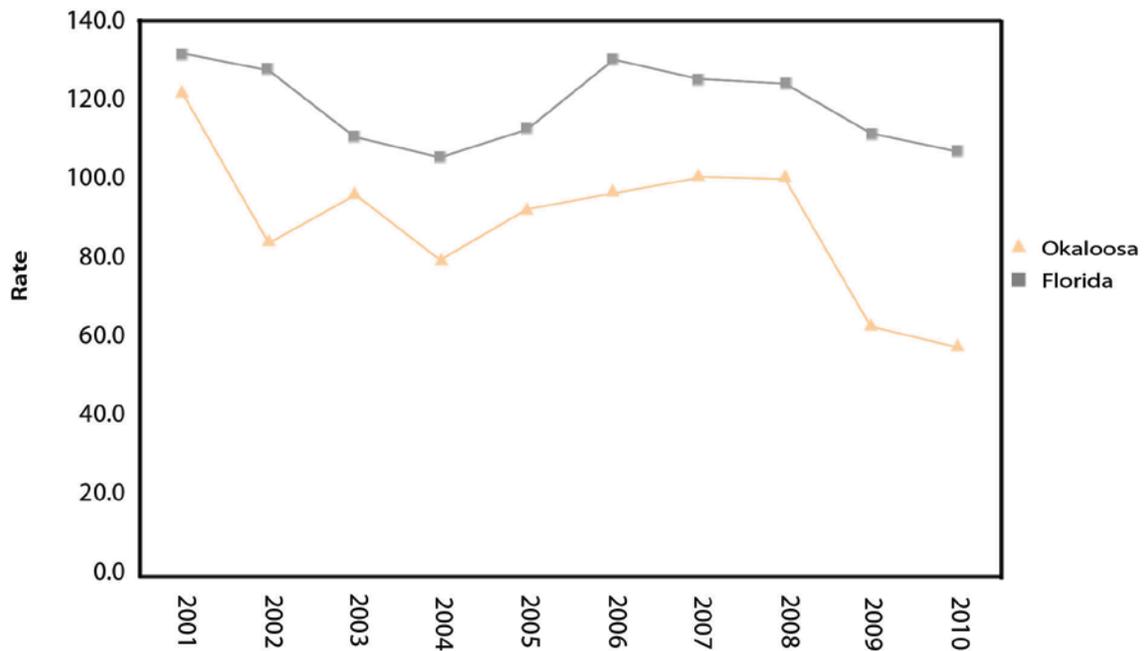
Figure 43: Chlamydia Cases, Ten-Year Rates per 100,000 for All Races, All Sexes



Source: Florida Department of Health; Bureau of STD Prevention & Control

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 early part of the decade, rates of gonorrhea in Florida increased slightly mid-decade, and are now decreasing. Rates of gonorrhea in Okaloosa have declined throughout the first decade of the 21st Century.

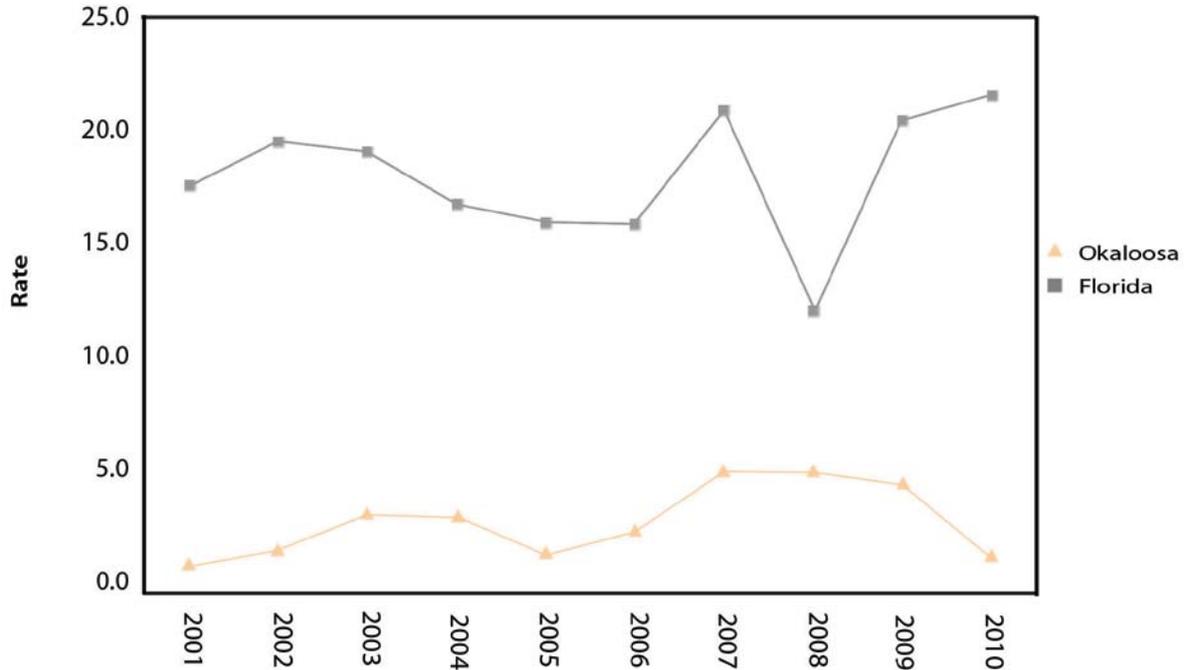
Figure 44: Gonorrhea Cases, Ten-Year Rates per 100,000, All Races, All Sexes



Source: Florida Department of Health; Bureau of STD Prevention & Control

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 Okaloosa remain much lower than in other parts of the state.

Figure 45: Syphilis Cases, Ten-Year Rates per 100,000, All Races, All Sexes



Source: Florida Department of Health, Bureau of STD Prevention & Control

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 significantly since the 1980s, new infections continue at far too high a level with an estimated 56,300 Americans becoming infected with HIV each year.

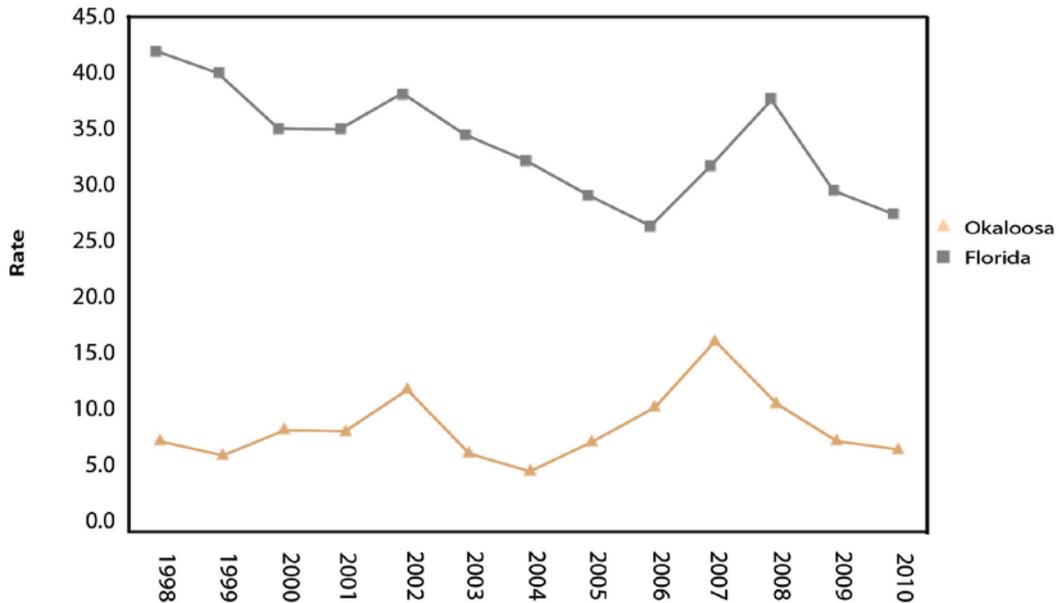
Since 2006, the CDC recommends that in all health care setting, screening for HIV infection should be performed routinely for all patients aged 13 – 64 years unless the health care provider can document an HIV infection rate of <0.1% in their practice population. Any patient diagnosed with TB and all 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. 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, 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 antiretroviral 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.

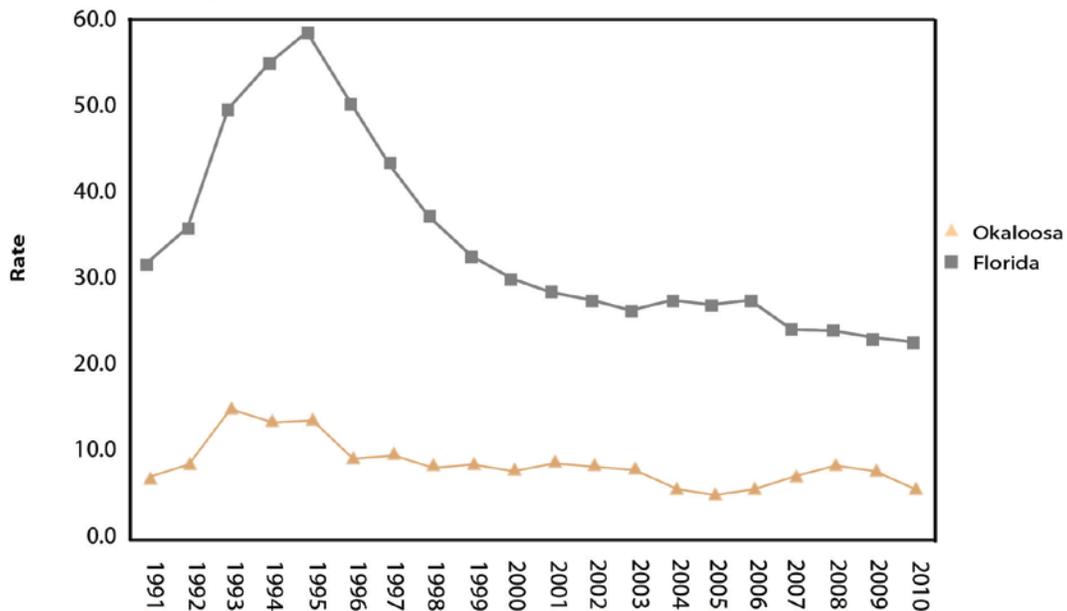
The rate of HIV/AIDS cases in Okaloosa is significantly lower than the state overall. The spike in reported HIV cases in both Okaloosa and Florida in 2007 reflected enhanced reporting laws that were implemented in November 2006 and the expansion of electronic lab reporting in 2007.

Figure 46: HIV Cases, Single-Year Rate per 100,000 Population



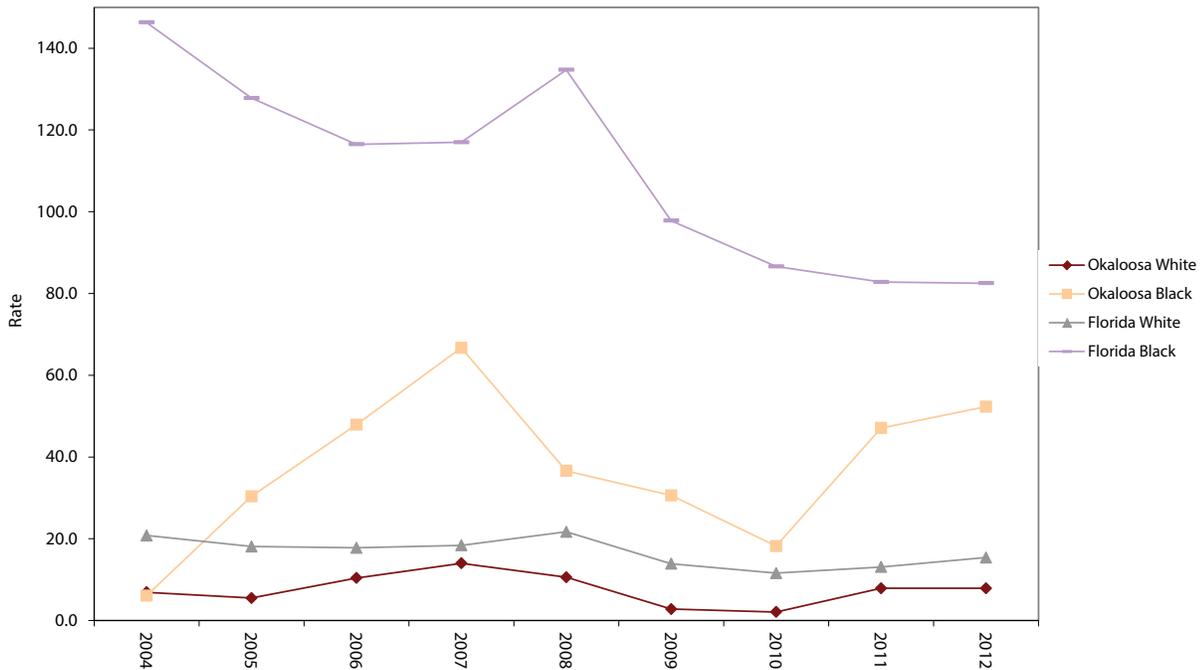
Source: Florida Department of Health; Bureau of HIV/AIDS

Figure 47: AIDS Cases, Rolling 3-Year Rate per 100,000 Population



Source: Florida Department of Health; Bureau of HIV/AIDS

Figure 47-A: HIV Cases Single Year Rate per 100,000 Population



Source: Florida Department of Health; Bureau of HIV/AIDS

In the United States, although the risk factors for the spread of HIV (unprotected anal or vaginal sex or by sharing drug-using equipment with an infected person) are the same, some racial/ethnic groups are more affected than others, given their percentage of the population. This is because some population groups have higher rates of HIV infection, increasing the risk of new infections with each sexual or drug use encounter. In addition, a range of social, economic and demographic factors – stigma, discrimination, income, education, and geographic region – affect risk for acquiring HIV infection. Blacks are the racial/ethnic group most affected by HIV both in the nation and in Florida. Rates of infection for black Floridians are significantly higher than for white Floridians. While the disparity is not as great as for Florida, black Okaloosan’s experience higher rates of HIV infection than do white Okaloosan’s.

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.

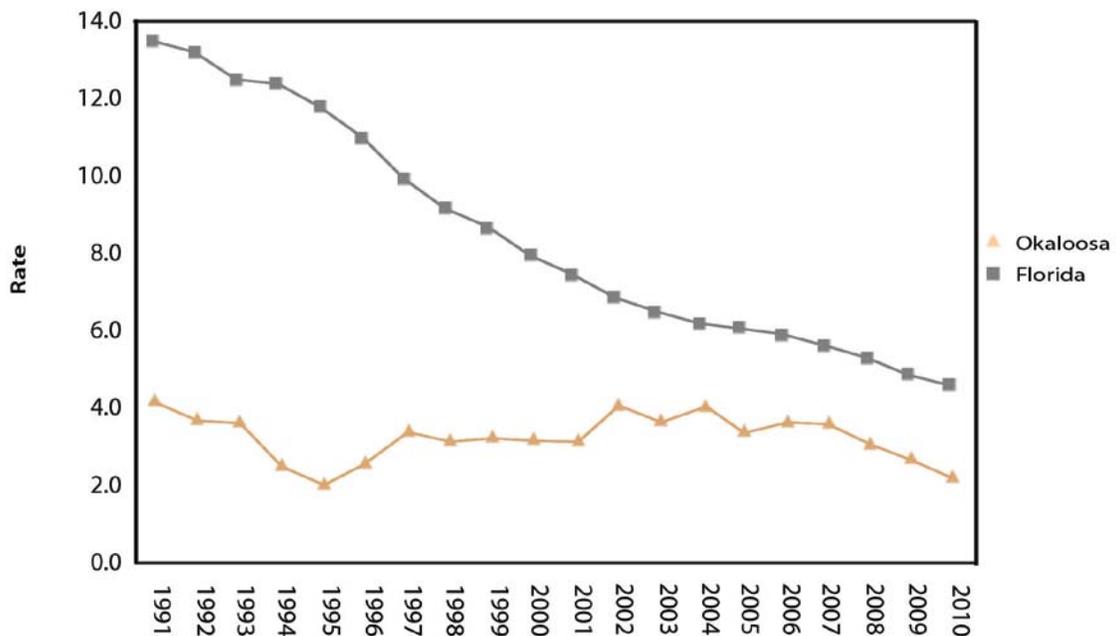
Not everyone infected with TB bacteria becomes sick. As a result, two TB-related conditions exist: -- **latent TB infection and active TB disease.**

- 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. Okaloosa 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 Okaloosa County. All cases of TB are reported to the Florida Department of Health in Okaloosa and co-managed with local physicians regardless on income status or insurance status.

Figure 48: Tuberculosis Cases, Rolling 3-Year Rate per 100,000 Population



Source: Florida Department of Health; Bureau of TB & Refugee Health

MATERNAL AND CHILD HEALTH

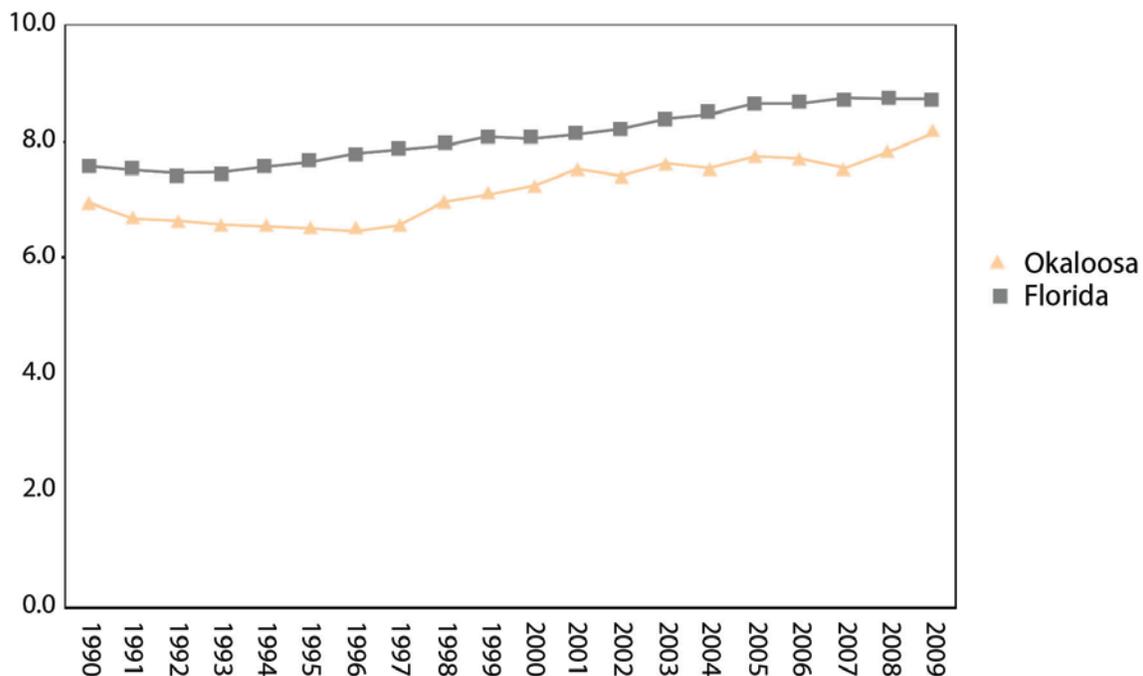
The health of women of child-bearing age, infants and children is of great importance to a community's well-being. These individuals make up 38.9% of the population in Okaloosa County. The health of this segment of the population predicts the health of the next generation. Maternal and child health addresses 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 Okaloosa County, the birth rate has dropped over the past ten years (1999-2009). Between 1999 and 2009 the birth rate in Okaloosa County decreased by 10.9%. In Okaloosa County in 2009 there were 2,602 births. White mothers gave birth to 80.5% (2,096) of infants. Births to women of other races accounted for 19.5% (506) of all births. The average number of live births in Okaloosa County between 2007 and 2009 was 2,692. Of these 2,692 live births 250 were to teens between the ages of 15 and 19 years. Repeat births to teens in this age group were 26.6%. Between 1990 and 2009, both Okaloosa and Florida have seen an upward trend in births to mothers ages 10-17.

Figure 49: Births to Mothers Ages 10-17, Rolling 3-Year Rate per 1,000 Females



Source: Florida Department of Health; Bureau of Vital Statistics

PRENATAL CARE

Women in Okaloosa County fail to meet the Healthy People 2010 goal of 90% of births with prenatal care in the first three months of pregnancy. In Okaloosa County, 77.4% of women enter prenatal care in the first three months of pregnancy. Florida has similar 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, and
- 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%), and
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. Data for 2007-2009 show that in Okaloosa County the percent of women with adequate prenatal care based on the Kotelchuck Index was 86.5%. A small percentage (6.3%) of women in Okaloosa County had no prenatal care. 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.

INFANT MORTALITY

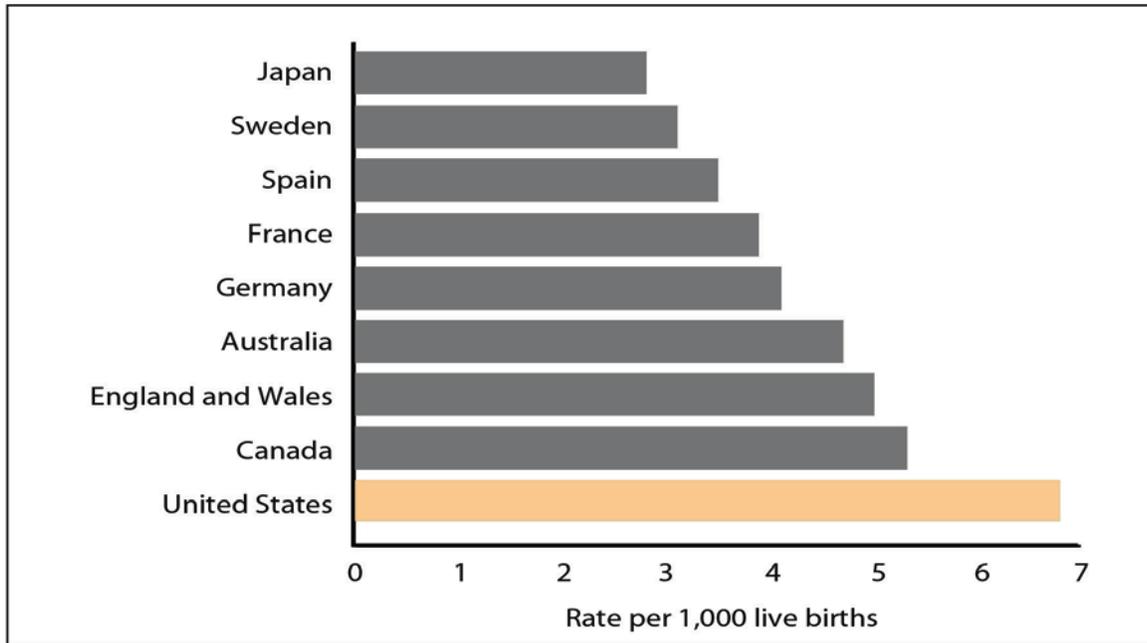
Infant mortality is defined as the death of any child less than one year of age. Infant mortality and birth weight statistics are used extensively in public health. These statistics are especially useful because of their relevance to measuring maternal and child health outcomes and because of their ease 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

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.

Figure 50: Infant Mortality Rates, Selected Countries, 2004



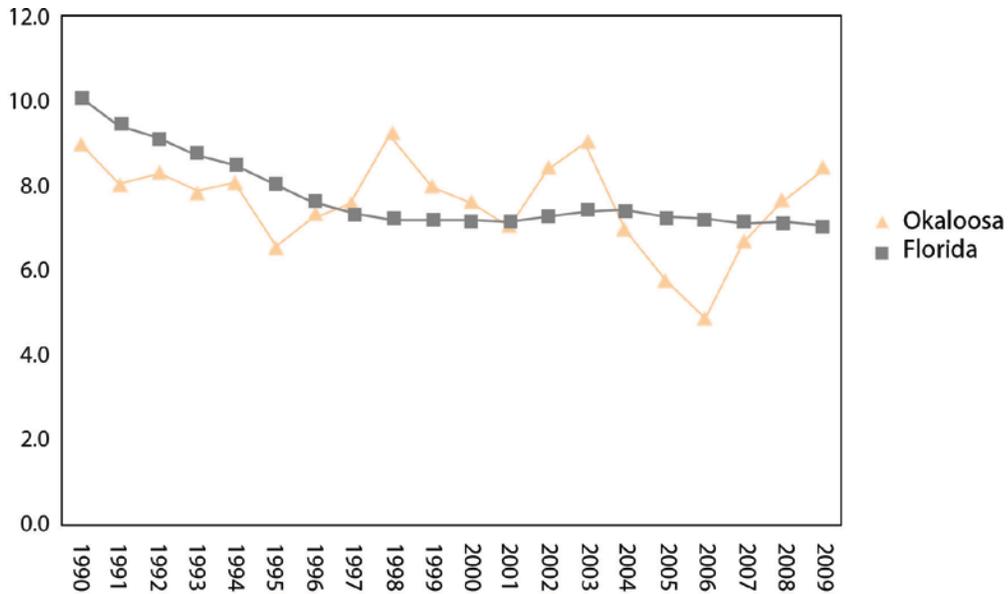
Source: Health, United States, 2007.

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 Okaloosa County infant mortality rates have stayed at about the same level for the past decade.

Figure 51: Total Infant Mortality, Rolling 3-Year Rate per 1,000 Live Births

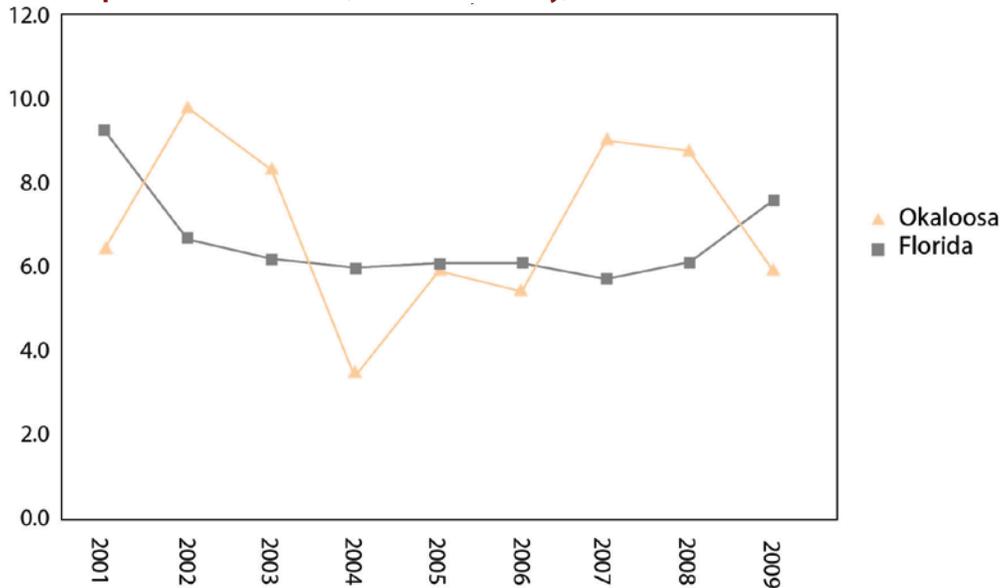


Source: Florida Department of Health; Bureau of Vital Statistics

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 Okaloosa County, due to the relatively small number of total births, the actual versus expected infant death rate varies from year to year. During most years between 2001 and 2009 the actual death rate was the same or less than the expected infant death rate.

Figure 52: Actual vs Expected Infant Deaths, Okaloosa County, 2001-2009



Source: Florida Department of Health, Bureau of Vital Statistics

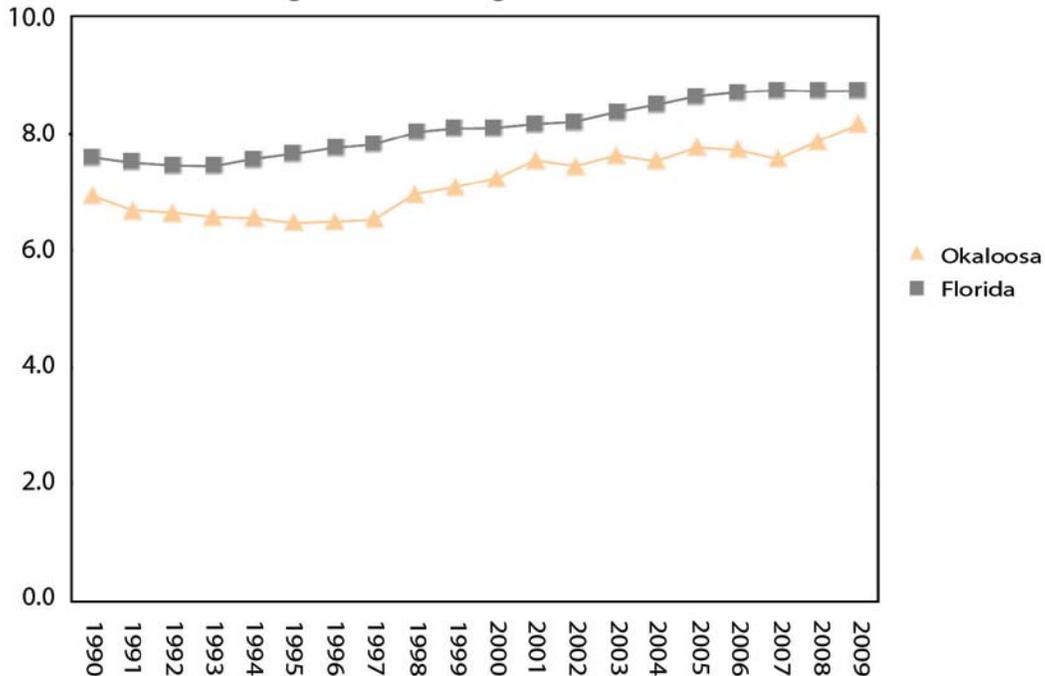
Community issues such as access to prenatal care, education, and support for women of child bearing age are important issues to address to help ensure the best possible birth outcomes. Several things can predict birth outcome. Some of these include mother’s age, race, marital status, educational level, smoking status, alcohol or drug use, entry into prenatal care, and whether the infant is born before full term (39 weeks of gestation). Three areas of concern related to women of child-bearing age in Okaloosa 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.

Okaloosa County compares favorably with state and national rates for the number of low birth weight infants born. In 2007-2009 8.2% of infants born in both Okaloosa County and the United States weighed less than 5 lb. 8 oz. at birth. Florida rates for the same time period were slightly higher at 8.7%. Neither Florida nor Okaloosa 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 singleton births.

Figure 53: Live Births Under 2500 Grams to All Mothers, Rolling 3-Year Percentage of Live Births

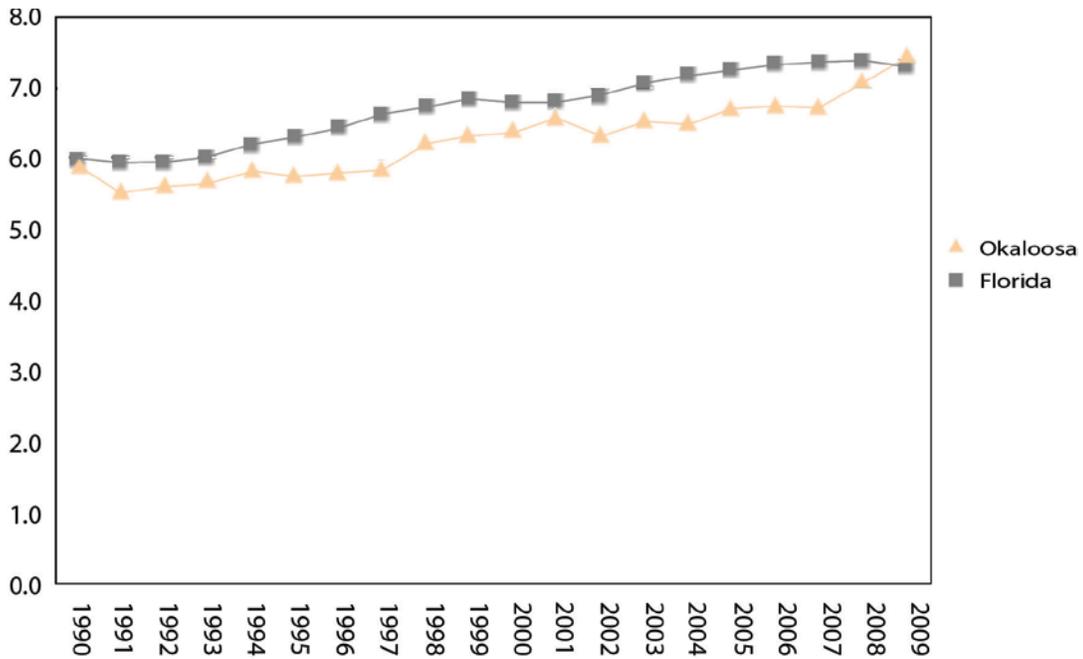


Source: Florida Department of Health; Bureau of Vital Statistics

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 black women than among whites for many years. Black 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 black women to preterm labor and delivery.

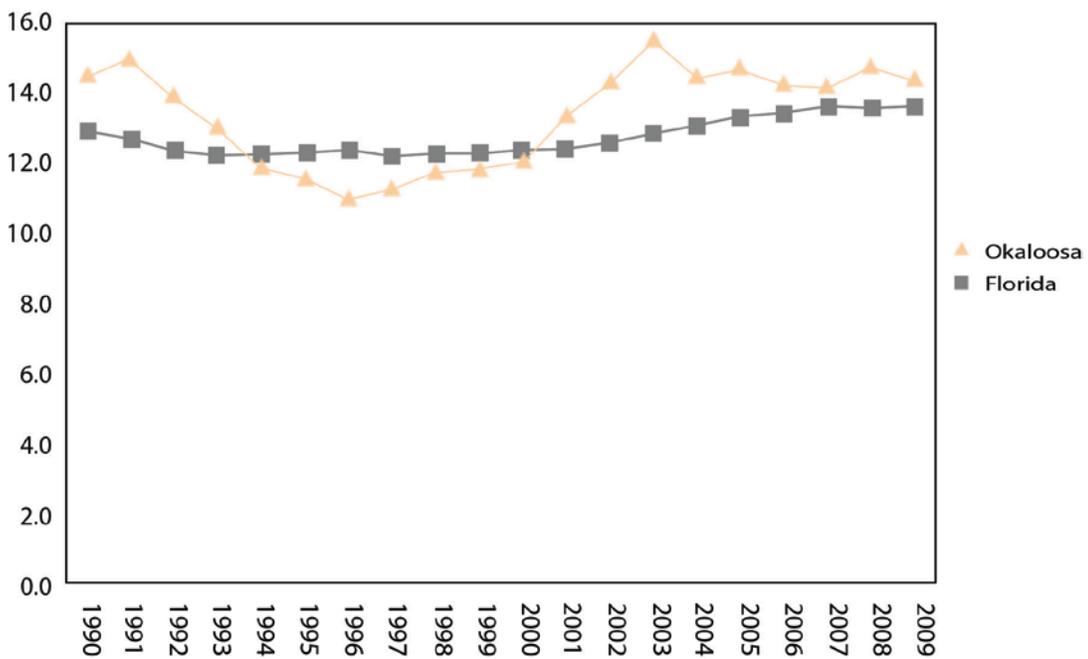
In Okaloosa County and in the state of Florida, low birth weight births are on the rise, and racial disparities still exist. In 1999 the 3-year rolling rate of low birth weight white infants born in Okaloosa County and the state was 6%. For the same time period the 3-year rolling rate of low birth weight black infants was more than double at 13% for the state and 14% for Okaloosa County. In 2009, the 3-year rolling rate for low birth weight white infants was a little over 7% for both the state and county, while the rate of black infants born at low birth weight was double that of whites at 14% for both the state and county.

Figure 54: Live Births Under 2500 Grams to White Mothers, Rolling 3-Year Percentage of White Live Births



Source: Florida Department of Health; Bureau of Vital Statistics

Figure 55: Live Births Under 2500 Grams to Black Mothers, Rolling 3-Year Percentage of Black Live Births



Source: Florida Department of Health; Bureau of Vital Statistics

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.

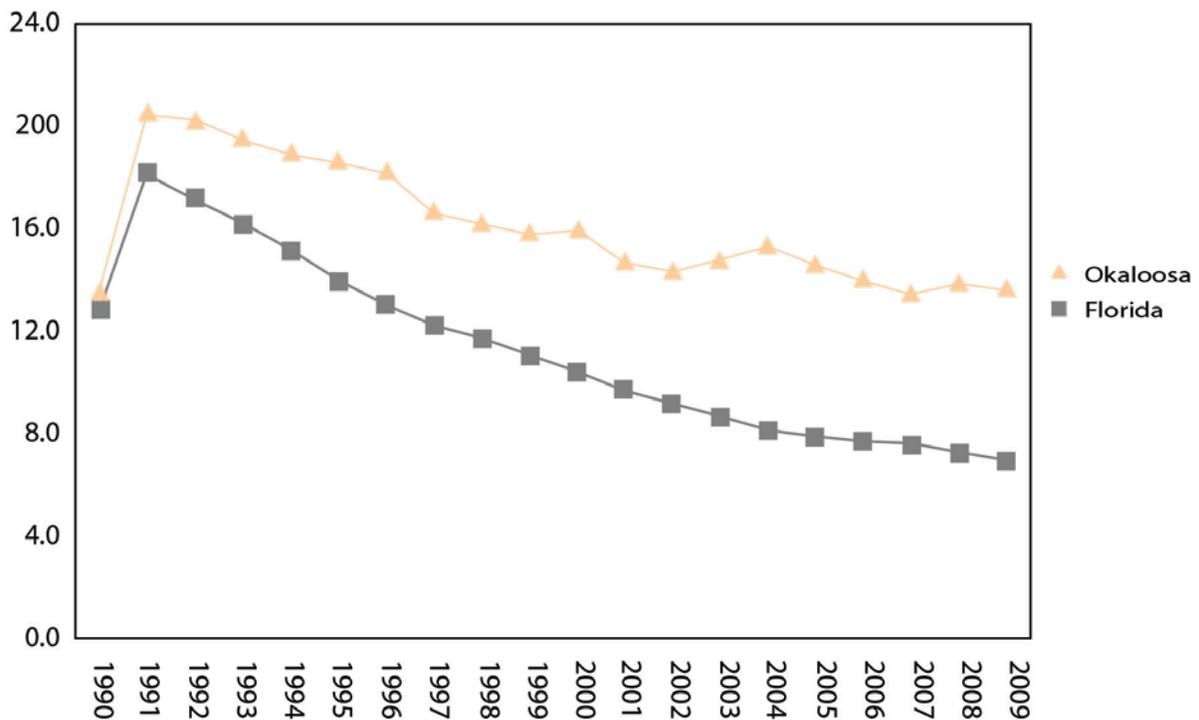
Numerous barriers often stand between pregnant women and children and receiving the care they need. For example, the inability to pay for services causes many women to delay or even forgo prenatal care. Frequently, women are not aware of the importance of prenatal or preventive care. In addition, women 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. Okaloosa County has a high number of smokers compared to the state as a whole. The percent of Okaloosa men who smoke is 18.9%, while the percent of Okaloosa women who smoke is 19.5%. Statewide, only 17.1% of men and 16% of women smoke. In Okaloosa, smoking during pregnancy is a serious concern with 13.6% of women reporting smoking during pregnancy for the years 2007-2009. There has been no change in the percentage of women smoking during pregnancy for the past 5 years. Okaloosa's pregnant women are almost twice as likely to smoke during pregnancy as pregnant women in Florida (6.9%).

In Okaloosa County, more white pregnant women (14.5%) than black pregnant women (10.1%) report that they continued to smoke during their pregnancy. This is in sharp contrast to the state in which only 8.2% of white pregnant women 3.6% of black pregnant women report that they continued to smoke during pregnancy. While the state has made good progress in reducing the percentage of women who smoke during pregnancy, Okaloosa County women have not taken heed of the warning about the dangers of smoking while pregnant. Women in Florida and in the county failed to attain the Healthy People 2010 goal of <1% of women who smoke during pregnancy.

**Figure 56: Resident Live Births to Mothers Who Smoked During Pregnancy
Rolling 3-Year Percentage of Live Births**

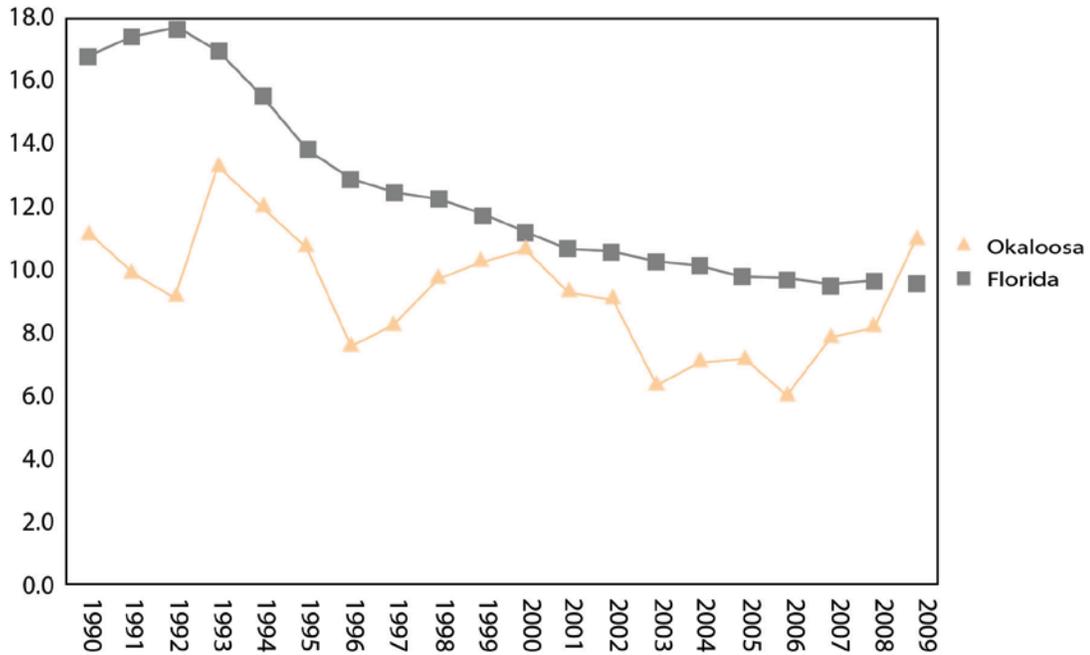


Source: Florida Department of Health; Bureau of Vital Statistics

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 Okaloosa 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 Okaloosa County between 1990 and 2008 Okaloosa repeat births to teens age 15-17 years stayed below state rates and steadily declined. However, beginning in 2006 the Okaloosa rates began to increase again and continue to rise.

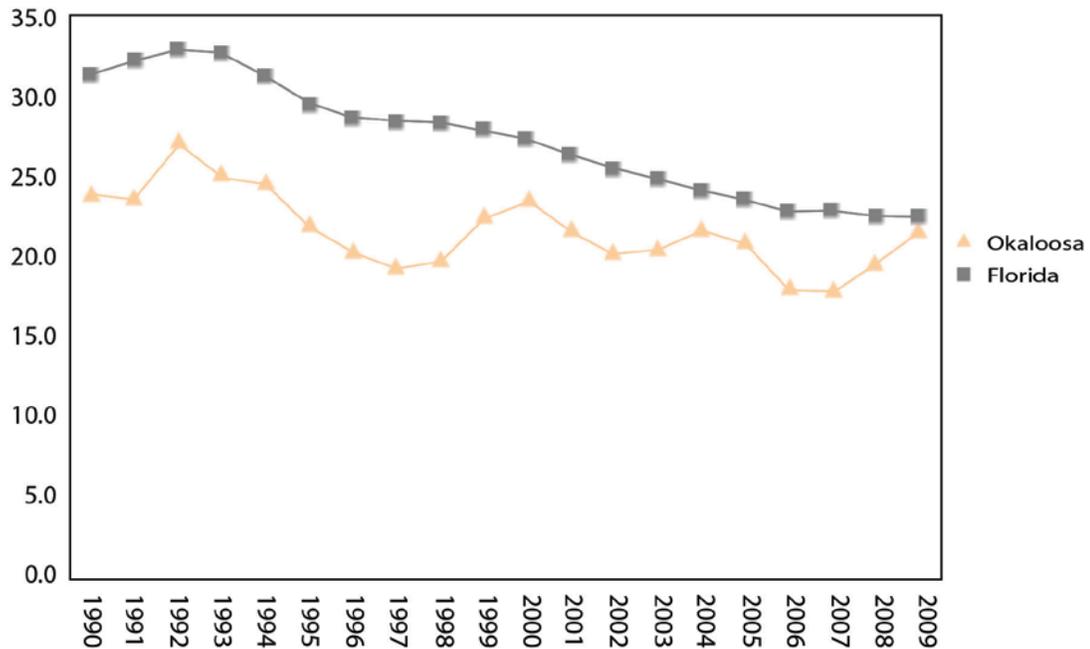
Figure 57: Repeat Births to Mothers Ages 15-17, Rolling 3-Year Percentage



Source: Florida Department of Health; Bureau of Vital Statistics

Repeat births to older teens show a similar pattern. Between 1999 and 2009 repeat births to teens age 18-19 years fell from over 30% to less than 25% in Florida. Okaloosa repeat births to teens age 18-19 years remained below state rates, but in 2006 began to rise and now are almost equal to the rates for Florida.

Figure 58: Repeat Births to Mothers Age 18-19, Rolling 3-Year Percentage



Source: Florida Department of Health; Bureau of Vital Statistics

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. Okaloosa County at 12.1% has a lower percent of births less than 37 weeks gestation than the state as a whole at 14.1%, however both Okaloosa 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.

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, 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. 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 Okaloosa County over the past 10 years, fewer babies are born at full-term. However, this appears to be due to more babies being born early term, than late preterm. The percentage of babies being born late preterm is just over 8% for the last decade. The percentage of babies born very preterm remains concerning but progress has been made in reducing the number of babies born post term.

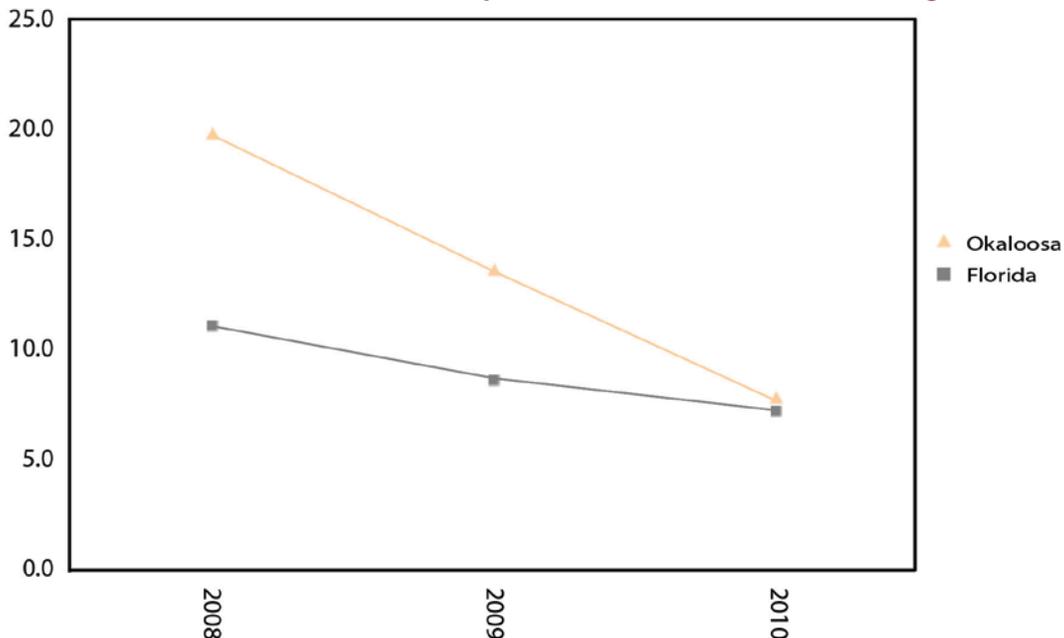
VACCINE-PREVENTABLE DISEASE

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. In the past three years, varicella outbreaks continue to occur in Okaloosa County and Florida.

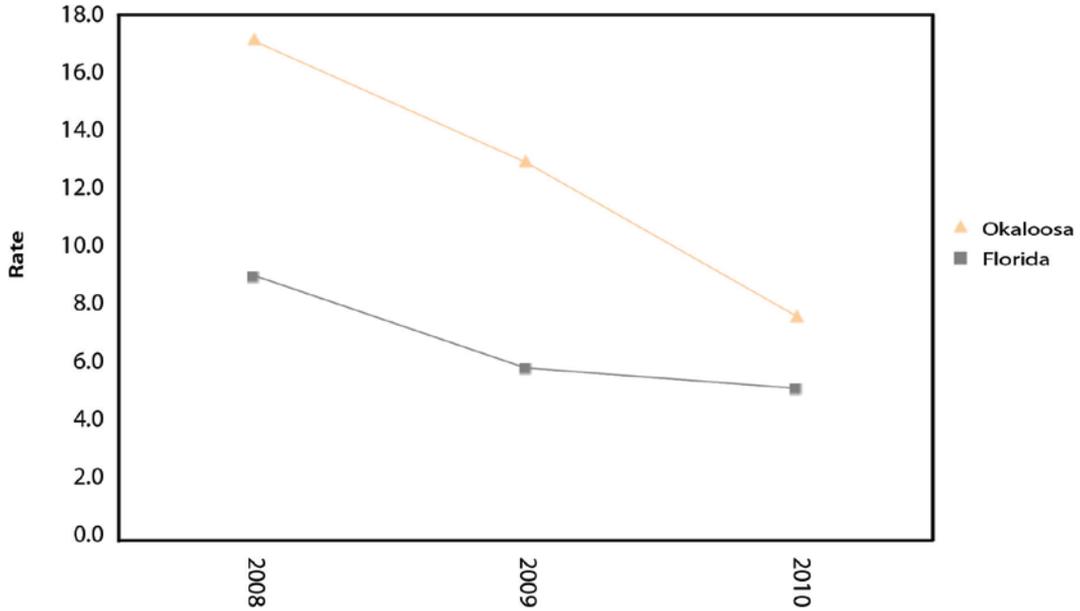
Immunizing individual children also helps to protect the health of our community, especially those people who are not immunized. People who are not immunized include those who are too young to be vaccinated (e.g., children less than a year old cannot receive the measles vaccine but can be infected by 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.

Figure 59: Vaccine Preventable Disease Rates, Rates per 100,000, All Races, All Sexes, All Ages



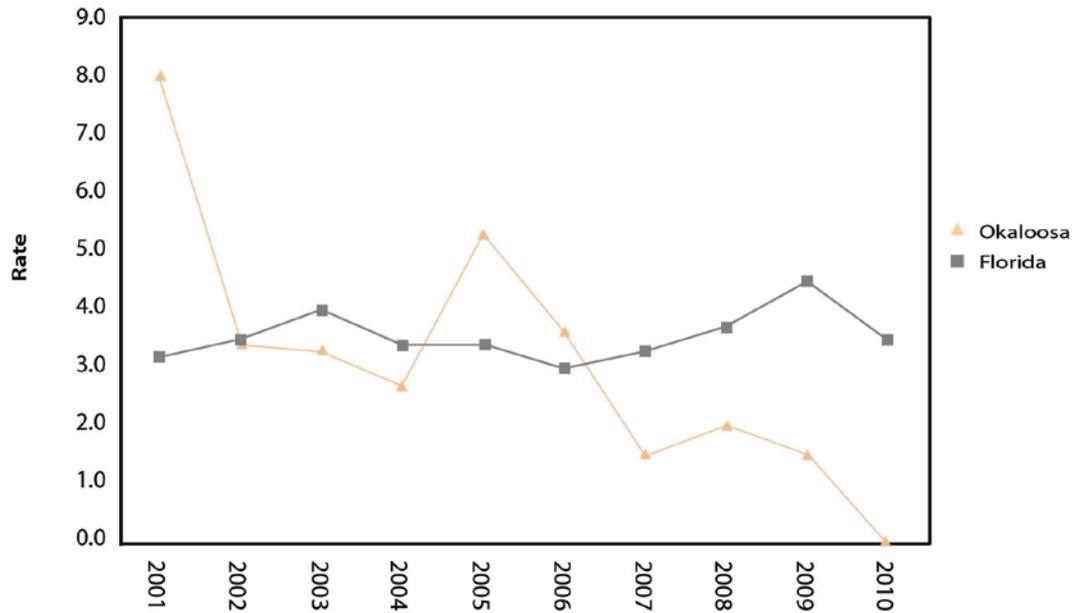
Source: Florida Department of Health; Bureau of Epidemiology

Figure 60: Vaccine Preventable Disease (Varicella) Rate for All Ages, Rates per 100,000, All Races, All Sexes



Source: Florida Department of Health; Bureau of Epidemiology

Figure 61: Selected Vaccine-Preventable Disease Rate for All Ages, 10-Year Rates per 100,000, All Races, All Sexes



Source: Florida Department of Health; Bureau of Epidemiology

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. Okaloosa County (91.0%) compares favorably to the state (91.3%) in the number of kindergarten students who are fully immunized. Both Okaloosa County (94%) and the state (84%) exceed the Healthy People 2010 goal of 80% of children who are fully immunized at 24 months of age, but lag behind the goal of 95% fully immunized at kindergarten.

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.

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 Okaloosa County. It is estimated that 70% of the population (roughly 90,000 people) in the northern region of the county currently utilize septic systems. An estimated 30 to 40 thousand septic systems are currently in use in Okaloosa County. Okaloosa County is very fortunate to have almost 90% of the homes and businesses in the southern region of the county serviced by public sewer. The following table shows the number of new septic systems installed in Okaloosa County in the past 10 years.

Table 9: New Septic System Installations, Okaloosa County

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
New Systems	366	442	574	726	704	895	715	321	243	199

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, lakes, bays, and bayous.

WATER QUALITY

Okaloosa County covers approximately 998 square miles (936 sq.mi. land area), and its elevation ranges from mean sea level (MSL) to 250 ft. above MSL. Major watercourses in the county include the Yellow, Shoal, and East Bay Rivers, as well as Panther, Titi, Turtle and Trammel Creeks. They all drain into the East Bay. Turkey and Rocky Creeks empty into Choctawhatchee Bay. Santa Rosa Sound separates the mainland from Santa Rosa Island (a barrier island), and Moreno Point (a peninsula) separates Choctawhatchee Bay from the Gulf of Mexico (NFWFMD 1994).

DRINKING WATER

Public water systems, mainly utilizing the Florida Aquifer, provide potable drinking water to 99% of Okaloosa residents exceeding 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 %.

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 20th 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 remineralize 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 71% of all residents in Okaloosa 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 Destin Water Users, City of Fort Walton Beach, Town of Mary Esther, Okaloosa County Water and Sewer. The City of Niceville water system also provides optimal amounts through fluoridation.

BEACH WATER QUALITY

In general, increased levels of fecal coliforms provide a warning of failure in water treatment, a break in the integrity of the distribution system, or possible contamination with pathogens. When levels are high there may be an elevated risk of waterborne gastrointestinal illness. The presence of fecal coliforms in beach water may indicate that the water has been contaminated with the fecal material of humans or other animals. Fecal coliform bacteria can enter rivers through direct discharge of waste from mammals and birds, from agricultural and storm runoff, and from human sewage. Failing home septic systems can allow coliforms in the effluent to flow into the water table, aquifers, drainage ditches and nearby surface waters. Sewage connections that are connected to storm drain pipes can also allow human sewage into surface waters.

Pets, especially dogs, can contribute to fecal contamination of surface waters. Runoff from roads, parking lots, and yards can carry animal wastes to streams through storm sewers. Birds can be a significant source of fecal coliform bacteria. Swans, geese, seagulls, and other waterfowl can all elevate bacterial counts, especially in wetlands, lakes, ponds, and rivers.

Large quantities of fecal coliform bacteria in water may indicate a higher risk of pathogens being present in the water. Some waterborne pathogenic diseases that may coincide with fecal coliform contamination include ear infections, dysentery, typhoid fever, viral and bacterial gastroenteritis, and hepatitis A. The presence of fecal coliforms tends to affect humans more than it does aquatic creatures, though not exclusively.

Untreated organic matter that contains fecal coliforms can be harmful to the environment. Aerobic decomposition of this material can reduce dissolved oxygen levels if discharged into rivers or waterways. This may reduce the oxygen level enough to kill fish and other aquatic life.

In the U.S., fecal coliform testing is one of the nine tests of water quality that form the overall water-quality rating in a process used by U.S. EPA. The Florida Department of Environmental Protection (DEP) uses fecal coliform testing to determine water quality in fresh, brackish and marine water environments. It has long been Florida's preferred indicator organism in both fresh and saltwater. Under the new Department of Health testing program, if a fecal coliform result is observed to exceed 399 colony forming units per 100 milliliters of beach water sampled and a re-sampling result also exceeds this value, then a health "Warning" will be issued for the sampling site. (100 milliliters is about 7 tablespoons of water).

The statewide testing program will also include testing for enterococci, which the United States Environmental Protection Agency (EPA) has recommended states adopt as a saltwater quality indicator. The enterococcus group is a subgroup of the fecal streptococci. The enterococci portion of the streptococcus group is a valuable bacterial indicator for determining the extent of fecal contamination of recreational surface waters. Studies in marine and fresh waters indicate that enterococci are one of the best bacterial indicators of water quality. Enterococcus is a bacteria found in the human intestine and therefore a good indicator of human waste.

According to studies conducted by the EPA, enterococci have a greater correlation with swimming-associated gastrointestinal illness in both marine and fresh waters than other bacterial indicator organisms, and are less likely to "die off" in saltwater. If an enterococci result exceeds 103 colony forming units per 100 milliliters of beach water sampled and a re-sampling result also exceeds this value, then an "Advisory" will be issued for the sampling site. With the collection of weekly samples, the program will also calculate the geometric mean for enterococci. The geometric mean is a number calculated from five weeks of beach sample results, including any re-sampling that has taken place. As a result, it is an indication of average water quality conditions over that time period at that particular location.

Since 2002, Environmental Health has conducted weekly saltwater beach water quality monitoring at 12 sites through the Healthy Beach Monitoring Program.

Figure 62: Okaloosa County “Healthy Beaches” Water Sampling Locations



1 Liza Jackson Park
338 Miracle Strip Pkwy SW
Ft Walton Beach

2 Garniers Park
257A Beachview Dr NE
Ft Walton Beach

3 Marler Park
1275 Santa Rosa Blvd
Ft Walton Beach

4 Wayside Park
1460 Miracle Strip Pkwy
Ft Walton Beach

5 Poquito Bayou
4 Bay St
Shalimar

6 Gulf Islands National Seashore
Hwy 98
Okaloosa Island

7 Destin East Pass
E Highway 98 & Destin Bridge
Destin

8 Lincoln Park
N Bayshore Dr
Valparaiso

9 Henderson Beach State Park
Henderson Beach State Rd
Destin

10 Fred Gannon / Rocky Bayou State
Park
4281 Hwy 20
Niceville

11 James Lee Park
3510 Scenic Hwy 98
Destin

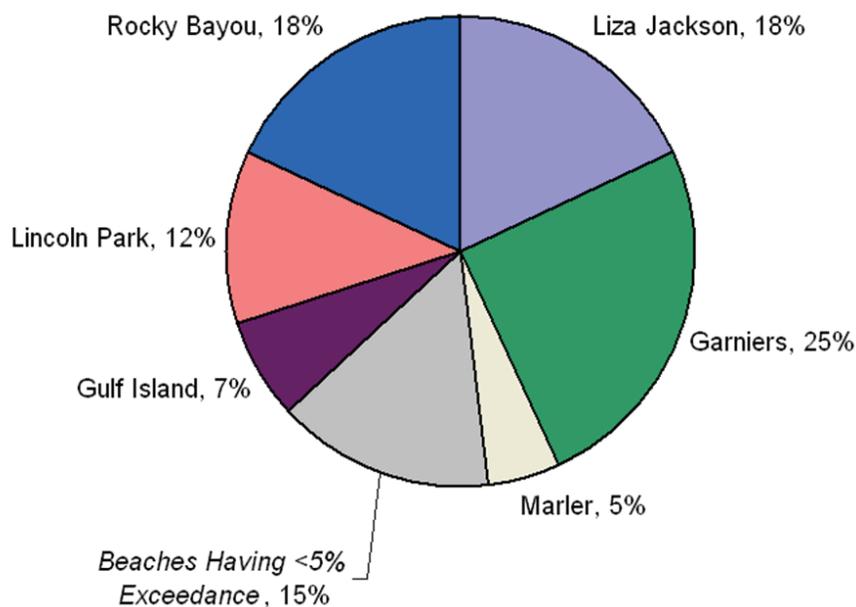
12 Camp Timpoochee
Timpoochee Ln
Niceville

Table 10: Samples Exceeding State Standards, 2010

Okaloosa County Sampling Location	% of Samples Exceeding State Standards	# of Advisory Days
Garniers Park	42	50
Lincoln Park	10	35
Liza Jackson	13	50
Rocky Bayou (Fred Gannon State Park)	10	29
Gulf Islands National Seashore	8	27
Poquito Park	2	8
Camp Timpoochee	6	14
Marler Park	0	0
Brackin Wayside Park	0	0
East Pass	4	13
Henderson State Park	0	0
James Lee Park	0	0

Water samples collected at Garniers Park had the 3rd highest percentage (42%) of samples exceeding State standards by location in Florida. Water samples in Okaloosa County exceeded acceptable levels of bacterial contamination 8% of the time resulting in Okaloosa County being ranked 8th highest among Florida’s 34 coastal counties. In Florida coastal counties sampled sites exceeded bacterial contamination rates only 3% of the time, ranking 6th highest for failure rates for all coastal states.

Figure 63: Healthy Beaches, 5-Year Study – Percentage of Advisories '06-'10



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. Okaloosa County has good air quality.

Table 11: AQI breakdown for Okaloosa, 2009

- Number of Days -						
Good	Moderate	Unhealthy for Sensitive Groups	Unhealthy	Very Unhealthy	Pollutants Monitored	# of Monitors
354	10	1	0	0	Ozone	1

Source: Florida Department of Environmental Protection

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 Okaloosa. 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 Okaloosa 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 the Mosquito Control Division of Okaloosa County Public Works to minimize the risk of human infection through education and other prevention and control activities. 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. Okaloosa relies upon the Sentinel Chicken program in Walton County to serve as an "early warning" or indicator for potential increases in the incidences of mosquito-borne illnesses.

ENVIRONMENTAL EPIDEMIOLOGY: RABIES

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

Environmental Health conducts rabies surveillance for Okaloosa. People usually get rabies when they are bitten or scratched by an animal that has the virus. In the US, 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 Florida Department of Health in Okaloosa. Environmental Health attempts to locate the animal and observes it during the required quarantine period. In 2010, Florida Department of Health in Okaloosa investigated over 750 reports of suspected rabies

exposures.

Table 12: Dog Bite Injury and Related Conditions, Okaloosa, 2005-2009

	Fatalities	Non-Fatal Hospitalizations	Non-Fatal Emergency Room Visits
2009	0	10	50
2008	0	13	35
2007	0	10	50
2006	0	8	29
2005	0	2	27

Source: DeathStat Database, Office of Vital Statistics, Florida Department of Health

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 Okaloosa County, Environmental Health permitted 180 facilities and conducted over 550 inspections in 2010.

PUBLIC SWIMMING POOLS AND SPAS

According to the Centers for Disease Control and Prevention (CDC) swimming is one of the most popular recreational activities in the United States. The Florida Department of Health in Okaloosa Environmental Health Section licenses and inspects public swimming pools and spas to minimize the risk of illness and other health related problems, and to reduce safety hazards resulting in accidents from an improperly maintained pool.

The Health Department licenses approximately 480 public pools and spas. Public swimming pools, wading pools, and spas include those located in apartment complexes, hotels, motels, neighborhood associations, parks, health clubs, and other health regulated recreational establishments. Environmental Health conducted over 1500 inspections performed each year to ensure the proper operation and safety of public pools and spas. Environmental Health does not permit or inspect private residential pools.

Year-round pools are inspected twice a year and seasonal outdoor pools are inspected annually. Routine inspections provide education, identify problems and site violations of State rules, and provide written notice of necessary corrections. Public swimming pool and spa inspections focus on safety, including pool supervision, pool enclosures, lifeguard requirements, and lifesaving equipment and its use. Environmental Health Specialists also check chemical treatment and the proper operation and maintenance of filtration equipment.

The number of pool and spa closures almost doubled from 2006-2010. This is a result of performing more frequent and stringent inspections as the public bathing water program became more robust.

Table 13: Pool & Spa Closures, due to Improper Sanitizer and Chemical Levels/Physical Hazards, Okaloosa

	2006	2007	2008	2009	2010
Pools & Spas Closed	126	105	157	272	230

Source: Florida Department of Health in Okaloosa, 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.