### Community Health Needs Assessment

Tallahassee Memorial HealthCare 1300 Miccosukee Road FY 2016

#### I. General Information

Contact Person: Warren Jones

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Date Written Report Made Publicly Available: September 29, 2016

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Name and EIN of Hospital Organization Operating Hospital Facility: Tallahassee Memorial HealthCare, Inc., EIN 59-1917016

Address of Hospital Organization: 1300 Miccosukee Road, Tallahassee, FL 32308 123.456.7890

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#### II. Purpose of CHNA Written Report

This written report is being conducted in order to comply with federal tax law requirements set forth in Internal Revenue Code section 501(r) requiring hospital facilities owned and operated by an organization described in Code section 501(c)(3) to conduct a community health needs assessment at least once every three years. The required Written Plan of Implementation Strategy is set forth in a separate written document. This Written Plan is intended to satisfy each of the applicable requirements set forth in Internal Revenue Code section 501(r) regarding conducting the CHNA for the Facility.

## About Tallahassee Memorial HealthCare Our Mission

Transforming Care. Advancing Health. Improving Lives.

#### **Our Vision**

Leading our community to be the healthiest in the nation.

At TMH, our focus is on providing patient and family centered quality healthcare to the communities that we serve.

#### **Our Services**

Providing innovative technology and a broad spectrum of services, Tallahassee Memorial HealthCare holds a number of important distinctions. TMH is home to the area's only state-designated Trauma Center and the Big Bend's only accredited community hospital cancer program. We are recognized by the Society of Chest Pain Centers as an Accredited Chest Pain Center with PCI and the area's only certified atrial fibrillation clinic.

Tallahassee Memorial is licensed as North Florida's only Comprehensive Stroke Center and is the only facility in the region performing minimally invasive stroke interventions. A Comprehensive Stroke Center offers the most advanced stroke interventions and treatments from expert physicians who are specially trained in their field. Tallahassee Memorial boasts a variety of revolutionary treatments for strokes, including endovascular neurosurgery, which removes blood clots and repairs aneurysms without opening the skull. Additionally, TMH has the only Neurological Intensive Care Unit.

Tallahassee Memorial is committed to our children. TMH maintains the area's only pediatric intensive care unit and employs a Child Life Specialist who is an expert in child development, making children feel comfortable in the hospital environment. One of the main goals for a child life specialist is to reduce stress associated with treatments and procedures by providing appropriate explanations and medical play opportunities. A

special pediatric rehabilitation unit provides services both inside and outside the hospital.

We offer the region's only Neonatal Intensive Care Unit (NICU). Tallahassee Memorial Women's Pavilion has two NICUs. Our Level-III unit is for critical care babies and our Level-II unit serves as a step-down or intermediate care unit. Each year our NICU team cares for over 600 babies. A neonatal transport team of specially trained nurses and respiratory therapists is on-call 24 hours a day to bring premature and/or sick babies from area hospitals and centers to our facility. Our NICU is also equipped with four nesting rooms to help with the baby's transition before going home. For families located out of town or learning to use medical equipment or administer medication, the transition rooms allow them to be together overnight with the support of our NICU team nearby.

Tallahassee Memorial HealthCare is following our vision to lead our community to be the healthiest in the nation through TMH FOR LIFE, a program designed to engage and motivate our community to take personal responsibility for their health and overall well-being. TMH FOR LIFE was designed to inspire people to take control of their health. Divided into four quadrants — know your numbers, be active, eat healthy, find your happy — the program hopes to prevent chronic disease by promoting easy ways to achieve a healthier lifestyle.

TMH has continued to operate its Family Medicine Residency Program, originally established in 1971, as an unaffiliated training facility on the hospital campus. Residency programs in Internal Medicine and General Surgery have also been recently implemented and both are managed by the Florida State University College of Medicine. The result: 156 Family Physicians and six Internal Medicine physicians who graduated from their programs at Tallahassee Memorial are now serving patients in our region.

The Transition Center is an innovative facility created by Tallahassee Memorial HealthCare, in partnership with Capital Health Plan, and the Florida State University College of Medicine to provide follow-up care for certain patients after they leave Tallahassee Memorial Hospital. This includes patients who cannot see a physician as quickly as needed, patients who do not have a physician, and patients who do not have insurance.

The goal of the Transition Center is to provide these patients with the care and support they need to help them continue on the road to recovery. Types of services offered at the Transition Center may include help with filling prescriptions, performing lab work, arranging physical therapy and other rehabilitation services, and connecting the patient with other agencies that may be able to provide assistance.

#### **Investment in our Community**

The federal government provides a benchmark to determine the strength of nonprofit hospitals' investments in their communities. According to this benchmark, TMH provides a significantly higher percentage of support to community benefit programs and services than the national average. At cost, TMH's percentage of total expenses for community benefits was over 13%. The national average was 9.67%. These programs include: community health improvement efforts, health education, subsidized health services, research, and charity care.

Since taking over the operations of the hospital, TMH has invested over \$710 million in facilities and equipment (not including costs for repairs in an amount exceeding \$17 million in a typical year), plus approximately \$198 million in interest costs. Therefore, TMH has spent well over \$900 million from the inception of the lease through June, 2016 on land, equipment and facilities for the continuing operation and expansion of the hospital facilities and services.

# About our Regional Partnerships Step Up For Gadsden

Communication is a key to effective collaboration. And, collaboration is the most efficient and effective tool businesses and agencies who serve the social needs of a community use to bring desired change for those with the most need.

Seeking a better life for their neighbors, a collection of concerned business leaders serving Gadsden County came together to fashion a platform for collaboration. That platform is now used to help those providing services cooperate better, together.

For two years, and over many community meetings, agencies and citizens fashioned a list of goals and strategies designed to promote the needs of the community and attract ideas and interest in successfully overcoming barriers standing in the way of improvement.

#### **Leon County Community Health Cooperative**

Tallahassee Memorial HealthCare, United Way of the Big Bend, and the Florida Department of Health in Leon County partnered with health provider stakeholders to form a steering committee of over 30 partner agencies to develop a Community Health Assessment and Health Improvement Plan. Once the plan is developed, the group would use the priorities, skill sets, expertise, and ideas of each member of the cooperative to garner resources that address the community's health needs.

The Cooperative developed an assessment that would dig deeper into the root causes of issues that have been previously identified and focus on the neighborhoods whose socio-economic factors increase their risk of being impacted by health issues. A two-

prong approach was chosen to ensure information was captured from populations that are less likely to have access to computers and research shows have a low response rate with this type of assessment. Two-hundred twenty-five door-to-door surveys were conducted in South City, Woodville area, Highway 20, Fairbanks Ferry Rd (near Highway 12), and Southside areas. These areas were chosen based on income, poverty, uninsured/under-insured, high school dropout rate, food access, and infant mortality rates. The cooperative shared the information gathered in each neighborhood with citizens of that neighborhood for further feedback and as a way to develop neighborhood specific strategies for the future.

# III. Community Served by Facility (3.03(1)) and 3.05)

#### **Description of Community Served by Hospital Facility:**

Tallahassee Memorial HealthCare's primary service area is a four-county region (PSA) containing Leon, Gadsden, Wakulla, and Jefferson counties with a population greater than 375,000. Leon County is the largest county in the PSA representing 75% of the four county population. Based in Leon County, Tallahassee Memorial serves a truly diverse population.

Within the four county region 24.62% of residents are uninsured and unemployment is 11.75%. The number of children in poverty stands at 22.69%, those over the age of 65 in poverty is 13.17% and the number of families with a single parent in poverty is 39.18%. These figures place the region in the lowest quartile in the State of Florida in these categories. (Truven Health Analytics, Community Need Index, 2016.)

Leon County boasts a high educational rate with 44% of the county population over the age of 25 having a bachelor's degree or higher compared to the Florida rate of 27%. Wakulla and Jefferson counties rate is 17%, Franklin is at 27% and Gadsden's rate is 16% (US Census Bureau Quick Facts, 2016).

#### **Description of How Community Served Was Determined:**

Tallahassee Memorial determined the definition and scope of the community served by assessing the geographic area representing 80% of its inpatient and outpatient discharges.

TMH determined the definition and scope of the community served by assessing the geographic area served by the facility, and because of its mission as a private, not-for-profit hospital, its target populations and principal functions. TMH also assessed the populations of medically underserved, low-income, minority, and chronic disease needs individuals, within this community.

# IV. Process and Methods Used to Conduct the CHNA (3.03(2))

## Description of Sources and Dates of Data and Other Information Used in CHNA:

- Leon County Collaborative Data, 2016
- · Step Up for Gadsden Goals and Strategies, 2016
- Countyhealthrankings.org, 2016
- Florida Charts County Minority Health Profile, 2014
- Gadsden County Community Health Council, 2016
- Jefferson County Community Health Improvement Plan, 2015
- Tallahassee Memorial Community Survey, 2016
- Interviews with Mayor of Tallahassee and Chair Leon County Commission

## Description of Analytical Methods Applied to Identify Community Health Needs:

Each source of data brought its own analytical analysis. The Leon County Cooperative, led by the Florida Health Department in Leon County, collected data from six lower income neighborhoods in the county through face-to-face interviews. Each neighborhood's data was then reported back to the neighborhood for their further discussion and use.

A draft September 23, 2016 draft report on the survey from the Department of Health in Leon County described the data collection:

"Since the overall goal of the assessment is to address health disparities and to identify needs of populations who are most disadvantaged, survey households were sampled from census blocks with the highest poverty concentration. Taking into account population density and to guarantee geographic dispersal of respondents— since much of the county lives outside of city/town limits and the rural/urban experience is very different—the county was divided into four geographic quadrants. Census blocks with the highest poverty rates from each quadrant were selected. From a base population totaling about 25% of Leon County's total population (covering about 10 census blocks), 300 households were randomly selected (200 from each quadrant) from the Leon

County Planning/Land use/Tax database of addresses. Sampling from blocks with a higher poverty rates did not guarantee that every household randomly selected would be low income, but simply that it was more likely to be. The goal was to effectively "skew" the data to lower income residents.

#### Survey Instrument Design

The Community Health Assessment Survey consisted of 94 questions about various health topics. The survey instrument was adapted from the tools created by Houston Department of Health and Human Services, Florida Department of Health in Sarasota County, and PACE-EH. Questions were sampled from model instruments that had been previously tested for validity.

The survey had nine sections: 1) Environmental Health/Built Environment; 2) Children's Concerns; 3) Access to Care; 4) Health and Wellbeing; 5) Health-Related Behaviors; and 6) Demographics. Questions were primarily multiple choice, with select open-ended opportunities. Surveys were all coded with a unique identification number.

Attempts to recruit selected households and administration of surveys were carried out by a team of 70 field volunteers, over the course of five Saturdays in February and March and two weeks in October 2015. Field volunteers spent one Saturday in six neighborhoods of the county. To ensure continuity and reliability of data collected, all field volunteers participated in a training which covered safety plans and procedures for conducting surveys (i.e., techniques for conducting unbiased surveys, what to do if someone was not home or chose not to participate, and procedures for non-English speaking residents, etc.). Volunteers conducted surveys in teams of two individuals. Each team was assigned a specific list of addresses grouped by proximity. Surveys were conducted by hand (pen and paper), in person, door-to-door. All survey respondents were given a resource bag of materials for their participation. In an attempt to include every sampled household in the assessment, the survey was administered in Spanish also.

#### Survey Population

Of the 330 surveys attempted in six census tracts, 300 were completed.

Survey data were entered using the online Survey Monkey tool then exported to an Excel database. Data were cleaned and analyzed within Excel. Given survey communities were selected with a health disparities focus (income, poverty, and education attainment), question responses were compared against categories: age and gender. Findings are presented throughout the document under relevant subheadings.

By census tract 27% of survey respondents live in South City, 16.5% reside in Greater Frenchtown and the Macon Community, 8% live in the Fairbanks Ferry Road area, 17% reside in the Bond Community, and the remaining 15% are in the Highway 20/Aenon Church Road area.

#### Community Meetings

The aim of the community health assessment is to identify the community's health-related priorities and generate strategies that will serve as the foundation for action plans associated with the Community Health Improvement Plan. This was met by holding community meetings over a four week span during the month of June in different locations throughout Leon County.

Residents were presented with the main findings from the CHA – quantitative survey results. After a presentation of results and supporting data, attendees at each meeting participated in a focused conversation and consensus building workshop. The process followed the Technology of Participation framework. Individuals were asked to consider the following series of questions:

- What information stood out to you?
- Where are you really clear? Where are you confused? What concerns you? What feels critical?
- What questions did this raise for you? What other things do we need to consider?
- What seems to be the most critical issue or concern for the community?

Attendees were asked to write their most critical concerns individually on separate pieced of paper. Afterwards, they were given a chance to group similar issues/concerns together. All participants had an opportunity to agree or disagree with the similarity between items. After all concerns were grouped by similarity, attendees were instructed to name each group. The wording described their answer to the original question — what are the most critical issues/problems in your community? These results along with the objective data analysis will inform development of the county's Community Health Improvement Plan (CHIP)."

In Gadsden County, Step Up For Gadsden was developed by several private companies including Tallahassee Memorial. Together, they gathered representatives from social service and governmental agencies, the people who know the needs of their community. Using countyhealthrankings.org data, the group focused on five areas: percent of children in poverty; high school graduation rate; percent of those in poor or fair health; percentage of homes with severe housing problems; unemployment rate and percentage of uninsured. Social and government agency representatives prioritized the top issues in their area of expertise.

Priorities from Gadsden County Health Council and the Florida Department of Health in Jefferson County were developed after undergoing their own analytical method.

This data was then given to a group of Tallahassee Memorial HealthCare clinical administrators who reviewed the findings including socio-economic and racial disparity data.

## Description of Information Gaps Impacting Facility's Ability to Assess Community Health Needs:

Given that Tallahassee Memorial established relationships with those whose focus is to improve health and prevent illness, help the community find appropriate care options, expand access to care, and use their knowledge and skill sets to understand the issues, we do not believe there are information gaps impacting our ability to assess health needs.

## Overview of Neighborhood Survey Results

## FAIRBANKS NEIGHBORHOOD PROFILE



What are some things that you like about your neighborhood?

- Quiet/Peaceful
- Family
- Property space

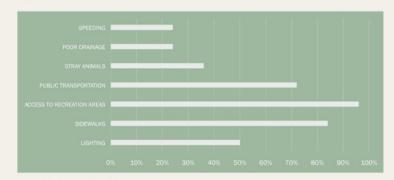
What are the biggest problems in your neighborhood?

- Drugs
- Road conditions





#### Neighborhood Concerns



- Biggest Neighborhood Issues:
  - Mosquitos
  - Walking Paths/Sidewalks
  - Drugs

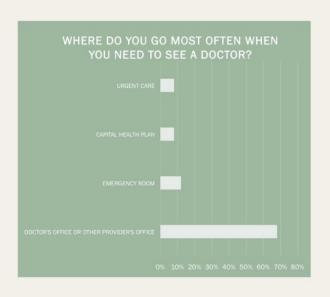
#### Children Concerns

- Of those who had children living in their home, 57.1% had children between the ages
   0-4
  - Of those children, 75% receive childcare outside of their home on a regular basis.
    - This includes childcare/daycare centers, and family member's homes.
- There were some concerns about safety of the children regarding the busy Fairbanks
   Ferry Rd. and being unfamiliar with many people in the community.
- There were also suggestions for more activities for children after school.



#### Access to Care

- 96% of respondents had some type of medical coverage.
- 83.3% of respondents have one person or more that they think of as their personal doctor or heath care provider.



#### Medical

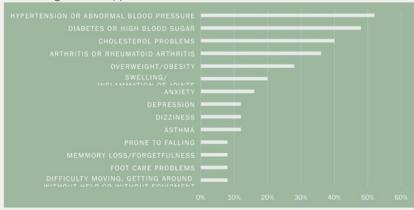
- 92% of respondents have seen a doctor for a routine checkup within the past year
- 72% of respondents rated their health 'good or excellent'
  - 28% rated their health 'fair or poor'
- During the past month, physical health problems limited 44% of respondents usual physical activities 'Very little' to 'Quite a lot'.

#### Dental

- 58.3% of respondents saw a dentist or a dental clinic for any reason within the past year.
  - Reasons include:
    - Dental Cleaning
    - Checkup
    - Dentures
- 25% of respondents saw a dentist or a dental clinic 5 or more years ago.

#### Current health conditions/problems

Has a Doctor, Nurse, or other health professional ever told you that you had any of the following conditions/problems?



#### Food Related Health

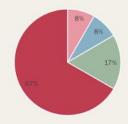
- 88% of respondents acknowledged that the grocery store or supermarket that you regularly go to offers a good selection of fresh fruits and vegetables.
  - 48% of respondents eat 3-5 servings of fruits and vegetables a day.
- 44% of respondents eat fast food 1-3 times per week.
  - 36% of respondents never eat fast food or eat fast food less than once a week.
  - 20% of respondents eat fast food 4 or more times per week.
- 44% of respondents never eat fried foods or eat fried foods less than once a week.
  - 44% of respondents eat fried foods 1-3 times per week.
  - 12% of respondents eat fried foods 4 or more times per week.





#### Alcohol

On average, how often do you drink alcoholic beverages (include beer, wine, wine coolers, etc.)



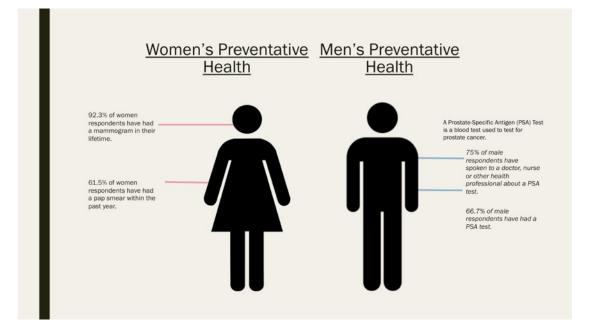
Every day/almost daily A few times per week Rarely Never

#### Preventative Health

- 60.9% of respondents participated in at least 30 minutes of any moderate intensity physical activities in the last month, other than their regular job, 4 or more times a week.
- 79.2% of respondents <u>did not</u> get a flu shot last year.









# What are some things that you like about your neighborhood?

- Quiet
- Friendly neighbors

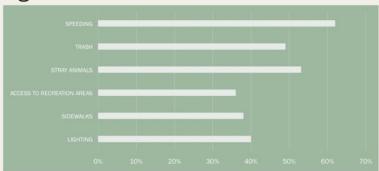


## What are the biggest problems in your neighborhood?

- Housing Management
- Drugs
- Trash
- Speeding



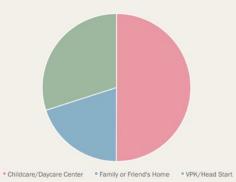
#### Neighborhood Concerns



- Biggest Neighborhood Issues:
  - Trash
  - Drugs
  - Mold
  - Walking paths/Sidewalks

#### Children Concerns

- Of those who had children living in their home, 66.7% had children between the ages 0-4.
  - Of those children, 44.4% receive childcare outside of their home on a regular basis.



#### Children Concerns

- Safety was the primary concern when asked 'What parents worry most about their children?'
- 37.5% of parent respondents are concerned with their children's safety inside the neighborhood.
  - Other concerns included:
    - School/education
    - Speeding



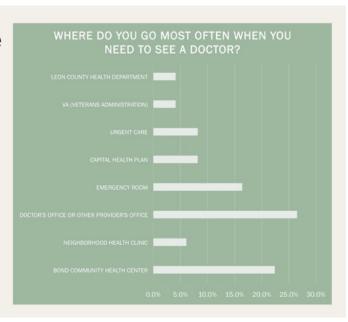
Is there a program or service that you want to suggest to improve the health or learning of your child?

- Tutoring/Mentoring
- More community activities



#### Access to Care

- 92% of respondents have medical insurance
- 62.5% of respondents have one person that they think of as their personal doctor or health care provider



#### Medical

- 78% of respondents have seen a doctor within the past year for a routine checkup
  - 4% of respondents have not seen a doctor within the past 5 years
- 81.6% of respondents rated their health good or better.
  - 18.4% rated their health fair or poor

#### Dental

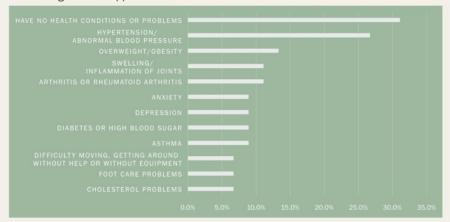
- 50% of respondents have seen a dentist or a dental clinic for any reason within the past year
  - Reasons include:
    - Dental cleaning
    - Tooth ache
    - Extractions
- 24% of respondents have not seen a dentist for 5 or more years

#### Mental Health

- 22% of respondents during the past month had some feelings of sadness or depression.
- 20% of respondents during the past month had some feelings of anxiousness or nervousness that make it hard to do what they normally do during the day.
- 22% of respondents had someone in their family that needed mental health services in the last year.
  - 29.4% of respondents did not know where to go if someone in their family needed mental health services.

#### Current health conditions/problems

■ Has a Doctor, Nurse, or other health professional ever told you that you had any of the following conditions/problems?



#### Current health conditions/problems cont.

- Other health problems include:
  - Epilepsy
  - Back pain
- In the past month, physical health problems limited usual physical activities very little for 10% (n=5) of respondents, somewhat for 14% of respondents and quite a lot for 10% of respondents.

#### Food Related Health

- 92% of respondents acknowledged that the grocery store or supermarket that you
  regularly go to offers a good selection of fresh fruits and vegetables.
  - 46% of respondents eat 3-5 servings of fruits and vegetables a day.

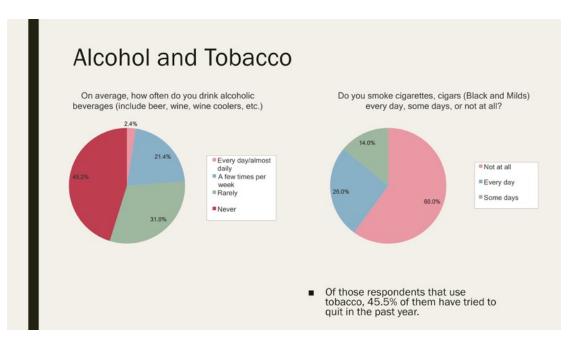


- 52% of respondents eat fast food 1-3 times per week.
  - 40% of respondents never eat fast food or eat fast food less than once a week.
  - 8% of respondents eat fast food 4 or more times per week.



- 52% of respondents eat fried foods 1-3 times per week.
  - 38% of respondents never eat fried foods or eat fried foods less than once a week.
  - 10% of respondents eat fried foods 4 or more times per week.



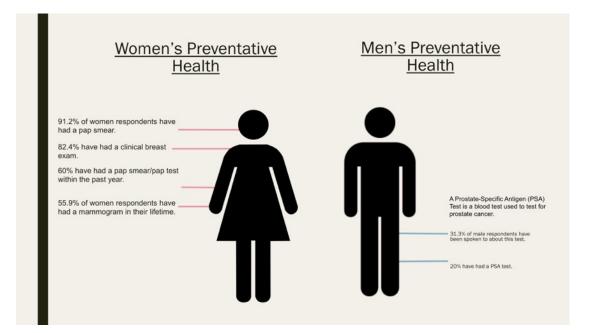


#### Preventative Health

- On average 20.8% of respondents participate in at least 30 minutes of moderate intensity physical activities or exercises 3-4 times per week.
- 26.3% received a flu shot last year.









## What are some things that you like about your neighborhood?

- Quiet
- Friendly neighbors

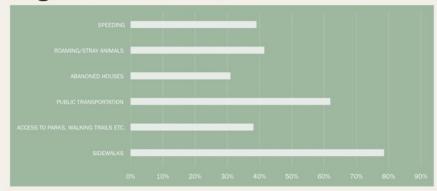


## What are the biggest problems in your neighborhood?

- Animals
  - Bears
  - Roaming pets
  - Coyotes



#### Neighborhood Issues



- Biggest neighborhood issues:
  - Management/Repairs
  - Mosquitos

#### Children Concerns

- Of those who had children living in their home, 61.9% had children between the ages of 0-4.
  - Of those children, 38.5% receive childcare outside of their home on a regular basis
- 30% of respondents who have children reported they are worried about their children's safety, education, and enough food to eat.



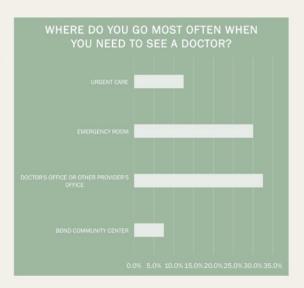
Is there a program or service that you want to suggest to improve the health or learning of your child?

- Local Daycare
- Outdoor activities (i.e. gardening)
- Recreation Center



#### Access to Care

- 88.1% of respondents had some type of medical coverage.
- 51.2% of respondents have one person that they think of as their personal doctor or health care provider.
  - 4.9% have more than one.



#### Medical

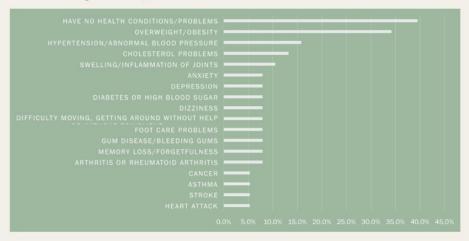
- 73.8% of respondents have seen a doctor within the past year for a routine checkup.
- 78% of respondents rated their health good or better.
  - 22% of respondents rated their health less than good.

#### Dental

- 41.5% of respondents have seen a dentist or a dental clinic for any reason within the past year.
  - Main Reasons include:
    - Dental cleaning
    - Extractions
    - Checkups
- 24.4% of respondents have not seen a dentist for 5 or more years.

#### Current health conditions/problems

Has a doctor, nurse, or other health professional ever told you that you had any of the following conditions/problems?



#### Current health conditions/problems cont.

- Other health problems include:
  - Stress
  - Glaucoma
  - ADHD
  - Bipolar
  - Insomnia
- 12.2% of respondents reported physical health problems limiting their usual physical activities 'Quite a lot' (such as walking or climbing stairs); 12.2% reported 'Somewhat', 4.9% reported 'Very Little'.

#### Food Related Health

- 95.2% of respondents acknowledged that the grocery store or supermarket that you regularly go to offers a good selection of fresh fruits and vegetables.
  - 57.1% of respondents eat 3-5 servings of fruits and vegetables a day.
- 47.6% of respondents never eat fast food or eat fast food less than once a week.
  - 26.2% of respondents eat fast food 1-3 times per week.
  - 26.2% of respondents eat fast food 4 or more times per week.



- 45.2% of respondents eat fried foods 1-3 times per week.
  - 33.3% of respondents never eat fried foods or eat fried foods less than once a week.
  - 21.4% of respondents eat fried foods 4 or more times per week.



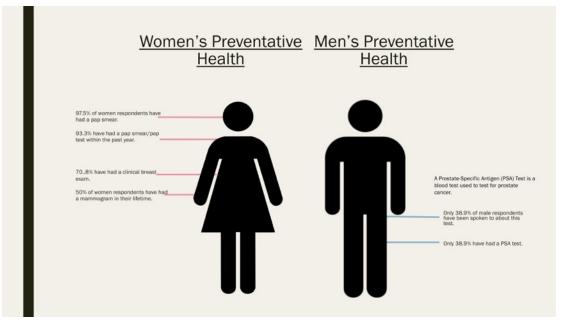
# Alcohol and Tobacco On average, how often do you drink alcoholic beverages (include beer, wine, wine coolers, etc.) Do you smoke cigarettes, cigars (Black and Milds) every day, some days, or not at all? \*\*Every day/almost daily \*\*A few times per week \*\*Rarely \*\*Never\* \*\*Not at all \*\*Every day

#### Preventative Health

- On average 17.5% of respondents participate in at least 30 minutes of moderate intensity physical activities or exercises 3-4 times per
- Only 33.3% received a flu shot last year.









What are some things that you like about your neighborhood?

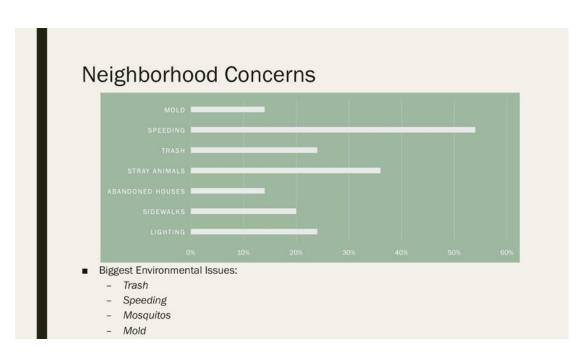
- Quiet/Peaceful
- Good Neighbors

What are the biggest problems in your neighborhood?

- Noisy
- Not enough activities for the kids
- Speeding







#### Children Concerns

- Of those who had children living in their home, 44.4% had children between the ages of 0-4.
  - Of those children, 37.5% receive childcare outside of their home on a regular basis.
    - Childcare outside of the home received included:
      - Childcare/Daycare Center
      - Voluntary Pre-Kindergarten



#### Children Concerns

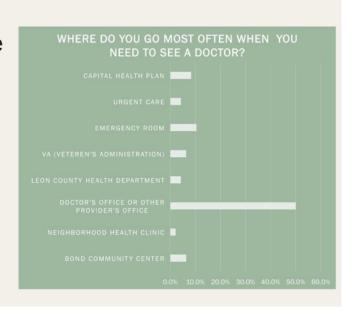
- Safety was the primary concern when asked what parents worry most about their children.
- 33.3% of parents are concerned with their children's safety in neighborhoods.



- Programs and services that were suggested to improve the health or learning of your child?
  - Tutoring/Afterschool programs
  - Mentor Program
  - Work experience opportunities

#### Access to Care

- 91.8% of respondents had some type of medical coverage.
- 68% of respondents have one person that they think of as their personal doctor or health care provider.



#### Medical

- 86% of respondents saw a doctor for a routine checkup within the pas year.
- 71.4% of respondents rated their health good or better.
  - 28.5% rated their health fair or poor.

#### Dental

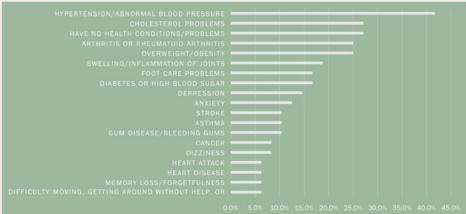
- 48% of respondents saw dentist or a dentist clinic within the past year for any reason.
  - Reasons include:
    - Dental Cleaning
    - Tooth ache
    - Extractions
    - Checkups
- 24% of respondents have not seen a dentist for 5 or more years.

#### Mental Health

- 26% of respondents during the past month had some feelings of sadness or depression.
- 24% of respondents during the past month had some feelings of anxiousness or nervousness that make it hard to do what they normally do during the day.
- 12% of respondents had someone in their family that needed mental health services in the last year.
  - 30% of respondents did not know where to go if someone in their family needed mental health services.

#### Current health conditions/problems

■ Has a Doctor, Nurse, or other health professional ever told you that you had any of the following conditions/problems?



#### Current health conditions/problems cont.

- Other health problems include:
  - Back Pain
- During the past month, physical health problems limited 20% of respondents usual physical activities (such as walking or climbing stairs) 'Quite a lot', 18% of respondents 'Somewhat', and 8% of respondents 'Very little'.

#### Food Related Health

 96% of respondents acknowledged that the grocery store or supermarket that you regularly go to offers a good selection of fresh fruits and vegetables.



- 46% of respondents eat 3-5 servings of fruits and vegetables a day.
- 48% of respondents eat fast food 1-3 times per week.
  - 46% of respondents never eat fast food or eat fast food less than once a week
  - 6% of respondents eat fast food 4 or more times per week.

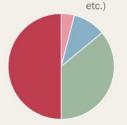


- 46% of respondents eat fried foods 1-3 times per week.
  - 36% of respondents never eat fried foods or eat fried foods less than once a week.
  - 18% of respondents eat fried foods 4 or more times per week.



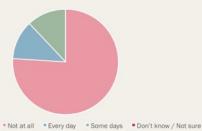
#### Alcohol and Tobacco

On average, how often do you drink alcoholic beverages (include beer, wine, wine coolers,



Every day/almost daily A few times per week Rarely Never

Do you smoke cigarettes, cigars (Black and Milds) every day, some days, or not at all?



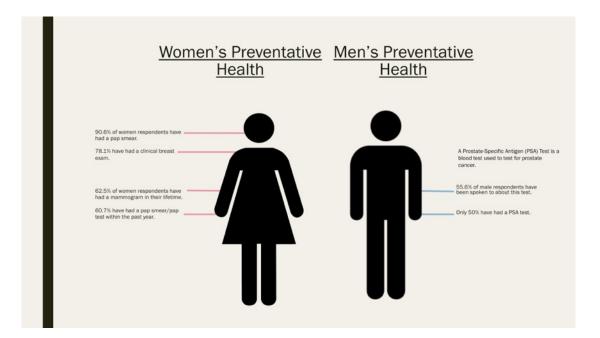
 Of those respondents that use tobacco, 63.6% of them have tried to quit in the past year.

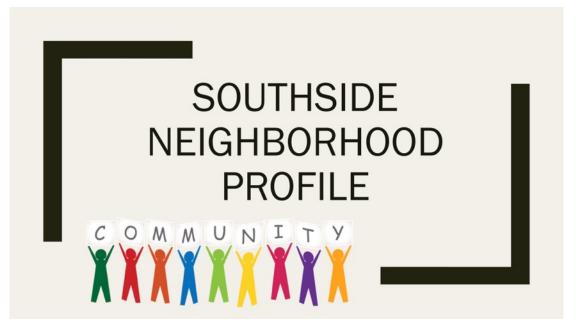
#### Preventative Health

- On average 18% of respondents participate in at least 30 minutes of moderate intensity physical activities or exercises 3-4 times per week.
- Only 46.8% received a flu show last year.









# What are some things that you like about your neighborhood?

- Quiet/Peaceful
- Neighbors

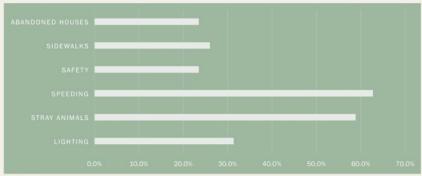
# What are the biggest problems in your neighborhood?

- Drugs
- Crime





#### Neighborhood Issues



- Biggest Neighborhood Issues:
  - Speeding
  - Animals
  - Trash

#### Children Concerns

- Of those who had children living in their home, 59% had children between the ages of 0-4.
  - Of those children, 38.5% receive childcare outside of their home on a regular basis.
- 50% of respondents reported they are worried about the safety of their children and this was a primary concern when asked parents what they worry most about their children overall.
  - Other worries include: School/Education (20%)



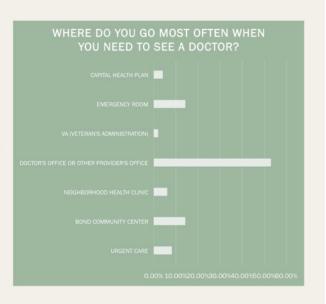
Is there a program or service that you want to suggest to improve the health or learning of your child?

- After school programs
- Tutoring
- Daycare for younger children
- Teen center



#### Access to Care

- 90% of respondents had some type of medical coverage.
- 80% of respondents have one person that they think of as their personal doctor or health care provider.



#### Medical

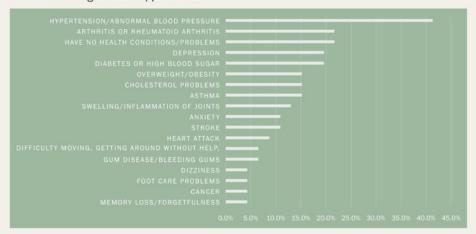
- 90% of respondents have seen a doctor within the past year for a routine checkup.
- 60% of respondents rated their health as good or better.
  - 40% rated their health fair or poor.

#### Dental

- 40% of respondents have seen a dentist or a dental clinic for any reason within the past year.
  - Main Reasons include:
    - Dental cleaning
    - Checkup
    - Extractions
- 28% of respondents have not seen a dentist for 5 or more years.

#### Current health conditions/problems

Has a doctor, nurse, or other health professional ever told you that you had any of the following conditions/problems?



#### Current health conditions/problems cont.

- Other health problems include:
  - Chest Pain
  - Stomach Problems
  - Respiratory
  - Sleep Apnea
  - Allergies
  - Lupus

#### Mental Health and Mental Health Services

- 30% of respondents had some feelings of being so sad or depressed that they had a hard time doing what they normally do during the day. (n=50)
- 37.5% of respondents and/or family of respondent had difficulty in the past year getting mental health services that they needed. (n=16)
- 35.6% of respondents were not sure or did not know at all where to go if you or anyone in your family need mental health services.(n=50)

#### Food Related Health

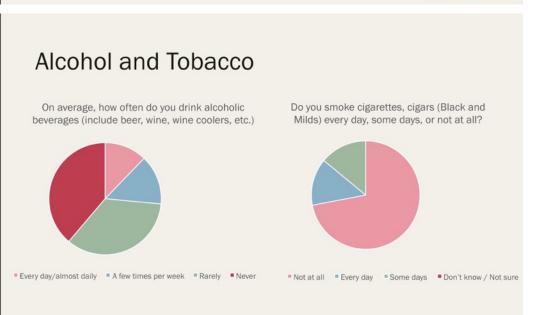
- 94% of respondents acknowledged that the grocery store or supermarket that you regularly go to offers a good selection of fresh fruits and vegetables.
  - 50% of respondents eat 3-5 servings of fruits and vegetables a day.



- 48% of respondents eat fast food 1-3 times per week.
  - 38% of respondents never eat fast food or eat fast food less than once a week.
  - 10% of respondents eat fast food 4 or more times per week.



- 44.9% of respondents eat fried foods 1-3 times per week.
  - 32.7% of respondents never eat fried foods or eat fried foods less than once a week.
  - 22.4% of respondents eat fried foods 4 or more times per week.

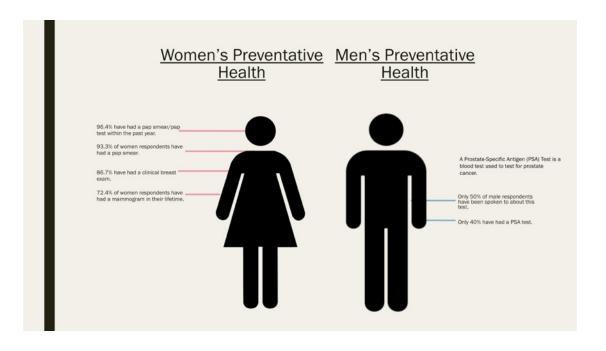


#### Preventative Health

- On average 21.3% of respondents participate in at least 30 minutes of moderate intensity physical activities or exercises 3-4 times per week.
- Only 40.8% received a flu shot last year.







### Identity All Organizations with Which Facility Collaborated to Conduct CHNA:

- Florida Department of Health in Leon County
- Gadsden County Health Council
- Florida Department of Health in Jefferson County
- Step Up For Gadsden participants:
- American Lung Association
- Big Bend Cares
- Big Bend Health Education Center
- Big Bend Community Based Care
- Boys and Girls Clubs of the Big Bend
- Capital Area Community Action
- Capital City Youth Services
- City of Chattahoochee
- CSI Special Care
- Dairy Council of Florida
- ELC Big Bend
- Florida Department of Financial Services
- FSU College of Education
- FSU College of Medicine
- FSU Early Head Start

- Gadsden Arts Center
- Gadsden County HSC
- Gadsden County Times
- · Gadsden Men of Action
- Gadsden Senior Services
- Gadsden/Leon PACT Partnership
- Goodwill Industries of the Big Bend
- Juvenile Justice Council
- Living Stones, International
- Megellan Health
- Mothercare Network
- PACE
- Quincy Police Department
- Second Harvest
- United Gadsden
- United Way
- University of Florida/IFIS
- Leon County Health Cooperative
- Leon County Health Department
- Tallahassee Police Department
- Whole Child Leon
- FAMU Institute of Public Health
- Bond Community Health Center
- 211 Big Bend, Inc.
- Apalachee Center, Inc.
- Tallahassee Parks & Recreation
- Florida State University College of Medicine
- Capital Regional Medical Center
- Frenchtown Revitalization Council/COPE
- Capital Medical Society
- United Way of the Big Bend
- Tallahassee Housing Authority
- Leon County Planning
- United Partners for Human Services
- City of Tallahassee
- Capital Area Breastfeeding Coalition
- League of Women Voters
- Tallahassee Initiative for Social Justice

## Identity and Qualifications of Third Party Contractors That Assisted in Conducting the CHNA:

**Meade Grigg** - Mr. Grigg has over 30 years of experience with Florida's public health agency where most of his career was spent directing the agency's planning and public health statistics activities. As director of the Division of Public Health Statistics and Performance Management his responsibilities included oversight and direction of several areas including health statistics and performance measurement, community health assessment and health improvement planning, and public health informatics. Mr. Grigg directed the statewide implementation and support of on-going MAPP-based community health assessment and health improvement processes in Florida's 67 county health departments. To further support local community health assessment and health improvement planning activities throughout the state, he directed the design and development of Florida's well known public health statistics web-based data query system FloridaCharts.com (Florida's Community Health Assessment Resource Tool Set).

# V. Description of Community Input and Process (3.03(3))

# General Explanation of How the Organization Took Into Account Input from Persons Who Represent Broad Interests of Community:

Over the past year, Tallahassee Memorial helped establish two groups of community leaders to gather more in-depth knowledge of what was behind numbers being generated by state and local agencies.

The Leon County Collaborative effort included community and governmental agencies. Together, they reviewed available data sources and assisted a Leon County Health Department survey of five socio-economically challenged neighborhoods. These face-to-face survey resulted in important qualitative data on the needs of this population. This effort will continue. Each neighborhood received their survey results. The Cooperative hopes to help them an action plan specific to their neighborhood. All data will be compiled and presented to county-wide meetings where participants will be asked to prioritize community needs. The Collaborative will then discuss if, and how, their agency skill sets and resources can best be utilized to tackle identified health needs.

The Step-Up For Gadsden initiative included community and governmental agencies. These agencies provide vital services in the Gadsden County community. Through a series of meetings they identified and prioritized concerns in their community in five areas of focus. The Gadsden Health Council also represents many social service and health groups who represent broad interests in the community.

The Florida Department of Health in Jefferson County also provided priorities for their community.

## Description of Input from Persons with Special Knowledge of or Expertise in Public Health:

Tallahassee Memorial HealthCare used its collaborative committees, physicians, members of the public health sectors, and our universities to provide input into data

gathering and analysis. We especially wish to thank the Florida Department of Health in Leon County, **Claudia Blackburn**, **MPH**, **RN** - Health Officer/CHD Administrator, and **Brandi Knight**, Community Health and Planning Supervisor, for their leadership and guidance.

# Description of Input from Government Health or Other Departments or Agencies with Information Relevant to Community's Health Needs:

We worked closely with public health professionals at the Florida Department of Health in Leon County and used their statistical analysis for our community health needs assessment.

The work of the Leon County Health Cooperative is ongoing. As of this submission the group has developed a schedule to prioritize and develop tactics to meet the needs identified. We anticipate further engagement on those tactics as they are identified.

SEE APPENDIX A FOR PRELIMINARY DATA GATHERED BY THE HEALTH DEPARTMENT IN LEON COUNTY.

#### Description of Input from Leaders, Representatives, or Members of Medically Underserved, Low-income, Minority, and Chronic Disease Needs Populations in the Community:

In this cycle, Tallahassee Memorial helped establish two groups of community leaders to gather more in-depth knowledge of what was behind the numbers being generated by state and local agencies.

Also, Tallahassee Memorial Service Line Administrators who have responsibility to understand the issues behind the disease, injury and/or health processes in their respective areas of expertise, which are cardiovascular, neurology, orthopedics, behavioral health, emergency & trauma and women and children, brought their own knowledge to help understand the data.

As mentioned earlier, The Leon County Health Cooperative, lead by the Leon County Health Department, collected data from five lower income areas in the county through face-to-face interviews. Those neighborhoods are: Greater Frenchtown, Macon Community, Fairbanks Ferry Road, Southside and Highway 20/Aenon Church Road. Each neighborhood's data was then reported back to the neighborhood for their further discussion and use.

Tallahassee Memorial also interviewed the Mayor of Tallahassee and Chairman of the Leon County Commission regarding their view of community health needs.

#### The Current Health Needs of our Service Area

The results of our data and the community input we received from residents and leaders indicate a strong desire to continue to tackle the incidents of infant mortality, especially in our black population. Obesity, especially in Gadsden County was identified as a strong need. Our neighborhood surveys indicate very high rates of tobacco use and significant behavioral health issues.

# Description of Written Comments Received on the Hospital Facility's Most Recently Conducted CHNA and Most Recent Adopted Implementation Strategy:

Tallahassee Memorial HealthCare published its Community Health Needs Assessment on it's website. The website contains a Contact Us section which can be used by viewers to comment on the community health needs assessment. TMH did not receive comments on the CHNA or on its published implementation strategy updates.

# VI. Identification and Prioritization of Community's Health Needs (3.03(4)) Prioritized Description of All the Community Health Needs Identified Through the CHNA:

#### Children's Concerns

- · Early intervention in maternal health
- Infant mortality

#### **Personal Health**

- Hypertension
- Obesity
- Diabetes
- Exercise options
- · Lack of access to healthy food options or food options in general
- Behavioral Health

#### **Access to Care**

- Transportation to appointments
- Affordability for physician appointments
- Dentists that accept Medicaid
- Access to mental health assistance
- Health Navigators
- Bond Women's and Children's Program Dental Program
- High Cost of Healthcare
- · Too many uninsured
- High drug prices

#### **Built Environment**

- Crime activity related to drugs
- Lack of sidewalks, lighting and paved roads

# VI. Identification and Prioritization of Community's Health Needs (3.03(4)) Description of Process and Criteria Used in Identifying Certain Health Needs and Prioritizing these Significant Health Needs:

Tallahassee Memorial gathered data from a variety of sources described in section, "Description of Sources and Dates of Data and Other Information Used in CHNA." The data was reviewed by Service Line Administrators at Tallahassee Memorial HealthCare. They considered all relevant facts, including the geographic locations and target populations served by the hospital. The Administrators took into account the outside agency priorities and heavily weighed input from the five targeted neighborhoods in Leon County. Taking into account the specialties and skill sets of the hospital and its staff they ranked the areas on which Tallahassee Memorial HealthCare could have the greatest impact.

# VII. Community Facilities and Other Resources (3.03(5))

## Description of Existing Health Care Facilities within the Community:

Leon County Health Facilities

- Allergy & Asthma Diagnostic Treatment Center (2300 Centerville Road, Tallahassee, FL)
- Ambulatory Ankle & Foot Care Center, PA (1608 West Plaza Drive, Tallahassee, FL)
- Anesthesiology Associates of Tallahassee, Inc. (2173-A Centerville Place, Tallahassee, FL)
- Apalachee Center, Inc. (2634-J Capital Circle NE, Tallahassee, FL) providing individuals and families of North Florida with help recovering from emotional, psychiatric, and substance abuse crises.
- Azalea Women's Healthcare (1219 Hodges Drive, Tallahassee, FL) integrating physical, mental and spiritual well-being through a focus on women's reproductive health.

- Bond Community Health Center (1720 South Gadsden Street, Tallahassee, FL) providing quality health care and support services, ranging from eligibility assistance and transportation
- Bond Tallahassee Housing Authority Primary Care Center (1704 Joe Louis St., Tallahassee, FL)
- Bond Specialty Care and Wellness Center (226 E. Palmer Ave., Tallahassee, FL 32301)
- Capital Eye Consultants (2280 Wednesday Street, Tallahassee, FL) Specializing In Vitreous, Macular, Retina, Ileitis, Cataracts, and Glaucoma.
- Capital Health Plan (Various Locations, Tallahassee, FL) CHP is a federally qualified, local non-profit health maintenance organization providing comprehensive and coordinated medical care for a fixed, prepaid fee with predictable copayments and no deductibles.
- Capital Regional Cancer Center (2003 Centre Pointe Boulevard, Tallahassee, FL).
- Capital Regional Medical Center (2626 Capital Medical Boulevard, Tallahassee, FL) a 242-bed acute care hospital.
- Capital Regional Medical Center, Behavioral Health Unit (2626 Capital Medical Blvd., Tallahassee, FL)
- Capital Regional Medical Group (Various Locations, Tallahassee, FL) Children's Clinic (2416 East Plaza Drive, Tallahassee, FL)
- Children's Home Society, NCF Family Connection (1801 Miccosukee Commons Dr., Tallahassee, FL)
- Cross Creek Medical (1381-A Cross Creek Circle, Tallahassee, FL)
- Dermatology Advanced Care, PA (2433 Mahan Drive, Tallahassee, FL)
- Dermatology Associates of Tallahassee, PA (1707 Riggins Road, Tallahassee, FL)
- Digestive Disease Clinic (2400 Miccosukee Road, Tallahassee, FL)
- Eastwood Medical Center (1626 North Plaza Drive, Tallahassee, FL)
- Engage Behavioral Health (1725 Capital Circle NE, Tallahassee, FL)
- Eye Associates of Tallahassee (2020 Fleischmann Road, Tallahassee, FL)
- Florida Cancer Specialists and Research Institute (1600 Phillips Road, Tallahassee, FL)

- Florida Therapy Services, Inc. (1834-A Jaclif Ct., Tallahassee, FL 32308)
- Gulf Coast Dermatology, PA (1350 Market Street, Tallahassee, FL)
- Gynecology & Obstetrics Associates (1405 Centerville Road, Suite 4200, Tallahassee, FL)
- Health & Wellness Center of North Florida (1965 Capital Circle NE, Tallahassee, FL addresses all aspects of physical, mental, and spiritual health.
- Heart Surgery Center (1405 Centerville Road, Suite 5000, Tallahassee, FL)
- Hematology Oncology Solutions of Tallahassee (2617 Mitcham Drive, Suite 101, Tallahassee, FL) private practice providing care for cancer and diseases of the blood.
- Hope Family Medicine, LLC (3375 Capital Circle NE, Tallahassee, FL)
- Jasmine Women's Center (1983 Center Pointe Blvd., Ste. 104, Tallahassee, FL)
- Kimble Family Medicine (2451 Centerville Road, Tallahassee, FL)
- Magnolia Family Medicine (1612 West Plaza Drive, Tallahassee, FL)
- Medical Group of North Florida (2770 Capital Medical Boulevard, Tallahassee, FL)
- Morales-Hall LLC (2001 Miccosukee Road, Tallahassee, FL)
- Nature Coast Women's Care (2473 Care Drive, Tallahassee, FL)
- Neighborhood Medical Center (438 West Brevard Street, Tallahassee, FL) serving Leon and surrounding counties as a key provider of primary, mental and episodic care for the medically underserved, uninsured and persons who are chronically homeless.
- North Florida Nephrology Associates (1609 Physicians Drive, Tallahassee, FL)
- North Florida Pediatric Associates (1633 Physicians Drive, Tallahassee, FL)
- North Florida Radiation Oncology Associates (1775 One Healing Place, Tallahassee, FL)
- North Florida Regional Thyroid Center (1705 South Adams Street, Tallahassee, FL)
- North Florida Sports Medicine & Orthopedic Center (Tallahassee, FL)
- North Florida Women's Care (1401 Centerville Road, Suite 200, Tallahassee,
- FL Oral & Facial Surgery Center of Tallahassee (1702 Riggins Road, Tallahassee, FL)

- Pain Institute of North Florida, PA (2770 Capital Medical Boulevard, Tallahassee, FL)
- Palmer Eye Center (2535 Capital Medical Boulevard, Tallahassee, FL)
- Patients First Medical Center (Various Locations, Tallahassee, FL)
- Preventative Cardiology & Internal Medicine Associates (3606 Maclay Boulevard, Tallahassee, FL)
- Professional Park Pediatrics (1881 Professional Park Circle, Tallahassee, FL)
- Radiology Associates of Tallahassee (1600 Phillips Road, Tallahassee, FL)
- Renaissance Obstetrics & Gynecology (2110 Centerville Road, Tallahassee, FL)
- Select Specialty Hospital (1554 Surgeons Drive, Tallahassee, FL)
- Seniors First Health Care Center (1889 Professional Park Circle, Tallahassee, FL)
- Sherman Walk-In Center & Skin Clinic (3721 North Monroe Street, Tallahassee, FL)
- Skin & Cancer Associates (1903 Welby Way, Tallahassee, FL)
- Southern Vitreoretinal Associates, Inc. (2439 Care Drive, Tallahassee, FL)
- Southern Southeast Eye Specialists (1903 Capital Circle NE, Tallahassee, FL)
- Southeastern Plastic Surgery (2030 Fleischmann Road, Tallahassee, FL)
- Southeastern Urological Center (2000 Centre Pointe Boulevard, Tallahassee, FL)
- Tallahassee Allergy, Asthma & Immunology (2619 Centennial Boulevard, Tallahassee, FL)
- Tallahassee Cardiology Associates (2631 Centennial Boulevard, Tallahassee, FL)
- Tallahassee Ear, Nose & Throat Head & Neck Surgery (1405 Centerville Road, Suite 5400, Tallahassee, FL)
- Tallahassee Family Medicine (1525 Killearn Center Boulevard, Tallahassee, FL)
- Tallahassee Memorial Bariatric Center (1981 Capital Circle NE, Tallahassee, FL) treating obesity
- Tallahassee Memorial Behavioral Health Center (1616 Physicians Drive, Tallahassee, FL)
- Tallahassee Memorial Diabetes Center (1981 Capital Circle NE, Tallahassee, FL)

- Tallahassee Memorial Family Medicine Residency Program (1301 Hodges Drive, Tallahassee, FL)
- Tallahassee Memorial Healthcare (1300 Miccosukee Rd., Tallahassee, FL)
- Tallahassee Memorial HealthCare Emergency Center Northeast (1260 Metropolitan Blvd., Tallahassee, FL)
- Tallahassee Memorial Internal Medicine Residency Program (1300 Miccosukee Road, Tallahassee, FL)
- Tallahassee Memorial Lipid Center (1981 Capital Circle NE, Tallahassee, FL)
   offering consultation to physicians, physician assistants, and nurse practitioners
   in the management of complex lipid disorders.
- Tallahassee Neurological Clinic (1401 Centerville Road, Suite 300, Tallahassee, FL) only provider in the region providing both adult and pediatric neurological and neurosurgical care.
- Tallahassee Neurology Associates (2868 Mahan Drive, Suite 5, Tallahassee, FL)
- Tallahassee Oral & Maxillofacial Surgery (3330 Capital Oaks Drive, Tallahassee, FL)
- Tallahassee Orthopedic Clinic (3334 Capital Medical Boulevard, Tallahassee, FL)
- Tallahassee Pediatrics (1205 Marion Avenue, Tallahassee, FL)
- Tallahassee Plastic Surgery Clinic (2452 Mahan Drive, Tallahassee, FL)
- Tallahassee Podiatry Associates (1866 Buford Boulevard, Tallahassee, FL)
- Tallahassee Primary Care Associates (Various Locations, Tallahassee, FL)
- Tallahassee Pulmonary Clinic (2617 Mitcham Drive, Tallahassee, FL)
- Tallahassee Surgical Associates (1405 Centerville Road, Suite 4400, Tallahassee, FL)
- TMH Physician Partners, Cancer & Hematology Specialists (1775 One Healing Place, Tallahassee, FL)
- TMH Physician Partners, Cardiac & Internal Medicine Specialists (1300 Medical Drive, Tallahassee, FL)
- TMH Physician Partners, Center for Maternal-Fetal Medicine (1401 Centerville Road, Suite 400) only provider within 150 mile radius for pregnancies requiring special monitoring or treatment due to pre-existing conditions, maternal age, multiples or any other complication identified by the patient's obstetrician.

- TMH Physician Partners, Endocrinology Specialists (2406 East Plaza Drive, Tallahassee, FL) specializing in diseases and disorders of the endocrine glands (thyroid, pituitary, adrenals, etc.) and other hormone related conditions.
- TMH Physician Partners, Southwood (3900 Esplanade Way, Tallahassee, FL)
- TMH Physician Partners, Surgical Specialists (1401 Centerville Road, Suite 100, Tallahassee, FL)
- Vascular Surgery Associates (2631 Centennial Boulevard, Suite 100, Tallahassee, FL)
- Wilson Family Medicine (2621 Mitcham Drive, Tallahassee, FL)

#### **Gadsden County**

- Abbey Eye Institute (23 North Madison Street, Quincy, FL)
- Capital Regional Medical Associates, Quincy (23186 Blue Star Hwy, Quincy, FL 32351)
- Capital Regional Medical Group, Chattahoochee (409 High St., Chattahoochee, FL)
- Cardiology & Internal Medicine Group of North Florida, PA (230 East Crawford Street, Quincy, FL)
- Chookiert Emko, MD (21 North Love Street, Quincy, FL) Florida Coastal Cardiology (230 East Crawford Street, Quincy, FL)
- Gadsden Family Clinic, PA (304 East Jefferson Street, Quincy, FL)
- Gina Hope, MD (1249 Strong Road, Quincy, FL)
- Gloria Ramos, MD (304 East Jefferson Street, Quincy, FL)
- Mark Newberry, MD (605 East 5th Avenue, Havana, FL)
- North Florida Medical Centers, Inc. (278 LaSalle Leffall Drive, Quincy, FL)
- North Florida Medical Centers, Inc. (NFMC) consists of 12 community health centers located throughout North Florida
- Quincy Family Medicine, Inc. (405 East Jefferson Street, Quincy, FL)
- Southeast Eye Specialists (21 South Madison Street, Quincy, FL)
- South East Eye Specialists and Eye\$avers with locations in Florida, Quincy, Monticello, and Crawfordville.

- Southern Smiles (223 East Washington Street, Quincy, FL)
- Sterling Watson, DMD (236 East Jefferson Street, Quincy, FL)
- TMH Physician Partners, Quincy (178 LaSalle Leffall Drive, Quincy, FL)

#### **Jefferson County**

- Melody S. Agbunag, MD (North Jefferson Street, Monticello, FL)
- Apalachee Center, Inc. (1996 North Jefferson Street, Monticello, FL) helping the individuals and families of North Florida recover from emotional, psychiatric, and substance abuse crises.
- Michael Carney, DDS (1535 West Washington Street, Monticello, FL)
- Charles Crocker, DDS (952 Mahan Drive, Monticello, FL)
- Gerry Medical Center (555 North Jefferson Street, Monticello, FL)
- Mel Hartsfield, MD (1255 West Washington Street, Monticello, FL)
- TMH Physician Partners, Monticello (1549 South Jefferson Street, Monticello, FL)

#### **Wakulla County**

- Capital Regional Health Care (2382 Crawfordville Highway, Crawfordville, FL)
- Coastal Rehabilitation & Treatment Services (3295 Crawfordville Hwy. Crawfordville, FL)
- Edmond P. Gardner, OD (35 Mike Steward Drive, Crawfordville, FL)
- Ashok Manocha, DDS (48 Oak Street, Crawfordville, FL)
- Southeast Eye Specialists (2140 Crawfordville Highway, Crawfordville, FL)
- South East Eye Specialists and Eye\$avers
- TMH Physician Partners, Wakulla (15 Council Moore Road, Crawfordville, FL) The Tallahassee Memorial Diabetes Center also provides diabetes education services monthly at this site.
- Wakulla Medical Center (1328 Coastal Highway, Panacea, FL)
- Wakulla Medical Center is part of North Florida Medical Centers, Inc. (NFMC) consisting of 12 community health centers located throughout North Florida

Wakulla Urgent Care (2615 Crawfordville Highway, Crawfordville, FL)

## Description of Existing Resources (Other than Facilities) Within the Community:

- 211 Big Bend hotline that connects callers to local social services: http://www. 211bigbend.org/.
- AHCH, FloridaHealthFinder.gov Hospice Car, Nursing Facilities, Consumer Education.
- AHCA, MyFloridaRX.com Prescription expense assistance.
- A Women's Pregnancy Center pregnancy testing and support.
- Alcoholics Anonymous addiction recovery support group.
- Allen Temple AME Church financial assistance with medical bills.
- American Heart Association Smoking cessation, General Health Education Programs
- Big Bend Cares HIV/AIDS support and referrals for treatment: www.bigbendcares.org.
- Big Bend Hospice end of life care: http://www.bigbendhospice.org/850.878.5310/main.cfm.
- Brehorn House– residential shelter for homeless pregnant women.
- Capital Area Healthy Start Coalition (1311 North Paul Russell Road, Tallahassee, FL)
- HealthyStart –provides services and support needed by pregnant women to have a
  healthy baby today. Every woman who receives a positive pregnancy test from her
  health care provider is offered a Healthy Start Risk Screen. If the screen indicates a
  risk, a Healthy Start Home Visitor is assigned and offers help.
- Capital Regional Medical Center, Lecture Series General health education programs.
- Catholic Charities of Northwest Florida mental health counseling: www.catholiccharitiesnwfl.org.

- Children's Home Society, NCD Family Connection Psychiatric medication services, infant and early childhood mental health, general counseling services.
- Children's Medical Services care for children ages 3-21 with chronic diseases.
- Covenant Hospice hospice care: www.covenanthospice.org.
- Dick Howser Center outpatient therapy (physical, occupational, speech) for children up to age 21.
- Easter Seal Society of North Florida early interventions for children age 3- 12.
- Epilepsy Association of the Big Bend support and referrals for treatment for epilepsy patients.
- Florida Dept. of Health, Brain & Spinal Cord Injury Registry physical therapy, occupational therapy, condition specific rehabilitation services.
- Florida Discount Drug Card Program Prescription expense assistance.
- Leon County Health Department provides immunizations, family planning, STD testing and treatment, HIV/AIDS screening and counseling, TB testing and treatment, dental program for children ages 5-20, breast and cervical cancer screening program, nutrition counseling, school health services, and a mobile health unit that provides primary care, STD screening and family planning services at various locations around the county.
- Leon County Satellite of CHADD support groups and resources for adults and children with attention deficit disorder: http://www.chadd.net/template.cfm? affid=216&p=about.
- National Association of Counties Prescription Drug Program prescription drug discount card that can be used at a variety of local pharmacies: http:// www2.caremark.com/naco/.
- Pregnancy Help and Information Center pregnancy testing, resources, and referrals for prenatal care.
- Project Dental Care offers free dental care to indigent residents of Leon County; sponsored by the Tallahassee Dental Association: http://www.capmed.org/ foundation.html#dental.
- Sickle Cell Foundation free sickle cell screening and assistance with prescription drugs.
- Tallahassee/Leon County Human Service Center residential and outpatient drug treatment and services for adolescents and adults.
- Tallahassee Pediatric Foundation refers eligible children to private pediatricians for care.

- Tri-County Family Health Care primary care provided on a sliding fee scale.
- United Way of the Big Bend partners with local social services organizations to provide services to the community: http://www.uwbb.org/Default.asp.
- We Care physician referral network refers uninsured residents of Leon, Gadsden, Jefferson and Wakulla Counties to physicians and other providers who offer free services; sponsored by the Capital Medical Society: http://www.capmed.org/ foundation.html#wecare.
- Whole Child Leon referral to a variety of social services for families with young children: http://www.wholechildproject.org/leon/new/.

#### **Gadsden County**

- 211 Big Bend (http://www.211bigbend.org/) 211 Big Bend is a hotline that connects callers to local social services.
- Big Bend Cares (www.bigbendcares.org) Big Bend Cares provides HIV/AIDS support and referrals for treatment.
- Big Bend Hospice (www.bigbendhospice.org) Big Bend Hospice provides end of life care. Big Bend Rural Health Network (www.bigbendruralhealth.org) Big Bend Rural Health unites providers in the Big Bend area to better serve rural patients' needs.
- Florida KidCare (www.floridakidcare.org) Through Florida KidCare, the State of
  Florida offers health insurance for children from birth through age 18, even if one or
  both parents are working.
- Gadsden County Health Department (278 LaSalle Leffall Drive, Quincy, FL) County Health Department services include free HIV testing, AIDS drug assistance, maternity care, STD testing and treatment, adult & child physicals, TB screening and treatment, insulin and epic-laps drugs, immunizations for adults and children, pregnancy testing and family planning, school health services.
- Learning Alternative Behaviors, LLC Mental health evaluation, adolescent/youth counseling, general counseling services.
- National Association of Counties Prescription Drug Program (http:// www2.caremark.com/naco/) a prescription drug discount card that can be used at a variety of local pharmacies.
- United Way of the Big Bend (www.uwbb.org) United Way partners with local social services organizations to provide services to the community.

We Care Physician Referral Network (1204 Miccosukee Road, Tallahassee, FL)
 We Care physician referral network refers uninsured residents of Leon, Gadsden,
 Jefferson and Wakulla Counties to physicians and other providers who offer free services.

#### <u>Jefferson County</u>

- 211 Big Bend (http://www.211bigbend.org/) 211 Big Bend is a hotline that connects callers to local social services.
- Big Bend Cares (www.bigbendcares.org) Big Bend Cares provides HIV/AIDS support and referrals for treatment.
- Big Bend Hospice (www.bigbendhospice.org) Big Bend Hospice provides end of life care.
- Big Bend Rural Health Network (www.bigbendruralhealth.org) Big Bend Rural Health unites providers in the Big Bend area to better serve rural patients' needs.
- Jefferson County Health Department (1255 West Washington Street, Monticello, FL) County Health Department services include immunizations, STD testing and treatment, HIV testing, AIDS drug assistance, TB screening and medications, free insulin and epic-laps medication for qualifying patients, family planning including sterilization, women's health services, adult & child primary care including disease management and physicals, indigent pharmacy program, maternity care, school health program, nutrition counseling, dental services for children age 2-20, mobile health unit that delivers medical and dental services to rural areas.
- National Association of Counties Prescription Drug Program (http:// www2.caremark.com/naco/) a prescription drug discount card that can be used at a variety of local pharmacies.
- United Way of the Big Bend (www.uwbb.org) United Way partners with local social services organizations to provide services to the community.
- We Care Physician Referral Network (1204 Miccosukee Road, Tallahassee, FL)
  We Care physician referral network refers uninsured residents of Leon, Gadsden,
  Jefferson and Wakulla Counties to physicians and other providers who offer free
  services.

#### Wakulla County

- 211 Big Bend (http://www.211bigbend.org/) 211 Big Bend is a hotline that connects callers to local social services.
- Big Bend Cares (www.bigbendcares.org) Big Bend Cares provides HIV/AIDS support and referrals for treatment.

- Big Bend Hospice (www.bigbendhospice.org) Big Bend Hospice provides end of life care.
- Big Bend Rural Health Network (www.bigbendruralhealth.org) Big Bend Rural Health unites providers in the Big Bend area to better serve rural patients' needs.
- National Association of Counties Prescription Drug Program (http://www2.caremark.com/naco/) a prescription drug discount card that can be used at a variety of local pharmacies.
- United Way of the Big Bend (www.uwbb.org) United Way partners with local social services organizations to provide services to the community.
- Wakulla County Health Department (48 Oak Street, Crawfordville, FL) County Health Department services include primary care, women's care and family planning, maternity care, dental services for children, mobile unit that provides primary care and dental services, breast and cervical cancer screening, immunizations, vision services provided in conjunction with the Lion's Club.
- We Care Physician Referral Network (1204 Miccosukee Road, Tallahassee, FL)
   We Care physician referral network refers uninsured residents of Leon, Gadsden,
   Jefferson and Wakulla Counties to physicians and other providers who offer free services. Programs available statewide.
- Healthy Start voluntary statewide program available to all pregnant women and infants in the State of Florida. The program assists pregnant women and infants in accessing prenatal and infant health care and other services necessary to reduce the risk of low birth weight, premature birth, fetal and infant mortality, and promote healthy development.
- WIC provides food and referrals to healthcare for mothers with infants and children under age 5.
- Florida KidCare funded through the State of Florida and the federal government; provides Medicaid coverage for kids above the federal poverty limit.
- Healthy Communities, Healthy People Program, a comprehensive and communitybased health promotion and wellness program designed to reduce major behavioral risk factors associated with chronic diseases. It is funded through the State of Florida and the CDC.
- Healthy Families Florida home visitation for families with children, newborns up to age five, that provides counseling, connects them with medical care, and arranges other social services: http://www.healthyfamiliesfla.org/index.asp.
- The Florida MediKids Program is the health insurance program designed to provide health insurance to children and teens under age 19 whose families may have too great an income to qualify for Medicaid, but who may not be able to afford health

insurance. The program is funded by the federal government and the State of Florida.

- Florida Breast and Cervical Cancer Early Detection Program funded through the Centers for Disease Control and Prevention (CDC) – offered in nine counties, open to all FL residents.
- The Florida Healthy Kids Corporation a public/private organization providing quality health insurance to Florida's children. The program provides children with excellent insurance benefits to keep them healthy and happy. The program is funded by the federal and state government and receives grants from the Robert Wood Johnson Foundation. Providers of this program vary by county.
- American Cancer Society local chapters provide counseling and referrals for treatment.
- Florida Vision Quest provides eyeglasses to kids in locations around the state http://www.flvq.org/aboutJVQ.asp.
- Local chapters of the Salvation Army provide a variety of social services and mental health counseling.
- Angel Flight Southeast provides air transport to distant treatment facilities for the needy: www.angelflightse.org.
- Better Hearing Institute Hotline information and sources of assistance for hearing loss sufferers: www.betterhearing.org.
- Brain Injury Association of Florida advocacy and support for brain-injured people and their families: www.biaf.org.
- American Cancer Research Center free information and psychological support for cancer patients and their families: www.amc.org.
- CancerCare counseling, education, financial assistance and practical help for cancer patients and their families: www.cancercare.org.
- Children's Medical Services case management for kids with chronic conditions up to age 21: http://www.cms-kids.com.
- American Diabetes Association local chapters provide information and resources for diabetes patients: http://www.diabetes.org.
- Florida Elks Children's Therapy Services operates six hospitals around the state that provide free orthopedic care and other services.
- Florida Alliance for Assistive Services and Technology referrals and financial aid for assistive technologies for the disabled: www.faast.org.

- Family Network on Disabilities of Florida training, resources, referrals and support groups for disabled people and their families: http://fndfl.org/aboutfnd.htm.
- American Heart Association local chapters provide information and support for heart disease patients: www.americanheart.org.
- Florida Hemophilia Association events, support, and referrals for treatment for hemophilia patients: www.floridahemophilia.org.
- Partnership for Prescription Assistance assistance with prescription drugs for those who qualify: https://www.pparx.org/Intro.php.
- National Kidney Foundation of Florida support and resources for kidney disease patients and their families: http://www.kidneyfla.org.
- La Leche League pregnancy and breastfeeding support: http://www.lllflorida.com/.
- American Lung Association of Florida treatment referrals, education and resources for patients with a wide variety of lung diseases, provided through local chapters: www.lungfla.org.
- Lupus Foundation of America support groups, treatment referrals, outreach and resources for lupus patients: http://www.lupus.org/webmodules/webarticlesnet/ templates/gflorida.
- March of Dimes, Florida Chapter: Bilingual prenatal education and resources: http://www.marchofdimes.com/florida/florida.asp.
- Muscular Dystrophy Association support and financial assistance with medical equipment for children with muscular dystrophy up to age 21: www.mdusa.org.
- Florida Prostate Cancer Network free support groups and resources for prostate cancer patients: http://www.charityadvantage.com/www.florida-prostate-cancer.org/HomePage.asp.
- RX Hope a collection of patient assistance programs for over 1000 medications: https://www.rxhope.com/.
- Tourette Syndrome Association, Florida Chapter direct assistance, support groups and resources for Tourette Syndrome patients and their families: www.tsa-fl.org.
- National Organization for Transplant Enlightenment financial and emotional support for organ donor families and transplant recipients.
- Southeastern Guide Dogs, Inc. free guide dogs for the blind and visually impaired: http://www.guidedogs.org/.

- Ryan White CARE program provides care to HIV-positive individuals with incomes less than 300% of the FPL in a variety of locations around the state: http:// careacttarget.org/community/state.asp?abbr=FL.
- Florida Area Health Education Centers partner with Florida's medical schools to provide primary care and health education to all 67 counties: http://www.flahec.org/ index.html.
- Salvation Army mental health and medical services offered by local chapters.
- Vision USA connects low-income people with no vision insurance to optometrists who volunteer their services; a service of the American Optometric Association: www.aoa.org.
- Volunteer Health Services Program local providers volunteer their professional services to low-income, uninsured residents; administered through DOH: http://www.doh.state.fl.us/tobacco/VHS/archive/Volunteer/index.html.
- Florida Baptist Convention Mobile Dental Van travels around the state delivering free dental care to indigent patients.
- Florida AIDS Insurance Continuation Program makes direct payments to an HIV/ AIDS patient's employer's insurer to continue medical, dental, mental and optical health coverage if it is discontinued because of their condition: http:// www.doh.state.fl.us/DISEASE\_CTRL/aids/care/aicp.html.
- AIDS Drug Assistance Program HIV/AIDS drugs for qualified patients: http:// www.doh.state.fl.us/disease\_ctrl/aids/care/adap.html.
- Pfizer for Living prescription drug assistance: http://www.pfizerforliving.com.
- Lions Clubs free eyeglasses, cataract surgery and other services for the blind and visually impaired.
- Fresh Start Surgical Gifts free reconstructive surgery for children who meet income requirements: www.freshstart.org.
- The Medicine Program low-cost prescription drug assistance; \$5 shipping fee for each prescription requested: www.themedicineprogram.info.
- American Liver Foundation, Gulf Coast Chapter free support groups and education for liver disease patients: www.liverfoundation.org.

## Description of Resources Potentially Available to Address the Significant Health Needs Identified Through the CHNA:

- · Leon County Health Cooperative
- Step Up For Gadsden
- Big Bend Area Health Education Center (AHEC)
- Florida Department of Health in Leon County
- Tobacco Free Florida
- Piggly Wiggly
- · Winn Dixie
- Tallahassee Orthopedic Clinic
- Tallahassee Memorial Physician Partners
- Tallahassee Pulmonary Clinic
- Florida State University
- Regional health departments
- · Regional pediatricians
- Capital Area Healthy Start
- · Whole Child Leon
- Women, Infants, and Children (WIC)
- · March of Dimes
- Florida Perinatal Collaborative
- Florida Healthy Babies
- Leon, Gadsden, Wakulla, and Jefferson County Health Departments
- Capital Area Healthy Start Coalition
- Publix
- Tallahassee Memorial HealthCare
- Apalachee Center
- Florida State University College of Medicine
- Regional Departments of Health
- · Bond Community Health Center
- Neighborhood Community Health Center
- Law Enforcement
- United Way of the Big Bend

# VIII. CHNA Report Widely Available to the Public

Description of How the Hospital Facility Makes a Paper Copy of the CHNA Report Available for Public Inspection Upon Request and Without Charge at the Hospital Facility at Least Until the Date the Hospital Facility has Made Available for Public Inspection a Paper Copy of its Two Subsequent CHNA Reports:

The public may receive a copy of the Community Health Needs Assessment in paper form at no charge by calling the Tallahassee Memorial Public Relations Office at 850-431-5875.

Description of How the Hospital Facility Makes the CHNA Report Widely Available on a Web Site at Least until the Date the Hospital Facility has Made Widely Available on a Web Site its Two Subsequent CHNA Reports:

The public can view the Community Health Needs Assessment on the Tallahassee Memorial HealthCare website by visiting www.tmh.org and looking under the "About Us" section of the website.

#### IX. Evaluation of Prior CHNA Impact

Evaluation of the impact the actions taken by facility have had on the community's health needs identified in the prior CHNA to address significant health needs.

Health Indicator	Leon County Ranking 2012	Leon County Ranking 2016
Health Outcomes	7	23
Length of Life	3	9
Quality of Life	18	46
Health Factors	9	24
Health Behaviors	18	37
Clinical Care	3	6
Physical Environment	55	62
Health Indicator	Leon County Rate 2012	Leon County Rate 2016
Health Indicator Infant Mortality (2012) (2015)		_
	Rate 2012	Rate 2016
Infant Mortality (2012) (2015)	Rate 2012 9.3	Rate 2016 7.2
Infant Mortality (2012) (2015) Black Infant Mortality (2012) (2015)	9.3 15.7	7.2 8.5
Infant Mortality (2012) (2015) Black Infant Mortality (2012) (2015) Adult Smoking	9.3 15.7 17%	Rate 2016 7.2 8.5 18%
Infant Mortality (2012) (2015) Black Infant Mortality (2012) (2015) Adult Smoking Adult Obesity	9.3 15.7 17% 28%	Rate 2016 7.2 8.5 18% 28%
Infant Mortality (2012) (2015)  Black Infant Mortality (2012) (2015)  Adult Smoking  Adult Obesity  Excessive drinking	9.3 15.7 17% 28% 19%	Rate 2016 7.2 8.5 18% 28% 22%
Infant Mortality (2012) (2015)  Black Infant Mortality (2012) (2015)  Adult Smoking  Adult Obesity  Excessive drinking  STIs	9.3 15.7 17% 28% 19% 1067	Rate 2016 7.2 8.5 18% 28% 22% 878.9
Infant Mortality (2012) (2015) Black Infant Mortality (2012) (2015) Adult Smoking Adult Obesity Excessive drinking STIs Teen Births	9.3 15.7 17% 28% 19% 1067 24	Rate 2016 7.2 8.5 18% 28% 22% 878.9
Infant Mortality (2012) (2015) Black Infant Mortality (2012) (2015) Adult Smoking Adult Obesity Excessive drinking STIs Teen Births Primary care physicians	9.3 15.7 17% 28% 19% 1067 24 980 to 1	Rate 2016 7.2 8.5 18% 28% 22% 878.9 16 1240 to 1
Infant Mortality (2012) (2015)  Black Infant Mortality (2012) (2015)  Adult Smoking  Adult Obesity  Excessive drinking  STIs  Teen Births  Primary care physicians  Preventable hospital stays	9.3 15.7 17% 28% 19% 1067 24 980 to 1 47	7.2 8.5 18% 28% 22% 878.9 16 1240 to 1 46

Tallahassee Memorial is awaiting final data from our internal efforts which will be reported after our fiscal year is completed. A review of the latest data from <u>countyhealthrankings.com</u> and Florida Charts indicate a decline in health in a majority of areas tracked by <u>countyhealthrankings.com</u>. Racial disparities continue to exist in most areas, including infant mortality.

## **Appendix A**

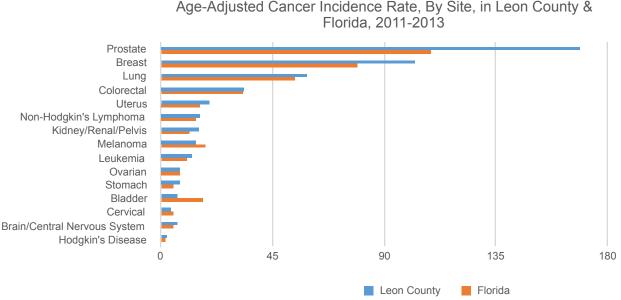
DATA SOURCE: THE FLORIDA DEPARTMENT OF HEALTH IN LEON COUNTY

#### **CHRONIC DISEASES**

#### Cancer

Malignant neoplasm, also known as cancer, is one the leading causes of death at the national, state, and county levels. Cancer is defined as the class of diseases in which a cell, or a group of cells display uncontrolled growth (division beyond the normal limits), invasion (intrusion on and destruction of adjacent tissues), and sometimes metastasis (spread to other locations in the body via lymph or blood).

The Florida Cancer Data System (FCDS) collects incidence data for the states of Florida. The FCDS reported that during 2011-13, there were 332,903 new cases (incidences) of cancer from all sites in Florida. These new cases corresponded to an age-adjusted rate of 370.3 per 100,000 population. Leon County's cancer incidence rate fell within the 3<sup>rd</sup> quartile, and is worse than the state's average. In Leon County, there were 2,926 new cases of cancer, the incidence rate was 420.4.



Source: University of Miami (FL) Medical School, Florida Cancer Data System

In Gadsden County in 2011-2013, there were 675 new cases of cancer, the incident rate was 485.3. From 2009 forward, Gadsden rates have increased while the state rates are declining.

In Jefferson County in 2011-2013, there were 246 new cases of cancer with a corresponding incident rate of 424.4. Rates were consistently below state levels from 1992 -1994 to 2000-2002 where they have intertwined with state levels, remaining fairly constant from 2000 to 2009 followed by a small downturn and then an uptick between 2010-2012 to 2011-2013.

In Wakulla County in 2011-2013, there were 431 new cases of cancer and the rate was 773.6. Rates in Wakulla County were fairly consistent with state rates until 2008-2010 where they have rapidly increased from 408.9 to 773.6 in 5 years.

#### **Lung Cancer**

Lung cancer is the leading cause of cancer deaths and the second most common type cancer (CDC, 2014). In 2013, lung cancer caused 156,176 deaths in the United States (CDC, 2015). Lung cancer refers to a disease, which consists of uncontrolled cell growth in tissues of the lung. The number one cause of lung cancer is cigarette smoking, which is a modifiable risk factor (CDC, 2014).

#### Incidence

In 2011-13, there were 48,531 new cases of cancer in Florida, and the age-adjusted incidence rate was 54.2 incidences per 100,000 population. Leon County's lung cancer incidence rate fell within the 2<sup>nd</sup> quartile among Florida counties. In Leon County, there were 407 new cases of lung cancer in Leon County, and incidence rate was 58.6.

The table shows that the rate of incidence for lung cancer was higher in blacks than whites.

Age-adjusted Lung Cancer Incidence Rate By Race & Ethnicity, 2011-2013			
	Leon County	Florida	
Overall	58.6	54.2	
White	35.8	35.3	
Black	47.7	46.1	
Hispanic	28.2	37.6	

Source: University of Miami (FL) Medical School, Florida Cancer Data System

In Gadsden County, from 2011-2013, there were 122 new incidents of lung cancer with a corresponding rate of 87.7. Rate of incidence for lung cancer is also higher in blacks versus whites or Hispanics in Gadsden County. In 2011-2013 rates were 45 Whites, 88.2 Blacks and 0 for Hispanics. Gadsden overall incidence has been sporadic and trending upward since 2009-2011 where it resides significantly above state figures.

In Jefferson County, from 2011-2013, there were 28 new cases of lung cancer, rate of 48.3. Contrasted with Gadsden, Jefferson County's White population has a higher rate of lung cancer versus Blacks and Hispanics with a rate of 34 for Whites, 26.6 for Blacks and 0 for Hispanics in 2011-2013. Overall lung cancer rates have been sporadic in Jefferson County; however, have remained below state levels since 2007-2009.

In Wakulla County, from 2011-2013, there were 90 new cases of lung cancer, rate of 161.5. Similar to Jefferson County, Wakulla also has a higher rate of the White population with lung cancer, with 113.1 for Whites and 93.4 for Blacks. Hispanic rates have increased drastically in recent years climbing to a rate of 193.8.

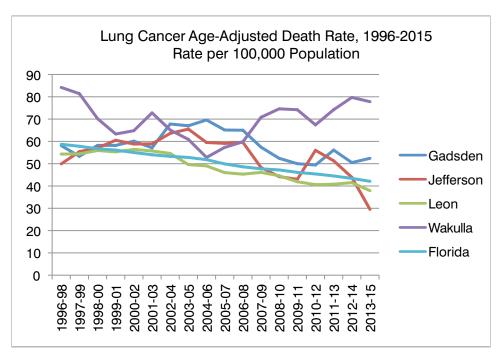
#### Mortality

In 2013-15, there were 35,253 deaths caused by lung cancer in Florida. These deaths corresponded to an age-adjusted death rate of 42.1 deaths per 100,000 population. Leon County's death rate fell within the 1<sup>st</sup> (most favorable) quartile among Florida counties. In Leon County, there were 291 lung cancer deaths, and the death rate was 37.9.

Overall, the Leon County rate of lung cancer deaths has declined in the past 20 years at the state and county levels. In addition, for the years that applied, Leon County and Florida met the *Healthy People 2020* target to reduce the lung cancer death rate to 45.5 deaths per 100,000 population.

Figure shows that the state's rates fell gradually from 58.7 in 1996-98 to 42.1 in 2013-15. Over the past 20 years, the state's rate declined by about a 28 percent. Leon County's death rates started at 54.3, and peaked to 56.4 during 2000-02. After peaking, the county's rates would decline gradually to 37.9 at the end of the period.

In Leon County, Blacks were more likely to die from lung cancer than Whites during 2013-15. However, this was not the trend throughout the 20-year period.



Source: Florida Department of Health, Bureau of Vital Statistics

Overall, Gadsden County death rates from lung cancer have remained above state levels but reside a bit lower than 1994-1996 data and quite a bit lower than peak years. In 2013-2015, there were 90 lung cancer deaths with a rate of 52.4 in Gadsden County. In this same timeframe, Blacks experienced a slightly higher rate of deaths with Whites at 52.4 and Blacks at 52.7. Hispanics have no incidence of lung cancer death from 2011-2013.

Jefferson County overall lung cancer death rates declined to a 20 year low in 2013-2015 with an incidence of 20 and a rate of 29.5. Blacks experience a slightly higher rate of lung cancer deaths with a rate of 29.6 compared to Whites in 2013-2015. Hispanics have a rate of zero incidence of lung cancer death.

Wakulla County overall lung cancer death rates have remained above state levels for 20 years. In 2013-2015, the overall incidence was 74 with a rate of 77.8. Whites experience a significantly higher rate than Blacks with rates of 86.7 and 28.1 respectively. Hispanics have zero incidence of death related to lung cancer in Wakulla County.

#### **Breast Cancer**

Breast cancer refers to cancer originating from breast tissue, most commonly from the inner lining of milk ducts or the lobules that supply the ducts with milk. Although both men and women can develop breast cancer, breast cancer is 100 times more common in women than in men (ACS, 2016). Breast cancer is a leading cause of cancer death in women at the county, state, and national level. According to the CDC, the risk of breast cancer increases with age (CDC, 2016).

#### Incidence

In 2011-13, there were 44,480 new cases of breast cancer in Florida, and the age-adjusted incidence rate was 79.0 incidences per 100,000 population. Leon County's breast cancer incidence rate fell with the 4<sup>th</sup> (least favorable) quartile among Florida counties. In Leon County, there were 490 incidences of breast cancer, and the incidence rate was 102.1.

In Gadsden County, the overall female breast cancer incidence has remained at or below state levels with exception of a couple of peak years 2002-2006 and 2007-2009. From 2008-2010 to 2011-2013, numbers have declined in line with state figures. In 2011-2013 the incidence was 77 with a rate of 80.5. White women in Gadsden County have generally had a higher incidence than Black women. Hispanic women had a lower incidence than either Black or White women until 2008-2010, when there rates began rising rapidly. In 2011-2013, Hispanic women in Gadsden had a rate of 1550.8, compared to 63.5 and 54.4 for Whites and Blacks, respectively in the same time frame.

In Jefferson County, the overall female breast cancer incidence has experienced peaks and valleys trending downward along with state figures since 2007-2009. The 2011-2013 incidence is 33 with corresponding rate of 84.6. Black women have experienced significantly higher rates in the past compared to Whites but in most recent data years both Whites and Blacks are similar in incidents while Hispanics have a rate of zero.

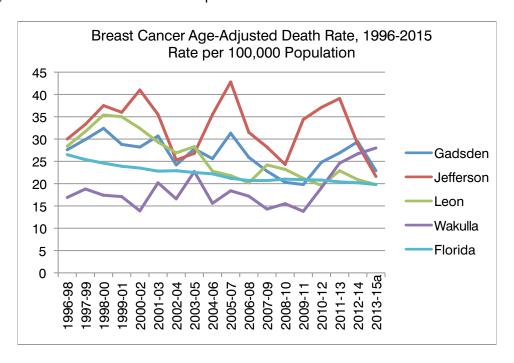
In Wakulla County, the overall female breast cancer incidence has rapidly and significantly increased from a rate of 99.2 in 2008-2010 to 183.9 in 2011-2013, residing well above the state level of 79. Black women in Wakulla County are experiencing a much higher rate of breast cancer compared to White women, with rates of 378.2 and 121.9 respectively. Black women's rates have increased rapidly and significantly and are well above state levels. Hispanic women also experience a very high rate at 387.7, rapid increase from 2008-2010 to 2009-2011, dipping a bit in next data years; however, remaining well above other ethnic groups and state levels.

#### Mortality

Statewide, there were 8,458 deaths caused by breast cancer, and the age-adjusted death rate was 19.8 deaths per 100,000 population. Leon County's rate was the same as the state's rate, fell within the second quartile. During 2013-15, there were 86 breast cancer deaths in Leon County. At the end of the period, the county and the state had met the *Health People 2020* target to reduce the rate of breast cancer deaths to 20.7 deaths per 100,000 population.

Starting at 28.4 death per 100,000 population, the county's rates fluctuated between a low 19.6 to a peak of 35.4, 19.8 from 2013-15 (figure). This fluctuation is reflective of the trend of both racial groups.

For most of the past 20 years, Blacks had a higher rate of death caused by breast cancer than Whites. At the start of the period, the death rate of Whites exceed that of Blacks. From 1996-98 to 1997-99, Blacks' rates jumped by about 57 percent. The rate of Black deaths peaked during 1998-00, in which there was about a 20 percent increase from 1997-99 to 1998-00.



Source: Florida Department of Health, Bureau of Vital Statistics

#### **Colorectal**

In Gadsden County, overall female breast cancer deaths have been sporadic but have remained above state levels for nearly 20 years. In 2013-2015, rates declined to a five year low of 22.9 corresponding to 22 deaths. From 2006-2008, Black women have had higher death rates than White women from breast cancer. Gadsden Hispanic women had a dramatic increase in breast cancer death rates followed by a rapid decline and ending at zero in 2013-2015.

In Jefferson County, overall female breast cancer deaths have also been sporadic and above state levels for nearly 20 years. In 2013-2015, rates have decreased to a count of 8 and a rate of 21.6. Jefferson County Black females experienced a higher rate than Whites for a number of years, but plummeted below both state and Jefferson County white women in 2007-2009 and have remained with lower rates since. Jefferson Hispanic women have maintained a zero rate of breast cancer deaths for 20 years.

In Wakulla County over the last 20 years, overall female breast cancer deaths resided below state levels until 2010-2012. At this time, rates began an upward climb reaching a rate of 28 in 2013-2015, representing 13 deaths. Wakulla Black women have generally experienced higher rates than White women. Hispanic women have remained at zero breast cancer deaths since 2004-2006, the first data year tracked.

#### **Colorectal Cancer**

According to the CDC, of all the cancers that affect both men and women, colorectal cancer is the second leading cancer killer in the U.S. Over 90% of colorectal cases occur in individuals 50 and older (CDC, 2016). Colorectal cancer is defined as cancer that occurs in the colon or rectum.

In 2011-13, there were 29,490 new cases of colon cancer in Florida, and the age-adjusted incidence rate was 32.8 incidences per 100,000 population. In Leon County, there were 234 incidences of colon cancer, and the incidence rate was 33.7. Leon County's rate fell within the 2<sup>nd</sup> quartile.

The table shows that the rate of incidence for colorectal cancer was highest in Blacks than Whites.

Age-adjusted Colorectal Cancer Incidence Rate By Race & Ethnicity, 2011-2013			
	Leon County	Florida	
Overall	33.7	32,8	
White	16.5	19.5	
Black	34.5	37.5	
Hispanic	42.3	39.6	

Source: University of Miami (FL) Medical School, Florida Cancer Data System

There were 57 new cases of overall colorectal cancer in Gadsden County in 2011-2013, representing a rate of 41.0. Gadsden County colorectal cancer rates rose above state levels in 2002-2004 and have remained above with the exception of 2008-2010 and 2009-2011 data

years with an upward trend in the most recent years. Currently Gadsden White and Black rates of colorectal cancer are similar; although there have been years of one trending over the other but not consistently. Hispanic rates are currently zero and have been since 2009-2011 data years. There was a sharp increase in 2006-2008 where Hispanics remained above state levels for a number of years but then declined again.

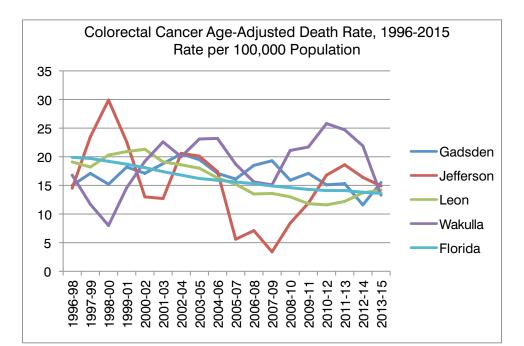
There were 26 new cases of overall colorectal cancer in Jefferson County in 2011-2013, rate is 44.9. Jefferson County rates have trended up and down in the last 20 years; however, since 2003-2005 have remained below state levels until 2010-2012 where they took a sharp increase and surpassed state levels. Whites and Blacks in both state and Jefferson rates have declined in recent years; however, Blacks in both categories remain above White rates. There are no incidences of Hispanics with colorectal cancer in Jefferson County.

In Wakulla County, there were 37 new cases of overall colorectal cancer in Jefferson County in 2011-2013 representing a rate of 66.4. Incidence rates have remained below or near state levels for the last 20 years until 2008-2010 where rate began an upward trend, currently residing well above state figures. Wakulla Black rates have trended up and down in the last 20 years; however, have generally been above both Wakulla and Florida White rates. In 2009-2011, Black Wakulla rates shot upward and now reside at a rate of 149.5 compared to Wakulla White rate of 34.3. Wakulla Hispanic rates have also increased drastically from 2009-2011 to 2011-2013 with the most recent rate of 193.8 and Wakulla non-Hispanic rate of 65.2.

#### Mortality

In 2013-15, there were 11,153 colon cancer deaths in Florida. The age-adjusted death rate was 13.6 deaths per 100,000 population. Leon County's death rate fell within the 3<sup>rd</sup> quartile (worse than Florida average). In Leon County, there were 109 colon cancer deaths. These deaths corresponded to an age-adjusted death rate of 14.2 deaths per 100,000 population. For the years that it applied, Leon County and the state met the *Healthy People 2020* target to reduce colorectal cancer death rate to 14.5 deaths per 100,000 population.

Figure shows that the state's rates fell gradually from 19.9 to 13.6 (31.7% decrease). Leon County's rates started at 19.1, before declining to 18.2. Then the rates gradually increased and peaked to 21.3. From 2000-02 to 2010-12, the county's rates dropped from 21.3 to 11.6. Then the rates increased gradually to 14.2.



In 2013-2015, Gadsden County experienced 26 deaths by colorectal cancer corresponding to a rate of 15.5. Rates have been mostly above or near state levels since 2001-2003. Gadsden Black death rates due to colorectal cancer are higher than Gadsden White and Florida Black and White rates. Gadsden Hispanic population has zero rate of colorectal cancer death in 2012-2014 and 2013-2013, there was a peak in deaths immediately prior to this time frame.

In 2013-2015, Jefferson County experienced 9 colorectal cancer deaths with a rate of 14.9. Rates have been sporadic over the last 20 years, remaining above state levels from 2010-2012 to 2013-2015. Jefferson Black rates have also been sporadic; however, generally are higher than Jefferson White rates of colorectal cancer deaths. In recent years, Jefferson Black rates have climbed while Jefferson White rates have declined. There is a rate of zero colorectal cancer deaths for Jefferson County for the last 20 years.

In 2013-2015, Wakulla County had 11 deaths from colorectal cancer with a rate of 13.3. Rates have remained consistently above or at state levels since 2000-2002, the 2013-2015 rates are same as the state. Since 2002-2004, Wakulla Black rates have been lower than Wakulla White rates. Wakulla County has experienced no incidence of colorectal cancer deaths.

#### **Prostate Cancer**

Prostate cancer is the most common non-skin cancer among men (CDC, 2015). Prostate cancer is defined as cancer that develops in the prostate, a gland in the male reproductive system. Prostate cancer is the most common non-skin cancer in men (CDC, 2016). The risk of prostate cancer increases with age. Prostate cancer typically occurs in men over the age of 50.

#### Incidence

In 2011-13, there were 36,423 new cases of prostate cancer in Florida. These new cases corresponded to an age-adjusted rate of 108.7 per 100,000 population (table). Leon County's prostate incidence rate fell within the 3<sup>rd</sup> quartile (worse than Florida average). In Leon County, there 364 incidences of prostate cancer, and the incidence rates was 169.1.

Age-adjusted Prostate Cancer Incidence Rate By Race & Ethnicity, 2011-2013			
	Leon County	Florida	
Overall	169.1	108.7	
White	104.1	64.5	
Black	250.5	231.1	
Hispanic	244.9	132.0	

Source: University of Miami (FL) Medical School, Florida Cancer Data System

The table shows that Blacks were more than twice as likely as Whites to be diagnosed for prostate cancer.

In Gadsden County, 2013-2015, there were 85 new cases of prostate cancer with an incidence rate of 195.9. In the last 20 years, Gadsden County rates have remained at or above state levels with an upward trend since 2007-2009. Both Gadsden Black and Florida Black rates have remained higher compared to Gadsden White and Florida White rates for 20 years. Gadsden Hispanic rates have been below state levels since 2007-2009 with zero incidence from 2009-2011 to 2011-2013.

In Jefferson County, 2013-2015, there were 40 new cases of prostate cancer with an incidence rate of 211.0. From 1992-1994 to 2006-2008, prostate cancer rates were fairly close to state levels. In 2007-2009, they began trending upward. Jefferson Black and Florida Black rates have been well above state levels for almost 20 years, with Jefferson Black rate at 247.2 in 2011-2013. Jefferson County Hispanic incidence of prostate cancer was at zero from 2004-2006 to 2007-2009 where it took a dramatic turn upward. In more recent years has declined and resided at zero again in 2011-2013.

In Wakulla County, 2013-2015, there were 48 new cases of prostate cancer with a rate of 207.9. Wakulla County rates remained at or below state levels since 1995-1997 until 2008-2010 when they began to climb. Black rates also tend to be above Florida White and Wakulla White rates.

#### Mortality

In 2013-15, there were 6,424 deaths caused by prostate cancer in Florida. These deaths corresponded to an age-adjusted death rate of 17.3 deaths per 100,000 population. In Leon County, there were 56 prostate cancer deaths, and the death rate was 19.1. The county's rate fell within the 3<sup>rd</sup> quartile (worse than the Florida average).

Though Leon County' rate is higher than the state average, Leon County met the *Health People 2020* target to reduce the prostate death rate to 21.8 deaths per 100,000 population. In addition, both the county and state rates are at a twenty-year low (figure).

In contrast to the county, the state's rate declined gradually throughout the past 20-years. While Leon County's rates rose during some periods. The gap between the county's and state's rates was greatest when the county experienced a 44% increase in its rates from 2007-09 to 2010-12.

In addition, the county's rates were in the 4<sup>th</sup> (least favorable) quartile among Florida counties prior to 2013-15.

In 2013-2015, Gadsden County prostate cancer deaths were 17 cases at a rate of 23.2. Rates have consistently been well above state figures for over 20 years; however have trended downward significantly with most recent data close with state. Gadsden Blacks have a much higher rate than White counterparts or even Florida Blacks. There have been zero prostate cancer deaths in Hispanic population since 2008-2010.

In Jefferson County, 2013-2015, there were 3 prostate cancer deaths with a rate of 12.3. Overall rates have been at or below state levels since 2002-2004. Jefferson Black rates

have been below Florida Black but above Jefferson and Florida White rates since 2000-2002 fairly consistently. There have been zero deaths from prostate cancer in Jefferson County since 2004-2006.

In Wakulla County, there were 10 prostate cancer deaths in 2013-2015 with a rate of 25.2. Since 2007-2009, Wakulla prostate cancer deaths has resided above the state level. Deaths of Black males due to prostate cancer has been higher than White males in Wakulla county since 2007-2009 and also higher compared to Florida Black rates. There have been no prostate cancer deaths in Wakulla County since 2004-2006.

#### **Chronic Lower Respiratory Disease**

Chronic lower respiratory diseases (CLRD) refer to diseases that affect the lungs (Office of Women's Health, 2011). CLRD is one of the leading causes of death at the national, state, and county levels. These conditions primarily include chronic obstructive pulmonary disease (COPD) and asthma. COPD is a group of diseases that block airflow to the lungs and affects breathing. COPD comprises of two illnesses emphysema and chronic bronchitis. In most cases, people with COPD most often have both emphysema and chronic bronchitis (NHLBI, National Institutes of Health, 2013).

**Chronic bronchitis** is defined as a long-term condition in which the airways that carry air to the lungs become inflamed and produce too much mucus, making it difficult to get air into and out of the lungs.

*Emphysema* is defined as a long-term, progressive disease of the lungs that primarily causes shortness of breath; tissues necessary to support the physical shape and function of the lungs are destroyed. From 2013-15, there were 24 emphysema deaths in Leon County, which corresponded to an age-adjusted death rate of 3.3 deaths per 100,000 population. Leon County emphysema death rate was nearly twice as high as the state's rate of 1.7 deaths per 100,000 population. Leon County's rate fell within the 4<sup>th</sup> quartile (least favorable) quartile among Florida counties.

In Gadsden County, 2013-2015, there were 3 emphysema deaths with a rate of 2.1. Gadsden County emphysema death rates declined from 2006-2008 to 2007-2009 and then leveled before increasing again. Rates surpassed state levels in 2012-2014 and remained above in 2013-2015.

In Jefferson County, 2013-2015, there was one death due to emphysema with a rate of 2.0. Jefferson County rates have mostly been higher than state rates until recent years where they are consistent with state.

In Wakulla County, 2013-2015 there was also one death due to emphysema with a rate of 1.4. Wakulla County rates have been above state rates for 20 years; however, showing much improvement since 2004-2006 and reaching state levels in 2013-2015.

#### Prevalence

Table shows that the Leon County BRFSS respondents had a lower prevalence of COPD, emphysema, or chronic bronchitis compared to respondents statewide. However, this difference was not statistically significant. In addition, the county's rate fell within the 1<sup>st</sup> (most favorable) quartile among Florida counties.

Non-Hispanic Whites had a higher prevalence of these conditions that non-Hispanic Blacks. However, Leon County whites were had significantly lower rates than Whites statewide.

Among sex and racial/ethnic groups, non-Hispanic White men were more likely to have these conditions in Leon County. In contrast, non-Hispanic White women had the highest prevalence rate statewide.

Elderly (65+) adults had a higher prevalence of these conditions than the other age groups.

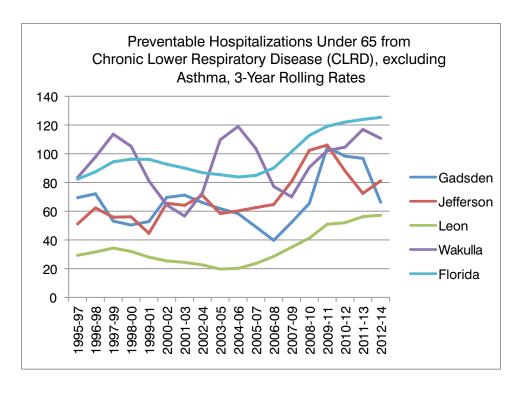
These conditions were also more common in lower income (<\$25,000) adults than adults with a higher income level.

Percentage of Adults who have ever been told they had COPD, Emphysema, or Chronic Bronchitis, 2013			
	Leon County	Florida	
Overall	4.8%	7.4%	
Race/Ethnicity			
Non-Hispanic White	5.4%*	9.2%	
Non-Hispanic Black	2.6%	5.1%	
Sex			
Men	6.1%	6.4%	
Women	3.6%*	8.3%	
Age Group			
18-44	2.1%	3.0%	
45-64	8.2%	8.5%	
65 & Older	9.5%	14.0%	
Annual Income			
<\$25,000	7.1%	11.1%	
\$25,000 - \$49,999	6.1%	7.4%	
\$50,000 or More	2.1%	3.9%	
* Indicates that the difference observed between the 2013 county and state measures is statistically significant.			

Source: Florida Behavioral Risk Factor Surveillance System

#### Asthma Hospitalizations

In 2012-14, there were 59,392 preventable CLRD (excluding asthma) hospitalizations for people under age 65 in Florida. These hospitalizations corresponded a rate of 125.3, which was twice as high as Leon County's rate. Leon County's rate fell within the 1<sup>st</sup> (most favorable) quartile among Florida counties. In Leon County, there was 428 preventable CLRD hospitalizations for this age group, and the rate of preventable hospitalizations was 57.2.



Source: Florida Agency for Health Care Administration (AHCA)

Figure shows that the county's rates were consistently lower than the state's rates in the last twenty years.

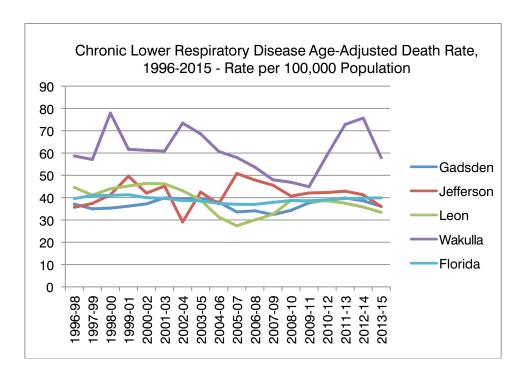
Leon County's rates started at 29.3, before rising to 34.3 in 1997-99. From 1997-99 to 2003-05, the rates fell by about 43 percent. The county's hospitalization rates increased from 2003-05 to 2012-14, and would more than double. In addition, Florida experienced a similar fluctuation in its rates.

#### Mortality

In 2013-15, there were 34,102 deaths caused by CLRD in Florida. These deaths corresponded to an age-adjusted death rate of 39.9 deaths per 100,000 population (figure). Leon County's

rate fell within the 1<sup>st</sup> (most favorable) quartile among Florida counties. In Leon County, there were 241 CLRD deaths, and the death rate was 33.4.

Leon County's CLRD death rate started at 44.6, peaking at 46.4 in 2000-02. Then the county's rates fell gradually to a low of 27.4 in 2005-07. The county experienced about a 42% increase in its rates from 2005-07 to 2008-10, falling to 33.4 at the end of the period.



Source: Florida Agency for Health Care Administration (AHCA)

#### **Asthma**

Asthma is defined as a chronic lung disease in which airways narrow and swell and produce extra mucus. Asthma causes whizzing, shortness of breath, and trigger coughing. Unfortunately, the exact cause of asthma is unknown. However, researchers have identified environmental and genetic factors that are linked to asthma. Some of these factors include:

- Inherited tendency to develop allergies;
- Parents having asthma;
- Experienced a respiratory infection as a child;
- and or exposure to airborne allergens or to viral infections as an infant or child
- Overweight (HP2020, 2016) (NHLBI, 2014).

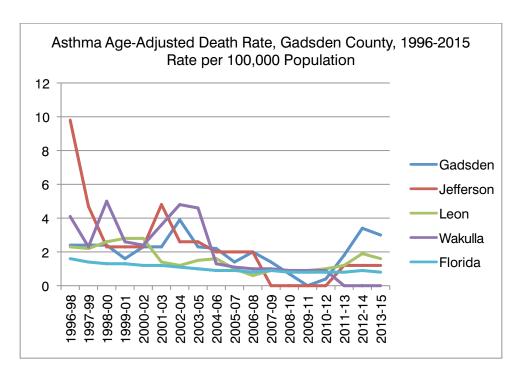
There is a misconception that you can outgrow asthma. This is untrue due to asthma being an incurable condition. The severity of asthma can range from being minor nuisance or life-

threatening. Asthma is described by *Healthy People 2020* as a "public health burden" in terms of financial cost, morbidity, and mortality (HP2020, 2016). Annually, the estimated cost of asthma in the United States is over \$30 million (CDC, 2010).

#### Mortality

In 2013-15, there were 546 deaths caused by asthma. These deaths corresponded to an age-adjusted death rate 0.8 deaths per 100,000 population (figure). Leon County's rate fell within the 4<sup>th</sup> (least favorable) quartile among Florida counties. In Leo County, there were 11 asthma deaths, and the death rate was of 1.6

Leon County's rates started at 2.3, the rates have fluctuated between a low of 0.6 and a peak of 2.8 in the last 20 years, before ending at 1.6 in 2013-15



## Prevalence-Children Ages 11-17

In 2014, 21.4% of Leon County public middle and high school students were told by a doctor or nurse that they have asthma at some time in their life (lifetime asthma). In addition, 21.7% reported having an asthma attack in the past year.

Data from the 2014 Florida Youth Tobacco Survey (FYTS), Leon County & Florida		
	Leon County	Florida
Lifetime asthma	21.4%	20.8%

Current asthma	13.1%	11.5%
Asthma attack in past year	21.7%	17.7%

\*Indicates that the difference observed between the 2014 county and state measures is statistically significant.

#### Prevalence-Adults

In 2013, 15.4% adults reported that have ever been told they had asthma in Leon County. This would be about a 52% increase from 2010 (5.2 percent). Compared to the state, Leon County adults had a lower prevalence of asthma. Leon County's rate fell within the 4<sup>th</sup> (least favorable) quartile among Florida counties.

In contrast to the state, non-Hispanic Whites were more likely to report that they were diagnosed with asthma than non-Hispanic Blacks in Leon County.

In both the county and the state, women were more likely be diagnosed with asthma than men.

In both the county and the state, adults between the ages of 45 to 64 were more likely to report that currently have asthma than the other age groups (18-44 and 65 and Older).

In both the count and the state, adults making less than \$25,000 were more likely to report being diagnosed with asthma than the other income groups.

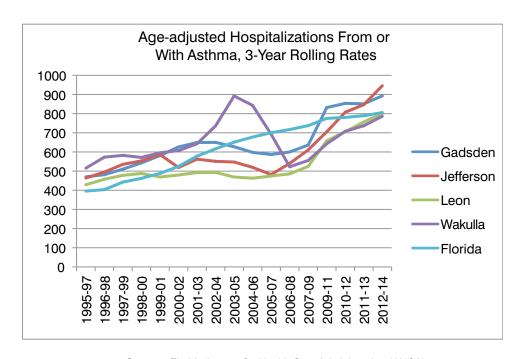
Adults who have ever been told they had asthma, Leon County & Florida, 2013			
	Leon County	Florida	
Overall	15.4%	13.5%	
Race/Ethnicity			
Non-Hispanic White	20.8%	13.2%	
Non-Hispanic Black	8.5%	14.2%	
Sex			
Men	10.7%	11.5%	
Women	19.5%	15.5%	
Age Group			
18-44	17.5%	14.8%	
45-64	14.4%	13.9%	
65+	9.1%	11.0%	

Annual Income			
<\$25,000	18.6%	18.5%	
\$25,000 - \$49,999	12.6%	12.1%	
\$50,000 or More 15.1% 10.5%			
* Indicates that the difference observed between the 2013 county and state measures is statistically significant.			

Source: Florida Behavioral Risk Factor Surveillance System

## Asthma Hospitalizations

During 2012-14, there were 509,785 asthma related hospitalizations in Florida. These hospitalizations corresponded to an age-adjusted rate 805.8 per 100,000 population (figure). Leon County's rate fell within the 3<sup>rd</sup> quartile (worse than Florida average). In Leon County, there were 6,152 hospitalizations related to asthma, and the hospitalization rate was 800.6.

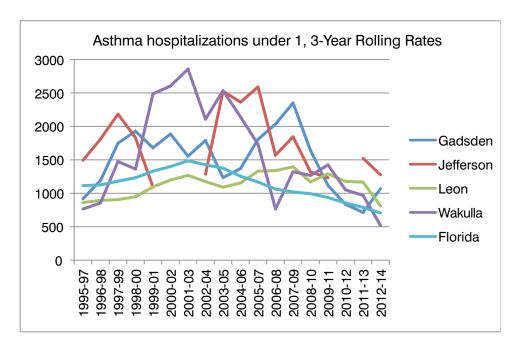


Source: Florida Agency for Health Care Administration (AHCA)

Statewide, the rate's gradually increased and doubled in the last 20 years. Countywide, the rates nearly doubled. The hospitalization generally rose in the past 20 years, climbing from 428.6 to 800.6, although there were few periods of decline in the rates.

#### Asthma Hospitalizations- Ages Under 1

During 2012-14, there were 4,496 asthma related hospitalizations in Florida for children under 1. These hospitalizations corresponded to an age-adjusted rate 705.5 per 100,000 population (figure). Leon County's rate fell within the third quartile (worse than Florida average). In Leon County, there were 73 asthma hospitalizations for children under age 1 years old, and the hospitalization rate was 809.8.

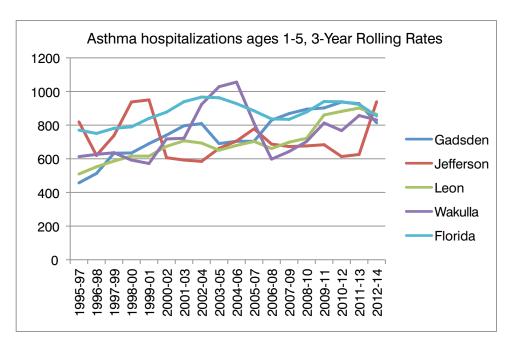


Source: Florida Agency for Health Care Administration (AHCA)

Both the county's and state's rate are at a 20-year low. Florida's rates started at 1,115.2, and climbed gradually to 1,485.3 during 2001-03. Leon County's rates also increased gradually during this time. From 2002-04 to 2012-14, the state's rates declined gradually to 809.8. The county's rates have fluctuated from 2002-04 to 2012-14, peaking during 2007-09, before declining at a 20-year low during 2012-14.

#### Asthma Hospitalizations- Ages 1-5

During 2012-14, there were 4,496 asthma related hospitalizations in Florida for children ages one to five years old. These hospitalizations corresponded to an age-adjusted rate 854.4 per 100,000 population (figure). The county's rates fell within the 4th (least favorable) quartile among Florida counties. In Leon County, there were 396 asthma hospitalizations for in this age group, and the hospitalization rate was 864.3.



Source: Florida Agency for Health Care Administration (AHCA)

Overall, the Leon County's hospitalizations rates have increased during the past 20-years. The county's rates started at 509.4, and rose gradually through most of the period. Leon County's rates peaked (901.3) during 2011, before declining to 864.3 at the end of the period. In addition, from 1995-97 to 2008-10, the county's rates were within the 2<sup>nd</sup> quartile.

In Gadsden County, during 2012-2014, there were 855 asthma hospitalizations, corresponding to an age-adjusted rate of 599.9 per 100,000 population. Rates have increased in the last 20 years, mostly trending above state levels. Gadsden Black and Other rates are significantly higher than Florida White and Gadsden White rates with Gadsden Black rates almost double Gadsden White.

In Jefferson County, during 2012-2014, there were 458 asthma hospitalizations, corresponding to an age-adjusted rate of 945.8 per 100,000 population. Rates have been sporadic but have but have trended upward in the last 20 years. The Jefferson Black rate is more than double the Jefferson White rate for asthma hospitalizations.

In Wakulla County, during 2012-2014, there were 753 asthma hospitalizations, corresponding to an age-adjusted rate of 786.4 per 100,000 population. Rates have been sporadic and on an upward climb in recent years, although remained below state levels. Rates for Wakulla Black and Other remain slightly below Wakulla Whites and significantly below Florida Blacks.

#### **Cardiovascular Conditions**

#### **Coronary Heart Disease**

As previously mentioned, heart disease a leading cause of death in the United States, Florida, and Leon County. Coronary heart disease (CHD) is "the most common type of heart disease in the United States, killing over 370,000 people annually" (CDC, 2015). CHD refers to the narrowing of small blood vessels, blocking the blood supply to the heart. CHD is caused by atherosclerosis, plaque buildup in the arteries. The most common symptom of CHD is angina, "chest pain or discomfort caused when your heart muscle does not get enough oxygen-rich blood" (AHA, 2015).

There are risk factors people can control to prevent heart disease, illness, or death in those that currently have heart disease. Some of these risks factors include preventing and controlling conditions, such as diabetes, high blood pressure, and high blood cholesterol.

#### Prevalence

According to the 2013 BRFSS, 2.8% of respondents reported that they were told they had angina or coronary heart disease in Leon County (table). Leon County's rates were significantly lower than the state's average of 5.0 percent. In addition, Leon County had the fourth lowest prevalence rate. As the result, the county's rate fell within the 1<sup>st</sup> (most favorable) quartile among Florida counties.

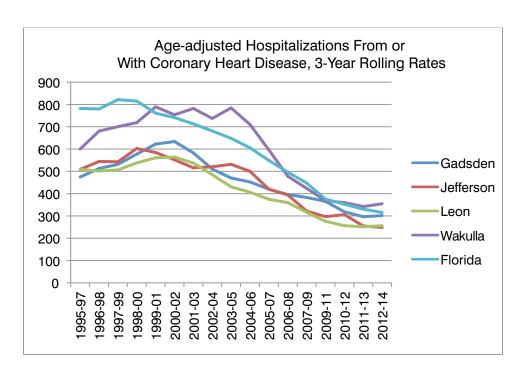
In contrast to the state, non-Hispanic Whites were less likely to report a prevalence of angina or CHD than non-Hispanic Blacks in Leon County. This is partially due to non-Hispanic Black woman higher rates in relation to the sex and race/ethnicity groups in the county. In addition, both non-Hispanic White men and women had significant lower rates than their counterpart. Non-Hispanic White men's rates played a role in Leon County men having significantly higher rates than men statewide.

In terms of annual income, people making \$50,000 or more had a lower prevalence of angina or CHD.

## CHD Hospitalizations-Overall

During 2012-14, there were 243,304 CHD related hospitalizations in Florida. These hospitalizations corresponded to an age-adjusted rate of 315.4 hospitalizations per 100,000 population. In Leon County, there were 1,944 CHD hospitalizations in Leon County, and the rate was 256.4 per 100,000 population. During this time, Leon County had the 7th lowest hospitalization rate in the state. Therefore, the county fell within the first quartile. Figure shows that the county's hospitalization rates have been consistently lower than Florida's rates.

Statewide, the hospitalization rates started at 781.9, before peaking to 821.3 during 1998-00. Then, the state's rates declined gradually to 315.4. Leon County's rates started at 508.6, before peaking to 564.4 during 2000-02. The county's rates fell gradually to 251.5 during 2011-13, before increasing to 256.4 at the end of the period.



Source: Florida Behavioral Risk Factor Surveillance System

Overall hospitalizations from Coronary Heart Disease in Gadsden County have remained below state levels in the last 20 years. In 2012-2014, there were 504 hospitalizations corresponding to an age adjusted rate of 301.7 per 100,000 population. State levels have gradually declined narrowing the gap between Gadsden and state figures. Since 2007-2009, Gadsden Black & Other, Gadsden White and Florida White rates have been similar and significantly below Florida Black & Other. In 2012-2014, Gadsden Whites had an age adjusted rate of 308.7 per 100,000 population while Gadsden Black and Other had an age adjusted rate of 286.9 per 100,000 population.

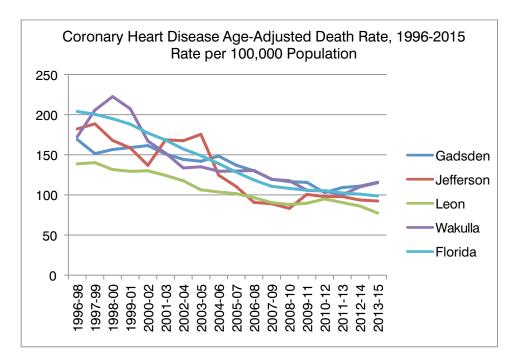
Overall hospitalizations from Coronary Heart Disease in Jefferson County have been below state levels and have consistently trended downward in the last 20 years. In 2012-2014, Jefferson County experienced 156 hospitalizations corresponding to an age adjusted rate of 248.2 per 100,000 population. In 2012-2014, both Jefferson Whites and Blacks & Other were below both Florida Whites and Florida Blacks & Others.

In Wakulla County, overall hospitalizations from Coronary Heart Disease have been trending downward since 2003-2005. In 1993-1995 they rates were significantly below state levels; however began trending upward from then to 1999-2001. Rates were sporadic and consistently above state levels until 2003-2005 when they began a downward trend and synced with state figures in 2006-2008 where they've remained consistent. Rates for all groups in Wakulla County have improved over the last 20 years. In 2012-2014, Wakulla Black and Other rates were the lowest compared to Florida White, Wakulla White and Florida Black & Other, respectively.

#### Mortality

In 2013-15, there were 84,720 deaths caused by CHD in Florida, These deaths corresponded to an age-adjusted death rate of 98.7 deaths per 100,000 population (figure). In Leon County, there were 574 deaths caused by CHD, and the death rate was 77.4. Leon County had the fourth lowest age-adjusted death rate among other counties. Therefore, the county's rate fell within the 1st (most favorable) quartile among Florida counties.

Statewide, the rates decreased gradually from 203.9 to 98.7 in the last 20 years, in which the age-adjusted death rates declined by more than 50 percent. In Leon County, the rates started at 138.7, and peaked at 140.2 during the 1997-99. From 1998-00 to 2013-15, this county's rates decreased to a twenty-year low of 77.4.



In 2013-2015 there were 187 deaths caused by CHD in Gadsden County, corresponding to an age adjusted rate of 115.8 per 100,000 population. Gadsden County CHD death rates have declined over the last 20 years; however remain slightly above state levels and have experienced an uptick since 2011-2013. Gadsden Blacks are more likely to die of CHD than Gadsden Whites, Florida Whites and Florida Blacks.

In 2013-2015 there were 55 deaths associated with CHD in Jefferson County. This is an age adjusted rate of 92.4 per 100,000 population. Jefferson rates have been below state levels since 2004-2006 and have been steady from 2009-2011 to 2013-2015. Jefferson Blacks are more likely to die of CHD than Jefferson Whites, Florida Whites and Florida Blacks.

In 2013-2015 there were 100 CHD deaths in Wakulla County with an age adjusted rate of 115.1 per 100,000 population. Wakulla rates have been close to state rates since 2003-2005. Wakulla

Blacks have experienced some peaks where they were significantly more at risk of death from CHD than other groups; however, have improved in more recent years and are now less at risk.

#### **Stroke**

Cerebrovascular disease, also known as a stroke, is defined as an interruption of the blood supply to any part of the brain. A stroke is sometimes called a "brain attack." The most common type of stroke is an ischemic stroke. During an ischemic stroke, the artery that supplies oxygenrich blood to the brain becomes blocked. Blood clots are a common cause of an ischemic stroke.

#### Prevalence

According to the 2013 BRFSS, 3.0% of Leon County adults reported that they were diagnosed with a stroke. Leon County adults were less likely to report that they were diagnosed with a stroke than adults statewide. Leon County's rate fell within the 1<sup>st</sup> (most favorable) quartile among Florida counties.

In Leon County, non-Hispanic Blacks were nearly four times as likely to be diagnosed with a stroke as non-Hispanic Whites. In terms of race/ethnicity and sex, non-Hispanic Black women had a higher rate (9.8%) than any other group. This resulted in Leon County women having a higher rate than men.

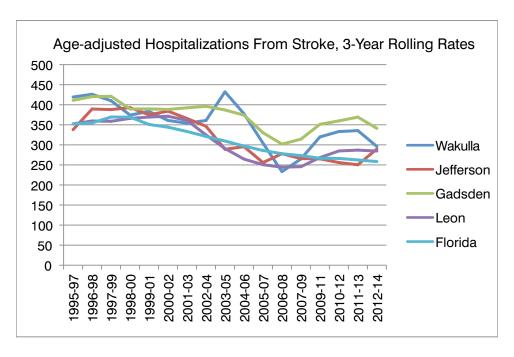
Elderly (65+) adults had the highest prevalence of stroke in the county and state. In addition, lower income (<\$25,000) adults also had a higher prevalence than adults with a higher income.

#### Stroke Hospitalizations

In 2012-14, there were 201,375 stroke hospitalizations in Florida. These hospitalizations corresponded to an age-adjusted rate of 258.4 hospitalizations per 100,000 population. Leon County's rate fell within the 3<sup>nd</sup> quartile (worse than the Florida average). In Leon County, there were 2,081 hospitalizations due to stroke, and the hospitalization rate was 284.6.

Statewide, the hospitalizations have fallen gradually over the past twenty-years. In Leon County, the rates started at 352.3, and peaking at 371.3 in 2000-02. Then the county experienced a drop in its rates from 2000-02 to 2006-08 (about 32 percent), before rising from 2006-08 to 2011-13(about 17 percent). From 2011-13 to 2014, the county experienced a slight decrease in the rates.

In 2012-2014, Gadsden County experienced 559 overall hospitalizations from stroke, corresponding to an age adjusted rate of 341.1 per 100,000 population. Gadsden County stroke hospitalizations have remained above state levels for 20 years. Gadsden Black rates have consistently remained above Gadsden White rates for the same time



**Source:** Florida Agency for Health Care Administration (AHCA)

period. In 2012-2014, Gadsden Blacks were 1.65 times more likely to be hospitalized from stroke than Gadsden Whites.

In 2012-2014, Jefferson County had 172 overall hospitalizations from stroke, corresponding to an age adjusted rate of 289.7 per 100,000 population. Jefferson County rates have remained at or below state levels from 2003-2005 until 2012-2014 when they had an upward tick and surpassed state figures. Jefferson Blacks are far more likely than Jefferson and Florida Whites to be hospitalized from stroke. In 2012-2014, Jefferson Blacks were almost twice as likely to be hospitalized from stroke compared to Jefferson Whites.

In 2012-2014, Wakulla County experienced 279 overall stroke hospitalizations. This corresponds to an age adjusted rate of 295.9 per 100,000 population. Jefferson County rates have been sporadic and have remained mostly above state levels in the last 20 years. Wakulla Blacks have a significantly higher rate (1.8 times) of being hospitalized from stroke compared to Wakulla Whites.

#### **Diabetes**

Diabetes mellitus is defined as a group of diseases that affects the body's ability to control blood glucose (sugar) levels. There are two main types of diabetes, type 1 and type 2 diabetes. Type 1 diabetes, formerly known as juvenile diabetes and insulin-dependent diabetes mellitus, is an autoimmune disease in which the pancreas produces too little or no insulin. Type 2 diabetes, formerly known as adult-onset or noninsulin-dependent diabetes, is the most common type of diabetes. This is the condition in which the body resists insulin or the body does not produce enough insulin to regulate blood glucose (Mayo Clinic, 2016). Gestational diabetes is a

condition in which women develop diabetes during pregnancy; however, did not have diabetes prior to pregnancy.

According to the CDC, these are some of the risk factors for type 2 diabetes include:

- Obesity
- Older
- Black or African American, Hispanics, and some Asian Pacific Islanders
- prior history of gestational diabetes
- family history of diabetes

People with diabetes are at greater risk of developing cardiovascular diseases, nerve damage, kidney damage, blindness, hearing loss, foot damage than can lead to amputation (Mayo Clinic, 2014).

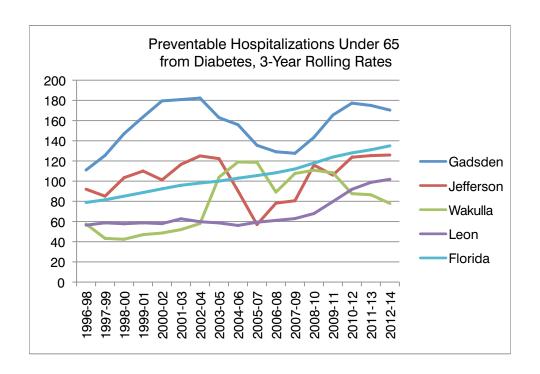
#### Mortality

If left uncontrolled, diabetes can lead to death. *Healthy People 2020* has an objective to reduce the diabetes rate to 66.6 deaths per 100,000 population. Figure shows that both the state's and county's rates are significantly lower than the target's rate.

From 2013-15, there were 138 deaths caused by diabetes in Leon County. These deaths corresponded to an age-adjusted death rate of 21.0 deaths per 100,000 population. Statewide, there were 15,927 diabetes death and the age-adjusted death rate was 19.5. Leon County's rate fell within the second quartile (better the Florida average).

From 1996-98 to 1999-01, the county's rates rose by about 40 percent. The rate diabetes deaths peaked from 1999-01. The county's rates was at its lowest 2008-10, in which the county's rates dropped by about 46% from 1999-01 to 2008-10. Then, from 2008-10 to 2012-14, the county's rates increased by about 26 percent.

There is a disparity between Blacks and Whites that persisted throughout the last 20-years. In 2013-15, Blacks were more three times as likely to die from diabetes as Whites. The gap between Black-White death rates was the greatest at the start of the period (1996-98), and at its lowest in 2009-11. From 1999-01 to 2009-11, the rate of Black deaths caused by diabetes declined by about 59 percent.



Source: Florida Agency for Health Care Administration (AHCA)

#### Prevalence- Adults who have ever been told they had diabetes

In 2013, 6.9% of adults who participated in the BRFSS reported that they had ever been told they had diabetes in Leon County. This was about a 30% drop from 2010 (9.8 percent). Leon County's rate was significantly lower than the state's rate (11.2%), and fell within the 1<sup>st</sup> (most favorable) quartile.

In contrast to the state, non-Hispanic Whites had a higher reported prevalence of diabetes than non-Hispanic blacks in Leon County. However, Leon County non-Hispanic Whites were significantly less likely to report a prevalence of diabetes.

In both the county and the state, women had a lower prevalence of diabetes. In addition, Leon County women rates were significantly lower than the women statewide.

Elderly adults (65+) were more likely to report that they had ever been told they had diabetes.

In contrast to the state, low income (<\$25,000) were less likely report a prevalence of diabetes that the other income groups in Leon County. In addition, the county's low income group had significantly lower rates than their counterpart at the state level.

Gadsden County death rates due to diabetes have remained significantly above state levels for the last 20 years; although, Gadsden rates have been sporadic while Florida rates have remained steady. In 2013-2015, overall Gadsden suffered 66 deaths from diabetes with an age

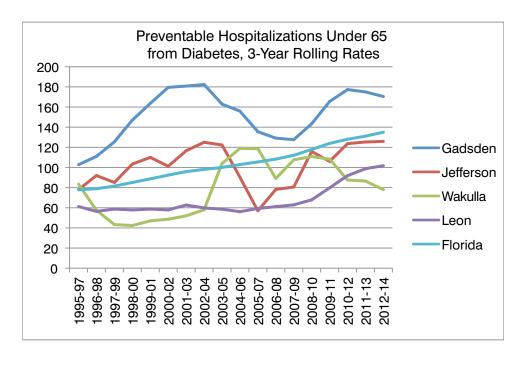
adjusted rate of 39.7 per 100,000 population, which is two times the state rate. Gadsden Blacks were almost three times as likely to die from diabetes as Gadsden whites in 2013-2015.

Jefferson County death rates due to diabetes have been in line with state averages since 2008-2010 to 2013-2015. Prior to that they were consistently above state levels and were sporadic. Jefferson Blacks are still far more likely to die of diabetes than Jefferson Whites with a rate 2.7 times higher.

Wakulla rates have also been sporadic but mostly above state levels in the last 20 years. In 2013-2015, Wakulla experienced 20 overall deaths from diabetes with a corresponding age adjusted rate of 21.8. Wakulla Black rates are 1.6 times higher than Wakulla White rates in 2013-2015.

#### Diabetes Hospitalizations

From 2012-14, there were 761 preventable hospitalizations under 65 from diabetes in Leon County. These hospitalizations corresponded to an age-adjusted rate of 101.8 per 100,000 population. Leon County's rates have been consistently lower than the state's rates. Figure illustrates that the state's rates increased gradually throughout the twenty-year period. The county's rates were relatively stable from 1995-97 to 2004-06, before rising gradually 101.8 in 2012-14.



Source: Florida Agency for Health Care Administration (AHCA)

In Gadsden County, from 2012-2014, there were 211 preventable hospitalizations under age 65 from diabetes. This corresponds to an age adjusted rate of 170.4 per 100,000 population.

Gadsden County rates have been consistently above Florida rates. Gadsden rates have been sporadic but with an upward trend over the last 20 years.

In Jefferson County, from 2012-2014, there were 45 preventable hospitalizations for under age 65 from diabetes, corresponding to an age adjusted rate of 125.9 per 100,000 population. Jefferson rates have been below Florida rates from 2004-2006 to 2012-2014.

Wakulla County had 64 preventable hospitalizations for under age 65 from diabetes during 2012-2014. This corresponds to an age adjusted rate of 77.9 per 100,000 population. Wakulla rates have trended downward and below state levels since 2005-2007. Overall, Wakulla residents under age 65 are 1.7 times less likely to be hospitalized from diabetes than state counterparts.

## **BEHAVIORAL RISK FACTORS**

### **Tobacco Use**

Tobacco use is a health behavior that strongly influence length of life and quality of life. According to the Centers for Disease Control and Prevention (CDC), tobacco use is the leading cause of preventable death in the United States. Annually, 6 million people die from smoking worldwide, and 480,000 Americans (CDC, 2015) (County Health Rankings, 2016). In addition, smoking leads to premature death. On average, smokers die on average 10 years earlier than nonsmokers.

There is a relationship to tobacco use and the prevalence of chronic diseases. In addition to causing cancer, smoking causes health complications. Smoking can damage the heart and the blood vessels, which can lead to heart disease and strokes. In addition, smoking can also damage the airways and small airs sacs in the lungs, which can lead to lung diseases, such as chronic obstructive pulmonary disease (COPD). Individuals that smoke are also more likely to develop type 2 diabetes. According the CDC, smokers are 30-40% more likely to develop type 2 diabetes than nonsmokers (CDC, 2015).

Research shows exposure to smoking during pregnancy has can result in major health complications. Women that smoke during pregnancy are more likely to have a miscarriage. In addition, infants are at risk of being born prematurely, low birth weight, birth defect, and infant death. Infants exposed to smoking are at a greater risk of developing sudden infant death syndrome (SIDS) (CDC, 2015).

#### Tobacco-Related Cancer Deaths

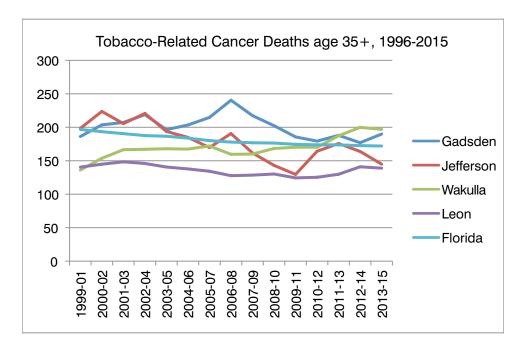
As previously stated, tobacco usage increases the risk of cancer. Smoking damages our DNA, the 'instruction manual' that controls cell's growth and function. Cancer tumors are the result of uncontrollable cell growth cell caused by damaged DNA (CDC, 2016). Tobacco use accounts for at least 30% of cancer deaths in the United States. Tobacco-related cancers include the following:

- Lip, Oral Cavity, Pharynx
- Esophagus
- Stomach
- Pancreas
- Trachea, Bronchus, Lung
- Cervix
- Kidney
- Bladder
- Acute myeloblastic leukemia

## Mortality

As previously mentioned, tobacco exposure increases the risk of cancer developing and death. In 2012-14, there were 57,362 tobacco-related cancer deaths to persons aged 35 and older in Florida (figure). These deaths corresponded to a crude death rate of 172.6 deaths per 100,000 population. Leon County's rates fell within the 1<sup>st</sup> (most favorable) quartile. In Leon County, there were 517 tobacco-related cancer deaths for this age group, and the death rate was 141.0.

Among racial and ethnic groups, Whites were more likely to die from tobacco-related cancer.



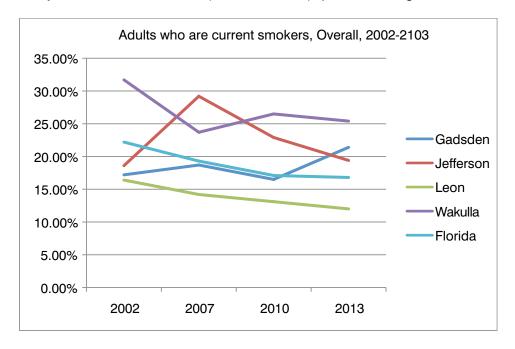
In 2012-2014, Gadsden County experienced 141 deaths to persons 35 and over due to tobacco related cancer, corresponding to a crude death rate of 189.9 per 100,000 population. Gadsden County rates have been above state levels consistently for the last 20 years. Gadsden Whites have a slightly higher rate of tobacco related cancer deaths than Gadsden Black and Others.

In 2012-2014, Jefferson County had 40 deaths to persons 35 and over due to tobacco related cancer, corresponding to a crude death rate of 144.9 per 100,000 population. Jefferson overall rates have been below state levels since 2007-2009. Jefferson Whites were about 1.5 times more likely to experience death due to tobacco related cancer than Jefferson Blacks in 2013-2015.

In 2012-2014, Wakulla County had 103 deaths to persons 35 and over due to tobacco related cancer, corresponding to a crude death rate of 196.9 per 100,000 population. Wakulla overall rates have gradually increased over the last 20 years and surpassed state levels in 2011-2013. Wakulla Whites were 4.3 times more likely to die from tobacco related cancer than Wakulla Blacks in 2013-2015.

#### Current Smokers

According to the 2013 BRFSS, Leon County had a significantly higher percentage of its population that never smoked than the population of Florida, 65.2% and 55.0%, respectively. Leon County's rate fell within the 1st (most favorable) quartile among Florida counties.



One of the *Healthy People 2020* target is to reduce the percentage of adults 18 years and older that are current smokers to 12 percent. In contrast to the state, Leon County had met this goal in 2013. In addition, was significantly lower than the state's rate, and the county's rate fell within the 1<sup>st</sup> (most favorable) quartile among Florida counties.

Non-Hispanic whites failed to reach the *HP2020* target. Non-Hispanic White rates dropped from 2002 to 2007 by 22.5 percent.

Figure shows Leon County men were more than twice as likely to be a current smoker as women. From 2010 to 2013, Men rates increased by 15%, while women rates dropped by about 33 percent. Among men, non-Hispanic Whites were more likely to be current smokers than non-Hispanic Black men.

According to the 2013 BRFSS, Gadsden County had a slightly higher percentage of its population that never smoked than the population of Florida, 58.0% and 55.0%, respectively. Current smokers in Gadsden County increased from 16.5% in 2010 to 21.4% in 2013, with state average of 16.8% in 2013. Gadsden men were more than twice as likely to be a current smoker as Gadsden women.

According to the 2013 BRFSS, Jefferson County had lower percentage of its population that never smoked than the population of Florida, 46.8.0% and 55.0%, respectively. Current smokers in Jefferson County decreased from 22.9% in 2010 to 19.4% in 2013, with state average of 16.8% in 2013. Jefferson men were slightly more likely to be a current smoker as Jefferson women, 20.7% and 18.1%, respectively.

According to the 2013 BRFSS, Wakulla County had a lower percentage of its population that never smoked than the population of Florida, 45.2% and 55.0%, respectively. Current smokers in Wakulla County decreased from 26.5% in 2010 to 25.4% in 2013, with state average of 16.8% in 2013. Wakulla men were more likely to be a current smoker as Wakulla women, with rates of 27.5% and 22.9%, respectively in 2013.

#### Florida Youth Tobacco Survey

The Florida Youth Tobacco Survey (FYTS) tracks indicators of tobacco use and exposure to secondhand smoke among Florida public middle and high school students and provides data for monitoring and evaluating tobacco use among youth for the Florida Department of Health's Bureau of Tobacco Prevention and Control.

In 2014, Leon County youth were significantly *more likely* to report than other Florida youth that they did the following (table):

- Used any form of tobacco on one or more of the past 30 days (negative).
- Smoked cigars on one or more of the past 30 days (negative)
- Served as an active member of Students Working Against Tobacco (SWAT) (positive)

In 2014, Leon County youth were significantly *less likely* to report than other Florida youth that they did the following:

- Used electronic cigarettes on one or more of the past 30 days (positive).
- Used hookah on one or more of the past 30 days (positive).
- Exposed to secondhand smoke during the past seven days (in a room or car) (positive).

Data from the 2014 Florida Youth Tobacco Survey (FYTS)		
	Leon County	Florida
Used any form of tobacco on one or more of the past 30 days	12.0%*	9.2%
Smoked cigars on one or more of the past 30 days	7.8%*	5.4%
Smoked cigarettes on one or more of the past 30 days	5.4%	4.3%
Used electronic cigarettes on one or more of the past 30 days	4.9%*	7.2%
Used smokeless tobacco on one or more of the past 30 days	4.3%	3.3%
Used hookah on one or more of the past 30 days	3.8%*	7.1%
Served as an active member of Students Working Against Tobacco (SWAT)	6.7%*	2.8%
Exposed to secondhand smoke during the past seven days (in a room or car)	31.7%*	37.5%
* Indicates that the difference observed between the 2014 county and state measures is statistically significant.		

**Source:** Florida Youth Tobacco Survey (FYTS)

In 2014, like Leon County, Gadsden County youth were significantly *more likely* to report than other Florida youth that they did the following:

Used any form of tobacco on one or more of the past 30 days (negative).

- Smoked cigars on one or more of the past 30 days (negative).
- Served as an active member of Students Working Against Tobacco (SWAT) (positive)

In 2014, Gadsden County youth were significantly *less likely* to report than other Florida youth that they did the following:

- Used electronic cigarettes on one or more of the past 30 days (positive).
- Used hookah on one or more of the past 30 days (positive).
- Exposed to secondhand smoke during the past seven days (in a room or car) (positive)

In 2014, both Wakulla and Jefferson County youth were significantly more likely, compared to Florida youth, to report that they did the following:

- Used any form of tobacco on one or more of the past 30 days
- Served as an active member of Students Working Against Tobacco (SWAT) (positive)

In Jefferson County, there was no significant difference with smoking cigars on one or more of the past 30 days as compared to other Florida youth or exposure to secondhand smoke during the last 7 days in a room or car. Wakulla County was significantly more likely to report exposure to secondhand smoke and use of electronic cigarettes while use of hookah was not significantly different than the state.

Jefferson County youth were less likely than the rest of the state to report:

- Used electronic cigarettes on one or more of the past 30 days
- Used hookah on one or more of the past 30 days

## **Obesity & Overweight**

According to Healthiest Weight Florida, "65% of adults are an unhealthy weight, and 1 out of 3 kids are now considered obese" (Healthiest Weight Florida, FDOH, 2016). Being overweight or obese increases one's risk of developing chronic conditions, such as heart disease, type 2

diabetes, cancers, hypertension, high cholesterol, and having a stroke. Therefore, being obese or overweight increases the risk of a premature death.

The body mass index (BMI) is used to determine if someone is overweight and obese. The BMI is calculated by weight and height.

For adults, their weight can be described using one of the four categories:

Underweight: BMI is less than 18

Normal or Healthy Weight: BMI ranging from 18.5 to 24.9

Overweight: BMI between 25 and 29.9

Obese: BMI of 30 or higher

For children ages 2 to 19, their weight falls into one of four categories:

Underweight: BMI below the 5th percentile

Normal Weight: BMI at the 5th and less than the 85th percentile

Overweight: BMI at the 85th and below 95th percentiles

Obese: BMI at or above 95th percentile

#### Adult Prevalence

According to the 2013 BRFSS, 41.0% of Leon County adults had a healthy weight. This was about a 13.3% increase from 2010. Leon County's rate fell within the 1<sup>st</sup> (most favorable) quartile.

In 2013, 56.3% of Leon County respondents were overweight or obese (table). Leon County's rate fell within the 1<sup>st</sup> (most favorable) quartile. Non-Hispanic Blacks were more likely to be overweight or obese than non-Hispanic Whites.

Men were more likely to report being overweight or obese. However, Leon County men had significantly lower rate than Florida men.

In both the county and state, adults aged 45-64 years older were more likely to be overweight or obese than the other age groups.

Adults making between \$25,000-\$49,999 were more likely to report that they were overweight or obese.

According to the 2013 BRFSS, 24.2% of Gadsden County adults had a healthy weight. This was 1.6% increase from 2010 and less favorable than the state in both years with 33.4% and 35.0%, respectively. In 2013, 75.2% of Gadsden County respondents were overweight or obese. Gadsden men are more likely to be overweight or obese compared to Gadsden females. Like Leon, Gadsden adults aged 45-64 are more likely to be overweight or obese than other age groups and adults making between \$25,000 and \$49,999 are more likely than those making under \$25,000 and over \$50,000.

According to the 2013 BRFSS, 37.5% of Jefferson County adults had a healthy weight. This is a 10.2% increase from 2010 but slightly more favorable than 2013 state rates. In 2013, 61.4% of Jefferson adults reported being overweight or obese, lower than state average. Like Leon and Gadsden, Jefferson men are more likely to be overweight than Jefferson females. Jefferson County adults older than age 65 have the highest rate of overweight and obesity compared to other age groups. Adults earning between \$25,000 and \$49,999 are the most likely to be overweight or obese.

According to the 2013 BRFSS, 26.1% of Wakulla County adults had a healthy weight. This is a 4.7% increase from 2010 and less favorable than 2013 state rates. In 2013, 72.4% of Wakulla adults reported being overweight or obese, higher than state average. Like Leon, Gadsden and Jefferson, Wakulla men are more likely to be overweight than Wakulla females. Wakulla County adults between 45-64 have the highest rate of overweight and obesity compared to other age groups. Adults earning between \$25,000 and \$49,999 are the most likely to be overweight or obese.

#### Childhood Prevalence

According to the 2014 FYTS, Leon and Gadsden County youth (ages11-17) were less likely to report than other Florida youth that they described themselves as slightly or very overweight while both Jefferson and Wakulla were more likely than other Florida youth to report the same. (table).

WIC Children >= 2 Years Who Are Overweight or Obese

Women, Infants, and Children (WIC) is a federally funded nutrition program. WIC provides services to infants, children up to 5 years old, pregnant and breastfeeding women, and women in the first 6 months after giving birth at no cost. In addition, WIC provides healthy foods, nutrition education and counseling, breastfeeding support, and referrals for health care and community services.

Under WIC regulations, enrollees' nutritional risk is assessed by measuring weight and height. In Leon County in 2015, 22.9% of WIC children age two or older was either overweight or obese, compared 26.3% statewide (figure). Leon County's rate fell within the 1<sup>st</sup> (most favorable) quartile.

In 2006, Leon County's rates started at 25.4%, before declining to a low of 19.3% in 2009. From 2009 to 2010, the county's rates increased dramatically to 28.3% (47% increase), before dropping gradually to 22.9 percent.

In Gadsden County, in 2015, 29.4% of WIC children age two or older was overweight or obese. In Jefferson County during 2015, 21.3% of WIC children age two or older was overweight or obese and in Wakulla County during the same year, 26.1% met this criteria.

## **Physical Activity**

Physical activity has many health benefits. In addition to controlling weight and reducing the risk of some chronic conditions, physical activity can also strengthen bones, improve mental health and one's mood, improve older individual's ability to do daily activities, and increases the likelihood to live longer (CDC, 2015). Therefore, it is essential that children and adults receive the recommended amount of physical activity. The recommended amount of physical activity varies by factors, such as age and physical capabilities.

#### Percentage of adults who are sedentary

Sedentary is defined as participating in no leisure-time physical activity in the past 30 days. In 2013, Leon County had a significantly lower percentage of adults who were sedentary than that the state, 16.6% and 27.7%, respectively (table). In addition, Leon County's rate fell within the 1st (most favorable) quartile.

In both the state and Leon County, Non-Hispanic Whites were less likely to be sedentary than non-Hispanic Blacks. Additionally, Leon County non-Hispanic Whites had significantly lower rates than Florida Whites. Women were more likely to report that they were sedentary than men. However, both Leon County men and women had significantly lower rates than their counterparts at the state level. Elderly (65+) adults were more likely to report that they were sedentary. However, in Leon County, all age groups had significantly lower rates than their counterparts at the state level. In contrast to the state, people making \$25,000-\$49,999 were more likely to report that they were sedentary than other income groups in Leon County. In addition, Leon County low-income (<\$25,000) adults were significantly less likely to report that they were sedentary than other low-income adults in Florida.

In 2013, Gadsden County had a significantly higher percentage of adults who were sedentary compared to the state, 37.4% and 27.7% respectively. Gadsden men were much more likely to report being sedentary than Gadsden women, 46.3% and 29.1% respectively. In Gadsden County age 45-64 had a higher rate of sedentary behavior than other age groups and those making less than \$25000 per year are more likely to be sedentary than other income groups.

In 2013, Jefferson County had a somewhat higher percentage of sedentary adults than the state at 29.8%. Jefferson men are much more likely to be sedentary with 34% reporting the behavior compared to 25.2% of women. Jefferson adults 65 years old and older are most likely to be sedentary and those making under \$25,000 per year.

In 2013, Wakulla county 26% of adults report being sedentary, slightly lower than state average. Wakulla females are much more likely to be overweight than Wakulla males with 34.2% and 19.2% respectively. Those aged 45-64 and those earning between \$25,000 and \$49,999 are most likely to be sedentary compared to counterparts in the county.

### Percentage of adults who meet aerobic recommendations

The BRFSS standards for the recommended aerobic physical activity is performance of at least 150 minutes of moderate aerobic activity or 75 minutes of vigorous aerobic activity per week in the past 30 days.

In 2013, 55.9% of Leon County respondents met the aerobic recommendations (table). The county's rates fell within the 1<sup>st</sup> (most favorable) quartile among Florida counties. At both the state and Leon County levels, non-Hispanic blacks were less likely to meet the recommendations than non-Hispanic whites. At both the state and Leon County levels, men were more likely to meet the recommendations than women. In Leon County, adults whose annual income ranged from \$25,000-\$49,999 were less likely to meet the aerobic recommendations.

In 2013, 43.0% of Gadsden County adult respondents met the aerobic recommendations compared to 50.2% of Floridians. Non-Hispanic Blacks were less likely to meet the recommendations than non-Hispanic Whites with 42.1% and 48.6%, respectively. Gadsden females were more likely to meet the recommendations compared to Gadsden men with Women reporting at 46.2% and men at 39.4%. Gadsden adults earning under \$25,000 per year were least favorable for achieving the recommendation and those earning between \$25,000 and \$49,999 were most favorable.

In 2013, 52.6% of Jefferson County adult respondents met the aerobic

Source: Florida Behavioral Risk Factor Surveillance System

recommendations. This was more favorable than the Florida rate. Non-Hispanic Blacks were less likely to meet the recommendations than non-Hispanic Whites with 39.4% and 59.6% respectively. Jefferson females were also more likely than their male counterparts reporting 58.1% and men reporting 47.7%. Jefferson adults earning over \$50,000 annually were much more likely to meet the recommendations compared to those earning less.

In 2013, 41.5% of Wakulla County adult respondents met the aerobic recommendations, much less favorable than state of Florida rates. There is no data to compare Non-Hispanic Whites and Blacks. Like Gadsden and Jefferson, Wakulla females were more likely than males to meet the recommendations with 45.1% and 38.5% reporting respectively. Wakulla respondents earning between \$25,000 and \$49,999 were more likely to meet recommendations than those earning less or more.

Percentage of adults who meet muscle strengthening recommendations

The BRFSS standards for muscle strengthening physical activity includes activities using body weight, weight machines, free weights, or elastic bands, at least two times per week in the past 30 days.

In 2013, 33.9% of Leon County BRFSS respondents met the muscle strengthening recommendations (table). The county's rates fell within the 1<sup>st</sup> (most favorable) quartile among Florida counties. At both the state and Leon County levels, non-Hispanic Blacks were more likely to report that they met this recommendation than non-Hispanic Whites. At both the state and Leon County levels, men were more likely to report that they met this recommendation than women. Younger (18-44) adults were more likely to meet the strengthening recommendations. In contrast to the state, adults whose income ranged from \$25,000-\$49,000 were more likely to meet this recommendation than adults in the other income groups.

In 2013, 26.5% of Gadsden County BRFSS respondents met the muscle strengthening recommendations, less favorable than the state rate of 29.6%. In Gadsden County, Non-Hispanic Whites were more likely to meet these recommendations and more favorable than state levels. Gadsden County men were much more likely than women to meet the strengthening recommendations with 35.2% and 18.4% respectively. Like Leon County, younger adults (18-44) were more likely than older groups to meet the recommendation. Adults

Source: Florida Behavioral Risk Factor Surveillance System earning over \$50,000 in Gadsden were the most likely to meet the muscle strengthening recommendations.

In 2013, only 17.8% of Jefferson County BRFSS respondents met the muscle strengthening recommendations, almost 12% lower than state average. Non-Hispanic Whites were twice as likely to meet these recommendations compared to Non-Hispanic Blacks. Jefferson men were more likely than women to meet the recommendations with 19.8% and 15.6% respectively. In contrast to Leon and Gadsden Counties, Jefferson adults between ages 45-64 are the most likely to meet the recommendations, with 19.5% and 17.7% and 15.2% for younger and older respectively. In Gadsden, the middle income group, those earning between \$25,000-\$49,999 were most likely to meet muscle strengthening recommendations.

In 2013, 27.6% of Wakulla County respondents reported meeting the muscle strengthening recommendations, slightly less favorable than the state. There is no data to compare Non-Hispanic Blacks and Whites in this category. Men were more than twice as likely compared to women to meet these recommendations. Younger adults (18-44) were more than double older groups to meet these recommendations with 39.2%, 15.7% and 17.4% respectively. The lowest income group, under \$25,000, in Wakulla County were more likely than higher income earners to meet the muscle strengthening recommendations and were more favorable than state averages.

#### Youth Physical Activity

According to the 2014 FYTS, 23.0% of Leon County public school students ages 11-17 reported that they were physically active for at least 60 minutes per day during the past seven days. There was no a significant difference between the county's and state's rate (22.7%). Statewide, students reported a significantly higher rate than Leon County that exercised to lose weight or to keep from gaining weight during the past 30 days.

Both Gadsden and Jefferson Counties have a less favorable rate of public school students ages 11-17 reporting that they were physically active for at least 60 minutes per day during the past seven days, with 22% and 17.8% respectively. In contrast, Wakulla County youth reported 32.8% meeting these recommendations, over 10% higher than the state average. Both Gadsden and Wakulla County also reported a higher level than state of youth exercising to lose weight or to keep from gaining weight during the past 30 days while Jefferson County reported lower than the state.

#### **Nutrition**

In 2013, 16.2% of Leon County respondents reported that they consumed five or more servings of fruits or vegetables per day. Compared to the state, Leon County respondents were less likely to report this. In addition, Leon County's rate fell within the 2<sup>nd</sup> quartile (better than Florida average). The tables illustrate that consumption varied across demographic groups.

- Among racial groups, non-Hispanic Blacks were less likely to report they consumed five or more servings of fruits or vegetables per day.
- The table shows that women were more likely to report that they consumed these servings of fruits and vegetables compared to men. In Leon, women were twice as likely to report they consumed these servings.
- Lower income persons were less likely to report they consumed these servings of fruits and vegetables.

In 2013, 16.5% of Gadsden County respondents reported that they consumed five or more servings of fruits or vegetables per day. This was less favorable than the state figure of 18.3%. In Gadsden County, Non-Hispanic Whites were less likely to report fruit and vegetable consumption than non-Hispanic Blacks. Women were almost twice as likely compared to men to meet the recommendation and the middle income group (\$25,000 to \$49,999) were more likely than lower and higher income earners.

In 2013, 19.3% of Jefferson County respondents report consuming five or more servings of fruits and vegetables per day, comparing slightly more favorable than the state. In Jefferson County, Non-Hispanic Whites are only slightly more likely than Non-Hispanic Blacks to meet the recommendations with 20% and 19.5% respectively. Women report a higher rate of consumption than men and respondents earning over \$50,000 were more likely than other income groups to meet these recommendations.

In Wakulla County in 2013, 15.3% of respondents report meeting the recommended consumption of fruits and vegetables. This is less favorable than the state and the lowest of the four county service area. There is no data to compare Non-Hispanic Whites and Blacks. Women were more than twice as likely to report consumption compared to men. The lowest income earners (under \$25,000) were twice as likely as earners over \$50,000 and three times as likely as earners between \$25,000 and \$49,999 to meet the consumption recommendations with 28.2%, 9.0% and 13.0% (low to high earners).

## **High Blood Pressure**

High blood pressure, also called hypertension, is described as high pressure in the blood vessels. According to the CDC, 70 million, or one in three, adults have high blood pressure in the U. S (CDC, 2015). High blood pressure is a risk factor for heart disease and stroke. High blood pressure is the primary cause or contributing factor to more than 410,000 American deaths (CDC, 2016).

#### Prevalence

Compared to the state, Leon County significantly lower percentage of adults that have ever been told they had hypertension. Leon County's rate fell within the 1<sup>st</sup> (most favorable) quartile. In addition, the county met the *Healthy People 2020* target to reduce the adults aged 18 years

and older that had high blood pressure/hypertension to 26.9 percent). Non-Hispanic Blacks had the highest reported prevalence of hypertension than to non-Hispanic whites. In addition, Leon County non-Hispanic Whites had a significant lower rate than Florida Whites. Women had a lower prevalence of hypertension than men. Additionally, Leon County women had significant lower rate than other Florida women. Elderly (65+) adults were more likely to have hypertension. Higher income adults (\$50,000 or more) were the least likely to report that they had hypertension. In addition, Leon County higher income adults had significant lower rates than state counterparts.

In 2013, Gadsden County had 47.9% respondents who had ever been told they had hypertension, compared to the state level of 34.6%. Non-Hispanic Blacks were far more likely than Non-Hispanic Whites to have been told they have hypertension with 56.1% and 38.9% respectively. Men had a higher rate than women and those older than age 65 had a much higher rate than younger groups. Adults earning under \$25,000 per year were the most likely to have been told they have hypertension compared to higher income groups with 55%, 46.5% and 32.5% (low to high income).

In 2013, Jefferson County had 42.7% respondents who had ever been told they had hypertension, much higher than the state. Like Gadsden, Jefferson Non-Hispanic Blacks are far more likely to have been told they are hypertensive than Non-Hispanic Whites. Jefferson women have a higher rate than men and age 65+ have a much higher rate than younger respondents. The middle income group (\$25,000-\$49,999) have a higher rate of hypertension than those earning less than \$25,000 and those earning more than \$50,000.

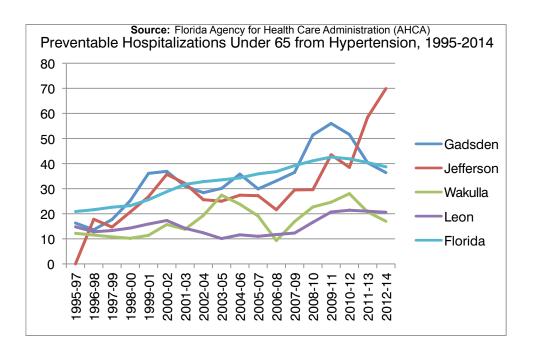
In 2013, Wakulla County had 33% respondents who had ever been told they had hypertension, slightly more favorable than the state and more favorable than both Gadsden and Jefferson Counties. There is no data to make comparison of race. Women were more likely to have been told they were hypertensive than men. Respondents over age 65 were most likely to have been told they were hypertensive with 10.8%, 43.1% and 73.6% (youngest to oldest). Like Jefferson County, Wakulla middle earners were most likely to report being hypertensive with 50.6%, 55.3% and 32.2%.

## Hospitalizations

From 2012-14, there were 154 preventable hospitalizations under 65 from hypertension in Leon County. These hospitalizations corresponded to an age-adjusted rate of 20.6 per 100,000 population. Figure shows that Leon County's rates have been consistently been lower than Florida's rates during the past 20 years. Leon County's rate fell within the 1<sup>st</sup> (most favorable) quartile.

Leon County's rates peaked during 2009-11, in which the rates rose by about 95% from 2005-07 to 2009-11. For the following years, the county's rates have been relatively stable.

From 2012-14, there were 45 preventable hospitalizations under 65 from hypertension in Gadsden County, corresponding to an age adjusted rate of 36.4 per 100,000 population. Gadsden hypertension hospitalization rates were slightly lower than the state in 2012-2014 after a downward trend from 2009-2011.



From 2012-2014, there were 25 preventable hospitalizations under 65 from hypertension in Jefferson County, corresponding to an age adjusted rate of 69.9 per 100,000 population. This rate is significantly above the state age adjusted rate in the same years. Jefferson rates have been on an upward trend since 2006-2008, surpassing state rates in 2010-2012.

From 2012-2014, there 14 preventable hospitalizations under age 65 from hypertension in Wakulla County, corresponding to an age adjusted rate of 17 per 100,000 population, much more favorable than the state level. Jefferson rates have been sporadic; however, consistently below state figures in the last 20 years.

## **High Blood Cholesterol**

Cholesterol is defined as waxy fat-like substance that is beneficial to the body. However, when there is too much cholesterol, the cholesterol can build up in the artery walls. High blood cholesterol places individuals at risk of having a heart disease or a stroke. The American Heart Association recommends that adults ages 20 years and older that have not been diagnosed with a cardiovascular disease to have their cholesterol checked every five years (AHA, 2014).

Modifiable risk factors for high blood pressure include the following:

- Diabetes
- Unhealthy diet
- Physical inactivity
- Overweight or Obese

#### Prevalence

In 2013, the estimated prevalence of high blood cholesterol in Leon County was 27.5 percent. Leon County adults had a significantly lower rate than adults across the state. In addition, Leon County's rate fell within the 1st (most favorable) quartile. At both the state and county levels, non-Hispanic Whites had a higher reported prevalence of high cholesterol than non-Hispanic Blacks. Men had a higher reported prevalence of this condition than women in Florida and Leon County. At both the state and county levels, elderly (65+) adults were more likely to have high cholesterol. Low-income (<\$25,000) were least to report a prevalence of high cholesterol than the other income groups. In addition, Leon County low-income adults had significantly lower rates that their counterparts at the state level.

In 2013, the estimated prevalence of high blood cholesterol in Gadsden County was 37.4 percent, higher than the state rate of 33.4%. At both the state and county levels, non-Hispanic Whites had a higher reported prevalence of high cholesterol than non-Hispanic Blacks. Men had a higher reported prevalence of this condition than women in Florida and Gadsden County. Elderly (65+) adults were more likely to have high cholesterol in Gadsden County. Low-income (<\$25,000) were least to report a prevalence of high cholesterol than the other income groups in Gadsden similar to Leon County findings.

In Jefferson County in 2013, 38.9% of respondents report ever being told they have high blood cholesterol. Non-Hispanic Whites have a higher prevalence than Non-Hispanic Blacks and women have a higher prevalence than men. Older adults (age 65+) have a much higher rate as compared to younger groups in Jefferson County. The lowest earners, under \$25,000, have the highest prevalence of high blood cholesterol compared to higher income brackets.

In Wakulla County in 2013, 30.4% reported prevalence of high blood cholesterol. There is not full data to compare races. Women have a higher prevalence than men with 34.4% and 27.2% respectively. Like the other counties and the state, those age 65+ have the highest rate of being told they have high blood cholesterol. In Wakulla County, middle income earners, between \$25,000 and \$49,000, have the highest prevalence compared to lower and higher earners.

#### Monitoring

In 2013, 75.6% of adults reported that they checked their cholesterol in the past five years. The county's rate was lower than the state rate (79.5%) and the Healthy People 2020 target (82.1%). Figure shows that Non-Hispanic Blacks were less likely to have their blood pressure checked in the past five years compared to non-Hispanic Whites. Males were also less likely to report that they had their cholesterol checked than females.

In 2013, both Gadsden and Jefferson counties have a better rate than the state for reports of having cholesterol checked in the last five years with 85.7% and 80.3% respectively. Wakulla County was just slightly below the state at 78.3% (state 79.5%). Non-Hispanic Blacks in Gadsden County were far more likely than Non-Hispanic Whites to have their cholesterol checked in Gadsden County. There was not data to compare race in Wakulla and Non-Hispanic Whites were more likely to have been checked in Jefferson. In both Gadsden and Jefferson,

women were more likely than men to report having cholesterol checked. In Wakulla rates between men and women were very similar.

### **Colorectal Cancer Screenings**

Screening is essential to preventing colorectal deaths. Colorectal cancer typically starts as a polyp, an unnecessary growth. Screenings can be used to locate and remove a polyp before it becomes cancerous. According to the CDC, "if everyone aged 50 years or older had regular screening tests, at least 60% of deaths from this cancer could be avoided" (CDC, 2014).

The U.S. Preventative Task Force recommends colorectal cancer screening for adults 50 to 75 years old (U.S. Preventive Services Task Force, 2016). There are multiple types of colorectal cancer screenings, which include some of the following:

**Sigmoidoscopy:** examines the rectum and part of the colon for polyps or cancer. The doctor inserts a shot, thin, flexible lighted tube into the rectum.

**Colonoscopy:** examines the rectum and the entire colon with a long, thin, flexible lighted tube. The test can entail the removal of polyps and some cancer.

High- sensitivity fecal occult blood tests (FOBT): test for blood in the stool.

#### Prevalence

In 2013 in Leon County, 60.3% of adults age 50 years and older reported that had received a sigmoidoscopy and colonoscopy. Leon County's rate was higher than the state's rate (55.3%), but not significantly higher. In addition, Leon County's rate fell within the 1st (most favorable) quartile.

Non-Hispanic Blacks were more likely (63.9%) to report that they had either test than Whites (60.6%).

In 2013 in both Gadsden and Jefferson Counties had a higher rate than the state for adults age 50 years and older reported that had received a sigmoidoscopy and colonoscopy in the last five years, with 66.9% and 67.0% respectively. Wakulla County was just under the state level reporting 54.6% (state 55.3%). In Gadsden County, Non-Hispanic Blacks were more likely to report screening than Whites. In Wakulla County it was opposite with Blacks reporting a higher testing rate than Non-Hispanic Whites. Wakulla County didn't have data on race for this test.

## Stool Blood Test

A stool blood test refers to a test used to determine if stool contains blood. Leon County adults age 50 and older were more than twice as likely to report that they received a stool blood test in the past year as adults statewide. In addition, Leon County's rate fell within the 1<sup>st</sup> (most favorable) quartile among Florida counties.

In contrast to the state, non-Hispanic whites were more likely to receive the test than non-Hispanic Blacks in Leon County. Leon County non-Hispanic White men and women had rates significantly higher than their statewide counterparts.

In contrast to the state, adults with an annual income of \$25,000-\$49,000 were more likely to report to receive this test in Leon County. In Leon County, adults making at least \$25,000 had a significant higher rate than adults with similar income at the state level.

In 2013, Gadsden, Jefferson and Wakulla Counties all reported significantly better rates of adults age 50 years+ who have ever had a blood stool test with 58.9%, 58.5% and 54.6% respectively (state 37.6%). Non-Hispanic Whites have a higher rate of testing in Gadsden County but the opposite is true in Jefferson County. There is not complete race data for comparison in Wakulla Counties. In all four counties, adults earning under \$25,000 annually reported higher rates of testing compared to state levels.

## **Pap Test**

The CDC states that cervical cancer is one of the easiest gynecological cancers to prevent (CDC, 2014). One of the ways to prevent cervical cancer is to receive the Pap test (or Pap smear). A Pap test is described as a cervical cancer screening test in which surface cells from the cervix are examined for cancer or pre-cancer characteristics. The Pap test is recommended for women between the ages of 21 to 65 years old, and that they receive the test every 3 years (CDC, 2014).

In 2013, 91.9 percent of Leon County women aged 21 to 65 who had a Pap test in the past 3 years, compared to the state's average of 80.1 percent (table). In addition, the county's rate fell within the 1st (most favorable) quartile among Florida counties.

At both the state and county levels, non-Hispanic White women were more likely to report that they met this recommendation than non-Hispanic Black women.

Women who made between \$25,000 -\$49,999 were the least likely to report that they had the recommended test compared to women of other income levels.

Percentage of Women aged 21 to 65 who had a Pap test in the past 3 years, Leon County & Florida, 2013			
	Leon County	Florida	
Overall	91.9%	80.1%	
Race/Ethnicity			
Non-Hispanic White	93.5%	80.3%	
Non-Hispanic Black	88.4%	79.6%	
Annual Income			
<\$25,000	92.2%	75.3%	
\$25,000 - \$49,999	89.3%	73.8%	
\$50,000 or More	93.6%	88.9%	

Source: Florida Behavioral Risk Factor Surveillance System

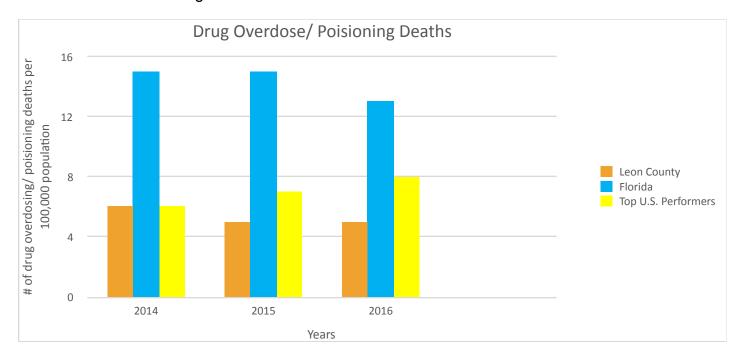
Gadsden and Wakulla Counties both report better levels than the state for women aged 21 to 65 who had a pap smear in the last 3 years, with 92.8% and 89.1% respectively (state 80.1%). Jefferson was below state reported levels at 76.1%. There is not complete data to make comparison on race or income differences.

# BEHAVIORAL HEALTH SERVICES

# **Substance Abuse**

Alcohol and substance abuse can negatively impact our personal lives and the community in a variety of ways. Unintentional injuries to include automobile accidents and liver disease are two of the most frequent consequences. Substance abuse can have a dramatic impact on families as well as the community.

Substance abuse can contribute to public health problems such as crime, domestic violence, homicide and physical fights. The figure above illustrates the amount of drug poisoning/ overdosing trends. Leon County has ranked below state and national trends since 2014. The amount of drug overdoses and drug poisonings in our community indicate the amount of drugs that are assessable.



Source: County Health Rankings

# **Drug Poisoning Deaths**

The prevalence of drug poisoning deaths for 2016 in Wakulla County are reported as a modeled number due to small population size or lack of reliable data. The 2016 modeled figure is 12-14 per 100,000 which is comparable to the state rank of 13.2. Drug poisoning deaths have trended upward in Wakulla County since 2014, with 11/100,000 and 10/100,000 in 2015; however, still remaining below the state trends.

The prevalence of drug poisoning deaths for 2016 in Gadsden County are reported as a modeled number due to small population size or lack of reliable data. The 2016 modeled figure is 6.1-8 per 100,000 which is well—under the state rank of 13.2. Drug poisoning deaths have also trended upward in Gadsden County since 2014, with 5/100,000 and 4/100,000 in 2015; however, still remaining well below the state trends.

The prevalence of drug poisoning deaths for 2016 in Jefferson County are reported as a modeled number due to small population size or lack of reliable data. The 2016 modeled figure is 10.1-12 per 100,000 which is comparable to the state rank of 13.2. There is no data for Jefferson County for drug poisoning deaths for 2014 or 2015.

# **Excessive Binge Drinking**

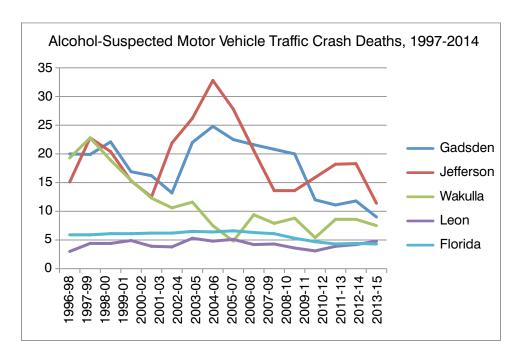
In 2016, 22% of adults in Leon County have reported excessive or binge drinking compared to 17% of adults in Florida. In 2011, the percentages were 21 and 16 respectively. From 2012 - 2015, 19% of adults reported excessive drinking in Leon County and 16% reported excessive drinking in Florida. In 2016, Leon County was ranked 2<sup>nd</sup> in Florida for excessive drinking prevalence with 22.1%. Leon County is currently ranked as the 24<sup>th</sup> county in Florida based on health factors.

In 2016, 23% of Wakulla County adults reported excessive drinking trending above the state average of 17%. This represents the highest rate in our 4 county PSA. Data should not be compared with prior years due to changes in definition/methods so trending not possible. The rate remained fairly constant from 2011 to 2015 ranging between 20-22% while state level was 16%.

In 2016, 16% of Gadsden County adults reported excessive drinking trending a bit below the state average of 17%. Data should not be compared with prior years due to changes in definition/methods so trending not possible. The range bounced between 11-14% from 2011 to 2015 while state level was 16%.

In 2016, 18% of Jefferson County adults reported excessive drinking trending a bit above the state average of 17%. Again, data should not be compared with prior years due to changes in definition/methods so trending not possible. The range remained fairly constant from 2011 to 2015 ranging between 8-10% well below the state level of 16%.

#### **Alcohol Impaired Driving Deaths**



Source: County Health Rankings

The figure above illustrates the percentage of alcohol impaired driving deaths in Leon County 2014-2016. Since 2014, over 30% of driving deaths have been alcohol related since 2014. This is above the state average and top U.S. performers which illustrates that improvements are necessary. In 2016, Alcohol-impaired driving deaths accounted for 33 percent of driving deaths in Leon County and 29 percent in Florida. In 2015, alcohol accounted for 30 percent of driving deaths in Leon County and 29 percent in Florida. In 2014, 31 percent of driving deaths were alcohol impaired in Leon County whereas driving deaths in Florida were 29 percent. Leon County is ranked number 18 in health behaviors out of Florida's 67 counties. The percentage of alcohol-impaired driving deaths in Leon County have varied only slightly since 2005.

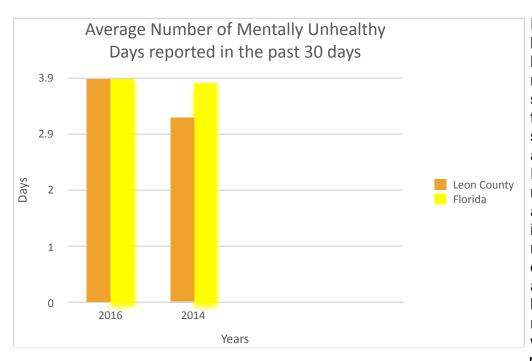
Since 2014, alcohol impaired driving deaths in Wakulla County have been well above the state average of 29% and US Top Performer rate of 14%. Rates have continued to trend upward with from 47% to the current, 52%.

In Gadsden County, alcohol impaired driving deaths are also well above the state average in 2016 with 35% of deaths; however, there has been a significant improvement since 2014. Rates dropped from 50% in 2014 to 43% in 2015 and then to 35% in 2016.

Jefferson County alcohol impaired deaths have been consistently below the state average of 29%. Ranging from 26 to 28% from 2014-2016.

## Mental Health

# **Poor Mental Health Days**



Poor mental health can lead to health risk behaviors such a s tobacco and substance abuse. Positive mental health allows individuals to make good life decisions, be a part healthy relationships. 0 productively

and be able to cope with the stresses of life among other attributes. Poor mental health can have an effect on your body's immune system, weakening it, making your body more susceptible to infections during when experiencing poor mental health.

In 2016, the average number of poor mental health days reported in Leon County was 3.9. The percentage was the same for the state of Florida. Leon County is ranked 46 out of 67 counties in the state of Florida in regards to quality of life measures.

From 2014 - 2015, the number of poor mental health days reported was 3.2 whereas the state average was 3.8. In 2013, the average number of poor mental health days in Leon County was 3.2 whereas the average in Florida was 3.7. In 2012, there were an average of 3.3 poor mental health days in Leon County and there were an average of 3.6 poor mental health days in Florida. In 2011, the average number of poor mental health days reported in Leon County was 3 and Florida averaged 3.5. Leon County is currently ranked number 46 of the 67 Florida Counties in regards to quality of life measures. In 2013, the amount of adults who were told that they had depressive disorder was 17.7% in Leon County compared to 16.8% in Florida.

The Apalachee Center currently offers inpatient, outpatient and residential treatment services through ten locations that serve Leon County and the Big Bend region. The amount of mentally unhealthy days in Leon County have increased slightly from 2014 to 2016 which indicates the amount of people requiring mental health services in our community. Organizations such as the Apalachee Center strive to create awareness regarding mental health issues and serve the approximately 17,000 people in the Big Bend area with severe and persistent mental illnesses.

In 2016 poor mental health days in Wakulla County adults is 3.6 days which is below the state figure of 3.9 days. Data should not be compared with prior years due to changes in definition/methods. Prior years remained fairly consistent ranging from 4.2 to 4.4 days while the state numbers in these years went from 3.5 days to 3.8 days, increasing 1/10 each year.

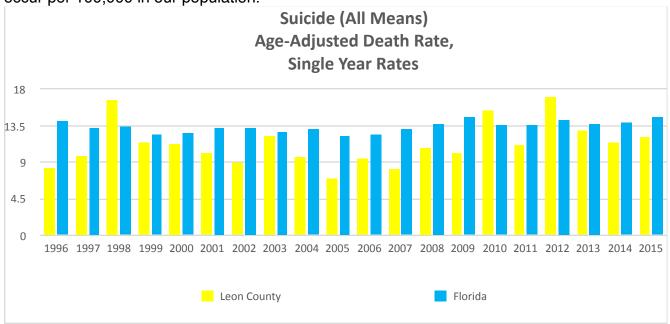
Gadsden County is experiencing 4.5 poor mental health days in 2016 while state average is 3.9 days. Data should not be compared with prior years due to changes in definition/methods. Prior years trended slightly upward starting at 2.8 in 2011 and bouncing between 3.1 and 3.4 from 2012 to 2015. The state range gradually went from 3.5 to 3.8 in those years.

In 2016 Jefferson County adults report 4.0 poor mental health days well above the state figure of 3.9 days. Data should not be compared with prior years due to changes in definition/methods. Prior years trended upwards over 1.5 days from 2011 to 2015 while state average only trended upwards by 0.3 days in the same timeframe.

#### **Suicide**

The most vulnerable populations are the young, elderly and socially isolated individuals. Suicidal risk factors include physical illness, alcohol and drug abuse, mental illness, and emotional distress among other risk factors. It is also important to consider the cultural and socio-economic factors that play a role in suicides. A suicide attempt is a sign that something is wrong in a person's life so an intervention is needed. Current trends in suicide have varied throughout the years. On average, suicide rates in Leon County are lower than those in Florida. The figure below illustrates the amount of suicides that

occur per 100,000 in our population.

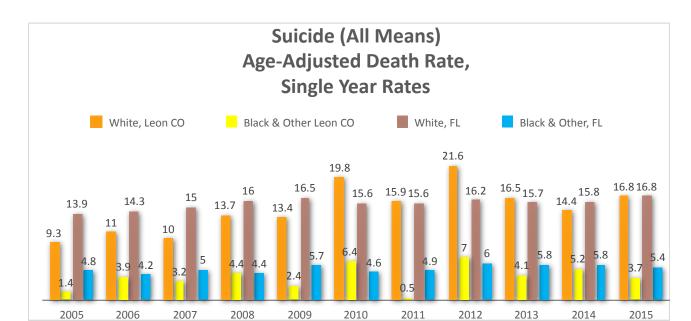


Data Source: Florida Department of Health, Bureau of Vital Statistics

Data Source: Florida Department of Health, Bureau of Vital Statistics

Suicide has increased every year from 1999-2014 for both men and women. Whites are four times more likely to commit suicide in comparison to blacks. The table above indicates the local and state suicide trends for whites, blacks and others. Current suicide rates indicate the need for population based prevention methods and increased awareness.

Wakulla, Gadsden and Jefferson Counties White rates have been quite variable trending up and down over the years. Wakulla County's peak was 25/100,000 population with a slight downward trend in recent years to 19.5 in 2013 (last data year). Gadsden County's peak is 21.8/100,000 in 2013 (most recent data year) and Jefferson County's peak was 20.7 in 2008 with a rapid decline to 8.1 in 2011 but began trending

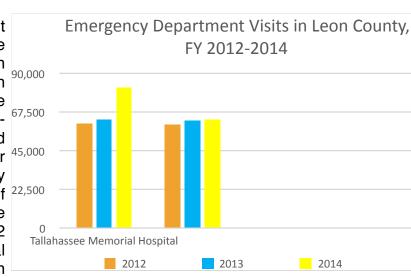


back upward the following year. State of Florida rates have remained fairly constant around 15/100,000 population.

## ACCESS TO HEALTH CARE SERVICES

## **Emergency Department Visits**

Local hospital emergency department utilization can be a good indicator of the accessibility and availability of area health care services. Recent increases in emergency department visits can indicate the number of people seeking care for non-urgent concerns, the amount of uninsured in the area and the health conditions or concerns in the area. Emergency departments in Leon County had a total of 146,009 visitors in 2014. Tallahassee Memorial Hospital had a total of 82,332 visitors while Capital Regional Medical Center saw a total of 63,677 visitors in 2014.

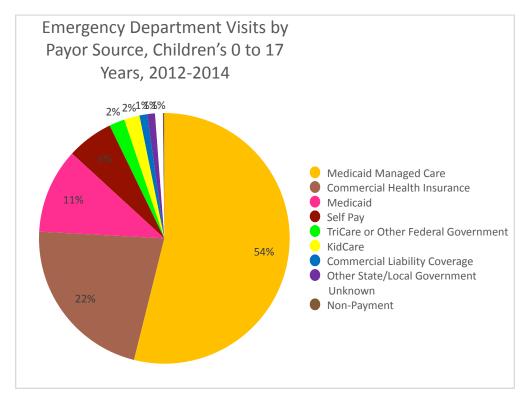


Source: Florida Injury Surveillance Data System

The majority of adult emergency department visits in in 2014 were funded by commercial health insurance (30.7 percent). The majority of emergency department visits by payer source children from 0 to 17 years of age was through Medicaid Managed Care (54.6 percent) and Commercial Health Insurance (22.6 percent).

Emergency department visits indicate the amount of people utilizing emergency facilities for non-emergency services. The increases in emergency department visits at TMH and CRMC indicate the availability of care for uninsured and publicly insured patients. Disparities in health services and access to primary care physicians can be obtained by measuring the amount of individuals using emergency rooms to treat illnesses that could be prevented with proper medical interventions.

#### **Emergency Department Visits**



Emergency department visits have increased throughout the years. In 2012, there were 60,893 emergency room visits at Tallahassee Memorial Hospital. By, 2014, those emergency room visits had increased to 82,332. Similarly, Capital Regional Medical Center

saw an increase in their emergency department visits from 60,396 in 2012 to 63,677 in 2014. These emergency department visits totaled \$178,950,359 in 2012 with an average charge of \$2,963. In 2014, Capital Regional Medical Center saw an increase in total charges to \$239,110,552.

Source: Florida Injury Surveillance Data System

The figure above indicates the amount of individuals that utilize services in Emergency Rooms in Florida. Children that have Medicaid Managed Care utilize emergency rooms at a rate of 54% compared to 22% of children that use Emergency Rooms that have commercial health insurance. These disparities indicate that children that have Medicaid Managed Care use emergency rooms at a greater number and there should be more preventative efforts made to reduce the amount of low income children that use the emergency department as their primary treatment.

Emergency departments in Leon County had a total of 146,009 visitors in 2014. Tallahassee Memorial Hospital had a total of 82,332 visitors while Capital Regional Medical Center saw a total of 63,677 visitors in 2014. Tallahassee Memorial Hospital saw a total of 63,188 visitors and Capital Regional Medical Center had 62,411 in 2013. In 2012, Tallahassee Memorial Hospital saw a total of 60,893 visitors whereas Capital Regional Medical Center saw a total of 60,396 visitors.

# Ratio of Primary Care Physicians, Dentists and Mental Health Providers

Primary care physicians are important to our health and well-being because areas with high concentrations of primary care physicians offer higher quality healthcare at a lower cost. Primary care physicians are important because they provide primary care for common illnesses, checkup and other non-emergency services. Dentists keep our mouths in top shape and good oral health prevents certain diseases from occurring. Mental Health is important to our health and well-being because good mental health is associated with better job performance, it helps maintain our physical health and it reduces medical visits when treatment is provided.

There are 510:1 mental health providers to clients in Leon County compared to a 690:1 ratio for the state of Florida in 2016. The ratio of primary care physicians in Leon County in 2016 was 1,240:1 compared to 1,390:1 for the state of Florida. Leon County was ranked number 6 of the 67 counties in the state of Florida. The amount of patients to primary care physicians in Leon County in 2011 was 980:1. In 2011, the ratio of primary care physicians to patients in Florida was 1,227:1. The ratio of dentists in Leon County was 2,430:1 in 2016 compared to a ratio of 1,820:1 for the state of Florida. In 2015, the ratio of patients to primary care physicians was 1,290 to 1 in Leon County. In 2015, the ratio of patients to dentists was 2,710 to 1 in Leon County. There were 540 patients to 1 mental health provider in Leon County.

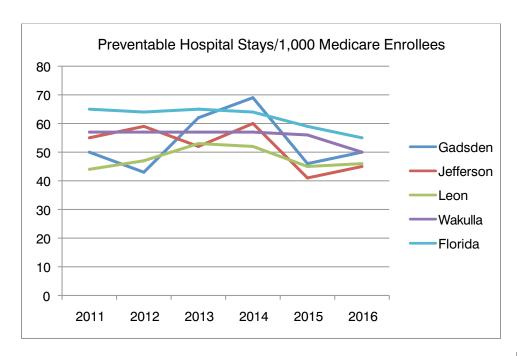
The ratio of patients to primary care physicians increased from 2011 to 2016. In 2016, the ratio was 1,240:1 compared to a ratio of 980:1 in Leon County. This illustrates the need for primary care physicians and an increase in population. The ratio of the population to mental health providers in Leon County decreased from 2014 to 2016. In 2016, the ratio of the population to mental health providers was 510:1. In 2014, the population to mental health provider ratio was 632:1, slightly higher than 2016.

The amount of primary care physicians has not increased as rapidly as the amount of other specialties. However, the amount physicians has outpaced population growth for over the past 40 years. The ratio of healthcare providers to the population illustrates the proportion of providers to the population and if there is a lack of access to services because the there are not enough health care providers to serve the population.

Wakulla, Gadsden and Jefferson Counties all have significantly higher ratios of population to care providers for primary care, dental and mental health providers. State of Florida ratios in 2016 are 1390:1, 1820:1 and 690:1 respectively for Primary Care, Dental and Mental Health. Gadsden's respective rates are 5770:1 for Primary Care, 5790:1 for Dental and 890:1 for Mental Health. Jefferson's rates are 4730:1 Primary Care, 4680:1 Dental and 14050:1 Mental Health. While Wakulla shows 3450:1 for Primary Care, 7860:1 for Dental and 1960:1 for Mental Health providers. Because

these are rural counties within 30-60 minutes drive of Tallahassee, many residents work and receive healthcare in Tallahassee, Leon County.

#### **Preventable Hospital Stays**



The amount of preventable hospital stays can indicate how unhealthy an area is because the unhealthiest areas tend to have the highest amount preventable hospital stays. In contrast, healthier areas have a larger number of primary care physicians. These rates are often used to assess

the quality and access to primary healthcare.

Source: 2016 County Health Rankings

By monitoring preventable hospital stays, the overuse of hospitals can be measured. The accessibility and effectiveness of primary healthcare can be monitored using this measure as well as the quality of outpatient care in the area.

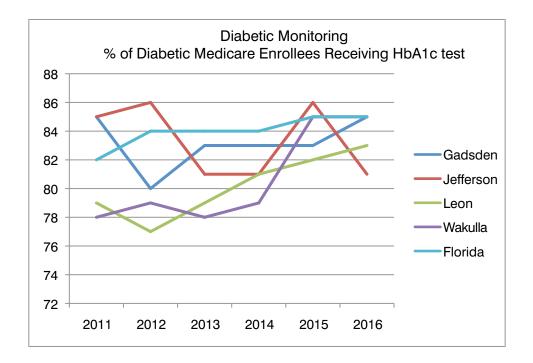
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Wakulla County ranks 36<sup>th</sup> in Florida in regards to clinical care while Gadsden and Jefferson counties are 40<sup>th</sup> and 43<sup>rd</sup>, respectively. All three counties have fewer preventable hospital stays per 1,000 Medicare enrollees than Florida and the US. In 2016, Gadsden and Wakulla rates were 50 and Jefferson's rate was 45. All three counties' preventable hospital stays have been trending downward since 2011.

Individuals lacking health care insurance tend to use the hospital for preventable issues that could have been treated by a primary care physician. Primary and preventative care can reduce the need for preventable hospital stays. The amount of preventable hospital stays for adults has decreased steadily since 2005 and this may be explained by the tighter scrutiny placed on hospitals due to a high number of readmissions.

#### **Diabetic Monitoring**

Diabetic monitoring is important to our health and well-being in order to prevent diabetes and related health complications from occurring. Diabetes can remain undiagnosed until severe symptoms appear and hospitalization is required. It is important for individuals to be tested for diabetes if they are overweight, have high cholesterol, and high blood pressure among additional risk factors. The percentage of diabetic fee-for-service patients ages 65-75 receiving Medicare whose blood sugar control has been monitored within the past year is known as diabetic monitoring. Diabetic monitoring is the percentage of Medicare enrollees ages 65-75 who are diabetic and receive HbA1c monitoring.



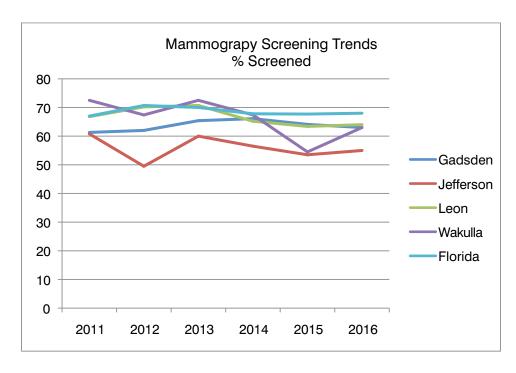
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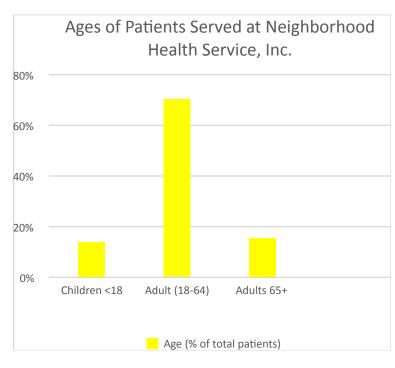
recommended age of over 50.

The above figure represents the percentage of female Medicare enrollees ages 67-69 using Mammography screening tests. In 2011, 66.8% of women in Leon County received mammography screening whereas 67% of women utilized this service in Florida. In 2012, these numbers increased to 70.2% and 70.7% respectively. In 2013, the percentage of women who received a mammography screening in Leon County was 70.7% and 70.0% in Florida. These numbers indicate a slight increase in women receiving mammography screening. In 2014, the amount of screenings in Leon County decreased to 65.2% and screenings in Florida decreased to 67.8%. In 2015, there was a slight decrease in mammography screenings in Leon County to 63.4%. Mammography screening in Florida decreased slightly to 67.7% in 2015. In 2016, 68% of women have utilized mammography screening services in Florida in comparison to 64% in Leon County, a slight increase from 2015.

In 2016, mammography rates are below the State of Florida average of 68% with Gadsden at 63%, Jefferson at 55% and Wakulla at 63%. All three counties have shown a decline in mammography rates since 2013 while state averages have gone up slightly.

Women who lack health insurance have the lowest utilization of mammography screening services. In the US, breast cancer is the most commonly diagnosed cancer among women. Breast cancer is more common in African-American women than in white women. In 2016, it is estimated that about 246,000 new cases of invasive breast cancer will be diagnosed in women in the United States.

#### **Individuals Served by Federally Qualified Health Centers**



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The Neighborhood Health Services of Tallahassee also serves those in need by providing services such as physical exams, treatment of sexually transmitted diseases, urgent care, chronic disease management for diabetics and hypertension, blood pressure checks, and adult immunizations. In 2014, the total number of patients served at Neighborhood Health Service, Inc. was 7,053. Source: US Department of Health and Human Services

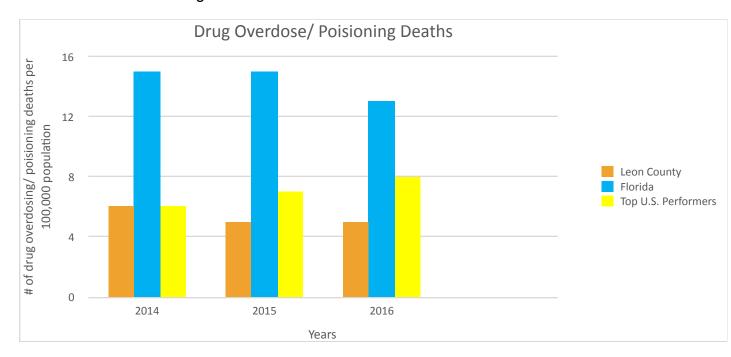
Wakulla County has one FQHC, Wakulla Medical Center. Gadsden County has two FQHCs: Cecil V. Butler Center and Jessie Furlow Medical Center. Jefferson County doesn't currently have an FQHC.

# BEHAVIORAL HEALTH SERVICES

#### **Substance Abuse**

Alcohol and substance abuse can negatively impact our personal lives and the community in a variety of ways. Unintentional injuries to include automobile accidents and liver disease are two of the most frequent consequences. Substance abuse can have a dramatic impact on families as well as the community.

Substance abuse can contribute to public health problems such as crime, domestic violence, homicide and physical fights. The figure above illustrates the amount of drug poisoning/ overdosing trends. Leon County has ranked below state and national trends since 2014. The amount of drug overdoses and drug poisonings in our community indicate the amount of drugs that are assessable.



Source: County Health Rankings

## **Drug Poisoning Deaths**

The prevalence of drug poisoning deaths for 2016 in Wakulla County are reported as a modeled number due to small population size or lack of reliable data. The 2016 modeled figure is 12-14 per 100,000 which is comparable to the state rank of 13.2. Drug poisoning deaths have trended upward in Wakulla County since 2014, with 11/100,000 and 10/100,000 in 2015; however, still remaining below the state trends.

The prevalence of drug poisoning deaths for 2016 in Gadsden County are reported as a modeled number due to small population size or lack of reliable data. The 2016 modeled figure is 6.1-8 per 100,000 which is well—under the state rank of 13.2. Drug poisoning deaths have also trended upward in Gadsden County since 2014, with 5/100,000 and 4/100,000 in 2015; however, still remaining well below the state trends.

The prevalence of drug poisoning deaths for 2016 in Jefferson County are reported as a modeled number due to small population size or lack of reliable data. The 2016 modeled figure is 10.1-12 per 100,000 which is comparable to the state rank of 13.2. There is no data for Jefferson County for drug poisoning deaths for 2014 or 2015.

#### **Excessive Binge Drinking**

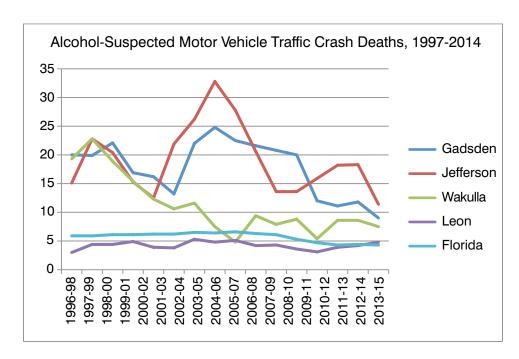
In 2016, 22% of adults in Leon County have reported excessive or binge drinking compared to 17% of adults in Florida. In 2011, the percentages were 21 and 16 respectively. From 2012 - 2015, 19% of adults reported excessive drinking in Leon County and 16% reported excessive drinking in Florida. In 2016, Leon County was ranked 2<sup>nd</sup> in Florida for excessive drinking prevalence with 22.1%. Leon County is currently ranked as the 24<sup>th</sup> county in Florida based on health factors.

In 2016, 23% of Wakulla County adults reported excessive drinking trending above the state average of 17%. This represents the highest rate in our 4 county PSA. Data should not be compared with prior years due to changes in definition/methods so trending not possible. The rate remained fairly constant from 2011 to 2015 ranging between 20-22% while state level was 16%.

In 2016, 16% of Gadsden County adults reported excessive drinking trending a bit below the state average of 17%. Data should not be compared with prior years due to changes in definition/methods so trending not possible. The range bounced between 11-14% from 2011 to 2015 while state level was 16%.

In 2016, 18% of Jefferson County adults reported excessive drinking trending a bit above the state average of 17%. Again, data should not be compared with prior years due to changes in definition/methods so trending not possible. The range remained fairly constant from 2011 to 2015 ranging between 8-10% well below the state level of 16%.

## **Alcohol Impaired Driving Deaths**



Source: County Health Rankings

The figure above illustrates the percentage of alcohol impaired driving deaths in Leon County 2014-2016. Since 2014, over 30% of driving deaths have been alcohol related since 2014. This is above the state average and top U.S. performers which illustrates that improvements are necessary. In 2016, Alcohol-impaired driving deaths accounted for 33 percent of driving deaths in Leon County and 29 percent in Florida. In 2015, alcohol accounted for 30 percent of driving deaths in Leon County and 29 percent in Florida. In 2014, 31 percent of driving deaths were alcohol impaired in Leon County whereas driving deaths in Florida were 29 percent. Leon County is ranked number 18 in health behaviors out of Florida's 67 counties. The percentage of alcohol-impaired driving deaths in Leon County have varied only slightly since 2005.

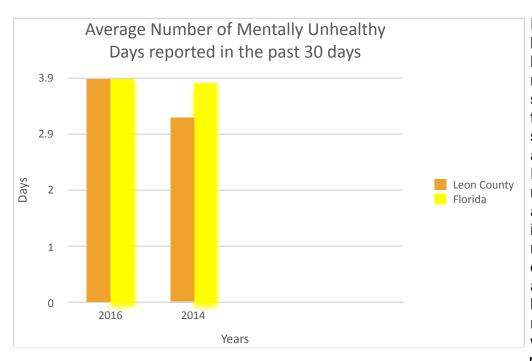
Since 2014, alcohol impaired driving deaths in Wakulla County have been well above the state average of 29% and US Top Performer rate of 14%. Rates have continued to trend upward with from 47% to the current, 52%.

In Gadsden County, alcohol impaired driving deaths are also well above the state average in 2016 with 35% of deaths; however, there has been a significant improvement since 2014. Rates dropped from 50% in 2014 to 43% in 2015 and then to 35% in 2016.

Jefferson County alcohol impaired deaths have been consistently below the state average of 29%. Ranging from 26 to 28% from 2014-2016.

## Mental Health

# **Poor Mental Health Days**



Poor mental health can lead to health risk behaviors such a s tobacco and substance abuse. Positive mental health allows individuals to make good life decisions, be a part healthy relationships. 0 productively

and be able to cope with the stresses of life among other attributes. Poor mental health can have an effect on your body's immune system, weakening it, making your body more susceptible to infections during when experiencing poor mental health.

In 2016, the average number of poor mental health days reported in Leon County was 3.9. The percentage was the same for the state of Florida. Leon County is ranked 46 out of 67 counties in the state of Florida in regards to quality of life measures.

From 2014 - 2015, the number of poor mental health days reported was 3.2 whereas the state average was 3.8. In 2013, the average number of poor mental health days in Leon County was 3.2 whereas the average in Florida was 3.7. In 2012, there were an average of 3.3 poor mental health days in Leon County and there were an average of 3.6 poor mental health days in Florida. In 2011, the average number of poor mental health days reported in Leon County was 3 and Florida averaged 3.5. Leon County is currently ranked number 46 of the 67 Florida Counties in regards to quality of life measures. In 2013, the amount of adults who were told that they had depressive disorder was 17.7% in Leon County compared to 16.8% in Florida.

The Apalachee Center currently offers inpatient, outpatient and residential treatment services through ten locations that serve Leon County and the Big Bend region. The amount of mentally unhealthy days in Leon County have increased slightly from 2014 to 2016 which indicates the amount of people requiring mental health services in our community. Organizations such as the Apalachee Center strive to create awareness regarding mental health issues and serve the approximately 17,000 people in the Big Bend area with severe and persistent mental illnesses.

In 2016 poor mental health days in Wakulla County adults is 3.6 days which is below the state figure of 3.9 days. Data should not be compared with prior years due to changes in definition/methods. Prior years remained fairly consistent ranging from 4.2 to 4.4 days while the state numbers in these years went from 3.5 days to 3.8 days, increasing 1/10 each year.

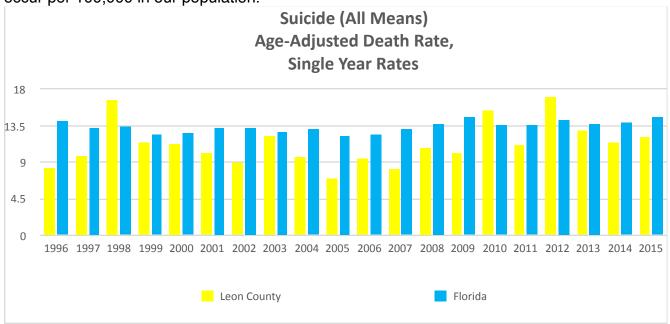
Gadsden County is experiencing 4.5 poor mental health days in 2016 while state average is 3.9 days. Data should not be compared with prior years due to changes in definition/methods. Prior years trended slightly upward starting at 2.8 in 2011 and bouncing between 3.1 and 3.4 from 2012 to 2015. The state range gradually went from 3.5 to 3.8 in those years.

In 2016 Jefferson County adults report 4.0 poor mental health days well above the state figure of 3.9 days. Data should not be compared with prior years due to changes in definition/methods. Prior years trended upwards over 1.5 days from 2011 to 2015 while state average only trended upwards by 0.3 days in the same timeframe.

#### **Suicide**

The most vulnerable populations are the young, elderly and socially isolated individuals. Suicidal risk factors include physical illness, alcohol and drug abuse, mental illness, and emotional distress among other risk factors. It is also important to consider the cultural and socio-economic factors that play a role in suicides. A suicide attempt is a sign that something is wrong in a person's life so an intervention is needed. Current trends in suicide have varied throughout the years. On average, suicide rates in Leon County are lower than those in Florida. The figure below illustrates the amount of suicides that

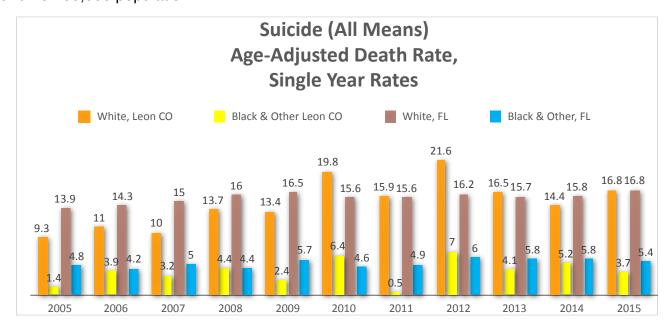
occur per 100,000 in our population.



Data Source: Florida Department of Health, Bureau of Vital Statistics

Suicide has increased every year from 1999-2014 for both men and women. Whites are four times more likely to commit suicide in comparison to blacks. The table above indicates the local and state suicide trends for whites, blacks and others. Current suicide rates indicate the need for population based prevention methods and increased awareness.

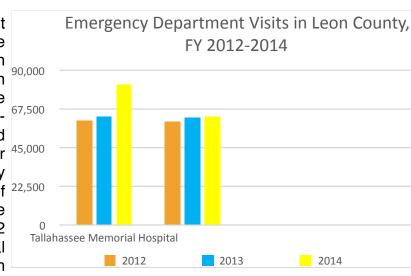
Wakulla, Gadsden and Jefferson Counties White rates have been quite variable trending up and down over the years. Wakulla County's peak was 25/100,000 population with a slight downward trend in recent years to 19.5 in 2013 (last data year). Gadsden County's peak is 21.8/100,000 in 2013 (most recent data year) and Jefferson County's peak was 20.7 in 2008 with a rapid decline to 8.1 in 2011 but began trending back upward the following year. State of Florida rates have remained fairly constant around 15/100,000 population.



## ACCESS TO HEALTH CARE SERVICES

## **Emergency Department Visits**

Local hospital emergency department utilization can be a good indicator of the accessibility and availability of area health care services. Recent increases in emergency department visits can indicate the number of people seeking care for non-urgent concerns, the amount of uninsured in the area and the health conditions or concerns in the area. Emergency departments in Leon County had a total of 146,009 visitors in 2014. Tallahassee Memorial Hospital had a total of 82,332 visitors while Capital Regional Medical Center saw a total of 63,677 visitors in 2014.

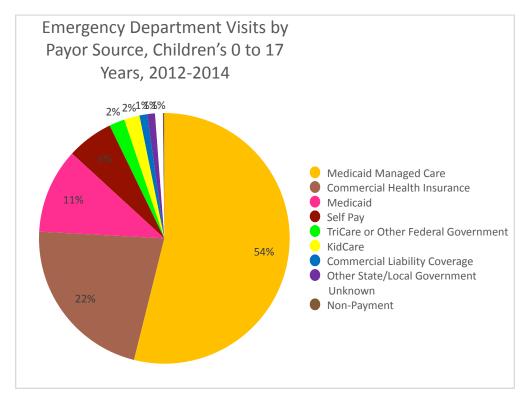


Source: Florida Injury Surveillance Data System

The majority of adult emergency department visits in in 2014 were funded by commercial health insurance (30.7 percent). The majority of emergency department visits by payer source children from 0 to 17 years of age was through Medicaid Managed Care (54.6 percent) and Commercial Health Insurance (22.6 percent).

Emergency department visits indicate the amount of people utilizing emergency facilities for non-emergency services. The increases in emergency department visits at TMH and CRMC indicate the availability of care for uninsured and publicly insured patients. Disparities in health services and access to primary care physicians can be obtained by measuring the amount of individuals using emergency rooms to treat illnesses that could be prevented with proper medical interventions.

#### **Emergency Department Visits**



Emergency department visits have increased throughout the years. In 2012, there were 60,893 emergency room visits at Tallahassee Memorial Hospital. By, 2014, those emergency room visits had increased to 82,332. Similarly, Capital Regional Medical Center

saw an increase in their emergency department visits from 60,396 in 2012 to 63,677 in 2014. These emergency department visits totaled \$178,950,359 in 2012 with an average charge of \$2,963. In 2014, Capital Regional Medical Center saw an increase in total charges to \$239,110,552.

Source: Florida Injury Surveillance Data System

The figure above indicates the amount of individuals that utilize services in Emergency Rooms in Florida. Children that have Medicaid Managed Care utilize emergency rooms at a rate of 54% compared to 22% of children that use Emergency Rooms that have commercial health insurance. These disparities indicate that children that have Medicaid Managed Care use emergency rooms at a greater number and there should be more preventative efforts made to reduce the amount of low income children that use the emergency department as their primary treatment.

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# Ratio of Primary Care Physicians, Dentists and Mental Health Providers

Primary care physicians are important to our health and well-being because areas with high concentrations of primary care physicians offer higher quality healthcare at a lower cost. Primary care physicians are important because they provide primary care for common illnesses, checkup and other non-emergency services. Dentists keep our mouths in top shape and good oral health prevents certain diseases from occurring. Mental Health is important to our health and well-being because good mental health is associated with better job performance, it helps maintain our physical health and it reduces medical visits when treatment is provided.

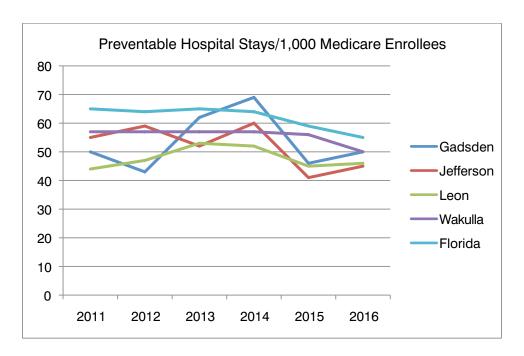
There are 510:1 mental health providers to clients in Leon County compared to a 690:1 ratio for the state of Florida in 2016. The ratio of primary care physicians in Leon County in 2016 was 1,240:1 compared to 1,390:1 for the state of Florida. Leon County was ranked number 6 of the 67 counties in the state of Florida. The amount of patients to primary care physicians in Leon County in 2011 was 980:1. In 2011, the ratio of primary care physicians to patients in Florida was 1,227:1. The ratio of dentists in Leon County was 2,430:1 in 2016 compared to a ratio of 1,820:1 for the state of Florida. In 2015, the ratio of patients to primary care physicians was 1,290 to 1 in Leon County. In 2015, the ratio of patients to dentists was 2,710 to 1 in Leon County. There were 540 patients to 1 mental health provider in Leon County.

The ratio of patients to primary care physicians increased from 2011 to 2016. In 2016, the ratio was 1,240:1 compared to a ratio of 980:1 in Leon County. This illustrates the need for primary care physicians and an increase in population. The ratio of the population to mental health providers in Leon County decreased from 2014 to 2016. In 2016, the ratio of the population to mental health providers was 510:1. In 2014, the population to mental health provider ratio was 632:1, slightly higher than 2016.

The amount of primary care physicians has not increased as rapidly as the amount of other specialties. However, the amount physicians has outpaced population growth for over the past 40 years. The ratio of healthcare providers to the population illustrates the proportion of providers to the population and if there is a lack of access to services because the there are not enough health care providers to serve the population.

Wakulla, Gadsden and Jefferson Counties all have significantly higher ratios of population to care providers for primary care, dental and mental health providers. State of Florida ratios in 2016 are 1390:1, 1820:1 and 690:1 respectively for Primary Care, Dental and Mental Health. Gadsden's respective rates are 5770:1 for Primary Care, 5790:1 for Dental and 890:1 for Mental Health. Jefferson's rates are 4730:1 Primary Care, 4680:1 Dental and 14050:1 Mental Health. While Wakulla shows 3450:1 for Primary Care, 7860:1 for Dental and 1960:1 for Mental Health providers. Because

these are rural counties within 30-60 minutes drive of Tallahassee, many residents work and receive healthcare in Tallahassee, Leon County.



#### **Preventable Hospital Stays**

The amount of preventable hospital stays can indicate how unhealthy an area is because the unhealthiest areas tend to have the highest amount of preventable hospital stays. In contrast, healthier areas have a larger number of primary care physicians. These rates are often used to assess the quality and access to primary healthcare. Source: 2016 County Health Rankings

By monitoring preventable hospital stays, the overuse of hospitals can be measured. The accessibility and effectiveness of primary healthcare can be monitored using this measure as well as the quality of outpatient care in the area.

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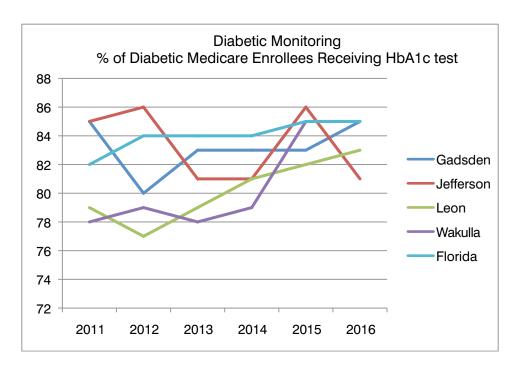
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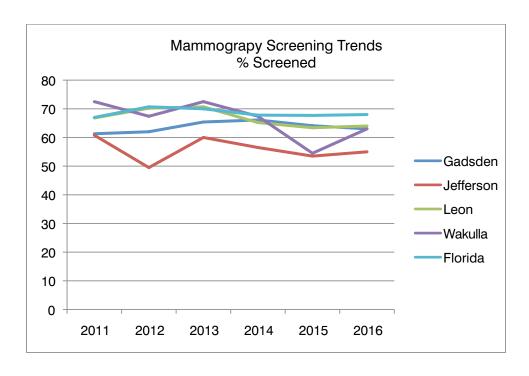


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## **Mammography Screening**

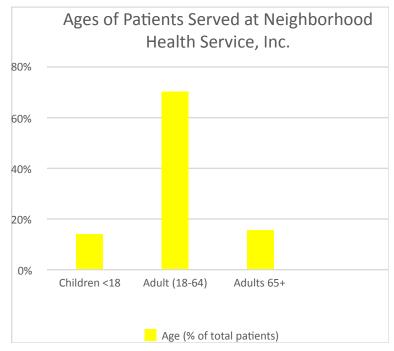
Mammography screening is currently the most reliable detection method in preventing breast cancer in its early stages. Mammography screening has the ability to detect a majority of tumors prior to them being felt. Women with a family history of breast cancer should seek a mammogram earlier than the recommended age of over 50.

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In 2014, Federally Qualified Health Centers served 1,197,948 patients. This illustrates an increase of 15% of patients since 2010. 35% of the patients are served in rural areas. The majority of the patients were homeless patients (76,828). In 2014, there were 58,524 migrants/farmworkers served by federally qualified health centers in Florida. The primary goal of FQHC's is to eliminate health disparities by serving underserved communities.

Leon County currently has 8 FQHCs. The Bond Community Health Center operates 4 of these centers. The Bond Community Health Center is an FQHC and is also accredited by the Accreditation Association for Ambulatory Healthcare (AAAHC) and is deemed a medical home. The majority of health center patients are low income while most live below the poverty level. Bond Community Health Center has been a FQHC for over 30 years. Bond Community Health Center provides services such as adult primary care, dentistry, HIV/AIDS, OB/GYN, pediatric child care, pharmacy, social services, transportation and outreach. In 2015, Bond cared for 8,000 patients and generated 27,000 visits.

The Neighborhood Health Services of Tallahassee also serves those in need by providing services such as physical exams, treatment of sexually transmitted diseases, urgent care, chronic disease management for diabetics and hypertension, blood pressure checks, and adult immunizations. In 2014, the total number of patients served at Neighborhood Health Service, Inc. was 7,053. Source: US Department of Health and Human Services

Wakulla County has one FQHC, Wakulla Medical Center. Gadsden County has two FQHCs: Cecil V. Butler Center and Jessie Furlow Medical Center. Jefferson County doesn't currently have an FQHC.