2019 Community Health Needs Assessment

AdventHealth
Waterman

This report was prepared by Renee Furnas, community outreach strategist, with contributions from Central Florida Division South Region's Community Impact team. Special thanks to Strategy Solutions, Inc. for their support and contribution in the process. Questions or comments can be directed to Renee.Furnas@AdventHealth.com

2019 Community Health Needs Assessment | AdventHealth Waterman

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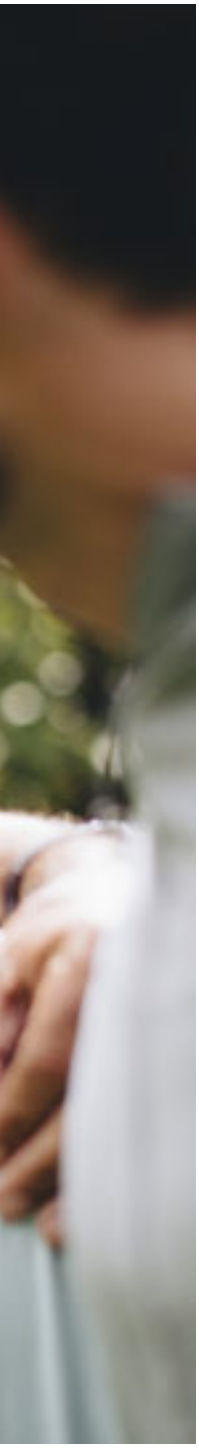
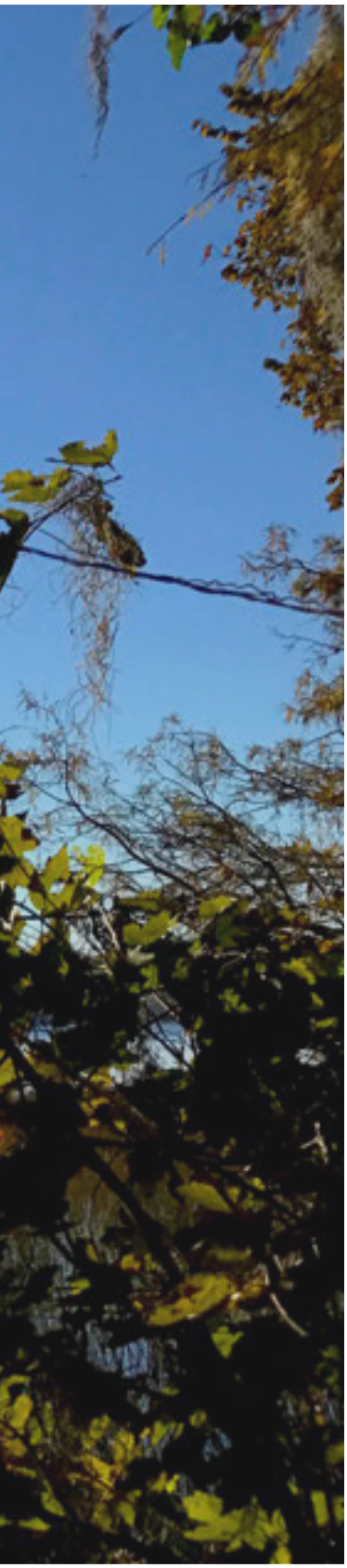




CHAPTER ONE

Introduction

Hickory Point Recreation Park
Tavares, FL

Lake County

MESSAGE FROM THE LEADER

AdventHealth Central Florida Division

80,000 Minds

One Purpose

No matter what brings you in, no matter which of our providers, facilities or medical services you need, we're all connected by more than just our name.

We're connected by our commitment to your whole-person health.

At AdventHealth, we have a sacred mission of Extending the Healing Ministry of Christ. That mission extends far beyond our walls and into the communities we serve. Our commitment is to address the needs of our community with a wholistic focus. That wellness isn't just about the physical, but also includes mental, spiritual, environmental and social health. We want to help our neighbors get well and stay well.

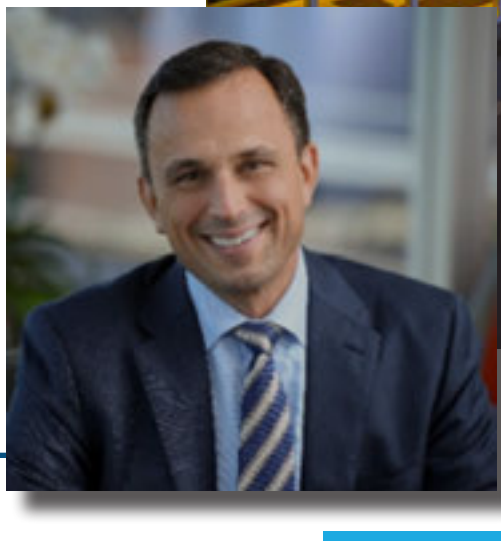
As a not-for-profit health care system, we are proud to support and partner with other organizations that share our vision of a healthier, more whole Central Florida.

We have once again worked with Orlando Health, Aspire Health Partners and the Departments of Health to produce this Community Health Needs Assessment (CHNA). Our partnership has expanded to include the local Federally Qualified Health Centers (FQHCs), which will further help us identify where we can have the most impact on the health of Central Florida.

We're committed to helping address Central Florida's greatest health challenges. From expanding mental health services to fighting food insecurity to reducing chronic diseases, we're working to bring change and empower our neighbors to live their healthiest lives.

Daryl Tol

President & CEO
AdventHealth Central Florida Division



AdventHealth

AdventHealth - Central Florida Division Executive Building

Introduction To The Community Health Needs Assessment

Thank you for being part of our community.

AdventHealth Waterman is proud to present our 2019 Community Health Needs Assessment (CHNA). AdventHealth Waterman is part of the AdventHealth Central Florida Division North Region. This report summarizes a comprehensive review and analysis of public health, socioeconomic and other demographic data from our immediate service area within Lake County, Florida. It also includes input gathered directly from local residents and stakeholders. All data was reviewed and analyzed to determine the top health issues facing our immediate and surrounding communities.

To conduct this CHNA, AdventHealth Waterman participated in the Central Florida Community Collaborative (the Collaborative), which included: AdventHealth, Aspire Health Partners, Orlando Health, the Departments of Health in Lake, Orange, Osceola and Seminole counties, Community Health Centers, Inc., Orange Blossom Family Health, Osceola Community Health Services and True Health.

This CHNA will assist our hospital, community organizations and social service agencies to identify community health needs and develop strategic interventions to improve the health of the communities we serve.

We offer special thanks to the many community-based organizations and almost 900 citizens and stakeholders that participated in this assessment. We appreciate their time and valuable input throughout the CHNA process.

Thank You!

CHAPTER TWO

Executive Summary

Lake Louisa State Park
Clermont, FL

Lake County

Formerly known as Florida Hospital Waterman, Adventist Health System/Sunbelt, Inc. dba AdventHealth Waterman will be referred to in this document as AdventHealth Waterman or "the Hospital." AdventHealth Waterman conducted a Community Health Needs Assessment in 2019. The goals of the assessment were to:

- Engage with the community, targeting underrepresented populations, to understand their unique needs
- Connect with public health representatives and community stakeholders serving low-income, minority and other underrepresented populations
- Assess and understand the community's health issues and needs
- Understand the health behaviors, risk factors and social determinants that impact health
- Identify community resources and collaborate with community partners
- Publish the Community Health Needs Assessment
- Use assessment findings to develop and implement a 2020-2022 Community Health Plan based on AdventHealth Waterman prioritized issues

Data Sources

To support this assessment, numerous qualitative and quantitative data sources were used to validate findings using the data triangulation method. The data triangulation method looks at primary data (collected through community input) and two types of relevant local secondary data (hospital utilization records/patient data; or county/region-specific/state data) looking for common themes and trends across all three sources. The data sources used in this method are outlined in Figure 2.1.

FIGURE 2.1: DATA TRIANGULATION

Source: Strategy Solutions, Inc.

To support the CHNA in Lake County, the Collaborative collected a total of 656 community surveys, 75 key informant surveys, conducted 16 stakeholder interviews, seven focus groups with 122 participants and 26 intercept surveys.

To assist the Collaborative in facilitating this CHNA, Strategy Solutions, Inc. (SSI) was contracted to provide support for the data collection and identification of priorities. SSI is a planning and research firm with the mission to create healthy communities. National best practices were used for the framework of the CHNA

including: the Association for Community Health Improvement (ACHI, a division of the American Hospital Association), the Mobilizing for Action Through Planning and Partnership (MAPP) developed by the National Association for City and County Health Officials (NACCHO), Healthy People 2020 (HP2020) and the Robert Wood Johnson Foundation's County Health Rankings and Roadmaps. Data were compiled from the most up-to-date resources. This was augmented with primary research conducted with community residents, providers and stakeholders. Hospital utilization/patient data for the uninsured patient population was also utilized in this CHNA.

Zip code level demographic and socio-economic data for the service area was collected from the U.S. Census Bureau (obtained through Environics Analytics and IBM Market Expert), the American Community Survey and the Bureau of Labor Statistics.

Key Findings

After reviewing the primary and secondary data in this CHNA, the following key findings were identified for Lake County and its residents. The goal of the key findings is to deliver a comprehensive overview of the data, which highlights the strengths and areas of improvement for the community. The key findings are broken down by themes seen in primary data collection, as well as by strengths and weaknesses identified through secondary data.

COMMUNITY THEMES AS IDENTIFIED BY PRIMARY DATA

The themes were compiled using data from the community surveys, stakeholder interviews, focus groups, key informant surveys and intercept surveys conducted for this CHNA as areas of need or community issues:

- Need for and access to mental health services
  - Address stigma
- Prevalence of opioids/substance use
- Access to affordable health care
  - Poor access to pharmacies and cost of medications
  - Inappropriate use of emergency department
  - Better transportation
  - Lack of dental care
  - Lack of adequate geriatric services
  - Insurance affordability issues: uninsured/underinsured
- Food insecurity including access to quality/nutritious foods
- Economic conditions
  - Prevalence of stress
  - Lack of family support
  - Need for affordable housing
  - Residents receive low wages
  - Employment opportunities/lack of jobs
- Chronic conditions
  - Overweight
  - Diabetes
  - Obesity
  - Heart disease and hypertension
  - Kidney disease
  - Asthma
  - Cancer
- Built Environment
  - Poor water quality and supply
  - Need for better transportation
- Inactivity
  - Need more and better bike-and pedestrian-friendly infrastructure
- Injury
  - Injury prevention for children and older adults
  - Older adult safety and mobility

COMMUNITY STRENGTHS

The community strengths assessment includes data points that improved by 10 percent or more since the 2016 CHNA or from 2013 to 2015 if the data was not included in the last CHNA:

- Economic conditions
  - Persons living below poverty level decreased
  - Unemployment rate decreased
- Student and school characteristics
  - Youth arrests, all offenses for ages 10-17 decreased
- Communicable diseases
  - Influenza vaccination for adults ages 65 and older increased
- Chronic conditions
  - Adults diagnosed with diabetes decreased
  - Preventable hospitalizations under age 65 from congestive heart failure decrease
  - Colorectal cancer incidence decreased
  - Lung cancer incidence decreased
  - Adults who currently have asthma decreased
  - Asthma hospitalizations for ages 1-4 and 5-11 decreased
- Injury
  - Unintentional falls and drownings decreased
- Birth characteristics
  - Infant deaths decreased
  - Births to mothers with less than a high school education decreased
  - Repeat births to mothers ages 15-19 decreased
  - Low birthweight births less than 2500 decreased

COMMUNITY OPPORTUNITIES FOR IMPROVEMENT

Findings for opportunities for improvement include data points that have worsened by 10 percent or more since the 2016 CHNA or from 2013 to 2015 if the data was not included in the last CHNA:

- Economic conditions
  - Students receiving free and reduced lunch increased
- School and student characteristics
  - Student absenteeism increased
  - Communicable diseases
- New HIV cases reported increased
- Preventative care
  - Adults aged 50 and older who received a sigmoidoscopy or colonoscopy in past five years
  - decreased
  - Men aged 50 and older who received a PSA test in past two years
- Chronic conditions
  - Adults who are obese increased
  - Adults who have every been told they had a stroke increased
  - High school students with known asthma increased
  - Asthma hospitalizations for ages 12-18 increased
- Injury
  - Unintentional poisoning increased
- Birth characteristics
  - Births to uninsured mothers increased
- Quality of life/Mental health
  - Suicide rates for ages 12-18, 19-21 and 22 and older increased
- Behavioral risk factors
  - Adults who are current smokers increased
  - Adult current smokers who quit smoking at least once in the past year decreased
  - Heroin-related deaths increased
  - Fentanyl-related deaths increased
  - Drug arrests increased
  - Injuries related to behavioral risk factors
  - Firearms discharge increased
- Health care access
  - Adults with any type of health care insurance coverage by annual income of $25-$49K decreased
  - Adults who could not see doctor in the past year due to cost decreased

Community Health Needs Assessment Committees

In order to ensure broad community input throughout the CHNA process, representatives from AdventHealth Waterman participated in regional and local CHNACs as well as an internal Hospital Health Needs Assessment Committee (HHNAC) to help guide and inform the prioritization process. Participation in the regional CHNAC happened through our membership in the Central Florida Community Collaborative. The local CHNAC was comprised of representatives from AdventHealth Waterman and from local community organizations, as well as the Lake County Department of Health.

The regional CHNAC (the Collaborative): The Central Florida Community Collaborative Steering Committee, comprised of representation from all member organizations, served as the regional CHNAC for the four-county region. The Steering Committee met 22 times throughout 2018-2019, either in person or via bi-weekly conference calls and included representation from the hospital systems, public health experts and the broad community. This included intentional representation from organizations that serve underrepresented populations.

The local CHNAC: In order to ensure broad community input representatives from AdventHealth Waterman, Orlando Health South Lake Hospital, the Lake County Department of Health and other health experts participated in a prioritization exercise on April 3, 2019 to review the primary and secondary data, as well as the Collaborative's CHNAC priorities to help define the needs to be addressed for broader community, as well as low-income, minority and other underserved populations.

The Hospital Health Needs Assessment Committee (HHNAC): HHNAC representation was comprised of AdventHealth team members whose focus includes the outreach, strategy development and deployment of community initiatives targeting underrepresented populations. Team members from AdventHealth Waterman met internally to review aggregated data from the regional and local CHNACs, in order to finalize priorities for the Hospital.

Prioritization Criteria

Specific criteria were used to aid in the prioritization process to identify and select the top needs that would be addressed. Members of the CHNACs were asked to rank the criteria on a scale of one to ten for each of the needs that had been identified during the data reviews and discussions. OptionFinder, an anonymous audience response polling tool, was used to rate all of the criteria. The criteria used is outlined below:

1. Accountable organization: The extent to which this issue is important to address in this action planning effort either for the health system or the community.
2. Magnitude of the problem: The degree to which the problem leads to death, disability, or impaired quality of life and/or could be an epidemic based on the rate or percent of population that is impacted by the issue.
3. Impact on health outcomes: The extent to which the issue impacts health outcomes and/or is a driver of other conditions.
4. Capacity/resources: The extent to which systems and resources are in place or available to implement evidence-based solutions.

These criteria allowed an aggregated number to be generated for each identified need in order to develop a ranking to determine potential impact in addressing the needs.

Prioritization Process

On April 3, 2019, seven Lake County collaborators from AdventHealth Waterman, Orlando Health South Lake Hospital and the Lake County Department of Health met at South Lake Hospital in Clermont, Florida. The data was presented, discussed and ranked amongst this group of key stakeholders.

The meeting was designed to review the primary and secondary collected data and create a master list of identified needs for Lake County. A multi-voting methodology was implemented using the OptionFinder system led by Strategy Solutions, Inc. (SSI).

On November 13, 2019 the AdventHealth Waterman Hospital Health Needs Assessment Committee (HHNAC) met to review and select final priorities from the top 10 needs identified during the previous data aggregation exercise performed on April 3, 2019. A decision tree activity, along with open dialogue, was applied to the top 10 identified needs to select the needs which the Hospital would address. During the activity five areas below were considered:

1. How acute is the need? (Based on community concern.)
2. What is the trend? Is it getting worse?
3. Does the Hospital provide services that relate to the priority?
4. Is someone else—or multiple groups—in the community already working on the issue?
5. If the Hospital were to address this issue, are there opportunities to work with community partners?

This activity was implemented to clearly lay out the priorities so that all options could be challenged, allowing the group to fully analyze the possible value of the priorities and provide a framework to quantify them. This resulted in the following five targeted areas to be addressed:

- Access to Care: Cost of Care, Insurance, Medications for cancer
- Prevention: Screenings, Well Visits and Behavioral Risk Factors
- Diabetes: Type II
- Obesity: Adult and Children
- Cardiovascular Disease

A complete list of identified needs and their subsequent ranking for the Hospital are available in Chapter 10.

Community Asset Inventory

As part of the CHNA process a community asset inventory is identified or created. This inventory serves to understand existing community efforts and to avoid duplication of services. An inventory of community resources for Lake County was identified. The existing resource inventory was constructed by Be Free Lake working in conjunction with The Connection Helpline. This inventory was designed to help identify existing community resources available to residents of Lake County

The Hospital utilized this existing resource for their CHNA Community Asset Inventory. The information included in the inventory was compiled from publicly available resources in Lake County and is a comprehensive guide to Lake County social service providers and government agencies. The Lake County Resource Guide is at: http://lakecountycommunityresourceguide.com/

Approvals

On December 6, 2019 the AdventHealth Waterman Board of Directors approved the Community Health Needs Assessment findings, priorities and final report. A link to the 2019 Community Health Needs Assessment was posted on the Hospital's website prior to December 31, 2019.

Next Steps

The local CHNAC will work with AdventHealth Waterman to develop a measurable implementation strategy to address the priority issues. The 2020-2022 Community Health Plan will be completed and posted on the Hospital's website prior to May 15, 2020.

CHAPTER THREE

AdventHealth Waterman and the Surrounding Community

Lake Griffin State Park
Fruitland Park, FL

Lake County

TRANSITION TO ADVENTHEALTH

In January of 2019, every wholly-owned entity across our organization adopted the AdventHealth system brand. Our identity has been unified to represent the full continuum of care our system offers. Throughout this report, we will refer to our facility as AdventHealth Waterman. Any reference to our 2016 Community Health Needs Assessment in this document will utilize our new name for consistency.

AdventHealth is part of the larger AdventHealth system, with more than 80,000 skilled and compassionate caregivers nationwide. AdventHealth is a connected system of care for every stage of life and health with a sacred mission of Extending the Healing Ministry of Christ.

ABOUT ADVENTHEALTH WATERMAN

AdventHealth Waterman, a 287-bed acute-care community Hospital that serves Lake County, was founded in 1938 and became a part of the AdventHealth system, formerly known as Adventist Health System, in 1992.

AdventHealth Waterman Snapshot

Annual number of admissions	15,161
Annual number of outpatient visits	63,308
Annual number of emergency cases	66,456
Annual number of surgeries	6,102
Annual number of deliveries	607
Number of licensed beds	287
Number of critical care beds	40
Number of staff physicians*	2,587
Number of employees	1,818

*Total AdventHealth staff physicians in Florida

Hospital services include: 24-hour emergency department; advanced heart program, including an accredited chest pain center, open heart and thoracic surgery; comprehensive Cancer Institute; certified Joint Replacement Center; Community Primary Health Clinic; critical care services; demonstration kitchen with nutritional counseling; diabetes; most advanced imaging services (3D mammography, CT, MRI, ultrasound and nuclear medicine); digestive health care; fitness center; home care services; inpatient and outpatient rehabilitation services; laboratory services; sports medicine; surgical services, including minimally invasive and robotic assisted surgeries; urology; Women and Children's Center; wound and hyperbaric medicine; and spiritual care.

Defining the Community

In compliance with the IRS guidelines at the time of data collection for this assessment, AdventHealth Waterman defined its community as Lake County, the Hospital's primary service area. This is the geography from which 75-80 percent of its inpatient and outpatient patients reside.

The Collaborative's overall service area includes four counties in Central Florida: Lake, Orange, Osceola and Seminole. This document will refer to this combined service area as the four-county region. Figure 3.1 outlines the primary service area for this CHNA for the Hospital and the Central Florida Collaborative overall.

FIGURE 3.1: ADVENTHEALTH WATERMAN'S PRIMARY SERVICE AREA

Source: Central Florida Community Collaborative

Community Description and Demographics

In order to understand the community and the challenges faced, AdventHealth Waterman looked at both demographic information for the primary service area population, as well as available data on social determinants of health. According to the Centers for Disease Control and Prevention (CDC), social determinants of health include conditions in the places where people live, learn, work and play, which affect a wide range of health risks and outcomes.

Residents of AdventHealth Waterman's primary service area are described by the demographic data illustrated in Figure 3.2. It is important to note that race/ethnicity equals more than 100 percent because those that identify as Hispanic or Latino ethnicity may also identify with a race group, such as White or Black/African American. Occupations (white collar, blue collar, and service and farming) are assigned by the US Census Bureau based on the Standard Occupational Classification (SOC) system used in census reporting. White collar occupations are professional and technical in nature such as engineers, scientists, health diagnosing occupations, librarians, planners and lawyers. Blue collar occupations include precision production and repair occupations such as mechanics and repairers, construction trades, metalworking, woodworking and extractive, as well as testers and plant and system operators. Service and farming occupations cover protective services occupations including firefighting, police and corrections as well as food service occupations such as servers, cooks and bartenders. This occupation category also includes health care services occupations such as dental assistants and nurse aids, cleaning and building service occupations, as well as personal service occupations such as hairdressers, daycare workers and transportation attendants.

FIGURE 3.2: LAKE COUNTY DEMOGRAPHIC

GENDER

Male	Female
48.4%	51.6%

RACE/ ETHNICITY

White, Non-Hispanic	79.2%
Black/African American	10.5%
Asian	2.2%
Hispanic or Latino	15.9%
Other	7.6%

MARITAL STATUS

Total, Never Married	25.4%
Married	50.6%
Separated	4.4%
Widowed	8.1%
Divorced	11.5%

AGE

0-20	22.4%
21-34	14.5%
35-64	35.6%
65+	27.5%

HOUSEHOLD INCOME

Under $25,000	19.6%
$25,000 to Under $50,000	26.8%
$50,000 to Under $100,000	32.8%
$100,000 or More	20.8%
Average Household Income	$70,731

EDUCATION

High School or Less	44.3%
Some College/Associate Degree	33.3%
Bachelors Degree	13.8%
Advanced Degree	8.6%

EMPLOYMENT

White Collar	59.5%
Blue Collar	18.3%
Service and Farming	22.2%

POPULATION

2019 Lake County Population	356,209
2024 Lake County Population	384,958
Percent Change: 2019 to 2024	8.1%

*Race/Ethnicity percentages add up to more than 100 percent because Hispanic or Latino individuals can also be White, Black or some other race.

Source: Strategy Solutions, Inc.

Table 3.1 illustrates demographic information for Lake County from the U.S. Census Bureau (obtained through Environics Analytics). Additional demographic information not illustrated was also obtained through this source. Over the next 5-year period, Lake County is expected to grow by about 8.1 percent, from 356,209 in 2019 to 384,958 in 2024, which is above the state of Florida's expected growth rate (6.8 percent percent). The county has slightly more females (51.6 percent) than males (48.4 percent). The population is also predominantly White (79.2 percent) and has a sizable Hispanic population (15.9 percent), although the percentage is below that of the state of Florida (31.2 percent) and the nation overall (18.3 percent).

According to the U.S. Census Bureau (obtained through Environics Analytics), the median age in 2019 is 47.3, slightly higher than the state of Florida overall (42.5). The median age is expected to grow slightly older to 47.9 by 2023. The percentage of residents living in the county with an education beyond high school (55.7 percent) is slightly higher than the state of Florida (49.3 percent) and nation (39 percent). The average household income is $70,731 with 9.3 percent of the families having incomes below the federal poverty level and 46.4 percent of households having incomes under $50,000.

TABLE 3.1: LAKE COUNTY POVERTY AND UNEMPLOYMENT DEMOGRAPHICS

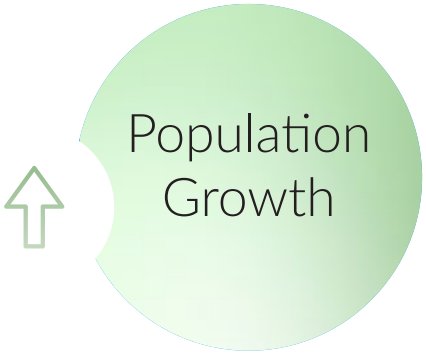
City	Zip Code	Poverty Range	Unemployment Rate	Poverty Percentage
Astor	32102	>20%	9.10%	23.30%
Altoona	32702	>20%	7.60%	20.30%
Eustis	32726	>20%	4.80%	21.60%
Paisley	32767	>20%	8.40%	24.50%
Umatilla	32784	15.01% - 20.00%	6.00%	19.80%
Astatula	34705	15.01% - 20.00%	3.40%	19.60%
Fruitland Park	34731	15.01% - 20.00%	4.00%	15.40%
Mascotte	34753	15.01% - 20.00%	7.40%	19.10%
Eustis	32736	10.01% - 15.00%	4.70%	14.20%
Mount Dora	32757	10.01% - 15.00%	3.60%	11.00%
Largo	32778	10.01% - 15.00%	5.00%	11.00%
Clermont	34711	10.01% - 15.00%	3.90%	10.70%
Clermont	34714	10.01% - 15.00%	4.50%	12.00%
Groveland	34736	10.01% - 15.00%	6.20%	14.60%
Leesburg	34748	10.01% - 15.00%	6.60%	13.10%
Okahumpka	34762	10.01% - 15.00%	7.30%	14.40%
Leesburg	34788	10.01% - 15.00%	4.50%	14.51%
Lady Lake	32159	5.01% - 10.00%	4.30%	8.80%
Grand Island	32735	5.01% - 10.00%	3.70%	9.00%
Mount Plymouth	32776	5.01% - 10.00%	3.10%	6.00%
Clermont	34715	5.01% - 10.00%	3.00%	8.50%
Howey in the Hills	34737	5.01% - 10.00%	3.60%	6.90%
Montverde	34756	5.01% - 10.00%	4.70%	8.70%
Yalaha	34797	0.00% - 5.00%	2.20%	4.18%

Sources: Poverty Rate as of 11/15/18: 2012-2016 American Community Survey
Unemployment Rate as of 11/15/18: U.S. Census Bureau, Census 2010

Demographics at a Glance

Figure 3.3 identifies individual demographic indicators and how they are changing. Red means that the indicator has worsened and green means that there has been improvement since the most recent CHNA.

FIGURE 3.3: DEMOGRAPHIC INDICATORS



Source: US Census Bureau

Demographics: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icon illustrates an observed trend from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative of the data included in the charts/tables that follow.

POPULATION GROWTH (2000-2018)

According to the U.S. Census Bureau, the population has grown in Lake County over 20 percent from 2010 (297,708) to 2018 (356,495). (See Chart 3.1)

POPULATION BY AGE (2019 ESTIMATED)

When looking at population by age, residents between the ages of 0-14 are the largest age group in the state (17.5 percent) and in Lake County (15.8 percent). The next largest age group in Lake County is age 65-74 at 15.5 percent, followed closely by age 55-64 at 13.1 percent. (See Chart 3.2)

POPULATION GROWTH BY AGE (2010-2040 ESTIMATED)

In the year 2040, when looking at population growth by age, residents ages 40-59 are still expected to make up the largest segment of the population, as they do in 2020. Across all the age groups those 75 and older are estimated to have the largest increase in population. (See Chart 3.3)

POPULATION BY GENDER (2019 ESTIMATED)

In Lake County, the gender distribution is nearly equal, with slightly more women (51.6 percent) than men (48.4 percent). The county closely mirrors the state (51.2 percent female, 48.8 percent male). (See Chart 3.4)

POPULATION BY RACE (2017)

When looking at population by race in 2017, Lake County (83.7 percent) and the state (77.4 percent) were predominantly White. The second most predominant race is Black at 11.1 percent. American Indian and Native Hawaiian each make up less than one percent of the population in Lake County and the state as a whole. (See Chart 3.5)

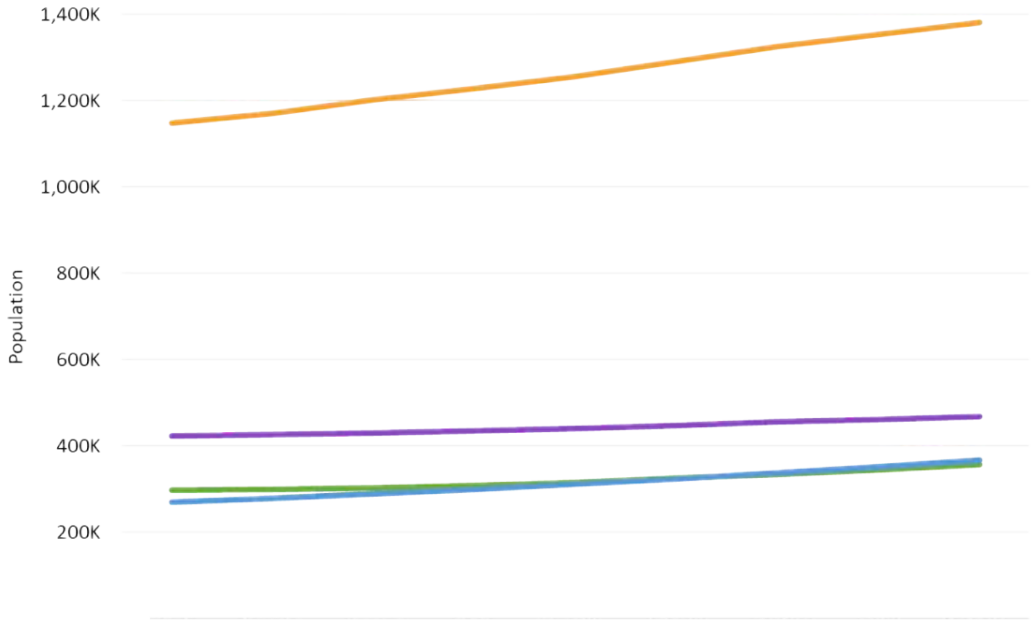
POPULATION BY ETHNICITY (2017)

Just over a quarter of Florida residents are Hispanic or Latino (25.6 percent). Lake County (15.4 percent) is below the state percentage of Hispanic or Latino residents. (See Chart 3.6)

LANGUAGE OTHER THAN ENGLISH SPOKEN AT HOME (2017)

Lake County (13.7 percent) has a smaller percentage of residents speaking a language other than English at home compared to the state (28.7 percent). (See Chart 3.7)

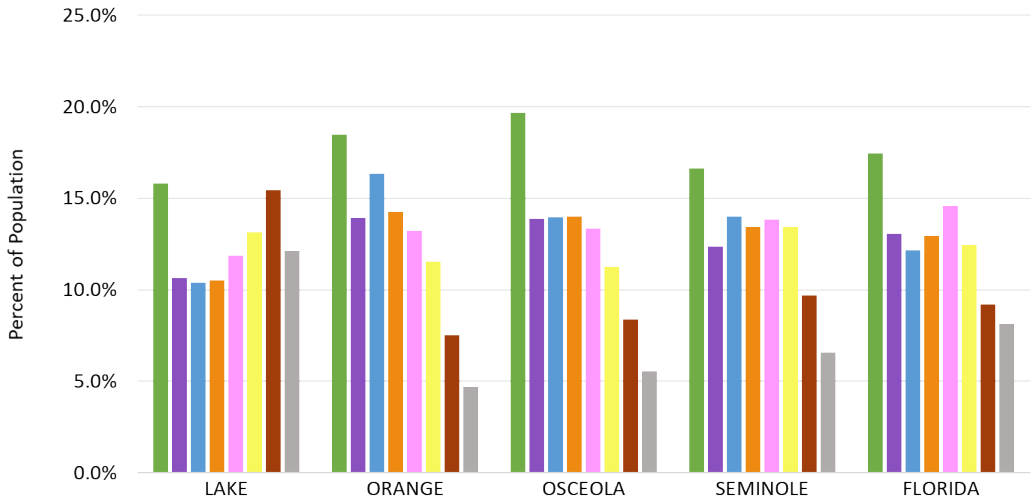
CHART 3.1: POPULATION GROWTH (2000–2018)



	2010	2011	2012	2013	2014	2015	2016	2017	2018
Lake	297,708	300,488	303,738	308,002	315,388	325,091	334,748	345,087	356,495
Orange	1,148,593	1,170,526	1,202,594	1,227,642	1,256,908	1,290,639	1,324,843	1,352,933	1,380,645
Osceola	269,841	278,637	288,908	299,304	311,137	323,578	337,730	352,661	367,990
Seminole	423,057	426,307	430,539	435,531	441,453	448,246	455,665	462,236	467,832

Source: U.S. Census Bureau, American Fact Finder

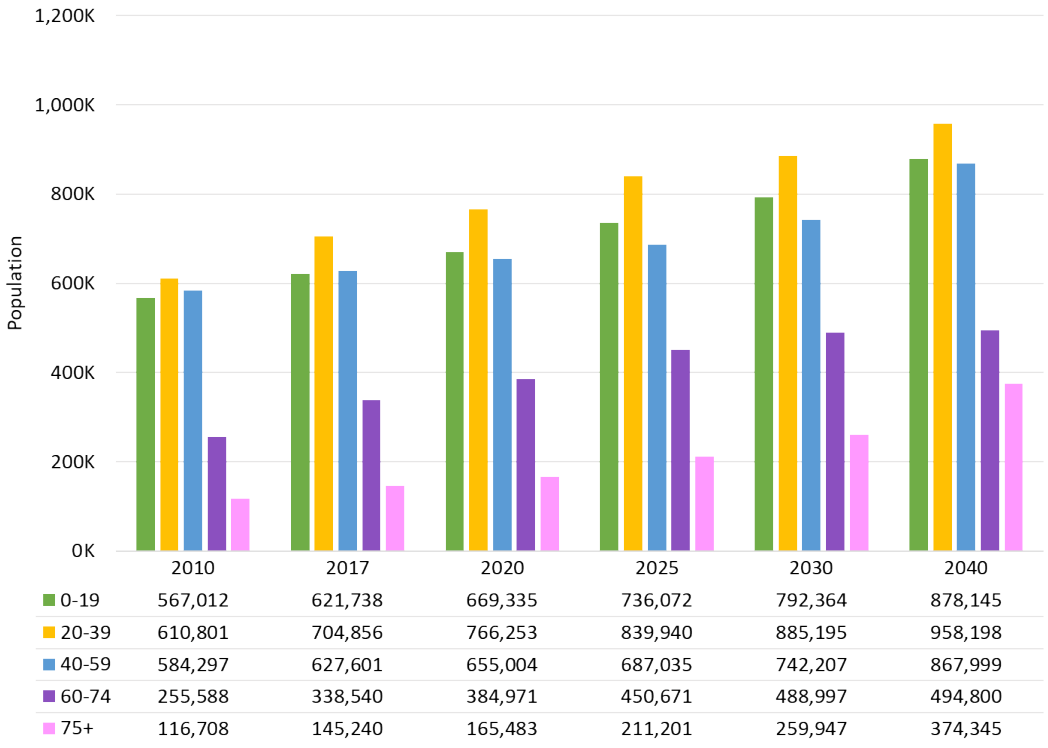
CHART 3.2: POPULATION BY AGE (2019 ESTIMATED)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
Age 0-14	15.8%	18.5%	19.7%	16.6%	17.5%
Age 15-24	10.7%	13.9%	13.9%	12.4%	13.1%
Age 25 - 34	10.4%	16.4%	14.0%	14.0%	12.2%
Age 35 - 44	10.5%	14.2%	14.0%	13.5%	12.9%
Age 45 - 54	11.9%	13.2%	13.3%	13.9%	14.6%
Age 55 - 64	13.1%	11.6%	11.3%	13.5%	12.4%
Age 65 - 74	15.5%	7.5%	8.4%	9.7%	9.2%
75+ Years	12.1%	4.7%	5.5%	6.6%	8.2%

Source: Claritas- Pop-Facts Premier 2019, Environics Analytics

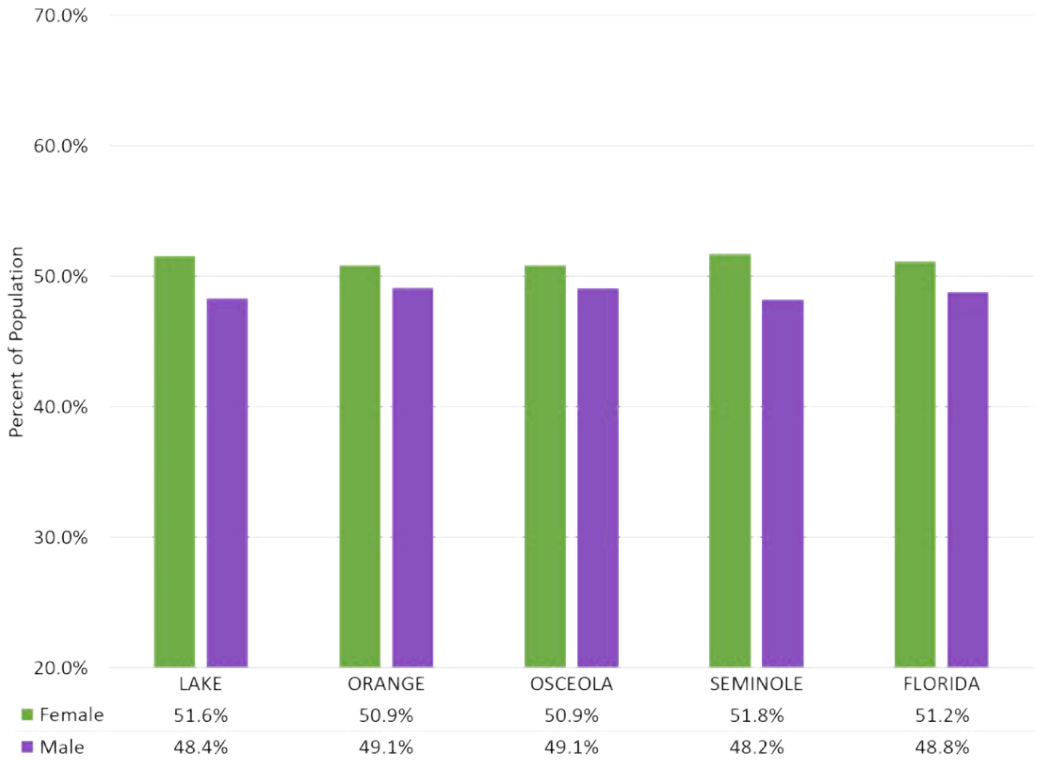
CHART 3.3: POPULATION GROWTH BY AGE (2010-2040 ESTIMATED)



	2010	2017	2020	2025	2030	2040
0-19	567,012	621,738	669,335	736,072	792,364	878,145
20-39	610,801	704,856	766,253	839,940	885,195	958,198
40-59	584,297	627,601	655,004	687,035	742,207	867,999
60-74	255,588	338,540	384,971	450,671	488,997	494,800
75+	116,708	145,240	165,483	211,201	259,947	374,345

Source: Florida Bureau of Economic and Business Research

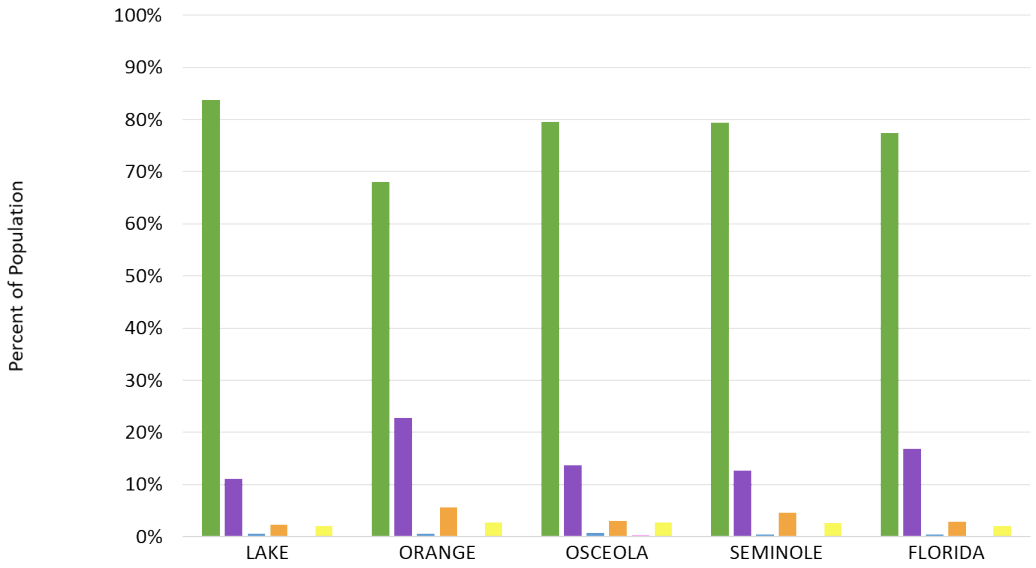
CHART 3.4: POPULATION BY GENDER (2019 ESTIMATED)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
Female	51.6%	50.9%	50.9%	51.8%	51.2%
Male	48.4%	49.1%	49.1%	48.2%	48.8%

Source: Claritas- Pop-Facts Premier 2019, Environics Analytics

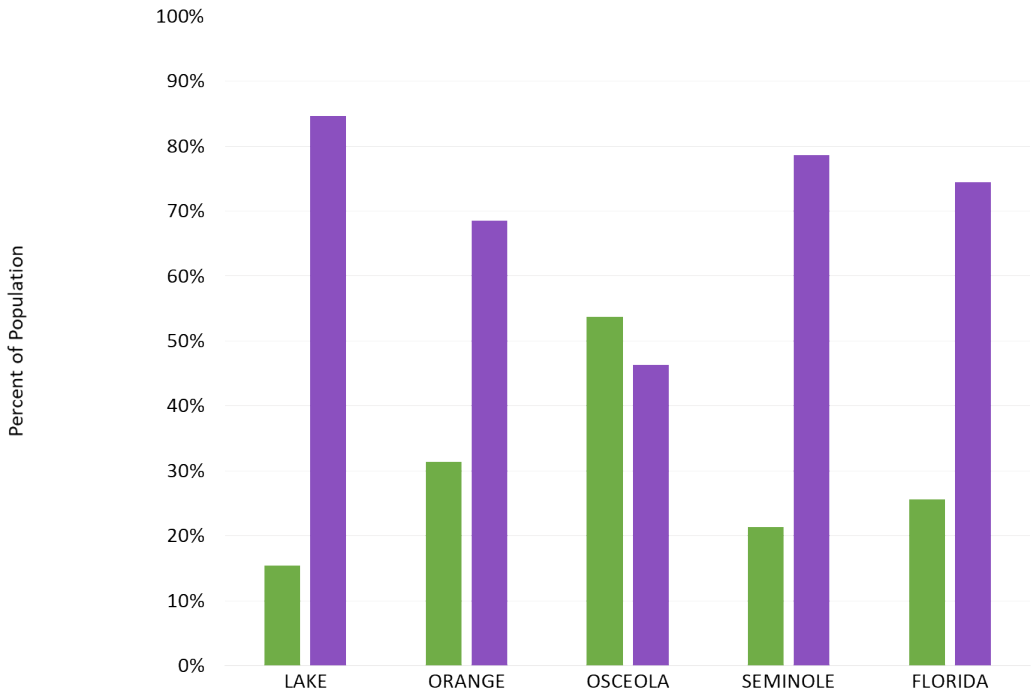
CHART 3.5: POPULATION BY RACE (2017)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
White	83.7%	68.1%	79.5%	79.4%	77.4%
Black	11.1%	22.8%	13.7%	12.7%	16.9%
American Indian	0.6%	0.6%	0.8%	0.4%	0.5%
Asian	2.3%	5.7%	3.0%	4.7%	2.9%
Native Hawaiian	0.2%	0.2%	0.3%	0.1%	0.1%
2+ Races	2.0%	2.7%	2.7%	2.6%	2.1%

Source: Census Quick Facts

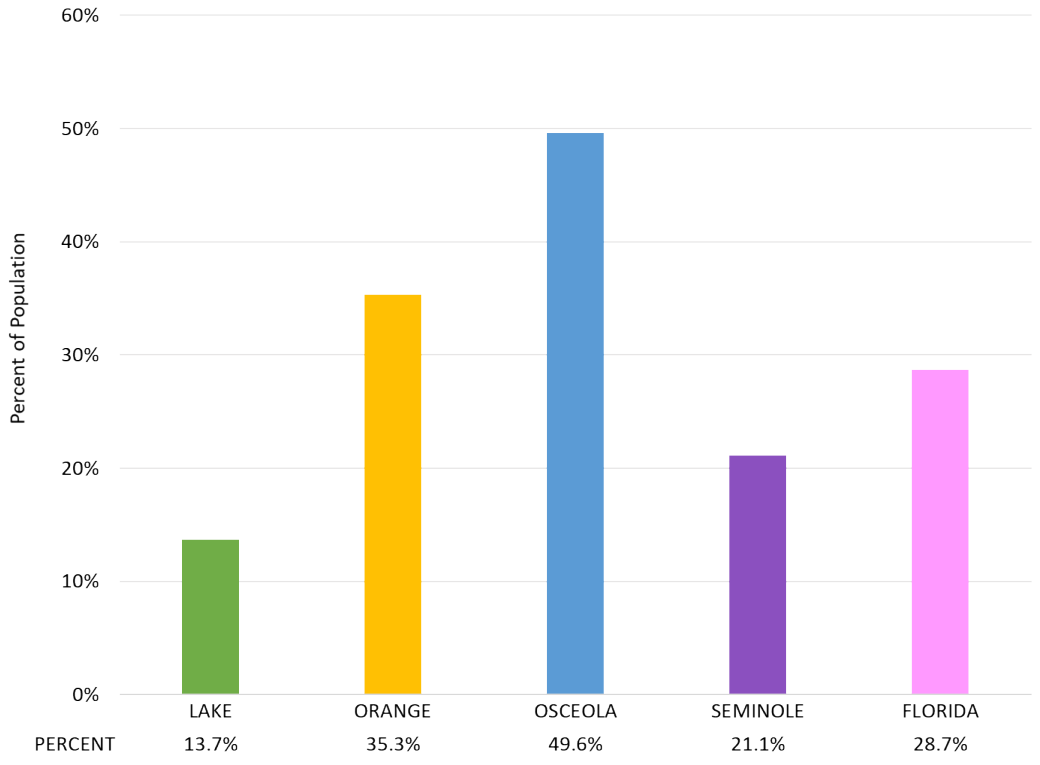
CHART 3.6: POPULATION BY ETHNICITY (2017)



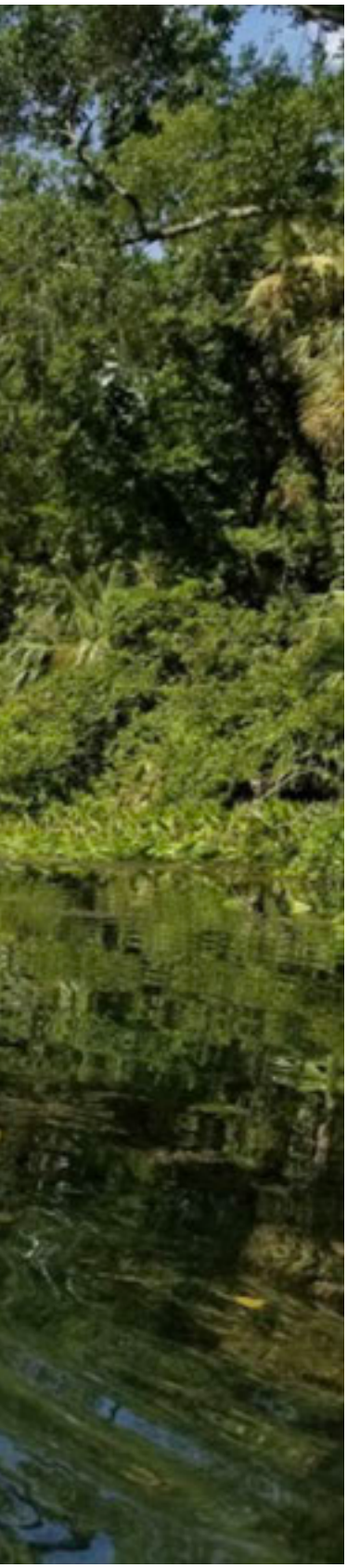
	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
HISPANIC OR LATINO	15.4%	31.4%	53.7%	21.4%	25.6%
NON-HISPANIC	84.6%	68.6%	46.3%	78.6%	74.4%

Source: Census Quick Facts

CHART 3.7: LANGUAGE OTHER THAN ENGLISH SPOKEN AT HOME (2017)



Source: Florida Office of Economic and Demographic Research



CHAPTER FOUR

Methodology

Alexander Springs Recreation Area
Altoona, FL

Lake County

The Origins of the CHNA

The Affordable Care Act, passed in 2010, established a regulatory requirement that all not-for-profit hospitals conduct a Community Health Needs Assessment (CHNA) at least every three years. This work provides a detailed look into the health needs of the communities served by these hospitals.

About the Central Florida Community Collaborative

In addition to not-for-profit hospitals, county health departments in Florida are also required to conduct a CHNA or a Community Health Assessment (CHA) to determine public health priorities. Due to the overlap in requirements for not-for-profit hospitals and the Departments of Health, as well as the positive synergies for our community, in 2012 the Central Florida Community Collaborative (the Collaborative) was created. The partners included AdventHealth (formerly Florida Hospital), Aspire Heath Partners, Orlando Health and the Florida Department of Health in Orange County. This collaborative worked together to complete a single, comprehensive CHNA.

This collaboration continued for the 2016 CHNA, and the Collaborative was expanded to include the Florida Departments of Health that serve the population of the individual counties of Lake, Osceola and Seminole. For the 2019 CHNA, the Collaborative expanded once again to include four local Federally Qualified Health Centers (FQHC): Community Health Centers, Inc., Orange Blossom Family Health, Osceola Community Health Services and True Health to better understand the needs of the community. The leadership from the partner organizations form the Steering Committee for this study.

In 2017, 12.9 percent of the state's population lacked health insurance, putting Florida well above the national average of 8.8 percent. As public health servants and not-for-profit community healthcare providers, the Collaborative sees the struggles of the uninsured and underinsured populations in our communities and are committed to continuing to serve these populations, propelled and guided by this CHNA.

The members of the Collaborative are interested in community comments and feedback on this report, as well as the individual member hospital and health department reports that were developed using the data collected through the CHNA process. The Collaborative report, as well as each of the individual hospital and health department reports, can be found on each member's website. Each member organization's website offers the opportunity to provide written comments on their individual CHNA report as well as on the collaborative regional report.

The Central Florida Community Collaborative Member Organizations

Hospital community benefit activities promote health and well-being by collaboratively addressing community health needs. In Central Florida, there is a well-established tradition of healthcare organizations, providers, community partners and individuals committed to working together to meet our local health needs. The four-county region is home to several respected hospitals that are ranked in the nation's top 100, a Level One Trauma Center, the busiest heart transplant program in the Southeast, nine designated teaching hospitals and the University of Central Florida College of Medicine.

The Collaborative's membership includes:

AdventHealth

AdventHealth Central Florida Division is represented in the Collaborative by AdventHealth Altamonte Springs, AdventHealth Apopka, AdventHealth Celebration, AdventHealth East Orlando, AdventHealth Kissimmee, AdventHealth Orlando, AdventHealth Waterman and AdventHealth Winter Park. The AdventHealth system is comprised of more than 80,000 skilled and compassionate caregivers nationwide, in physician practices, hospitals, outpatient clinics, skilled nursing facilities, home health agencies and hospice centers providing individualized, wholistic care.

Aspire Health Partners

Committed to providing individuals and families of Central Florida with compassionate, comprehensive and cost-effective behavioral health care services that lead to successful living and healthy, responsible lifestyles.

Orlando Health

Based in Orlando, FL, Orlando Health is a $3.8 billion not-for-profit healthcare organization and a community-based network of hospitals, physician practices and outpatient care centers across Central Florida. The organization is home to the area's only Level One Trauma Centers for adults and pediatrics, and is a statutory teaching hospital system that offers both specialty and community hospitals.

Florida Department of Health in Lake, Orange, Osceola and Seminole Counties

For over 125 years, the Florida Department of Health has been serving all residents in the four-county region through their ICARE vision: Innovation, Collaboration, Accountability, Responsiveness and Excellence.

Community Health Centers, Inc.

A FQHC, Community Health Centers, is a private, not-for-profit organization that provides healthcare services to insured, uninsured, underinsured and underserved children and adults within Central Florida.

Orange Blossom Family Health

A FQHC, Orange Blossom Family Health, provides quality health care services that improve the lives of the homeless and medically indigent people of our community.

Osceola Community Health Services

A FQHC, Osceola Community Health Services, offers affordable health services for the entire family including family medicine, pediatrics, maternity care, women's health, dental, optometry, pharmacy and men's health.

True Health

A FQHC, True Health is a private, not-for-profit 501 (c)(3) that has been serving low-income, uninsured, underinsured and underserved population in Central Florida since 1977, operating eight service delivery locations within Orange and Seminole counties.

A top priority of the Collaborative was to ensure that the 2019 CHNA be as conclusive and inclusive as possible. The group spent several months determining the most important indicators to assess through the input of community and key informant survey instruments, the focus groups and stakeholder interviews and identifying secondary data to include from county, state and federal agencies. A concerted effort was made to reach out to all members of the Central Florida region and obtain perspectives across age, race and ethnicity, gender, profession, household income, education level and geographic location. In this CHNA process, the Collaborative built upon existing partnerships with health care providers, county and state agencies, nonprofits, media, faith-based groups and business and civic organizations.

The Collaborative reviewed all the data and prioritized the key issues according to intensity of the need, current initiatives around the issue and the potential for future collaboration.

The Local Community Health Needs Assessment Committee (CHNAC)

The Community Health Needs Assessment Committee for AdventHealth Waterman included representation from local community members, Hospital employees and public health officials.

Table 4.1 includes community representatives from the AdventHealth Waterman service area that attended the local CHNAC, a description of their organizations' services and notes what populations they serve. These representatives provided leadership and insight throughout the CHNAC process.

TABLE 4.1: CHNAC COMMUNITY REPRESENTATIVES

Name	Title	Organization	Description of Services	Low-Income	Minority	Other Underrepresented Populations
Nadine Bobick	Health Advocate	Lake Cares	Food pantry helping those in need in Lake County, Florida	x	x	
Aaron Kissler	Administrator	Lake County Health Department	To protect, promote and improve the health of all people in Lake County through integrated state, county and community efforts	x	x	x
Robert Putt	Pastor Operations Officer	Umatilla Seventh-Day Adventist Church	Provides spiritual care and serves the community through a continual prioritization of humanitarian aid and community development	x	x	x
Barbara Howard, PhD	Barbara Howard, PhD	Current Board Member of AdventHealth Waterman	Provides expertise in community education needs and programs			x
John Simpson	Chief Operations Officer	Lake Emergency Medical Services	Provides emergency medical services to residents of Lake County	x	x	x
Rick Hankey	Chief Operating Officer	Lifestream Behavioral Center	Lifestream is a behavioral health and social services organization that provides high-quality treatment, education, care management, rehabilitation, child welfare, primary care and homeless services to children, adolescents, and adults located in Central Florida	x	x	x
Esmerelda Batiz	Marketing & Outreach Lead	Community Health Centers, Inc.	Federally qualified health center (FQHC) providing quality and compassionate primary healthcare services to the underserved community	x	x	x
Dr. Candace Booth	Community Outreach Coordinator	Be Free Lake	Community substance abuse and violence prevention coalition	x	x	x

Table 4.2 includes AdventHealth Waterman employees who actively participated and provided leadership and insight during the HHNAC.

TABLE 4.2: CHNAC ADVENTHEALTH REPRESENTATIVES

Name	Title
Anita Young	Vice President/Chief Operations Officer
Jennifer Ambs	Controller
April Kauffman	President, Waterman Foundation
Nick Bejarano	Executive Director, Network Development & Marketing
Melissa Simmes	Director, Outpatient Centers & Community Services, Freestanding Clinic
Heather Palladino	Director, Case Management
Candace Huber	Director, Mission Development Child Care
Renee Furnas	Community Outreach Strategist
Eileen Bascombe	Cancer Care Navigator, Radiation Oncology

Public Health Representation

The public health representatives involved in the regional CHNAC (the Collaborative) are outlined in Table 4.3:

TABLE 4.3: PUBLIC HEALTH REPRESENTATION

Name	Title	Department
Page Barningham, MPA, CCHW, R.S.	Operations & Management Consultant II	Lake County Health Department
Jason Martinez	Government Analyst II	QA/QI Management Osceola County Health Department
Udgit Mehta, MBA, FCCM	Administrative Service Director II	Seminole County Health Department
Ellis Perez, MPH	Government Analyst II and Population Health & Quality Improvement Data Manager	Office of Performance and Quality Improvement - Orange County Health Department
Donna Walsh, MPA, BSN, RN	Health Officer	Seminole County Health Department

Primary and Secondary Data Sources

Primary and secondary data was collected for the CHNA to be representative of the entire four-county service area of the Collaborative. When available, county specific data was used. Each hospital and county provided and used data that was specific to their primary service area for their individual CHNAs.

Primary Data

The primary data collection for this study included five different qualitative methods: a community survey, stakeholder interviews, focus groups, a key informant survey and an intercept survey. These are outlined in Figure 4.1.

FIGURE 4.1: 2019 CHNA PRIMARY DATA COLLECTION METHODS

Source: Strategy Solutions, Inc.

Community Survey

The purpose of conducting a community survey is to:

- Learn about community needs through data collection from a subset of the population
- Receive detailed information from a larger and more representative group of people
- Ensure that actions taken are in line with needs that are expressed by the community
- Foster community support for actions that will be undertaken

The audience for the community survey included:

- General community, concentrating on the underrepresented populations
- A subset of the population that was representative of the population demographics

The platform of the community survey included:

- Survey was created in SurveyMonkey and made available online (accessed through a link or QR Code)
- Paper surveys were placed strategically throughout the four counties so those not able to access technology could complete the survey; staff from AdventHealth collected the paper surveys and inputted into SurveyMonkey
- Survey was made available in the following languages:
  - English
  - Latin American Spanish
  - Brazilian Portuguese
  - Haitian Creole

The community survey was launched on January 7, 2019 and was available for data collection until March 4, 2019. A total of 2,708 surveys were completed for the four-county region overall; 656 were completed by Lake County residents.

An incentive was included to encourage community residents to complete the survey. All employees of the Collaborative member organizations were ineligible to participate in the incentive drawing and all incentive logistics were handled by SSI.

Table 4.4 below shows the breakdown of the community survey respondent totals by county and language. Note that the Waterman's service area is Lake County.

TABLE 4.4: CENTRAL FLORIDA COMMUNITY SURVEY RESPONDENTS BY COUNTY AND LANGUAGE

	English	Latin American Spanish	Brazilian Portuguese	Haitian Creole	Total
Lake County	**653**	**3**	**0**	**0**	**656**
Orange County	1120	89	7	24	1240
Osceola County	250	36	3	0	289
Seminole County	516	7	0	0	523
	2539	135	10	24	2708

Source: Strategy Solutions, Inc.

Stakeholder Interviews

The purpose of conducting stakeholder interviews is to:

- Explore complex issues and allow for follow-up questions to probe for understanding
- Access and understand the needs of underrepresented populations
- Give respondents the opportunity to clarify questions and concepts
- Provide a uniform approach to gathering information along with immediate results

The audience for the stakeholder interview collection tool was:

- Community members who represent the underserved population through programs and services offered

Interviews were conducted between January 1, 2019 and May 7, 2019 by Strategy Solutions, Inc. staff. Table 4.5 lists the interviews conducted relevant to Lake County. A total of 16 stakeholders participated from Lake County.

TABLE 4.5: LAKE COUNTY STAKEHOLDERS

Interview Date	Stakeholder Name	Organization
01/07/19	Debbie Quick	Central Florida YMCA
01/11/19	Karen Broussard	Second Harvest Food Bank of Central Florida
01/15/19	Bill D'Aiuto	Florida Department of Children and Families-Regional Director
01/22/19	Jill Krohn	Florida Department of Children and Families-Substance Abuse
01/29/19	Wendy Brandon	University of Central Florida Hospital
01/31/19	Jon Cherry	Lifestream Behavioral Center, Inc.
02/06/19	Candy Crawford	Mental Health Association of Central Florida
02/21/19	Carol Millwater Ryan	We Care Lake County
02/28/19	Kristine Landry	Lake County Schools
03/06/19	Peyton Grinnell	Lake County Sheriff's Office
05/02/19	Margaret Brennan	Community Health Centers
05/03/19	John Simpson	Lake County EMS
05/06/19	David Drape	Florida Department of Children and Families-Refugee Services
05/06/19	Sue Aboul-Hosn	Florida Department of Children and Families-Human Trafficking
05/07/19	Lance Morgan	Florida Department of Children and Families-Adult Services
05/07/19	Fawn Moore	Florida Department of Children and Families-Foster Care

Source: Strategy Solutions, Inc.

Focus Groups

The purpose of conducting focus groups is to gather community input on:

- Health status
- Health needs
- Community issues
- Access to services
- Potential solutions

The target audience for the focus groups included:

- Underrepresented populations
- People representing underrepresented populations
- People representing specific areas of interest, such as mental health, food insecurity, individuals experiencing homelessness, etc.

The platform used for conducting focus groups included:

- SSI staff conducted focus groups both in person and virtually:
  - In person used a combination of open discussion, list generation and OptionFinder with anonymous voting
  - Virtual focus groups were conducted with the Healthy Seminole Community Health Partners group and Aspire Health Partners

Focus groups were conducted between October 11, 2018 and April 4, 2019. A total of 15 focus groups were conducted with the seven below having representation from Lake County.

TABLE 4.6: FOCUS GROUPS WITH REPRESENTATION FROM LAKE COUNTY

Focus Group Name	Counties	Date Conducted	# of Participants
Health and Hunger Task Force	4 County Representation	October 12, 2018	15
Lake County CHIP Group	Lake County	December 11, 2018	16
Mental and Behavioral Health Providers	4 County Representation	December 13, 2018	23
Homelessness Providers	4 County Representation	December 13, 2018	20
Emergency Personnel and First Responders	4 County Representation	December 13, 2018	19
Senior Care	4 County Representation	December 13, 2018	13
Advent Care Center	4 County Representation	December 14, 2018	16
Total Focus Group Participants			122*

*may not represent total number of non-duplicated individuals
Source: Strategy Solutions, Inc.

Intercept Survey

The purpose of conducting an intercept survey is to:

- Gather on-site feedback from an identified population
- Understand from the identified populations what their community health needs, barriers to care and needed services are

The audience for an intercept survey was:

- Individuals representing the underrepresented populations

The platform used to conduct intercept surveys was in-person, one-on-one conversations.

To support this CHNA in Lake County, a total of 26 intercept surveys were conducted with patients at Community Health Center, a Federally Qualified Health Center, during the week of October 11, 2018. For the intercept surveys completed by the consultant team, the collection tool was available in English, Latin American Spanish, Brazilian Portuguese and Haitian Creole. AdventHealth supplied interpreters to assist with talking to community members. Table 4.7 outlines the number of intercept surveys collected overall and by county. In Lake County all the surveys were completed in English.

TABLE 4.7: INTERCEPT SURVEY BREAKDOWN BY COUNTY

Total Intercept Surveys	Lake County	Orange County	Osceola County	Seminole County
135	26	86	9	14

Source: Strategy Solutions, Inc.

Key Informant Survey

The purpose of conducting a key informant survey is to:

- Obtain vital information about the community
- Gather information for a CHNA and utilize the findings for effective prevention planning
- Assess if the needs in the community have changed over time
- Collect input from individuals who are knowledgeable about specific needs or issues, including underrepresented populations

The audience for the key informant survey collection tool was:

- Individuals who represented a particular population and/or sectors in the community that were not able to be included in the stakeholder interviews or focus groups.

The key informant survey was conducted as an on-line survey through SurveyMonkey from December 17, 2018 through January 11, 2019.

Table 4.8 lists the totals for the key informant survey participation by county, with 75 surveys identified as relevant to Lake County. Please note that the total surveys completed does not equal the sum of the breakdown by county number as respondents were able to select multiple counties that their organization or agency serves. The AdventHealth Waterman's' service area includes Lake County.

TABLE 4.8: KEY INFORMANT SURVEY BREAKDOWN BY COUNTY

Lake County	Orange County	Osceola County	Seminole County	Total
75	111	97	83	172

Source: Strategy Solutions, Inc.

Secondary Data

Figure 4.2 illustrates the sources used to capture the qualitative and quantitative secondary data that inform the AdventHealth Waterman's' 2019 Community Health Needs Assessment report.

FIGURE 4.2: 2019 CHNA SECONDARY DATA

Source: Strategy Solutions, Inc.

The secondary quantitative data collection process included:

- Demographic and socio-economic data obtained from the United States Census Bureau with data obtained through Claritas-Pop-Facts Premier, 2018, Environics Analytics and the U.S. Census Bureau, American Fact Finder
- Economic data obtained from the United States Census Bureau
- Disease incidence and prevalence data obtained from FLHealthCHARTS, Florida Department of Health
- Centers for Disease Control and Prevention
- Behavioral Risk Factor Surveillance Survey (BRFSS) data collected by the Centers for Disease Control and Prevention
- American Community Survey
- Healthy People 2020 goals from HealthyPeople.gov
- Florida Department of Education
- County Health Rankings & Roadmaps
- United States Department of Agriculture
- ESRI (an international supplier of geographic information system software, web GIS and geodatabase management applications)
- Selected emergency department and inpatient utilization data from the Hospital were also utilized to produce the hot spot maps and analysis

The data presented are the most recent published by the source at the time of the data collection.

Healthy People 2020 is a set of goals and objectives with 10-year targets designed to guide national health promotion and disease prevention efforts to improve the health of all citizens. This framework reflects the idea that setting objectives and providing science-based benchmarks to track and monitor progress can motivate and focus action. Its comprehensive set of objectives and targets is used to measure progress for health issues in specific populations and serves as a model for measurement at the state and local levels.

Data Limitations

There are limitations to the primary and secondary data collected to conduct this assessment. Researchers were limited to the collection of the most recent available data sources of which many are two (2) or more years old. FLHealthCHARTS periodically updates data compiled and reported on through their website as new data is available and/or methods of reporting indicators change. The data in this report from FLHealthCHARTS is the data publicly available on their website at the time it was pulled between January and May 2019. FLHealthCHARTS may have updated or modified data on their website after data was pulled for inclusion in this report. Additionally, all primary data is qualitative and does not necessarily reflect a representative sample of the service area since it was collected through convenience sampling.

General Findings

The information sections of this report, where the primary and secondary data findings are available, are structured to provide insight into the social determinants of health (SDOH) and how they impact the residents of the four-county region. Each section outlined in Chapters 6 and 7 follow the same structure with three distinct sections for each major topic:

1. What the community is saying: includes the primary data collected through the focus groups, community surveys, intercept surveys, key informant surveys and stakeholder interviews.
2. At a glance: includes a graphic summary of the indicators in this section with a color-coded snapshot. Red means that the indicator has worsened and green means that the rates have improved since the 2016 CHNA.
3. Summary of indicators: includes a narrative description of the secondary data indicators included in the section.

The charts within the report are designed to provide longitudinal data when available, to highlight the trends and changes that have occurred over time in the data. Some of the charts, especially those that highlight disparities among different racial and ethnic groups, contain “line breaks” where the data is not available for that population for one or more years. An asterisk (*) on a chart indicates the rate for one specific year.

A full report of all of the indicators reviewed can be found in the Central Florida Community Benefit Collaborative Community Health Needs Assessment at: *www.adventhealth.com/community-health-needs-assessments*

CHAPTER FIVE

Top Community Health Needs

Pear Park
Leesburg, FL

Lake County

Top Community Health Needs

Using the data collected on behalf of the Collaborative, SSI presented a summary of the data for the regional CHNAC meeting held on April 3, 2019. The data presentation was customized for AdventHealth Central Florida Division and included a summary of the demographics of the four-county service area along with the primary and secondary data.

Lake County Community Survey Top 10 Issues Affecting Respondents and Their Families:

1. Obesity and overweight
2. Hypertension/high blood pressure
3. High cholesterol
4. Cardiovascular disease
5. Diabetes
6. Asthma/COPD related issues
7. Cancer
8. Affordable and adequate housing
9. Employment opportunities/lack of jobs

Lake County Top 10 Priorities from Stakeholder Interviews:

1. Mental/behavioral health, including services for children and seniors
2. Opioids/substance use
3. Access to health care
4. Housing/homelessness
5. Obesity rates and diabetes
6. Lack of dental care
7. Rising medical/insurance costs
8. Transportation
9. Injury prevention for children
10. Lack of adequate geriatric services

Lake County Key Informant Survey Top 10 Community Issues:

1. Injury prevention/falls
2. Older adult safety/mobility
3. Living with a disability
4. Food security (accessibility to nutritious foods)
5. Diabetes
6. Mental health/illness
7. Rise in vapes and e-cigarettes
8. Access to dental care
9. Access to primary care
10. Obesity

Lake County Focus Groups Top 10 Community Needs/Issues:

1. Transportation
2. Opioid crisis
3. Mental health: self-medication through drugs and alcohol
4. Overweight/obesity
5. Affordable housing for specific populations
6. Mental health: need for change in society, more prevention
7. Health inequity
8. Mental health: stigma
9. Health insurance issues: underinsured/uninsured
10. Long-term addiction recover facilities

Top Community Health Needs (Continued)

Primary and secondary data were reviewed and analyzed by SSI. The needs that rose to the top—either through incidence rate in secondary data, frequency through primary data, or a correlation of both—are included in Table 5.1. All data and indicators were presented at the April 3, 2019 meeting for review.

Table 5.1: TOP COMMUNITY HEALTH NEEDS- LAKE COUNTY

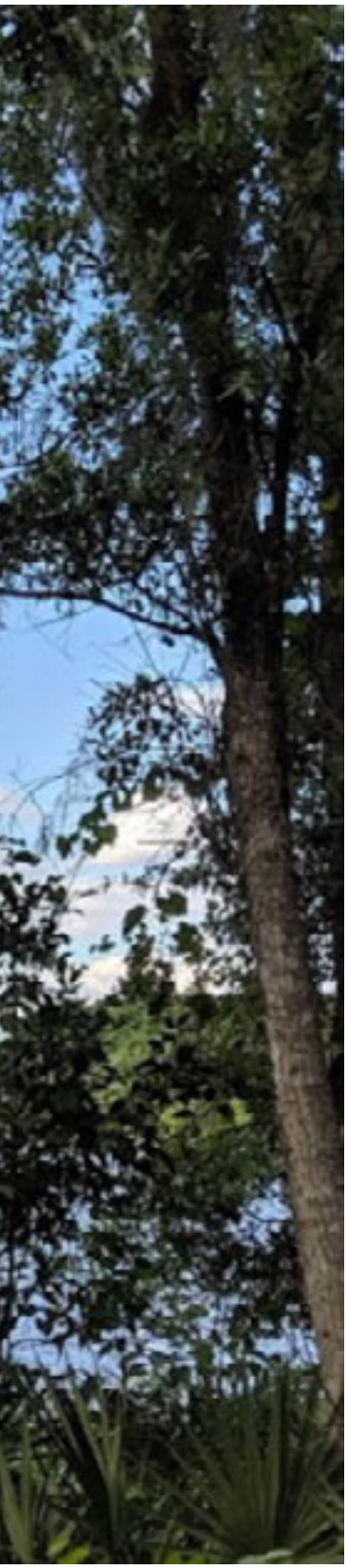
Identified Need	Secondary Data	Community Survey	Stakeholder Interviews	Focus Groups	Intercept Surveys	Key Informant Surveys
ACCESS TO CARE						
Services for Aging Population				X	X	
Cost of Care/Insurance/Medications			X	X		
Insurance Coverage	X			X		
Lack Awareness of Available Resources			X	X		
Health Education and Literacy			X	X	X	
Inappropriate Use of ED			X			
Transportation			X	X	X	
BEHAVIORAL RISK FACTORS						
Mental Health				X		
Binge Drinking	X					
Lack Of Substance Abuse Providers			X	X		
Youth Substance Abuse (Drugs And Alcohol)	X					
Opioid Prescriptions	X			X		
Sedentary Adults	X					
Substance Abuse (Drugs, Alcohol, Tobacco, Vaping/E-Cigarettes)	X	X	X	X		
Infant Mortality	X					
BIRTH CHARACTERISTICS						
Self-pay for delivery method	X					
Mothers obese at time of pregnancy	X					
Medicaid births	X					
Mothers not receiving prenatal care first 3 months/difficulty accessing prenatal	X					
BUILT ENVIRONMENT						
Access to affordable foods/Food insecurity			X	X		
Asthma and asthma hospitalizations	X	X				

Source: Strategy Solutions, Inc.

Table 5.1: TOP COMMUNITY HEALTH NEEDS- LAKE COUNTY, CONTINUED

Identified Need	Secondary Data	Community Survey	Stakeholder Interviews	Focus Groups	Intercept Surveys	Key Informant Surveys
CHRONIC DISEASE						
Cancer	X	X			X	
Cardiovascular Disease (Heart Disease)	X	X				
Stroke	X	X				
Diabetes and diabetes hospitalizations	X	X	X		X	
Hypertension	X	X	X			
Obesity	X	X	X	X	X	
Child obesity	X	X				
High Cholesterol	X	X				
COMMUNICABLE DISEASES						
Childhood Immunizations	X					
Influenza and Pneumonia		X				
HIV/AIDS	X				X	
Hepatitis C		X			X	
ECONOMIC CONDITIONS						
Employment/Livable wages			X			
Affordable housing			X	X	X	
Housing for low income seniors				X		
Homelessness			X	X	X	
Financial planning				X		
Poverty	X				X	
Students receiving free and reduced lunch	X					
HEALTH CARE PROVIDERS AND FACILITIES						
Availability of primary care physicians (accessible hours and wait times)				X		
Dental care			X			
Specialists			X			
Mental health providers/services			X	X	X	
Substance use providers/services			X	X	X	
Bilingual/Bicultural providers				X		

Source: Strategy Solutions, Inc.



CHAPTER SIX

Community Profile of Lake County

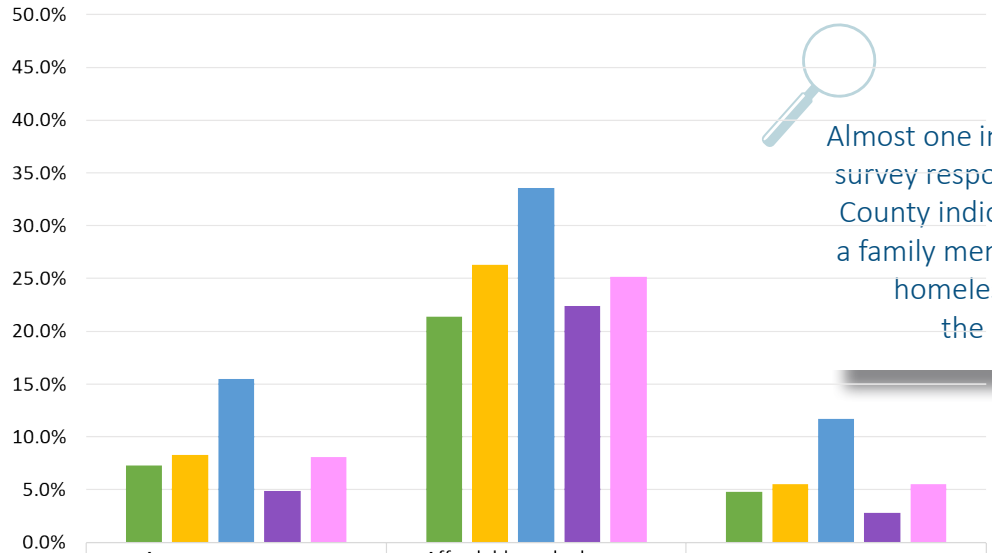
Lake May Reserve
Eustis, FL

Lake County

Economic Conditions: What the Community is Saying

Figure 6.1 illustrates the experiences of Lake County community survey respondents related to housing. More than one in 20 (7.3 percent) of Lake County community survey respondents indicated that they or a family member had accessed an emergency shelter in the area in the past year. A little more than one in five respondents (21.4 percent) indicated that they or a family member experienced difficulty with affordable and adequate housing in the past year.

FIGURE 6.1: HOUSING NEEDS, COMMUNITY SURVEY 2019



Almost one in 20 of community survey respondents from Lake County indicated that they or a family member experienced homelessness within the past year.

	Access to emergency shelter in the area	Affordable and adequate housing	Homelessness
LAKE	7.3%	21.4%	4.8%
ORANGE	8.3%	26.3%	5.5%
OSCEOLA	15.5%	33.6%	11.7%
SEMINOLE	4.9%	22.4%	2.8%
OVERALL	8.1%	25.2%	5.5%

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Figure 6.2 outlines some of the impacts of economic conditions identified by community survey respondents.

FIGURE 6.2: IMPACTS OF ECONOMIC CONDITIONS, COMMUNITY SURVEY 2019

Almost one in 10 community respondents in Lake County reported that food did not last.

Food Did Not Last		Utilities Shut Off		Worried About Stable Housing	
Lake	8.3%	Lake	4.9%	Lake	6.3%
Orange	11.2%	Orange	6.3%	Orange	10.4%
Osceola	22.6%	Osceola	9.0%	Osceola	18.1%
Seminole	7.8%	Seminole	6.4%	Seminole	4.5%
Overall	11.1%	Overall	6.3%	Overall	9.1%

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Figure 6.3 outlines the percentages of community survey respondents that are struggling with employment-related needs and issues

FIGURE 6.3: EMPLOYMENT-RELATED NEEDS, COMMUNITY SURVEY 2019

% Affected by Employment-Related Needs	
Lake	11.1%
Orange	8.3%
Osceola	11.2%
Seminole	22.6%
Overall	7.8%

More than 10 percent of Lake County respondents were affected by employment-related issues.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary data collection identified the following as community needs and issues related to economic conditions in Lake County:

- Lack of transportation
- Affordable housing
- Unemployment
- Homelessness
- Health inequity

Barriers to care identified by primary research participants included:

- Insufficient public transportation (both routes and times)
- Poverty
- Lack of livable wage jobs
- Cannot take time off from work to get care

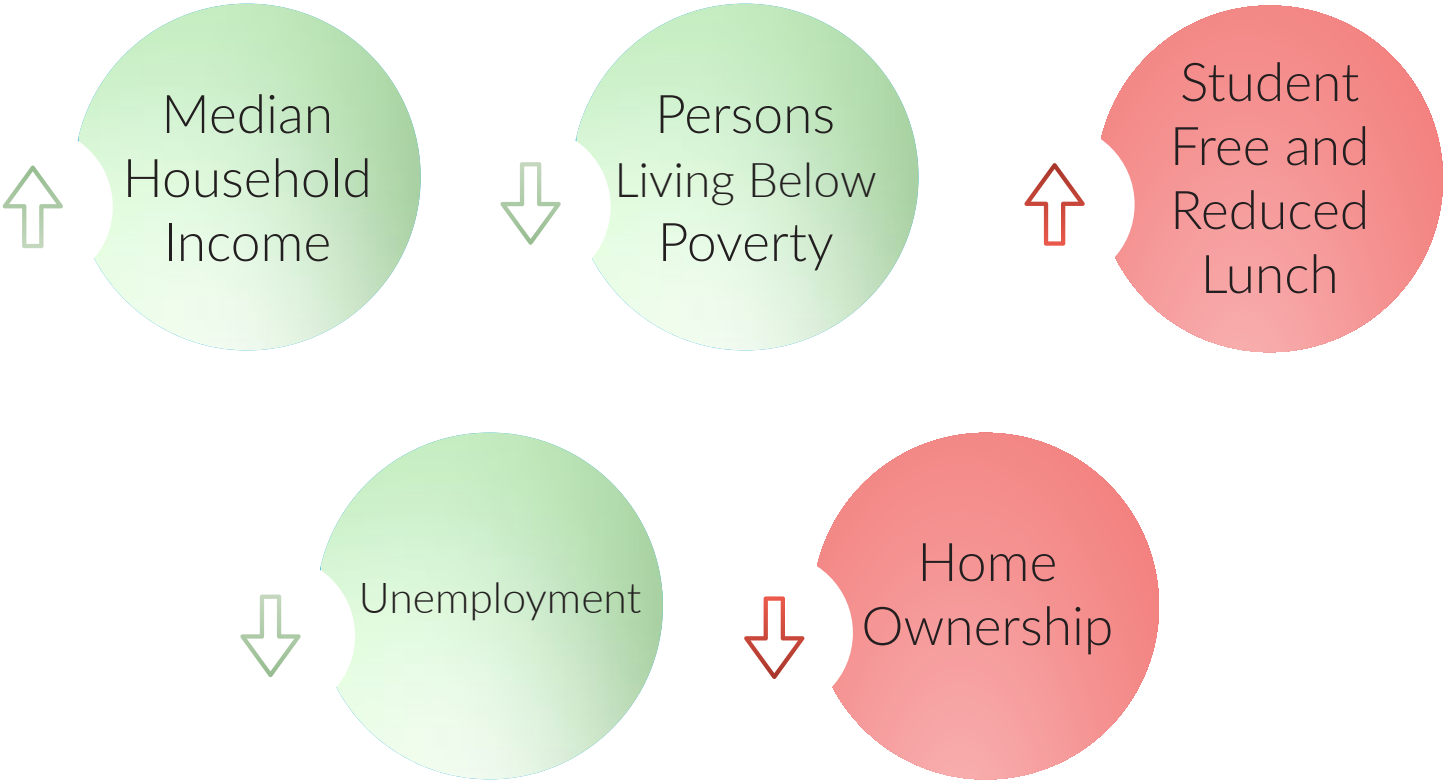
Services needed identified by the primary research respondents included:

- Increased homeless support
- Affordable quality housing
- Health navigator for the homeless
- Improve public transportation (routes and times)
- Job training

Economic Conditions at a Glance

The key indicators related to economic conditions that have changed since the last CHNA are identified in Figure 6.4. Red means that the indicator has worsened and green means that there has been improvement since the most recent CHNA.

FIGURE 6.4: ECONOMIC INDICATORS



Source: Strategy Solutions, Inc.

Economic Conditions: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative of the data included in the charts/tables that follow.

MEDIAN HOUSEHOLD INCOME (2000-2017)

Lake County increased from $36,903 in 2000 to $49,734 in 2017, while the state was $50,883 in 2017. (See Chart 6.1)

PERSONS LIVING BELOW POVERTY LEVEL (2000-2017)

Lake County's percentage of people living below the poverty line increased from 9.6 percent in 2000 to 12.6 percent in 2017. The county percentage was consistently lower than that of the state (12.5 percent and 14 percent respectively). (See Chart 6.2)

STUDENTS RECEIVING FREE & REDUCED LUNCH (2014-2018)

The National School Lunch Program, School Breakfast Program, Special Milk Program, Child And Adult Care Food Program, and Summer Food Service Program provide income-eligible students with free and reduced-price meals. According to County Health Rankings and Roadmaps in 2018, Lake County had 68.2 percent of students receiving free and reduced lunch, while the state had 58.8 percent. (See Chart 6.3)

UNEMPLOYMENT RATE (2008-2018)

The average unemployment rate in Lake County fluctuated from 2008 (6.6 percent) to 2018 (3.4 percent). The percentage peaked at 11.8 percent in 2010 then declined to 3.4 percent in 2018. The county's percentage has been consistently higher than, or equal to, that of the state for most of that period, including in 2018, when the state percentage was 3.6 percent. (See Chart 6.4)

HOMEOWNERSHIP RATES (2000-2017)

The Lake County homeownership rates decreased from 81.5 percent in 2000 to 73.5 percent in 2017. The state percentage was 70.1 percent in 2000 and 64.8 percent in 2017. (See Chart 6.5)

COST BURDEN OF HOUSEHOLDS (2016)

According to the Department of Housing and Urban Development (HUD), households that pay more than 30 percent of their income for housing are considered cost burdened. Those who pay more than 50 percent are severely cost burdened. In Lake County, 18.6 percent were cost burdened and 16.7 percent were severely cost burdened as of 2016. In the state, 20.4 percent reported being cost burdened and 21.3 percent severely cost burdened. (See Chart 6.6 and Figure 6.5)

HOMEOWNER COST BURDEN (2016)

Homeowners are less likely to be burdened by the cost of their home than renters. In 2016, 71 percent of Lake County homeowners were not cost burdened. This was slightly higher than the state level (65.1 percent). (See Chart 6.7)

GROSS RENT AS A PERCENT OF INCOME- 5-YEAR ESTIMATES (2016)

In 2016, residents in Lake County report that 46.5 percent are paying less than 30 percent of their income on rent, higher than the state percentage of 43 percent. (See Chart 6.8)

COST BURDEN EXPERIENCED BY RENTER HOUSEHOLDS (2016)

Lake County had more residents who rent that were cost burdened (26.5 percent) and fewer severely cost burdened (29.6 percent) than the state did (24.8 percent and 31.3 percent respectively) in 2016. (See Chart 6.9 and Figure 6.6)

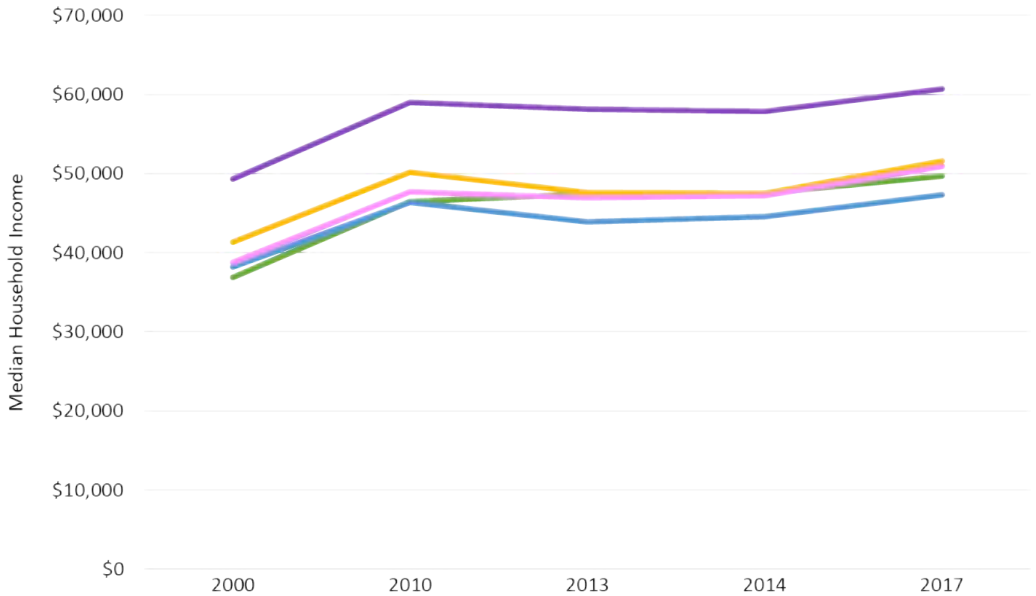
HOMELESS INDIVIDUALS BY COUNTY (2010-2018)

The number of homeless individuals has fluctuated in Lake County, which reported 312 homeless in 2018, down from 796 in 2010 and a high of 1,019 in 2012. (See Table 6.1)

INCOME INEQUALITY (2018)

Income inequality refers to the uneven distribution of income across a population. One measure of income inequality involves generating percentiles for household income. Then, the income (in dollars) at the 20th and 80th percentiles are used to generate a ratio; the higher the ratio, the higher the income inequality. The ratio in Lake County (4:1) is lower than the state (4:7), indicating a more equal distribution of income. (See Chart 6.10)

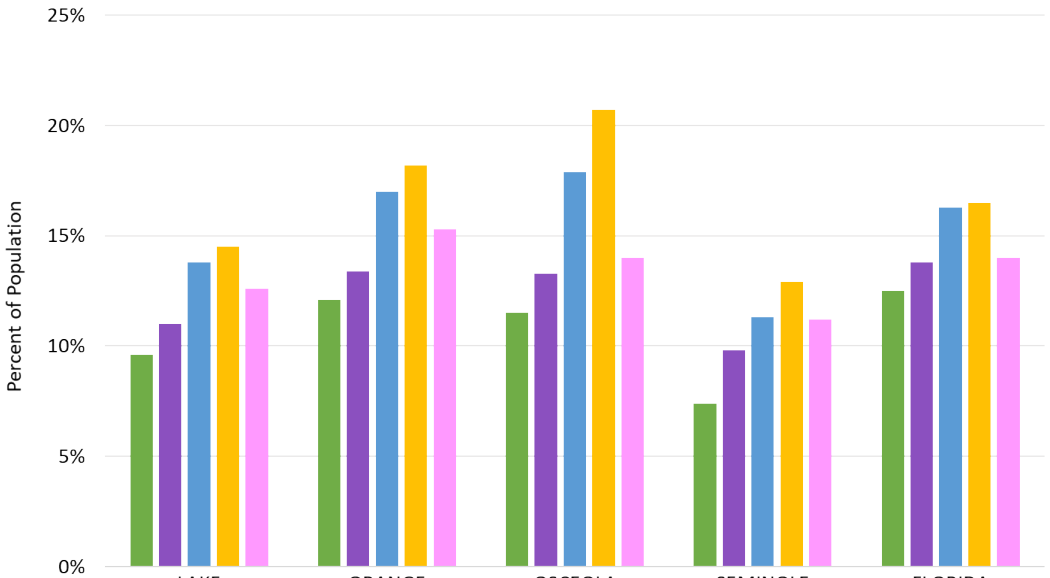
CHART 6.1: MEDIAN HOUSEHOLD INCOME (2000-2017)



	2000	2010	2013	2014	2017
LAKE	$36,903	$46,477	$47,439	$47,465	$49,734
ORANGE	$41,311	$50,138	$47,581	$47,556	$51,586
OSCEOLA	$38,214	$46,328	$43,891	$44,551	$47,343
SEMINOLE	$49,326	$58,971	$58,175	$57,875	$60,739
FLORIDA	$38,819	$47,661	$46,956	$47,212	$50,883

Source: U.S. Census Bureau, American Fact Finder

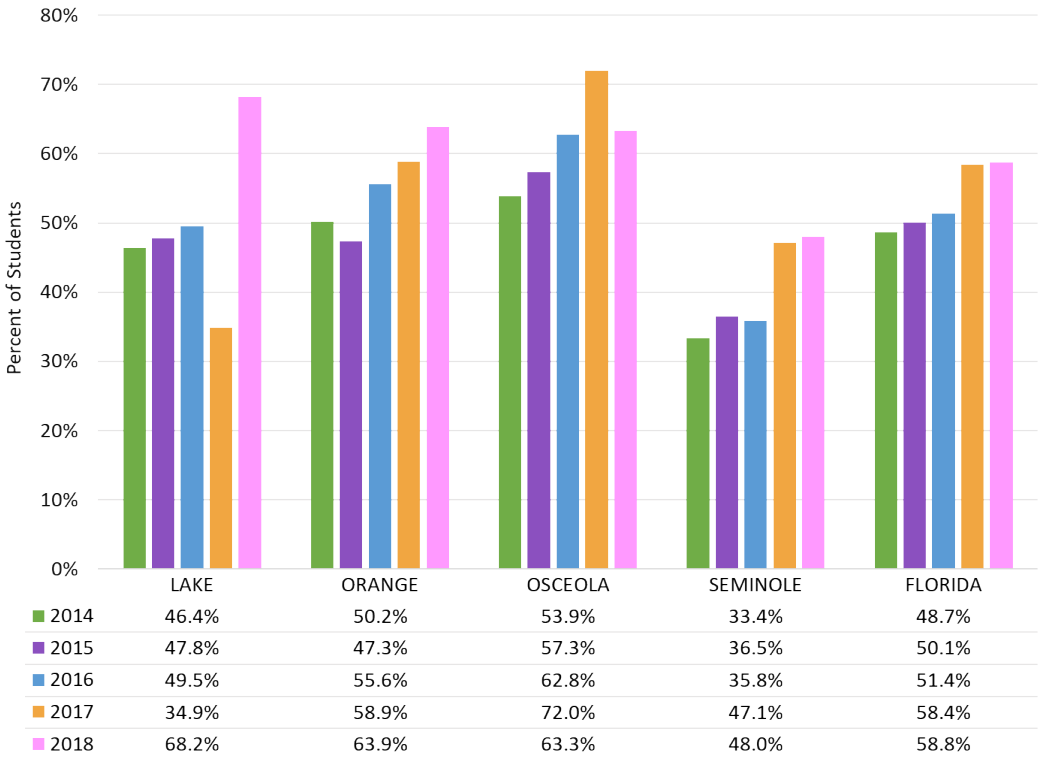
CHART 6.2: PERSONS LIVING BELOW POVERTY LEVEL (2000-2017)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
2000	9.6%	12.1%	11.5%	7.4%	12.5%
2010	11.0%	13.4%	13.3%	9.8%	13.8%
2013	13.8%	17.0%	17.9%	11.3%	16.3%
2014	14.5%	18.2%	20.7%	12.9%	16.5%
2017	12.6%	15.3%	14.0%	11.2%	14.0%

Source: U.S. Census Bureau, American Fact Finder

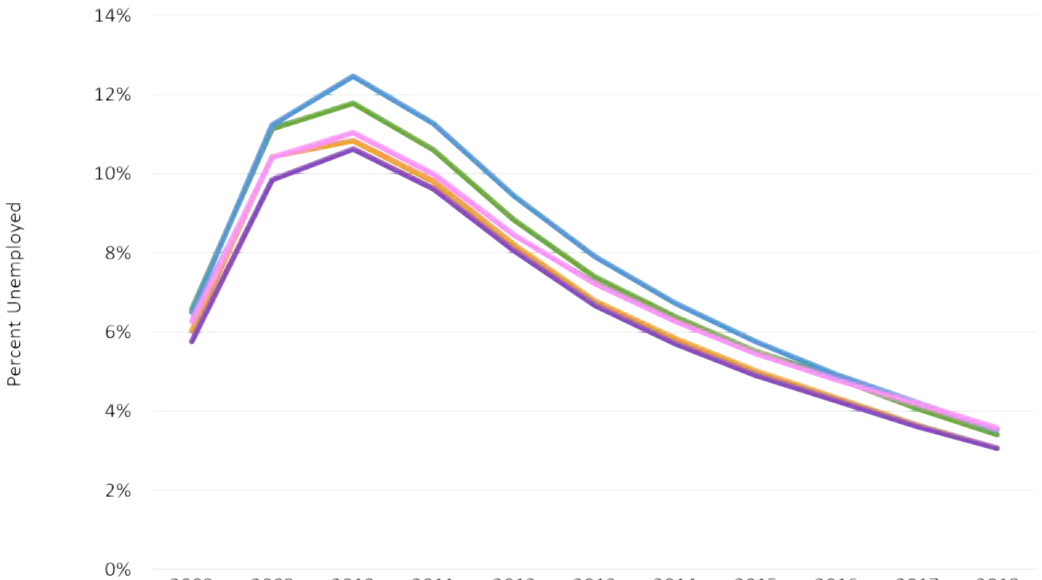
CHART 6.3: STUDENTS RECEIVING FREE & REDUCED LUNCH (2014-2018)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
2014	46.4%	50.2%	53.9%	33.4%	48.7%
2015	47.8%	47.3%	57.3%	36.5%	50.1%
2016	49.5%	55.6%	62.8%	35.8%	51.4%
2017	34.9%	58.9%	72.0%	47.1%	58.4%
2018	68.2%	63.9%	63.3%	48.0%	58.8%

Source: County Health Rankings and Roadmaps

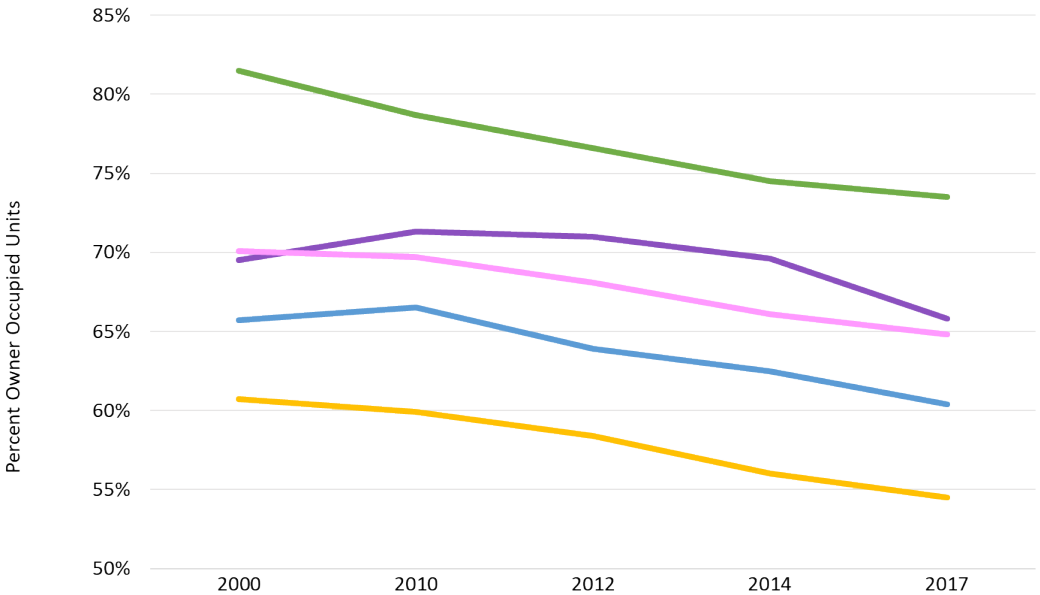
CHART 6.4: UNEMPLOYMENT RATE (2008–2018)



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
LAKE	6.6%	11.1%	11.8%	10.6%	8.8%	7.4%	6.4%	5.5%	4.8%	4.1%	3.4%
ORANGE	6.0%	10.4%	10.8%	9.8%	8.2%	6.8%	5.8%	5.0%	4.3%	3.7%	3.1%
OSCEOLA	6.5%	11.2%	12.5%	11.3%	9.5%	7.9%	6.7%	5.8%	4.9%	4.2%	3.6%
SEMINOLE	5.8%	9.8%	10.6%	9.6%	8.1%	6.7%	5.7%	4.9%	4.3%	3.6%	3.1%
FLORIDA	6.3%	10.4%	11.0%	10.0%	8.5%	7.2%	6.3%	5.5%	4.8%	4.2%	3.6%

Source: US Department of Labor, Bureau of Labor Statistics

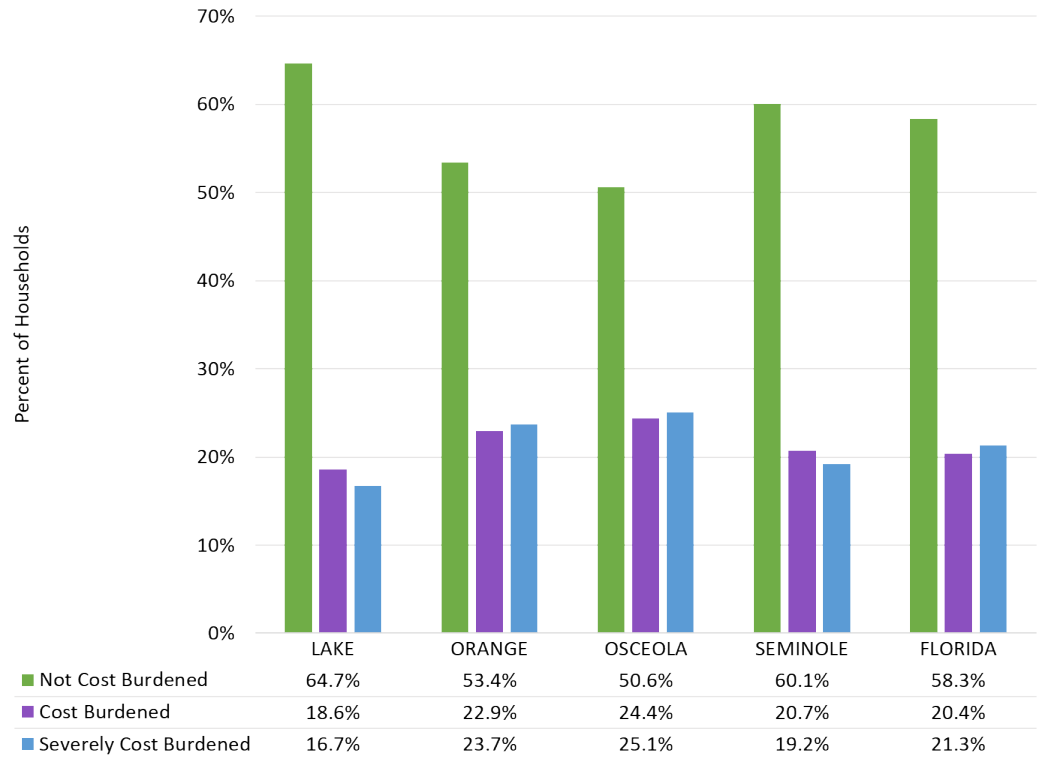
CHART 6.5: HOMEOWNERSHIP RATES (2000–2017)



	2000	2010	2012	2014	2017
LAKE	81.5%	78.7%	76.6%	74.5%	73.5%
ORANGE	60.7%	59.9%	58.4%	56.0%	54.5%
OSCEOLA	65.7%	66.5%	63.9%	62.5%	60.4%
SEMINOLE	69.5%	71.3%	71.0%	69.6%	65.8%
FLORIDA	70.1%	69.7%	68.1%	66.1%	64.8%

Source: Florida Housing Data, Shimberg Center

CHART 6.6: COST BURDEN OF HOUSEHOLDS (2016)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
Not Cost Burdened	64.7%	53.4%	50.6%	60.1%	58.3%
Cost Burdened	18.6%	22.9%	24.4%	20.7%	20.4%
Severely Cost Burdened	16.7%	23.7%	25.1%	19.2%	21.3%

Source: Florida Housing Data, Shimberg Center

FIGURE 6.5: HOMEOWNER COST BURDEN MAP (2013-2017)

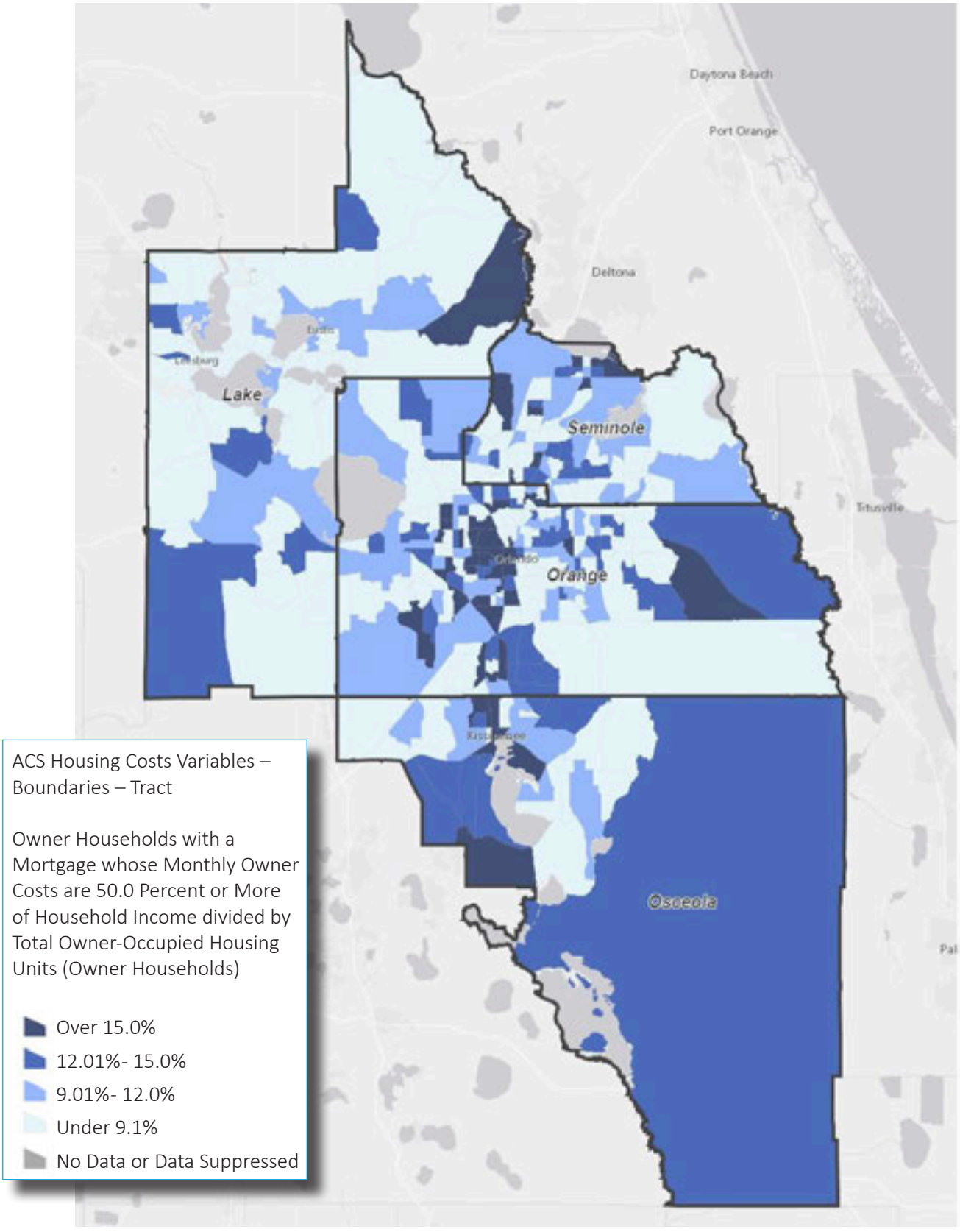
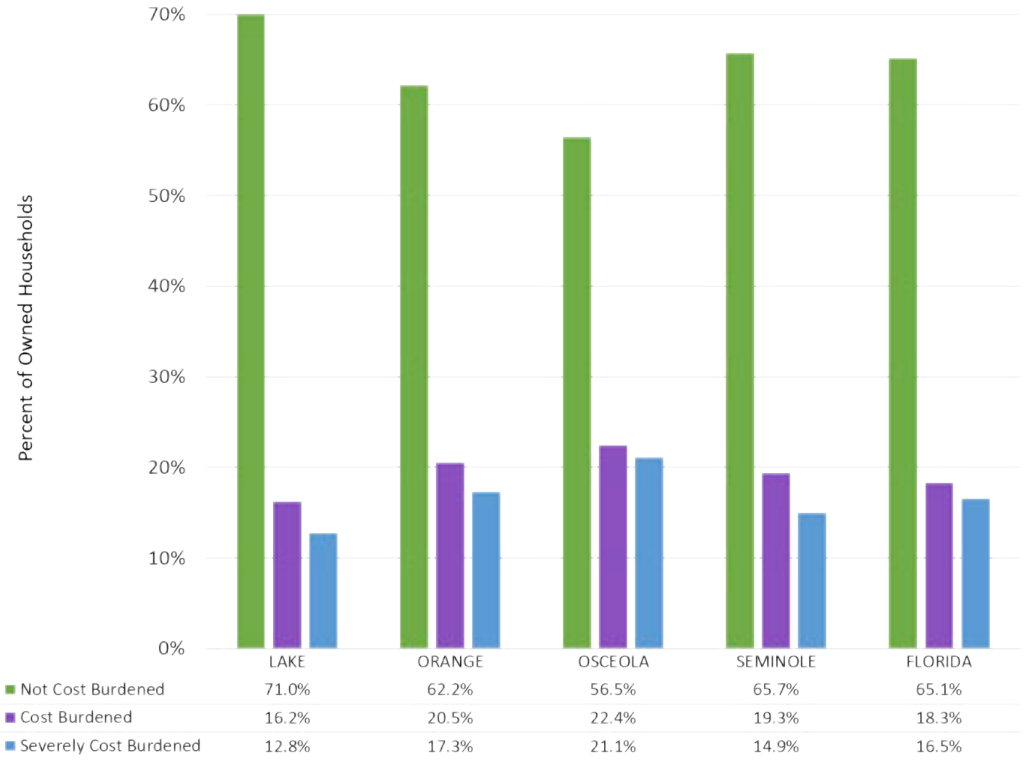
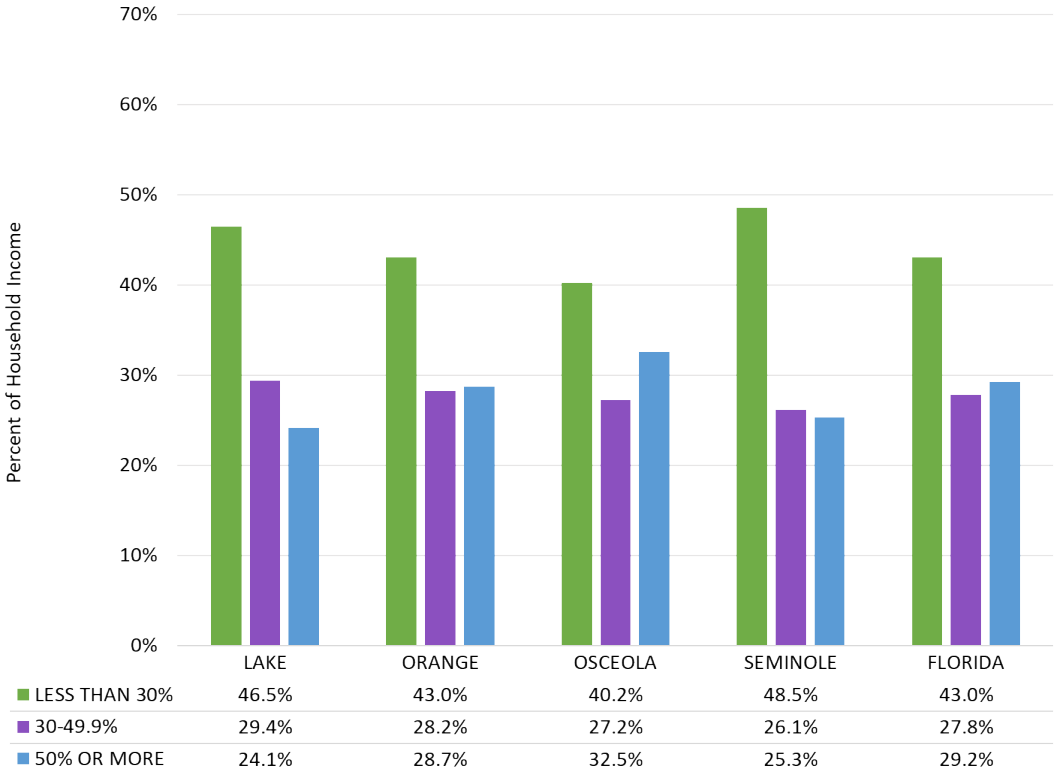


CHART 6.7: HOMEOWNER COST BURDEN (2016)



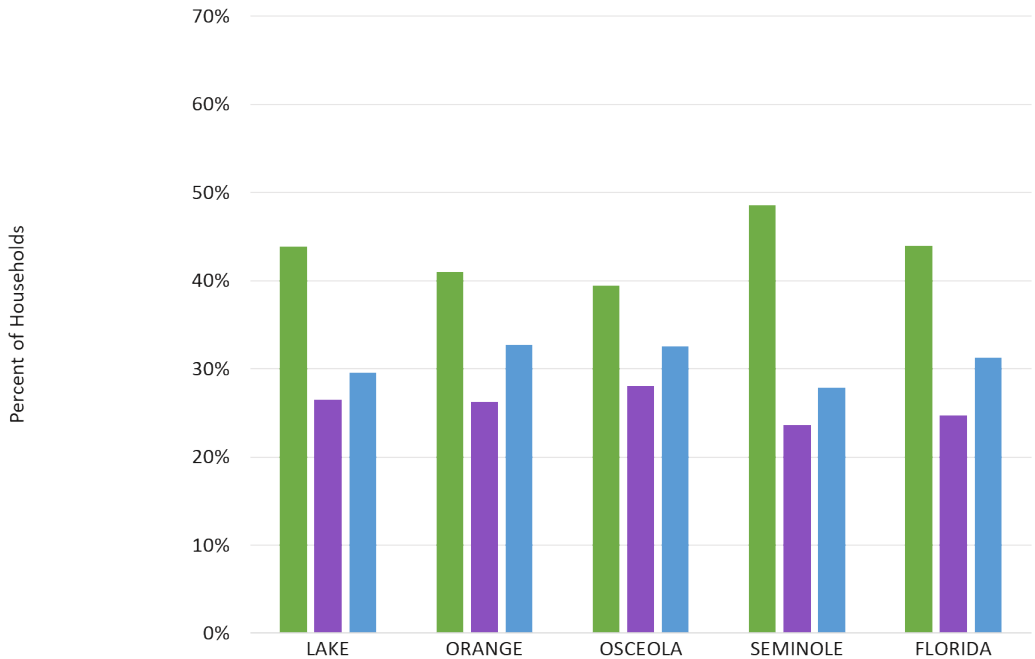
Source: Florida Housing Data, Shimberg Center

CHART 6.8: GROSS RENT AS A PERCENT OF INCOME- 5-YEAR ESTIMATES (2016)



Source: Florida Housing Data, Shimberg Center

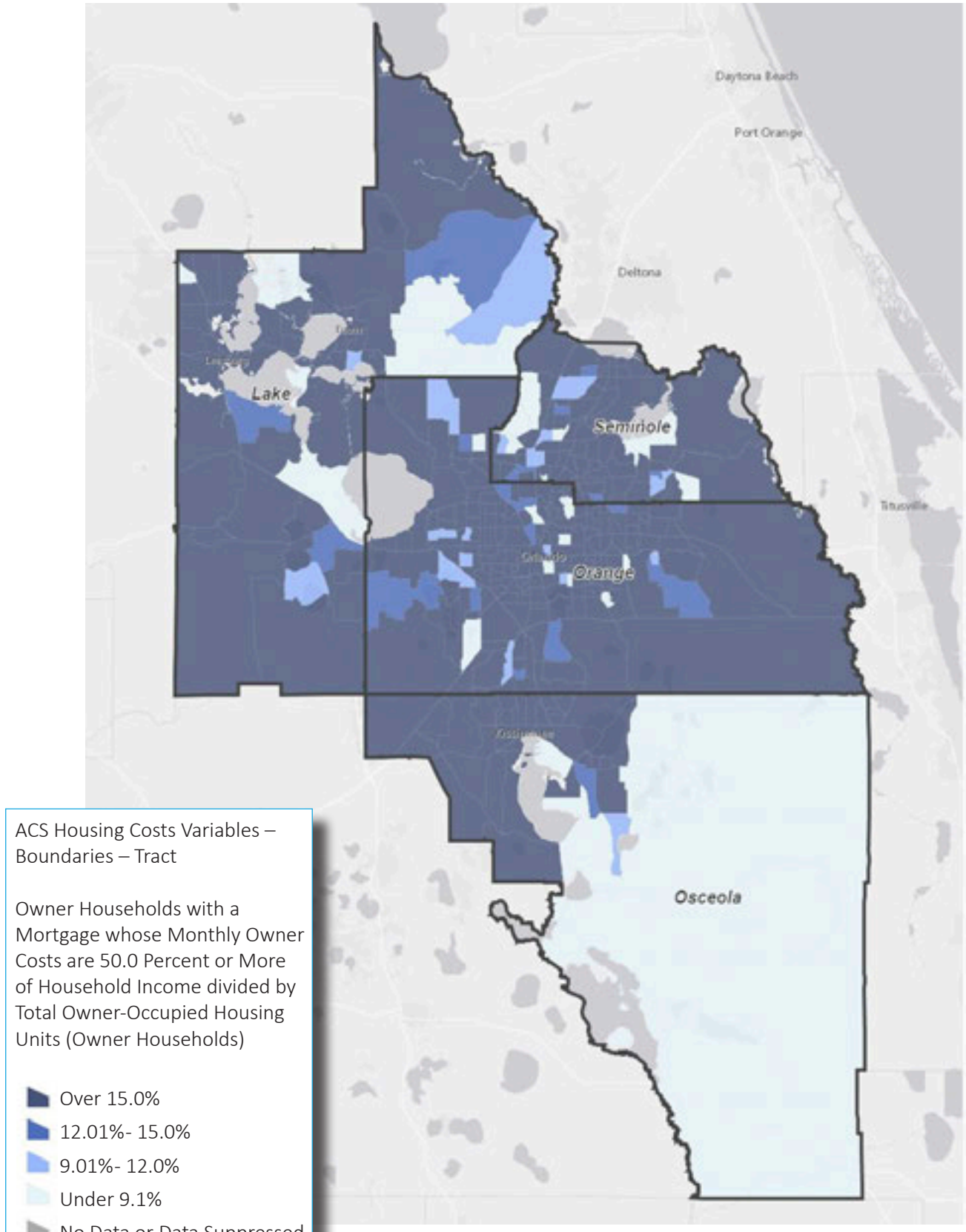
CHART 6.9: COST BURDEN EXPERIENCED BY RENTER HOUSEHOLDS (2016)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
Not Cost Burdened	43.9%	41.0%	39.4%	48.6%	44.0%
Cost Burdened	26.5%	26.3%	28.0%	23.6%	24.8%
Severely Cost Burdened	29.6%	32.7%	32.5%	27.9%	31.3%

Source: Florida Housing Data, Shimberg Center

FIGURE 6.6: COST BURDEN EXPERIENCED BY RENTER HOUSEHOLDS MAP (2013-2017)



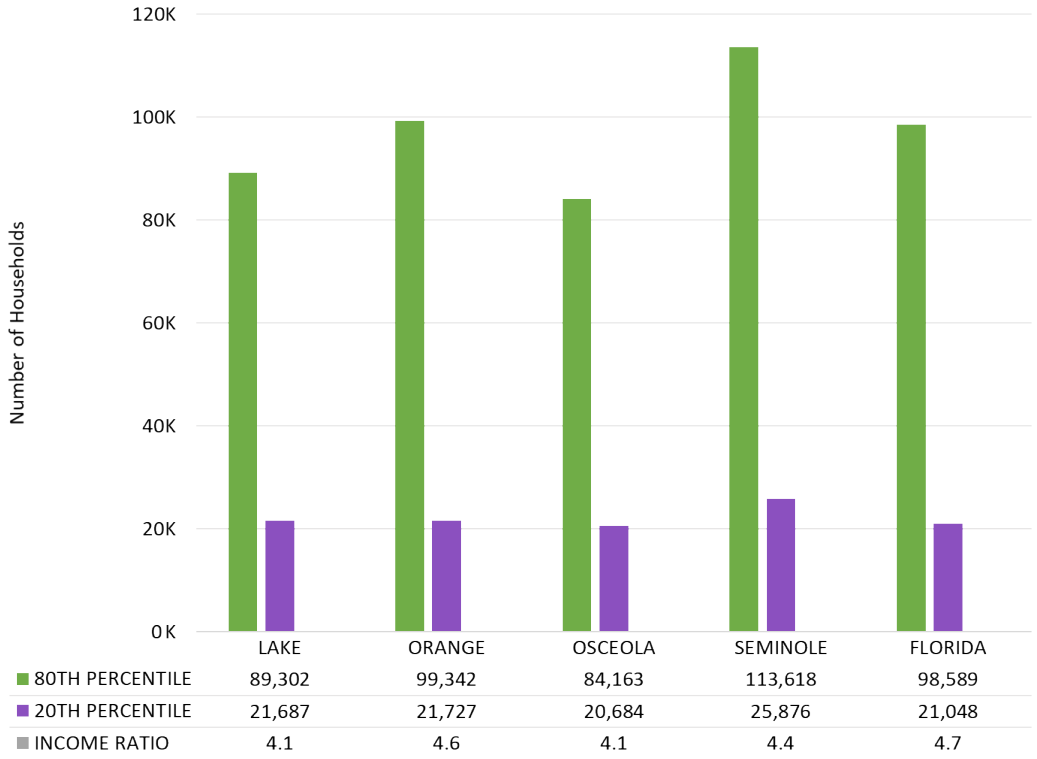
Source: American Family Survey, 5-Year Estimates

TABLE 6.1: HOMELESS INDIVIDUALS BY COUNTY (2010-2018)

County	2010	2011	2012	2013	2014	2015	2016	2017	2018
Lake	796	1,008	1,019	282	187	265	198	242	312
Orange	1,494	2,872	2,281	2,937	1,701	1,396	1,228	1,522	1,539
Osceola	443	833	722	599	278	372	175	239	226
Seminole	397	810	658	842	275	344	210	313	288
Total	3,130	5,523	4,680	4,660	2,441	2,377	1,811	2,316	2,365

Source: Florida Department of Children and Families Council on Homelessness Annual Report

CHART 6.10: INCOME INEQUALITY (2018)



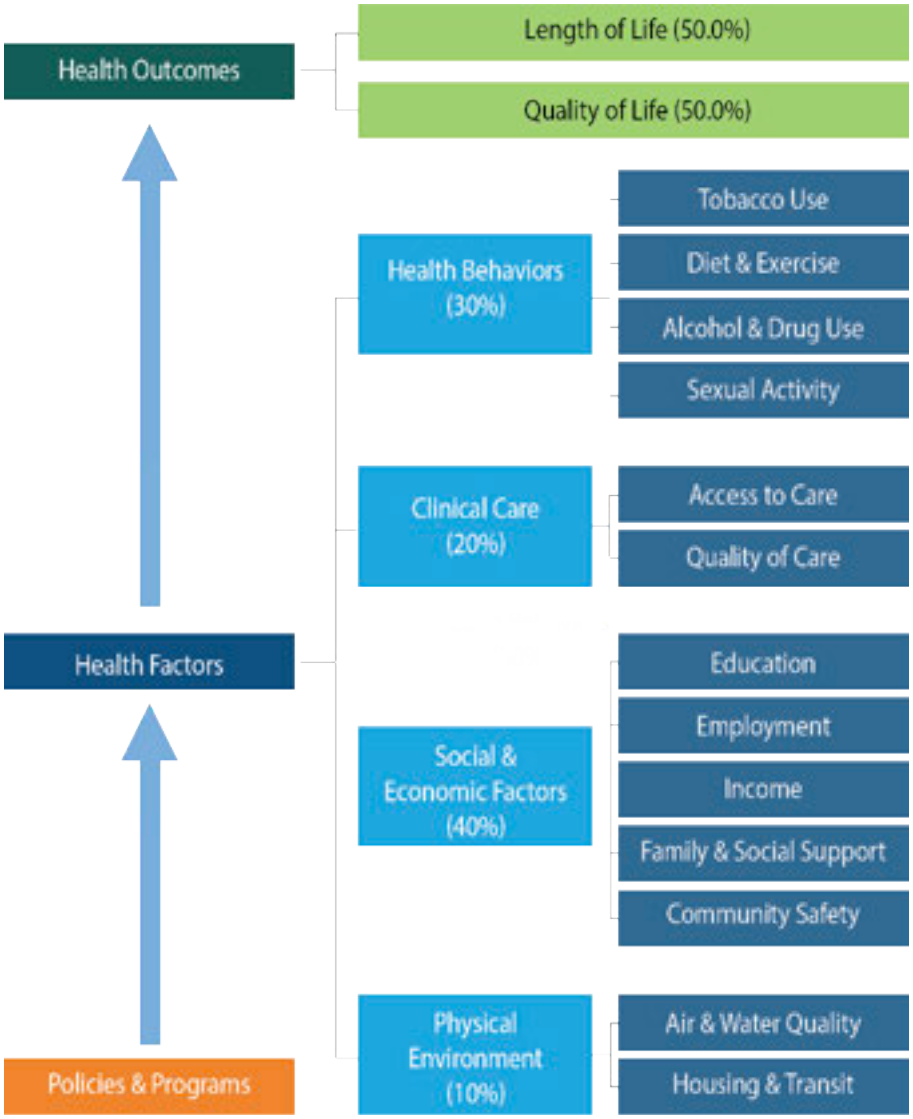
Source: Florida Housing Data, Shimberg Center

County Health Rankings and Roadmaps

The County Health Rankings & Roadmaps (CHR) program is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. They believe America can become a nation where getting healthy, staying healthy and making sure our children grow up healthy are top priorities. They envision an America where we all strive to live together to build a national culture of health that enables all in our diverse society to lead healthy lives, now, and for generations to come.

The County Health Rankings are based on a model of community health that emphasizes the many factors that influence how long and how well we live. The rankings use more than 30 measures that help communities understand how healthy their residents are today (health outcomes) and what will impact their health in the future (health factors). Health outcomes weigh length of life and quality of life equally and health factors are comprised of health behaviors (weighted at 30 percent), clinical care (20 percent), social and economic factors (40 percent) and physical environment (ten percent). The model is outlined in Figure 6.7. This model outlines how numerical rankings are determined. All 67 counties in Florida receive rankings.

FIGURE 6.7: COUNTY HEALTH RANKINGS



Source: County Health Rankings and Roadmaps

To assess changes in the four-county region since the 2016 CHNA, Table 6.2 includes data from 2016 and 2018. When looking at all of identified health outcomes and factors identified by County Health Rankings, Seminole County leads the way in the four-county region by far as the fourth and fifth best respectively in the state.

When the components of health outcomes are broken down, Lake County was 21st in the state in social & economic factors, 26th in the state for resident length of life and 20th in quality of life. Lake County ranks 12th in the region for clinical care outcomes (See Table 6.3)

TABLE 6.3: CENTRAL FLORIDA COUNTY HEALTH RANKINGS 2018

County	2016		2018	
	Health Outcomes	Health Factors	Health Outcomes	Health Factors
Lake	14	17	24	24
Orange	21	21	15	19
Osceola	32	40	30	32
Seminole	5	3	4	5

Source: County Health Rankings and Roadmaps

TABLE 6.4: HEALTH OUTCOME/FACTOR RANKINGS 2018

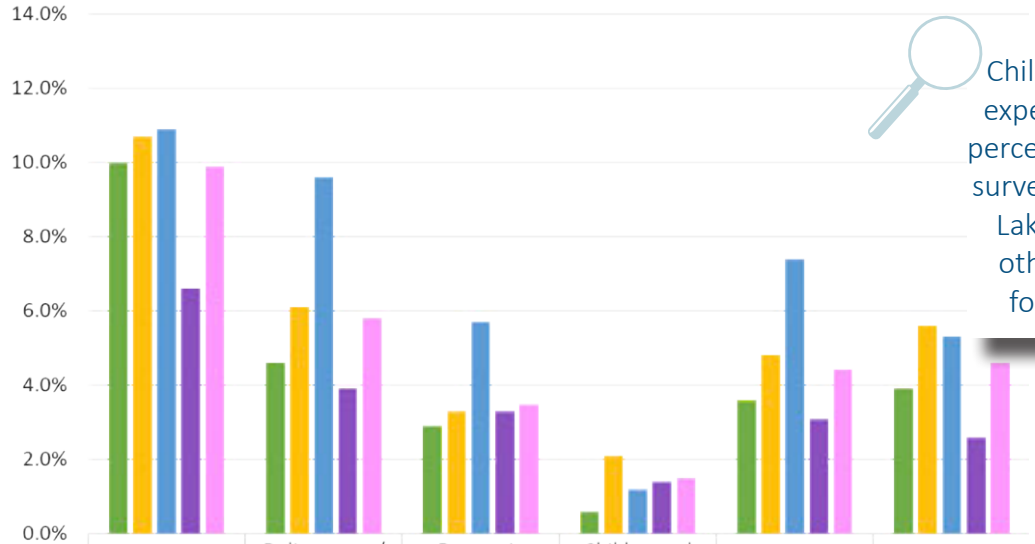
County	Length of Life	Quality of Life	Health Behavior	Clinical Care	Social & Economic Factors	Physical Environment
Lake	26	20	21	12	21	51
Orange	7	28	13	23	18	48
Osceola	8	51	18	48	26	65
Seminole	5	8	10	5	2	55

Source: County Health Rankings and Roadmaps

School and Student Characteristics: What the Community is Saying

Figure 6.8 illustrates the experience of the community survey respondents related to crime, delinquency and violence. One in 10 respondents from Lake County are likely to have experienced crime. Almost one in 20 are likely to have experienced delinquency/youth crime, violence and gun violence.

FIGURE 6.8: CRIME AND DELINQUENCY EXPERIENCE, COMMUNITY SURVEY 2019



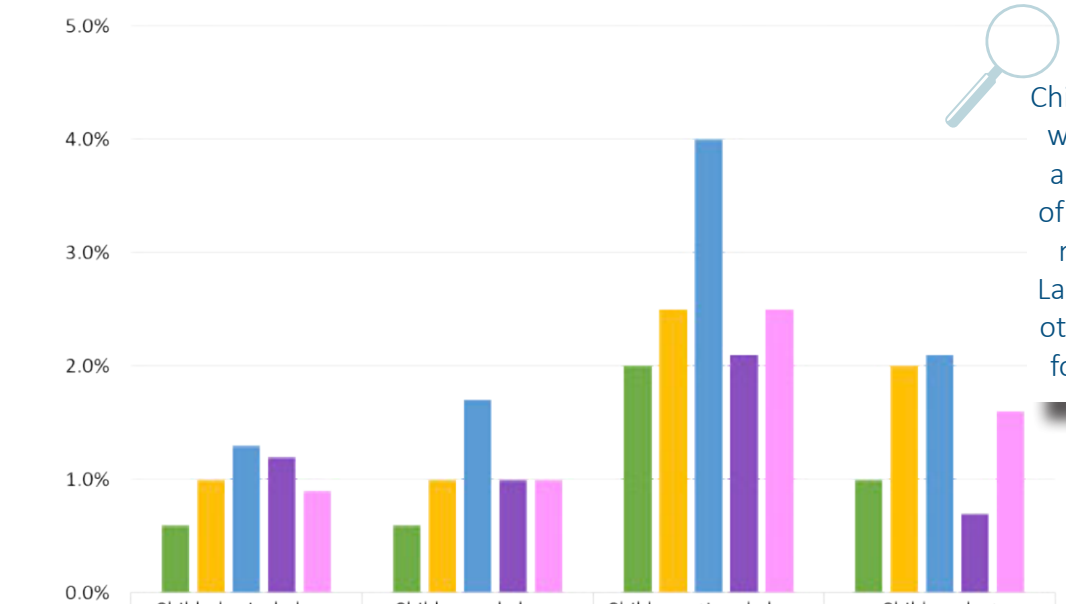
	Crime	Delinquency/ youth crime	Domestic violence	Child sexual abuse	Violence	Gun violence
LAKE	10.0%	4.6%	2.9%	0.6%	3.6%	3.9%
ORANGE	10.7%	6.1%	3.3%	2.1%	4.8%	5.6%
OSCEOLA	10.9%	9.6%	5.7%	1.2%	7.4%	5.3%
SEMINOLE	6.6%	3.9%	3.3%	1.4%	3.1%	2.6%
OVERALL	9.9%	5.8%	3.5%	1.5%	4.4%	4.6%

Child sexual abuse was experienced by a lower percentage of community survey respondents from Lake County than the other counties in the four-county region.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

A small percentage (less than 0.7 percent) of community survey respondents indicated that they or their family have experienced physical or sexual child abuse issues. These are outlined in Figure 6.9.

FIGURE 6.9: CHILD ABUSE AND NEGLECT, COMMUNITY SURVEY 2019



	Child physical abuse	Child sexual abuse	Child emotional abuse	Child neglect
LAKE	0.6%	0.6%	2.0%	1.0%
ORANGE	1.0%	1.0%	2.5%	2.0%
OSCEOLA	1.3%	1.7%	4.0%	2.1%
SEMINOLE	1.2%	1.0%	2.1%	0.7%
OVERALL	0.9%	1.0%	2.5%	1.6%

Child emotional abuse was experienced by a lower percentage of community survey respondents from Lake County than the other counties in the four-county region.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following needs and issues related to school and student characteristics:

- Neighborhood safety especially for the children
- Gun safety
- Need for a community coalition to address the youth
- Homeless students
- Human trafficking
- Poor quality of education
- Obesity and poor diet

Barriers that were identified by primary research participants included:

- Lack of safe mobility options
- Lack of recreational spaces
- Lack of living wages
- Lack of pediatricians that accept Medicaid for children

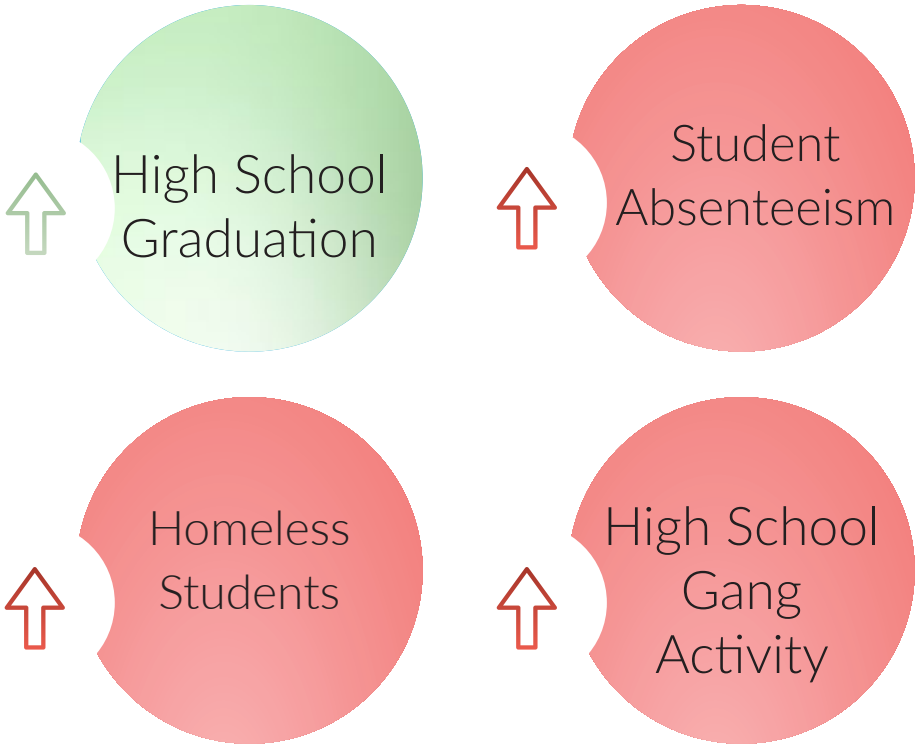
Needed services related to school and student characteristics that were identified by primary research participants included:

- Early intervention programs for pre-kindergarten
- Accessible parks
- A community coalition that supports youth education
- Health education
- Accessible healthy foods

School and Student Demographic Characteristics at a Glance

The key indicators related to school and student demographic characteristics that have changed since the last CHNA are identified in Figure 6.10. Red means that the indicator has worsened and green means that there has been improvement since the most recent CHNA.

FIGURE 6.10: SCHOOL AND STUDENT CHARACTERISTICS INDICATORS



Source: Strategy Solutions, Inc.

School and Student Characteristics: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative of the data included in the charts/tables that follow.

STUDENT RACE/ETHNICITY BY PERCENT (2017)

In 2017, the majority of students in Lake County (76.7 percent) were White, slightly higher than the state (70 percent). Approximately 15 percent (15.2 percent) of students in Lake County were Black, lower than the state average (22.2 percent). Almost a quarter (23.4 percent) were Hispanic, also lower than the state (30.1 percent).

It should be noted that by measuring race and ethnicity separately, the percentages may total more than 100 percent. Students may identify as White or Black racially and also be Hispanic. (See Chart 6.11)

STUDENT RACE/ETHNICITY BY NUMBER (2017)

In 2017, there were 39,445 White students, 7,838 Black students and 12,029 students who identified themselves as Hispanic in Lake County. (See Chart 6.12)

HIGH SCHOOL GRADUATION RATE (2012-2013/2016-2017)

Lake County's graduation rate in 2016-2017 was 77.8 percent, almost five percent less than the state average (82.3 percent). The rate in Lake County has decreased since 2012-2013 (78.3 percent). (See Chart 6.13)

STUDENT ABSENTEEISM (2013-2014/2017-2018)

Lake County had 13.4 percent of students absent 21 or more days in 2017-2018, the percentage increased from 9.3 percent in 2013-2014. The Lake County percentage in in 2013-2014 was lower than the state (9.5 percent) and higher than the state percentage in 2017-2018 (11.3 percent) for this time. (See Chart 6.14)

HOMELESS STUDENTS (2012-2013/2016-2017)

Lake County had the highest percentage of homeless students in the four-county region in 2012-2013 (seven percent) and in 2016-2017 (5.2 percent). The county percentage has been higher than that of the state during this time (two percent in 2012-2013 and 2.5 percent in 2016-2017). (See Chart 6.15)

HIGH SCHOOL GANG ACTIVITY (2014/2017)

In 2017, Lake County's high school gang activity percentage (2.3 percent) was lower than the state (three percent). However, this was an increase from 2.2 percent in 2014 when the percentage was higher than that of the state (2.1 percent). (See Chart 6.16)

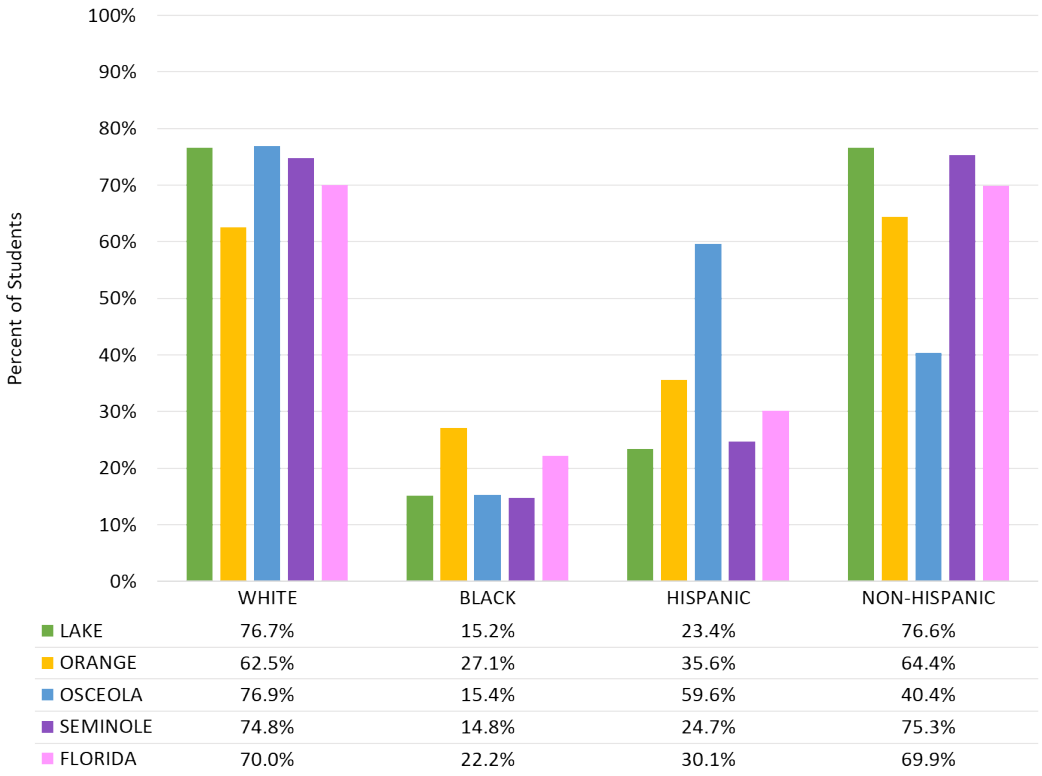
YOUTH ARRESTS, ALL OFFENSES, AGES 10-17 (2012-2016)

Lake County's youth arrest rate per 100,000 decreased from 5,331.3 per 100,000 in 2012 to 3,846 in 2016. The rate was higher than the state rate, which was 5,232.7 and 3,762.9 respectively during this time. (See Chart 6.17)

BULLYING PREVALENCE K-12 (2018)

More than half of all students in Lake County admitted that they had taunted or teased another student in 2018 (60.4 percent), slightly higher than the state (56 percent). Lake County students were more likely than students statewide (9.9 percent versus 8.1 percent) to have skipped school because of bullying, to have ever physically bullied others (16 percent versus 15.1 percent) or to have ever verbally bullied others (30 percent versus 27.1 percent). (See Chart 6.18)

CHART 6.11: STUDENT RACE/ETHNICITY BY PERCENT (2017)

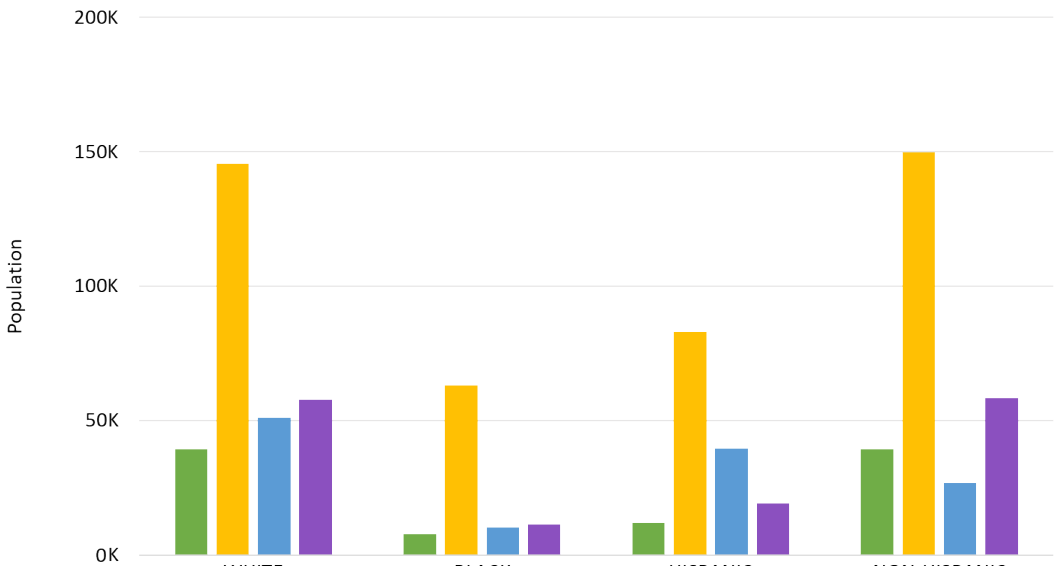


	WHITE	BLACK	HISPANIC	NON-HISPANIC
LAKE	76.7%	15.2%	23.4%	76.6%
ORANGE	62.5%	27.1%	35.6%	64.4%
OSCEOLA	76.9%	15.4%	59.6%	40.4%
SEMINOLE	74.8%	14.8%	24.7%	75.3%
FLORIDA	70.0%	22.2%	30.1%	69.9%

Source: School-Aged Child and Adolescent Profile, Florida Department of Health

*Race/Ethnicity percentages add up to more than 100 percent because Hispanic or Latino individuals can also be White, Black or some other race.

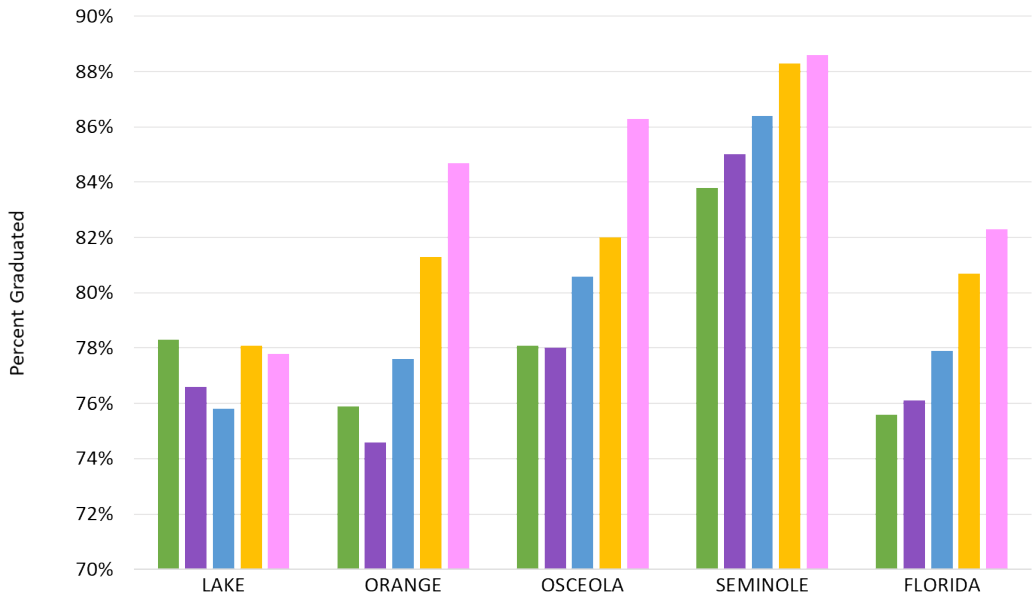
CHART 6.12: STUDENT RACE/ETHNICITY BY NUMBER (2017)



	WHITE	BLACK	HISPANIC	NON-HISPANIC
LAKE	39,445	7,838	12,029	39,407
ORANGE	145,466	63,086	82,894	149,729
OSCEOLA	50,927	10,168	39,473	26,732
SEMINOLE	57,876	11,460	19,095	58,252

Source: School-Aged Child and Adolescent Profile, Florida Department of Health

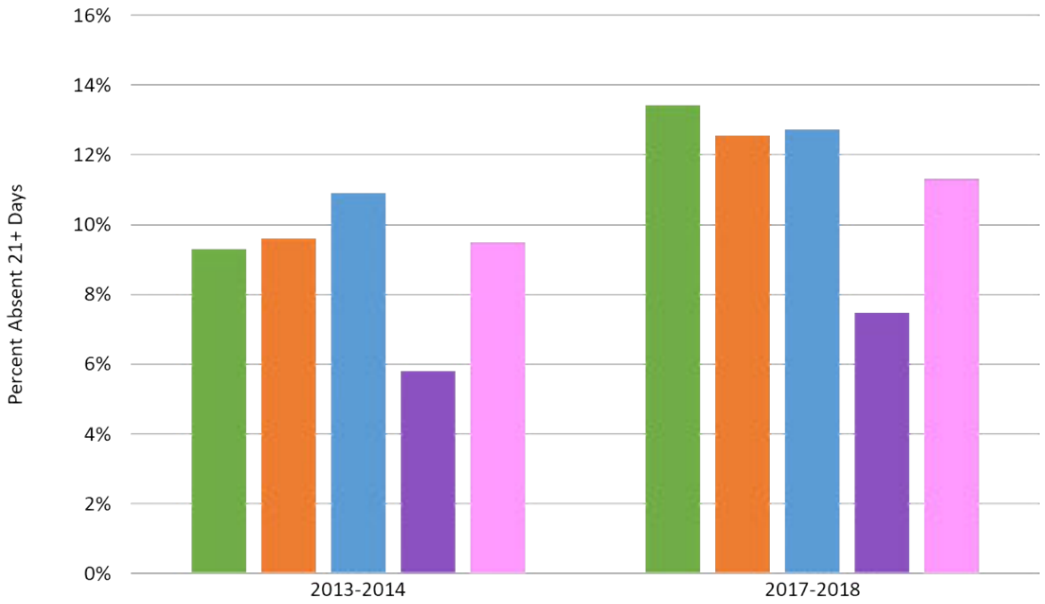
CHART 6.13: HIGH SCHOOL GRADUATION RATE (2012-2013/2016-2017)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
2012-2013	78.3%	75.9%	78.1%	83.8%	75.6%
2013-2014	76.6%	74.6%	78.0%	85.0%	76.1%
2014-2015	75.8%	77.6%	80.6%	86.4%	77.9%
2015-2016	78.1%	81.3%	82.0%	88.3%	80.7%
2016-2017	77.8%	84.7%	86.3%	88.6%	82.3%

Source: County Health Rankings and Roadmaps

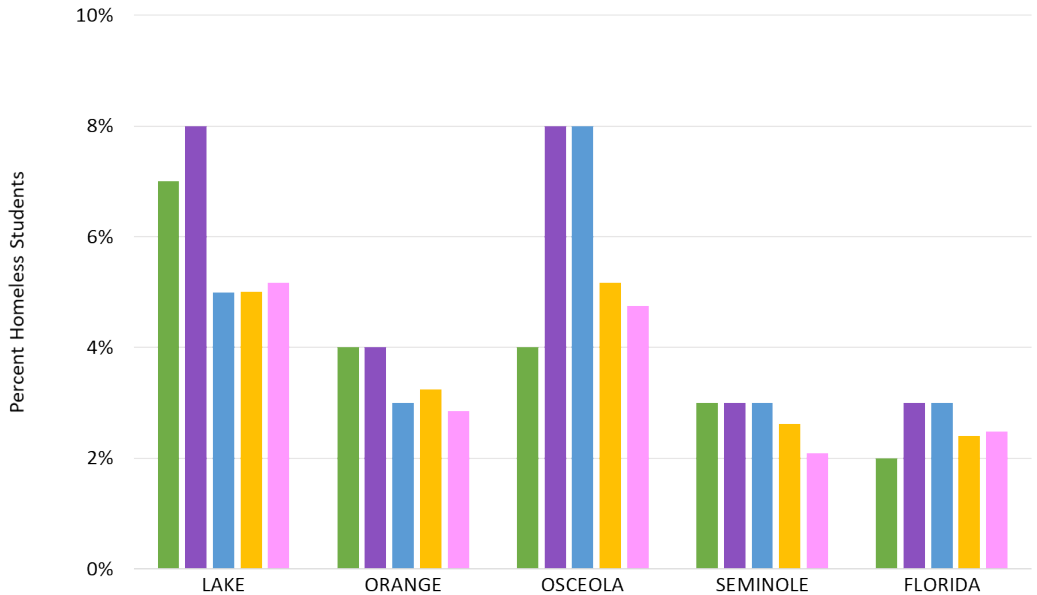
CHART 6.14: STUDENT ABSENTEEISM (2013-2014/2017-2018)



	2013-2014	2017-2018
LAKE	9.3%	13.4%
ORANGE	9.6%	12.6%
OSCEOLA	10.9%	12.7%
SEMINOLE	5.8%	7.5%
FLORIDA	9.5%	11.3%

Source: Florida Department of Education

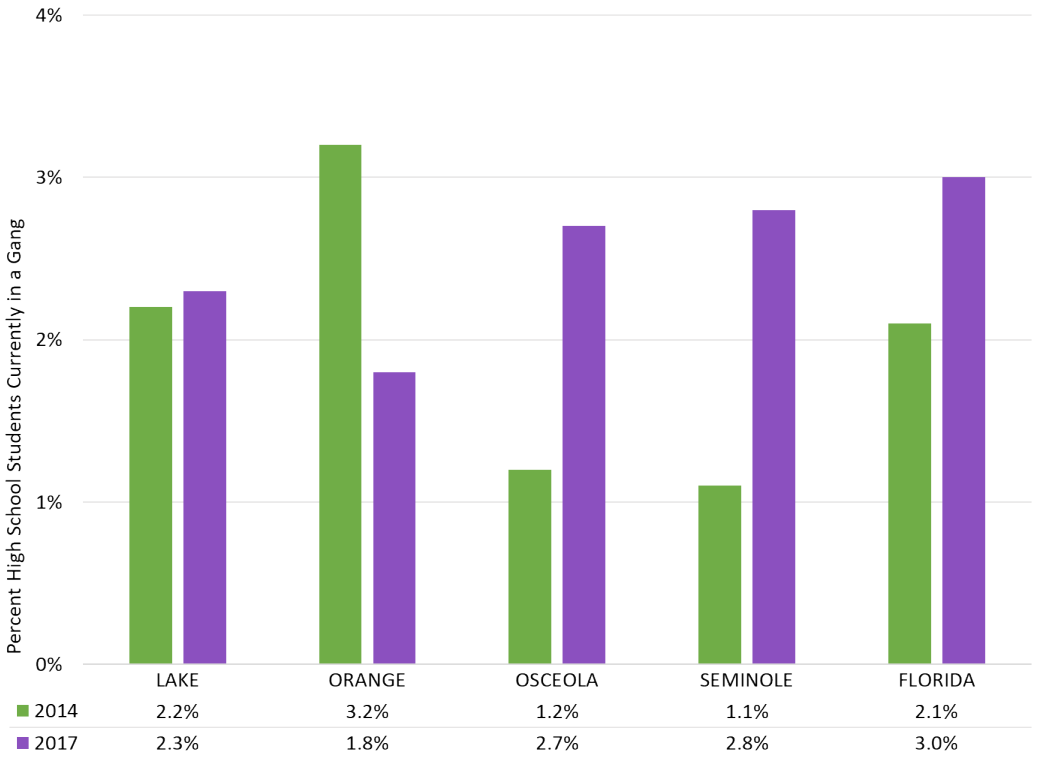
CHART 6.15: HOMELESS STUDENTS (2012-2013/2016-2017)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
2012-2013	7.0%	4.0%	4.0%	3.0%	2.0%
2013-2014	8.0%	4.0%	8.0%	3.0%	3.0%
2014-2015	5.0%	3.0%	8.0%	3.0%	3.0%
2015-2016	5.0%	3.2%	5.2%	2.6%	2.4%
2016-2017	5.2%	2.8%	4.8%	2.1%	2.5%

Source: Florida Department of Children & Families Council on Homelessness

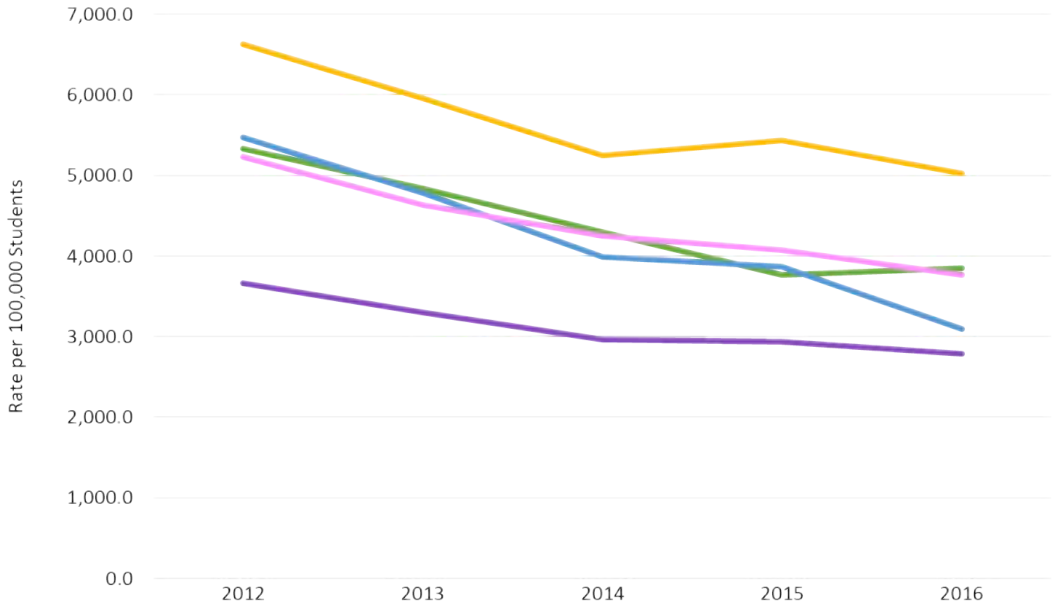
CHART 6.16: HIGH SCHOOL GANG ACTIVITY (2014/2017)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
2014	2.2%	3.2%	1.2%	1.1%	2.1%
2017	2.3%	1.8%	2.7%	2.8%	3.0%

Source: Florida Substance Abuse Survey, Florida Department of Children & Families

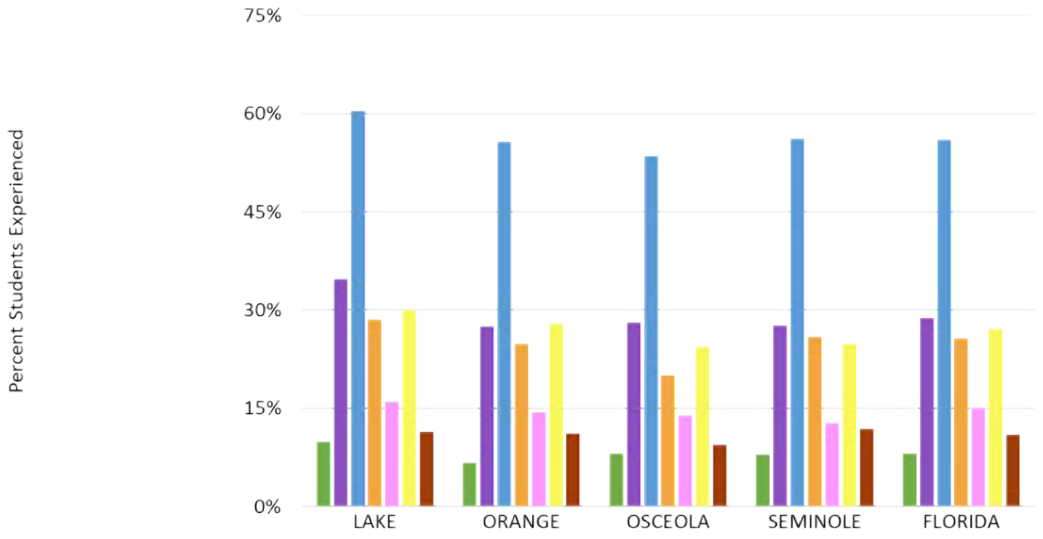
CHART 6.17: YOUTH ARRESTS, ALL OFFENSES, AGES 10-17 (2012-2016)



	2012	2013	2014	2015	2016
LAKE	5,331.3	4,834.0	4,300.4	3,763.3	3,846.0
ORANGE	6,629.1	5,953.5	5,252.9	5,438.2	5,026.9
OSCEOLA	5,470.7	4,783.8	3,989.8	3,865.2	3,092.4
SEMINOLE	3,661.4	3,303.0	2,967.5	2,940.7	2,791.2
FLORIDA	5,232.7	4,637.0	4,250.1	4,073.5	3,762.9

Source: FLHealthCHARTS: Florida Department of Health

CHART 6.18: BULLYING PREVALENCE K-12 (2018)



	LAKE	ORANGE	OSCEOLA	SEMINOLE	FLORIDA
Skipped school/bullying	9.9%	6.7%	8.1%	7.9%	8.1%
Ever kicked/shoved	34.8%	27.5%	28.1%	27.6%	28.8%
Ever taunted/teased	60.4%	55.7%	53.5%	56.1%	56.0%
Ever victim of cyber bullying	28.5%	24.8%	20.0%	25.9%	25.6%
Ever physically bullied others	16.0%	14.4%	13.9%	12.8%	15.1%
Ever verbally bullied others	30.0%	27.9%	24.4%	24.8%	27.1%
Ever cyber bullied others	11.4%	11.1%	9.4%	11.9%	10.9%

Source: Florida Youth Substance Abuse Survey

CHAPTER SEVEN

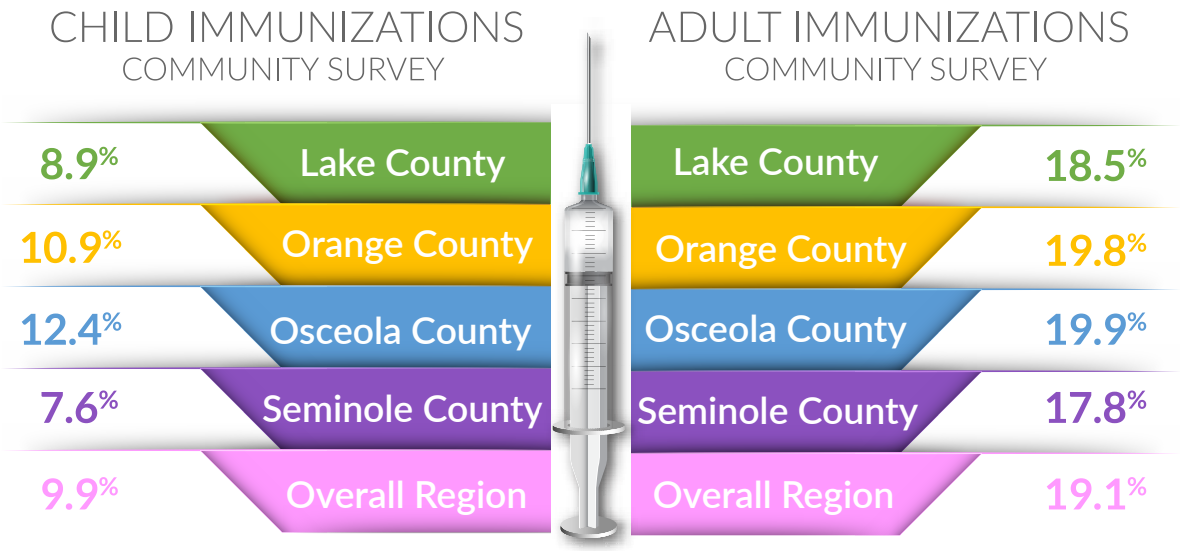
Health Needs of the Community

Lake Norris Conservation Area
Eustis, FL

Lake County

Communicable Diseases: What the Community is Saying

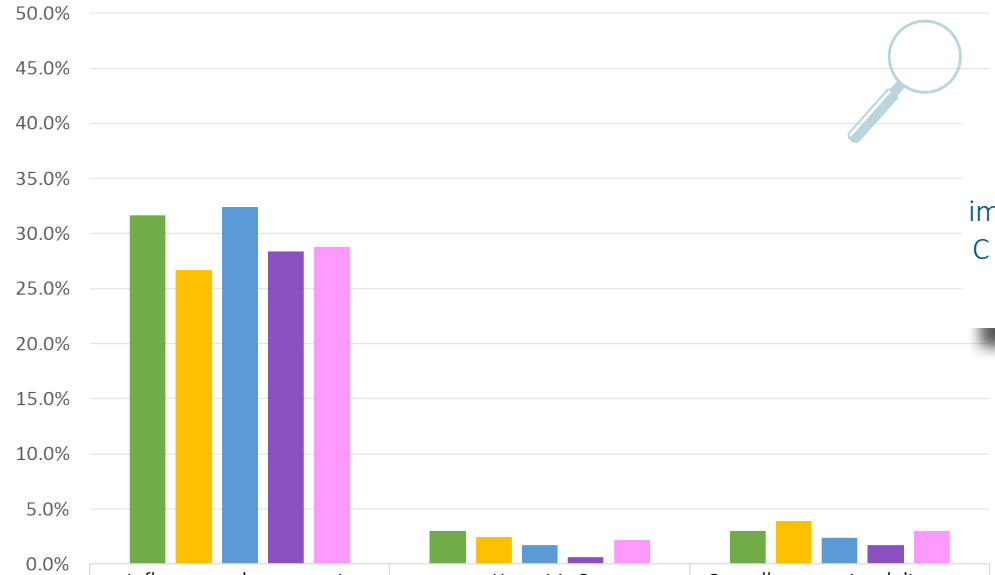
Figure 7.1 identifies the percentages of community survey respondents within Lake County who have experienced difficulty getting immunizations in the past 12 months. Almost one in 10 respondents had difficulty accessing childhood immunizations and almost one in five had difficulty accessing adult immunizations.



Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

In Lake County, 31.7 percent of community survey respondents said they or someone in their family was affected by influenza or pneumonia over the past two years, higher than the four-county region overall (28.8 percent). Far fewer respondents had challenges with hepatitis C and sexually transmitted diseases, both at three percent. This is outlined in Figure 7.2.

FIGURE 7.2: COMMUNICABLE DISEASES IMPACTING COMMUNITY SURVEY RESPONDENTS 2019



	Influenza and pneumonia	Hepatitis C	Sexually transmitted diseases
LAKE	31.7%	3.0%	3.0%
ORANGE	26.7%	2.5%	3.9%
OSCEOLA	32.4%	1.7%	2.4%
SEMINOLE	28.4%	0.6%	1.7%
OVERALL	28.8%	2.2%	3.0%

Respondents in Lake County were more likely to be impacted by Hepatitis C than those in other counties.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following needs and issues related to communicable diseases:

- HIV/AIDS and Hepatitis C
- Stigma around HIV/AIDS
- Misconception that AIDS have been solved
- Access to care

Barriers to care related to communicable diseases identified by participants in the primary research included:

- Limited access to specialized care
- High cost of medications, especially for those with HIV/AIDS
- Lack of multi-lingual providers, especially Spanish-speaking
- Lack of money

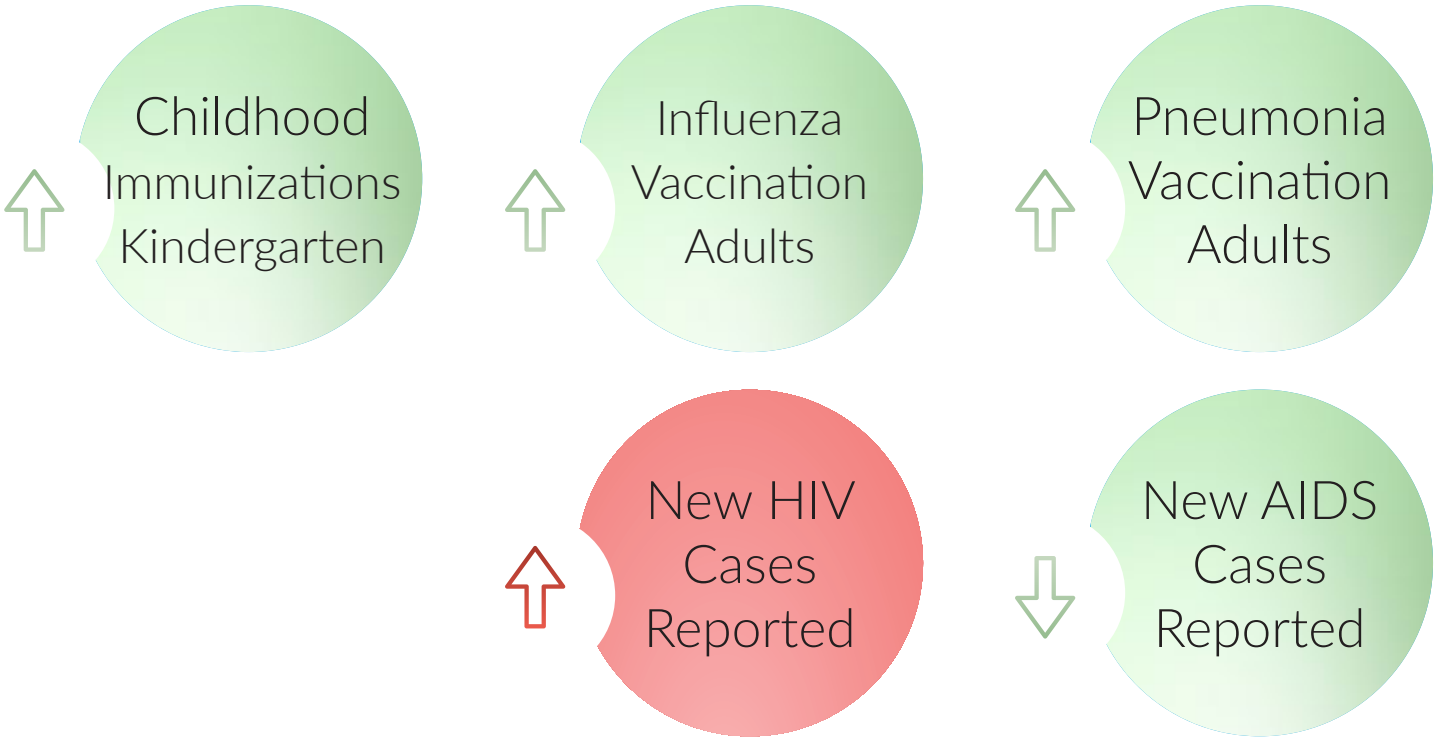
Needed services identified by primary research participants included:

- Increased access to specialty care
- Job accessibility
- Access to housing
- Awareness of community resources
- More access to social networks

Communicable Diseases at a Glance

The key indicators related to communicable diseases that have changed since the last CHNA are identified in Figure 7.3. Red means that the indicator has worsened and green means that there has been improvement since the most recent CHNA.

FIGURE 7.3: COMMUNICABLE DISEASE INDICATORS



Source: Strategy Solutions, Inc.

Communicable Diseases: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

CHILDHOOD IMMUNIZATIONS 2 YEAR OLDS (2008-2017)

The only data available in Lake County for childhood immunizations is in 2017 when the percentage was 88.3 percent. This was higher than the state percentage at the time, which was 86.1 percent. (See Chart 7.1)

CHILDHOOD IMMUNIZATIONS KINDERGARTEN (2009-2018)

Kindergarten-age children in the county have consistently had immunization percentages exceeding 90 percent. While state percentages have gradually increased from 2009 to 2018 (89.8 percent to 93.7 percent), county percentages have fluctuated. The Lake County percentage has increased slightly from 92.9 percent in 2009 to 93.9 percent in 2018. This was a decrease from a high of 95.5 percent in 2013. (See Chart 7.2)

INFLUENZA VACCINATION ADULTS AGES 65 AND OLDER (2007-2016)

Influenza (flu) vaccinations percentages for adults ages 65 and older decreased from 2007 to 2013 (71.9 percent to 51.8 percent) in Lake County. The percentage then increased in 2016 to 64.7 percent. The state percentage increased from 64.6 percent in 2007 to 65.3 in 2010 before decreasing to 57.6 percent in 2016. (See Chart 7.3)

PNEUMONIA VACCINATION ADULTS AGES 65 AND OLDER (2007-2016)

Pneumonia vaccination percentages for Lake County adults ages 65 and older increased from 70.4 percent in 2007 to 75.2 percent in 2016. This was higher than the state percentage during this time, which increased from 63 percent to 65.6 percent. (See Chart 7.4)

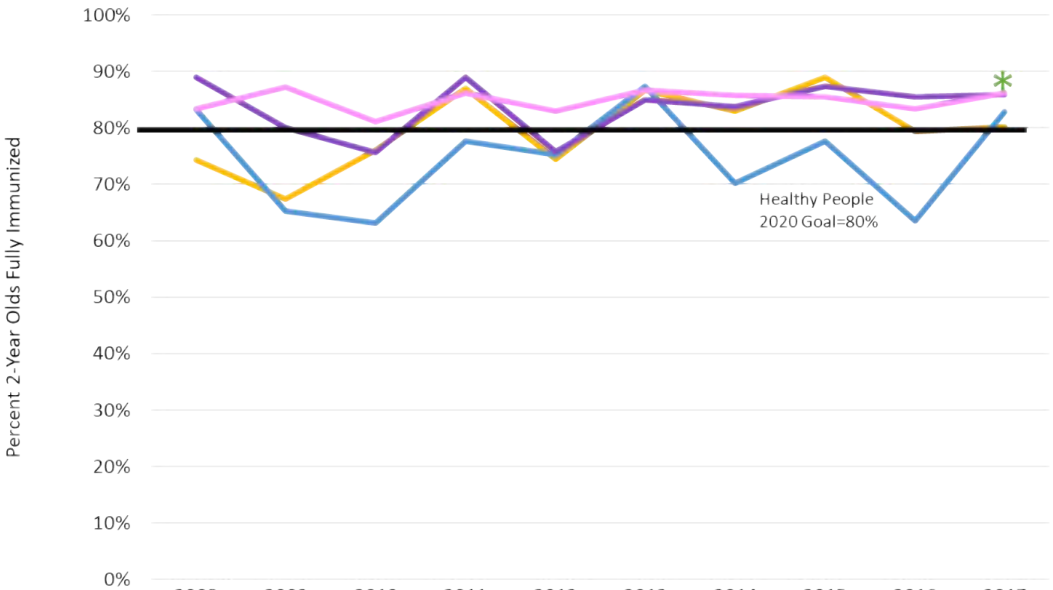
NEW HIV CASES REPORTED (2008-2017)

The rate of new HIV cases per 100,000 population increased in Lake County (10.2 to 15) from 2008 to 2017. The state rate decreased during the same time (32.5 to 24.1). (See Chart 7.5)

NEW AIDS CASES REPORTED (2008-2017)

The rate of new AIDS cases per 100,000 decreased in Lake County and the state from 2008 to 2017. Lake County's rate was 10.6 in 2008 and 6.3 in 2017. The state rate decreased from 22.3 in 2008 to 9.9 in 2017. (See Chart 7.6)

CHART 7.1: CHILDHOOD IMMUNIZATIONS 2 YEAR OLDS (2008-2017)

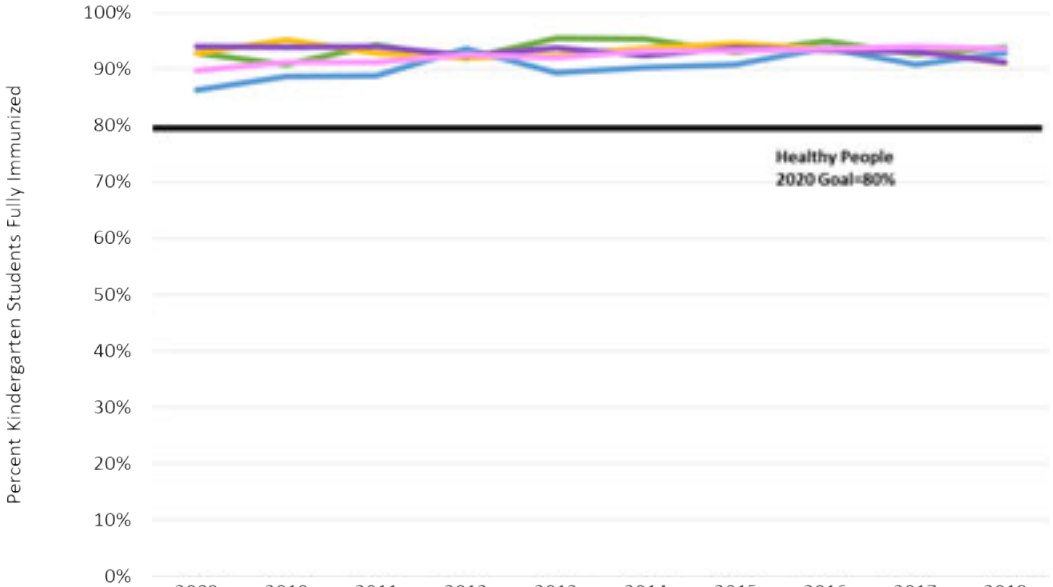


	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	88.3%
ORANGE	74.3%	67.4%	76.1%	87.0%	74.4%	86.7%	83.0%	88.9%	79.4%	80.2%
OSCEOLA	83.3%	65.3%	63.2%	77.7%	75.2%	87.3%	70.2%	77.7%	63.6%	82.9%
SEMINOLE	89.0%	80.0%	75.7%	89.0%	75.8%	85.0%	83.7%	87.4%	85.5%	85.9%
FLORIDA	83.4%	87.2%	81.1%	86.1%	83.0%	86.7%	85.7%	85.5%	83.4%	86.1%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Epidemiology, Immunization Section

*Represents a single data point where there has been inconsistent data for a county

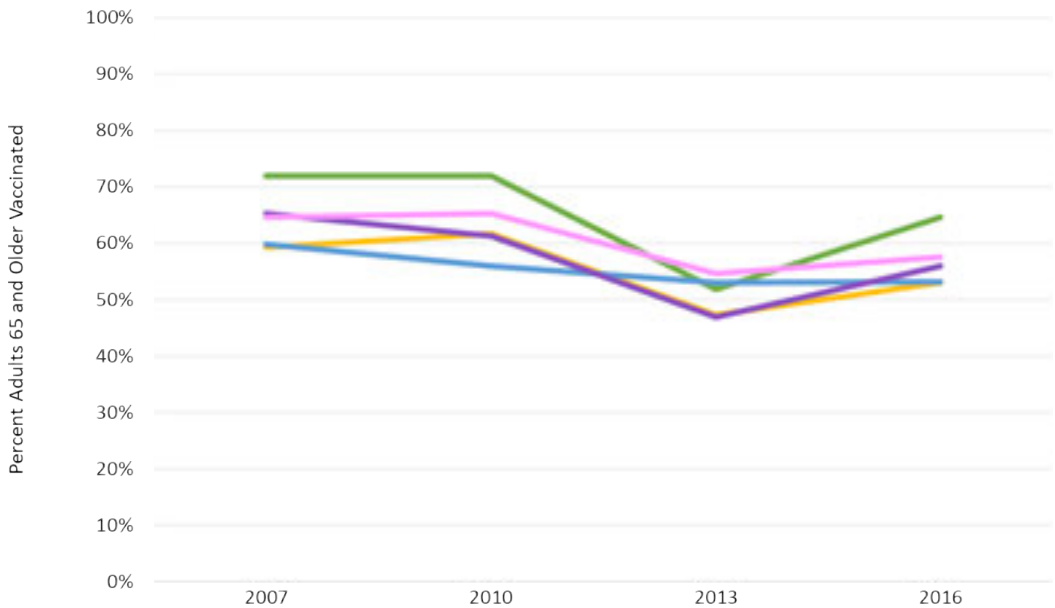
CHART 7.2: CHILDHOOD IMMUNIZATIONS KINDERGARTEN (2009-2018)



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
LAKE	92.9%	90.8%	94.3%	91.9%	95.5%	95.4%	93.0%	95.0%	92.7%	93.9%
ORANGE	92.9%	95.3%	92.8%	92.1%	92.4%	93.8%	94.6%	93.7%	93.3%	91.1%
OSCEOLA	86.3%	88.7%	88.9%	93.7%	89.4%	90.3%	90.8%	93.8%	90.9%	92.9%
SEMINOLE	94.0%	93.9%	94.1%	92.5%	93.8%	92.4%	93.8%	93.4%	93.1%	91.3%
FLORIDA	89.8%	91.3%	91.3%	92.6%	92.1%	93.2%	93.3%	93.7%	94.1%	93.7%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Epidemiology, Immunization Section

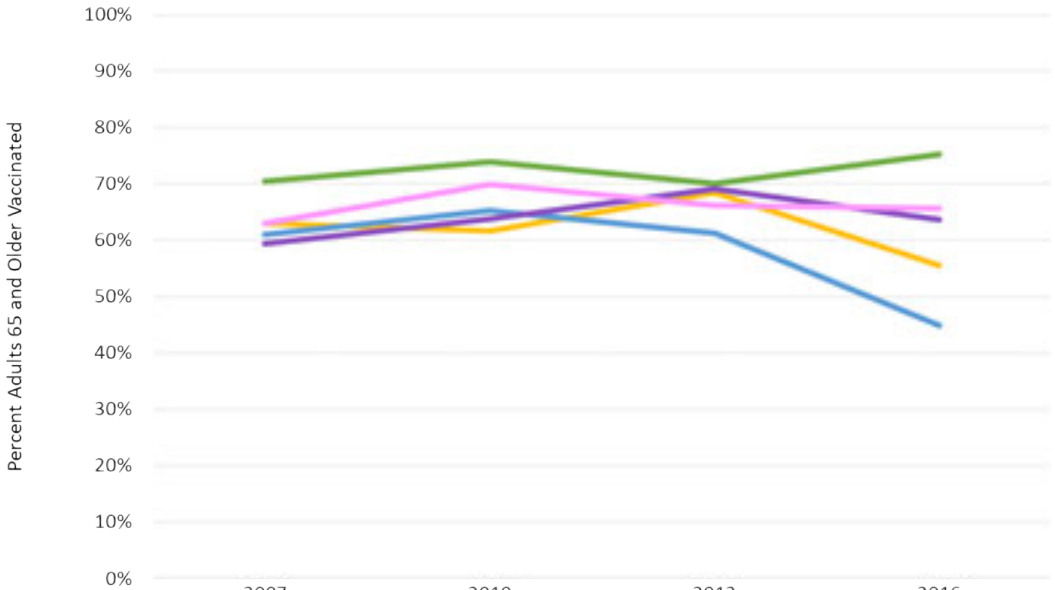
CHART 7.3: INFLUENZA VACCINATION ADULTS AGES 65 AND OLDER (2007-2016)



	2007	2010	2013	2016
LAKE	71.9%	71.9%	51.8%	64.7%
ORANGE	59.3%	61.7%	47.4%	53.0%
OSCEOLA	59.9%	56.0%	53.1%	53.2%
SEMINOLE	65.3%	61.3%	47.0%	56.0%
FLORIDA	64.6%	65.3%	54.6%	57.6%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

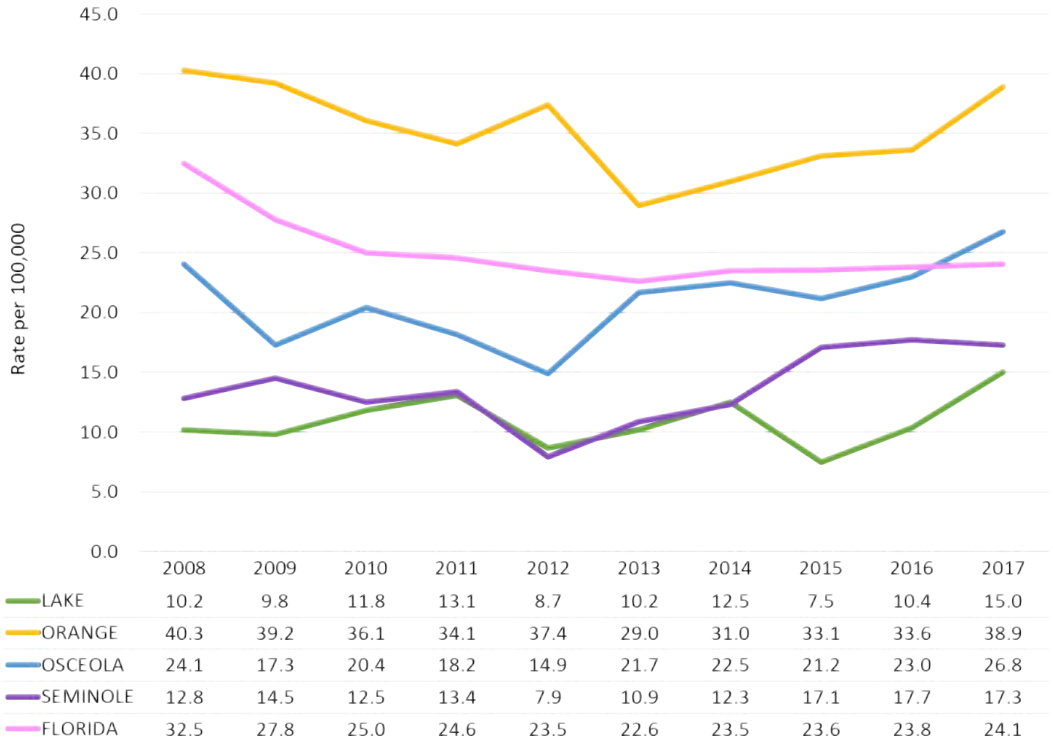
CHART 7.4: PNEUMONIA VACCINATION ADULTS AGES 65 AND OLDER (2007-2016)



	2007	2010	2013	2016
LAKE	70.4%	73.9%	70.1%	75.2%
ORANGE	63.0%	61.6%	68.5%	55.6%
OSCEOLA	61.0%	65.2%	61.3%	44.9%
SEMINOLE	59.4%	63.8%	69.1%	63.6%
FLORIDA	63.0%	69.9%	66.2%	65.6%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance

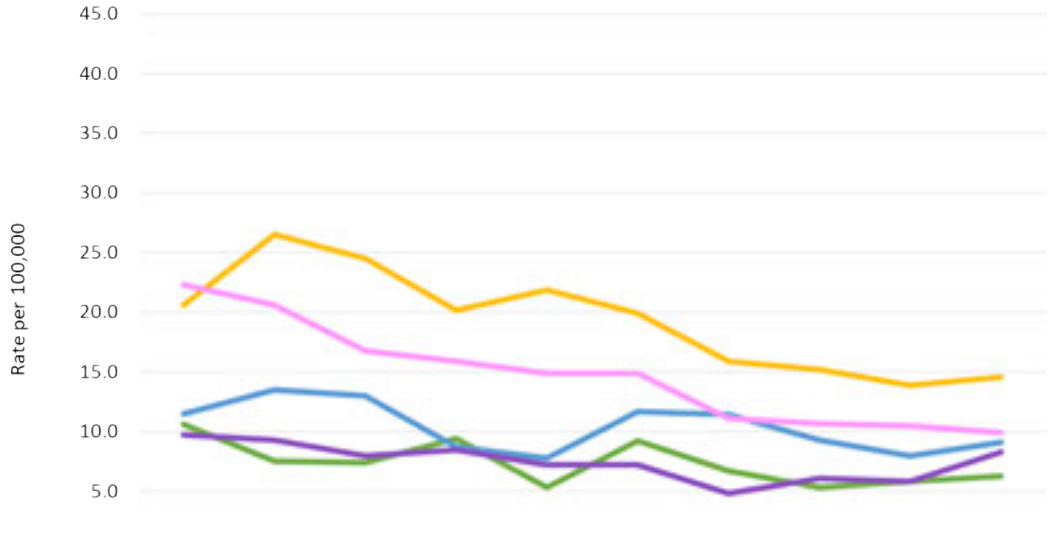
CHART 7.5: NEW HIV CASES REPORTED (2008-2017)



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	10.2	9.8	11.8	13.1	8.7	10.2	12.5	7.5	10.4	15.0
ORANGE	40.3	39.2	36.1	34.1	37.4	29.0	31.0	33.1	33.6	38.9
OSCEOLA	24.1	17.3	20.4	18.2	14.9	21.7	22.5	21.2	23.0	26.8
SEMINOLE	12.8	14.5	12.5	13.4	7.9	10.9	12.3	17.1	17.7	17.3
FLORIDA	32.5	27.8	25.0	24.6	23.5	22.6	23.5	23.6	23.8	24.1

Source: FLHealthCHARTS: Florida Department of Health, Bureau of HIV/AIDS

CHART 7.6: NEW AIDS CASES REPORTED (2008-2017)



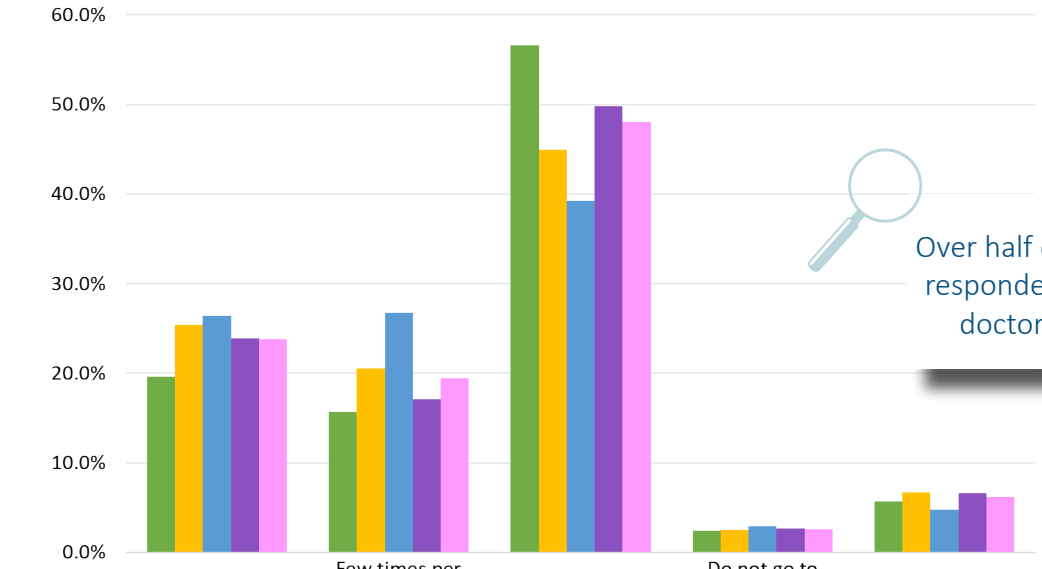
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	10.6	7.5	7.4	9.4	5.3	9.2	6.7	5.3	5.8	6.3
ORANGE	20.6	26.5	24.5	20.2	21.9	19.9	15.9	15.2	13.9	14.6
OSCEOLA	11.5	13.5	13.0	8.7	7.8	11.7	11.4	9.3	8.0	9.1
SEMINOLE	9.7	9.3	8.0	8.5	7.2	7.2	4.8	6.1	5.8	8.3
FLORIDA	22.3	20.6	16.8	15.9	14.9	14.9	11.1	10.7	10.5	9.9

Source: FLHealthCHARTS: Florida Department of Health, Bureau of HIV/AIDS

Preventative Care: What the Community is Saying

Approximately 1 in 5 (19.6 percent) of the community survey respondents from Lake County indicated that they see a doctor or a medical provider once a year. More than half (56.6 percent) of the respondents only see a doctor or provider when they are sick. This is illustrated in Figure 7.4.

FIGURE 7.4: FREQUENCY OF DOCTOR VISITS, COMMUNITY SURVEY 2019



Over half of Lake County respondents only see a doctor when sick.

	Once per year	Few times per year	Only when sick	Do not go to doctor	Other
LAKE	19.6%	15.7%	56.6%	2.4%	5.7%
ORANGE	25.4%	20.5%	44.9%	2.5%	6.7%
OSCEOLA	26.4%	26.7%	39.2%	2.9%	4.8%
SEMINOLE	23.9%	17.1%	49.8%	2.7%	6.6%
OVERALL	23.8%	19.4%	48.0%	2.6%	6.2%

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Table 7.1 outlines the percentages of the community survey respondents by county and for the overall four-county region that accessed preventative care services over the past two years.

TABLE 7.1: PREVENTATIVE CARE SERVICES, COMMUNITY SURVEY 2019*

	Overall	Lake	Orange	Osceola	Seminole
Annual exam	70.6%	75.2%	68.8%	67.5%	71.1%
Prostate specific antigen test (PSA Test)	4.6%	7.0%	4.0%	0.3%	5.4%
Dental exam	62.8%	66.6%	62.2%	55.0%	63.7%
Sigmoidoscopy	1.2%	1.1%	1.2%	0.3%	1.7%
Lab screenings or lab work	70.5%	76.4%	68.3%	66.4%	70.6%
Eye exam	58.7%	66.6%	55.6%	54.3%	58.5%
Colonoscopy	13.3%	16.9%	11.5%	11.1%	14.0%
Blood pressure screening	55.0%	58.2%	54.0%	43.9%	59.7%
Pap test	41.6%	38.0%	43.1%	45.7%	40.3%
Diabetic screening	28.7%	27.4%	30.6%	23.2%	28.9%
Mammogram	38.5%	44.1%	35.2%	38.4%	39.2%
Cholesterol screening	50.6%	54.4%	49.1%	40.5%	55.1%

*lowest scores are highlighted in red.
Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Primary research participants identified the following needs and issues related to preventative care services:

- Health literacy
- Cost of preventative services
- Healthy aging

Barriers identified by the primary research participants included:

- Lack of transportation
- Lack of insurance
- High co-pays and insurance premiums
- Lack of doctors
- Lack of preventative care education

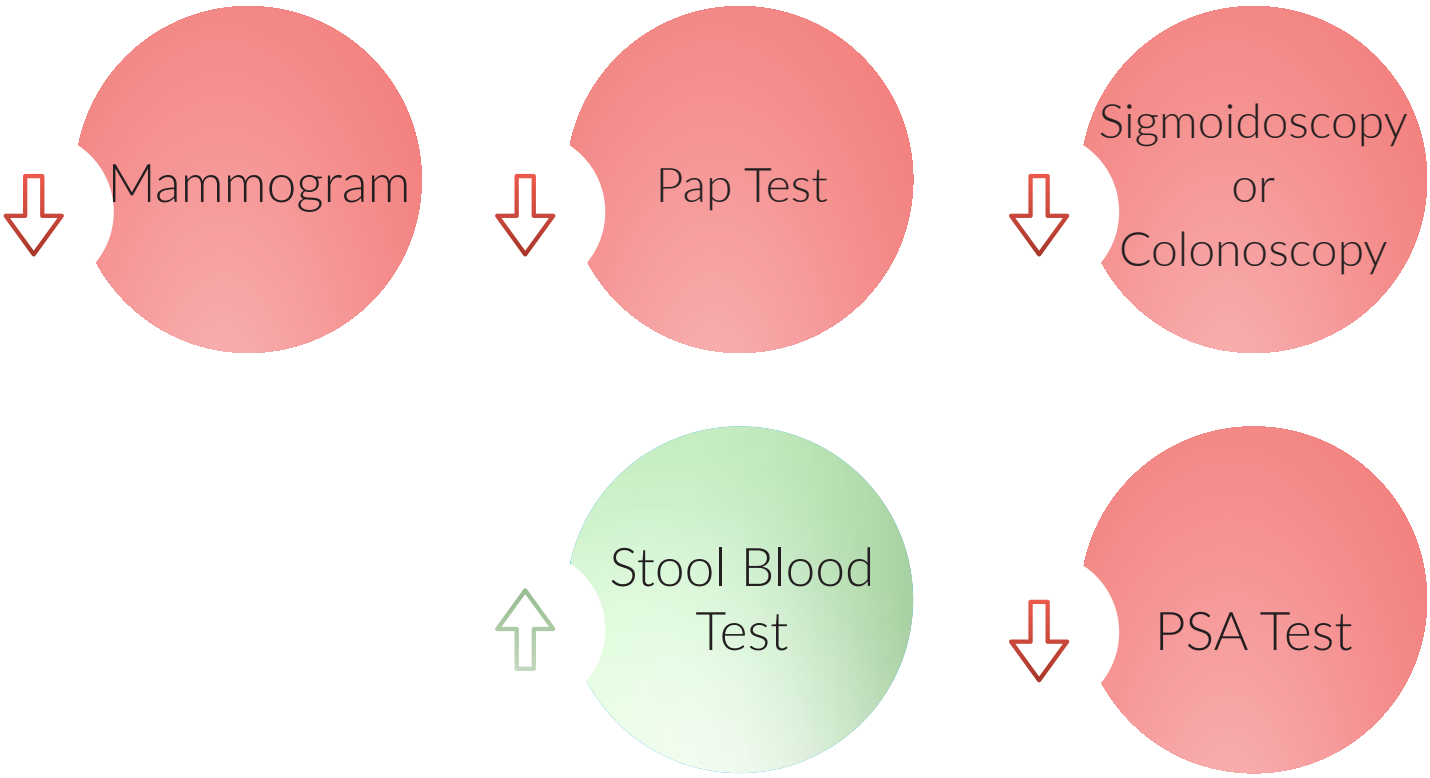
Needed services identified by primary research participants included:

- More primary care providers
- More sliding scale programs
- LGBTQ services/care
- Care for seniors
- Care for those with disabilities
- Telemedicine
- Health literacy programs

Preventative Care at a Glance

The key indicators related to preventative care that have changed since the last CHNA are identified in Figure 7.5. Red means that the indicator has worsened and green means that there has been improvement since the most recent CHNA.

FIGURE 7.5: PREVENTATIVE CARE INDICATORS



Source: Strategy Solutions, Inc.

Preventative Care: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

USPSTF RECOMMENDATIONS ON PREVENTATIVE SERVICES

The U.S. Preventive Services Task Force (USPSTF) is an independent, volunteer panel of national experts in disease prevention and evidence-based medicine. The task force works to improve the health of all Americans by making evidence-based recommendations about clinical preventative services. The USPSTF is the leading independent panel of private-sector experts in prevention and primary care. The USPSTF recommendations are based on rigorous, impartial assessments of the scientific evidence for the effectiveness of a broad range of clinical preventative services, including screening, counseling and preventative medications.

The mission of the USPSTF is to evaluate the benefits of individual services based on age, gender and risk factors for disease, make recommendations about which preventative services should be incorporated routinely into primary medical care and for which populations, and identify a research agenda for clinical preventative care. Recommendations issued by the USPSTF are assigned a letter grade of A, B, C, D or I to help clinicians recommend appropriate services to their patients. For a complete list of grades and their definitions, please visit https://content.highmarkprc.com/files/region/hdebcbs/educationmanuals/clinicalguidelines/guideline-19-64.pdf.

The grades are defined in Figure 7.6. Note that USPSTF reports indicators as 'aged', whereas FLHealthCHARTS reports indicators as 'ages'.

FIGURE 7.6: USPSTF GRADE DEFINITIONS

Grade	Definition	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer or provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer or provide this service.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer or provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.	Read the clinical considerations section of USPSTF Recommendation Statement. If the service is offered, patients should understand the uncertainty about the balance of benefits and harms.

Source: U.S. Preventive Services Task Force

WOMEN AGED 40 AND OLDER WHO RECEIVED A MAMMOGRAM IN PAST YEAR (2002-2016)

2019 USPSTF recommendations:

Women aged 50-74 years	B
Women aged 40-49 years	C
Women aged 75 years or older	I
All women	I
Women with dense breasts	I

In both Lake County and the state, the percentage of women ages 40 years and older who received a mammogram in the previous year decreased from 2002 to 2016. The percentage in Lake County increased from 61 percent in 2002 to 67.1 percent in 2007, then decreased to 60.4 percent in 2016. This was slightly lower than the state percentage (60.8 percent) in 2016. (See Chart 7.7)

WOMEN AGED 18 AND OLDER WHO RECEIVED PAP TEST IN PAST YEAR (2002-2016)

2018 USPSTF recommendations:

Women aged 21-65 years (pap smear) every three years or 30-65 (in combo with HPV testing) every five years	A
Women younger than 30 years, HPV testing	D
Women younger than 21 years	D
Women older than 65, who have had adequate prior screening	D
Women who have had a hysterectomy	D

In both Lake County (64.8 percent to 40.9 percent) and the state (70.7 percent to 48.4 percent) the number of women ages 18 years and older who received a Pap test in the previous year decreased from 2002 to 2016. (See Chart 7.8)

ADULTS AGED 50 AND OLDER WHO RECEIVED A SIGMOIDOSCOPY OR COLONOSCOPY IN PAST FIVE YEARS (2002-2016)

2019 USPSTF recommendations:

Adults aged 50-75 years: A

- Colonoscopy every 10 years or
- Fecal occult blood test home three-pack FOBT test or
- FIT fecal immunochemical test every year or
- Flexible sigmoidoscopy every five years or
- Flexible sigmoidoscopy every 10 years with FIT every year or
- CT colonography every five years or
- Cologuard (DNA stool screening) every three years

Adults aged 76-85 years C

In Lake County and the state, the percentage of adults ages 50 years and older who had received a sigmoidoscopy or colonoscopy in the past five years increased from 2002 to 2016. In 2016, Lake County's percentage (51.5 percent) was lower than the state (53.9 percent). (See Chart 7.9)

ADULTS AGED 50 AND OLDER WHO RECEIVED A BLOOD STOOL TEST IN PAST YEAR (2002-2016)

The percentage in Lake County of adults ages 50 and older who received a blood stool test in the past year decreased from 29.8 in 2002 to 15 percent in 2016. The 2016 county percentage was lower than that of the state (16 percent). (See Chart 7.10)

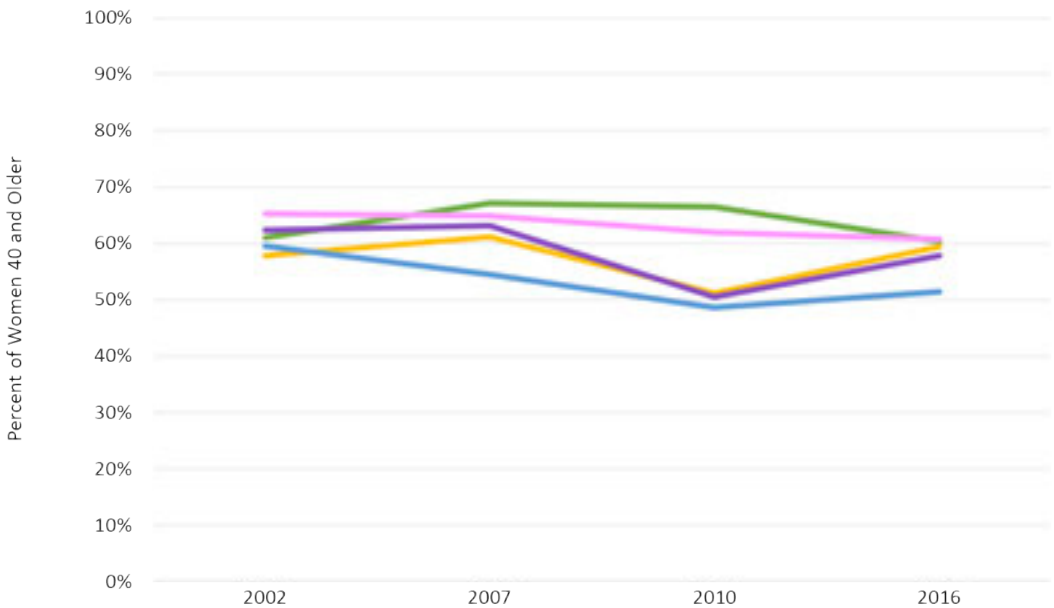
MEN AGED 50 AND OLDER WHO RECEIVED A PSA TEST IN PAST TWO YEARS (2007-2016)

2019 USPSTF recommendations:

Men aged 55-69, screening with PSA (prostate specific antigen) C

In Lake County and throughout the state, the percentage of men ages 50 years and older receiving a PSA test increased between 2007 and 2010 then decreased in 2016. The Lake County percentage in 2016 (55.5 percent) was slightly above that of the state (54.9 percent). (See Chart 7.11)

CHART 7.7: WOMEN AGED 40 AND OLDER WHO RECEIVED A MAMMOGRAM IN PAST YEAR (2002-2016)



	2002	2007	2010	2016
LAKE	61.0%	67.1%	66.5%	60.4%
ORANGE	57.8%	61.1%	51.2%	59.4%
OSCEOLA	59.5%	54.5%	48.6%	51.4%
SEMINOLE	62.3%	63.2%	50.5%	57.8%
FLORIDA	65.3%	64.9%	61.9%	60.8%

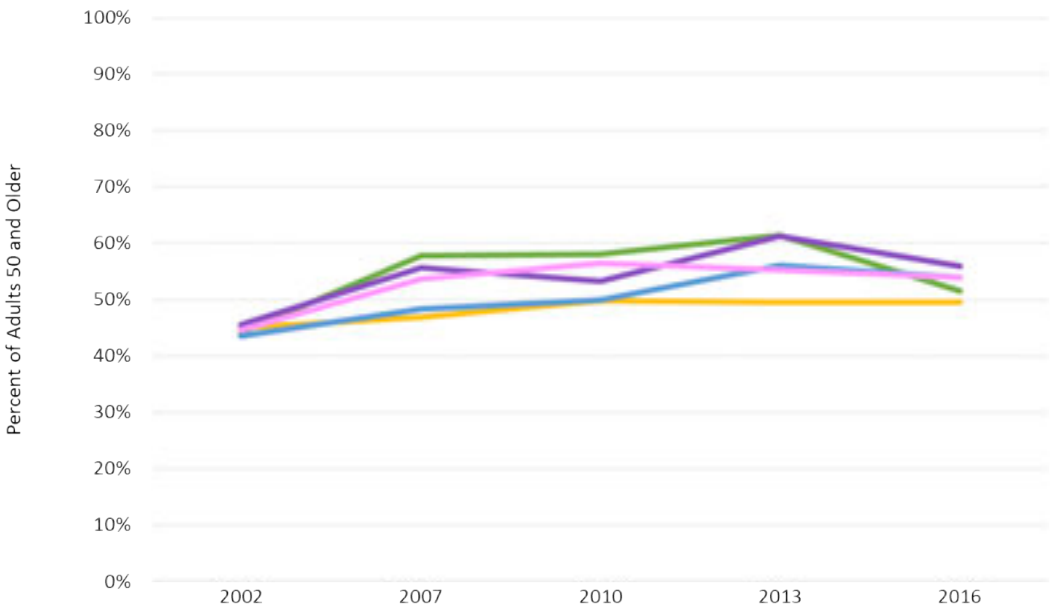
Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

CHART 7.8: WOMEN AGED 18 AND OLDER WHO RECEIVED PAP TEST IN PAST YEAR (2002-2016)

	2002	2007	2010	2013	2016
LAKE	64.8%	65.7%	58.1%	44.3%	40.9%
ORANGE	71.2%	68.4%	57.4%	51.7%	51.3%
OSCEOLA	72.5%	62.8%	50.3%	38.0%	51.5%
SEMINOLE	77.1%	69.8%	56.3%	47.5%	45.5%
FLORIDA	70.7%	64.8%	57.1%	51.4%	48.4%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

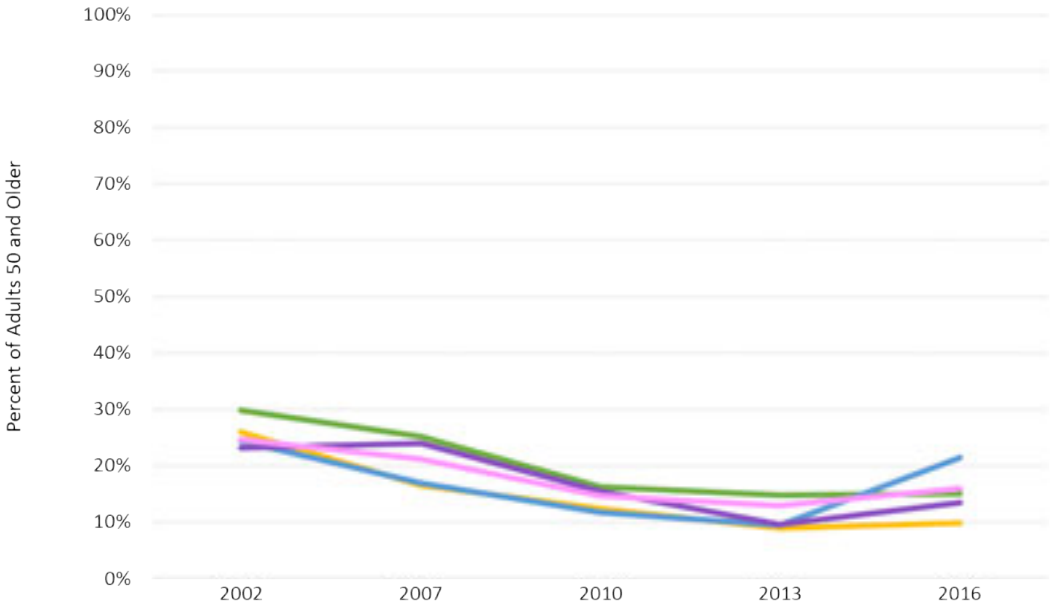
CHART 7.9: ADULTS AGED 50 AND OLDER WHO RECEIVED A SIGMOIDOSCOPY OR COLONOSCOPY IN PAST 5 YEARS (2002-2016)



	2002	2007	2010	2013	2016
LAKE	44.2%	57.8%	58.1%	61.4%	51.5%
ORANGE	45.0%	46.9%	49.8%	49.6%	49.6%
OSCEOLA	43.6%	48.4%	50.0%	56.1%	54.0%
SEMINOLE	45.5%	55.7%	53.3%	61.2%	55.9%
FLORIDA	44.6%	53.7%	56.4%	55.3%	53.9%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

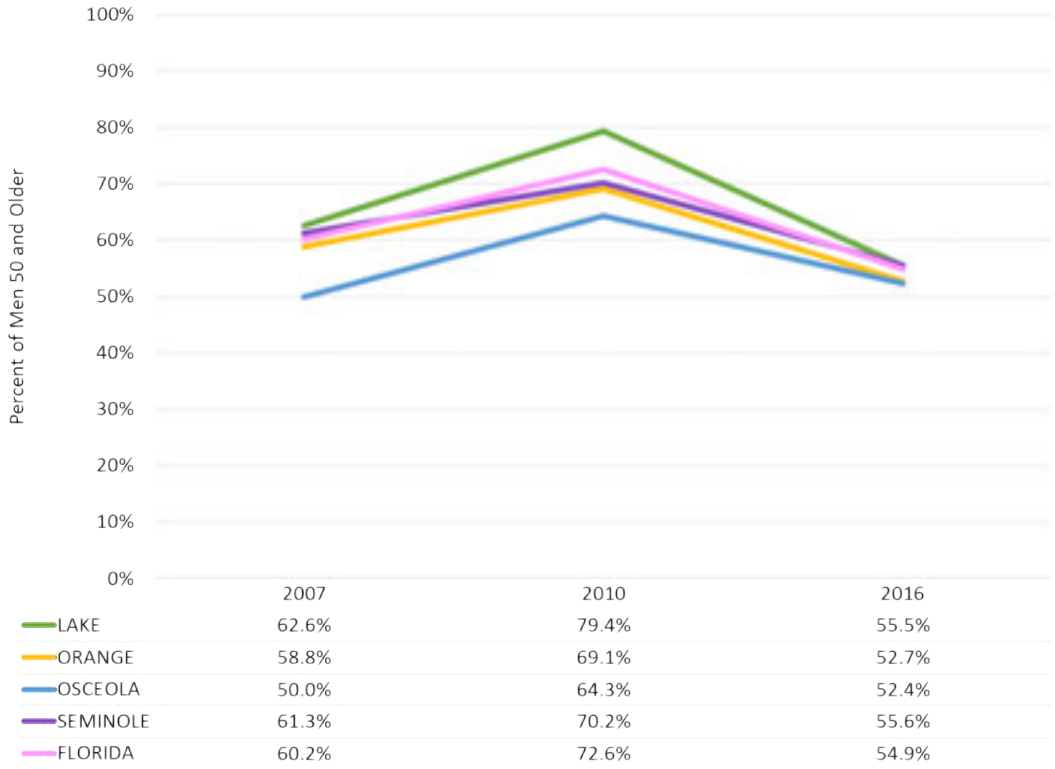
CHART 7.10: ADULTS AGED 50 AND OLDER WHO RECEIVED A BLOOD STOOL TEST IN PAST YEAR (2002-2016)



	2002	2007	2010	2013	2016
LAKE	29.8%	25.2%	16.3%	14.8%	15.0%
ORANGE	26.0%	16.5%	12.4%	8.9%	9.9%
OSCEOLA	24.4%	16.9%	11.7%	9.5%	21.5%
SEMINOLE	23.2%	24.0%	15.5%	9.6%	13.4%
FLORIDA	24.7%	21.2%	14.7%	12.9%	16.0%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

CHART 7.11: MEN AGED 50 AND OLDER WHO RECEIVED A PSA TEST IN PAST TWO YEARS (2007-2016)



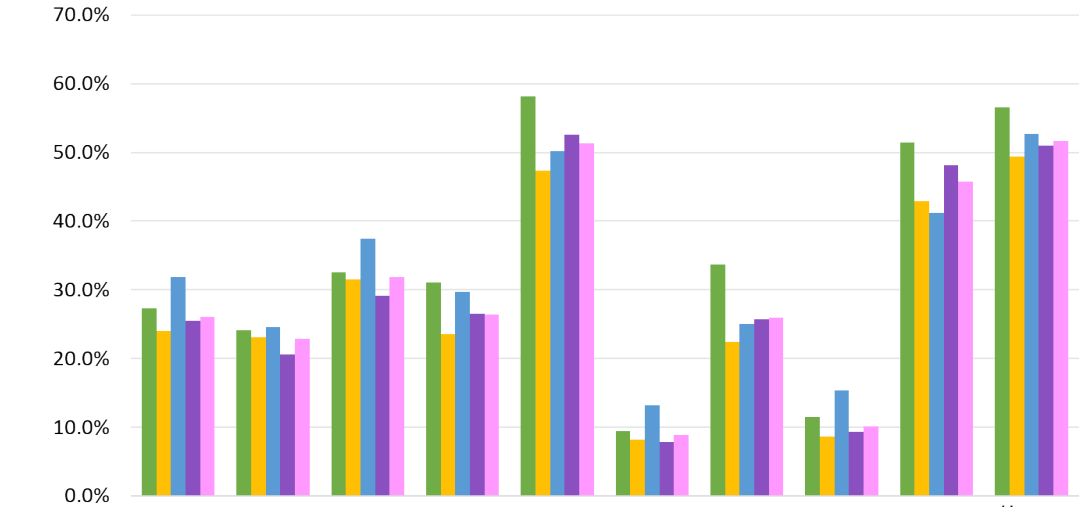
	2007	2010	2016
LAKE	62.6%	79.4%	55.5%
ORANGE	58.8%	69.1%	52.7%
OSCEOLA	50.0%	64.3%	52.4%
SEMINOLE	61.3%	70.2%	55.6%
FLORIDA	60.2%	72.6%	54.9%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

Chronic Conditions: What the Community is Saying

Figure 7.7 illustrates the percentages of community survey respondents that are experiencing either chronic conditions or risk factors related to chronic conditions. More than half of Lake County community survey respondents indicated that they consider themselves overweight, or had hypertension/high blood pressure..

FIGURE 7.7: CHRONIC CONDITIONS AND RISK FACTORS, COMMUNITY SURVEY 2019



	Asthma/ COPD-related issues	Cancer	Diabetes	Heart disease	Obesity and overweight	Childhood obesity	Cardio-vascular disease	Stroke	High choles-terol	Hyper-tension/ high blood pressure
LAKE	27.3%	24.1%	32.5%	31.1%	58.1%	9.4%	33.7%	11.5%	51.4%	56.6%
ORANGE	24.0%	23.1%	31.5%	23.5%	47.3%	8.2%	22.4%	8.6%	42.9%	49.4%
OSCEOLA	31.8%	24.6%	37.4%	29.7%	50.2%	13.2%	25.0%	15.3%	41.2%	52.7%
SEMINOLE	25.5%	20.6%	29.1%	26.5%	52.6%	7.8%	25.7%	9.3%	48.1%	51.0%
OVERALL	26.0%	22.9%	31.8%	26.4%	51.3%	8.9%	25.9%	10.1%	45.7%	51.7%

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Primary research participants identified the following as needs and issues in the community related to chronic conditions:

- Obesity
- Diabetes
- Heart disease and hypertension
- Sexually transmitted infections (STIs)
- Asthma
- Kidney disease
- Cancer

Barriers identified by primary research participants included:

- Lack of chronic disease prevention and management services
- Access to affordable, fresh produce
- Lack of education on medical marijuana usage to treat chronic conditions
- Lack of access to care
- Transportation
- Healthy eating education
- Lack of insurance
- Time it takes to get an appointment
- Lack of coordinated care

Needed services identified by primary research participants included:

- Multilingual providers (both in number and type of specialties)
- Disease prevention education
- Emotional support groups
- Care coordination

Chronic Conditions at a Glance

The key indicators related to chronic conditions that have changed since the last CHNA are identified in Figure 7.8. Red means that the indicator has worsened green means that there has been an improvement since the 2016 CHNA.

FIGURE 7.8: CHRONIC CONDITIONS INDICATORS

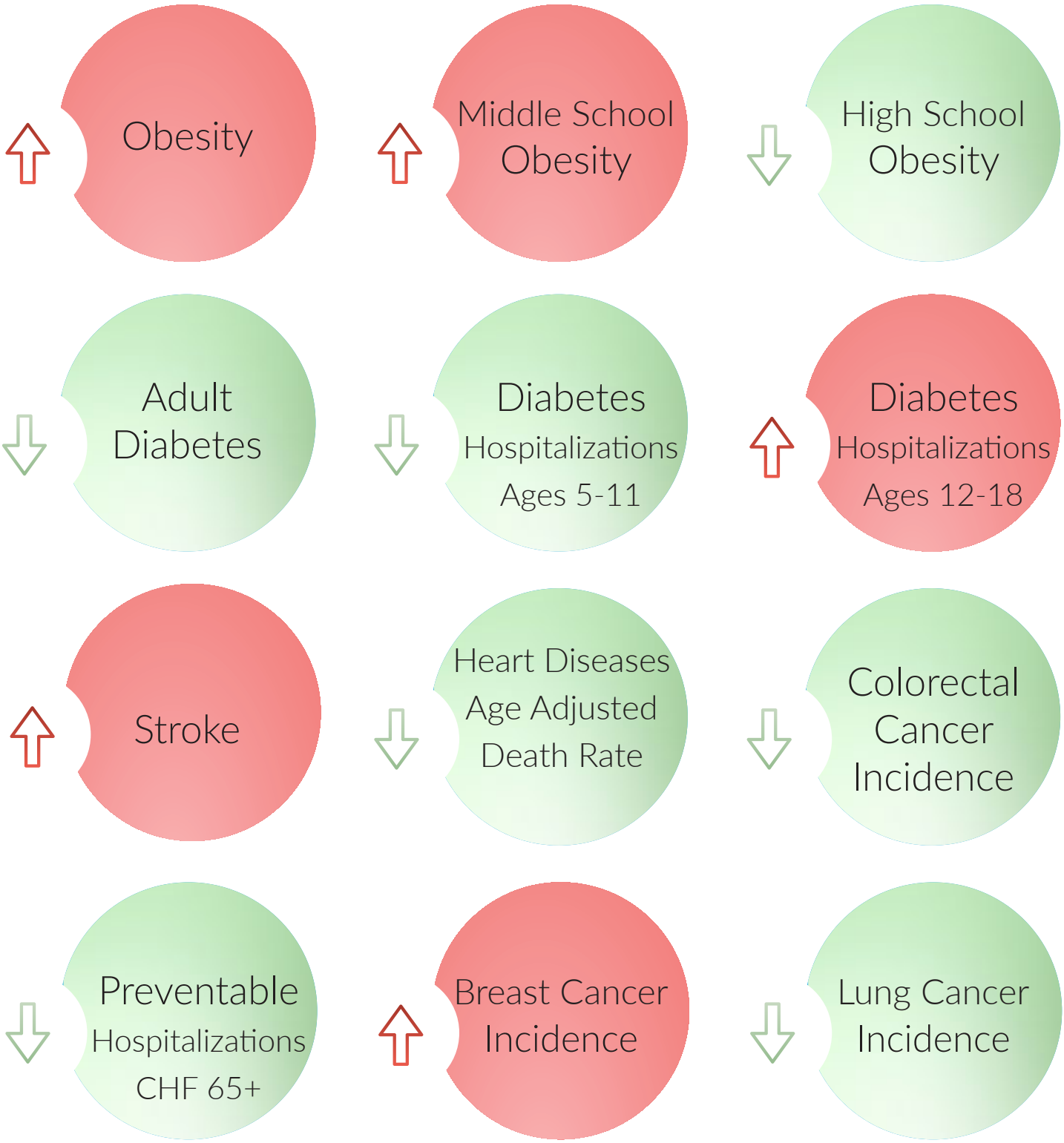
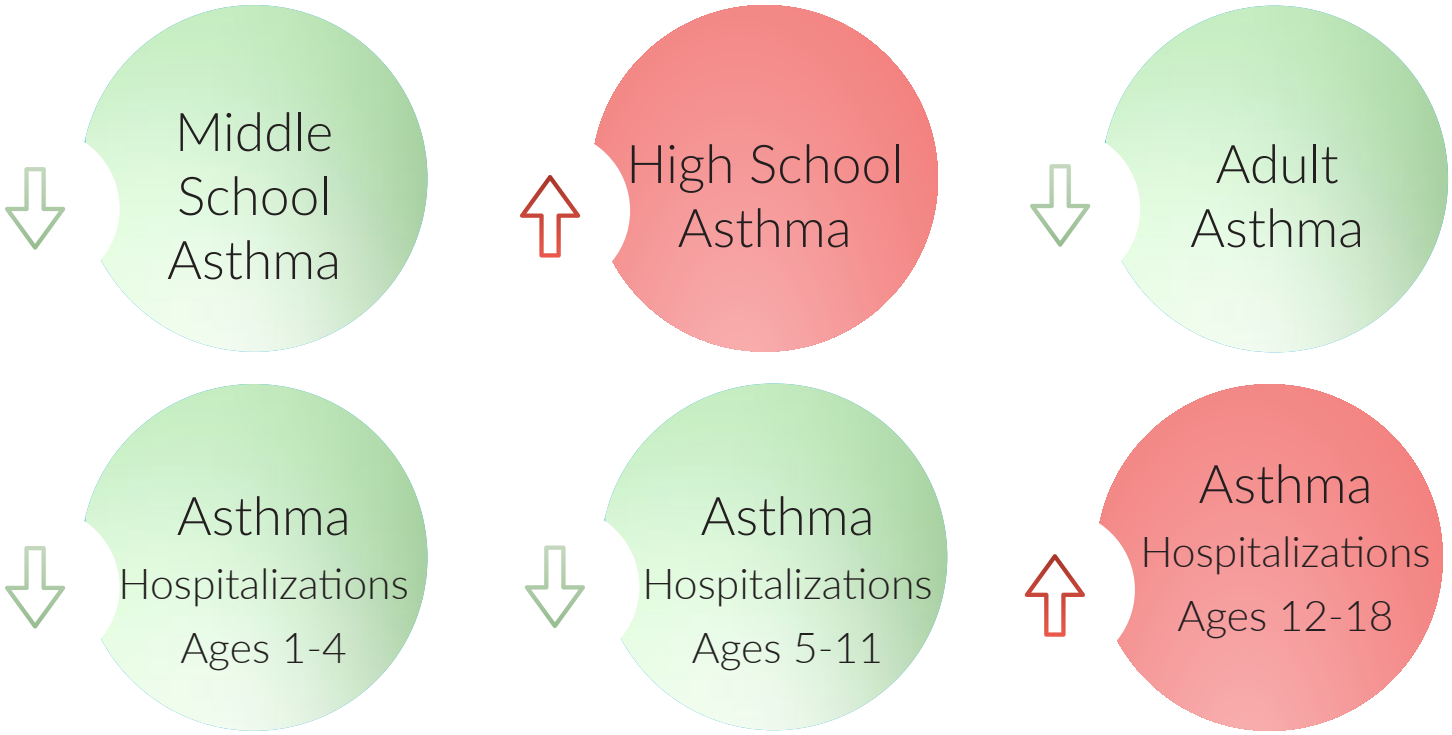


FIGURE 7.8: CHRONIC CONDITIONS INDICATORS, CONTINUED



Source: Strategy Solutions, Inc.

Chronic Conditions: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

ADULTS WHO ARE OBESE (2002-2016)

The percentage of adults who are obese in Lake County was below the HP2020 goal of 30.5 percent from 2002 to 2016. However, Lake County's percentage trended upward from 2002 (20.8 percent) to 2016 (32.6 percent). Lake County's percentage in 2016 (32.6 percent) was higher than the state (27.4 percent). (See Chart 7.12)

MIDDLE SCHOOL STUDENTS REPORTING BMI AT OR ABOVE 95TH PERCENTILE (2006-2016)

The percentage of middle school students reporting a body mass index (BMI) at or above the 95th percentile remained relatively constant at the state level from 2006 (11.3 percent) to 2012 (11.6 percent), then increased in 2014 (12.4 percent) and 2016 (12.6 percent). The Lake County percentage increased from 9.6 percent in 2006 to 10.7 percent in 2008, then increased to 14.3 in 2010, then decreased to 13.4 percent in 2012 and to 12.2 percent in 2014. The percentage increased again to 14.5 percent in 2016. (See Chart 7.13)

HIGH SCHOOL STUDENTS REPORTING BMI AT OR ABOVE 95TH PERCENTILE (2006-2016)

The state's trend for high school students reporting a BMI at or above the 95th percentile increased between 2006 and 2016 from 11.2 percent to 13.3 percent. During this time, Lake County's percentage increased from 13.9 percent in 2006 to 14.8 percent in 2014 before decreasing to 12.7 percent in 2016, still lower than the state (13.3 percent). (See Chart 7.14)

ADULTS DIAGNOSED WITH DIABETES (2002-2016)

The state percentage of adults diagnosed with diabetes steadily increased from 8.2 percent in 2002 to 11.8 percent in 2016. Lake County's percentage increased from 9.5 percent in 2002 to 15.2 percent in 2013, before decreasing to 12.5 percent in 2016. The county percentage was slightly above the state (11.8 percent). (See Chart 7.15)

DIABETES HOSPITALIZATIONS CHILDREN AGES 5-11 (2011-2017)

Lake County's rate per 100,000 of diabetes hospitalizations for children ages 5-11 was 49.8 in 2011, then increased to a high of 90.5 in 2012 before decreasing to 54.9 in 2017. The county rate in 2017 (54.9) was higher than the state (41.1). (See Chart 7.16)

DIABETES HOSPITALIZATIONS CHILDREN AGES 12-18 (2011-2017)

For diabetes hospitalizations among children ages 12-18 years, Lake County's rate per 100,000 increased from 101.4 in 2011 to 158.1 in 2017. The 2017 Lake County rate is higher than the state (138.3). (See Chart 7.17)

ADULTS EVER TOLD THEY HAVE HYPERTENSION (HIGH BLOOD PRESSURE) (2002-2013)

The Lake County percentage increased from 27.6 percent in 2002 to 39 percent in 2013. The county percentage was comparable to that of the state from 2002 to 2013 (27.7 percent in 2002 and 34.6 percent in 2013). (See Chart 7.18)

ADULTS WITH HYPERTENSION WHO TAKE BLOOD PRESSURE MEDICATION (2002-2013)

In 2013, the percentage of adults with hypertension who take blood pressure medication in Lake County (76.6 percent) was lower than the state (79.4 percent). The percentage in Lake County increased from 75.8 percent in 2002. (See Chart 7.19)

ADULTS WHO HAVE EVER BEEN TOLD THEY HAD A STROKE (2007-2016)

The percentage of adults who have ever been told they had a stroke in Lake County (5 percent) was above the state (3.5 percent) in 2016. The Lake County percentage increased from 3.8 percent in 2007 to 5 percent in 2016. (See Chart 7.20)

ADULTS WHO HAVE EVER BEEN TOLD THEY HAD HIGH CHOLESTEROL (2002-2013)

The percentage of adults who have ever been told they had high cholesterol in Lake County fluctuated between 2002 (39.6 percent) and 2013 (41.8 percent) but had an overall increase. This is well above the 13.5 percent target for HP2020. In 2013, Lake County (41.8 percent) was higher than the state (33.4 percent). (See Chart 7.21)

HEART DISEASES, AGE-ADJUSTED DEATH RATE (2007-2017)

Lake County's age adjusted death rate per 100,000 from heart diseases (155.2) was higher than the state (148.5) in 2017. The Lake County rate increased over time from 141 in 2007 to 155.2 in 2017. (See Chart 7.22)

PREVENTABLE HOSPITALIZATIONS UNDER AGE 65 FROM CONGESTIVE HEART FAILURE (2007-2017)

Preventable hospitalizations under age 65 from congestive heart failure per 100,000 have decreased in Lake County and the state from 2007 to 2017. The county rate (154.5 in 2007 and 80.7 in 2017) has been higher than the state rate (117.9 in 2007 and 73.7 in 2017) for this time frame. (See Chart 7.23)

COLORECTAL CANCER INCIDENCE, AGE-ADJUSTED (2007-2016)

While the rates have fluctuated between 2007 and 2016, Lake County has seen a net decline in colorectal cancer incidence per 100,000, from 49 in 2007 to 40.6 in 2016. The 2016 county rate was higher than the state rate (36.5). Lake County's rate has been consistently higher than the state in that time frame. (See Chart 7.24)

FEMALE BREAST CANCER INCIDENCE, AGE-ADJUSTED (2007-2016)

The incidence of female breast cancer per 100,000 had a net increase in Lake County, even though the rate has fluctuated to some degree. The county rate increased from 119.1 in 2007 to 135.8 in 2016, which was higher than the state rate (121.8). (See Chart 7.25)

LUNG CANCER INCIDENCE, AGE-ADJUSTED (2007-2016)

The age-adjusted lung cancer incidence rate per 100,000 in Lake County has been consistently higher than the state between 2007 and 2016. The county rate decreased from 71.5 in 2007 to 63.6 in 2016, higher than the state rate of 57.5 in 2016. (See Chart 7.26)

ADULTS WHO CURRENTLY HAVE ASTHMA (2007-2016)

The percentage of adults who currently have asthma increased in Lake County from 5.7 percent in 2007 to 8.7 percent in 2013, followed by a decrease in 2016 to 5 percent. Lake County was lower than the state percentage in 2016 (6.7 percent). (See Chart 7.27)

MIDDLE SCHOOL STUDENTS WITH KNOWN ASTHMA (2006-2016)

Lake County and the state have seen increasing percentages of middle school students with known asthma. The county percentage increased from 18.1 percent in 2006 to 18.7 percent in 2016. The county percentage was lower than that of the state (19.5 percent) in 2016. (See Chart 7.28)

HIGH SCHOOL STUDENTS WITH KNOWN ASTHMA (2006-2016)

Lake County had a net increase in high school students with known asthma between 2006 and 2016. The percentage increased from 19.8 percent in 2006 to 24 percent in 2016. This was slightly higher than the state percentage in 2016 (20.5 percent). (See Chart 7.29)

ASTHMA HOSPITALIZATIONS AGES 1-4 (2003-2017)

The rate of asthma hospitalizations per 100,000 children ages 1-4 in both Lake County and the state fluctuated from 2003 to 2017 with an overall decrease. The Lake County rate was 803.1 in 2003 and increased to 890.9 in 2005. The rate decreased to 572.8 in 2006, then increased and peaked at 926.2 in 2010 before decreasing again to 464.5 in 2017. The state rate was 982 in 2003 and 551.8 in 2017. (See Chart 7.30)

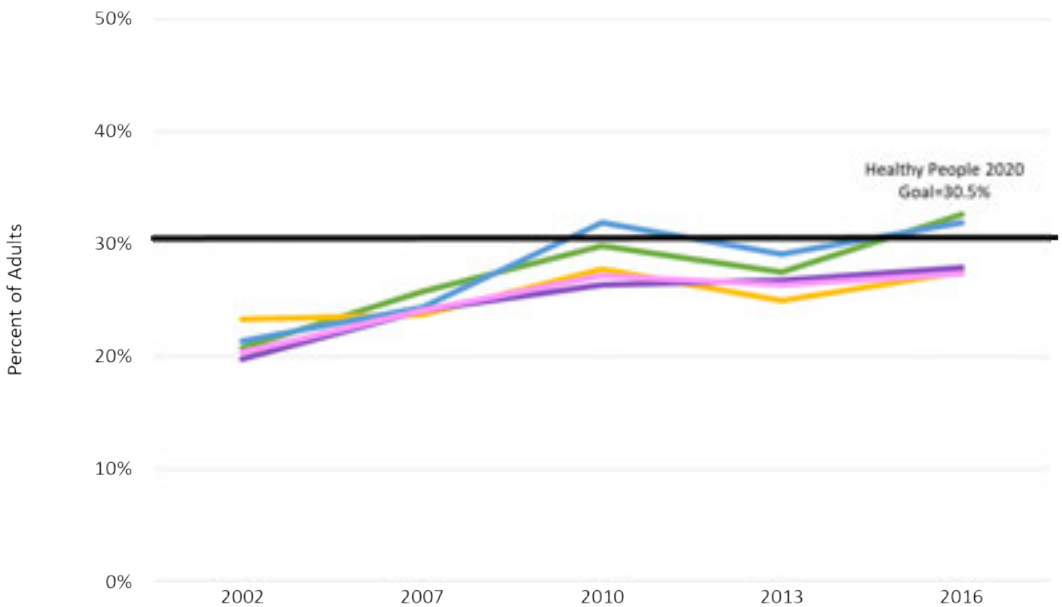
ASTHMA HOSPITALIZATIONS AGES 5-11 (2003-2017)

The rate of asthma hospitalizations per 100,000 children ages 5-11 fluctuated from 2003 to 2017, with a decrease occurring in Lake County and an increase in the state. Lake County's rate decreased from 293.1 to 286.2. The state rate increased in the same time from 366.7 to 382.3. (See Chart 7.31)

ASTHMA HOSPITALIZATIONS AGES 12-18 (2003-2017)

From 2003 to 2017, the rate of asthma hospitalizations per 100,000 for children ages 12-18 has fluctuated in Lake County and the state, both increasing over that time. The Lake County rate increased from 153.4 in 2003 to 335.5 in 2017, lower than the 2017 state rate (443.9). (See Chart 7.32)

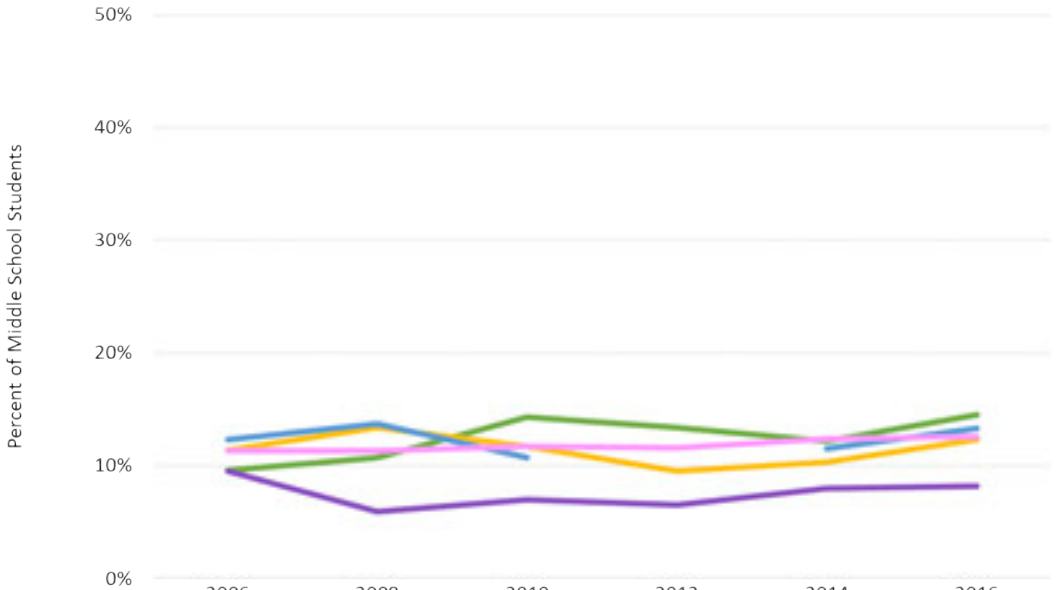
CHART 7.12: ADULTS WHO ARE OBESE (2002-2016)



	2002	2007	2010	2013	2016
LAKE	20.8%	25.8%	29.8%	27.5%	32.6%
ORANGE	23.3%	23.7%	27.8%	25.0%	27.5%
OSCEOLA	21.4%	24.4%	31.9%	29.1%	31.9%
SEMINOLE	19.8%	24.1%	26.4%	26.8%	27.9%
FLORIDA	20.4%	24.1%	27.2%	26.4%	27.4%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

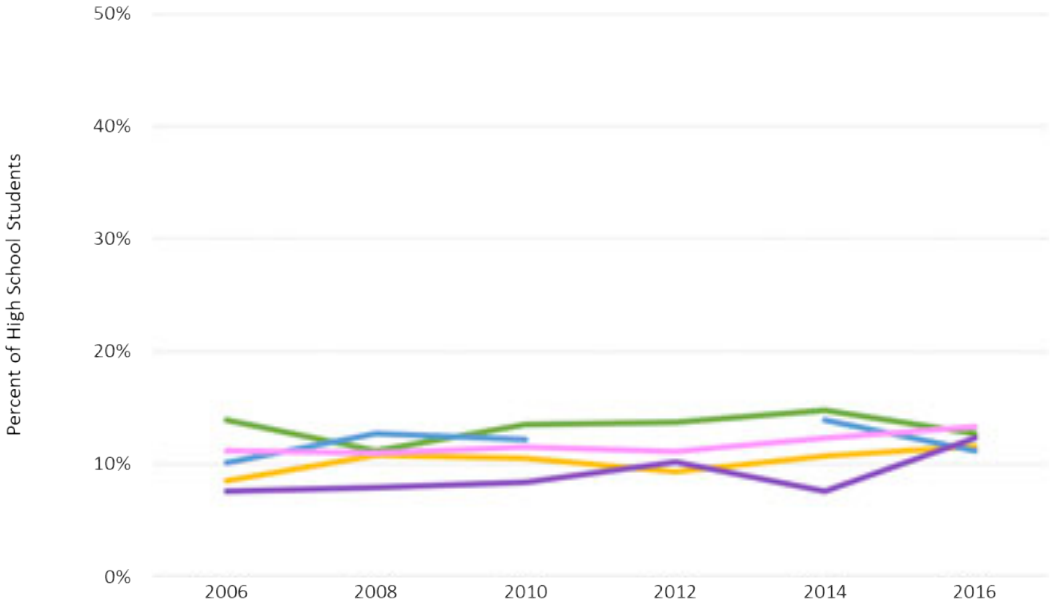
CHART 7.13: MIDDLE SCHOOL STUDENTS REPORTING BMI AT OR ABOVE 95TH PERCENTILE (2006-2016)



	2006	2008	2010	2012	2014	2016
LAKE	9.6%	10.7%	14.3%	13.4%	12.2%	14.5%
ORANGE	11.4%	13.4%	11.7%	9.5%	10.3%	12.3%
OSCEOLA	12.3%	13.7%	10.7%	N/A	11.5%	13.3%
SEMINOLE	9.5%	5.9%	7.0%	6.5%	8.0%	8.2%
FLORIDA	11.3%	11.3%	11.7%	11.6%	12.4%	12.6%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Epidemiology

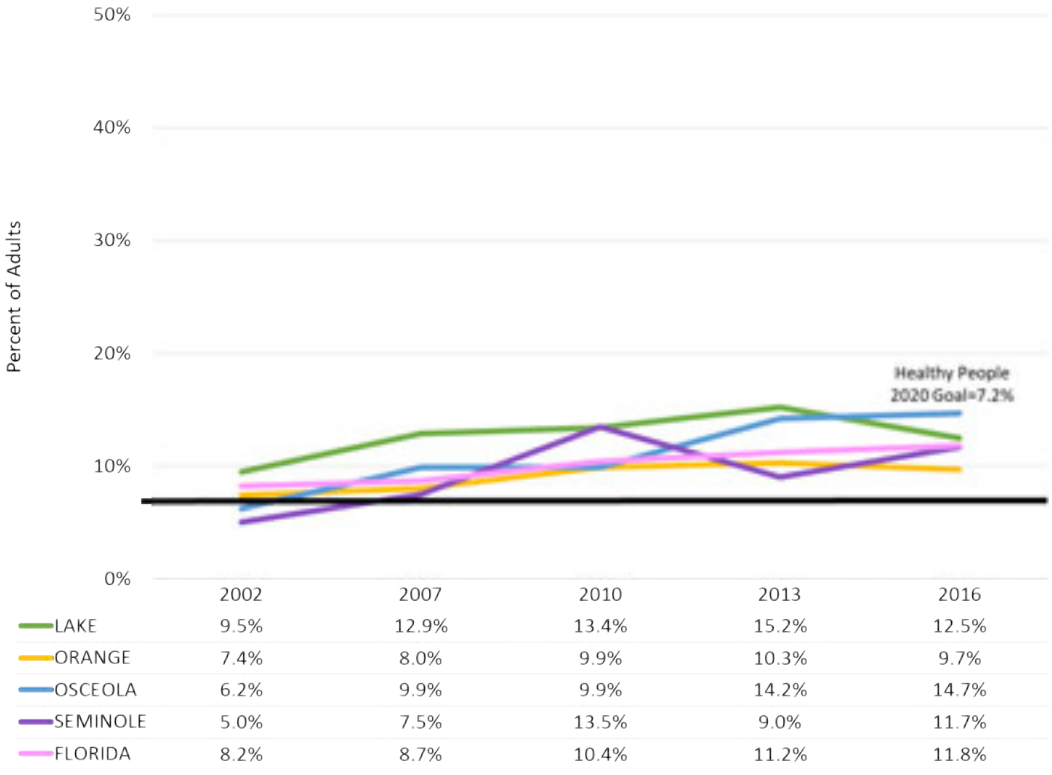
CHART 7.14: HIGH SCHOOL STUDENTS REPORTING BMI AT OR ABOVE 95TH PERCENTILE (2006-2016)



	2006	2008	2010	2012	2014	2016
LAKE	13.9%	11.2%	13.5%	13.7%	14.8%	12.7%
ORANGE	8.5%	10.8%	10.5%	9.3%	10.7%	11.6%
OSCEOLA	10.1%	12.7%	12.2%	N/A	13.9%	11.2%
SEMINOLE	7.6%	7.9%	8.4%	10.2%	7.6%	12.3%
FLORIDA	11.2%	11.0%	11.5%	11.1%	12.3%	13.3%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Epidemiology

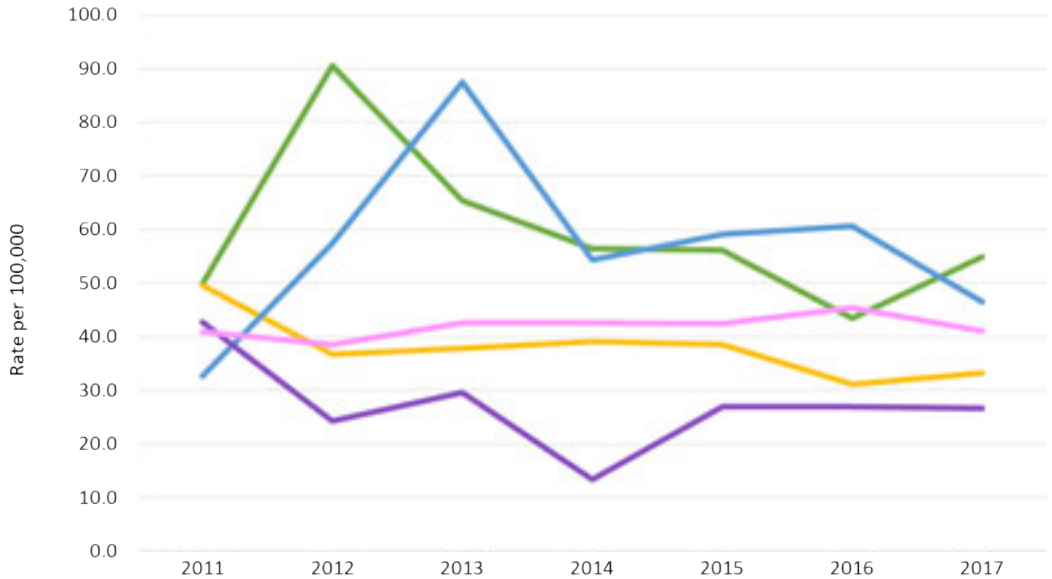
CHART 7.15: ADULTS DIAGNOSED WITH DIABETES (2002-2016)



	2002	2007	2010	2013	2016
LAKE	9.5%	12.9%	13.4%	15.2%	12.5%
ORANGE	7.4%	8.0%	9.9%	10.3%	9.7%
OSCEOLA	6.2%	9.9%	9.9%	14.2%	14.7%
SEMINOLE	5.0%	7.5%	13.5%	9.0%	11.7%
FLORIDA	8.2%	8.7%	10.4%	11.2%	11.8%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

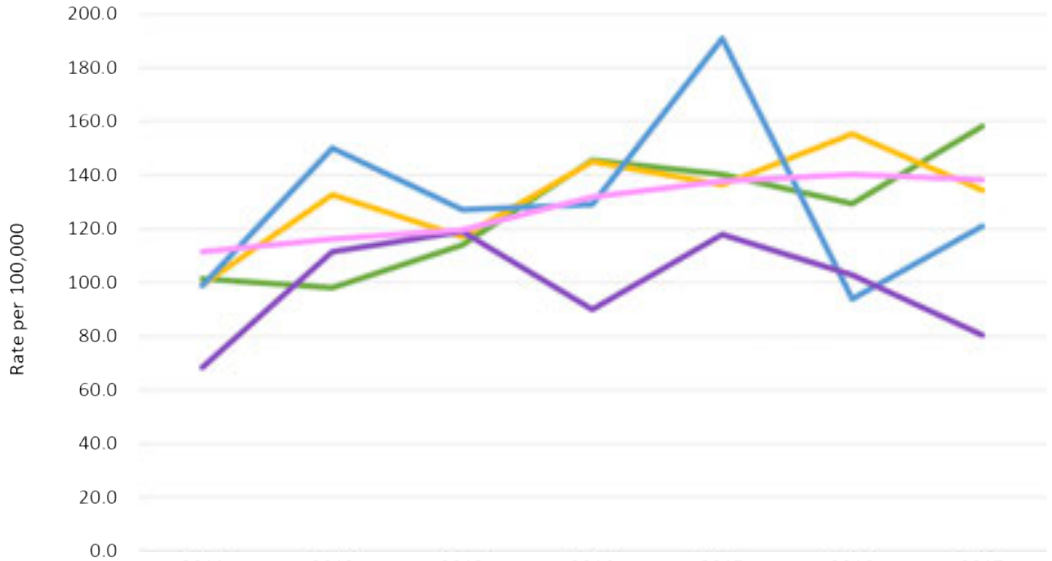
CHART 7.16: DIABETES HOSPITALIZATIONS CHILDREN AGES 5-11 (2011-2017)



	2011	2012	2013	2014	2015	2016	2017
LAKE	49.8	90.5	65.4	56.4	56.2	43.4	54.9
ORANGE	49.6	36.7	37.9	39.1	38.5	31.1	33.2
OSCEOLA	32.6	57.4	87.5	54.3	59.1	60.7	46.5
SEMINOLE	42.8	24.3	29.6	13.4	26.9	26.9	26.6
FLORIDA	40.9	38.5	42.6	42.6	42.4	45.4	41.1

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

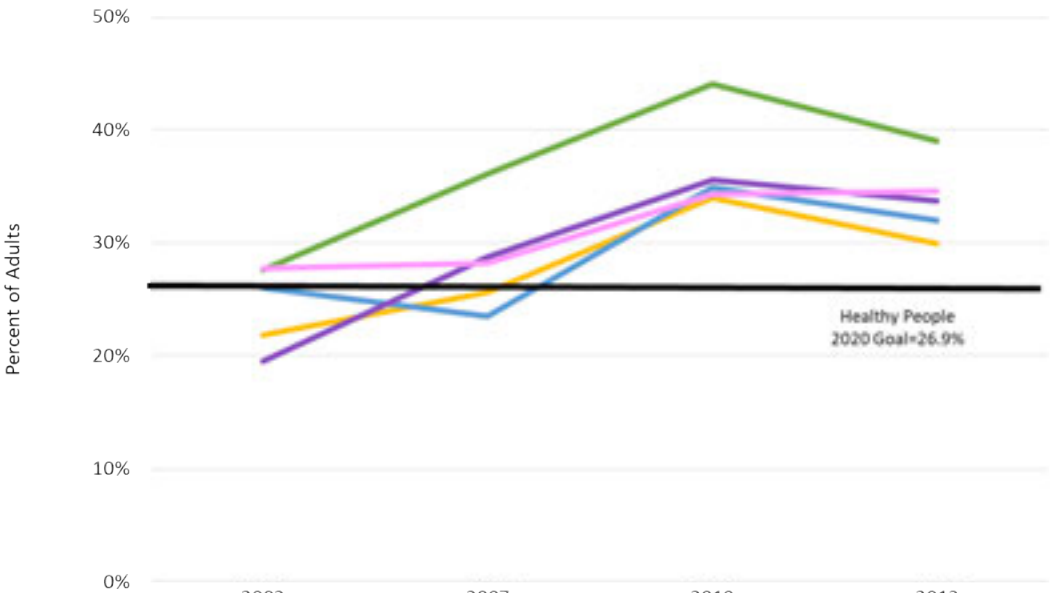
CHART 7.17: DIABETES HOSPITALIZATIONS CHILDREN AGES 12-18 (2011-2017)



	2011	2012	2013	2014	2015	2016	2017
LAKE	101.4	98.0	114.1	145.6	140.2	129.5	158.1
ORANGE	99.2	132.8	117.0	145.0	136.5	155.5	134.4
OSCEOLA	98.9	150.1	127.0	129.0	190.9	93.8	120.9
SEMINOLE	68.3	111.4	118.9	89.9	117.9	102.9	80.5
FLORIDA	111.6	116.1	119.6	131.8	137.8	140.3	138.3

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

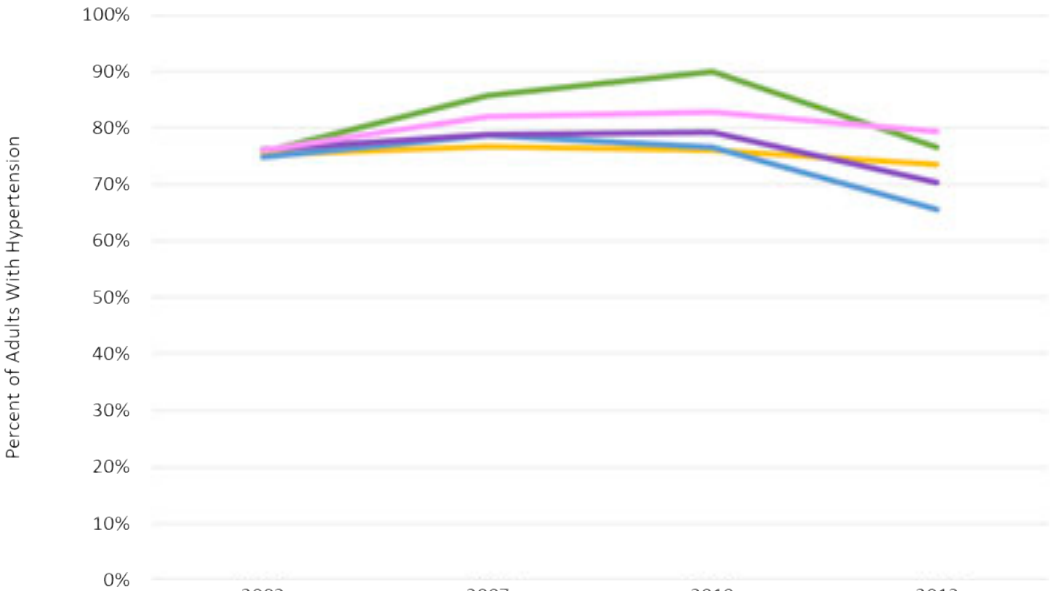
CHART 7.18: ADULTS EVER TOLD THEY HAVE HYPERTENSION (HIGH BLOOD PRESSURE) (2002-2013)



	2002	2007	2010	2013
LAKE	27.6%	36.1%	44.1%	39.0%
ORANGE	21.8%	25.6%	34.0%	29.9%
OSCEOLA	26.0%	23.5%	34.9%	32.0%
SEMINOLE	19.5%	28.7%	35.6%	33.7%
FLORIDA	27.7%	28.2%	34.3%	34.6%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System-

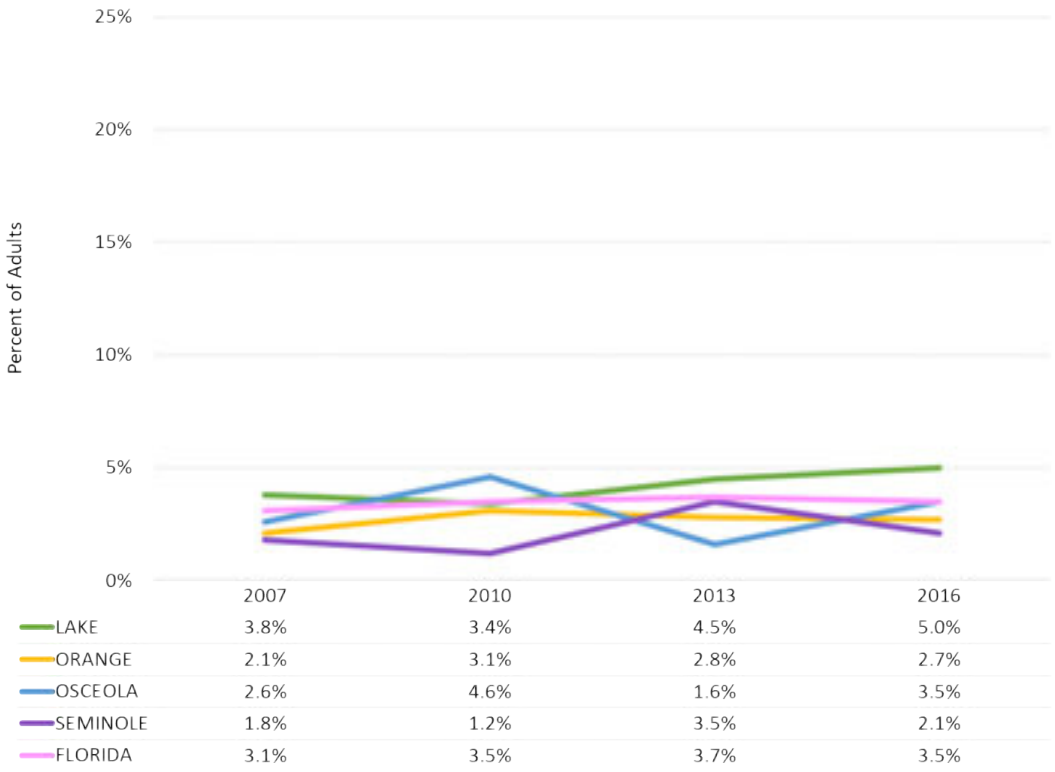
CHART 7.19: ADULTS WITH HYPERTENSION WHO TAKE BLOOD PRESSURE MEDICATION (2002-2013)



	2002	2007	2010	2013
LAKE	75.8%	85.8%	90.0%	76.6%
ORANGE	75.3%	76.7%	76.0%	73.5%
OSCEOLA	74.9%	78.7%	76.6%	65.5%
SEMINOLE	76.2%	78.9%	79.2%	70.4%
FLORIDA	76.0%	82.1%	82.8%	79.4%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

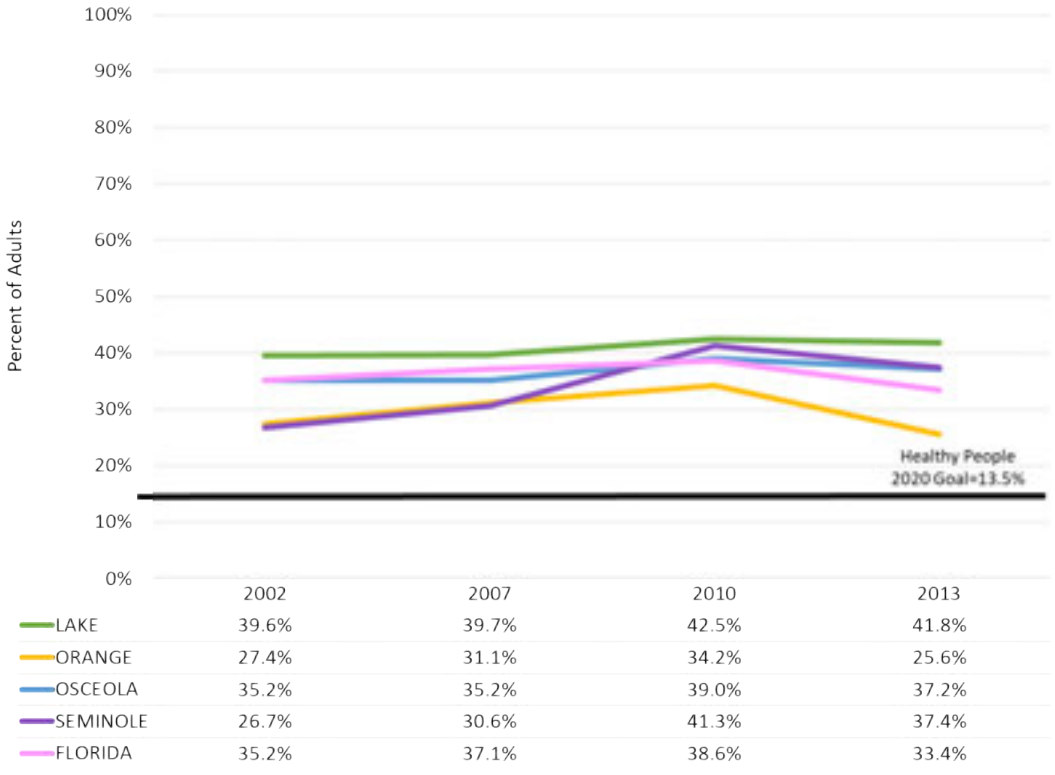
CHART 7.20: ADULTS WHO HAVE EVER BEEN TOLD THEY HAD A STROKE (2007-2016)



	2007	2010	2013	2016
LAKE	3.8%	3.4%	4.5%	5.0%
ORANGE	2.1%	3.1%	2.8%	2.7%
OSCEOLA	2.6%	4.6%	1.6%	3.5%
SEMINOLE	1.8%	1.2%	3.5%	2.1%
FLORIDA	3.1%	3.5%	3.7%	3.5%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

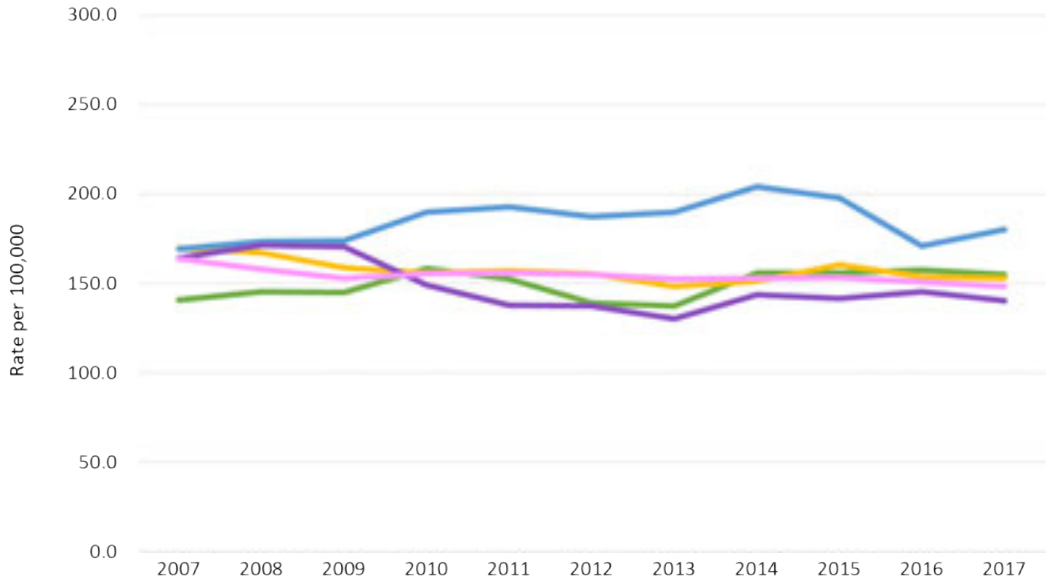
CHART 7.21: ADULTS WHO HAVE EVER BEEN TOLD THEY HAD HIGH CHOLESTEROL (2002-2013)



	2002	2007	2010	2013
LAKE	39.6%	39.7%	42.5%	41.8%
ORANGE	27.4%	31.1%	34.2%	25.6%
OSCEOLA	35.2%	35.2%	39.0%	37.2%
SEMINOLE	26.7%	30.6%	41.3%	37.4%
FLORIDA	35.2%	37.1%	38.6%	33.4%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

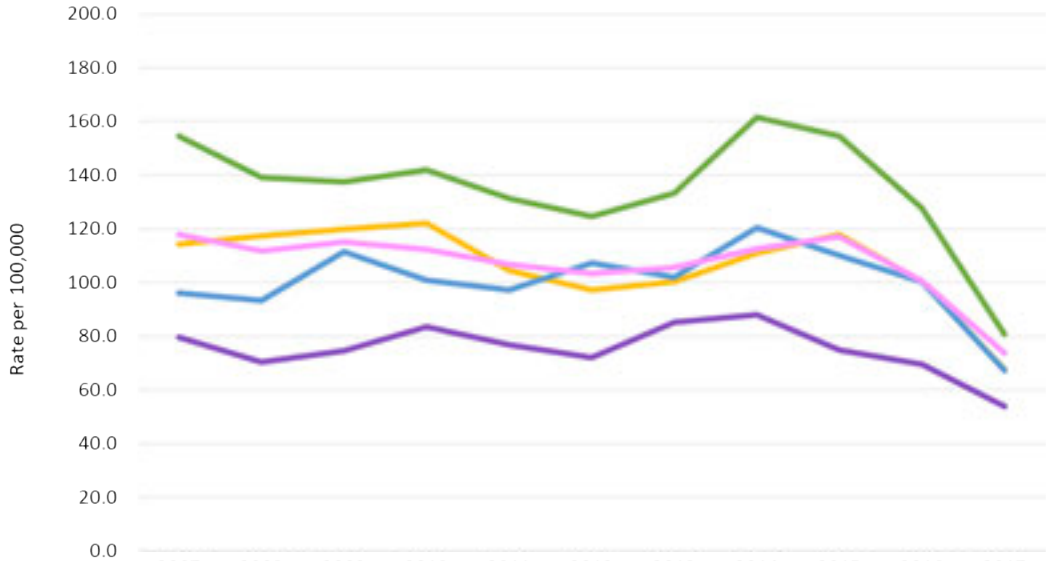
CHART 7.22: HEART DISEASES AGE-ADJUSTED DEATH RATE (2007-2017)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	141.0	145.4	145.1	158.3	152.6	139.0	137.5	156.0	156.0	157.4	155.2
ORANGE	169.6	167.2	158.9	155.7	157.0	155.3	148.5	151.2	160.6	153.7	152.9
OSCEOLA	169.4	173.7	174.1	189.8	193.0	187.4	190.0	204.2	197.8	170.9	180.3
SEMINOLE	164.2	171.5	170.7	149.3	137.7	137.5	130.4	143.9	141.8	145.4	140.5
FLORIDA	163.8	158.0	152.8	155.3	155.8	155.1	152.6	153.0	153.3	150.7	148.5

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

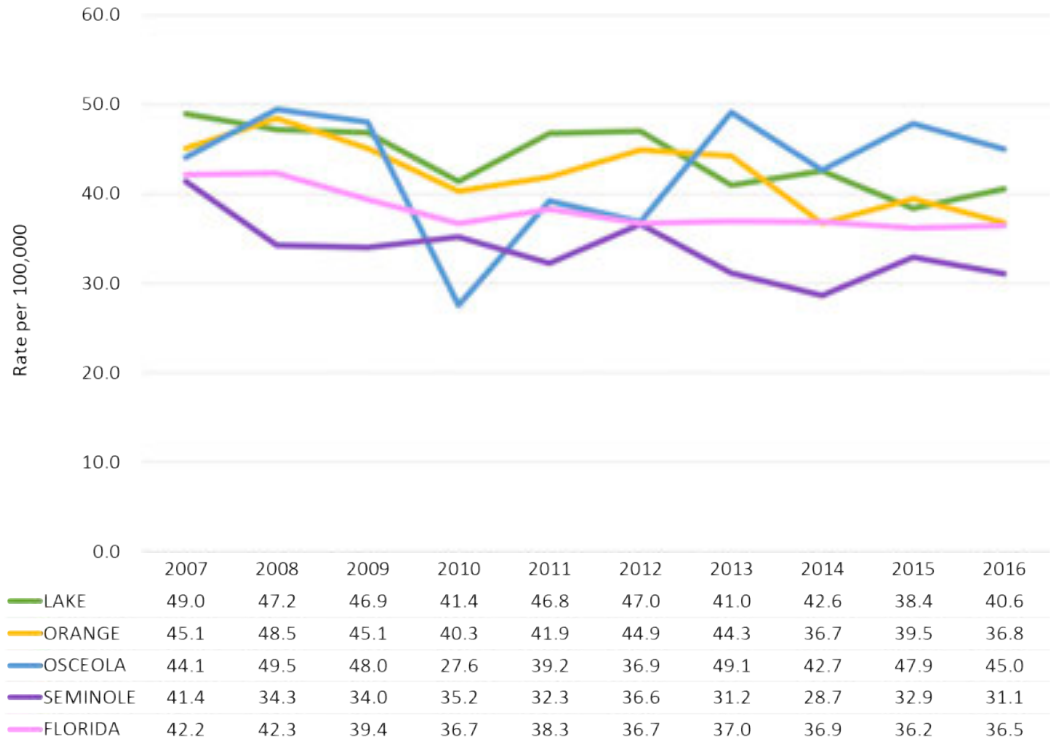
CHART 7.23: PREVENTABLE HOSPITALIZATIONS UNDER AGE 65 FROM CONGESTIVE HEART FAILURE (2007-2017)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	154.5	139.2	137.6	141.9	131.4	124.7	133.4	161.6	154.6	127.6	80.7
ORANGE	114.2	117.4	119.9	122.2	104.4	97.3	100.2	110.8	117.8	100.2	67.7
OSCEOLA	96.0	93.4	111.4	100.8	97.2	107.4	102.1	120.3	110.0	100.3	67.2
SEMINOLE	79.7	70.4	74.6	83.5	76.7	72.0	85.1	88.1	74.9	69.5	53.9
FLORIDA	117.9	111.7	115.1	112.4	106.6	103.4	105.7	112.7	117.0	100.6	73.7

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

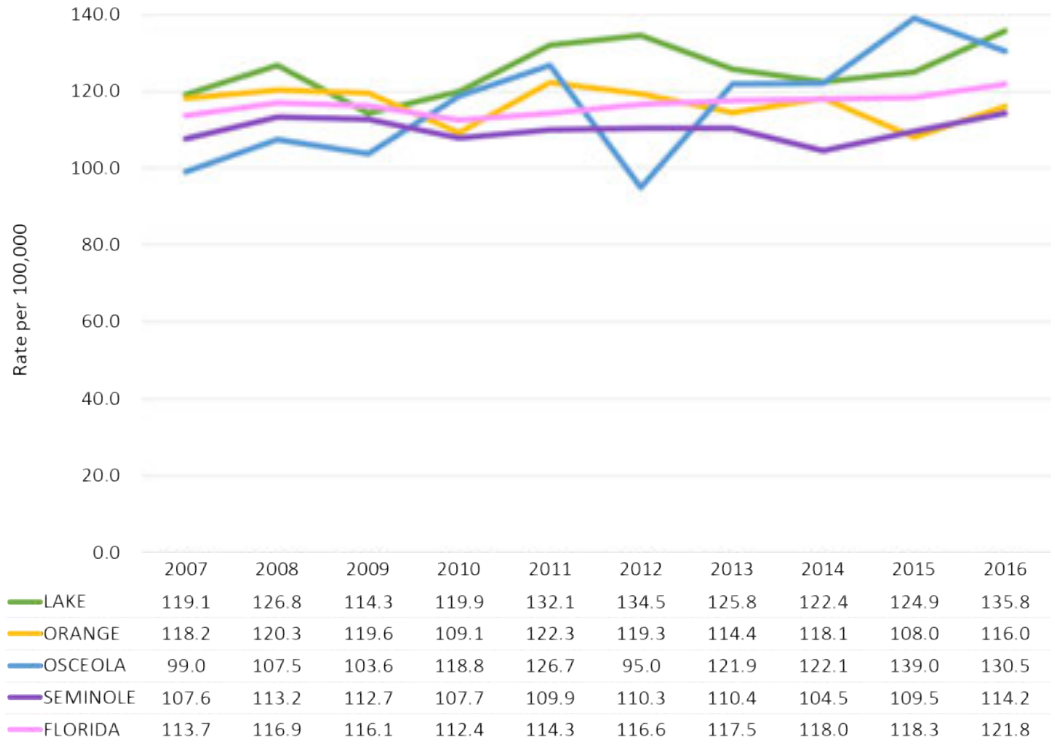
CHART 7.24: COLORECTAL CANCER INCIDENCE, AGE-ADJUSTED (2007-2016)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
LAKE	49.0	47.2	46.9	41.4	46.8	47.0	41.0	42.6	38.4	40.6
ORANGE	45.1	48.5	45.1	40.3	41.9	44.9	44.3	36.7	39.5	36.8
OSCEOLA	44.1	49.5	48.0	27.6	39.2	36.9	49.1	42.7	47.9	45.0
SEMINOLE	41.4	34.3	34.0	35.2	32.3	36.6	31.2	28.7	32.9	31.1
FLORIDA	42.2	42.3	39.4	36.7	38.3	36.7	37.0	36.9	36.2	36.5

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

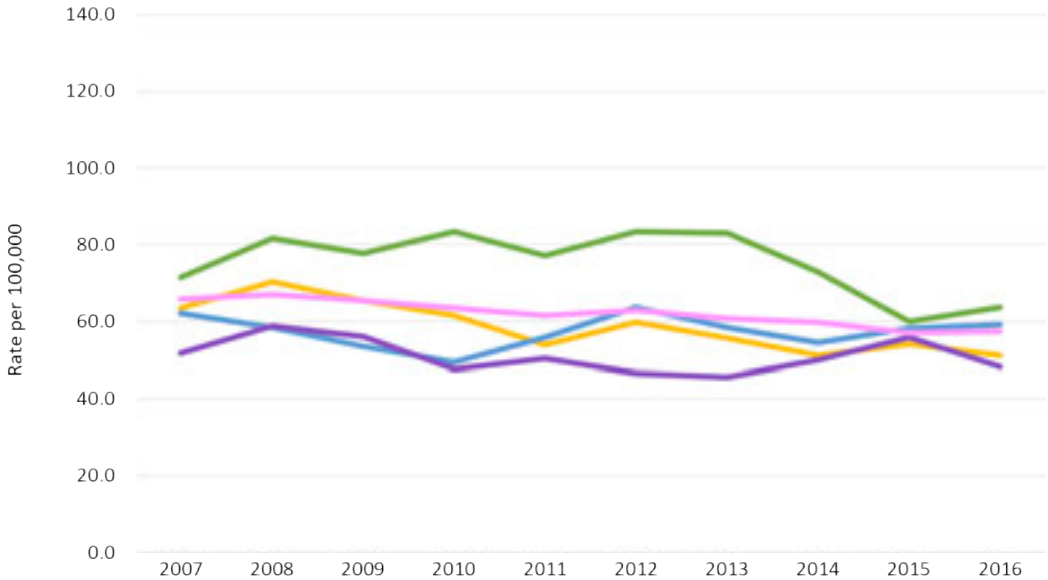
CHART 7.25: FEMALE BREAST CANCER INCIDENCE, AGE-ADJUSTED (2007-2016)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
LAKE	119.1	126.8	114.3	119.9	132.1	134.5	125.8	122.4	124.9	135.8
ORANGE	118.2	120.3	119.6	109.1	122.3	119.3	114.4	118.1	108.0	116.0
OSCEOLA	99.0	107.5	103.6	118.8	126.7	95.0	121.9	122.1	139.0	130.5
SEMINOLE	107.6	113.2	112.7	107.7	109.9	110.3	110.4	104.5	109.5	114.2
FLORIDA	113.7	116.9	116.1	112.4	114.3	116.6	117.5	118.0	118.3	121.8

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

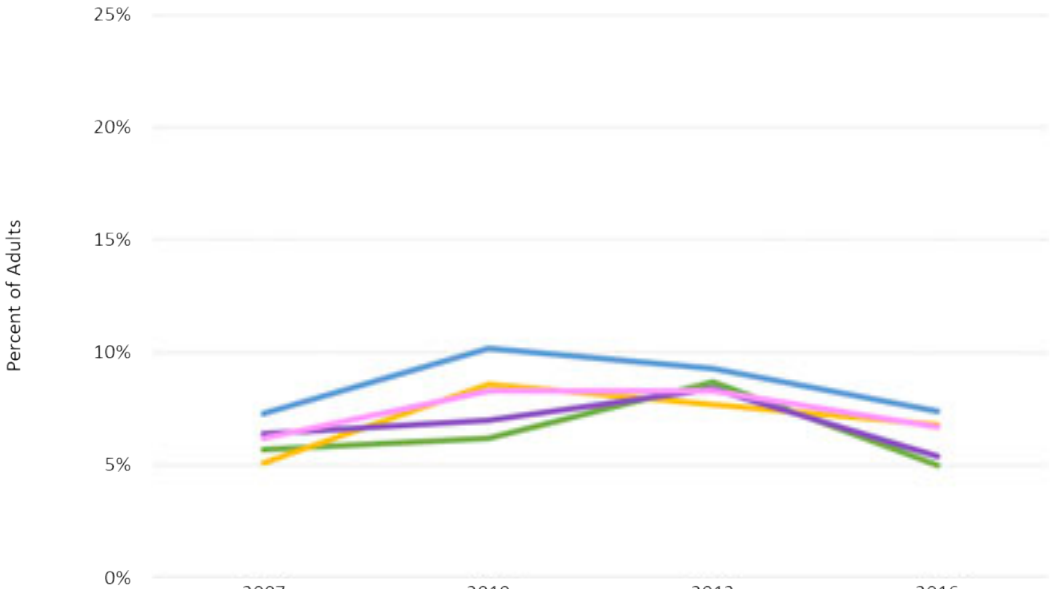
CHART 7.26: LUNG CANCER INCIDENCE, AGE-ADJUSTED (2007-2016)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
LAKE	71.5	81.7	77.7	83.3	77.1	83.4	83.0	72.9	59.9	63.6
ORANGE	63.5	70.2	65.4	61.5	53.8	59.7	55.6	51.1	54.0	51.2
OSCEOLA	62.1	58.3	53.5	49.4	55.9	63.6	58.4	54.5	58.1	59.1
SEMINOLE	51.8	58.7	56.1	47.6	50.4	46.7	45.7	49.9	55.8	48.2
FLORIDA	65.9	67.0	65.5	63.4	61.6	62.8	60.7	59.7	57.0	57.5

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

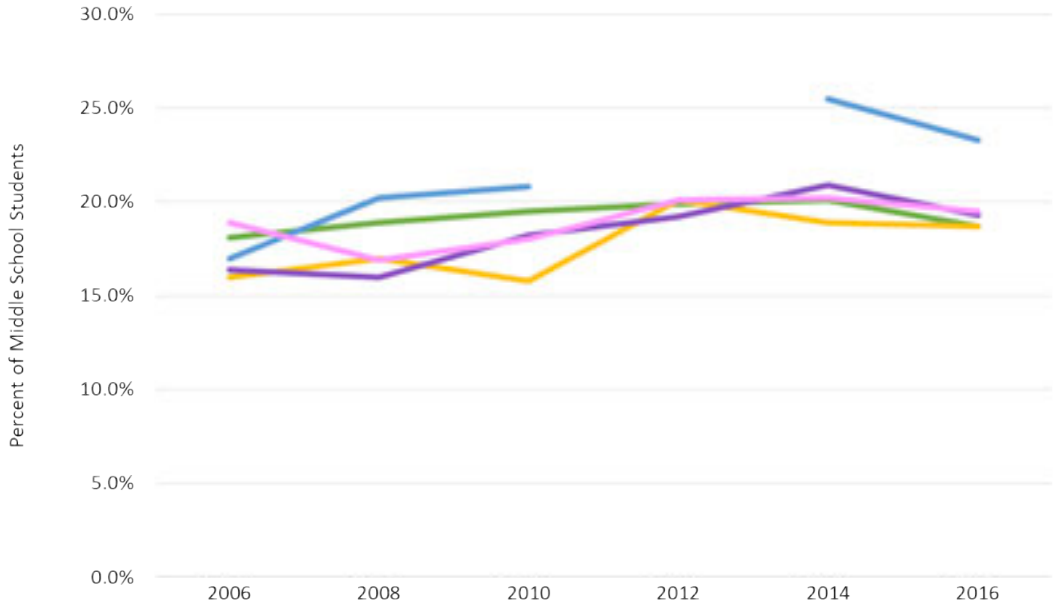
CHART 7.27: ADULTS WHO CURRENTLY HAVE ASTHMA (2007-2016)



	2007	2010	2013	2016
LAKE	5.7%	6.2%	8.7%	5.0%
ORANGE	5.1%	8.6%	7.7%	6.8%
OSCEOLA	7.3%	10.2%	9.3%	7.4%
SEMINOLE	6.4%	7.0%	8.4%	5.4%
FLORIDA	6.2%	8.3%	8.3%	6.7%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

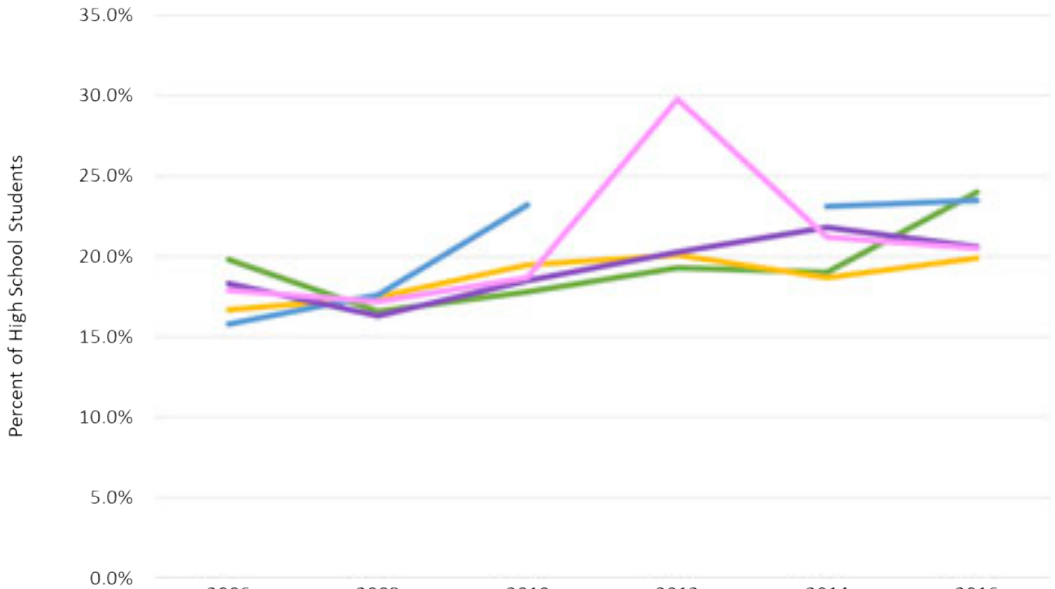
CHART 7.28: MIDDLE SCHOOL STUDENTS WITH KNOWN ASTHMA (2006-2016)



	2006	2008	2010	2012	2014	2016
LAKE	18.1%	18.9%	19.5%	19.9%	20.1%	18.7%
ORANGE	16.0%	17.0%	15.8%	20.1%	18.9%	18.7%
OSCEOLA	17.0%	20.2%	20.8%	N/A	25.5%	23.3%
SEMINOLE	16.4%	16.0%	18.2%	19.2%	20.9%	19.3%
FLORIDA	18.9%	16.9%	18.0%	20.1%	20.2%	19.5%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Epidemiology

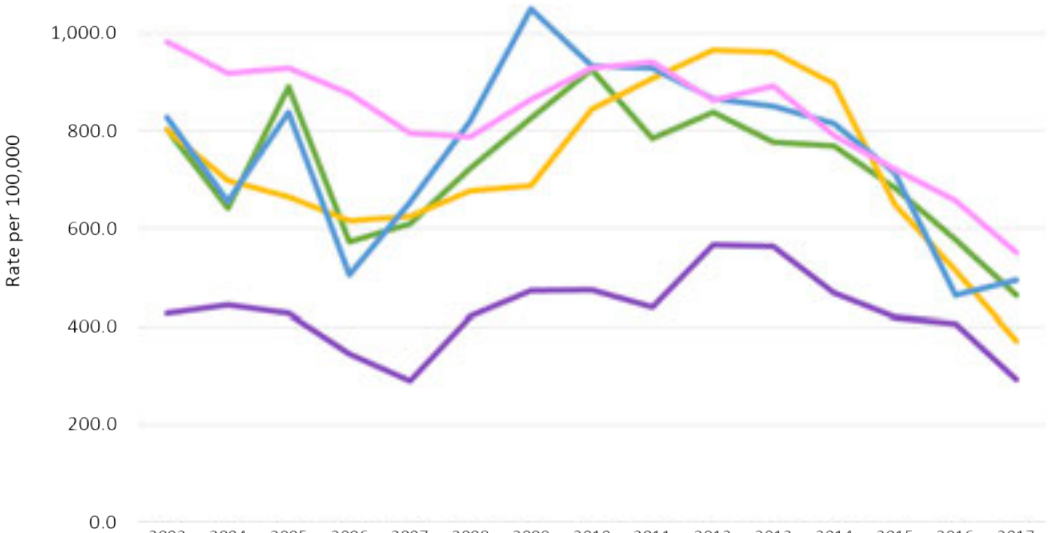
CHART 7.29: HIGH SCHOOL STUDENTS WITH KNOWN ASTHMA (2006-2016)



	2006	2008	2010	2012	2014	2016
LAKE	19.8%	16.6%	17.8%	19.3%	19.0%	24.0%
ORANGE	16.7%	17.5%	19.5%	20.1%	18.7%	19.9%
OSCEOLA	15.8%	17.6%	23.2%	N/A	23.1%	23.5%
SEMINOLE	18.3%	16.3%	18.5%	20.3%	21.8%	20.6%
FLORIDA	17.9%	17.2%	18.7%	29.8%	21.2%	20.5%

Source: FLHealthCHARTS: Florida Department of Health, Bureau of Epidemiology

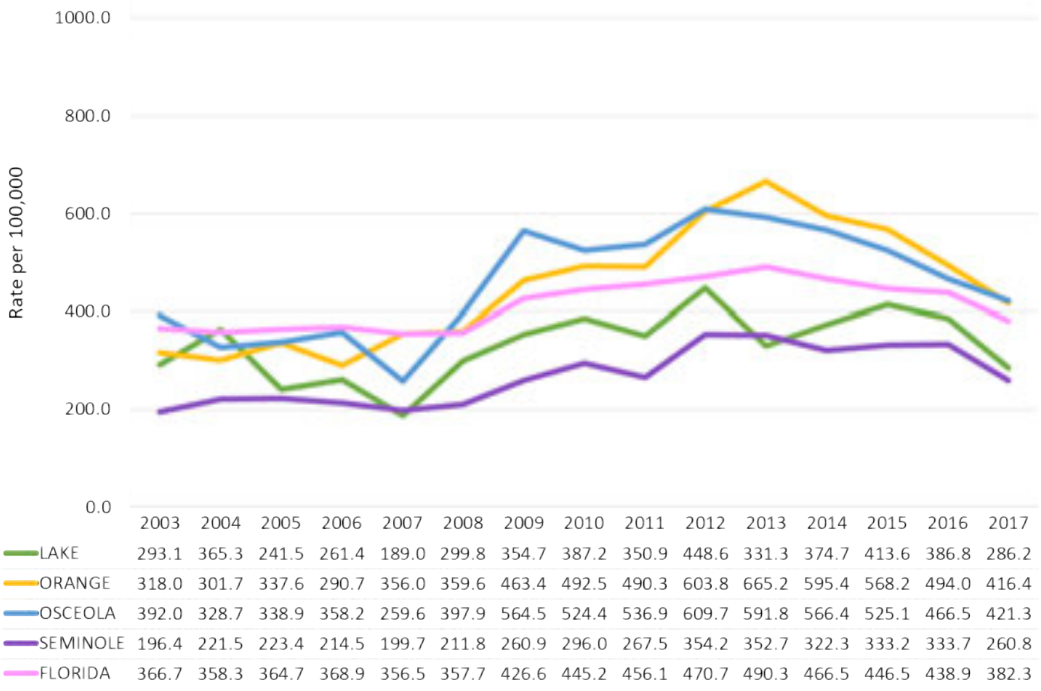
CHART 7.30: ASTHMA HOSPITALIZATIONS AGES 1-4 (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	803.1	641.7	890.9	572.8	609.2	723.4	826.2	926.2	784.0	838.0	776.8	769.0	683.9	577.8	464.5
ORANGE	801.7	698.2	664.3	615.4	624.3	677.0	687.7	844.9	906.8	965.2	961.3	896.6	649.2	514.3	372.2
OSCEOLA	827.0	655.5	837.5	505.0	653.5	819.8	1050.4	933.9	928.4	865.1	850.3	814.8	713.7	464.1	494.5
SEMINOLE	427.5	443.5	426.7	345.7	291.0	421.4	472.8	474.1	438.9	566.2	563.1	468.9	419.0	407.1	293.6
FLORIDA	982.0	917.4	929.3	876.2	795.2	787.5	864.2	928.8	941.5	862.3	892.3	790.7	721.9	657.4	551.8

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

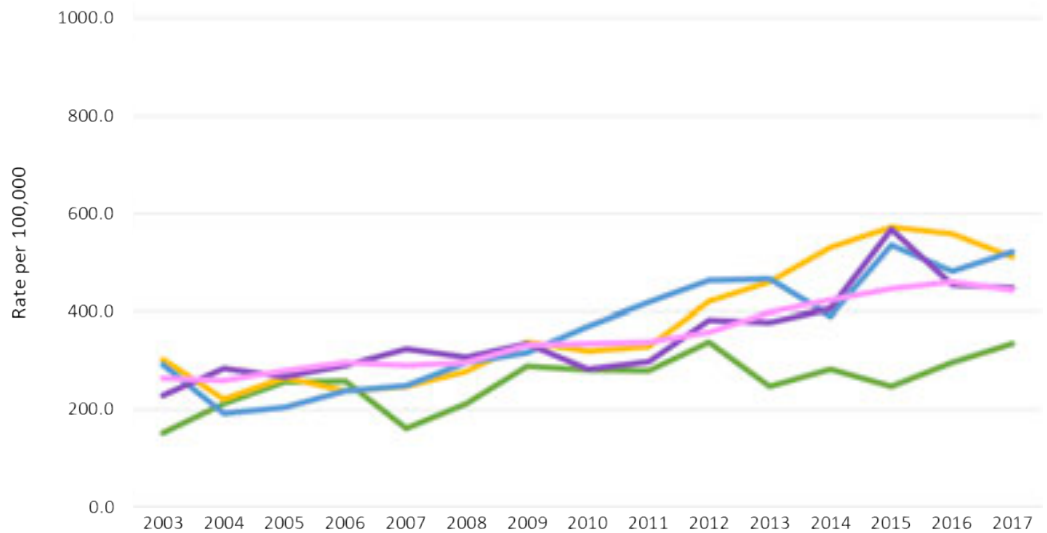
CHART 7.31: ASTHMA HOSPITALIZATIONS AGES 5-11 (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	293.1	365.3	241.5	261.4	189.0	299.8	354.7	387.2	350.9	448.6	331.3	374.7	413.6	386.8	286.2
ORANGE	318.0	301.7	337.6	290.7	356.0	359.6	463.4	492.5	490.3	603.8	665.2	595.4	568.2	494.0	416.4
OSCEOLA	392.0	328.7	338.9	358.2	259.6	397.9	564.5	524.4	536.9	609.7	591.8	566.4	525.1	466.5	421.3
SEMINOLE	196.4	221.5	223.4	214.5	199.7	211.8	260.9	296.0	267.5	354.2	352.7	322.3	333.2	333.7	260.8
FLORIDA	366.7	358.3	364.7	368.9	356.5	357.7	426.6	445.2	456.1	470.7	490.3	466.5	446.5	438.9	382.3

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

CHART 7.32: ASTHMA HOSPITALIZATIONS AGES 12-18 (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	153.4	213.3	257.4	259.7	162.7	213.8	290.4	282.8	279.9	338.9	248.6	283.1	248.3	298.2	335.5
ORANGE	303.2	221.8	266.0	239.6	247.7	279.1	338.8	320.8	329.0	419.6	459.9	530.0	572.0	558.4	510.5
OSCEOLA	293.5	193.5	206.0	239.3	249.6	297.9	317.2	370.7	418.7	463.2	465.7	390.3	535.0	481.3	521.8
SEMINOLE	230.6	285.9	268.7	291.2	325.8	308.4	335.5	283.4	298.9	382.7	379.1	406.9	567.1	454.1	447.5
FLORIDA	265.0	260.7	281.0	297.7	291.4	298.1	332.6	336.0	338.4	359.4	398.8	423.6	445.9	460.1	443.9

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

Leading Causes of Death: Summary of Indicators

According to the Centers for Disease Control and Prevention, cause-of-death ranking is a useful tool for illustrating the relative burden of cause-specific mortality. However, it should be used with a clear understanding of what the rankings mean. Literally, the rankings denote the most frequently occurring causes of death among those causes eligible to be ranked. Rankings do not illustrate cause-specific mortality risk as depicted by mortality rates. The rank of a specific cause (i.e., its mortality burden relative to other causes) may decline over time even if its mortality rate has not changed, or its rank may remain the same over time even if its mortality rate is decreasing.

Another tool used to depict the relative burden of cause-specific mortality is the proportion of total deaths from the rankable causes. This maps directly to the rankings such that, within a given year or population group, the causes with the highest rankings also have the highest proportion of total deaths. When making comparisons over time, however, it is important to note that the rank of a specific cause may remain the same even though the proportion of deaths attributable to that cause may have changed. Similarly, two population groups may have the same rank for a specific cause but different attributable proportions.

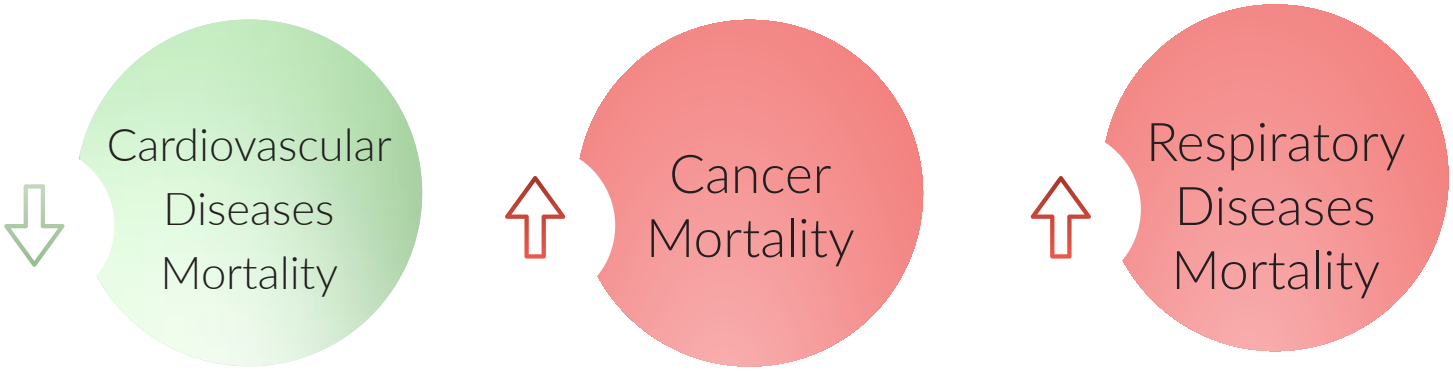
The following includes both a narrative as well as visual (chart or table) summary of indicators reported on in this section.

LEADING CAUSES OF DEATH, AGE-ADJUSTED, PER 100,000 POPULATION, LAKE COUNTY (2012-2017)

In Lake County, cardiovascular diseases are the leading cause of death per 100,000 population. Between 2014 (207) and 2017 (206.4) there was a slight decline in cardiovascular disease deaths. The cancer mortality rate increased from 153.8 in 2014 to 172.6 in 2017. Respiratory diseases have also increased from 53.8 in 2014 to 63.1 in 2017. Most other specific causes of death have increased as well. (See Table 7.2)

Figure 7.9 identifies the leading causes of death for Lake County in 2017. Red means that the indicator has worsened and green means that rates have improved since the last year data was reported in the previous CHNA.

FIGURE 7.9: LEADING CAUSES OF DEATH INDICATORS, LAKE COUNTY



Source: Strategy Solutions, Inc.

TOP 10 LEADING RANKABLE CAUSES OF DEATH, AGE-ADJUSTED, PER 100 ,000 POPULATION, LAKE COUNTY (2012-2017)

Cancer is the top leading rankable cause of death in Lake County with the rate increasing from 153.8 in 2014 to 172.6 in 2017. Heart diseases are the second leading rankable cause of death in the county, with the rate decreasing from 156 in 2014 to 155.2 in 2017. Unintentional injury death rates have increased from 63.2 to 71.6. (See Table 7.2)

TABLE 7.2: LEADING CAUSES OF DEATH, AGE-ADJUSTED, PER 100,000 POPULATION, LAKE COUNTY (2012-2017)

	2012	2013	2014	2015	2016	2017	Total
Cardiovascular diseases	186.8	189.2	207.0	204.3	210.1	206.4	201.1
Cancer	160.2	172.2	153.8	174.0	165.9	172.6	166.6
Other causes (residual)	72.5	91.4	82.7	85.5	84.6	92.9	85.1
Respiratory diseases	55.5	58.7	53.8	60.5	57.5	63.1	58.3
External causes	71.1	62.8	82.1	77.9	85.6	103.2	80.9
Nervous system diseases	25.4	26.2	28.0	33.8	30.1	31.0	29.2
Nutritional and metabolic diseases	22.4	23.6	22.4	18.7	26.0	27.1	23.4
Infectious diseases	17.7	21.1	17.2	18.0	15.3	16.2	17.5
Digestive diseases	15.2	13.5	13.7	14.3	19.7	17.7	15.8
Symptoms, signs & abnormal findings	14.1	10.4	12.3	6.1	6.6	5.7	9.0
Urinary tract diseases	8.2	6.4	7.1	8.8	9.1	8.8	8.1
In situ, benign neoplasms, uncertain/unknown behavior	4.0	4.5	4.0	3.8	4.3	5.1	4.3
Perinatal period conditions	4.6	3.6	7.5	6.1	3.0	6.4	5.2
Congenital & chromosomal anomalies	3.9	3.1	3.7	4.4	2.3	3.4	3.5
Anemias	1.6	0.8	1.7	1.0	1.4	2.1	1.4
Pregnancy, childbirth, puerperium complications	0.0	0.0	0.3	0.0	0.0	0.0	0.1

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

TABLE 7.3: TOP 10 LEADING RANKABLE CAUSES OF DEATH, AGE-ADJUSTED, PER 100,000 POPULATION, LAKE COUNTY (2012-2017)

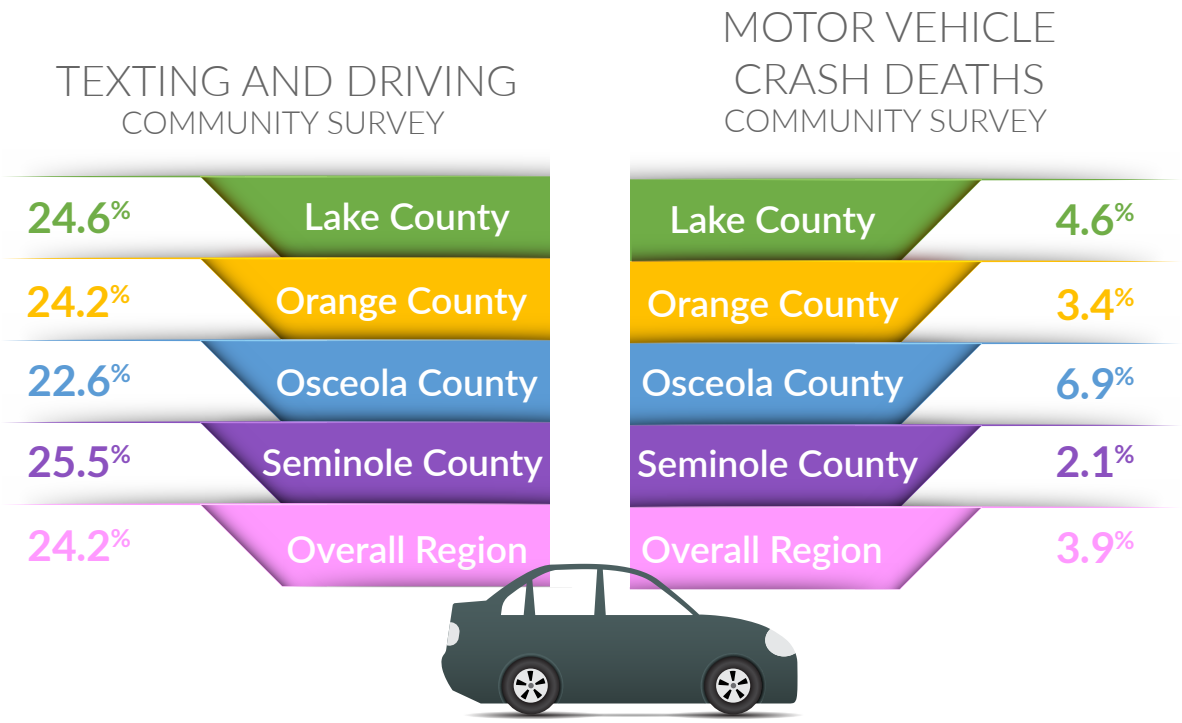
	2012	2013	2014	2015	2016	2017	Total
Cancer	160.2	172.2	153.8	174.0	165.9	172.6	166.6
Heart diseases	139.0	137.5	156.0	156.0	157.4	155.2	150.6
Unintentional injury	52.1	48.4	63.2	60.1	66.4	71.6	60.6
Chronic lower respiratory disease	37.9	40.4	38.1	42.9	40.1	45.1	40.8
Cerebrovascular diseases	28.7	27.6	32.4	30.4	32.7	31.0	30.5
Alzheimer's disease	18.4	15.6	21.4	24.2	20.5	22.5	20.6
Diabetes mellitus	21.4	23.1	21.4	18.1	24.8	25.4	22.4
Chronic liver disease & cirrhosis	12.1	11.1	11.9	12.6	15.5	13.8	12.9
Suicide	15.2	12.7	13.7	13.6	12.6	23.8	15.3
Parkinson's disease	7.0	10.4	6.6	9.0	9.6	8.5	8.5

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

Injury: What the Community is Saying

Figure 7.10 displays the input from community survey respondents related to injury. Residents of Lake County have a slightly higher rate of having experienced texting and driving (24.6 percent) compared to the four-county region overall (24.2 percent). Lake County respondents were more likely to experience a motor vehicle crash death (4.6 percent) compared to the region (3.9 percent)

FIGURE 7.10: INJURY INDICATORS, COMMUNITY SURVEY 2019



Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Not all primary research participant groups discussed injury-related needs and issues. Those who did identified injury prevention and falls as well as older adult safety and mobility as important community issues that their clients deal with.

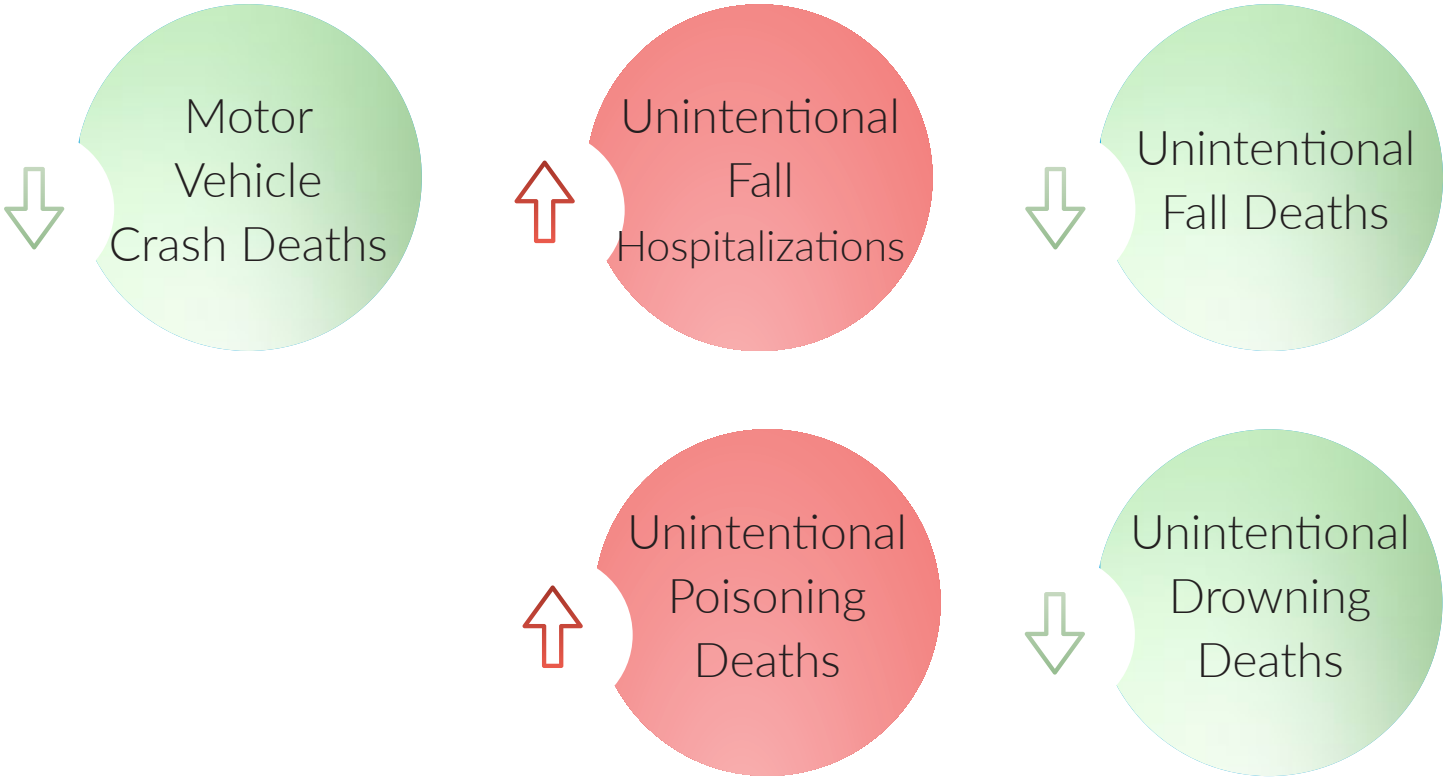
Barriers identified by primary research participants included lack of accessible care and difficulty navigating the system to find help.

Needed services identified by primary research participants included more in-home supports, particularly for seniors.

Injury at a Glance

The key indicators related to injury that have changed since the CHNA are identified in Figure 7.11. Red means that the indicator has worsened and green means that there has been improvement since the most recent CHNA.

FIGURE 7.11: INJURY INDICATORS



Source: Strategy Solutions, Inc.

Injury: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

MOTOR VEHICLE CRASH DEATHS (2002-2017)

Lake County's rates of motor vehicle deaths per 100,000 people fluctuated from 2002 to 2017 with an overall decrease. The Lake County rate in 2002 was 33.4 and decreased to 20 in 2006. The rate then increased to 26.3 in 2007 before decreasing again to 18.3 in 2017. The state rate also fluctuated over this time period, decreasing from 18.7 in 2002 to 14.9 in 2017. (See Chart 7.33)

NON-FATAL HOSPITALIZATIONS FOR MOTOR VEHICLE-RELATED INJURIES BY AGE (2017)

In 2017, the only data available for the rate of non-fatal hospitalizations per 100,000 for motor vehicle-related injuries in Lake County is for those 15-19. In this group the rate was 122.8, which was higher than the state rate of 98.5. (See Chart 7.34)

CHILD MOTOR VEHICLE CRASH DEATHS BY AGE (2015-2017)

Lake County had 6.1 child motor vehicle crash deaths per 100,000, for those ages 0-4 years, from 2015 to 2017, above the state rate of 2.5. Lake County also had a slightly higher rate of deaths for those ages 5-11 years at 2.6, compared to the state rate of 2.2. Lake County was above the state rate of 8.7 for ages 12-18 years at 10.5. For ages 19-21, Lake County's rate of 10.3 was less than half of the state rate of 26.6. (See Chart

HOSPITALIZATIONS FOR NON-FATAL UNINTENTIONAL FALLS (2006-2017)

Hospitalizations for non-fatal unintentional falls per 100,000 has increased in Lake County (328.9 to 515) and the state (282.1 to 353.4) from 2006 to 2017. (See Chart 7.36)

UNINTENTIONAL FALL, AGE-ADJUSTED DEATHS (2006-2017)

Lake County's unintentional fall age-adjusted death rate per 100,000 increased from 5.8 in 2006 to 9.6 in 2009, before spiking to 23.3 in 2014 and then decreasing to 20.4 in 2017. The state rate increased from 6.8 in 2006 to 10.1 in 2017. (See Chart 7.37)

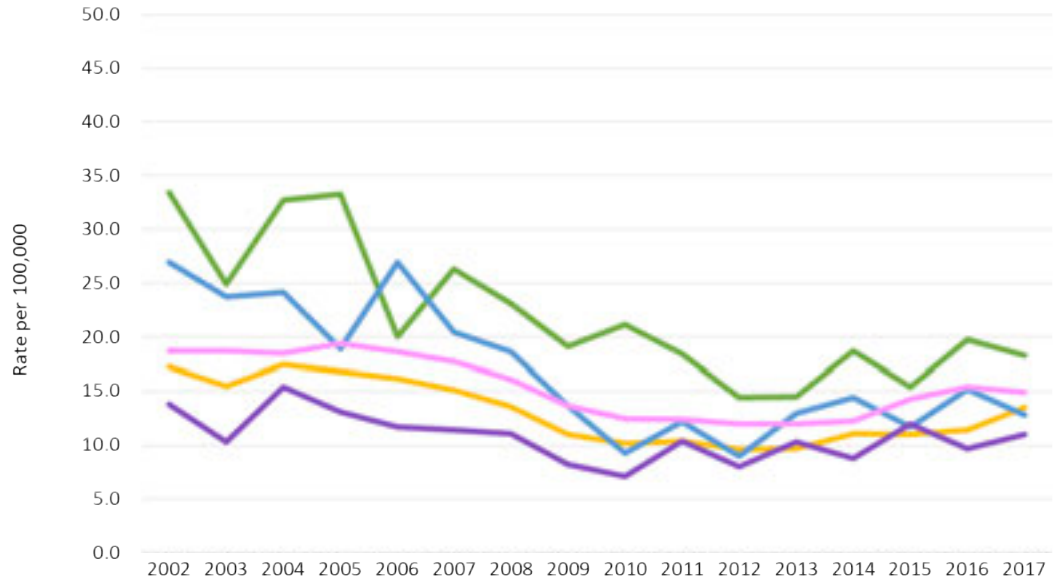
UNINTENTIONAL POISONING, AGE-ADJUSTED DEATHS (2002-2017)

Unintentional poisoning age-adjusted deaths per 100,000 increased in Lake County and across the state between 2002 and 2017. Lake County's rate increased from 7.9 in 2002 to 26.7 in 2017. The state rate in 2002 was 9.5 and 23.5 in 2017. (See Chart 7.38)

UNINTENTIONAL DROWNING, AGE-ADJUSTED DEATHS (2002-2017)

The rate of unintentional drowning age-adjusted deaths per 100,000 fluctuated from 2002 to 2017. In Lake County the rate was 1.2 in 2002, had a spike to 3.4 in 2015, and in 2017 dropped to 1.6. The state rate remained relatively consistent from 2.1 in 2002 to 2 in 2017. (See Chart 7.39)

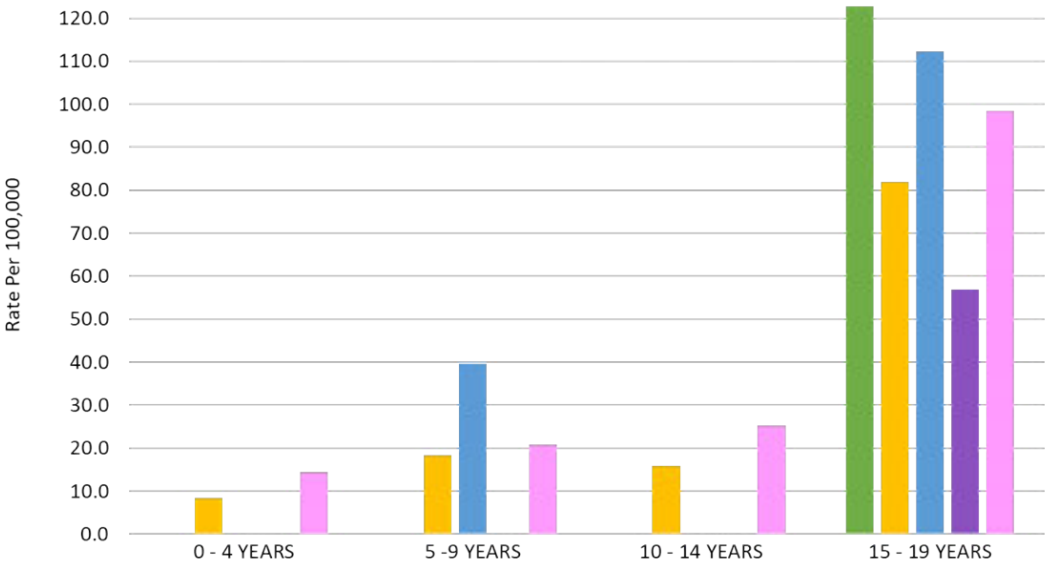
CHART 7.33: MOTOR VEHICLE CRASH DEATHS (2002-2017)



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	33.4	24.9	32.7	33.3	20.0	26.3	23.1	19.1	21.1	18.4	14.4	14.5	18.7	15.4	19.7	18.3
ORANGE	17.2	15.5	17.4	16.8	16.2	15.1	13.6	11.0	10.2	10.4	9.6	9.7	11.1	11.0	11.4	13.5
OSCEOLA	26.9	23.7	24.1	18.9	26.9	20.4	18.6	13.7	9.3	12.2	9.0	13.0	14.4	11.7	15.2	12.8
SEMINOLE	13.8	10.3	15.4	13.1	11.7	11.4	11.1	8.2	7.1	10.4	8.0	10.3	8.8	12.0	9.7	11.0
FLORIDA	18.7	18.7	18.5	19.4	18.6	17.7	16.1	13.7	12.5	12.4	12.0	12.0	12.3	14.3	15.4	14.9

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

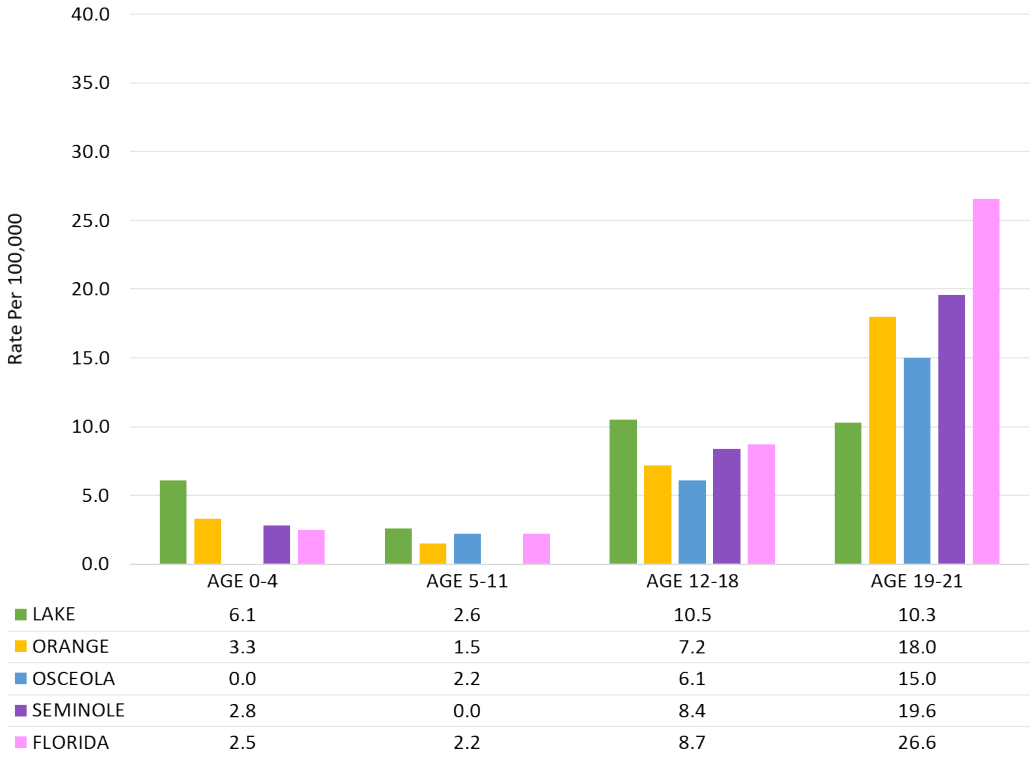
CHART 7.34: NON-FATAL HOSPITALIZATIONS FOR MOTOR VEHICLE-RELATED INJURIES BY AGE (2017)



	0 - 4 YEARS	5 -9 YEARS	10 - 14 YEARS	15 - 19 YEARS
LAKE	N/A	N/A	N/A	122.8
ORANGE	8.4	18.4	15.9	81.9
OSCEOLA	0.0	39.7	N/A	112.2
SEMINOLE	N/A	N/A	N/A	56.9
FLORIDA	14.5	20.8	25.2	98.5

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)

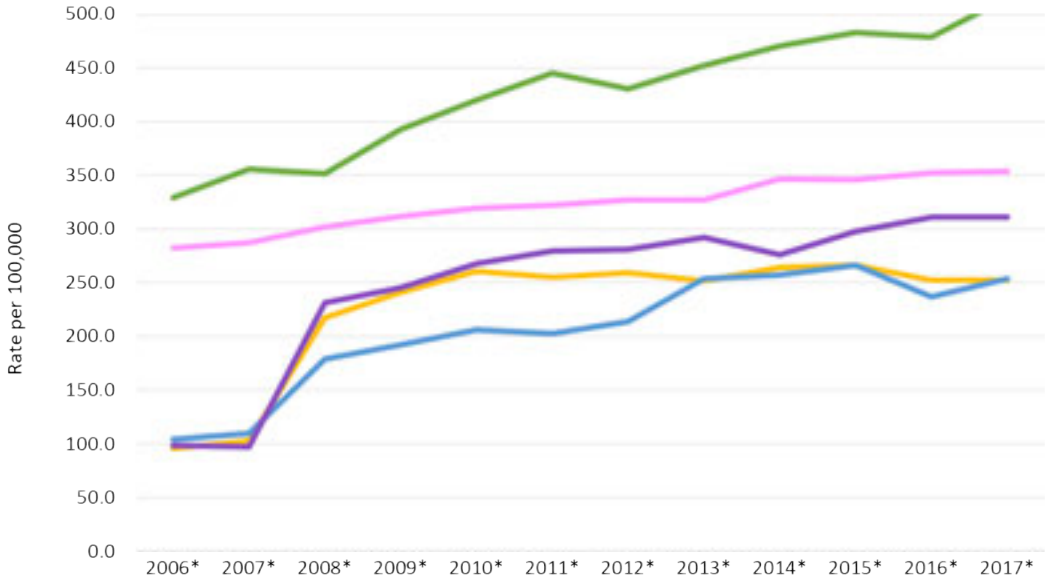
CHART 7.35: CHILD MOTOR VEHICLE CRASH DEATHS BY AGE (2015-2017)



	AGE 0-4	AGE 5-11	AGE 12-18	AGE 19-21
LAKE	6.1	2.6	10.5	10.3
ORANGE	3.3	1.5	7.2	18.0
OSCEOLA	0.0	2.2	6.1	15.0
SEMINOLE	2.8	0.0	8.4	19.6
FLORIDA	2.5	2.2	8.7	26.6

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

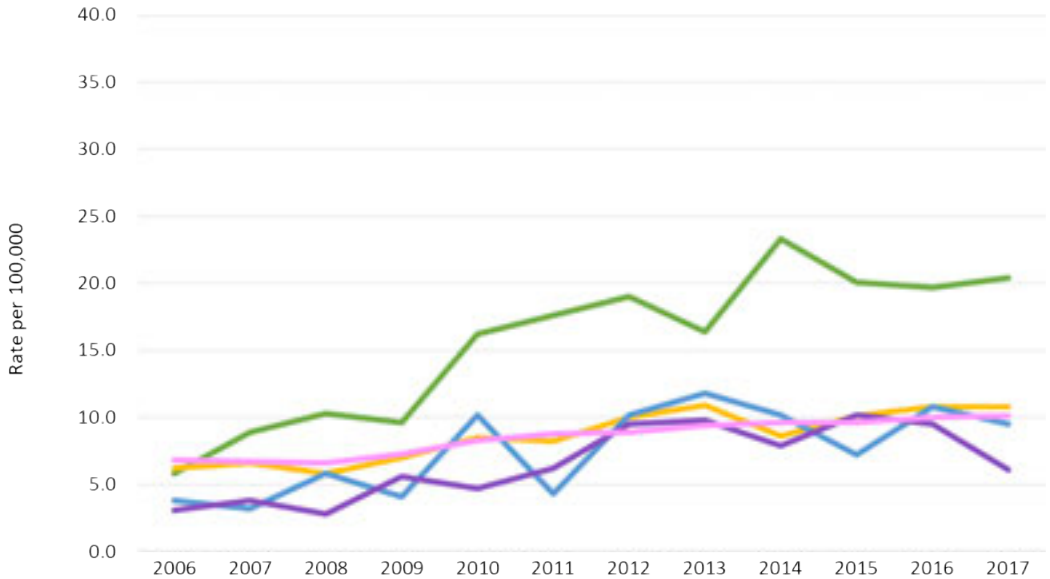
CHART 7.36: HOSPITALIZATIONS FOR NON-FATAL UNINTENTIONAL FALLS (2006-2017)



	2006*	2007*	2008*	2009*	2010*	2011*	2012*	2013*	2014*	2015*	2016*	2017*
LAKE	328.9	355.7	351.6	392.7	419.7	444.9	430.5	451.9	470.1	483.1	478.7	515.0
ORANGE	96.1	102.7	217.7	241.4	260.9	255.2	259.0	251.7	264.5	266.1	252.6	252.6
OSCEOLA	104.5	109.8	178.9	191.9	206.3	202.9	213.6	253.5	257.5	266.0	237.2	253.6
SEMINOLE	98.8	97.5	231.3	245.6	267.4	279.7	281.0	292.1	276.3	297.5	311.3	310.9
FLORIDA	282.1	287.5	302.1	311.5	319.3	322.5	327.2	327.2	346.6	345.7	352.2	353.4

Source: FLHealthCHARTS: Florida Agency For Health Care Administration (AHCA)
*All rates are significantly different than the state

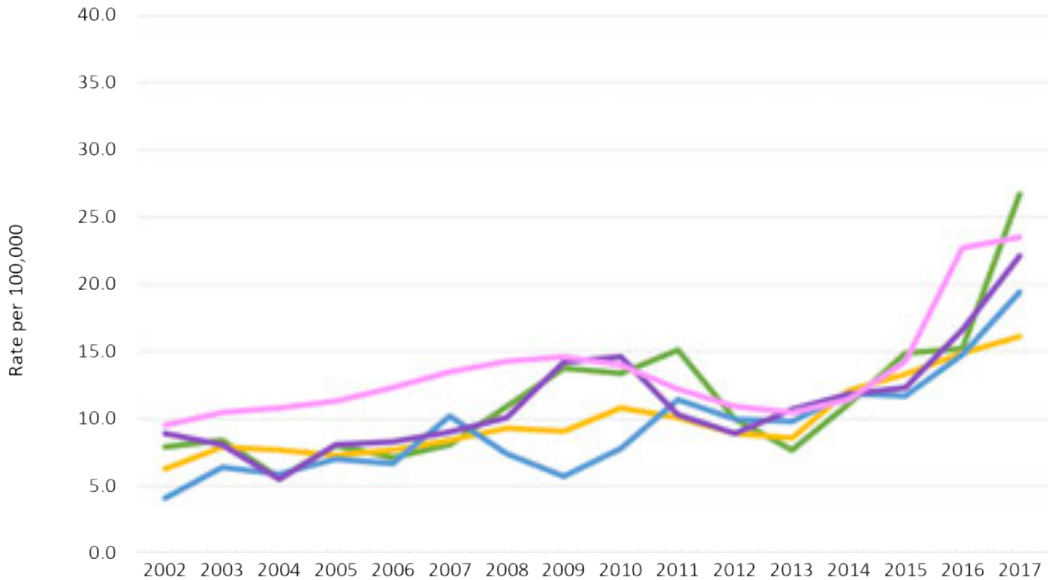
CHART 7.37: UNINTENTIONAL FALL, AGE-ADJUSTED DEATHS (2006-2017)



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	5.8	8.9	10.3	9.6	16.2	17.6	19.0	16.4	23.3	20.1	19.7	20.4
ORANGE	6.2	6.6	5.8	7.0	8.5	8.2	10.0	10.9	8.6	10.1	10.8	10.8
OSCEOLA	3.8	3.2	5.8	4.1	10.2	4.3	10.2	11.8	10.2	7.2	10.8	9.5
SEMINOLE	3.1	3.8	2.8	5.6	4.7	6.2	9.5	9.8	7.9	10.2	9.5	6.1
FLORIDA	6.8	6.7	6.6	7.3	8.3	8.8	8.9	9.4	9.6	9.6	10.0	10.1

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

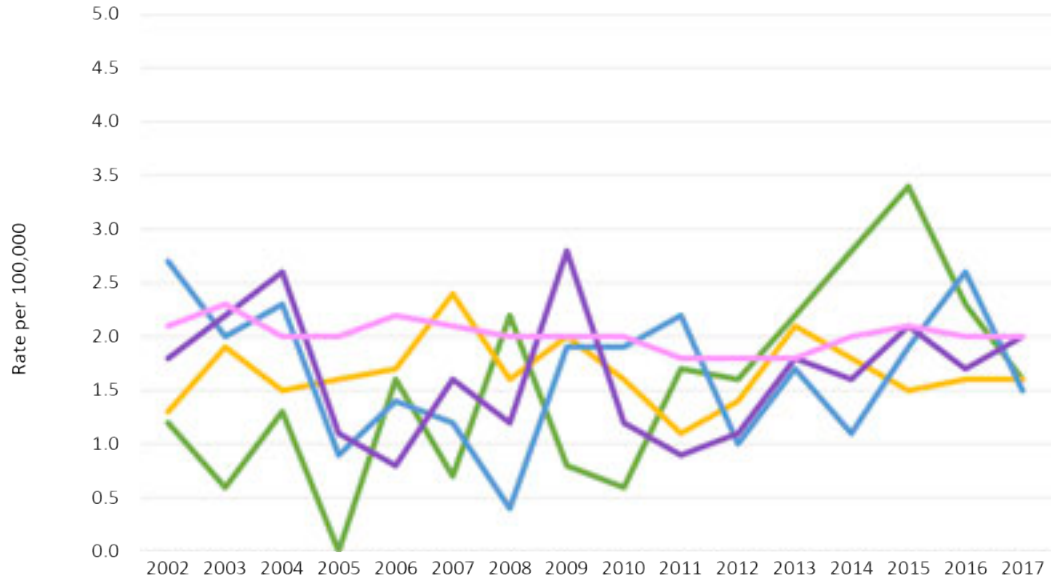
CHART 7.38: UNINTENTIONAL POISONING, AGE-ADJUSTED DEATHS (2002-2017)



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	7.9	8.4	5.6	8.0	7.1	8.1	10.9	13.8	13.4	15.1	10.0	7.7	11.1	14.9	15.2	26.7
ORANGE	6.3	7.9	7.7	7.3	7.7	8.4	9.3	9.1	10.8	10.1	8.9	8.6	12.1	13.3	14.9	16.1
OSCEOLA	4.1	6.4	5.9	7.0	6.7	10.2	7.4	5.7	7.8	11.4	10.0	9.8	11.9	11.7	14.8	19.4
SEMINOLE	8.9	8.1	5.5	8.1	8.3	9.0	10.1	14.2	14.6	10.3	8.9	10.7	11.8	12.3	16.6	22.1
FLORIDA	9.5	10.5	10.8	11.3	12.3	13.5	14.3	14.6	14.0	12.2	10.9	10.5	11.4	14.3	22.7	23.5

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

CHART 7.39: UNINTENTIONAL DROWNING AGE-ADJUSTED DEATHS (2002-2017)



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	1.2	0.6	1.3	0.0	1.6	0.7	2.2	0.8	0.6	1.7	1.6	2.2	2.8	3.4	2.3	1.6
ORANGE	1.3	1.9	1.5	1.6	1.7	2.4	1.6	2.0	1.6	1.1	1.4	2.1	1.8	1.5	1.6	1.6
OSCEOLA	2.7	2.0	2.3	0.9	1.4	1.2	0.4	1.9	1.9	2.2	1.0	1.7	1.1	1.9	2.6	1.5
SEMINOLE	1.8	2.2	2.6	1.1	0.8	1.6	1.2	2.8	1.2	0.9	1.1	1.8	1.6	2.1	1.7	2.0
FLORIDA	2.1	2.3	2.0	2.0	2.2	2.1	2.0	2.0	2.0	1.8	1.8	1.8	2.0	2.1	2.0	2.0

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

Leading Causes of Injury Deaths: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section.

TOP 10 LEADING CAUSES OF INJURY DEATH, AGE-ADJUSTED, LAKE COUNTY (2012-2017)

In Lake County, poisoning is the leading cause of injury death, increasing in rate almost three times between 2012 (11.5) and 2017 (31.6). Fall is the second leading cause of injury death, with rates remaining consistent for the six reportable years (19 in 2012 and 20.6 in 2017). Firearm is the third leading cause of injury death, with rates increasing slightly between 2012 (14.6) and 2017 (17.7). Motor vehicle traffic-occupant is the fourth leading cause of injury death, with rates almost doubling from 4.7 in 2012 to 9.1 in 2017. Suffocation is the fifth leading cause of injury death, with rates increasing slightly from 5.8 in 2012 to 7.7 in 2017. (See Table 7.4)

TABLE 7.4: TOP 10 LEADING CAUSES OF INJURY DEATH, AGE-ADJUSTED, LAKE COUNTY (2012-2017)

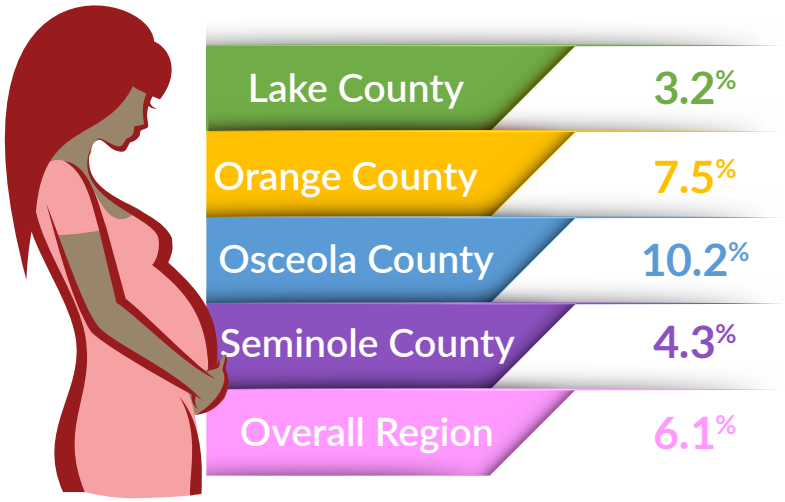
	2012	2013	2014	2015	2016	2017
Poisoning	11.5	10.0	13.9	18.5	16.9	31.6
Fall	19.0	16.4	23.3	20.1	19.7	20.6
Firearm	14.6	9.2	11.0	9.7	11.2	17.7
Motor vehicle traffic - occupant	4.7	9.6	6.6	7.7	5.9	9.1
Suffocation	5.8	4.8	7.0	6.1	6.6	7.7
Motor vehicle traffic - motorcyclist	5.6	0.0	3.7	1.0	7.5	4.6
Motor vehicle traffic - pedestrian	0.0	0.0	0.3	0.0	0.0	3.0
Drowning, submersion	1.6	3.2	2.8	3.8	2.5	2.7
Motor vehicle traffic - other, unspecified	0.9	0.5	1.0	0.4	0.2	1.5
Unspecified	1.8	3.2	2.8	1.4	2.8	1.2

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

Birth Characteristics: What the Community is Saying

Figure 7.12 outlines the percentages of community survey respondents that experienced difficulty in accessing prenatal care. Lake County respondents (3.2 percent) were less likely to experience difficulty accessing prenatal care than the region overall.

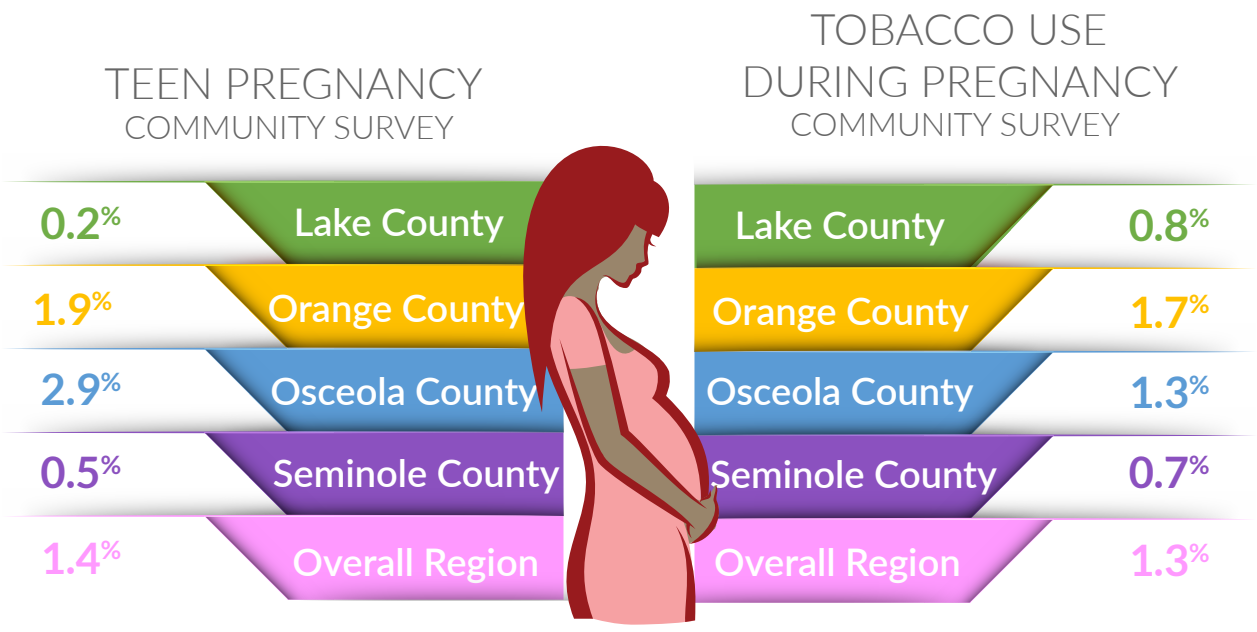
FIGURE 7.12: DIFFICULTY ACCESSING PRENATAL CARE, COMMUNITY SURVEY 2019



Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Figure 7.13 outlines the percentage of community survey respondents that experienced teen pregnancy and smoking during pregnancy. Less than one percent of Lake County respondents indicated that they experienced teen pregnancy or tobacco use during pregnancy.

FIGURE 7.13: TEEN PREGNANCY AND SMOKING DURING PREGNANCY, COMMUNITY SURVEY 2019



Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following needs and issues related to birth characteristics in Lake County:

- Substance abuse exposure for newborn babies
- Access to convenient care
- More support systems

Barriers to care that were identified by primary research participants included:

- Reluctance of immigrant families to seek care
- Lack of housing services
- Lack of affordable prenatal care

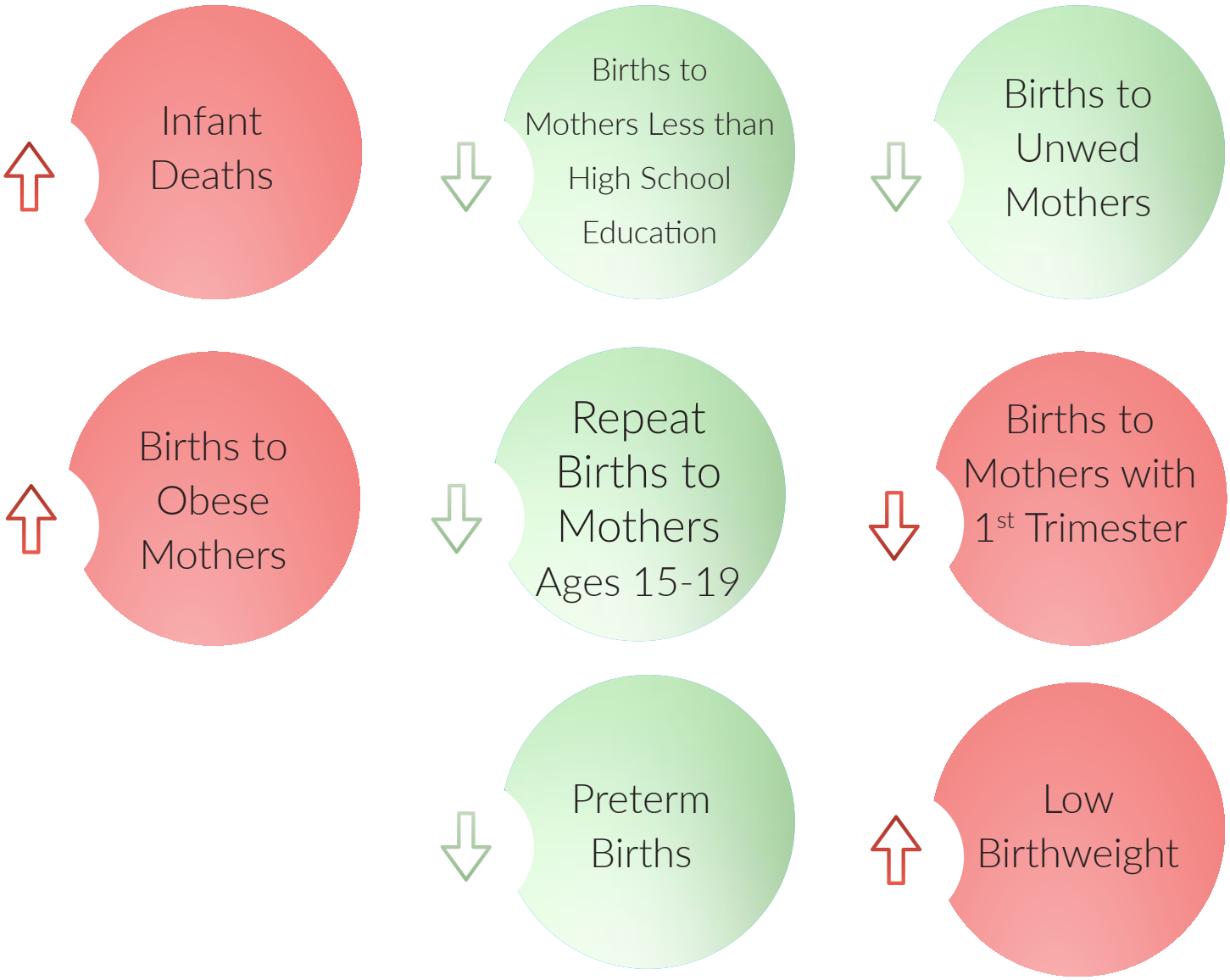
Services needed according to primary research participants included:

- Affordable, comprehensive prenatal care
- Education on community resources available
- Awareness of the need for maternity fitness and nutrition
- Support systems
- Housing services
- Access to WIC services

Birth Characteristics at a Glance

The key indicators related to birth characteristics that have changed since the last CHNA are identified in Figure 7.14. Red means that the indicator has worsened and green means that there has been improvement since the most recent CHNA.

FIGURE 7.14: BIRTH CHARACTERISTICS INDICATORS



Source: Strategy Solutions, Inc.

Birth Characteristics: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the colored icons, located on the previous page, illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

INFANT DEATHS PER 1,000 LIVE BIRTHS (2003-2017)

The rate for infant deaths per 1,000 live births in Lake County increased from 5.6 in 2003 to 7 in 2017. The county and state (6.1) were above the HP2020 goal of six in 2017. (See Chart 7.40)

BIRTHS WITH SELF-PAY FOR DELIVERY PAYMENT SOURCE (2004-2017)

The percentages of births with self-pay for delivery has fluctuated between 2004 and 2017. During that time, the percentage decreased in Lake County from 8.1 percent to 4.9 percent. Lake County's percentage in 2017 was lower than the state (6.2 percent). (See Chart 7.41)

BIRTHS TO MOTHERS WITH LESS THAN HIGH SCHOOL EDUCATION (2003-2017)

The percentage of births to mothers with less than a high school education decreased in Lake County and the state between 2003 and 2017. Lake County's percentage decreased from 22.5 percent in 2003 to 10.6 percent in 2017. The state decreased from 20 percent to 12.1 percent during that time. (See Chart 7.42)

BIRTHS TO UNWED MOTHERS (2003-2017)

The percentage of births to unwed mothers was similar in Lake County to that of the state from 2003 to 2017. Both percentages have increased; Lake County increased from 37.8 percent in 2003 to 47.1 percent in 2017 and the state increased from 39.9 percent to 46.9 during this time. (See Chart 7.43)

BIRTHS TO MOTHERS WHO WERE OBESE AT TIME OF PREGNANCY (2004-2017)

The percentage of births to mothers who were obese at time of pregnancy increased in Lake County and the state between 2004 and 2017. Lake County's percentages increased from 21.5 percent to 28.8 percent during this time period. The state percentage increased from 18.7 percent (2004) to 25 percent (2017). (See Chart 7.44)

REPEAT BIRTHS TO MOTHERS AGES 15-19 (2003-2017)

The percentage of repeat births to mothers ages 15-19 decreased in both Lake County and the state from 2003 to 2017. In Lake County there was a decrease from 21.8 percent to 14.5 percent and in the state from 19.9 percent to 15.2 percent during this time. (See Chart 7.45)

BIRTHS TO MOTHERS WITH FIRST TRIMESTER PRENATAL CARE (2003-2017)

The percentage of births to mothers with first trimester prenatal care has been consistently higher in Lake County than the state from 2003 and 2017. While the percentages have fluctuated, they have also decreased; in Lake County from 86.1 percent to 79.5 percent. The state percentage decreased from 85.8 percent in 2003 to 77.3 percent in 2017. (See Chart 7.46)

PRETERM BIRTHS <37 WEEKS GESTATION (2003-2017)

The percentage of preterm births in Lake County decreased from 11 percent to 10.1 percent from 2003 to 2017. The state percentage decreased slightly from 10.8 percent to 10.2 percent during this time. (See Chart 7.47)

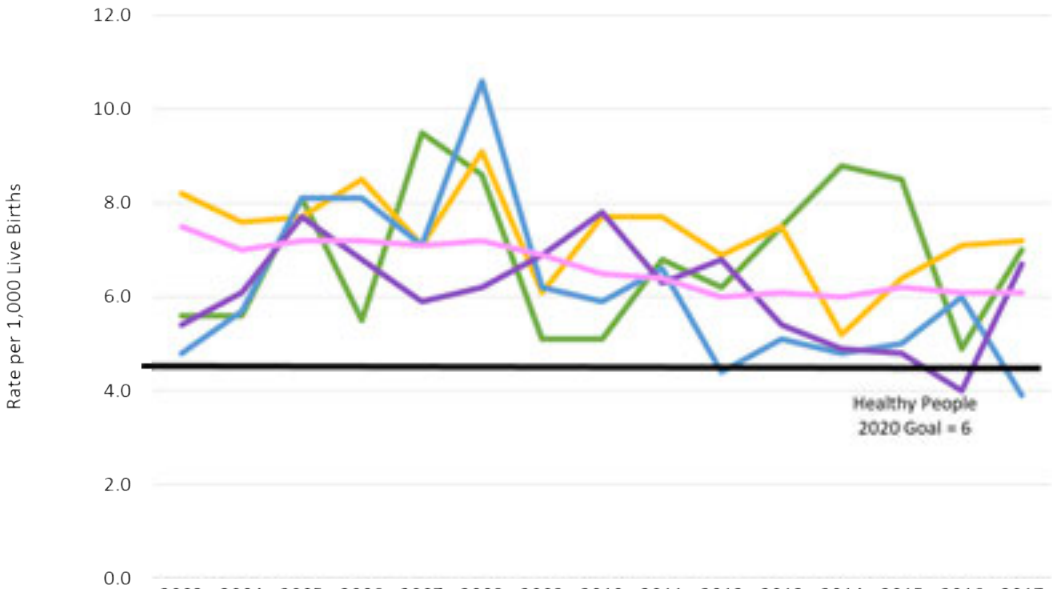
LOW BIRTHWEIGHT BIRTHS <2500 GRAMS (2003-2017)

The percentage of low birthweight babies born in Lake County was 8.7 percent in 2003 and 8.1 percent in 2017, similar to the percentages at the state level. There was a slight increase in the state from 8.5 percent in 2003 to 8.8 percent in 2017. (See Chart 7.48)

BIRTHS COVERED BY MEDICAID (2004-2017)

The percentage of births covered by Medicaid has increased in Lake County as well as the state. In Lake County there was an increase from 37.6 percent in 2004 to 51.1 percent in 2017. The state percentage has grown from 36.6 percent to 48.9 percent during this time. (See Chart 7.49)

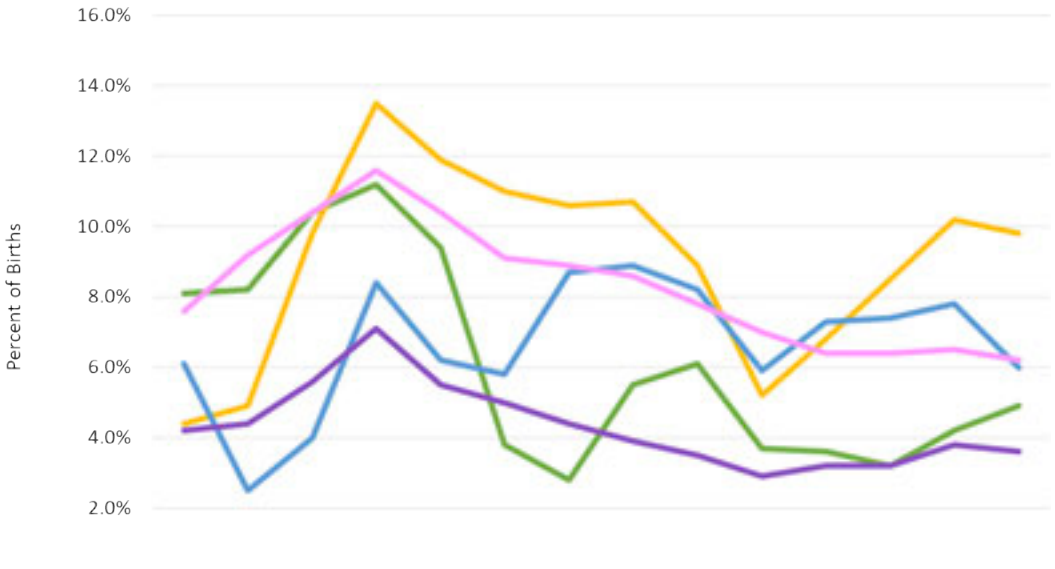
CHART 7.40: INFANT DEATHS PER 1,000 LIVE BIRTHS (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	5.6	5.6	8.1	5.5	9.5	8.6	5.1	5.1	6.8	6.2	7.5	8.8	8.5	4.9	7.0
ORANGE	8.2	7.6	7.7	8.5	7.1	9.1	6.1	7.7	7.7	6.9	7.5	5.2	6.4	7.1	7.2
OSCEOLA	4.8	5.7	8.1	8.1	7.1	10.6	6.2	5.9	6.6	4.4	5.1	4.8	5.0	6.0	3.9
SEMINOLE	5.4	6.1	7.7	6.8	5.9	6.2	6.9	7.8	6.3	6.8	5.4	4.9	4.8	4.0	6.7
FLORIDA	7.5	7.0	7.2	7.2	7.1	7.2	6.9	6.5	6.4	6.0	6.1	6.0	6.2	6.1	6.1

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

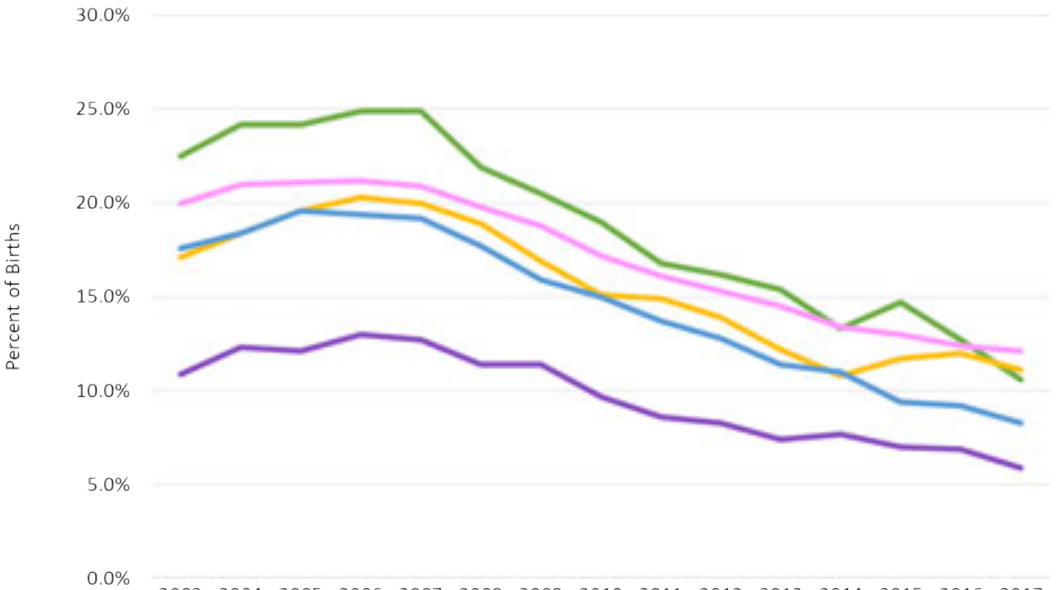
CHART 7.41: BIRTHS WITH SELF-PAY FOR DELIVERY PAYMENT SOURCE (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	8.1%	8.2%	10.4%	11.2%	9.4%	3.8%	2.8%	5.5%	6.1%	3.7%	3.6%	3.2%	4.2%	4.9%
ORANGE	4.4%	4.9%	9.8%	13.5%	11.9%	11.0%	10.6%	10.7%	8.9%	5.2%	6.8%	8.5%	10.2%	9.8%
OSCEOLA	6.1%	2.5%	4.0%	8.4%	6.2%	5.8%	8.7%	8.9%	8.2%	5.9%	7.3%	7.4%	7.8%	6.0%
SEMINOLE	4.2%	4.4%	5.6%	7.1%	5.5%	5.0%	4.4%	3.9%	3.5%	2.9%	3.2%	3.2%	3.8%	3.6%
FLORIDA	7.6%	9.2%	10.4%	11.6%	10.4%	9.1%	8.9%	8.6%	7.8%	7.0%	6.4%	6.4%	6.5%	6.2%

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

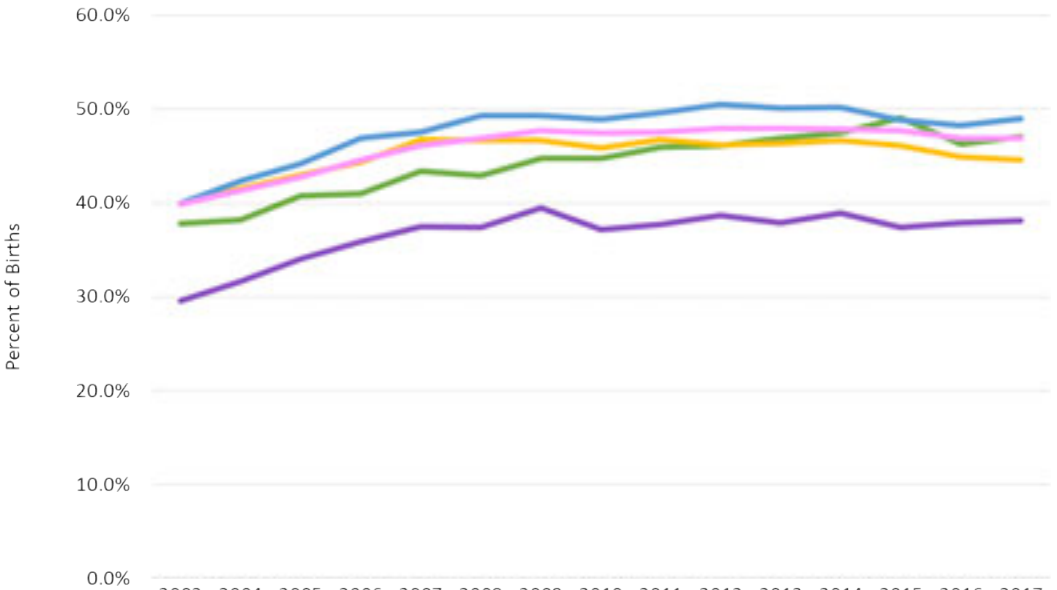
CHART 7.42: BIRTHS TO MOTHERS WITH LESS THAN HIGH SCHOOL EDUCATION (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	22.5%	24.2%	24.2%	24.9%	24.9%	21.9%	20.5%	19.0%	16.8%	16.2%	15.4%	13.3%	14.7%	12.7%	10.6%
ORANGE	17.1%	18.4%	19.6%	20.3%	20.0%	18.9%	16.9%	15.1%	14.9%	13.9%	12.2%	10.8%	11.7%	12.0%	11.1%
OSCEOLA	17.6%	18.4%	19.6%	19.4%	19.2%	17.7%	15.9%	15.0%	13.7%	12.8%	11.4%	11.0%	9.4%	9.2%	8.3%
SEMINOLE	10.9%	12.3%	12.1%	13.0%	12.7%	11.4%	11.4%	9.7%	8.6%	8.3%	7.4%	7.7%	7.0%	6.9%	5.9%
FLORIDA	20.0%	21.0%	21.1%	21.2%	20.9%	19.8%	18.8%	17.2%	16.1%	15.3%	14.5%	13.4%	13.0%	12.4%	12.1%

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

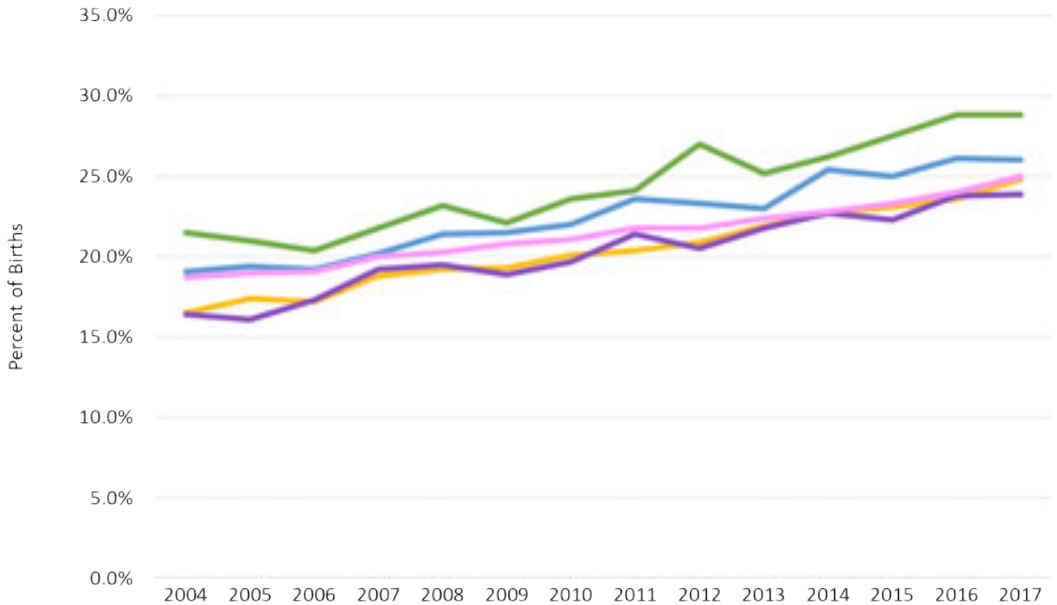
CHART 7.43: BIRTHS TO UNWED MOTHERS (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	37.8%	38.2%	40.8%	41.0%	43.4%	42.9%	44.8%	44.8%	46.0%	46.1%	46.9%	47.5%	49.1%	46.3%	47.1%
ORANGE	39.9%	41.6%	43.0%	44.4%	46.8%	46.7%	46.7%	45.9%	46.8%	46.2%	46.4%	46.7%	46.1%	44.9%	44.6%
OSCEOLA	40.0%	42.4%	44.2%	46.9%	47.6%	49.3%	49.3%	48.9%	49.6%	50.5%	50.1%	50.2%	48.8%	48.3%	49.0%
SEMINOLE	29.6%	31.7%	34.1%	35.9%	37.5%	37.4%	39.5%	37.2%	37.7%	38.7%	37.9%	38.9%	37.4%	37.9%	38.1%
FLORIDA	39.9%	41.3%	42.8%	44.6%	46.1%	46.9%	47.7%	47.5%	47.6%	48.0%	48.0%	47.9%	47.7%	46.9%	46.9%

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

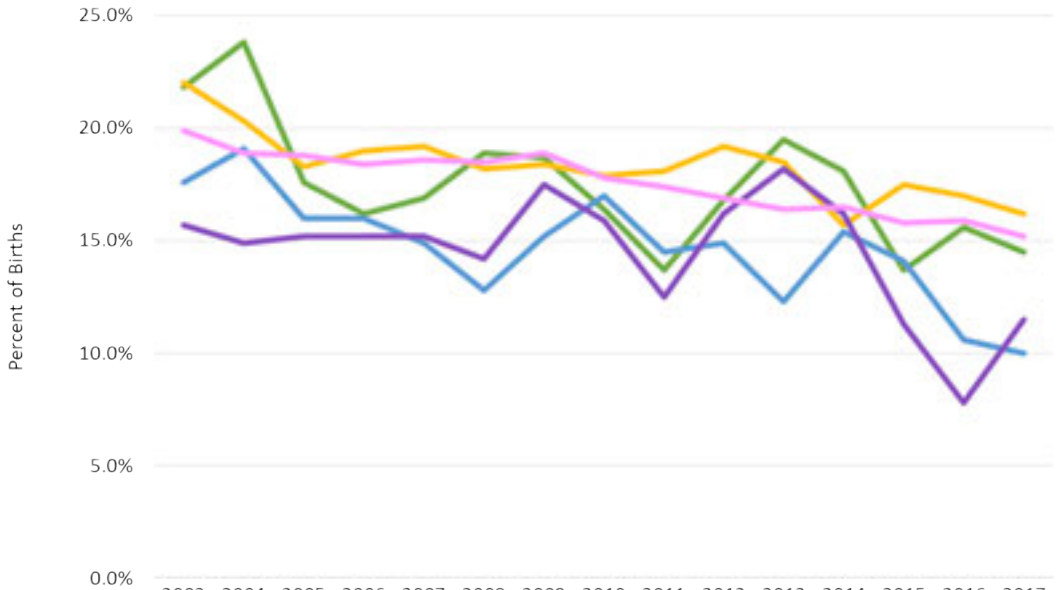
CHART 7.44: BIRTHS TO MOTHERS WHO WERE OBESE AT TIME OF PREGNANCY (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	21.5%	21.0%	20.4%	21.8%	23.2%	22.1%	23.6%	24.1%	27.0%	25.2%	26.2%	27.5%	28.8%	28.8%
ORANGE	16.5%	17.4%	17.2%	18.8%	19.2%	19.3%	20.1%	20.4%	20.9%	21.9%	22.7%	23.1%	23.6%	24.8%
OSCEOLA	19.1%	19.4%	19.2%	20.2%	21.4%	21.5%	22.0%	23.6%	23.3%	23.0%	25.4%	25.0%	26.1%	26.0%
SEMINOLE	16.4%	16.1%	17.3%	19.2%	19.5%	18.9%	19.7%	21.4%	20.5%	21.8%	22.7%	22.3%	23.8%	23.9%
FLORIDA	18.7%	19.0%	19.1%	20.0%	20.3%	20.8%	21.1%	21.8%	21.8%	22.4%	22.8%	23.3%	24.0%	25.0%

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

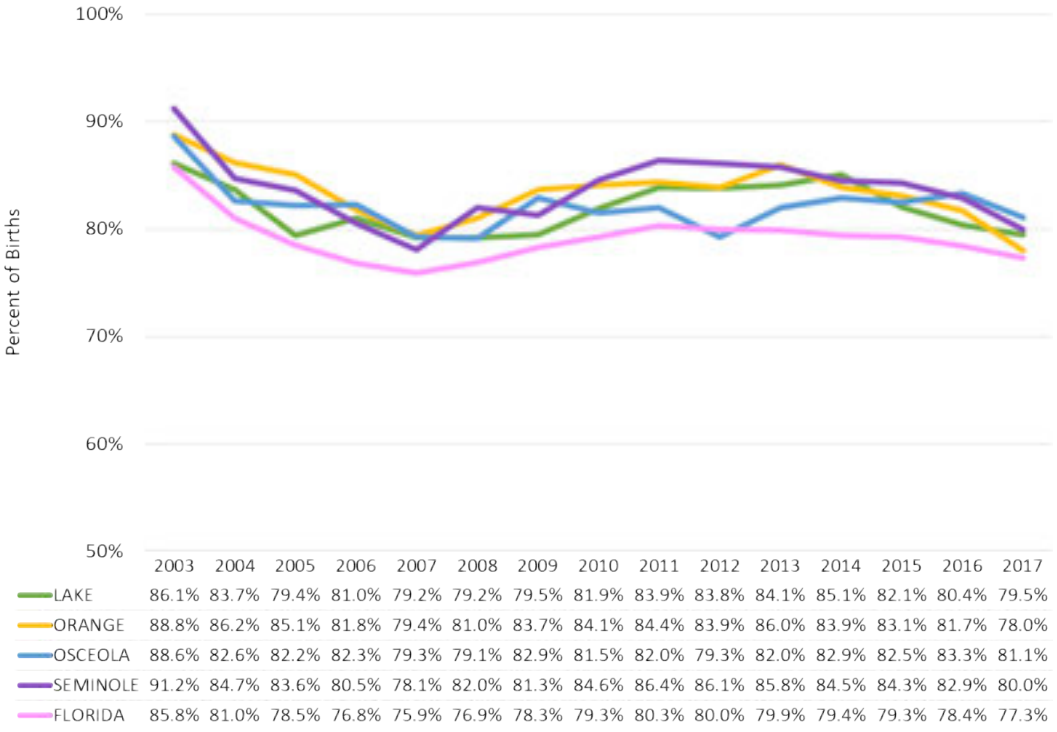
CHART 7.45: REPEAT BIRTHS TO MOTHERS AGES 15-19 (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	21.8%	23.8%	17.6%	16.2%	16.9%	18.9%	18.7%	16.4%	13.7%	16.8%	19.5%	18.1%	13.7%	15.6%	14.5%
ORANGE	22.0%	20.3%	18.3%	19.0%	19.2%	18.2%	18.4%	17.9%	18.1%	19.2%	18.5%	15.7%	17.5%	17.0%	16.2%
OSCEOLA	17.6%	19.1%	16.0%	16.0%	14.9%	12.8%	15.2%	17.0%	14.5%	14.9%	12.3%	15.4%	14.1%	10.6%	10.0%
SEMINOLE	15.7%	14.9%	15.2%	15.2%	15.2%	14.2%	17.5%	15.9%	12.5%	16.2%	18.2%	16.2%	11.3%	7.8%	11.5%
FLORIDA	19.9%	18.9%	18.8%	18.4%	18.6%	18.5%	18.9%	17.8%	17.4%	16.9%	16.4%	16.5%	15.8%	15.9%	15.2%

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

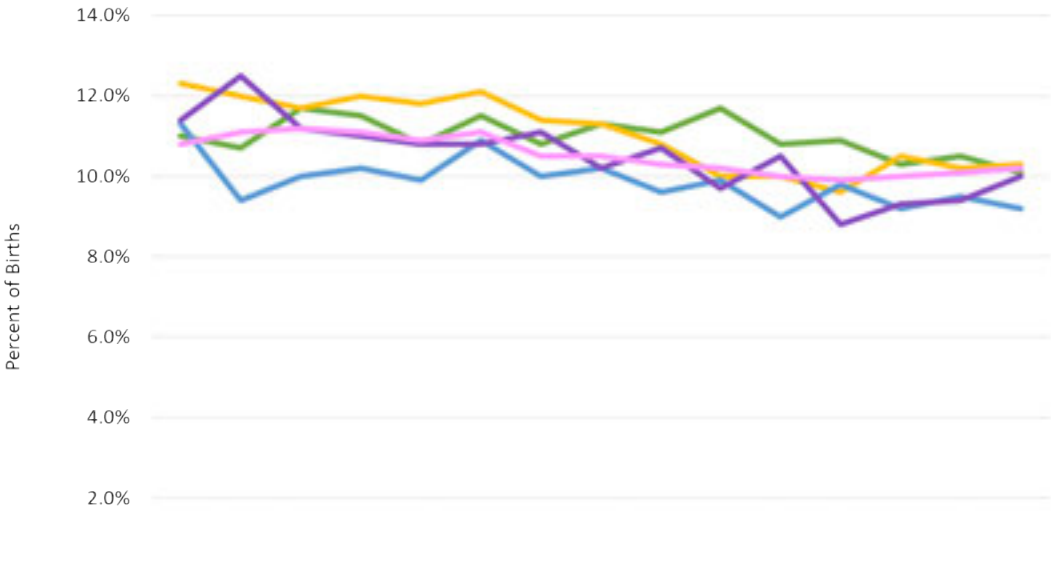
CHART 7.46: BIRTHS TO MOTHERS WITH FIRST TRIMESTER PRENATAL CARE (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	86.1%	83.7%	79.4%	81.0%	79.2%	79.2%	79.5%	81.9%	83.9%	83.8%	84.1%	85.1%	82.1%	80.4%	79.5%
ORANGE	88.8%	86.2%	85.1%	81.8%	79.4%	81.0%	83.7%	84.1%	84.4%	83.9%	86.0%	83.9%	83.1%	81.7%	78.0%
OSCEOLA	88.6%	82.6%	82.2%	82.3%	79.3%	79.1%	82.9%	81.5%	82.0%	79.3%	82.0%	82.9%	82.5%	83.3%	81.1%
SEMINOLE	91.2%	84.7%	83.6%	80.5%	78.1%	82.0%	81.3%	84.6%	86.4%	86.1%	85.8%	84.5%	84.3%	82.9%	80.0%
FLORIDA	85.8%	81.0%	78.5%	76.8%	75.9%	76.9%	78.3%	79.3%	80.3%	80.0%	79.9%	79.4%	79.3%	78.4%	77.3%

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

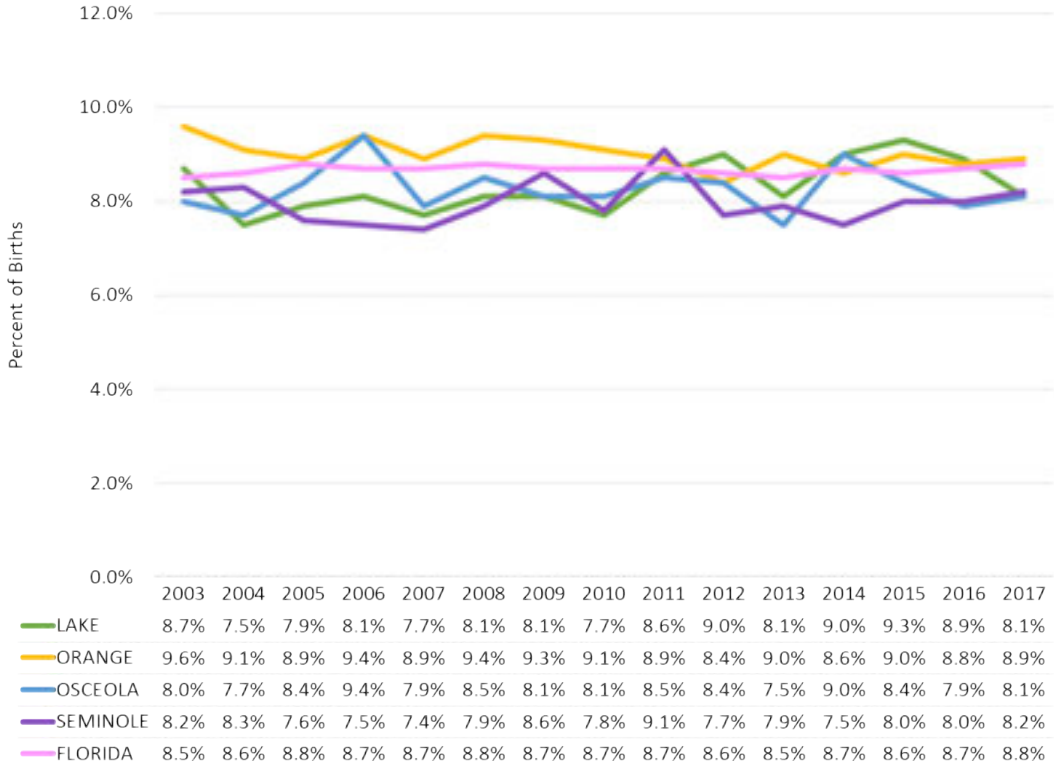
CHART 7.47: PRE-TERM BIRTHS <37 WEEKS GESTATION (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	11.0%	10.7%	11.7%	11.5%	10.8%	11.5%	10.8%	11.3%	11.1%	11.7%	10.8%	10.9%	10.3%	10.5%	10.1%
ORANGE	12.3%	12.0%	11.7%	12.0%	11.8%	12.1%	11.4%	11.3%	10.8%	10.0%	10.0%	9.6%	10.5%	10.2%	10.3%
OSCEOLA	11.3%	9.4%	10.0%	10.2%	9.9%	10.9%	10.0%	10.2%	9.6%	9.9%	9.0%	9.8%	9.2%	9.5%	9.2%
SEMINOLE	11.4%	12.5%	11.2%	11.0%	10.8%	10.8%	11.1%	10.2%	10.7%	9.7%	10.5%	8.8%	9.3%	9.4%	10.0%
FLORIDA	10.8%	11.1%	11.2%	11.1%	10.9%	11.1%	10.5%	10.5%	10.3%	10.2%	10.0%	9.9%	10.0%	10.1%	10.2%

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

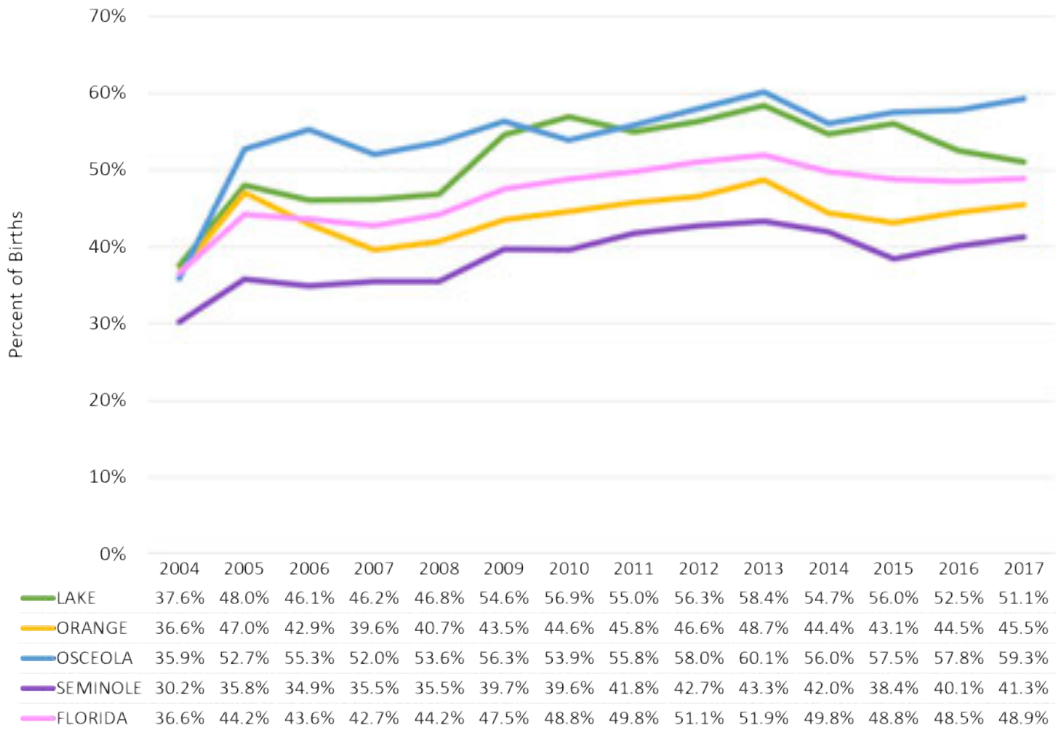
CHART 7.48: LOW BIRTHWEIGHT BIRTHS <2500 GRAMS (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	8.7%	7.5%	7.9%	8.1%	7.7%	8.1%	8.1%	7.7%	8.6%	9.0%	8.1%	9.0%	9.3%	8.9%	8.1%
ORANGE	9.6%	9.1%	8.9%	9.4%	8.9%	9.4%	9.3%	9.1%	8.9%	8.4%	9.0%	8.6%	9.0%	8.8%	8.9%
OSCEOLA	8.0%	7.7%	8.4%	9.4%	7.9%	8.5%	8.1%	8.1%	8.5%	8.4%	7.5%	9.0%	8.4%	7.9%	8.1%
SEMINOLE	8.2%	8.3%	7.6%	7.5%	7.4%	7.9%	8.6%	7.8%	9.1%	7.7%	7.9%	7.5%	8.0%	8.0%	8.2%
FLORIDA	8.5%	8.6%	8.8%	8.7%	8.7%	8.8%	8.7%	8.7%	8.7%	8.6%	8.5%	8.7%	8.6%	8.7%	8.8%

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

CHART 7.49: BIRTHS COVERED BY MEDICAID (2004-2017)



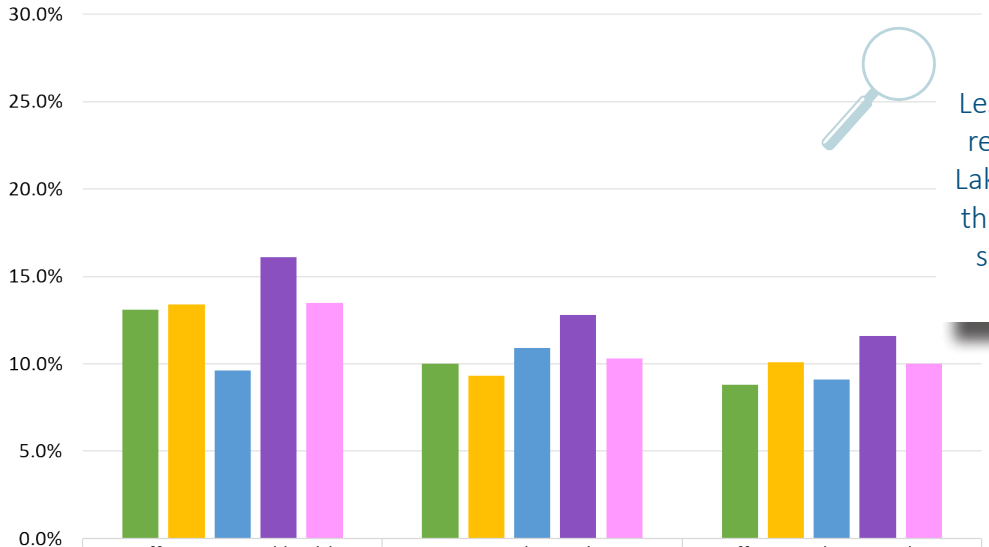
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	37.6%	48.0%	46.1%	46.2%	46.8%	54.6%	56.9%	55.0%	56.3%	58.4%	54.7%	56.0%	52.5%	51.1%
ORANGE	36.6%	47.0%	42.9%	39.6%	40.7%	43.5%	44.6%	45.8%	46.6%	48.7%	44.4%	43.1%	44.5%	45.5%
OSCEOLA	35.9%	52.7%	55.3%	52.0%	53.6%	56.3%	53.9%	55.8%	58.0%	60.1%	56.0%	57.5%	57.8%	59.3%
SEMINOLE	30.2%	35.8%	34.9%	35.5%	35.5%	39.7%	39.6%	41.8%	42.7%	43.3%	42.0%	38.4%	40.1%	41.3%
FLORIDA	36.6%	44.2%	43.6%	42.7%	44.2%	47.5%	48.8%	49.8%	51.1%	51.9%	49.8%	48.8%	48.5%	48.9%

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

Quality of Life/Mental Health: What the Community is Saying

Figure 7.15 illustrates the percentages of community survey responses from Lake County on quality of life and mental health questions. Fewer than 1 in 5 respondents indicated that there were sufficient mental health services and one in 10 respondents believe the community knows how to access them.

FIGURE 7.15: QUALITY OF LIFE AND MENTAL HEALTH, COMMUNITY SURVEY 2019



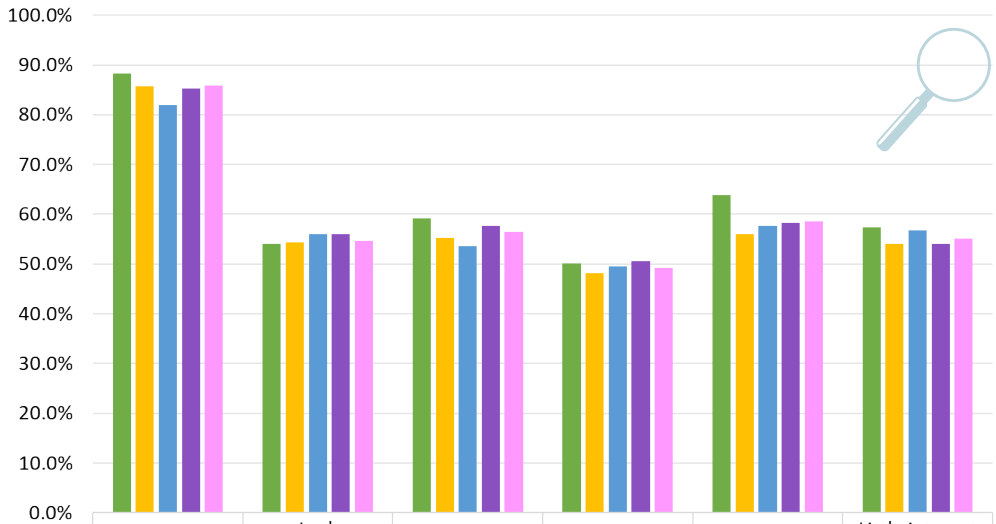
	Sufficient mental health services	Community knows how to access mental health services	Sufficient substance abuse services
LAKE	13.1%	10.0%	8.8%
ORANGE	13.4%	9.3%	10.1%
OSCEOLA	9.6%	10.9%	9.1%
SEMINOLE	16.1%	12.8%	11.6%
OVERALL	13.5%	10.3%	10.0%

Less than one in 10 respondents from Lake County believe there are sufficient substance abuse services.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Figure 7.16 illustrates the mental health-related challenges identified by community survey respondents. The majority of Lake County community survey respondents (88.3 percent) indicated that they or a family member have had difficulty sleeping in the past two weeks. A little over half of the respondents indicated that they lack companionship, feel left out or isolated.

FIGURE 7.16: MENTAL HEALTH-RELATED EXPERIENCES, COMMUNITY SURVEY 2019



	Difficulty sleeping	Lack companion-ship	Feel left out	Feel isolated	Depressed/ hopeless	Little interest or pleasure in activities
LAKE	88.3%	54.0%	59.1%	50.1%	63.9%	57.4%
ORANGE	85.7%	54.3%	55.3%	48.2%	56.0%	54.0%
OSCEOLA	82.0%	56.0%	53.6%	49.5%	57.6%	56.8%
SEMINOLE	85.3%	56.0%	57.6%	50.5%	58.3%	54.0%
OVERALL	85.8%	54.7%	56.4%	49.2%	58.5%	55.1%

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

More than 60 percent of respondents indicated that they feel depressed or hopeless.

Needs and issues related to mental health identified by primary research respondents included:

- Access to care
- Growing mental health needs, particularly at younger ages, that are becoming more severe
- Reluctancy from older adults to leave their homes and receive needed treatment
- Lack of inpatient beds
- Length of time to get treatment
- People are self-medicating
- Stigma still exists regarding mental health services

Barriers to care identified by primary research respondents included:

- Lack of funding for mental health services
- Lack of knowledge of available services
- Lack of staff
- Lack of insurance coverage or insurances not covering it well
-

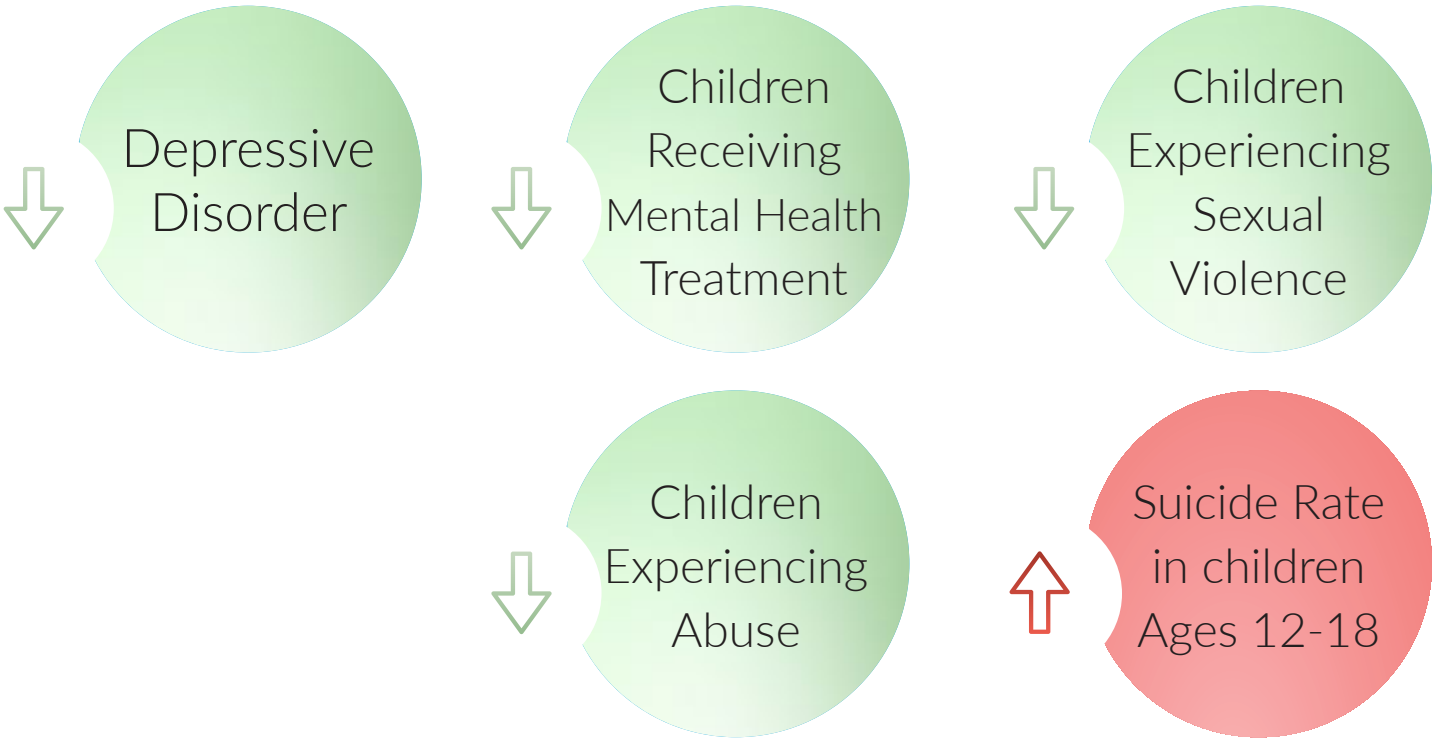
Needed services identified by primary research respondents included:

- Affordable mental health care that is high quality and consistent
- Social support
- Preventative programs
- Programs that meet gaps in current service
- Easier access to psychiatric care and medication
- Services/resources for the LGBTQ youth and adults
- Increase the range and amount of mental health providers

Quality of Life/Mental Health at a Glance

The key indicators related to quality of life/mental health that have changed since the last CHNA are identified in Figure 7.17. Red means that the indicator has worsened and green means that there has been improvement since the most recent CHNA.

FIGURE 7.17: MENTAL HEALTH/QUALITY OF LIFE INDICATORS



Source: Strategy Solutions, Inc.

Quality of Life/Mental Health: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the above colored icons illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

ADULTS WHO HAVE EVER BEEN TOLD THEY HAD A DEPRESSIVE DISORDER (2013-2016)

The percentage of adults who have ever been told they had a depressive disorder decreased in Lake County and the state from 2013 to 2016. In the county there was a decrease from 18.5 percent to 15.4 percent and in the state from 16.8 percent to 14.2 percent. (See Chart 7.50)

ADULTS WITH A DEPRESSIVE DISORDER BY AGE (2013-2016)

The percentage of adults with depressive disorder decreased in two age groups in Lake County and remained constant in the other from 2013 to 2016, while decreasing in all groups at the state level during this time. The largest decrease in Lake County and the state was for adults 65 and older; in the county, from 14.2 percent to 8.2 percent and in the state, from 14.6 percent to 11.8 percent. The percentage for adults 45 to 64 remained constant in the county at 21.7 percent in 2013 and 2016, while in the state there was a decrease from 19.6 percent to 17.3 percent during this time. Percentages for those 18 to 44 decreased in Lake County from 19.9 percent to 16.2 percent and in the state from 15.8 percent to 13.3 percent from 2013 to 2016. (See Chart 7.51)

ADULTS WITH A DEPRESSIVE DISORDER BY INCOME (2013-2016)

In 2016, adults with incomes under $25K in Lake County (24.7 percent) and across the state (20.6 percent) had the highest percentages of a depressive disorder. The percentages in the remaining income categories in Lake County and the state decreased from 2013 to 2016. Adults with incomes from $25K to $49K had a decrease in Lake County from 15.5 percent to 13.2 percent, while at the state level there was a decrease from 16.5 percent to 14.9 percent during this time. The decrease for the those with incomes of $50K and above in Lake County was from 13.3 percent (2013) to 11.5 percent (2012) and in the state from 11.3 percent to 9.9 percent over this time. (See Chart 7.52)

CHILDREN AGES 1-5 RECEIVING MENTAL HEALTH TREATMENT SERVICES (2004-2016)

The rate of children ages 1-5 receiving mental health treatment services per 100,000 in Lake County and across the state has varied widely from 2004 to 2016 although there has been an overall decline. The rates in Lake County increased from 2004 (9.6) to 2006 (13.2) and then fell in 2013 to 0.9, before decreasing to 0.4 in 2016. Lake County's utilization rate (0.4) remained lower than the state rate (3.4) in 2016. (See Chart 7.53)

CHILDREN IN GRADES K-12 WITH EMOTIONAL/BEHAVIORAL DISABILITY (2004-2018)

The percentage of children in grades K-12 with an emotional or behavioral disability decreased in Lake County from 2004 (1.5 percent) to 2018 (1.1 percent). The percentage in Lake County has consistently been equal to or above the state throughout this time period. In the state there was a decreased during this time from 1.5 percent to 0.5 percent. (See Chart 7.54)

CHILDREN AGES 5-11 EXPERIENCING SEXUAL VIOLENCE (2003-2017)

The rate per 100,000 of children ages 5-11 experiencing sexual violence fluctuated dramatically in Lake County from 2003 and 2017. Lake County's rate increased from 47.1 in 2003 to 232.2 in 2005 and then decreased in 2009 to 64.1 then to 19.6 in 2017. The state rate has increased from 51.3 in 2003 to 59.6 in 2017. (See Chart 7.55)

CHILDREN AGES 5-11 EXPERIENCING CHILD ABUSE (2003-2017)

The rate of children ages 5-11 experiencing child abuse per 100,000 has fluctuated in both Lake County and the state from 2003 to 2017 with an overall decrease in the county and an increase in the state. The Lake County rate fluctuated from 1046.8 in 2003 to a peak of 2136.5 in 2005, followed by a decrease to 657.9 in 2010 and a further decrease to 352.9 in 2017. The state rate was 674.6 in 2003 and 857.9 in 2017. (See Chart 7.56)

SUICIDE RATE OF CHILDREN AGES 12-18 (2004-2017)

The suicide rate per 100,000 of children ages 12-18 has increased in Lake County and the state from 2004 to 2017. The Lake County rate was zero in 2004 and increased to 8.5 in 2009, followed by a decrease to zero in 2013, 2014 and 2015 before spiking to a high of 15.4 in 2017. The state rate increased from 3.2 (2004) to 5.5 (2017). (See chart 7.57)

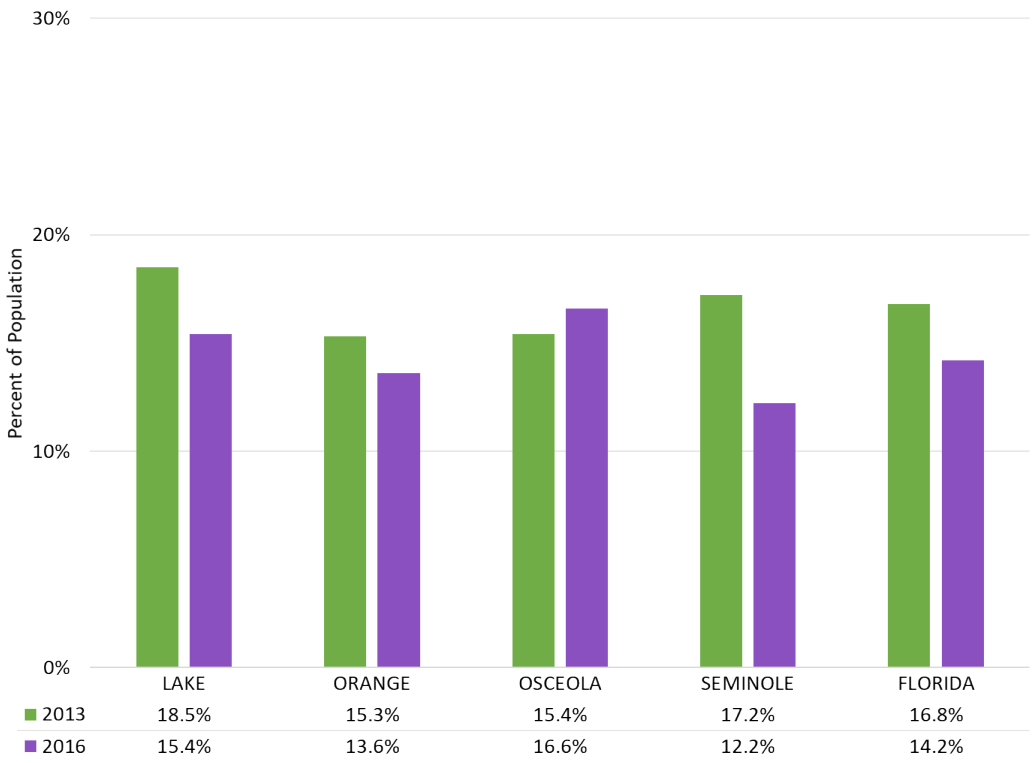
SUICIDE RATE AGES 19-21 (2004-2017)

The suicide rate ages 19-21 per 100,000 fluctuated between 2004 and 2017 with Lake County's rate trending upward over time. Lake County's rate increased from zero in 2004 to a high of 45.1 in 2012 before decreasing to 10.2 in 2017. The state rate increased from 12 to 13.3 during this time. (See Chart 7.58)

SUICIDE RATE AGES 22 AND OLDER (2004-2017)

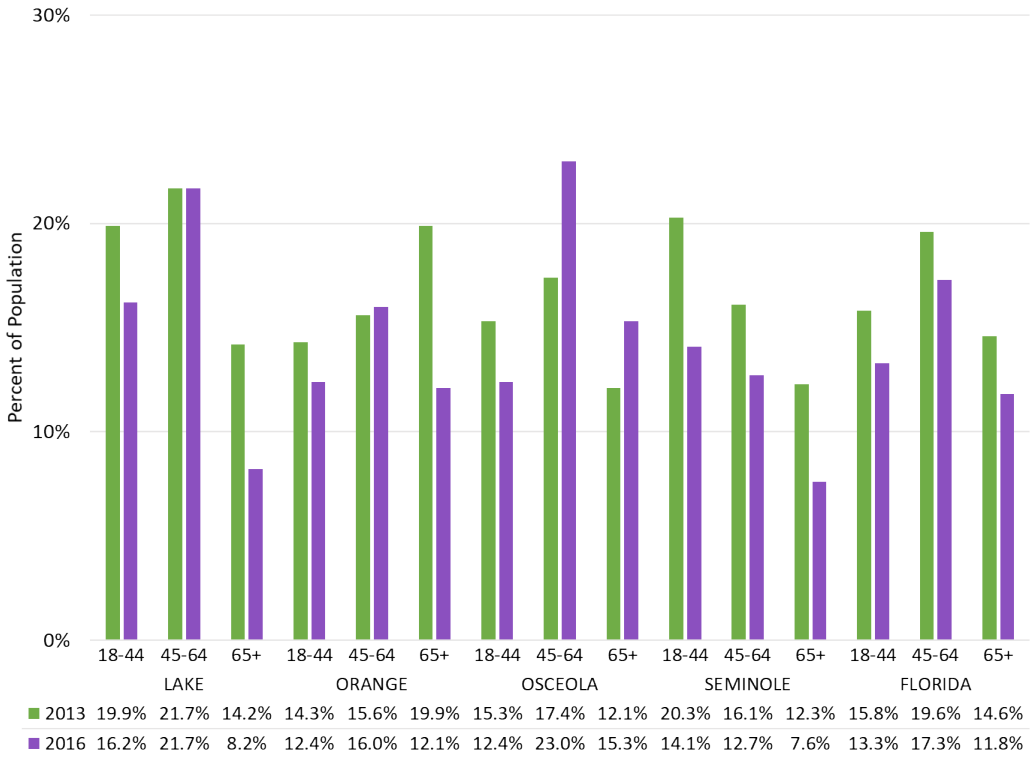
The suicide rate among persons ages 22 and older per 100,000 fluctuated in Lake County and the state between 2004 and 2017. In Lake County in 2004 the rate was 17.7 before spiking in 2010 to 24.5 and again in 2017 to 32.1. The state rate was 17.8 in 2004 and 19.4 in 2017. (See Chart 7.59)

CHART 7.50: ADULTS WHO HAVE EVER BEEN TOLD THEY HAD A DEPRESSIVE DISORDER (2013-2016)



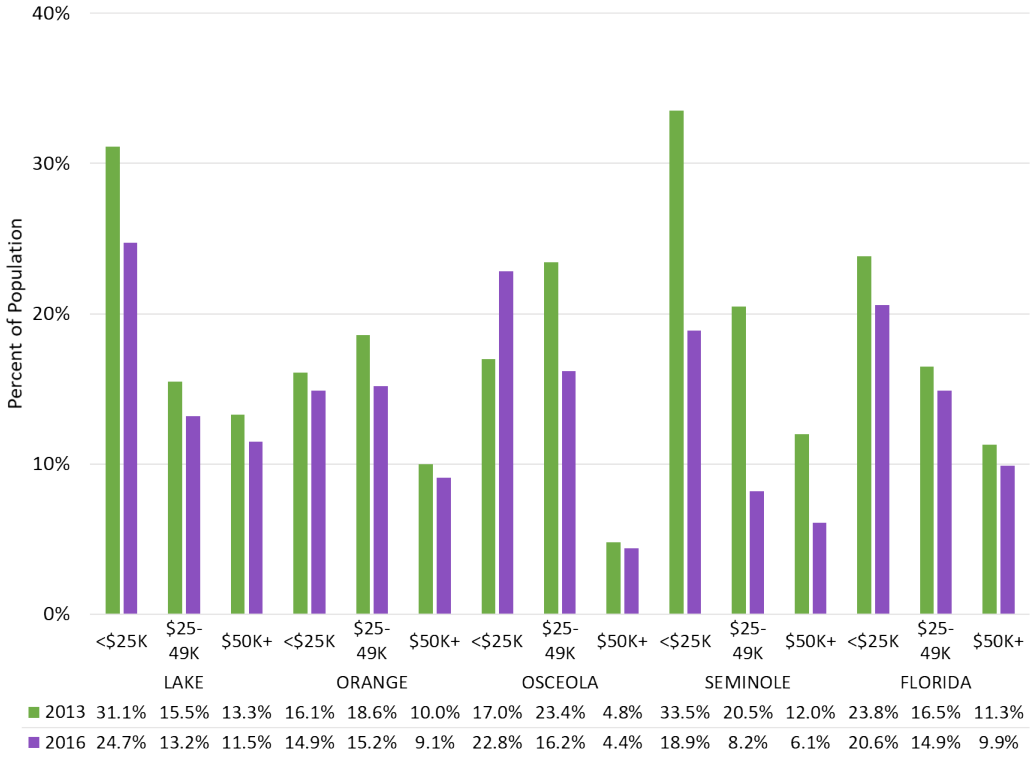
Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

CHART 7.51: ADULTS WITH A DEPRESSIVE DISORDER BY AGE (2013-2016)



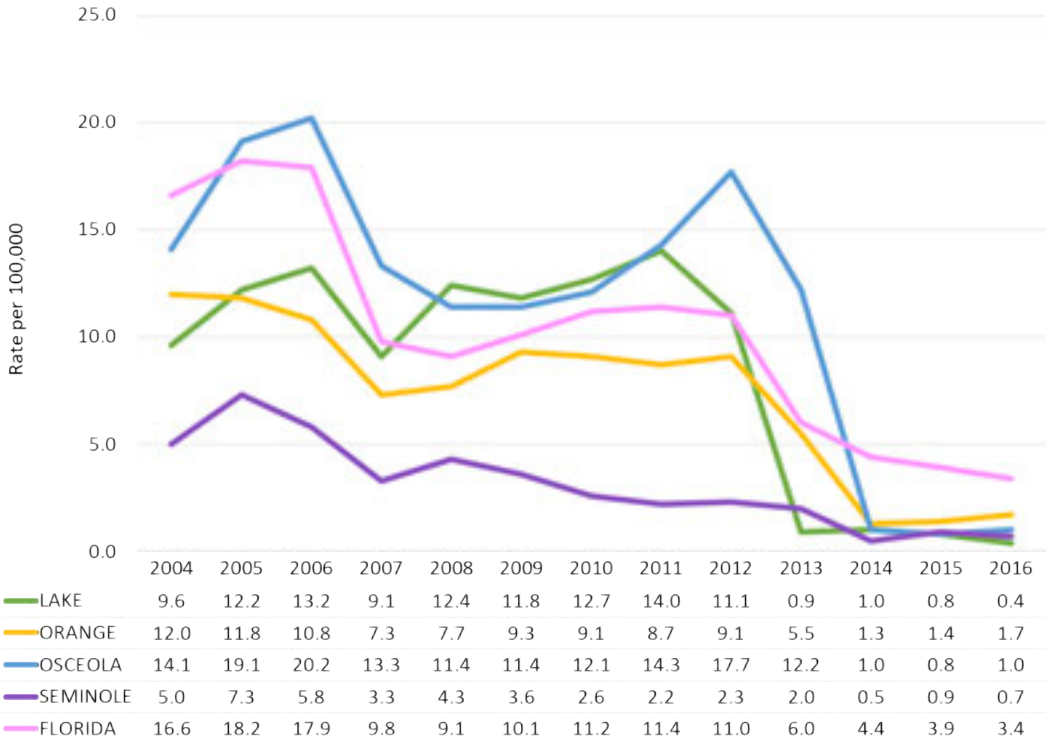
Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

CHART 7.52: ADULTS WITH A DEPRESSIVE DISORDER BY INCOME (2013-2016)



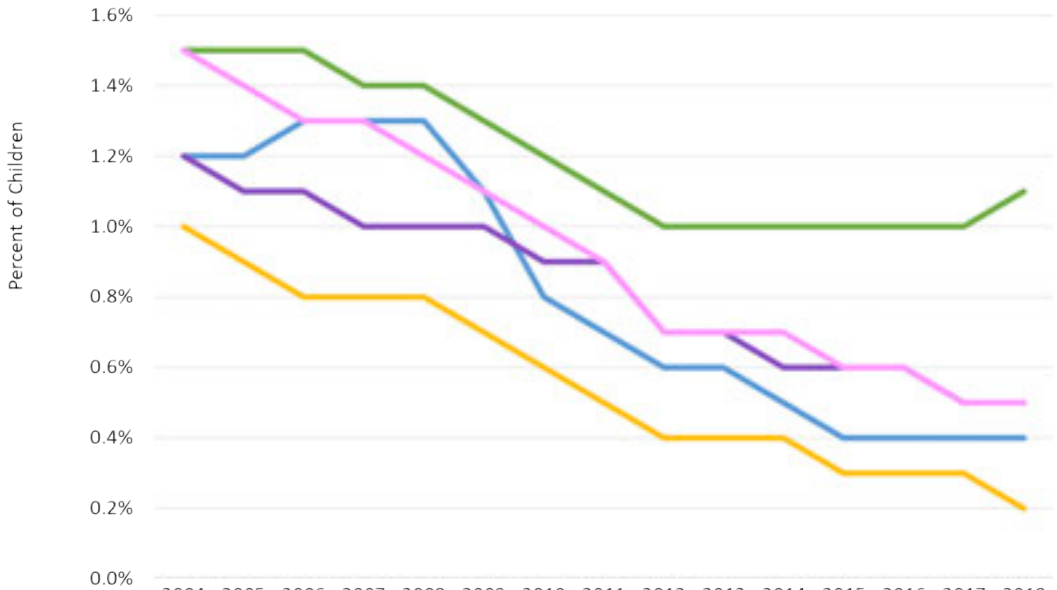
Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

CHART 7.53: CHILDREN AGES 1-5 RECEIVING MENTAL HEALTH TREATMENT SERVICES (2004-2016)



Source: FLHealthCHARTS: Florida Department of Children and Families

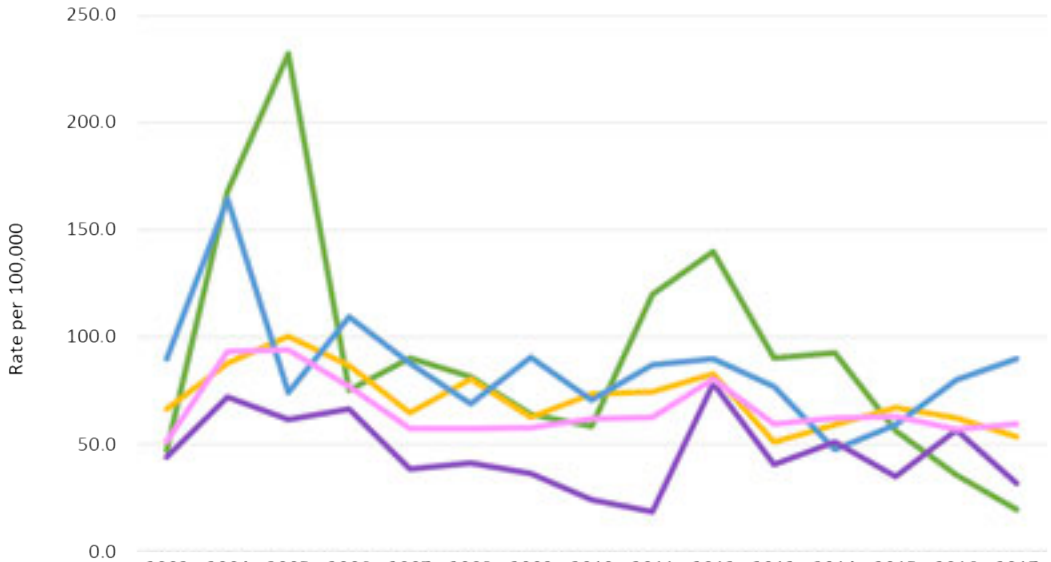
CHART 7.54: CHILDREN IN GRADES K-12 WITH EMOTIONAL/BEHAVIORAL DISABILITY (2004-2018)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
LAKE	1.5%	1.5%	1.5%	1.4%	1.4%	1.3%	1.2%	1.1%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.1%
ORANGE	1.0%	0.9%	0.8%	0.8%	0.8%	0.7%	0.6%	0.5%	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.2%
OSCEOLA	1.2%	1.2%	1.3%	1.3%	1.3%	1.1%	0.8%	0.7%	0.6%	0.6%	0.5%	0.4%	0.4%	0.4%	0.4%
SEMINOLE	1.2%	1.1%	1.1%	1.0%	1.0%	1.0%	0.9%	0.9%	0.7%	0.7%	0.6%	0.6%	0.6%	0.5%	0.5%
FLORIDA	1.5%	1.4%	1.3%	1.3%	1.2%	1.1%	1.0%	0.9%	0.7%	0.7%	0.7%	0.6%	0.6%	0.5%	0.5%

Source: FLHealthCHARTS: Florida Department of Education, Education Information and Accountability Services

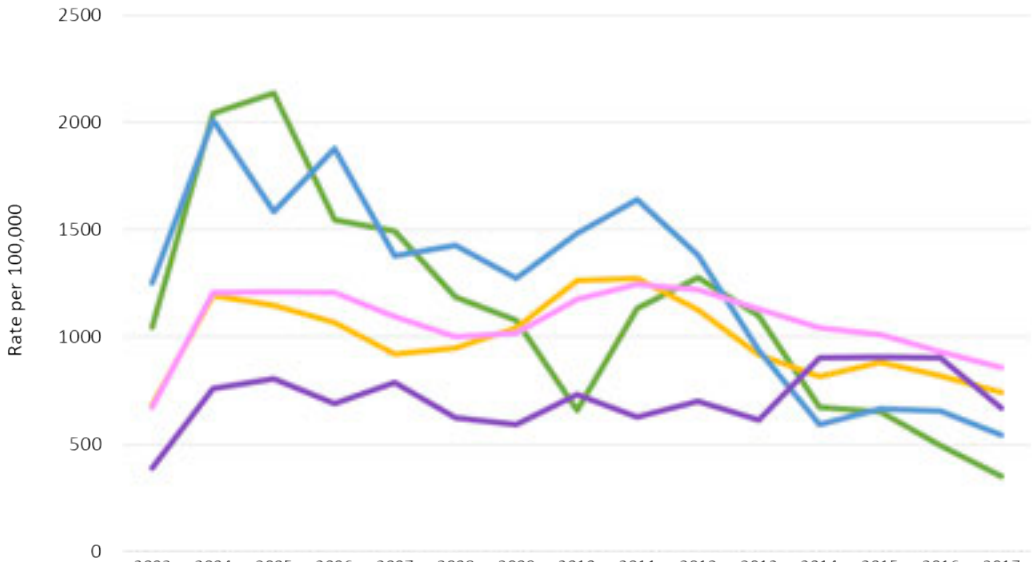
CHART 7.55: CHILDREN AGES 5-11 EXPERIENCING SEXUAL VIOLENCE (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	47.1	167.9	232.2	75.3	90.2	81.4	64.1	58.3	119.7	139.9	90.0	92.7	56.2	35.5	19.6
ORANGE	66.3	87.7	100.4	86.6	64.6	80.5	62.6	73.5	74.4	82.8	50.9	59.1	67.2	62.2	53.4
OSCEOLA	89.7	164.3	74.0	109.3	87.7	68.7	90.5	70.7	87.1	89.7	77.0	47.5	59.1	79.9	89.8
SEMINOLE	43.9	72.1	61.6	66.4	38.4	41.3	36.5	24.2	18.7	78.4	40.4	51.0	34.9	56.5	31.9
FLORIDA	51.3	93.2	93.9	76.8	57.5	57.5	57.7	61.8	62.6	80.3	59.4	62.2	62.8	56.9	59.6

Source: FLHealthCHARTS: Florida Department of Children and Families Florida Safe Families Network Data Mart

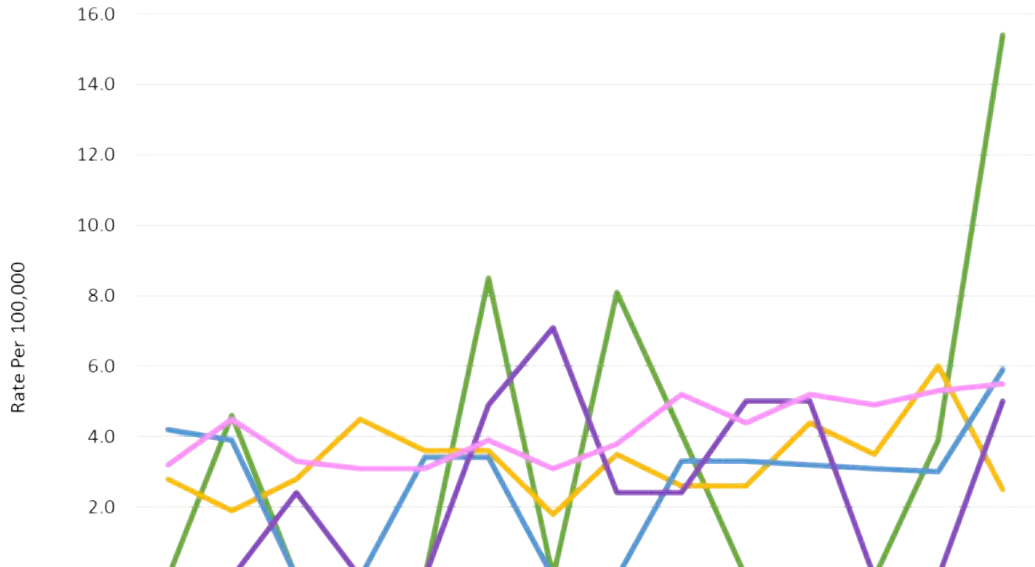
CHART 7.56: CHILDREN AGES 5-11 EXPERIENCING CHILD ABUSE (2003-2017)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	1046.8	2043.8	2136.5	1546.0	1494.9	1186.2	1077.0	657.9	1135.3	1275.9	1100.4	672.9	650.5	493.4	352.9
ORANGE	682.6	1192.3	1146.7	1069.0	920.8	948.2	1043.0	1261.8	1274.4	1126.7	917.8	815.3	881.9	819.1	744.5
OSCEOLA	1251.7	2012.1	1585.3	1877.8	1378.3	1428.8	1273.8	1483.9	1639.6	1380.8	938.4	593.6	666.2	655.0	542.1
SEMINOLE	390.3	759.7	806.4	692.2	788.7	622.5	592.2	731.8	628.5	700.2	613.9	902.4	905.5	904.1	670.7
FLORIDA	674.6	1205.9	1209.8	1206.5	1097.0	1000.9	1020.3	1175.1	1244.4	1223.1	1129.8	1043.9	1011.4	930.3	857.9

Source: FLHealthCHARTS: Florida Department of Children and Families Florida Safe Families Network Data Mart

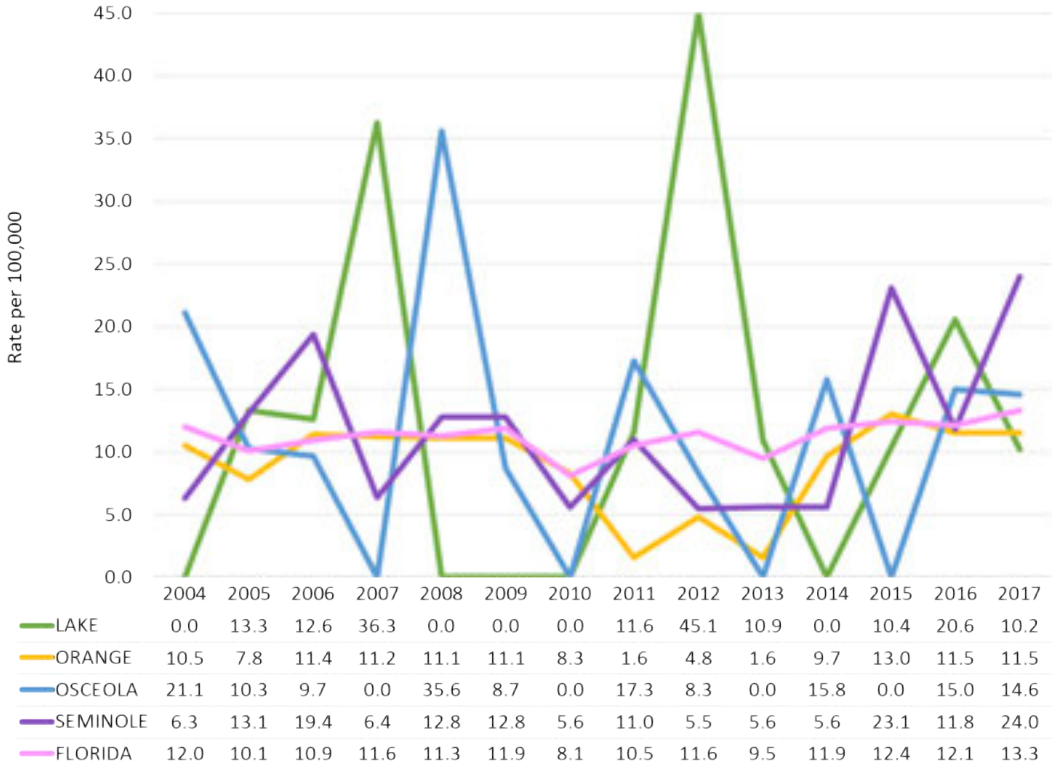
CHART 7.57: SUICIDE RATE OF CHILDREN AGES 12-18 (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	0.0	4.6	0.0	0.0	0.0	8.5	0.0	8.1	4.1	0.0	0.0	0.0	3.9	15.4
ORANGE	2.8	1.9	2.8	4.5	3.6	3.6	1.8	3.5	2.6	2.6	4.4	3.5	6.0	2.5
OSCEOLA	4.2	3.9	0.0	0.0	3.4	3.4	0.0	0.0	3.3	3.3	3.2	3.1	3.0	5.9
SEMINOLE	0.0	0.0	2.4	0.0	0.0	4.9	7.1	2.4	2.4	5.0	5.0	0.0	0.0	5.0
FLORIDA	3.2	4.5	3.3	3.1	3.1	3.9	3.1	3.8	5.2	4.4	5.2	4.9	5.3	5.5

Source: FLHealthCHARTS: Florida Department oh Health, Bureau of Vital Statistics

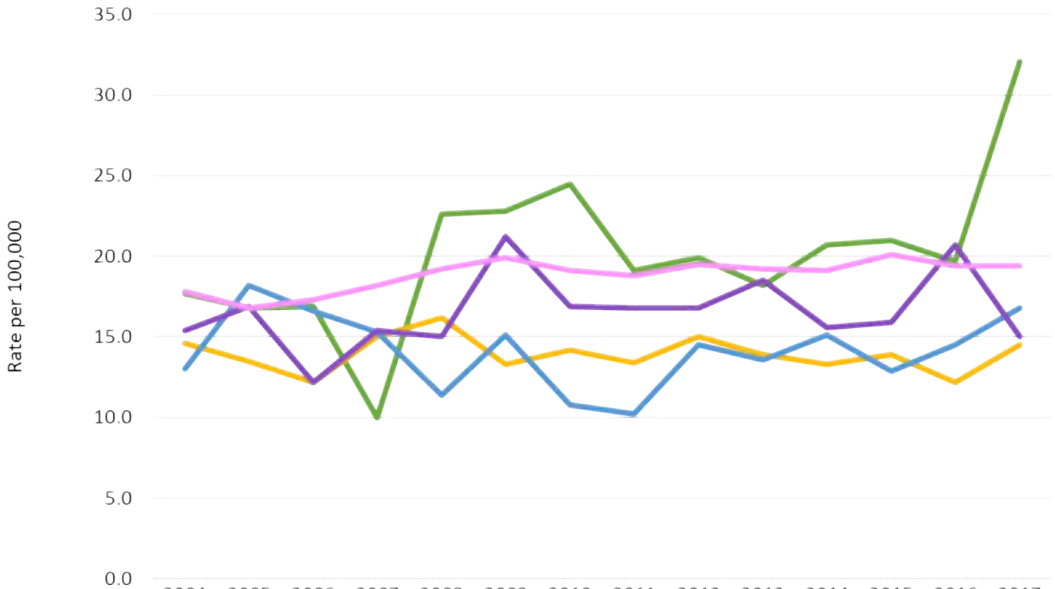
CHART 7.58: SUICIDE RATE AGES 19-21 (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	0.0	13.3	12.6	36.3	0.0	0.0	0.0	11.6	45.1	10.9	0.0	10.4	20.6	10.2
ORANGE	10.5	7.8	11.4	11.2	11.1	11.1	8.3	1.6	4.8	1.6	9.7	13.0	11.5	11.5
OSCEOLA	21.1	10.3	9.7	0.0	35.6	8.7	0.0	17.3	8.3	0.0	15.8	0.0	15.0	14.6
SEMINOLE	6.3	13.1	19.4	6.4	12.8	12.8	5.6	11.0	5.5	5.6	5.6	23.1	11.8	24.0
FLORIDA	12.0	10.1	10.9	11.6	11.3	11.9	8.1	10.5	11.6	9.5	11.9	12.4	12.1	13.3

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

CHART 7.59: SUICIDE RATE AGES 22 AND OLDER (2004-2017)



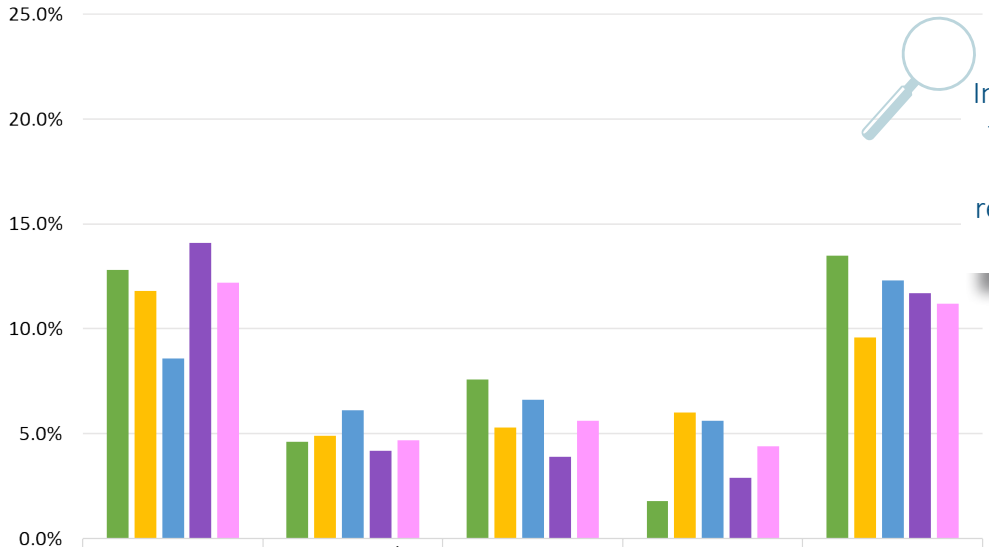
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	17.7	16.8	16.9	10.0	22.6	22.8	24.5	19.1	19.9	18.2	20.7	21.0	19.7	32.1
ORANGE	14.6	13.5	12.2	15.0	16.2	13.3	14.2	13.4	15.0	13.9	13.3	13.9	12.2	14.5
OSCEOLA	13.0	18.2	16.6	15.3	11.4	15.1	10.8	10.2	14.5	13.6	15.1	12.9	14.5	16.8
SEMINOLE	15.4	16.9	12.2	15.4	15.0	21.2	16.9	16.8	16.8	18.5	15.6	15.9	20.7	15.0
FLORIDA	17.8	16.8	17.3	18.2	19.2	19.9	19.1	18.8	19.5	19.2	19.1	20.1	19.4	19.4

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

Behavioral Risk Factors: What the Community is Saying

Figure 7.18 illustrates the percentages of community survey respondents experiencing various behavioral risk factors. Sexual behaviors were defined in the survey as unprotected, irresponsible/risky.

FIGURE 7.18: BEHAVIORAL RISK FACTORS, COMMUNITY SURVEY 2019



	Alcohol abuse	Prescription drug abuse	Illegal drug use	Sexual behaviors	Tobacco use
LAKE	12.8%	4.6%	7.6%	1.8%	13.5%
ORANGE	11.8%	4.9%	5.3%	6.0%	9.6%
OSCEOLA	8.6%	6.1%	6.6%	5.6%	12.3%
SEMINOLE	14.1%	4.2%	3.9%	2.9%	11.7%
OVERALL	12.2%	4.7%	5.6%	4.4%	11.2%

In Lake County, more than 10 percent of community survey respodents reported tobacco use.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following needs and issues related to behavioral risk factors:

- Prevalence and increase of substance abuse disorders
- Tobacco and vaping/nicotine use
- Addicts deal with a variety of health issues because the lack of taking care of their health

Barriers to care identified by primary research participants included:

- Lack of affordable and accessible treatment options

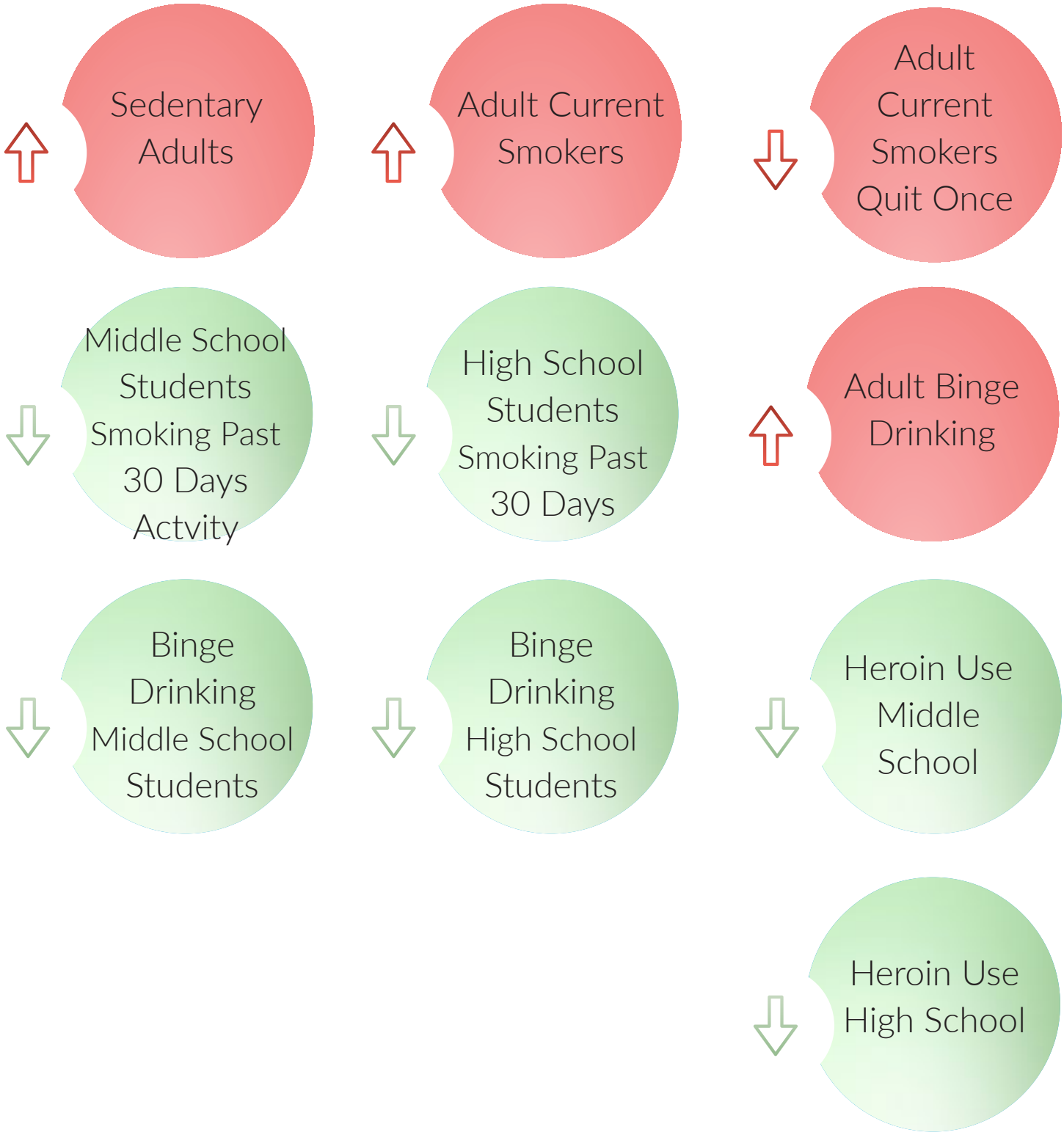
Needed services related to behavioral risk factors that were identified by primary research participants included:

- More prevention
- Education to change social norms
- Long term addiction recovery facilities
- Prevention, treatment, and education for tobacco/vaping
- Detox facility
- Connections for individuals who overdose to a peer support navigator

Behavioral Risk Factors at a Glance

The key indicators related to behavioral risk factors that have changed since the last CHNA are identified in Figure 7.19. Red means that the indicator has worsened and green means that there has been improvement since the most recent CHNA.

FIGURE 7.19: BEHAVIORAL RISK FACTOR INDICATORS



Source: Strategy Solutions, Inc.

Behavioral Risk Factors: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the colored icons, located on the previous page, illustrate observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

MIDDLE SCHOOL STUDENTS WITHOUT SUFFICIENT VIGOROUS PHYSICAL ACTIVITY (2014-2016)

The percentage of middle school students without sufficient vigorous physical activity increased in Lake County and the state between 2014 and 2016. The County's percentage increased from 75.9 percent to 79.1 percent. The state percentage increased from 75.2 percent to 78.3 percent. (See Chart 7.60)

HIGH SCHOOL STUDENTS WITHOUT SUFFICIENT VIGOROUS PHYSICAL ACTIVITY (2014-2016)

The percentage of high school students without sufficient vigorous physical activity increased in both Lake County and the state between 2014 and 2016. The percentage for the county increased slightly from 76.2 percent to 79.9 percent and for the state from 78.5 percent to 80.6 percent during this time. (See Chart 7.61)

SEDENTARY ADULTS (2002-2016)

The percentage of sedentary adults in Lake County increased from 2002 (27.6 percent) to 2016 (29.3 percent), although it did decrease in 2007 (25.3 percent). The state percentage also increased over this time period (26.4 percent to 29.8 percent) but also saw a decrease in 2007 (25.4 percent). (See Chart 7.62)

ADULTS WHO ARE CURRENT SMOKERS (2002-2016)

The percentage of adults who are current smokers in Lake County fluctuated from 2002 to 2016, decreasing from 23.1 percent in 2002 to 13.9 percent in 2013, then increasing to 19.2 percent in 2016. The state level decreased during this time from 22.2 percent to 15.5 percent. (See Chart 7.63)

ADULT CURRENT SMOKERS WHO QUIT SMOKING AT LEAST ONCE IN PAST YEAR (2002-2016)

The percentage of adult current smokers who quit at least once in the past year increased in both Lake County and the state between 2002 and 2016. The Lake County percentage increased from 53.5 percent to 62.1 percent and the state percentage increased from 55.3 percent to 62.1 percent. (See Chart 7.64)

MIDDLE SCHOOL STUDENTS SMOKING CIGARETTES IN PAST 30 DAYS (2010-2018)

The percentage of middle school students smoking cigarettes in the past 30 days steadily decreased in Lake County and the state between 2010 and 2018. Lake County's percentage decreased from 9.2 percent in 2010 to 1.1 percent in 2018. The state percentage decreased from 4.9 percent to 1.3 percent during this time. (See Chart 7.65)

HIGH SCHOOL STUDENTS SMOKING CIGARETTES IN PAST 30 DAYS (2010-2018)

The percentage of high school students smoking cigarettes in the past 30 days steadily decreased in Lake County and state between 2010 and 2018. The percentage in Lake County decreased from 16.5 percent to 4.2 percent from 2010 to 2018. The state percentage decreased from 13.1 percent to 3.6 percent during this time. (See Chart 7.66)

BINGE DRINKING AMONG ADULTS (2002-2016)

The percentage of binge drinking among adults increased in both Lake County and the state from 2002 to 2016. In Lake County the percentage increased slightly from 13.9 percent in 2002 to 15.8 percent in 2016. In the state there was an overall increase from 16.4 percent to 17.5 percent during this time. (See Chart 7.67)

BINGE DRINKING MIDDLE SCHOOL STUDENTS (2012-2018)

The percentage of binge drinking middle school students decreased in Lake County and the state between 2012 and 2018. The percentage in Lake County dropped from 4 percent to 2.4 percent during this time. The state percentage also decreased from 5 to 3.1 percent between 2012 and 2018. (See Chart 7.68)

BINGE DRINKING HIGH SCHOOL STUDENTS (2012-2018)

The percentage of binge drinking high school students decreased in Lake County and the state between 2012 and 2018. Lake County's percentage decreased from 17 percent in 2012 to 7.5 percent in 2018. The state also decreased from 16 percent in 2012 to 9.6 percent in 2018. (See Chart 7.69)

HEROIN USE IN MIDDLE SCHOOL (2010-2018)

Only a small percentage of middle school students report heroin use, although there was a decrease in both Lake County and the state. Lake County's percentage decreased from 1.4 percent to 0.2 percent between 2010 and 2018. In the state there as a decrease from 0.9 percent to 0.4 percent. (See Chart 7.70)

HEROIN USE IN HIGH SCHOOL (2010-2018)

Only a small percentage of high school students report heroin use in Lake County and the state, although there was a decrease in both from 2010 to 2018. The percentage in Lake County decreased from 0.7 percent to zero percent between 2010 and 2018, similar to the state drop from 1.1 percent to 0.3 percent. (See Chart 7.71)

HEROIN-RELATED DEATHS (2013-2017)

The rate per 100,000 of heroin-related deaths in Lake County and the state increased in the past few years. There was no available data in 2013 in Lake County, however the rate increased from 0.3 in 2015 to 1.1 in 2017 and has consistently been lower than the state rate. The state rate increased from one in 2013 to 4.5 in 2017. (See Chart 7.72)

FENTANYL-RELATED DEATHS (2013-2017)

The rate per 100,000 of fentanyl-related deaths increased in Lake County and the state from 2013 and 2017. In Lake County the rate increased from 0.7 to 3.8, below the state increase from 0.9 to 8.3 from during that time. (See Chart 7.73)

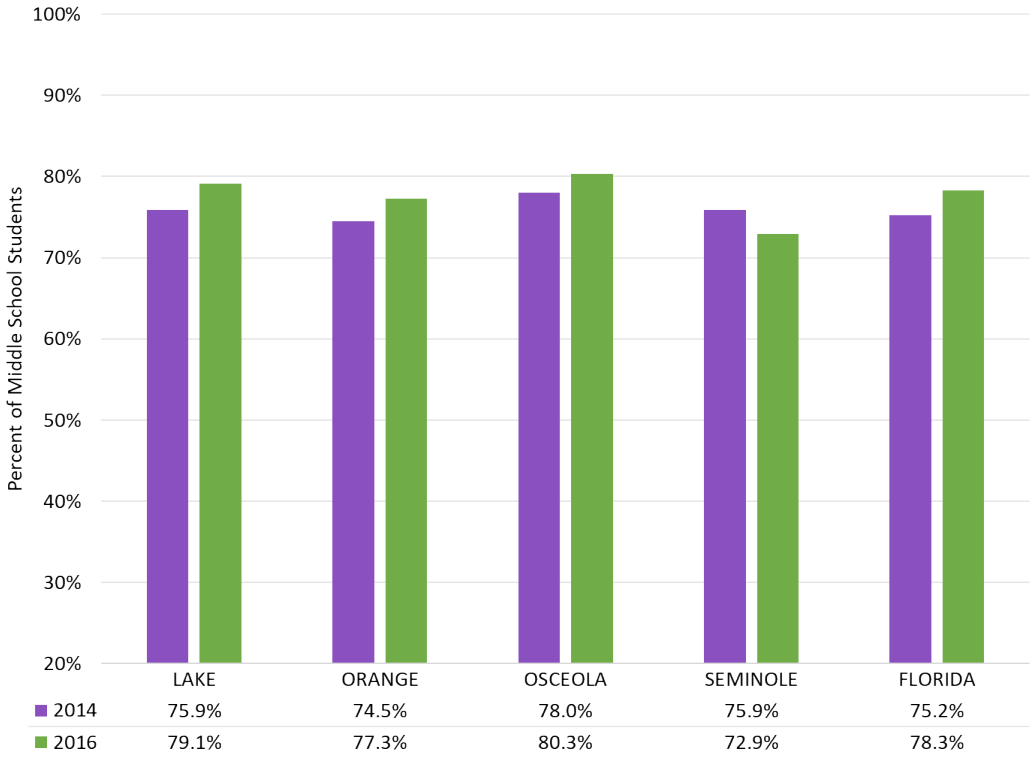
RATE OF CONTROLLED PRESCRIPTIONS OF OPIOIDS (2013-2017)

The rate per 100,000 of controlled prescriptions of opioids increased in Lake County in 2015 (1006.8), then decreased in 2017, although rates in 2017 were still higher than the 2013 rates. Lake County's rate increased from 813.2 in 2013 to 942.9 in 2017. The state rate for 2017 was unavailable, although rates in both 2013 (735) and 2015 (671) were lower than Lake County rates. (See Chart 7.74)

DRUG ARRESTS (2013-2017)

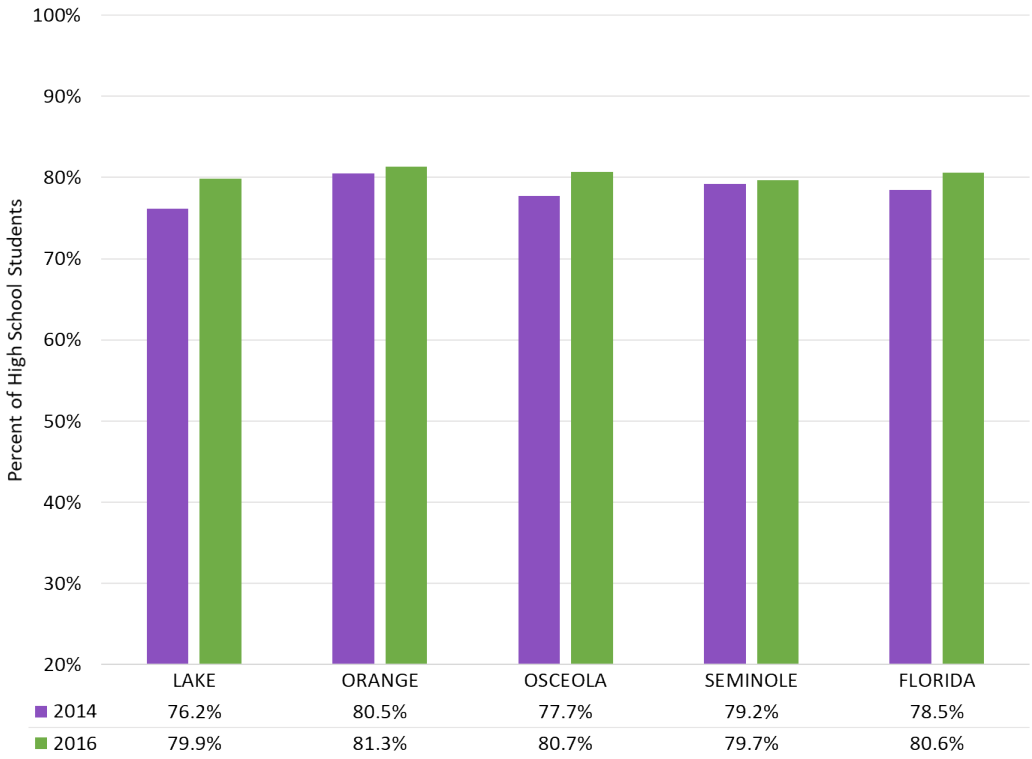
The rate of drug arrests per 100,000 decreased in Lake County between 2013 and 2017 from 654.1 to 558.9. There is no data available for the state for this indicator. (See Chart 7.75)

CHART 7.60: MIDDLE SCHOOL STUDENTS WITHOUT SUFFICIENT VIGOROUS PHYSICAL ACTIVITY (2014-2016)



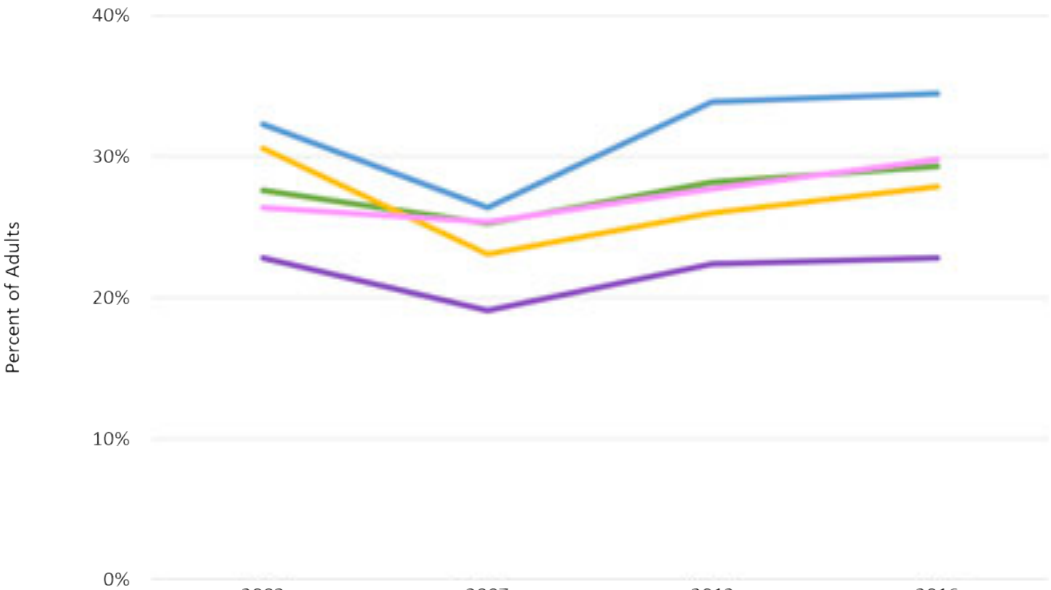
Source: FLHealthCHARTS: Florida Department of Health, Florida Youth Tobacco Survey

CHART 7.61: HIGH SCHOOL STUDENTS WITHOUT SUFFICIENT VIGOROUS PHYSICAL ACTIVITY (2014-2016)



Source: FLHealthCHARTS: Florida Department of Health, Florida Youth Tobacco Survey

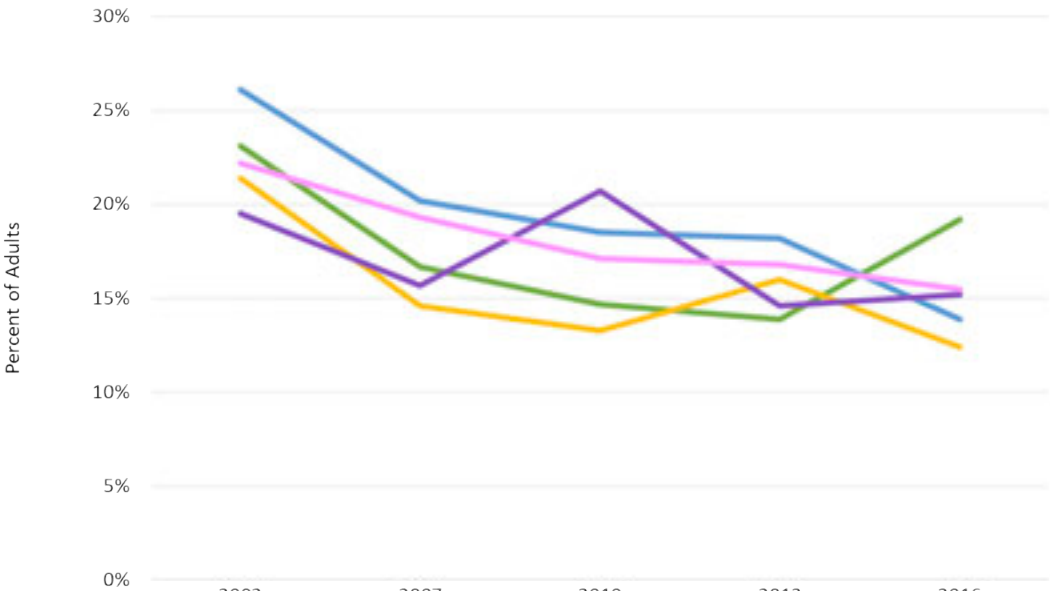
CHART 7.62: SEDENTARY ADULTS (2002-2016)



	2002	2007	2013	2016
LAKE	27.6%	25.3%	28.2%	29.3%
ORANGE	30.6%	23.1%	26.0%	27.9%
OSCEOLA	32.3%	26.4%	33.9%	34.5%
SEMINOLE	22.8%	19.1%	22.4%	22.8%
FLORIDA	26.4%	25.4%	27.7%	29.8%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

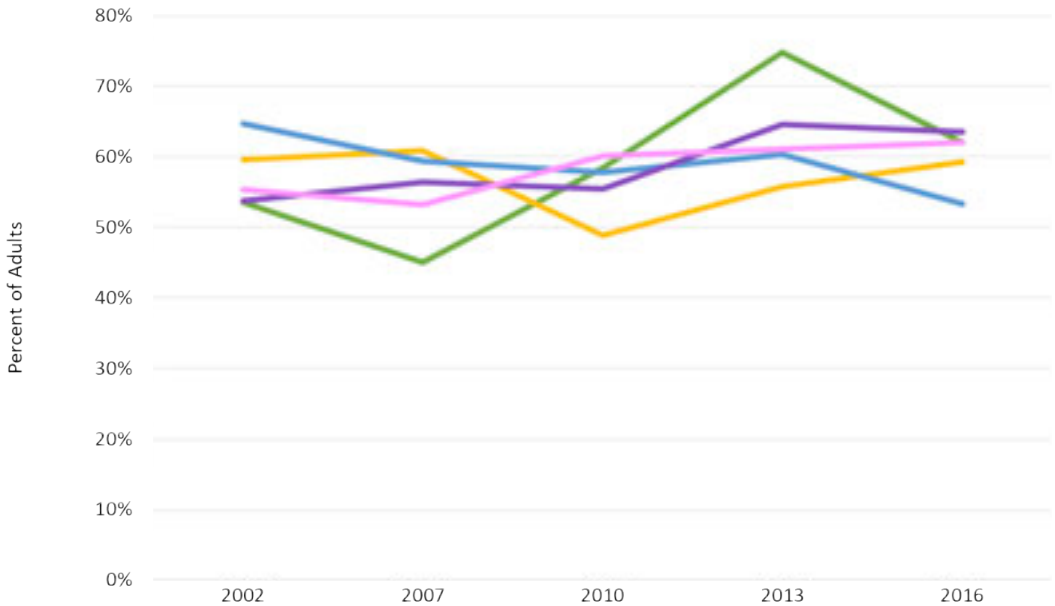
CHART 7.63: ADULTS WHO ARE CURRENT SMOKERS (2002-2016)



	2002	2007	2010	2013	2016
LAKE	23.1%	16.7%	14.7%	13.9%	19.2%
ORANGE	21.4%	14.6%	13.3%	16.0%	12.4%
OSCEOLA	26.1%	20.2%	18.5%	18.2%	13.9%
SEMINOLE	19.5%	15.7%	20.7%	14.6%	15.2%
FLORIDA	22.2%	19.3%	17.1%	16.8%	15.5%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

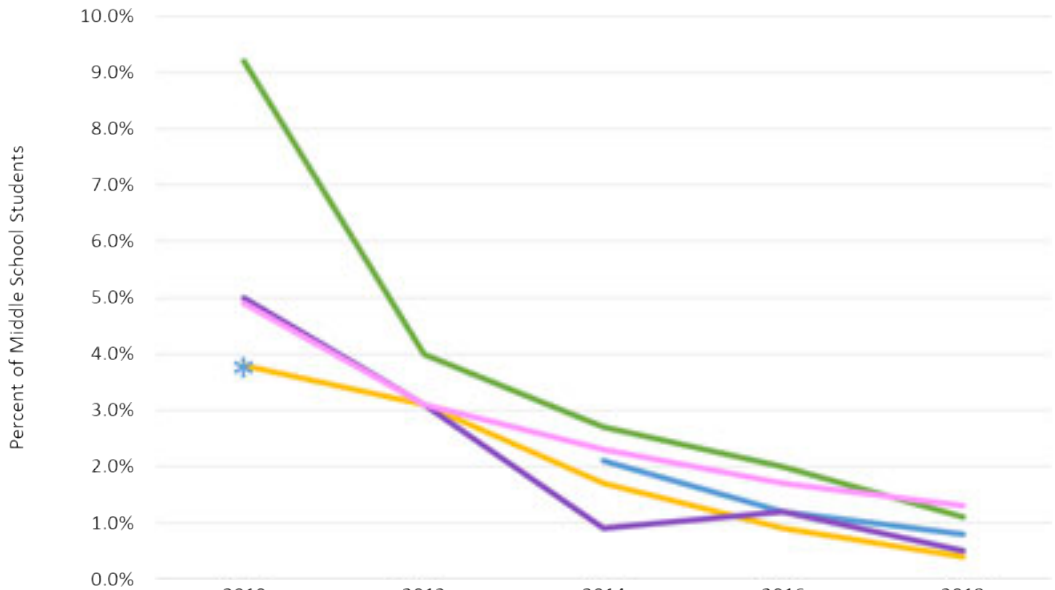
CHART 7.64: ADULT CURRENT SMOKERS WHO QUIT SMOKING AT LEAST ONCE IN PAST YEAR (2002-2016)



	2002	2007	2010	2013	2016
LAKE	53.5%	45.0%	58.4%	74.8%	62.1%
ORANGE	59.6%	60.9%	48.9%	55.8%	59.3%
OSCEOLA	64.7%	59.4%	57.8%	60.3%	53.3%
SEMINOLE	53.7%	56.4%	55.4%	64.6%	63.5%
FLORIDA	55.3%	53.2%	60.1%	61.1%	62.1%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

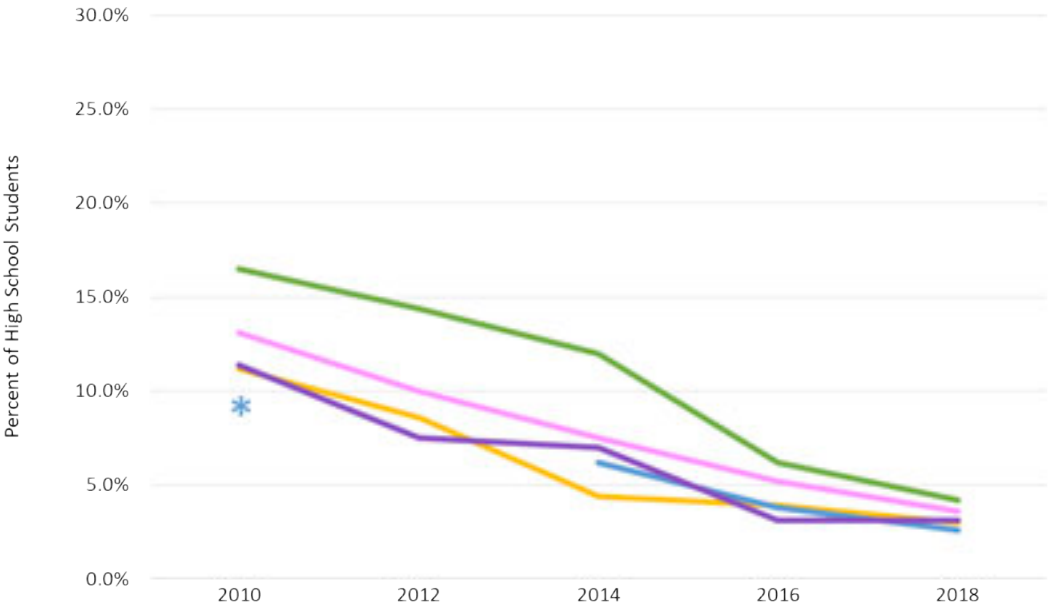
CHART 7.65: MIDDLE SCHOOL STUDENTS SMOKING CIGARETTES IN PAST 30 DAYS (2010-2018)



	2010	2012	2014	2016	2018
LAKE	9.2%	4.0%	2.7%	2.0%	1.1%
ORANGE	3.8%	3.1%	1.7%	0.9%	0.4%
OSCEOLA	3.8%	N/A	2.1%	1.2%	0.8%
SEMINOLE	5.0%	3.1%	0.9%	1.2%	0.5%
FLORIDA	4.9%	3.1%	2.3%	1.7%	1.3%

Source: FLHealthCHARTS: Florida Department of Health, Florida Youth Survey Tobacco Survey
*Represents a single data point where there has been inconsistent data for a county

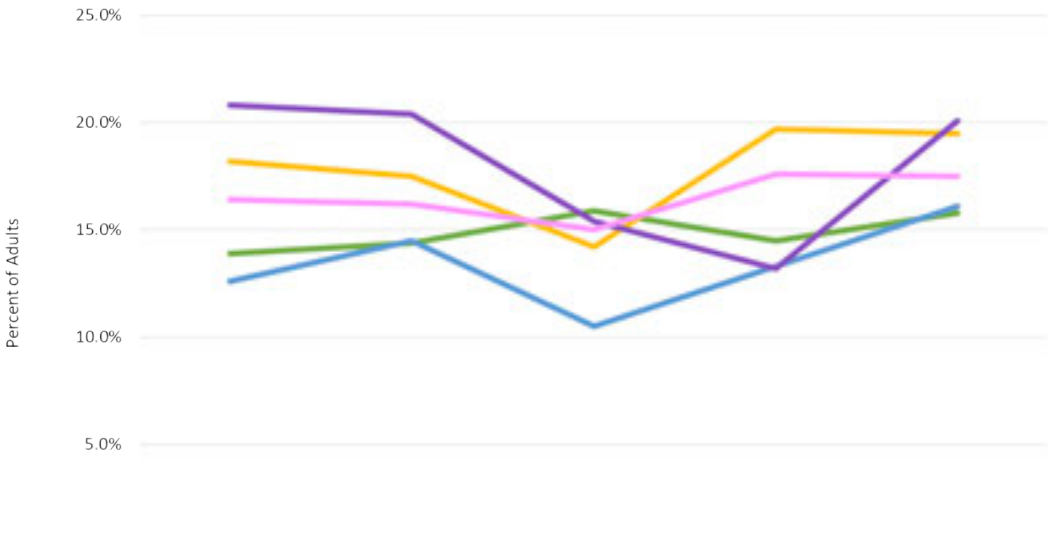
CHART 7.66: HIGH SCHOOL STUDENTS SMOKING CIGARETTES IN PAST 30 DAYS (2010-2018)



	2010	2012	2014	2016	2018
LAKE	16.5%	14.4%	12.0%	6.2%	4.2%
ORANGE	11.2%	8.6%	4.4%	3.9%	3.0%
OSCEOLA	9.5%	N/A	6.2%	3.8%	2.6%
SEMINOLE	11.4%	7.5%	7.0%	3.1%	3.1%
FLORIDA	13.1%	10.0%	7.5%	5.2%	3.6%

Source: FLHealthCHARTS: Florida Department of Health, Florida Youth Tobacco Survey
*Represents a single data point where there has been inconsistent data for a county

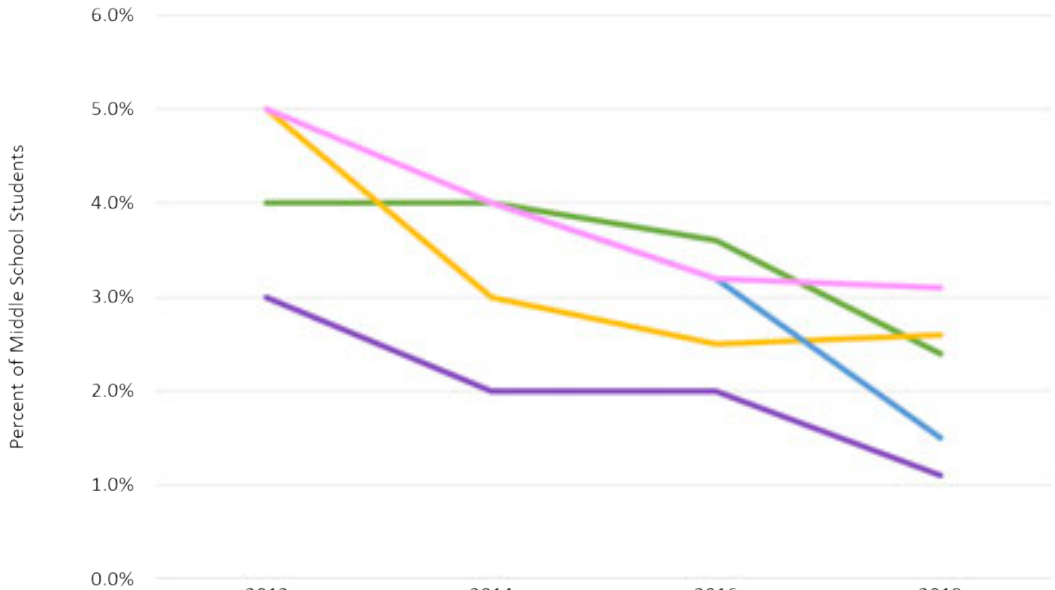
CHART 7.67: BINGE DRINKING AMONG ADULTS (2002-2016)



	2002	2007	2010	2013	2016
LAKE	13.9%	14.4%	15.9%	14.5%	15.8%
ORANGE	18.2%	17.5%	14.2%	19.7%	19.5%
OSCEOLA	12.6%	14.5%	10.5%	13.3%	16.1%
SEMINOLE	20.8%	20.4%	15.4%	13.2%	20.1%
FLORIDA	16.4%	16.2%	15.0%	17.6%	17.5%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance Survey

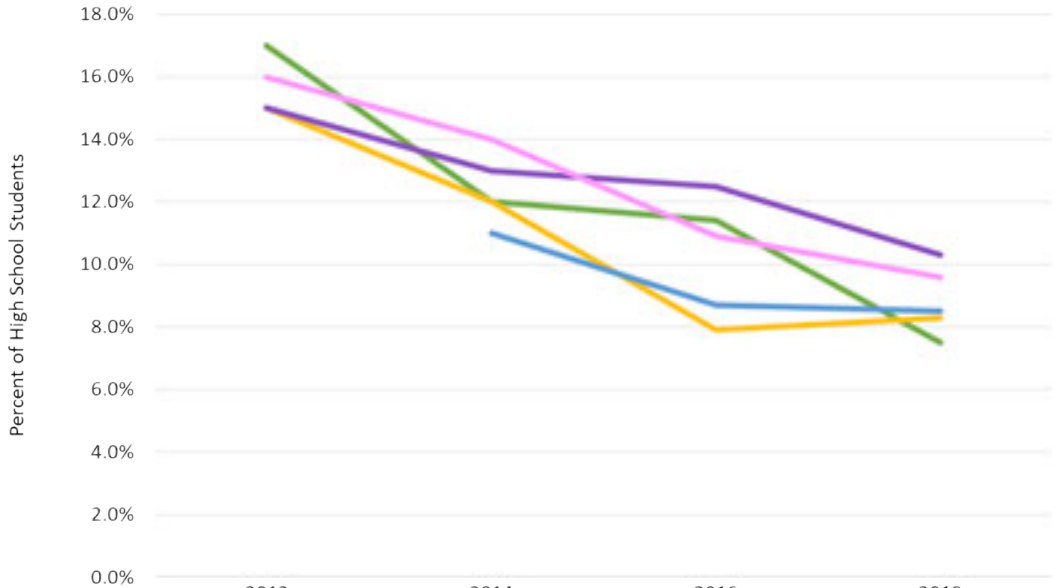
CHART 7.68: BINGE DRINKING MIDDLE SCHOOL STUDENTS (2012-2018)



	2012	2014	2016	2018
LAKE	4.0%	4.0%	3.6%	2.4%
ORANGE	5.0%	3.0%	2.5%	2.6%
OSCEOLA	N/A	4.0%	3.2%	1.5%
SEMINOLE	3.0%	2.0%	2.0%	1.1%
FLORIDA	5.0%	4.0%	3.2%	3.1%

Source: FLHealthCHARTS: Florida Department of Children and Families, Florida Youth Substance Abuse Survey
Note: Data is not available for Osceola County in 2012, the data for Osceola County for 2014 is not shown on the chart because it closely aligns with Florida and is hidden behind the state line.

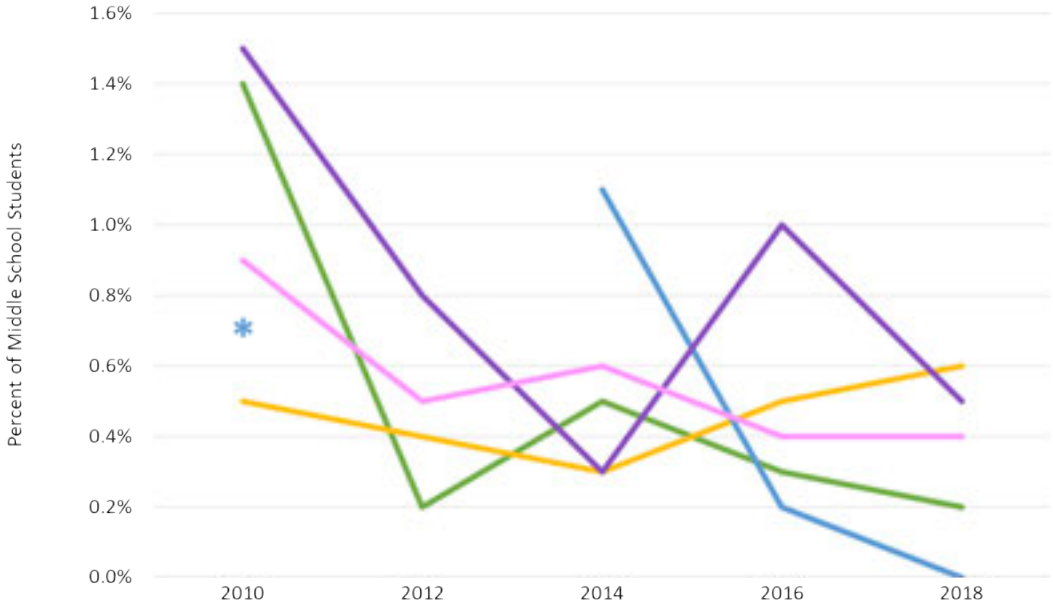
CHART 7.69: BINGE DRINKING HIGH SCHOOL STUDENTS (2012-2018)



	2012	2014	2016	2018
LAKE	17.0%	12.0%	11.4%	7.5%
ORANGE	15.0%	12.0%	7.9%	8.3%
OSCEOLA	N/A	11.0%	8.7%	8.5%
SEMINOLE	15.0%	13.0%	12.5%	10.3%
FLORIDA	16.0%	14.0%	10.9%	9.6%

Source: FLHealthCHARTS: Florida Department of Children and Families, Florida Youth Substance Abuse Survey

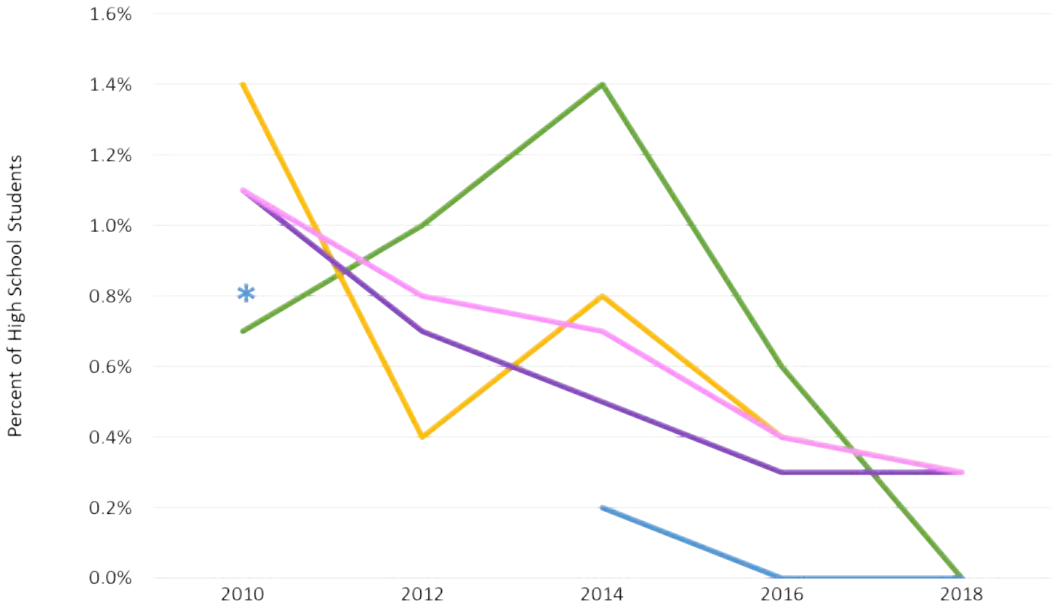
CHART 7.70: HEROIN USE IN MIDDLE SCHOOL (2010-2018)



	2010	2012	2014	2016	2018
LAKE	1.4%	0.2%	0.5%	0.3%	0.2%
ORANGE	0.5%	0.4%	0.3%	0.5%	0.6%
OSCEOLA	0.7%	N/A	1.1%	0.2%	0.0%
SEMINOLE	1.5%	0.8%	0.3%	1.0%	0.5%
FLORIDA	0.9%	0.5%	0.6%	0.4%	0.4%

Source: FLHealthCHARTS: Florida Department of Children and Families, Florida Youth Substance Abuse Survey
*Represents a single data point where there has been inconsistent data for a county

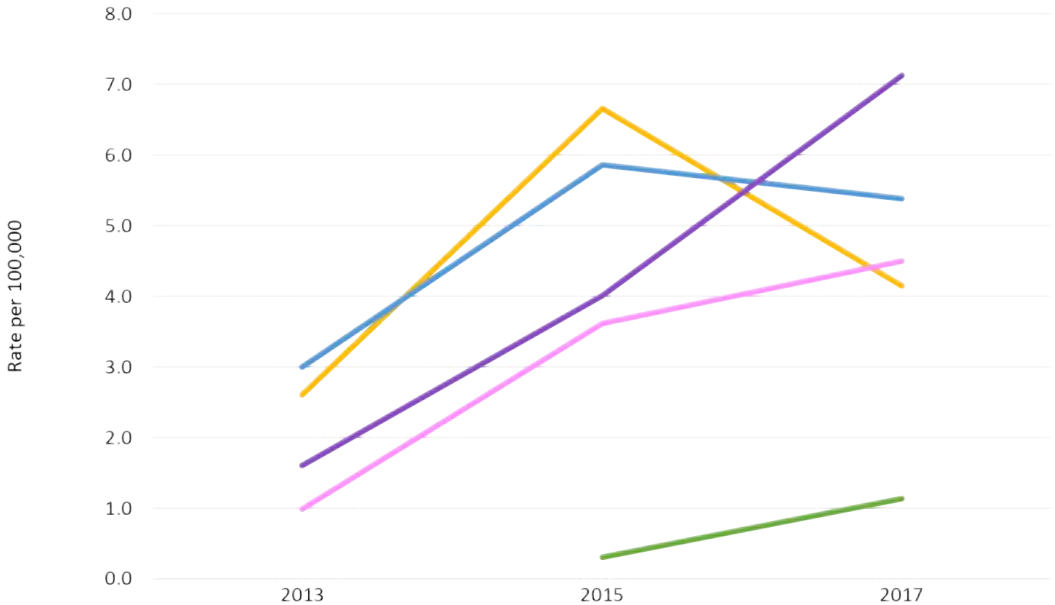
CHART 7.71: HEROIN USE IN HIGH SCHOOL (2010-2018)



	2010	2012	2014	2016	2018
LAKE	0.7%	1.0%	1.4%	0.6%	0.0%
ORANGE	1.4%	0.4%	0.8%	0.4%	0.3%
OSCEOLA	0.8%	N/A	0.2%	0.0%	0.0%
SEMINOLE	1.1%	0.7%	0.5%	0.3%	0.3%
FLORIDA	1.1%	0.8%	0.7%	0.4%	0.3%

Source: FLHealthCHARTS: Florida Department of Children and Families, Florida Youth Substance Abuse Survey
*Represents a single data point where there has been inconsistent data for a county

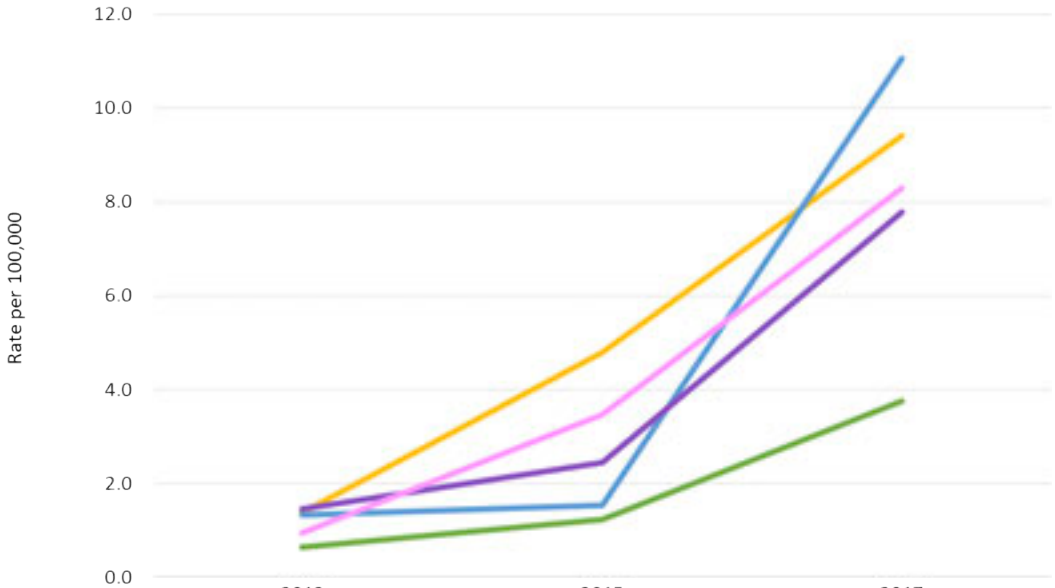
CHART 7.72: HEROIN-RELATED DEATHS (2013-2017)



	2013	2015	2017
LAKE	N/A	0.3	1.1
ORANGE	2.6	6.7	4.2
OSCEOLA	3.0	5.9	5.4
SEMINOLE	1.6	4.0	7.1
FLORIDA	1.0	3.6	4.5

Source: Medical Examiners Contacted Via Email, Orange County Health Department, FDLE

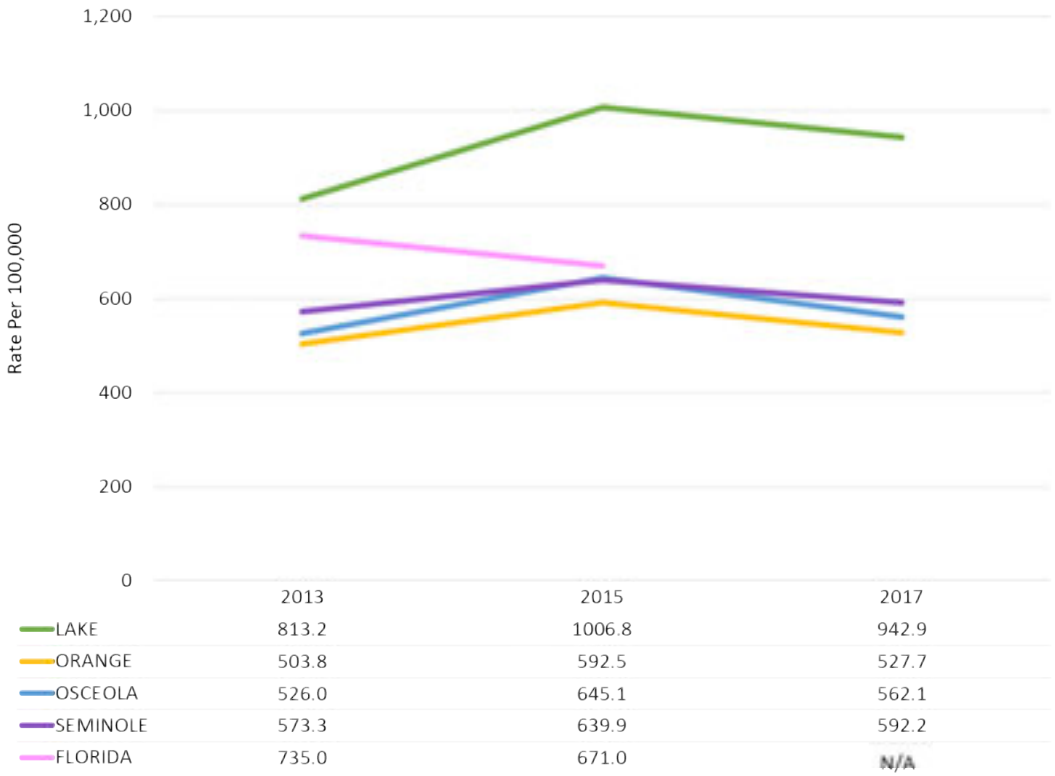
CHART 7.73: FENTANYL-RELATED DEATHS (2013-2017)



	2013	2015	2017
LAKE	0.7	1.2	3.8
ORANGE	1.4	4.8	9.4
OSCEOLA	1.3	1.5	11.1
SEMINOLE	1.5	2.5	7.8
FLORIDA	0.9	3.5	8.3

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

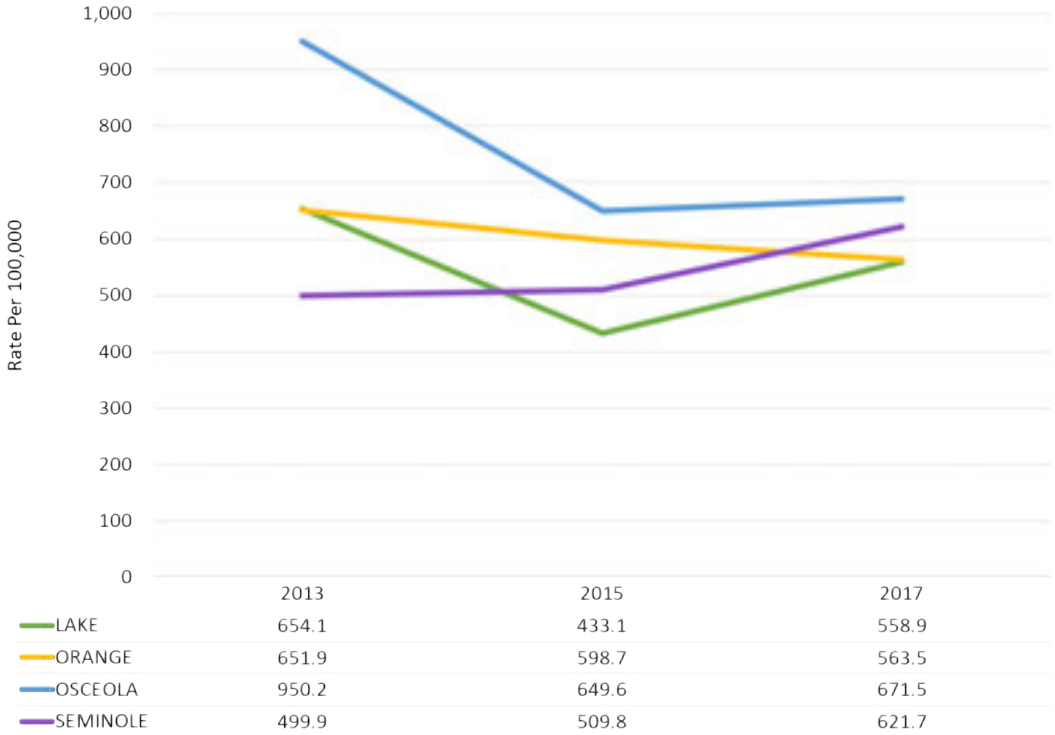
CHART 7.74: RATE OF CONTROLLED PRESCRIPTIONS OF OPIOIDS (2013-2017)



	2013	2015	2017
LAKE	813.2	1006.8	942.9
ORANGE	503.8	592.5	527.7
OSCEOLA	526.0	645.1	562.1
SEMINOLE	573.3	639.9	592.2
FLORIDA	735.0	671.0	N/A

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

CHART 7.75: DRUG ARRESTS (2013-2017)



	2013	2015	2017
LAKE	654.1	433.1	558.9
ORANGE	651.9	598.7	563.5
OSCEOLA	950.2	649.6	671.5
SEMINOLE	499.9	509.8	621.7

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

Injury Related to Behavioral Risk Factors: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section.

ALCOHOL-RELATED MOTOR VEHICLE CRASHES (2014-2016)

The percentage of motor vehicle crashes that were alcohol-related decreased in both Lake County and the state between 2014 and 2016. The county's percentage decreased from 1.85 percent to 1.47 percent between 2014 and 2016, slightly higher than the state percentage, which decreased from 1.64 percent to 1.32 percent. (See Chart 7.76)

DRUG-RELATED MOTOR VEHICLE CRASHES (2014-2016)

The percentage of Lake County's drug-related motor vehicle crashes decreased from 0.30 percent in 2014 to 0.12 percent in 2016. The percentage in the state during that time increased slightly from 0.14 percent to 0.16 percent. (See Chart 7.77)

DRUG AND ALCOHOL-RELATED MOTOR VEHICLE CRASHES (2014-2016)

The combined drug and alcohol-related motor vehicle crash percentage in Lake County has been consistently higher than the state, although there was a decrease from 0.27 percent in 2014 to 0.14 percent in 2016. The state has remained relatively consistent around 0.09 percent over the same time period. (See Chart 7.78)

ALCOHOL-RELATED INJURIES (2014-2016)

Alcohol-related injuries as a percentage of all injuries decreased in Lake County and the state between 2014 and 2016. In Lake County there was a decrease from 1.44 percent in 2014 to 1.11 percent in 2016. In the state there was a decrease from 1.5 percent to 1.24 percent during this time. (See Chart 7.79)

DRUG-RELATED INJURIES (2014-2016)

Drug-related injuries as a percentage of all injuries fluctuated in Lake County from 2014 and 2016 although in the state they remained relatively consistent at 0.21 percent. Lake County's percentage decreased from 0.26 percent in 2014 to 0.10 percent in 2015, then increased to 0.23 percent in 2016. (See Chart 7.80)

DRUG AND ALCOHOL-RELATED INJURIES (2014-2016)

The percentage of drug and alcohol-related injuries in Lake County was consistently higher than in the state. The county percentage decreased from 0.30 percent in 2014 to 0.16 percent in 2015, followed by an additional decrease to 0.12 percent in 2016. During this time, in the state there was as increase from 0.10 percent in 2014 to 0.13 percent in 2015 back to 0.10 percent in 2016. (See Chart 7.81)

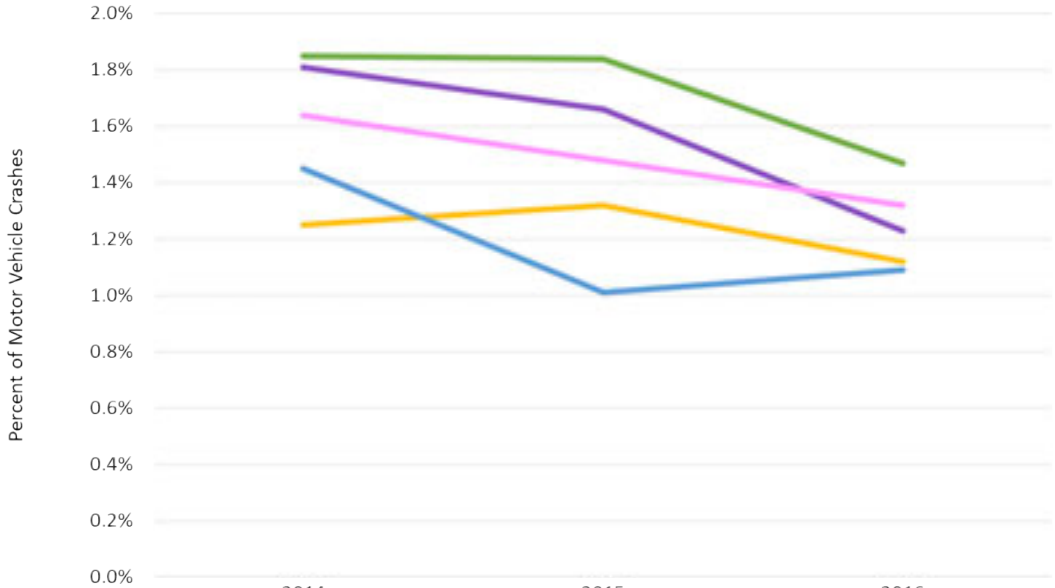
FIREARMS DISCHARGE, AGE-ADJUSTED DEATH RATE (2004-2017)

The firearms discharge age-adjusted death rate per 100,000 has fluctuated in Lake County and the state from 2004 and 2017, with a net increase in both. Lake County's rate increased from 9.1 in 2004 to 17.7 in 2017; Florida's rate increased from 10.5 to 12.5 over the same time period. (See Chart 7.82)

DOMESTIC VIOLENCE (2013-2017)

The domestic violence rate per 100,000 in Lake County decreased from 520.9 in 2013 to 514 in 2017. The state rate decreased from 560.9 to 522.3 during this time period. (See Chart 7.83)

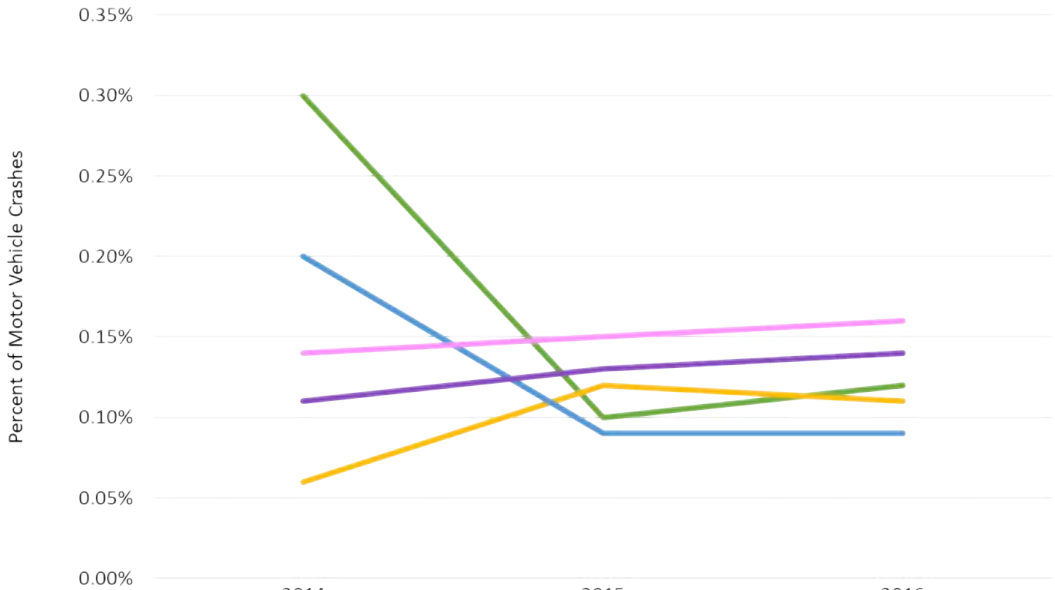
CHART 7.76: ALCOHOL-RELATED MOTOR VEHICLE CRASHES (2014-2016)



	2014	2015	2016
LAKE	1.85%	1.84%	1.47%
ORANGE	1.25%	1.32%	1.12%
OSCEOLA	1.45%	1.01%	1.09%
SEMINOLE	1.81%	1.66%	1.23%
FLORIDA	1.64%	1.48%	1.32%

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

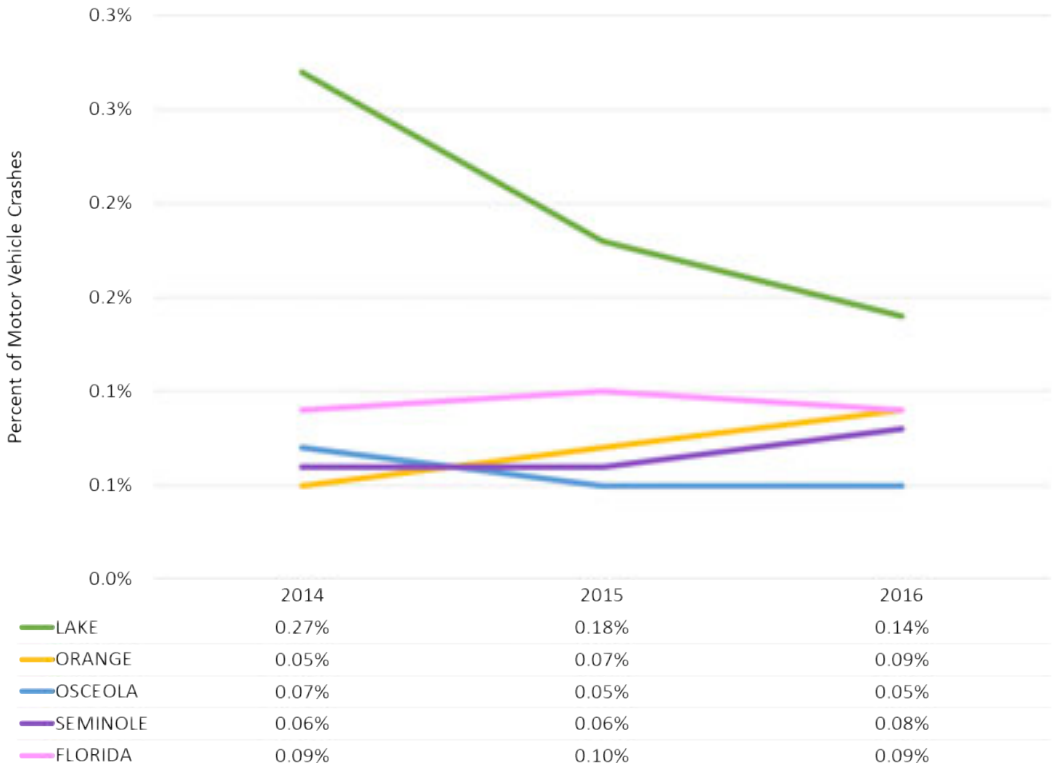
CHART 7.77: DRUG-RELATED MOTOR VEHICLE CRASHES (2014-2016)



	2014	2015	2016
LAKE	0.30%	0.10%	0.12%
ORANGE	0.06%	0.12%	0.11%
OSCEOLA	0.20%	0.09%	0.09%
SEMINOLE	0.11%	0.13%	0.14%
FLORIDA	0.14%	0.15%	0.16%

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

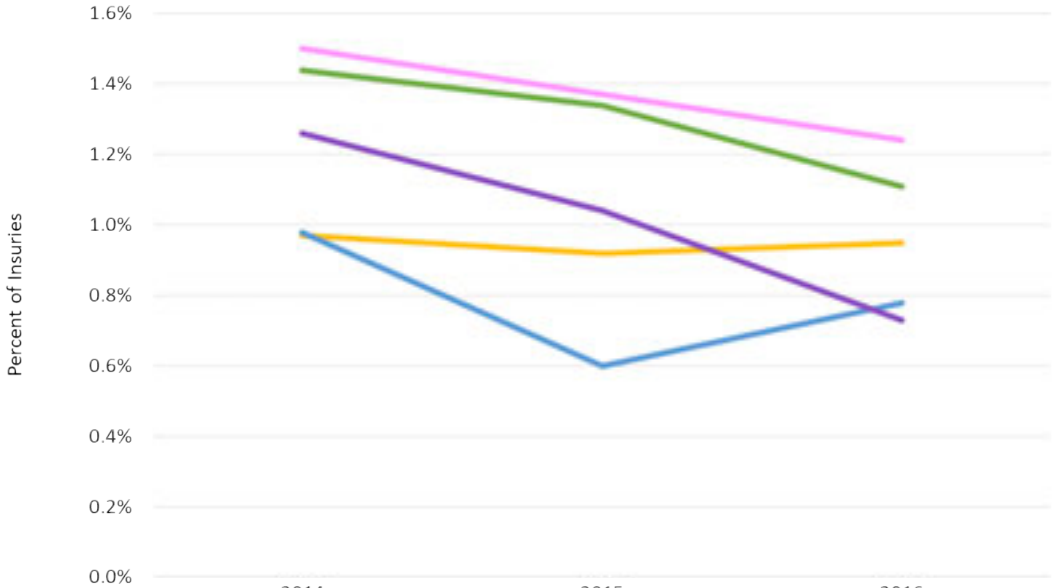
CHART 7.78: DRUG AND ALCOHOL-RELATED MOTOR VEHICLE CRASHES (2014-2016)



	2014	2015	2016
LAKE	0.27%	0.18%	0.14%
ORANGE	0.05%	0.07%	0.09%
OSCEOLA	0.07%	0.05%	0.05%
SEMINOLE	0.06%	0.06%	0.08%
FLORIDA	0.09%	0.10%	0.09%

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

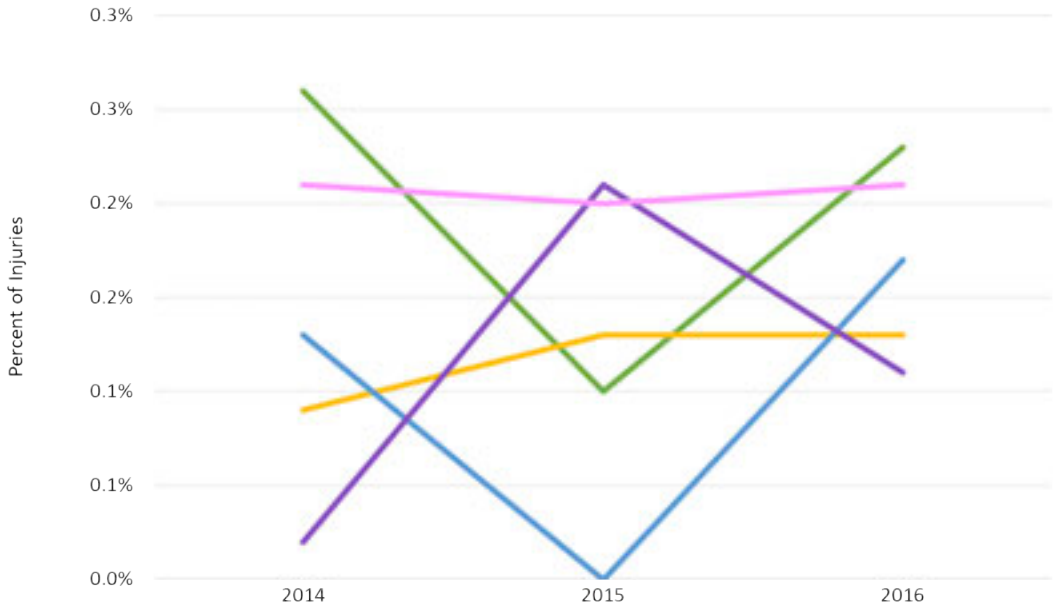
CHART 7.79: ALCOHOL-RELATED INJURIES (2014-2016)



	2014	2015	2016
LAKE	1.44%	1.34%	1.11%
ORANGE	0.97%	0.92%	0.95%
OSCEOLA	0.98%	0.60%	0.78%
SEMINOLE	1.26%	1.04%	0.73%
FLORIDA	1.50%	1.37%	1.24%

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

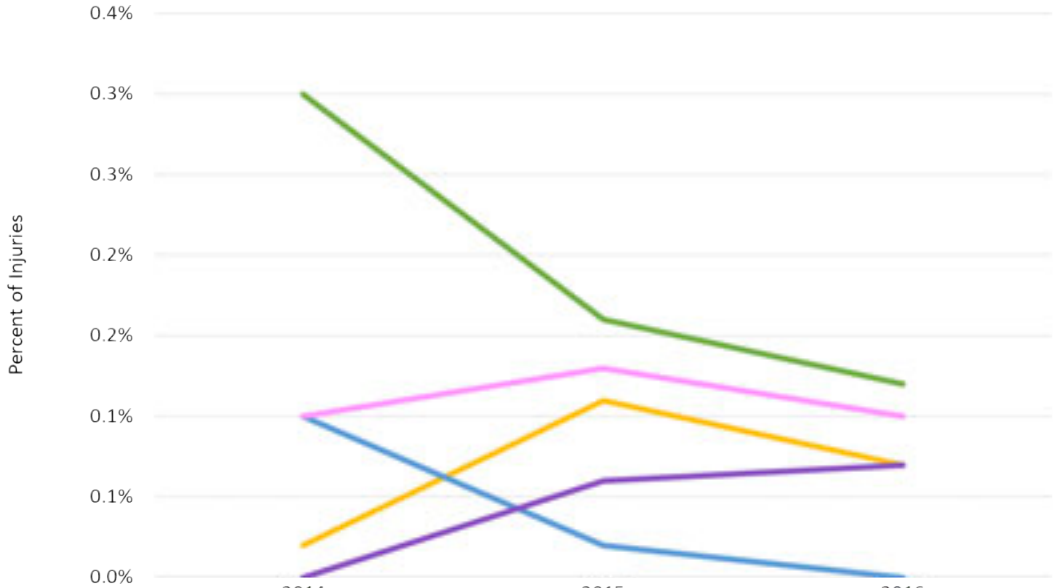
CHART 7.80: DRUG-RELATED INJURIES (2014-2016)



	2014	2015	2016
LAKE	0.26%	0.10%	0.23%
ORANGE	0.09%	0.13%	0.13%
OSCEOLA	0.13%	0.00%	0.17%
SEMINOLE	0.02%	0.21%	0.11%
FLORIDA	0.21%	0.20%	0.21%

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

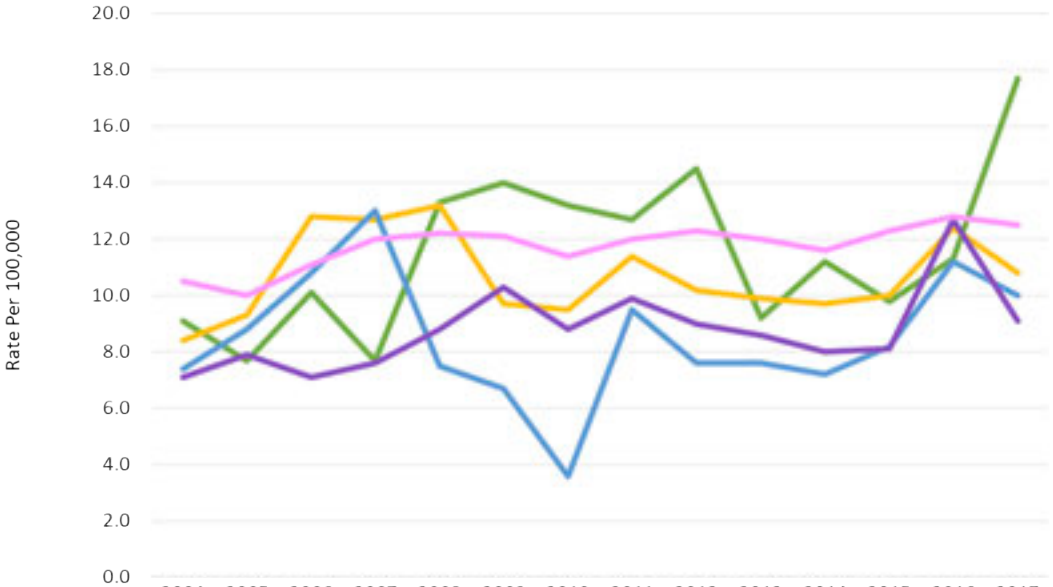
CHART 7.81: DRUG AND ALCOHOL-RELATED INJURIES (2014-2016)



	2014	2015	2016
LAKE	0.30%	0.16%	0.12%
ORANGE	0.02%	0.11%	0.07%
OSCEOLA	0.10%	0.02%	0.00%
SEMINOLE	0.00%	0.06%	0.07%
FLORIDA	0.10%	0.13%	0.10%

Source: University of Florida College of Medicine Florida Drug-Related Outcomes Surveillance and Tracking System

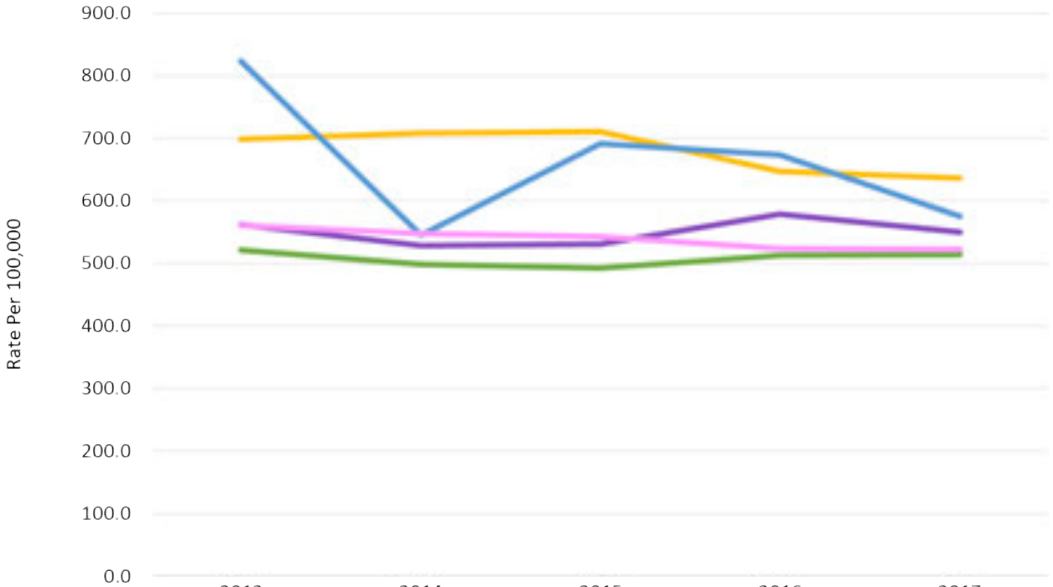
CHART 7.82: FIREARMS DISCHARGE, AGE-ADJUSTED DEATH RATE (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	9.1	7.7	10.1	7.7	13.3	14.0	13.2	12.7	14.5	9.2	11.2	9.8	11.3	17.7
ORANGE	8.4	9.3	12.8	12.7	13.2	9.7	9.5	11.4	10.2	9.9	9.7	10.0	12.4	10.8
OSCEOLA	7.4	8.8	10.8	13.0	7.5	6.7	3.6	9.5	7.6	7.6	7.2	8.2	11.2	10.0
SEMINOLE	7.1	7.9	7.1	7.6	8.8	10.3	8.8	9.9	9.0	8.6	8.0	8.1	12.7	9.1
FLORIDA	10.5	10.0	11.1	12.0	12.2	12.1	11.4	12.0	12.3	12.0	11.6	12.3	12.8	12.5

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

CHART 7.83: DOMESTIC VIOLENCE (2013-2017)



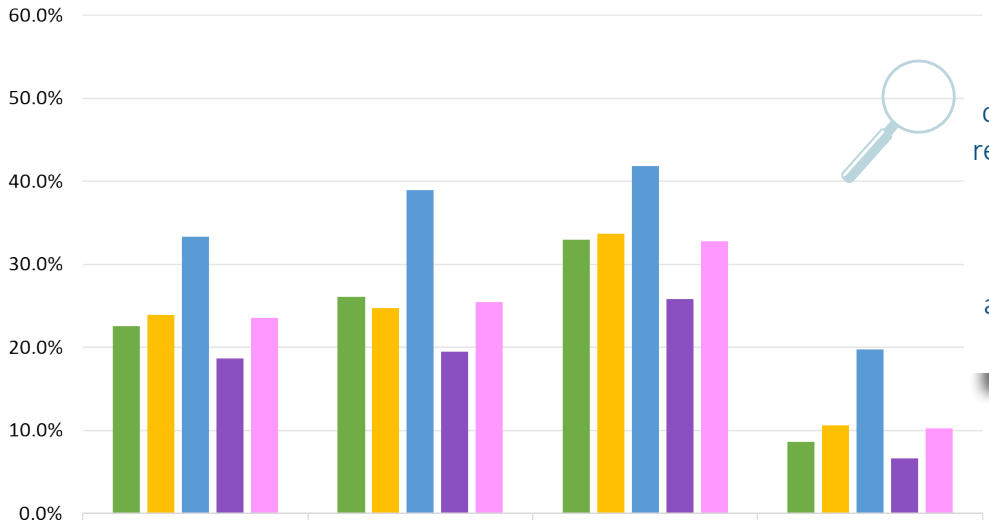
	2013	2014	2015	2016	2017
LAKE	520.9	499.1	492.8	513.3	514.0
ORANGE	698.6	708.4	710.7	647.4	636.3
OSCEOLA	822.9	545.4	691.5	674.0	574.9
SEMINOLE	561.9	529.2	530.6	579.4	550.0
FLORIDA	560.9	547.9	543.4	524.3	522.3

Source: FLHealthCHARTS: Florida Department of Law Enforcement

Built Environment: What the Community is Saying

Figure 7.20 outlines the experience of community survey respondents related to the built environment. More than one in five Lake County respondents indicated that they lack recreational opportunities (22.6 percent) and safe roads and sidewalks (26.1 percent). About one in 10 respondents indicated that they lack access to fresh, available, safe drinking water (8.6 percent).

FIGURE 7.20: BUILT ENVIRONMENT INDICATORS, COMMUNITY SURVEY 2019



	Lack recreational opportunities	Lack safe roads/sidewalks	Lack access to high quality, affordable healthy food	Lack access to fresh, available drinking water
LAKE	22.6%	26.1%	33.0%	8.6%
ORANGE	23.9%	24.7%	33.7%	10.6%
OSCEOLA	33.3%	38.9%	41.8%	19.8%
SEMINOLE	18.7%	19.5%	25.8%	6.6%
OVERALL	23.6%	25.5%	32.8%	10.3%

Almost a third of community survey respondents in Lake County indicated they lack access to high quality, affordable healthy food.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following as needs and issues in Lake County related to the built environment:

- Insufficient access to healthy and affordable food options
- Poor eating habits
- Poor housing conditions
- Lack of good public transportation
- Not enough opportunities for physical activity

Barriers for residents identified by participants in the primary research included:

- High cost associated with housing
- Lack of money/low wages

Needed services identified in the primary research included:

- Affordable, healthy food
- Nutrition education
- Affordable, safe housing
- Safe routes for pedestrians and bicyclists
- Safe places for recreation

Built Environment: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section.

POPULATION LIVING WITHIN ½ MILE OF A PARK (2016)

In 2016, the percentage of the population living within a half mile of a park in Lake County was 21.9 percent, while in the state it was 43.2 percent. (See Figure 7.21)

RECREATION AND FITNESS FACILITIES (2016)

The US Census Bureau considers a recreation and fitness facility an establishment primarily engaged in operating fitness and recreational sports facilities featuring exercise and other active physical fitness conditioning or recreational sports activities, such as swimming, skating, or racquet sports. Lake County had a total of 41 recreation and fitness facilities. (See Table 7.5)

PERCENTAGE OF THE POPULATION WITH ACCESS TO EXERCISE (2018)

Access to exercise opportunities measures the percentage of individuals in a county who live reasonably close to a location for physical activity. Physical activity locations are defined as parks or recreational facilities. Individuals are considered to have access to exercise opportunities if they reside in a census block that is within a half mile of a park or reside in an urban census block that is within one mile of a recreational facility. Individuals who reside in a rural census block that is within three miles of a recreational facility are considered to have access to exercise opportunities.

According to the above definition, Lake County residents have slightly less access to exercise (82 percent) compared to the state percentage for Florida (88 percent). (See Figure 7.22)

FOOD DESERTS (2014)

Based on guidelines from the Healthy Food Financing Initiative (HFFI) working group, to qualify as a food desert census tract, at least 33 percent of the tract's population, or a minimum of 500 people in the tract, must have low access to a supermarket or large grocery store. Some census tracts that contain supermarkets or large grocery stores may meet the criteria of a food desert if a substantial number or share of people within that census tract are more than one mile (urban areas) or 10 miles (rural areas) from the nearest supermarket. Residents of food desert census tracts may live within one or 10 miles of a supermarket; these residents were not counted as low access and thus not counted in the total (Community Commons, 2015).

Lake County has 11 areas in the county considered food deserts, the largest of which is in the northwest area of the county. (See Figure 7.23)

MODIFIED RETAIL FOOD ENVIRONMENT INDEX (2015)

Centers for Disease Control and Prevention (CDC) created a modified retail food environment index (mRFEI) which identifies food deserts and food swamps by combining them into a single measure within census tracts for every state. According to the USDA, a food swamp refers to neighborhoods saturated with fast food chains, corner stores, and other unhealthy food providers, while food deserts are parts of the county lacking fresh fruit, vegetables and other healthy foods, usually found in impoverished areas. Although the state-wide mRFEI was created by census tract level, large static mRFEI maps for each state could not identify small communities within the state.

North American Industry Classification Codes (NAICS) were utilized to categorize retail food businesses as healthy or less healthy. Retail food data was purchased from Environmental Systems Research Institute (ESRI) and was current as of January 2015. The mRFEI ranges from zero to 100 and was calculated as the number of healthy food retailers divided by the sum of healthy food retailers plus less healthy food retailers and multiplied by 100.

$$mRFEI = 100 \text{ x } \frac{\text{\# Healthy Food Retailers}}{\text{\# Healthy Food Retailers + \# Less Healthy Food Retailers}}$$

Lower scores indicate that census tracts contain a higher number of less healthy retailers than healthy retailers. The mRFEI was calculated based on food retailers within a census tract and within a half mile buffer of a census tract boundary, identified using geoprocessing tools including clip, buffer, count and spatial join with ARCGIS 10.3 and PYWIN 32. Classification of the mRFEI used the same methodology as the CDC's original maps: zero (no healthy food retailers), 0.1–5 (fewer less healthy food retailers), 5.1–10, 10.1–37.5 and 37.6–100 (more healthy food retailers). Since the mRFEI is based on census tracts it is possible for there to be variations within a county, with pockets having high availability of healthy food retailers while other areas have low availability.

In Lake County 66.7 percent of the county has food retailers that are considered healthy and 20 percent of the county has areas where there are no healthy food retailers. (See Table 7.6)

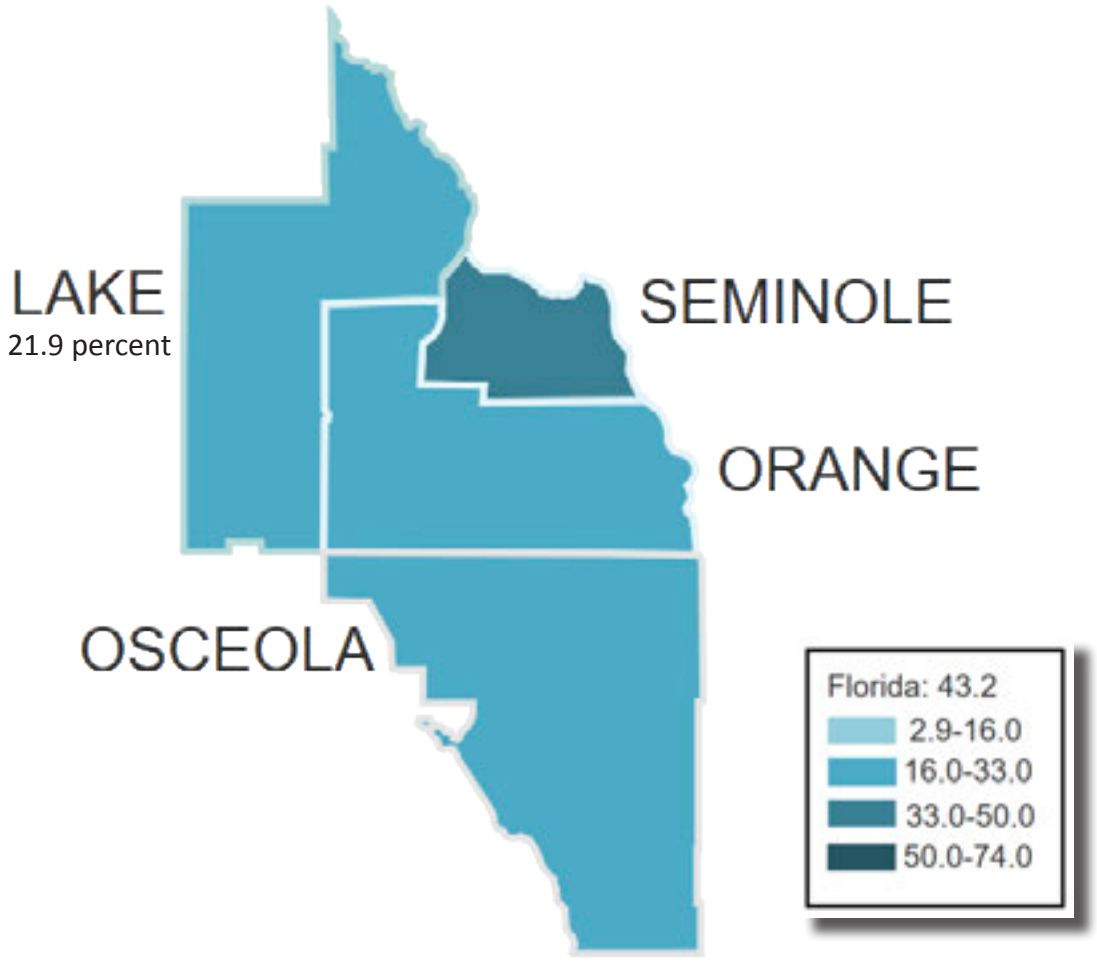
FRUIT AND VEGETABLE EXPENDITURES (2016)

This indicator analyzes fruit and vegetable expenditures by low-income households and higher income households and compares the sensitivity of both groups' purchases to changes in income. On average, low-income households spent $3.59 per capita per week on fruits and vegetables in 2000, while higher income households spent $5.02; a statistically significant difference. In addition, a statistical demand model indicates that marginal increases in income received by low-income households are not spent on additional fruits and vegetables. In contrast, increases in income received by higher income households do result in an increase in fruit and vegetable expenditures. One interpretation of this finding is that low-income households will allocate an additional dollar of income to other food or nonfood items deemed more essential to the household such as meats, clothing or housing.

The United States Department of Agriculture (USDA) maps fruit and vegetable expenditures by census tracts with the amount of expenditure broken into and mapped as a quintile. A quintile is a statistical value of a data set that represents 20% of a given population. The USDA considers the highest expenditures as the first quintile (80 percent to 100 percent).

In Lake County there are three areas that have the highest expenditure level on fruits and vegetables, with the majority of the county in the third and fourth quintile. (See Figure 7.24)

FIGURE 7.21: POPULATION LIVING WITHIN ½ MILE OF A PARK (2016)



Source: FLHealthCHARTS, Florida Department of Public Health

TABLE 7.5: RECREATION AND FITNESS FACILITIES (2016)

County - Primary	County – Secondary*	ZCTA	Geographic Area Name	Number Of Establishments
Lake		32159	Zip 32159 (Lady Lake, FL)	2
Lake		32726	Zip 32726 (Eustis, FL)	1
Lake	Orange	32757	Zip 32757 (Mount Dora, FL)	4
Lake		32778	Zip 32778 (Tavares, FL)	4
Lake		32784	Zip 32784 (Umatilla, FL)	1
Lake		34698	Zip 34698 (Dunedin, FL)	8
Lake		34711	Zip 34711 (Clermont, FL)	11
Lake		34714	Zip 34714 (Clermont, FL)	2
Lake		34715	Zip 34715 (Clermont, FL)	3
Lake		34731	Zip 34731 (Fruitland Park, FL)	1
Lake		34736	Zip 34736 (Groveland, FL)	3
Lake		34737	Zip 34737 (Howey in the Hills, FL)	2
Lake		34748	Zip 34748 (Leesburg, FL)	3
Lake		34788	Zip 34788 (Leesburg, FL)	3
Volusia	Lake	32720	Zip 32720 (Deland, FL)	1
Total Establishments in Lake County				41
Orange	Seminole	32703	Zip 32703 (Apopka, FL)	9
Orange		32709	Zip 32709 (Christmas, FL)	1
Orange		32712	Zip 32712 (Apopka, FL)	2
Orange	Seminole	32751	Zip 32751 (Maitland, FL)	7
Orange		32789	Zip 32789 (Winter Park, FL)	21
Orange	Seminole	32792	Zip 32792 (Winter Park, FL)	9
Orange		32801	Zip 32801 (Orlando, FL)	5
Orange		32803	Zip 32803 (Orlando, FL)	10
Orange		32804	Zip 32804 (Orlando, FL)	8
Orange		32805	Zip 32805 (Orlando, FL)	2
Orange		32806	Zip 32806 (Orlando, FL)	6
Orange		32807	Zip 32807 (Orlando, FL)	6
Orange		32808	Zip 32808 (Orlando, FL)	1
Orange		32809	Zip 32809 (Orlando, FL)	8
Orange		32810	Zip 32810 (Orlando, FL)	3
Orange		32811	Zip 32811 (Orlando, FL)	6
Orange		32812	Zip 32812 (Orlando, FL)	4
Orange		32814	Zip 32814 (Orlando, FL)	5
Orange		32817	Zip 32817 (Orlando, FL)	8
Orange		32818	Zip 32818 (Orlando, FL)	1
Orange		32819	Zip 32819 (Orlando, FL)	27
Orange		32821	Zip 32821 (Orlando, FL)	1
Orange		32822	Zip 32822 (Orlando, FL)	5
Orange		32824	Zip 32824 (Orlando, FL)	1

*Note that some zip codes cross county lines

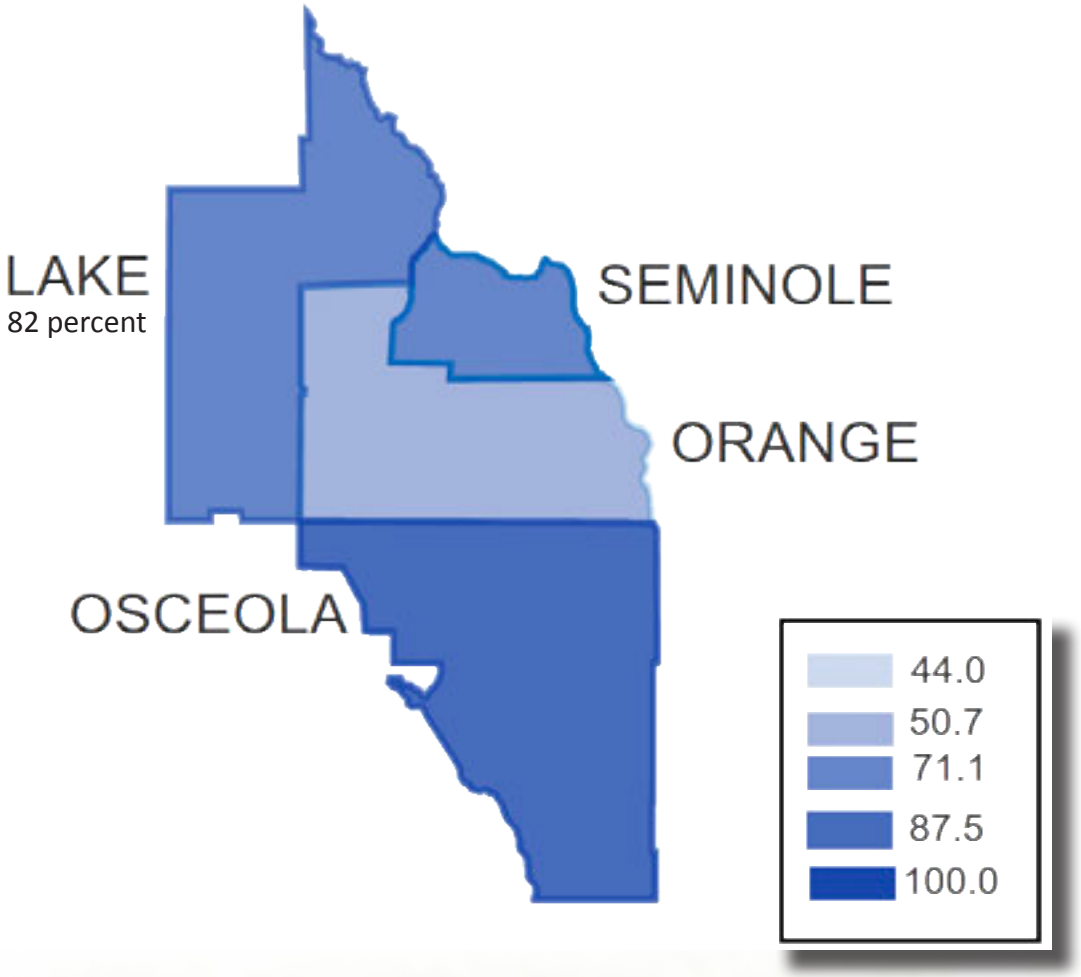
TABLE 7.5: RECREATION AND FITNESS FACILITIES (2016), CONTINUED

County - Primary	County – Secondary*	ZCTA	Geographic Area Name	Number Of Establishments
Orange		32825	Zip 32825 (Orlando, FL)	2
Orange		32827	Zip 32827 (Orlando, FL)	5
Orange		32828	Zip 32828 (Orlando, FL)	18
Orange		32829	Zip 32829 (Orlando, FL)	2
Orange		32832	Zip 32832 (Orlando, FL)	3
Orange		32835	Zip 32835 (Orlando, FL)	8
Orange		32836	Zip 32836 (Orlando, FL)	2
Orange		32837	Zip 32837 (Orlando, FL)	10
Orange		32839	Zip 32839 (Orlando, FL)	2
Orange		34761	Zip 34761 (Ocoee, FL)	9
Orange		34786	Zip 34786 (Windermere, FL)	10
Orange	Lake	34787	Zip 34787 (Winter Garden, FL)	20
Total Establishments in Orange County				247
Okeechobee	Osceola	34972	Zip 34972 (Okeechobee, FL)	1
Osceola		34741	Zip 34741 (Kissimmee, FL)	9
Osceola		34743	Zip 34743 (Kissimmee, FL)	2
Osceola		34744	Zip 34744 (Kissimmee, FL)	2
Osceola		34746	Zip 34746 (Kissimmee, FL)	1
Osceola		34747	Zip 34747 (Kissimmee, FL)	3
Osceola		34758	Zip 34758 (Kissimmee, FL)	1
Osceola		34769	Zip 34769 (Saint Cloud, FL)	2
Osceola		34771	Zip 34771 (Saint Cloud, FL)	2
Osceola		34772	Zip 34772 (Saint Cloud, FL)	1
Polk	Osceola	33896	Zip 33896 (Davenport, FL)	1
Total Establishments in Osceola County				27
Seminole		32701	Zip 32701 (Altamonte Springs, FL)	3
Seminole		32707	Zip 32707 (Casselberry, FL)	6
Seminole		32708	Zip 32708 (Winter Springs, FL)	7
Seminole		32714	Zip 32714 (Altamonte Springs, FL)	13
Seminole		32746	Zip 32746 (Lake Mary, FL)	14
Seminole		32750	Zip 32750 (Longwood, FL)	15
Seminole		32765	Zip 32765 (Oviedo, FL)	14
Seminole		32766	Zip 32766 (Oviedo, FL)	2
Seminole		32771	Zip 32771 (Sanford, FL)	5
Seminole		32779	Zip 32779 (Longwood, FL)	6
Total Establishments in Seminole County				85

*Note that some zip codes cross county lines

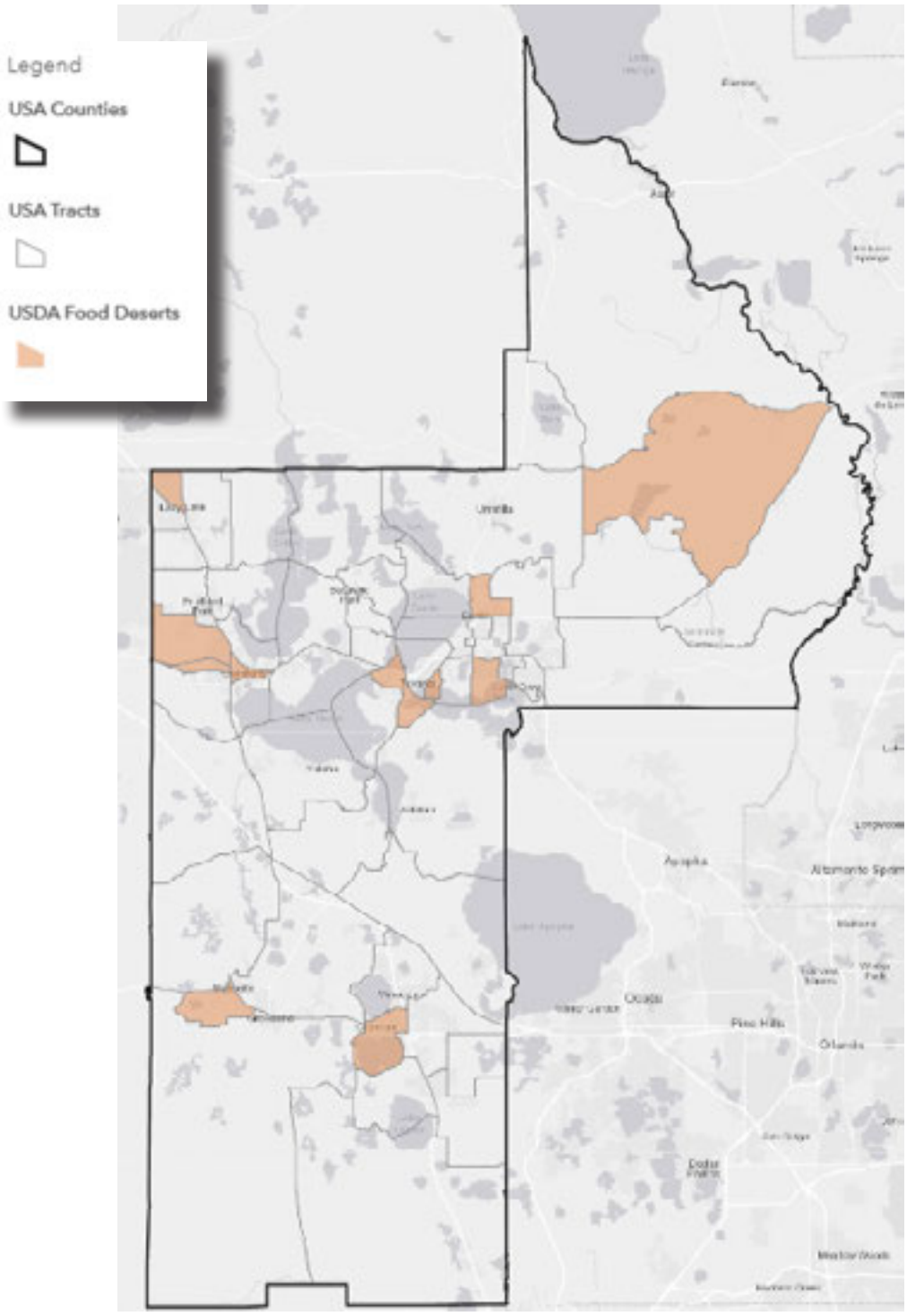
Data Source: US Census Bureau, County Business Patterns. Source Geography: ZCTA

FIGURE 7.22: PERCENTAGE OF THE POPULATION WITH ACCESS TO EXERCISE (2018)



Source: County Health Rankings and Roadmaps

FIGURE 7.23: LAKE COUNTY FOOD DESERTS (2014)



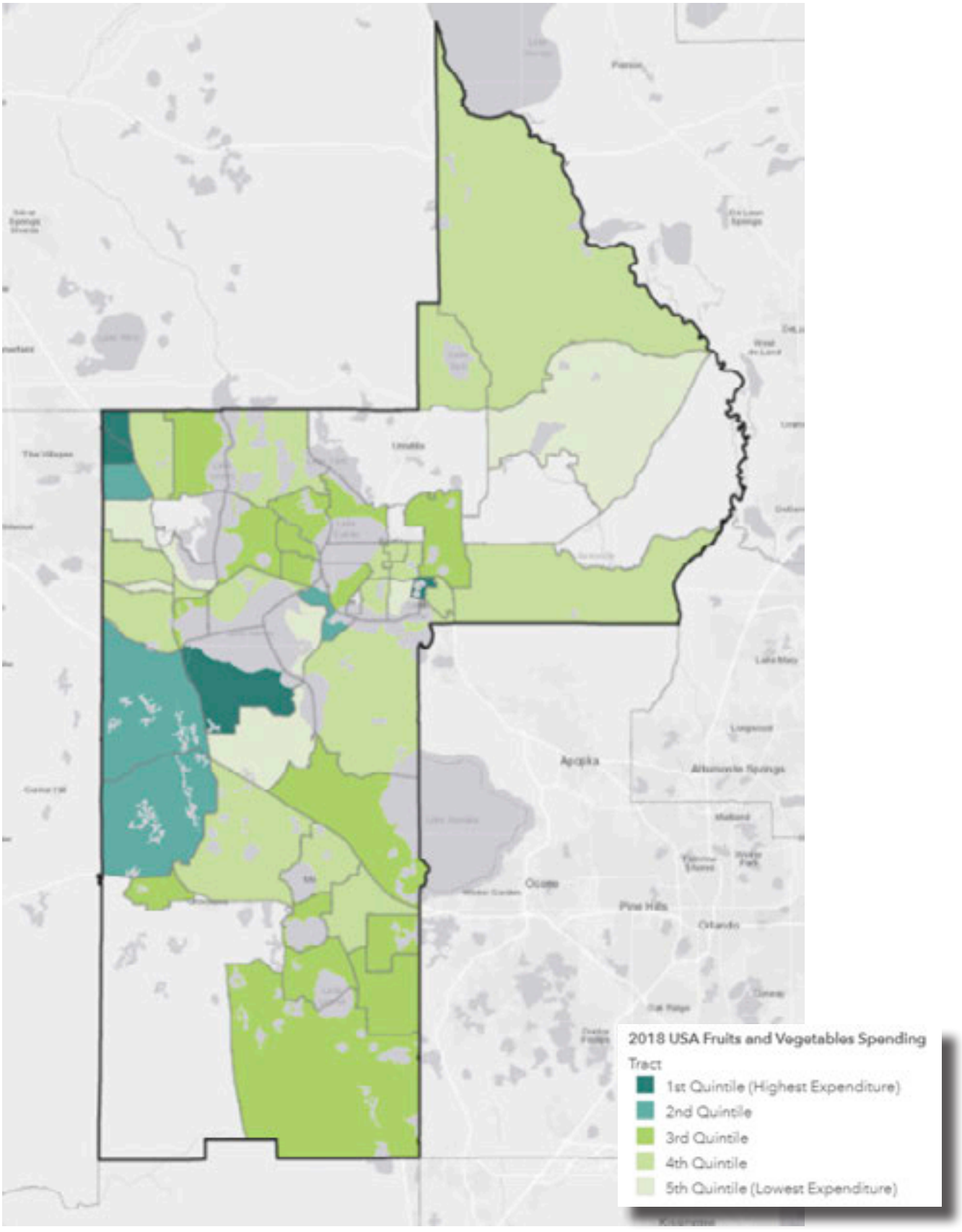
Source: US Census Bureau, FARA

TABLE 7.6: MODIFIED RETAIL FOOD ENVIRONMENT INDEX (2015)

	Lake		Orange		Osceola		Seminole	
Zero	3	20.0 %	19	12.3%	2	10.0%	7	10.8%
Under 10	2	13.3%	68	44.2%	4	20.0%	26	40.0%
10	0	0.0%	8	5.2%	0	0.0%	2	3.1%
Above 10	10	66.7%	59	38.3%	14	70.0%	30	46.2%
Total	15		154		20		65	

Source: Centers for Disease Control

FIGURE 7.24: FRUIT AND VEGETABLE EXPENDITURES, LAKE COUNTY (2016)



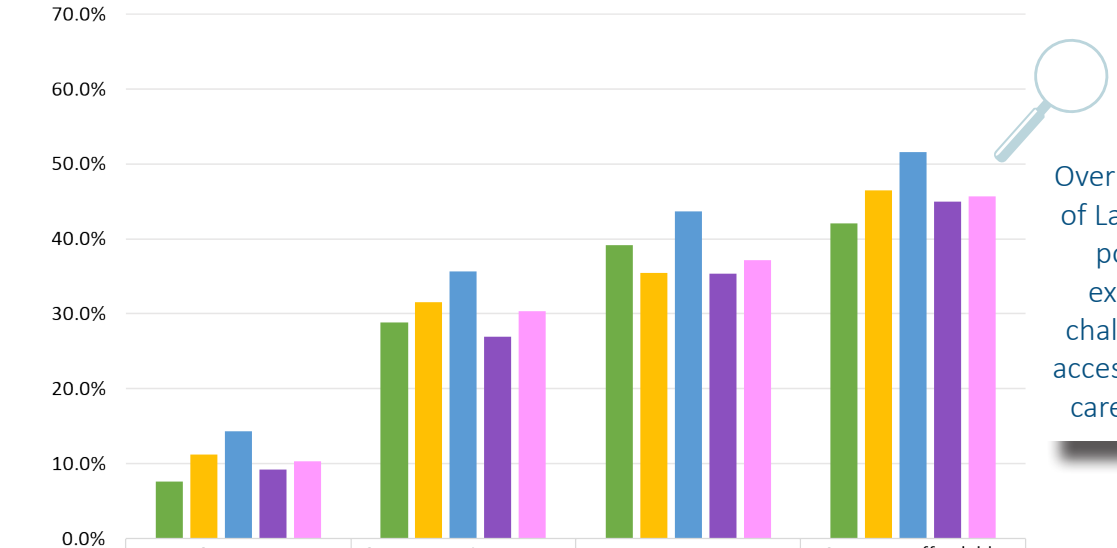
Source: United States Department of Agriculture, Economic Research Service

Healthcare Access: What the Community is Saying

Figure 7.25 illustrates the experience of community survey respondents related to barriers to access. Residents of Lake County were less likely than respondents from the four-county region overall to have experienced difficulty with transportation related to access to health care.

Almost half of respondents (42.1 percent) indicated that they have experienced challenges with access to affordable health care and over one in three have experienced difficulty in finding a specialist.

FIGURE 7.25: BARRIERS TO ACCESS, COMMUNITY SURVEY 2019



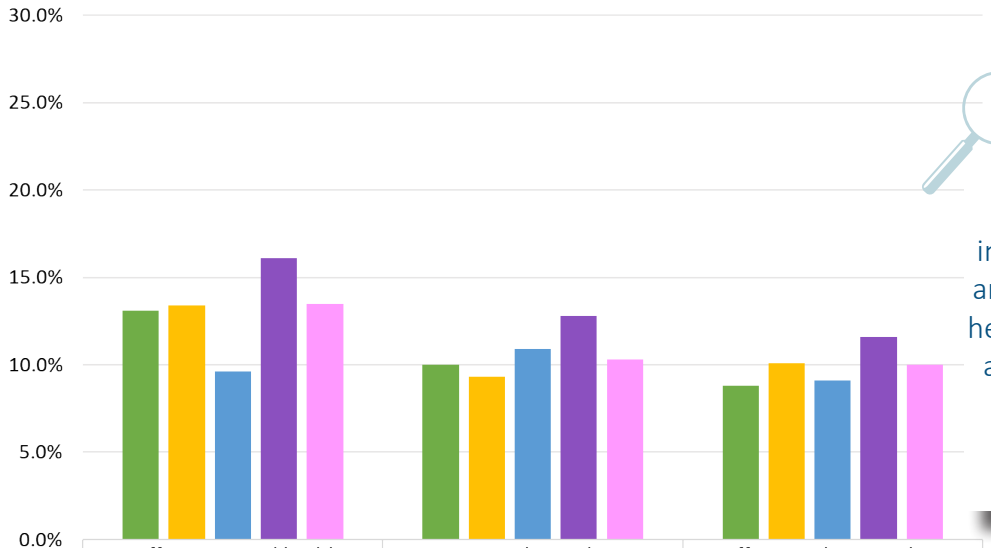
	Access to transportation	Access to primary care providers	Access to specialists	Access to affordable health care
LAKE	7.6%	28.8%	39.2%	42.1%
ORANGE	11.2%	31.6%	35.5%	46.5%
OSCEOLA	14.3%	35.7%	43.7%	51.6%
SEMINOLE	9.2%	26.9%	35.4%	45.0%
OVERALL	10.3%	30.4%	37.2%	45.7%

Over one quarter of Lake County's population experiences challenges with access to primary care providers.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Figure 7.26 illustrates the percentages of community survey respondents who indicated that the community does not have sufficient access to mental health services.

FIGURE 7.26: MENTAL HEALTH CARE ACCESS, COMMUNITY SURVEY 2019



	Sufficient mental health services	Community knows how to access mental health services	Sufficient substance abuse services
LAKE	13.1%	10.0%	8.8%
ORANGE	13.4%	9.3%	10.1%
OSCEOLA	9.6%	10.9%	9.1%
SEMINOLE	16.1%	12.8%	11.6%
OVERALL	13.5%	10.3%	10.0%

One in 10 respondents indicated that there are sufficient mental health and substance abuse services and the community knows how to access them.

Source: Central Florida Community Collaborative Community Survey, Strategy Solutions, Inc.

Participants in the primary research identified the following as needs and issues related to healthcare access:
Some people misuse emergency services

- High cost of insurance
- Costs related to services and medications are too high
- Lack of routine medical care
- Lack of knowledge of available services

Barriers to accessing health care identified by primary research participants included:

- Navigation of services
- Lack of dental providers
- Lack of insurance and cost
- Lack of understanding of the importance of preventative care
- Lack of support systems/support from family
- Difficulty with Medicare/Medicaid navigation
- Transportation
- Fear among immigrants to access services
- Fear of hearing what the doctor will say

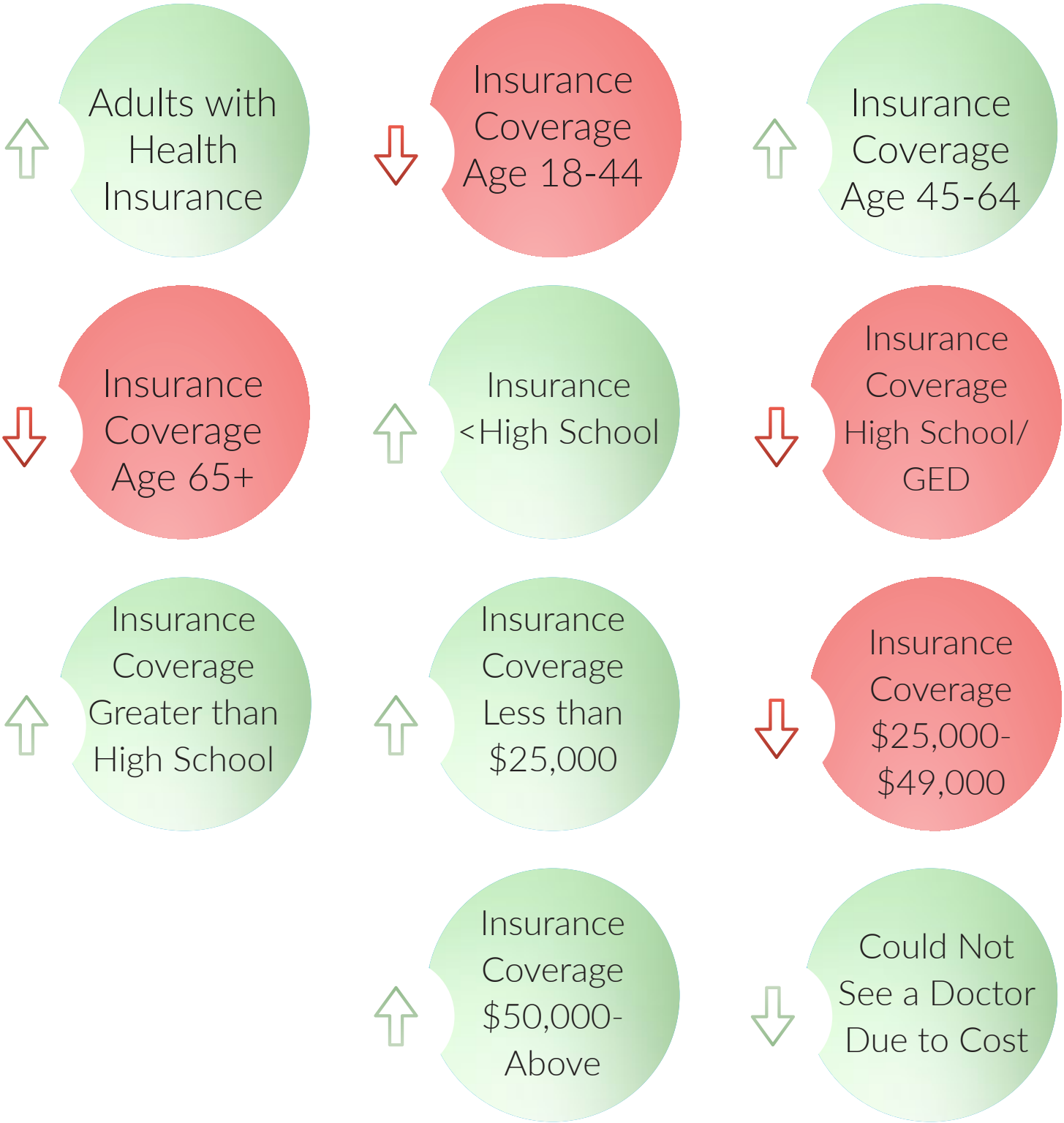
Needed services identified by primary research participants included:

- Education on the community services
- Better resource and referral connections
- More health fairs and outreach in rural areas
- More primary care providers
- More services for immigrants (especially those who undocumented), seniors, those with disabilities, and the LGBTQ population
- Affordable dental and eye care

Healthcare Access at a Glance

The key indicators related to healthcare access that have changed since the last CHNA are identified in Figure 7.27. Red means that the indicator has worsened and green means that rates have improved since the most recent CHNA that data is available.

FIGURE 7.27 HEALTHCARE ACCESS INDICATORS



Source: Strategy Solutions, Inc.

Healthcare Access: Summary of Indicators

The following includes both a narrative as well as a visual (chart or table) summary of indicators reported on in this section. While the colored icons illustrate, located on the previous page, observed trends from the data reported in the 2016 CHNA, this section is designed to highlight relevant information on each indicator and provide a narrative interpretation of the data included in the charts/tables that follow.

ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE (2007-2016)

The percentage of adults with any type of health care insurance coverage in Lake County and the state fluctuated between 77 percent and 90 percent between 2007 and 2016. In 2016, the percentage of adults with health insurance in Lake County (83.5 percent) was higher than the state (83.7 percent). (See Chart 7.84)

ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY AGE (2007-2016)

The percentage of adults ages 18-44 in Lake County with any type of health care insurance decreased from 72.6 percent in 2007 to 67.5 percent in 2016. The percentage with insurance coverage in the state for this age group increased during this time from 72.4 percent to 74.5 percent.

In 2016, the percentage of adults age 45-64 that had health insurance in Lake County (83.4 percent) was higher than adults age 18-44 (67.5 percent) and lower than those age 65 and older (97.3 percent). The percentage for adults age 45-64 at the state level had a slight increase, from 82.7 (2007) percent to 84.3 percent (2016).

The percentage of adults age 65 and older with insurance in Lake County (97.3 in 2007 and 2016) is consistently higher than other age groups and similar to the state (97.3 to 98.1) for this same age range. (See Charts 7.85- 7.87)

ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY EDUCATION (2007-2016)

Adults with less than a high school education are less likely to have health insurance. Between 2007 and 2016, the percentage with insurance coverage increased in Lake County from 52 percent to 63.4 percent, while the state increased from 60.8 to 64.7.

Those with a high school/GED education have higher percentages of health insurance coverage than those without a high school education. The percentage in Lake County decreased from 79.9 percent in 2007 to 77.6 percent in 2016, lower than the state (80.6 percent).

Those with education beyond high school in both Lake County and the state had higher percentages of having health insurance compared to those with lower levels of education. The percentage has decreased slightly in Lake County from 2007 (91.5 percent) to 2016 (89.2 percent). The percentage increased in the state during this time (88.3 percent to 89.9 percent). (See Charts 7.88-7.90)

ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY ANNUAL INCOME (2007-2016)

Residents with annual incomes under $25K in both Lake County and the state were less likely to have insurance coverage than any other income group with the percentage covered increasing as income increases. Those that have annual incomes of $50K and over have the highest percentage with insurance of all income groups. In Lake County the percentage of adults with incomes less than $25K with insurance coverage decreased slightly between 2007 (75.5 percent) and 2016 (74.3 percent). The state increased during this time (64.5 percent to 71 percent). The percentage of adults with incomes between $25K-$49K also decreased in Lake County and increased in the state between 2007 and 2016. The county decreased from 82.5 percent to 77.6 percent while the state increased (79 percent to 84.2 percent). The percentage with insurance coverage for those with incomes of $50K or greater increased in both the county (92 percent to 97.1 percent) and state (93.2 percent to 94.4 percent) between 2007 and 2016. (See Charts 7.91-7.93)

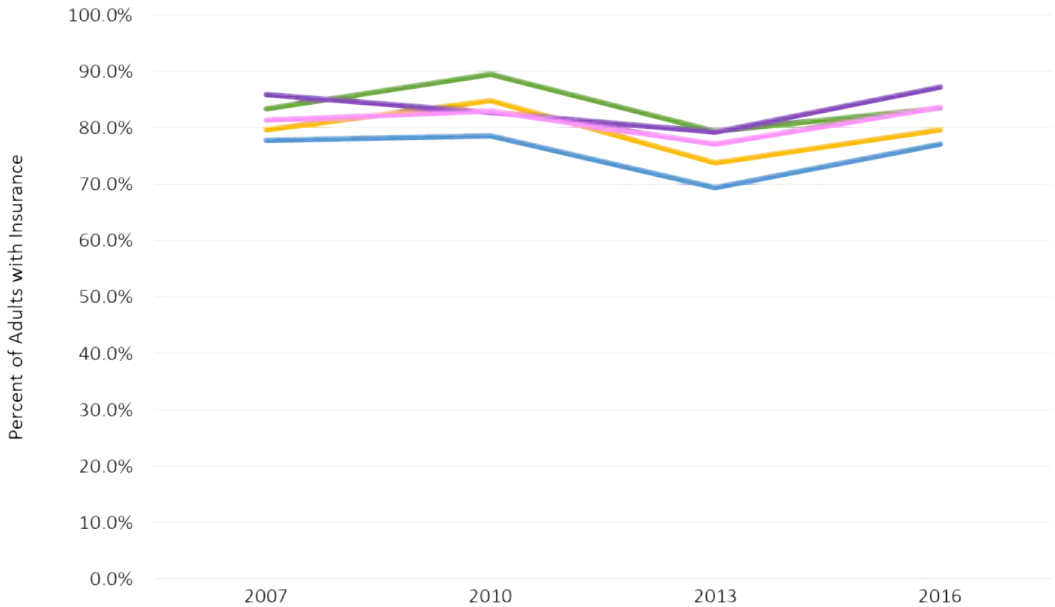
ADULTS WHO COULD NOT SEE A DOCTOR IN THE PAST YEAR DUE TO COST (2007-2016)

The percentage of adults in Lake County and the state that could not see a doctor due to cost in the past year has increased from 2007 and 2016. In Lake County there was an increase from 13.6 percent to 17.1 percent and in the state from 15.1 percent to 16.6 percent. (See Chart 7.94)

ADULTS WHO COULD NOT SEE A DOCTOR IN THE PAST YEAR DUE TO COST, BY ANNUAL INCOME (2016)

In 2016, those with annual incomes under $25K were more likely to indicate that they were not able to see a doctor in the past year due to cost than those with higher incomes. This trend—that those with lower incomes are more likely not to see the doctor due to cost—is similar in both Lake County and the state. In Lake County 32.7 percent of those with incomes less than $25K could not see a doctor due to cost compared to 8.5 percent of those with incomes $50K or greater. (See Chart 7.95)

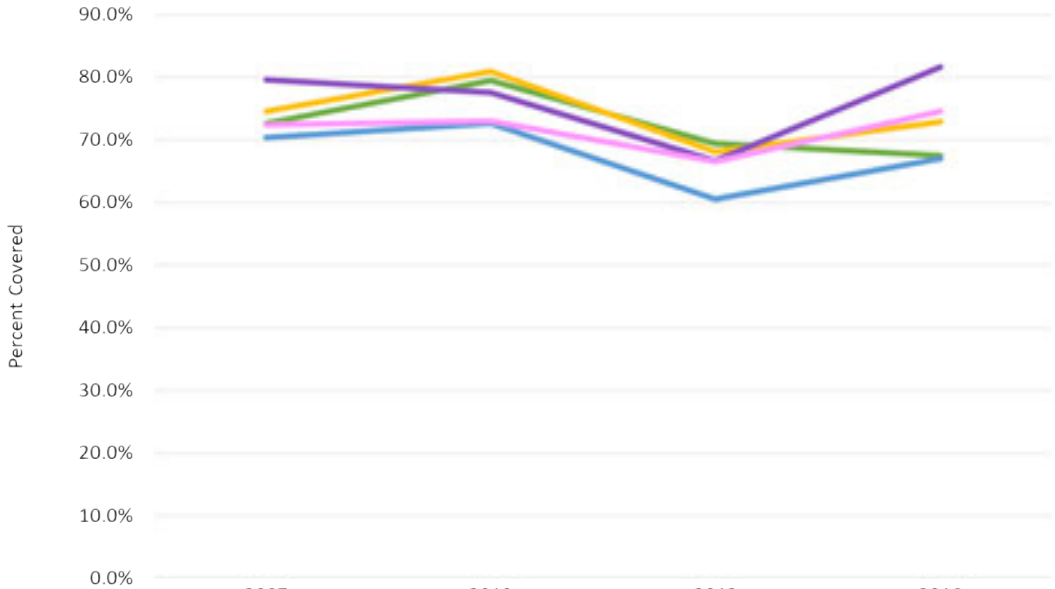
CHART 7.84: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE (2007-2016)



	2007	2010	2013	2016
LAKE	83.4%	89.5%	79.4%	83.5%
ORANGE	79.7%	84.8%	73.8%	79.7%
OSCEOLA	77.8%	78.6%	69.4%	77.1%
SEMINOLE	85.9%	82.7%	79.2%	87.2%
FLORIDA	81.4%	83.0%	77.1%	83.7%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

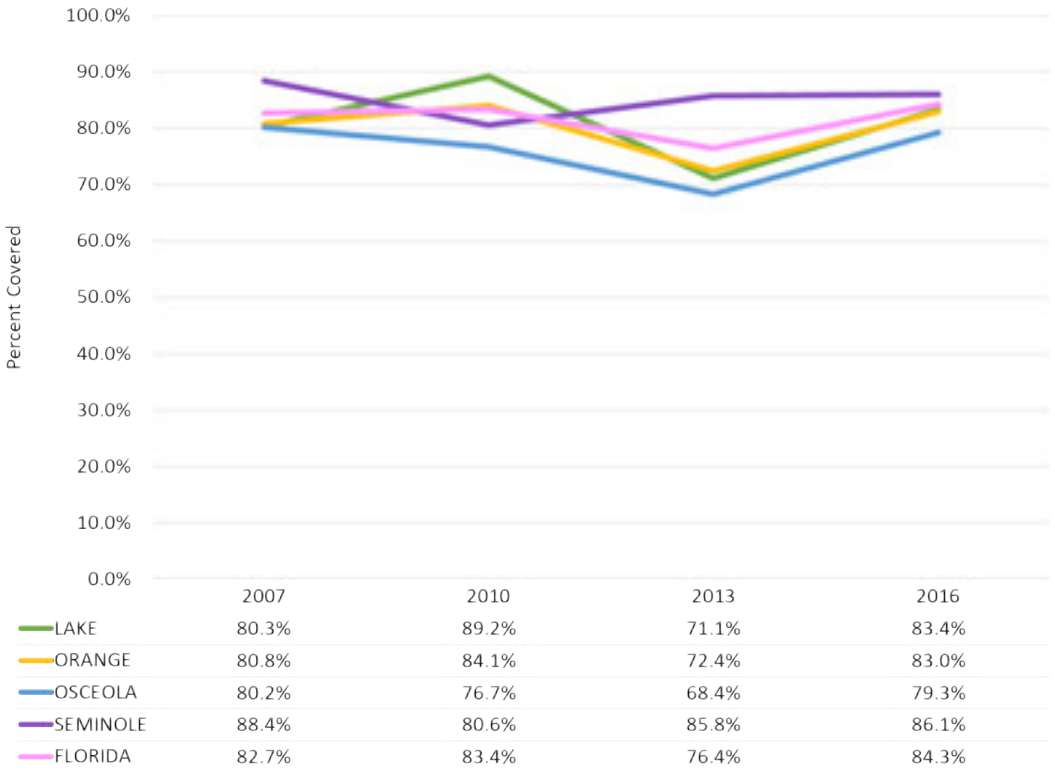
CHART 7.85: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY AGE, 18-44 (2007-2016)



	2007	2010	2013	2016
LAKE	72.6%	79.5%	69.4%	67.5%
ORANGE	74.5%	80.9%	68.1%	72.9%
OSCEOLA	70.4%	72.7%	60.6%	67.0%
SEMINOLE	79.6%	77.5%	66.6%	81.6%
FLORIDA	72.4%	73.0%	66.5%	74.5%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

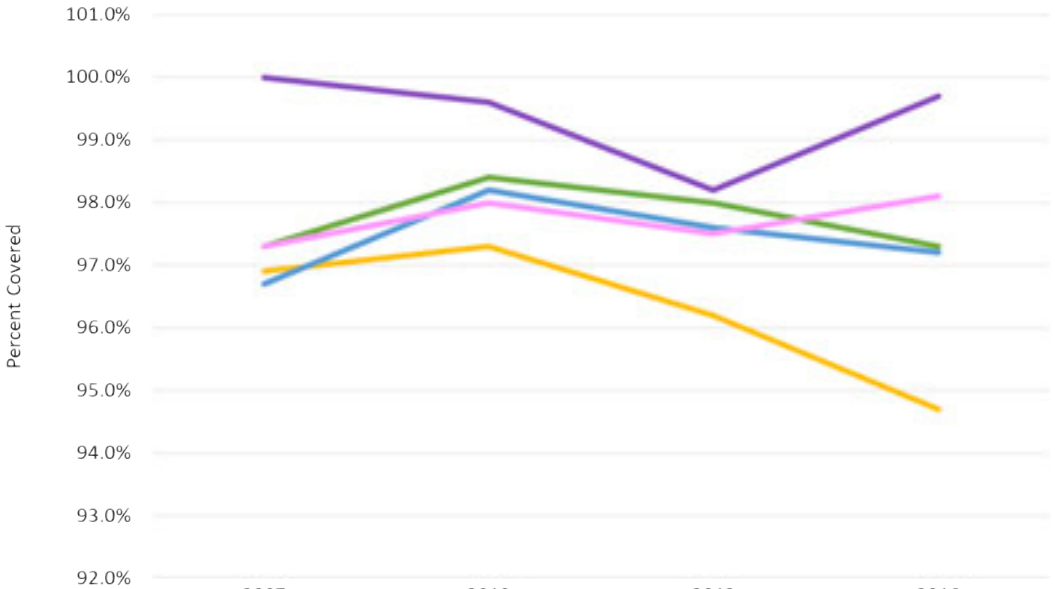
CHART 7.86: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY AGE, 45-64 (2007-2016)



	2007	2010	2013	2016
LAKE	80.3%	89.2%	71.1%	83.4%
ORANGE	80.8%	84.1%	72.4%	83.0%
OSCEOLA	80.2%	76.7%	68.4%	79.3%
SEMINOLE	88.4%	80.6%	85.8%	86.1%
FLORIDA	82.7%	83.4%	76.4%	84.3%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

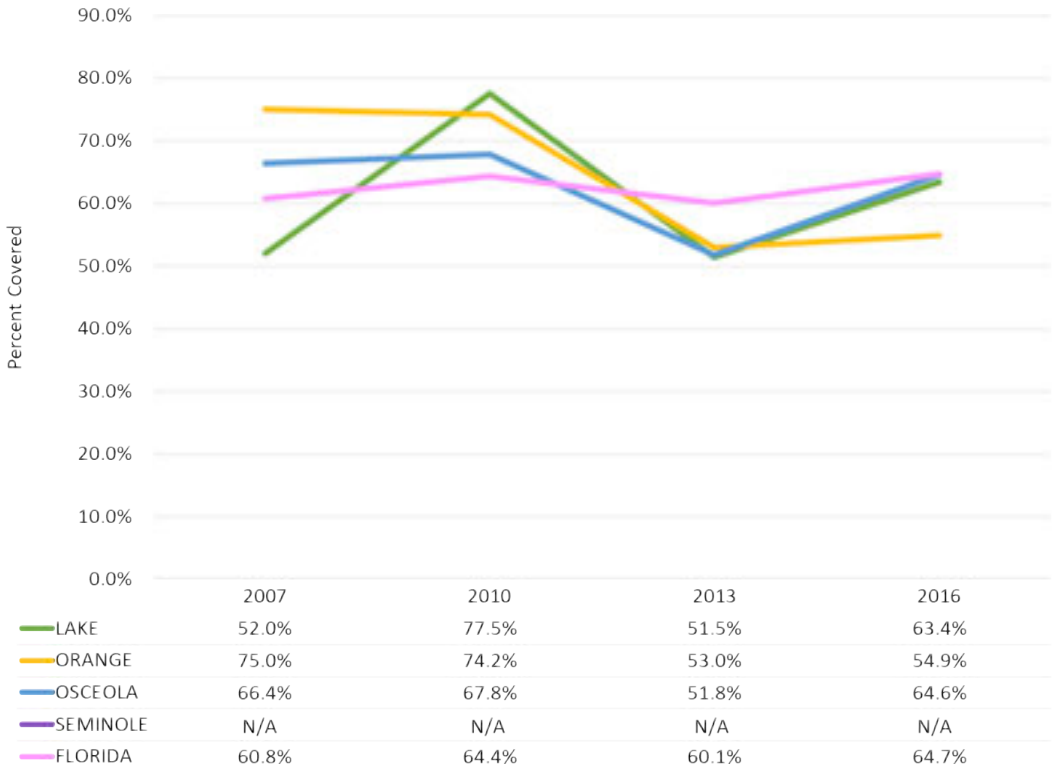
CHART 7.87: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY AGE, 65 & OLDER (2007-2016)



	2007	2010	2013	2016
LAKE	97.3%	98.4%	98.0%	97.3%
ORANGE	96.9%	97.3%	96.2%	94.7%
OSCEOLA	96.7%	98.2%	97.6%	97.2%
SEMINOLE	100.0%	99.6%	98.2%	99.7%
FLORIDA	97.3%	98.0%	97.5%	98.1%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

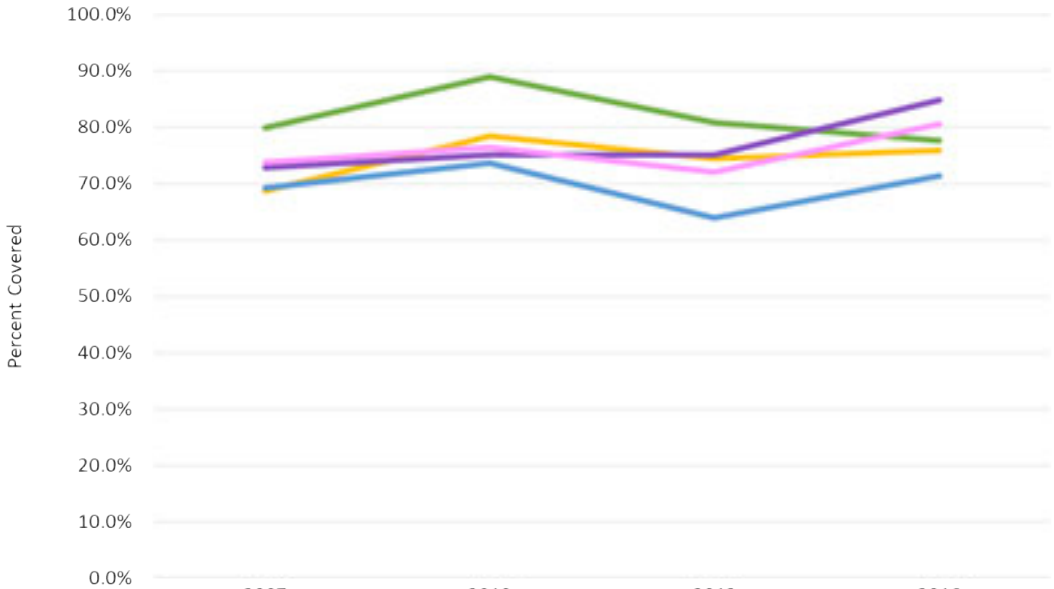
CHART 7.88: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY EDUCATION < HIGH SCHOOL (2007-2016)



	2007	2010	2013	2016
LAKE	52.0%	77.5%	51.5%	63.4%
ORANGE	75.0%	74.2%	53.0%	54.9%
OSCEOLA	66.4%	67.8%	51.8%	64.6%
SEMINOLE	N/A	N/A	N/A	N/A
FLORIDA	60.8%	64.4%	60.1%	64.7%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

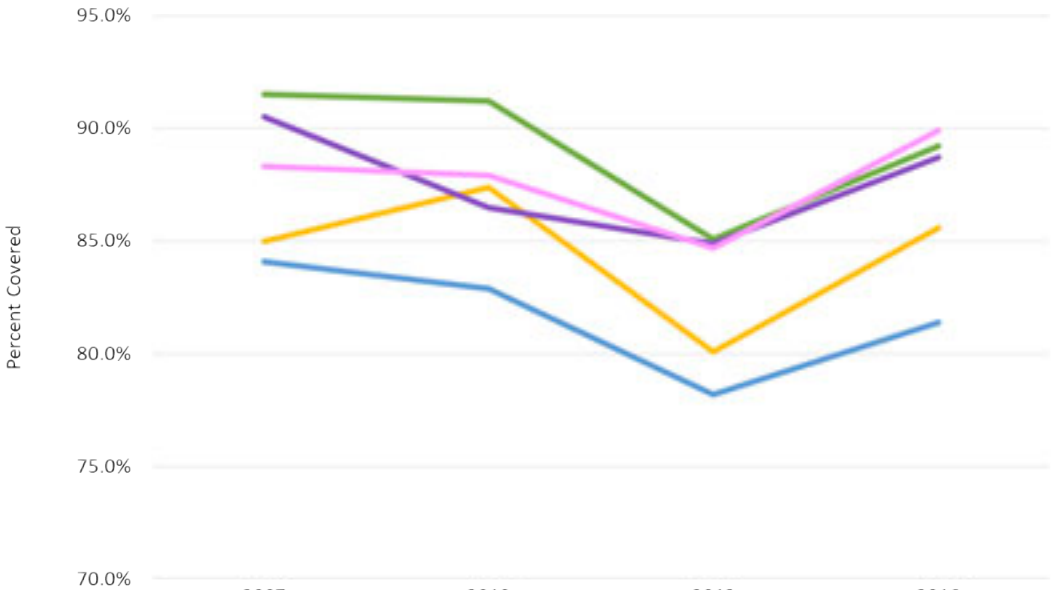
CHART 7.89: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY EDUCATION-HIGH SCHOOL/ GED (2007-2016)



	2007	2010	2013	2016
LAKE	79.9%	89.0%	80.9%	77.6%
ORANGE	68.8%	78.4%	74.4%	75.9%
OSCEOLA	69.3%	73.7%	63.9%	71.4%
SEMINOLE	72.9%	75.1%	75.1%	84.9%
FLORIDA	73.8%	76.5%	72.1%	80.6%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

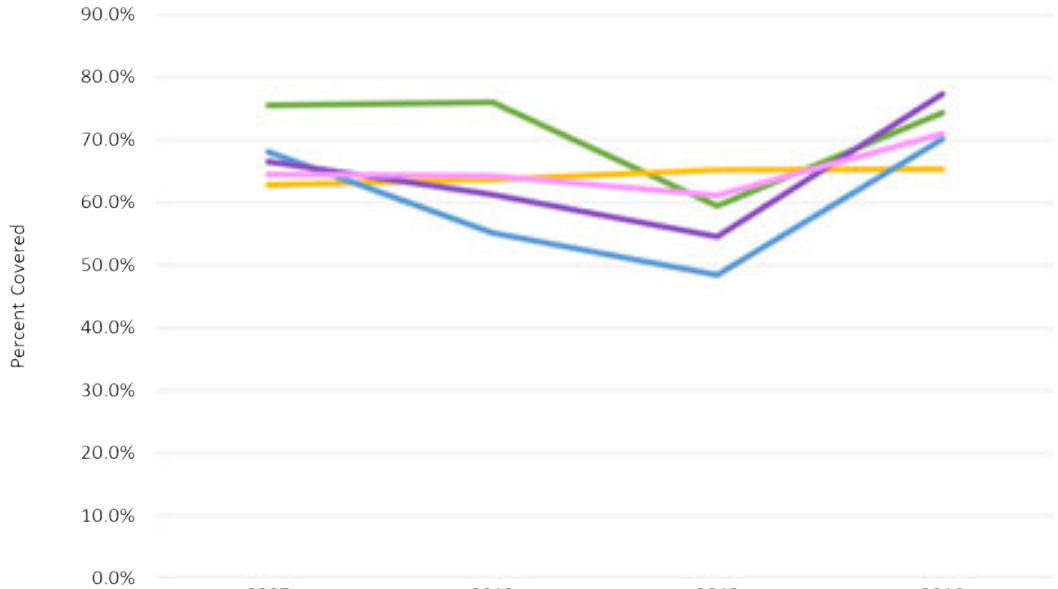
CHART 7.90: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY EDUCATION > HIGH SCHOOL (2007-2016)



	2007	2010	2013	2016
LAKE	91.5%	91.2%	85.1%	89.2%
ORANGE	85.0%	87.4%	80.1%	85.6%
OSCEOLA	84.1%	82.9%	78.2%	81.4%
SEMINOLE	90.5%	86.5%	84.9%	88.7%
FLORIDA	88.3%	87.9%	84.7%	89.9%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

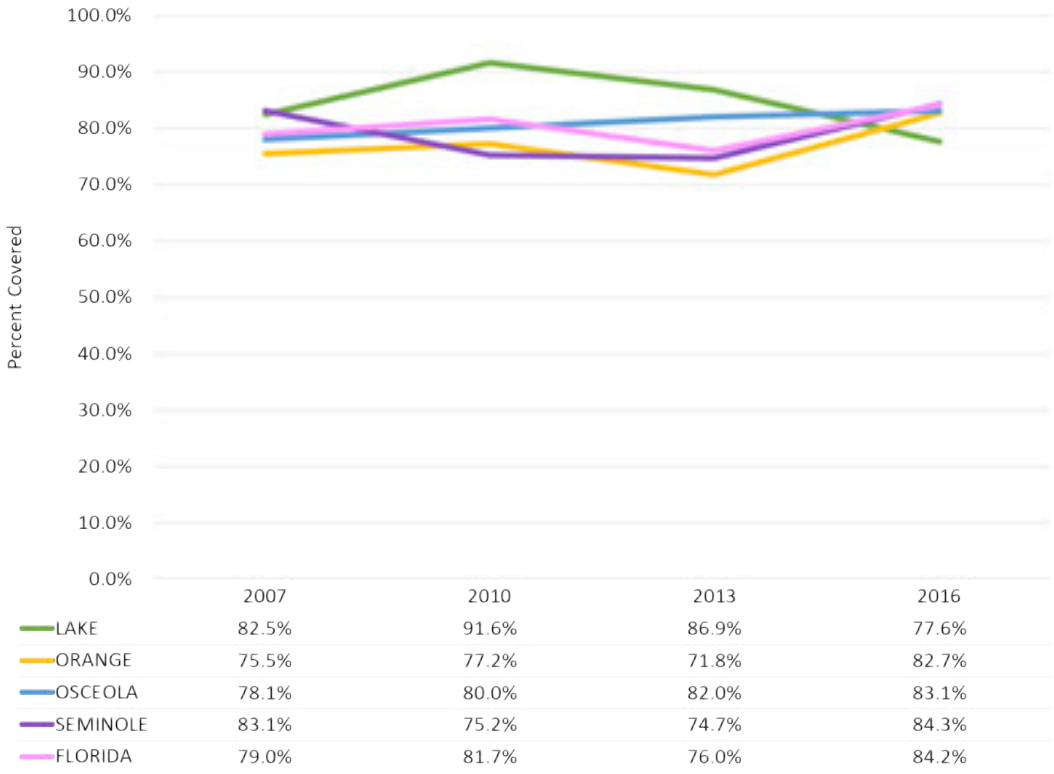
CHART 7.91: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY ANNUAL INCOME <$25K (2007-2016)



	2007	2010	2013	2016
LAKE	75.5%	76.0%	59.5%	74.3%
ORANGE	62.8%	63.6%	65.2%	65.3%
OSCEOLA	68.1%	55.1%	48.5%	70.1%
SEMINOLE	66.5%	61.3%	54.5%	77.3%
FLORIDA	64.5%	64.2%	61.2%	71.0%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

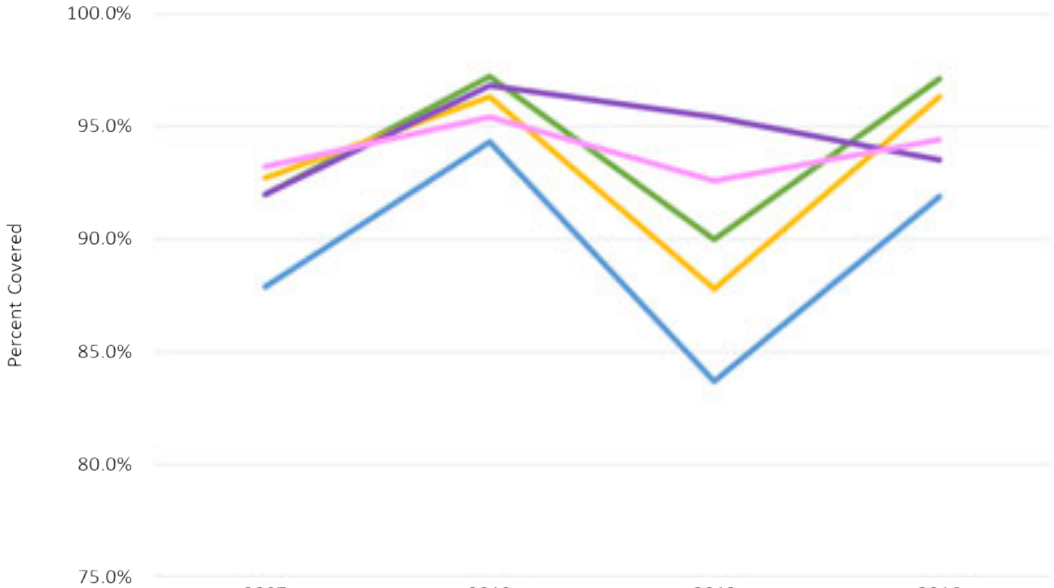
CHART 7.92: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY ANNUAL INCOME $25K-$49K (2007-2016)



	2007	2010	2013	2016
LAKE	82.5%	91.6%	86.9%	77.6%
ORANGE	75.5%	77.2%	71.8%	82.7%
OSCEOLA	78.1%	80.0%	82.0%	83.1%
SEMINOLE	83.1%	75.2%	74.7%	84.3%
FLORIDA	79.0%	81.7%	76.0%	84.2%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

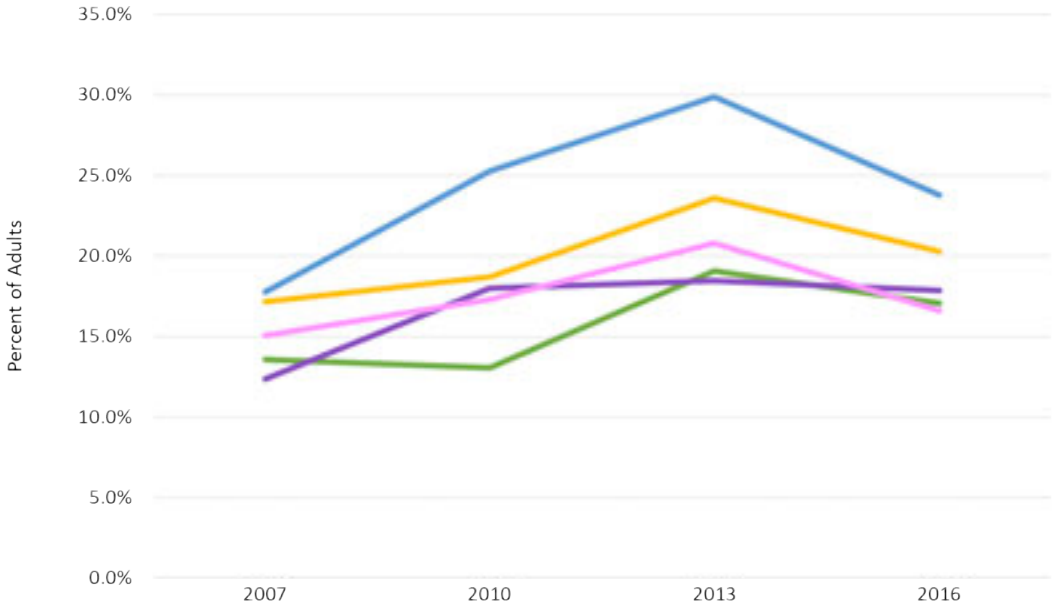
CHART 7.93: ADULTS WITH ANY TYPE OF HEALTH CARE INSURANCE COVERAGE, BY ANNUAL INCOME $50K+ (2007-2016)



	2007	2010	2013	2016
LAKE	92.0%	97.2%	90.0%	97.1%
ORANGE	92.7%	96.3%	87.8%	96.3%
OSCEOLA	87.9%	94.3%	83.7%	91.9%
SEMINOLE	92.0%	96.8%	95.4%	93.5%
FLORIDA	93.2%	95.4%	92.6%	94.4%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

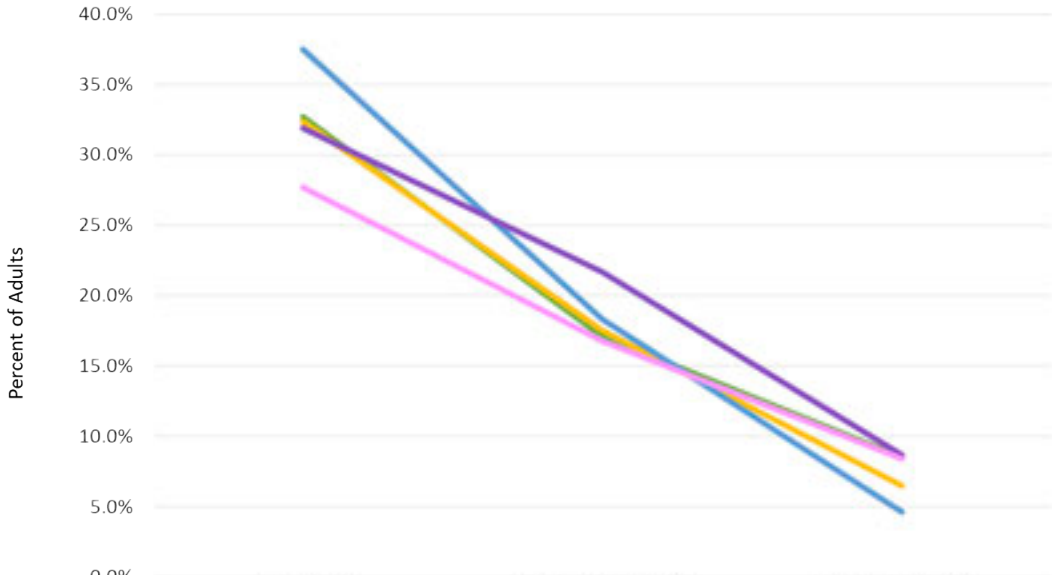
CHART 7.94: ADULTS WHO COULD NOT SEE A DOCTOR IN THE PAST YEAR DUE TO COST (2007-2016)



	2007	2010	2013	2016
LAKE	13.6%	13.1%	19.1%	17.1%
ORANGE	17.2%	18.7%	23.6%	20.3%
OSCEOLA	17.8%	25.3%	29.9%	23.8%
SEMINOLE	12.4%	18.0%	18.5%	17.9%
FLORIDA	15.1%	17.3%	20.8%	16.6%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

CHART 7.95: ADULTS WHO COULD NOT SEE DOCTOR IN PAST YEAR DUE TO COST, BY ANNUAL INCOME (2016)



	<$25,000	$25,000 - $49,999	$50,000 or More
LAKE	32.7%	17.1%	8.5%
ORANGE	32.4%	17.5%	6.5%
OSCEOLA	37.5%	18.3%	4.6%
SEMINOLE	31.9%	21.7%	8.7%
FLORIDA	27.7%	16.8%	8.4%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

Healthcare Providers and Facilities

LICENSED HOSPITALS

There are 32 hospitals in the four-county region, 17 of which are not-for-profit and belong to one of the three health systems that are members of the Collaborative: AdventHealth, Aspire Health Partners and Orlando Health. These 17 hospitals contain a total of 5,448 beds, 4,830 of which are acute care beds. The Collaborative member hospitals provide a wide variety of services including acute care, neonatal intensive care, rehabilitation, psychiatric, substance use and Level One Trauma.

Outside of the Collaborative membership, there are five for-profit acute care hospitals in the region, one not-for-profit acute care hospital and a nonprofit children's acute care hospital. There are also four for-profit and two not-for-profit behavioral health hospitals. Additionally, there are two for-profit long-term care hospitals with 99 beds as well as one for-profit rehabilitation hospital with 60 beds. (See Table 7.7)

ADVENTHEALTH

AdventHealth operates nearly 50 hospitals and hundreds of care centers in nearly a dozen states, making it one of the largest faith-based health-care systems in the United States. Eight AdventHealth hospital facilities participated in this assessment, including AdventHealth Orlando, a major tertiary referral hospital for Central Florida and much of the southeast, the Caribbean and South America. These eight facilities have service areas encompassing parts of each county in the Central Florida region with a total of 2,953 beds, including acute care, pediatric care, organ transplant, NICU levels II and III, comprehensive rehabilitation, adult psychiatric care and much more. While these AdventHealth facilities are located in Lake, Orange, Osceola and Seminole counties, their primary service areas extend into Brevard, Polk and Volusia counties. Below is a description of the services provided at AdventHealth Orlando and each of AdventHealth's hospital campuses included in this assessment.

AdventHealth Altamonte Springs

AdventHealth Altamonte Springs, a 393-bed acute-care community hospital in Seminole County, was established in 1973 as AdventHealth Orlando's first satellite campus and continues to be the leading health care provider in Seminole County.

Hospital services include: 24-hour emergency department, audiology, The Baby Place℠, The Breast Imaging Center of Excellence, breast surgery, AdventHealth Cancer Institute, cancer care, AdventHealth Cardiovascular Institute, cardiology, Center for Spine Health, critical care, diabetes, diagnostic imaging (including CT, MRI, ultrasound, nuclear cardiology), digestive health, Eden Spa (image recovery services for oncology patients), general surgery, gynecology, Heartburn and Acid Reflux Center, infusion services, interventional cardiology, interventional radiology, minimally invasive and robotic surgery, obstetrics, orthopedics, pain medicine, radiation therapy, rehabilitation and sports medicine, respiratory care and women's services.

AdventHealth Apopka

AdventHealth Apopka is a 120-bed acute-care community hospital in Orange County. AdventHealth Apopka has offered a wide range of health care services since its inception in 1975.

Hospital services include: 24-hour emergency department, cardiology, cath lab, chapel and meditation garden, critical care, CT, diagnostic imaging, DEXA, endoscopy, general surgery, laboratory services, mammography, medical care, MRI, nuclear cardiology, outpatient services, outpatient surgery, pediatric-friendly rooms, pulmonary services, radiology, rehabilitation and sports medicine, respiratory care, sleep medicine, ultrasound and urology services.

AdventHealth Celebration

AdventHealth Celebration, a 237-bed acute-care community hospital located in Osceola County opened in 1997. It is a is a leader in innovation and offers cutting edge services in digestive health, cancer, robotic surgery, neonatology, neuroscience, women's and men's health and imaging diagnostics.

Additional hospital services include: 24-hour emergency department, 24-hour critical care coverage, level II neonatal intensive care unit, global robotics institute, Center for Advanced Diagnostics with Seaside Imaging, women's center, women's imaging, head and neck surgery program, comprehensive breast health center,

primary stroke center designation, level I cardiovascular services designation, fitness center, sports medicine center, joint replacement center, spine center, Nicholson Center For Surgical Advancement, bariatric (weight loss) surgery, obesity medicine, endocrinology, reproductive endocrinology, neurosurgery, neurotology, diagnostic and interventional cardiology, transition clinic, health assessments, occupational medicine, oral surgery, primary care, behavioral health, cardiology, obstetrics/ gynecology, gynecologic oncology, general surgery, thoracic surgery, ENT, neurology, oncology, gastroenterology, advanced gastroenterology (ERCP and EUS), ophthalmology, podiatry, orthopedics, pain medicine, plastic surgery, spine surgery, vascular surgery, robotic surgery, urology, urologic oncology, sleep disorders, diabetes, respiratory, diagnostic imaging, laboratory, observation medicine, nutrition, outpatient surgery, retail pharmacy, inpatient and outpatient rehabilitation, spiritual care, education center, centralized and integrated scheduling, patient tracking, wireless networks, document imaging and telemedicine.

AdventHealth East Orlando

AdventHealth East Orlando, a 295-bed acute-care community hospital located in east Orange County, became part of the AdventHealth system in 1990. It includes residency programs in family medicine, podiatry and emergency medicine, as well as a dedicated Children's Emergency Center and a hospital-based Center for Medical Simulation and Education.

Additional hospital services include: 24-hour emergency department with a dedicated pediatric unit, audiology, AdventHealth Cancer Institute, cardiology, chest pain observation unit, critical care, diabetes, digestive health, endoscopy, home health, medical imaging, oncology unit, orthopedics, outpatient services, pain medicine, pediatric/adolescent and adult rehabilitation, primary stroke center, radiation therapy, seizure monitoring, sleep disorders center, surgery center and women's health pavilion.

AdventHealth Kissimmee

AdventHealth Kissimmee, a 162-bed acute-care community hospital located in north Osceola County, became part of the AdventHealth system in 1993.

Additional hospital services include: 24-hour emergency department, 24-hour critical care coverage, DNV-accredited primary stroke center, dedicated outpatient endoscopy center, comprehensive health care services: cancer treatment including radiation therapy and chemotherapy, cardiac diagnostics (including diagnostic catheterizations), cardiology, diabetes, gastroenterology, inpatient and outpatient rehabilitation, minimally invasive surgery, neurology, interventional radiology, imaging (digital mammography, MRI, CT, PET, nuclear medicine, ultrasound, 4-D ultrasound, diagnostic x-ray), inpatient and outpatient surgery services including breast surgery, colorectal surgery, gastrointestinal surgery, general surgery, gynecologic surgery, hand surgery, ENT surgery and ophthalmology, oral surgery, orthopedics (sports med/joint), podiatry, urology and pulmonology.

AdventHealth Orlando

AdventHealth Orlando, a 1,366-bed acute-care medical center that serves as AdventHealth's main campus in Central Florida, was founded in 1908. It is one of the largest and most comprehensive medical centers in the Southeast and includes AdventHealth for Children, one of the premier children's health systems in the nation.

Hospital services include: 24-hour emergency department, advanced diagnostic imaging center (CT, MRI, PET, meg), audiology, brain surgery, cardiovascular institute, behavioral health, critical care, diabetes institute, digestive health, family practice residency, AdventHealth for Children, cancer institute, center for interventional endoscopy, epilepsy, fracture care center, Gamma Knife® center, general medical/surgical, gynecology, high-risk perinatal care/fetal diagnostic center, home care, hyperbaric medicine and wound care, interventional neuroradiology, kidney stone center, level III neonatal intensive care, maternal fetal Medicare, neuroscience institute, nutritional counseling, obstetrics, occupational health, open heart surgery, organ transplantation (bone marrow, kidney, liver, pediatric liver, pancreas, heart, lung), orthopedic institute, outpatient services, pain medicine, pediatric hematology/oncology, psychiatry, radiation therapy, radiology, rehabilitation and sports medicine, respiratory care, sleep disorders/diagnosis and treatment, spine surgery, surgical oncology, urology and women's services.

AdventHealth Waterman

AdventHealth Waterman is a 299-bed acute-care community hospital located in Lake County, was established in 1938 and has been the cornerstone of health care excellence in Lake County.

Hospital services include: 24-hour emergency department, advanced heart program, including an accredited chest pain center, open heart and thoracic surgery, comprehensive Cancer Institute certified Joint Replacement Center, Community Primary Health Clinic, critical care services, demonstration kitchen with nutritional counseling, diabetes, most advanced imaging services (3D mammography, CT, MRI, ultrasound, nuclear medicine), digestive health care, fitness center, home care services, inpatient and outpatient rehabilitation services, laboratory services, sports medicine, surgical services including minimally invasive and robotic assisted surgeries, urology, Women and Children's Center, wound and hyperbaric medicine and spiritual care.

AdventHealth Winter Park

AdventHealth Winter Park, a 320-bed acute-care community hospital serving northeastern Orange and southeastern Seminole counties, became part of the AdventHealth system in 2000. The facility began caring for patients in February 1955 when it first opened its doors as Winter Park Memorial Hospital.

Hospital services include: 24-hour emergency department, The Baby Place℠ (comprehensive maternity care), breast care, cancer care, cardiology, critical care, diagnostic imaging, digestive health, ENT services, educational classes and support groups, endoscopy, family medicine residency program, geriatric medicine, gynecology, laboratory, neonatal intensive care (NICU), orthopedics, primary stroke center, rehabilitation & sports medicine, radiation therapy, sleep disorders center and AdventHealth for Women - Winter Park. Inpatient and outpatient surgery services include colorectal surgery, gastrointestinal and general surgery, gynecology, hand surgery, ENT, ophthalmology, oral surgery, orthopedics (sports med/joint), podiatry and urology.

ASPIRE HEALTH PARTNERS

Aspire Health Partners (Aspire) is a community-based, not-for-profit provider of behavioral health services. Aspire provides a full continuum of prevention, intervention and treatment services for children, adolescents and adults with, or at-risk of developing: mental health, substance use and co-occurring disorders; HIV/AIDS and Hepatitis Spectrum disease; homelessness; and juvenile delinquency. Service components include community and school-based prevention and intervention services; outpatient and residential treatment for mental health, substance use and co-occurring disorders; detoxification and crisis stabilization, inpatient psychiatric care, supportive housing and homeless support. Aspire is the designated public receiving facility for involuntary mental health commitments in Orange and Seminole counties and operates the only Addictions Receiving Facility for involuntary substance use commitments in Central Florida. Aspire operates 90 psychiatric acute care hospital beds, 130 crisis stabilization beds for adults and children, 50 detoxification beds for adults and children, 160 mental health/substance abuse residential treatment beds for adults, 36 substance abuse residential beds for adolescents, 30 juvenile justice residential beds and 271 supportive housing beds.

With a team of over 1,400 professionals, more than 50 program sites, serving five Central Florida counties (Orange, Osceola, Seminole, Lake and Brevard), Aspire is able to provide a comprehensive, cost efficient, seamless continuum of behavioral healthcare. In 2018, Aspire provided direct prevention, intervention, treatment, juvenile justice and HIV/AIDS services to more than 35,000 individuals. Aspire's programs are licensed by the Florida Department of Children and Families (DCF), the Florida Agency for Health Care Administration (AHCA) and are nationally accredited through the Commission on Accreditation of Rehabilitative Facilities (CARF).

ORLANDO HEALTH

The Orlando Health healthcare system is one of Florida's most comprehensive private, not-for-profit healthcare organizations with a community-based network of physician practices, hospitals and outpatient care centers throughout Central Florida. As a statutory teaching hospital system, Orlando Health offers the region's only Level One Trauma Center; the area's first heart program; specialty hospitals dedicated to children, women and babies; a major cancer center; and long-standing community hospitals.

With 2,424 hospital beds, facilities include: Orlando Health Orlando Regional Medical Center (ORMC); Orlando Health UF Health Cancer Center; Orlando Health Arnold Palmer Hospital for Children; Orlando Health Winnie Palmer Hospital for Women & Babies; Orlando Health Dr. P. Phillips Hospital; Orlando Health South Seminole Hospital; Orlando Health – Health Central Hospital; and Orlando Health South Lake Hospital. Areas of expertise include heart and vascular, cancer care, neurosciences, surgery, pediatric orthopedics and sports medicine, neonatology and women's health.

Orlando Health Orlando Regional Medical Center

Orlando Health Orlando Regional Medical Center (ORMC), located in Orlando, is Orlando Health's flagship medical center with 866 acute care and comprehensive rehabilitation beds. Orlando Health ORMC specializes in orthopedics, neurosciences, cardiology, trauma and critical care medicine. Orlando Health ORMC is home to Central Florida's only Level One Trauma Center and burn unit. The hospital offers other specialty centers, including memory disorders, epilepsy and the Orlando Health rehabilitation institute. Orlando Health ORMC also is one of the state's six major teaching hospitals. Orlando Health ORMC's primary service area extends from Orange County into Lake, Seminole and Osceola counties. All jurisdictions in Seminole, except for Geneva, are considered in the primary service area. The cities of Kissimmee and St. Cloud (in Osceola), and Clermont and Minneola (in Lake) are included in the service area.

Orlando Health UF Health Cancer Center

Orlando Health UF Health Cancer Center is a statewide cancer treatment and research program with the University of Florida specializing in cancer detection and treatment. It is home to the Marjorie and Leonard Williams Center for Proton Therapy, Central Florida's first — and only the nation's 23rd proton therapy center. The cancer center's specific services include genetic counseling, integrative medicine, nutrition services, counseling and rehabilitation. Although it serves all of Central Florida, the cancer center's primary service area is the entirety of Orange County.

Orlando Health Arnold Palmer Hospital for Children

Orlando Health Arnold Palmer Hospital for Children is a pediatric teaching hospital and the first facility in Central Florida to provide emergency care for pediatric patients. With 156 beds, Orlando Health Arnold Palmer offers numerous pediatric specialties, including cardiology and cardiac surgery, emergency and trauma care, endocrinology and diabetes, gastroenterology, nephrology, neuroscience, oncology and hematology, orthopedics, rheumatology, pulmonology and sleep medicine. Orlando Health Arnold Palmer has received national recognition for its programs in orthopedics, pulmonology and cardiology and heart surgery. The hospital offers the most comprehensive heart care in Central Florida for infants, children, and teens with heart disease. Orlando Health Arnold Palmer also has the only Level One Pediatric Trauma Center in the region. The primary service area of Orlando Health Arnold Palmer extends throughout the Central Florida region and into Polk County, southern Brevard County and Volusia County (Deltona).

Orlando Health Winnie Palmer Hospital for Women & Babies

Orlando Health Winnie Palmer Hospital for Women & Babies is dedicated to the health of women and babies in the Central Florida region. With 350 beds, the teaching hospital is one of the largest birthing hospitals in the nation. Orlando Health Winnie Palmer's Level III neonatal intensive care unit (NICU) is one of the largest NICUs in the world and has one of the highest survival rates in the country for low birth-weight babies. Specialized programs and services that Orlando Health Winnie Palmer offers to mothers and babies include those for high-risk births, neonatal, obstetrics and gynecology, breastfeeding, childbirth and parenting classes, and surgical and specialized care. The extent of the primary service area of this facility extends to all jurisdictions in Orange, Seminole, except for Geneva, as well as the cities of Kissimmee and St. Cloud (Osceola County) and Clermont and Minneola (Lake County).

Orlando Health Dr. P. Phillips Hospital

Orlando Health Dr. P. Phillips Hospital is a 237-bed, full-service medical and surgical facility that provides emergency services, diagnostic imaging, rehabilitation and surgical services, including vascular, neurosurgery, oncology, orthopedics and the DaVinci robotic surgical system. The hospital also includes cardiovascular care as a fully accredited chest pain center and a designated primary stroke center. Cancer treatments, home healthcare and wound care therapies also are provided at Orlando Health Dr. P. Phillips. The primary service area is the southwestern portion of Orange County, including the municipalities of Windermere, Winter Garden, Oakland, Ocoee, Belle Isle, Orlando and the community areas of Bay Hill, Dr. Phillips, Hunters Creek, Southchase and Bay Lake. The service area also encompasses the communities of Celebration and Poinciana in Osceola County.

Orlando Health South Seminole Hospital

Orlando Health South Seminole Hospital, located in Longwood, is a full-service medical and surgical facility with 206 beds, including an 80-bed psychiatric unit. Services offered through the hospital include endoscopy, women's health, behavioral health, wound care and hyperbaric medicine, and therapies (physical, occupational and speech). The facility is home to one of Orlando Health's three Air Care Team helicopter bases. Orlando Health South Seminole's primary service area covers the majority of Seminole County, including all municipalities except for Geneva, which is located in eastern Seminole County. The service area extends into southwestern Volusia County to include the city of Deltona.

Orlando Health – Health Central Hospital

Orlando Health – Health Central Hospital, located in West Orange County, is a 211-bed, full-service medical and surgical facility that provides emergency services, cardiac care, women's health, neurology, neurosurgery, orthopedic and spine care, endocrinology, oncology, wound care, mammography and general surgery. Orlando Health – Health Central also offers a primary stroke center. The primary service area is western Orange County, including Winter Garden, Ocoee, Windermere, Pine Hills, South Apopka and west Orlando.

Orlando Health South Lake Hospital

Orlando Heath South Lake Hospital, located in Clermont, Florida is a full-service medical and surgical facility with 140 inpatient beds, along with 30 short-term rehabilitation beds. The hospital serves south Lake County and provides a variety of medical services, including diagnostic, imaging, orthopedics, robotic surgery, urology and cardiac care. It is situated on a 180-acre health, education and wellness campus that also includes the Center for Women's Health, the National Training Center, the SkyTop View Rehabilitation Center and other outpatient services. The primary service areas is Clermont, Minneola, Groveland, Mascotte and Montverde. This makes up the whole of southern Lake County.

LICENSED PHYSICIAN RATE (2012/2013- 2017/2018)

The rate of physicians per 100,000 population licensed in the state remained relatively stable from fiscal year (FY) 2012/13 to FY 2017/2018. The rate in Lake County has been below the state for FY 2012/2013 to FY 2017/2018. The county rate increased from 205.1 in FY 2012/2013 to 227.5 in FY 2017/2018, while the state increased from 264.6 to 310.6. (See Chart 7.96)

TOTAL NUMBER OF LICENSED PHYSICIANS (2013/2014- 2017/2018)

The number of licensed physicians increased by 20.4 percent in the four-county region between 2013 and 2018 from 5,570 in fiscal year 2013/2014 to 6,707 in fiscal year 2017/2018. The number of licensed physicians in Lake County increased from 747 in fiscal year 2013/2014 to 759 in fiscal year 2017/2018. (See Table 7.8)

LICENSED DENTIST RATE (2012/2013- 2017/2018)

The licensed dentist rate per 100,000 decreased in Lake County from 43 in FY 2012/2013 to 39.6 in FY 2017/2018, which was below the state (55.8). The state rate increased during this time from 54.6 to 55.8. (See Chart 7.97)

TOTAL NUMBER OF LICENSED DENTISTS (2013/2014- 2017/2018)

The number of licensed dentists in the four-county region decreased over the past five years from 1,078 in fiscal year 2013/2014 to 1,029 in fiscal year 2017/2018. Lake County decreased from 152 to 132 over the five-year period. The state increased from 10,396 to 11,475. (See Table 7.9)

RATIO OF MENTAL HEALTH PROVIDERS TO POPULATION (2015-2018)

In 2018, across the four-county region and the state, the ratio of providers to residents has improved over the past few years. Lake County (1,285:1) had a ratio that was less favorable than the state level (703:1). (See Table 7.10)

EMERGENCY DEPARTMENT SERVICES (2019)

There is a total of 21 dedicated emergency departments throughout the four-county region, 14 of which are part of the Collaborative member hospitals. The region also has one licensed burn unit located at Orlando Health ORMC, although 15 regional hospitals offer burn emergency services. The region also has five Level I cardiovascular and six Level II cardiovascular services facilities. There are also nine primary stroke centers and four comprehensive stroke centers in the four-county region. The four-county region also has one Level I Trauma Center, located at Orlando Health ORMC, and one Level II Trauma Center. (See Table 7.11)

TRANSPLANT SERVICES (2019)

The only hospital (AdventHealth Orlando) in the region for transplants is included in the Collaborative. (See Table 7.12)

TOTAL LICENSED HOSPITAL BEDS (2019)

There are 7,321 total licensed hospital beds in the four-county region. The majority (5,448, 74.4 percent) are operated by Collaborative member hospitals. Of the hospital beds included in the four-county region, there are 814 beds in Lake County. (See Chart 7.98 and Table 7.7)

TOTAL LICENSED ACUTE CARE BEDS (2019)

There are 14 hospital partners in this assessment that operate 4,830 of the 5,980 total licensed acute-care beds. The Collaborative partners represent more than 72 percent of the acute-care beds available in the four-county region. There are 717 acute-care beds (12 percent) in Lake County. (See Chart 7.99 and Table 7.7)

TOTAL NICU II AND III BEDS (2019)

There are 140 NICU II beds and 136 NICU III beds in the four-county region. There are zero NICU II or III beds in Lake County. (See Table 7.13)

TOTAL COMPREHENSIVE REHAB BEDS (2019)

Throughout the four-county region, there are a total of 189 comprehensive rehabilitation beds. There are zero comprehensive rehab beds in Lake County. (See Table 7.14)

TOTAL LICENSED ADULT PSYCHIATRIC BEDS (2019)

There are a total of 521 licensed adult psychiatric beds in the four-county region in 2019. Lake County has 62 (12 percent of the total beds). All adult psychiatric beds in Lake County are affiliated with hospitals outside the Collaborative membership. (See Chart 7.100 and Table 7.15)

TOTAL PSYCHIATRIC TREATMENT FACILITY BEDS (2019)

There is a total of 930 adult psychiatric, child and adolescent psychiatric, residential treatment facility and intensive residential treatment facility beds in the four-county region. Lake County has 113 total beds, located with providers outside of the Collaborative membership. (See Table 7.15)

TOTAL ADULT SUBSTANCE ABUSE BEDS (2019)

The four-county region has a total of 45 licensed substance abuse beds. All beds, except for the five beds in Lake County, are affiliated with hospitals in the Collaborative. (See Table 7.16)

TABLE 7.7: LICENSED HOSPITAL FACILITIES, CENTRAL FLORIDA FOUR-COUNTY REGION (2019)

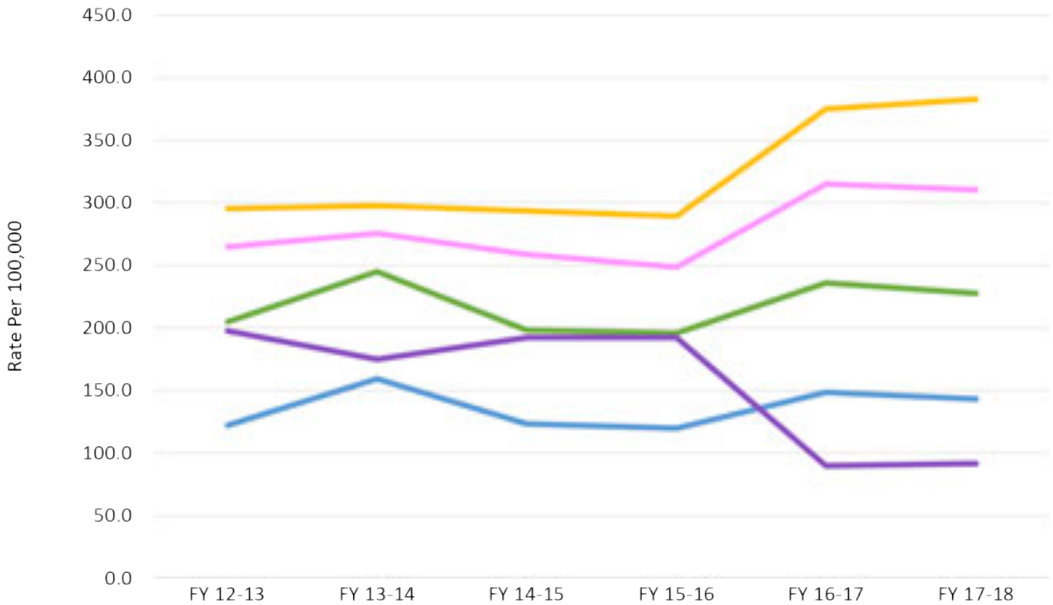
				LICENSED BEDS																	
							NICU		Psychiatric			Substance Abuse				Non CON Regulated Services					
ID#	AHCA#	Facility Name	City	Total Beds	Acute Care Beds	LTC Hosp. Beds	Level II	Level III	Adult	Child/ Adol	IRTF	Adult	Child/ Adol	SNU	Rehab	Burn Units	Level II Adult Cardio	Level I Adult Cardio	Comp. Stroke Center	Primary Stroke Center
3053	1000057	AdventHealth Waterman	Tavares	269	269												1			1
3077	1000084	Leesburg Regional Medical Center	Leesburg	308	308												1			1
3239	1040018	Lifestream Behavioral Center	Leesburg	46					41			5								
3077	1002214	LRMC Senior Behavioral Health Center	Leesburg	21					21											
3047	1000051	Orlando Health South Lake Hospital	Clermont	170	140									30				1		1
		Lake County Total		814	717				62			5		30			2	1		3
3258	1200003	AdventHealth Apopka	Apopka	120	120															
3019	1000021	AdventHealth East Orlando	Orlando	295	295															1
3258	1000007	AdventHealth Orlando	Orlando	1,366	1,195		28	74	59						10		1		1	
31	1000162	AdventHealth Winter Park	Winter Park	320	288		12								20					1
3112	1000129	Aspire Health Partners, Inc.	Orlando	90					90											
	219600083	Central Florida Behavioral Hospital	Orlando	174					109	65										
3310	1100051	La Amistad Residential Treatment Center	Maitland	40							40									
	219600096	Nemours Children's Hospital	Orlando	100	77		2	16							5					
3028	1000030	Orlando Health - Health Central	Ocoee	211	211													1		1
3005	1200001	Orlando Health Arnold Palmer	Orlando	156	156															
3005	1200002	Orlando Health Dr. P. Phillips	Orlando	257	257													1		1
3005	1000006	Orlando Health ORMC	Orlando	866	813										53	1	1		1	
3005	1200001	Orlando Health Winnie Palmer	Orlando	350	298		90	52												
	219600043	Select Specialty Hospital-Orlando (North Campus)	Orlando	35		35														
	219600068	Select Specialty Hospital-Orlando (South Campus)	Orlando	64		64														
3104	1 100047	University Behavioral Center	Orlando	112					64	32		16								
		Orange County Total		4,536	3,600	99	132	142	322	97	40	16			88	1	2	2	2	4
	219600017	AdventHealth Celebration	Celebration	237	227		10											1		1
3082	1000089	AdventHealth Kissimmee	Kissimmee	162	162															1
	219600129	Blackberry Center	St. Cloud	64					50			14								
3096	1000110	Osceola Regional Medical Center	Kissimmee	404	333		10	8	25						28		1		1	
	219600111	Poinciana Medical Center	Kissimmee	76	76															
3057	1000074	St. Cloud Regional Medical Center	St. Cloud	84	84															
		Osceola County Total		1,017	882		20	8	75			14			28		1	1	1	2
3258	1200004	AdventHealth Altamonte Springs	Altamonte Springs	393	383		10											1		1
3138	1000161	Central Florida Regional Hospital	Sanford	221	208										13		1			1
	219600112	Encompass Health Rehabilitation Hospital of Altamonte	Altamonte Springs	60											60					
3266	1000263	Orlando Health South Seminole	Longwood	206	126				62	8		10						1		1
	219600121	Oviedo Medical Center (Licensed 1/26/2017)	Oviedo	64	64															
		Seminole County Total (Per Actual Numbers Written)		944	781		10		62	8		10			73		1	2		3
		Total Regional Bed Count		7,321	5,980	99	162	150	521	105	40	45	0	30	189	1	6	6	3	12

*Gray shading denotes collaborative member facilities

Note: Data reported in this chart was the most recent publically available data as of January 2019. Individual hospital narratives reflect internal hospital data.

Sources: Florida Agency for Healthcare Administration; Central Florida Collaborative

CHART 7.96: LICENSED PHYSICIAN RATE (2012/2013-2017/2018)



	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18
LAKE	205.1	245.1	198.4	195.7	236.0	227.5
ORANGE	295.6	298.0	293.9	289.5	374.9	382.8
OSCEOLA	122.3	159.3	123.4	119.9	148.6	143.2
SEMINOLE	197.5	175.1	192.2	192.2	89.9	91.5
FLORIDA	264.6	275.7	258.8	248.6	315.5	310.6

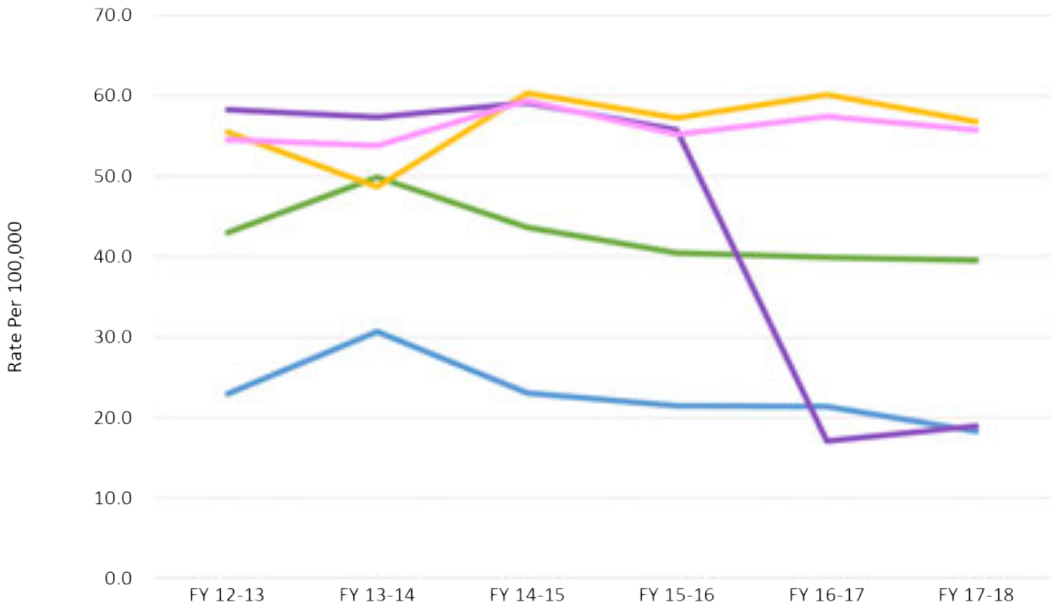
Source: FLHealthCHARTS: Florida Department of Health, Division of Medical Quality Assurance

TABLE 7.8: TOTAL NUMBER OF LICENSED PHYSICIANS (2013/2014- 2017/2018)

	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18
Lake	747	618	623	769	759
Orange	3,604	3,626	3,645	4,827	5,044
Osceola	462	368	374	485	486
Seminole	757	843	854	405	418
Region Total	5,570	5,455	5,496	6,486	6,707
Florida	53,259	50,679	49,456	63,825	63,849

Source: FLHealthCHARTS: Florida Department of Health, Division of Medical Quality Assurance

CHART 7.97: LICENSED DENTIST RATE (2012/2013-2017/2018)



	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18
LAKE	43.0	49.9	43.7	40.5	39.9	39.6
ORANGE	55.5	48.7	60.3	57.3	60.2	56.8
OSCEOLA	23.0	30.7	23.1	21.5	21.4	18.3
SEMINOLE	58.3	57.4	59.1	55.8	17.1	19.0
FLORIDA	54.6	53.8	59.4	55.2	57.5	55.8

Source: FLHealthCHARTS: Florida Department of Health, Division of Medical Quality Assurance

TABLE 7.9: TOTAL NUMBER OF LICENSED DENTISTS (2013/2014-2017/2018)

	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18
Lake	152	136	129	130	132
Orange	589	744	722	775	748
Osceola	89	69	67	70	62
Seminole	248	259	248	77	87
Region Total	1,078	1,208	1,166	1,052	1,029
Florida	10,396	11,635	10,986	11,641	11,475

Source: FLHealthCHARTS: Florida Department of Health, Division of Medical Quality Assurance

TABLE 7.10: RATIO OF MENTAL HEALTH PROVIDERS TO POPULATION (2015-2018)

	2015	2016	2017	2018
Lake	1,318:1	1,283:1	1,375:1	1,285:1
Orange	591:1	544:1	553:1	507:1
Osceola	992:1	884:1	842:1	769:1
Seminole	690:1	627:1	706:1	675:1
Florida	744:1	689:1	747:1	703:1

Source: County Health Rankings and Roadmaps

TABLE 7.11: EMERGENCY DEPARTMENT SERVICES (2019)

County	Facility Name	Collaborative Member	Emergency Department	Burn Services	Cardio	Stroke Center	Trauma
Lake	AdventHealth Waterman	X	X		Level II	Primary	
Lake	Orlando Health South Lake Hospital	X	X	X	Level I		
Lake	Leesburg Regional Medical Center		X			Primary	
Orange	AdventHealth Apopka	X	X	X			
Orange	AdventHealth East Orlando	X	X	X			
Orange	AdventHealth Orlando	X	X	X	Level II	Comp.	
Orange	AdventHealth Winter Park	X	X	X		Primary	
Orange	Orlando Health Arnold Palmer Hospital for Children	X	X	X			
Orange	Orlando Health Winnie Palmer Hospital for Women & Babies	X					
Orange	Orlando Health Dr. P. Phillips Hospital	X	X	Burn Unit	Level II	Comp.	
Orange	Orlando Health Orlando Regional Medical Center	X	X	X	Level II	Comp.	Level I
Orange	Nemours Children's Hospital		X				
Orange	Orlando Health – Health Central Hospital	X	X		Level I	Primary	
Osceola	AdventHealth Celebration	X	X	X	Level I	Primary	
Osceola	AdventHealth Kissimmee	X	X	X		Primary	
Osceola	Osceola Regional Medical Center		X		Level II	Comp.	
Osceola	St. Cloud Regional Medical Center		X				
Osceola	Poinciana Medical Center		X	X			
Seminole	AdventHealth Altamonte Springs	X	X	X	Level I	Primary	
Seminole	Orlando Health South Seminole Hospital	X	X	X	Level I	Primary	
Seminole	Central Florida Regional Hospital		X	X	Level II	Primary	Level II
Seminole	Oviedo Medical Center		X	X			
		15	21	15			

Sources: Florida Agency For Healthcare Administration; Central Florida Collaborative

TABLE 7.12: TRANSPLANT SERVICES (2019)

Program (A=Adult; P=Pediatric)	AdventHealth Orlando	4-County Region	Florida
Transplant	1	1	10
Heart Transplant (A)	1	0	7
Heart Transplant (P)	0	0	4
Kidney Transplant (A)	1	1	10
Kidney Transplant (P)	1	1	4
Liver Transplant (A)	1	1	8
Liver Transplant (P)	0	0	2
Lung Transplant (A)	1	1	5
Lung Transplant (P)	0	0	2
Bone Marrow Transplant (A)	1	1	6
Bone Marrow Transplant (P)	1	1	6
Pancreas/Transplant (A)	1	1	5
Pancreas/Transplant (P)	0	0	1

Source: Florida Agency For Healthcare Administration (AHCA)

CHART 7.98: TOTAL LICENSED HOSPITAL BEDS (2019)

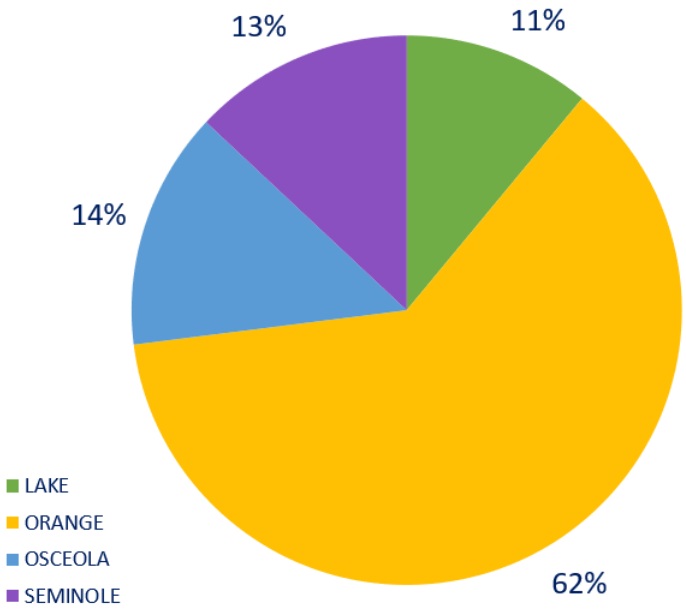
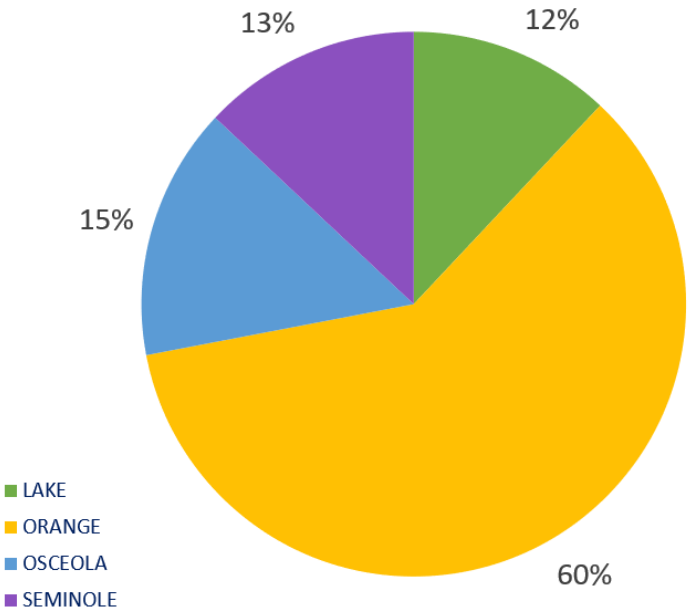


CHART 7.99: TOTAL LICENSED ACUTE CARE BEDS (2019)



Source: Florida Agency For Healthcare Administration (AHCA)

TABLE 7.13: TOTAL NICU II AND NICU III BEDS (2019)

County	NICU II	NICU III
Orange	130 beds	126 beds
	• AdventHealth Winter Park	• AdventHealth Orlando
	• AdventHealth Orlando • Orlando Health Winnie Palmer Hospital for Women & Babies	• Orlando Health Winnie Palmer Hospital for Women & Babies
Osceola	10 beds	
	• AdventHealth Celebration	
Seminole		10 beds
		• AdventHealth Altamonte Springs

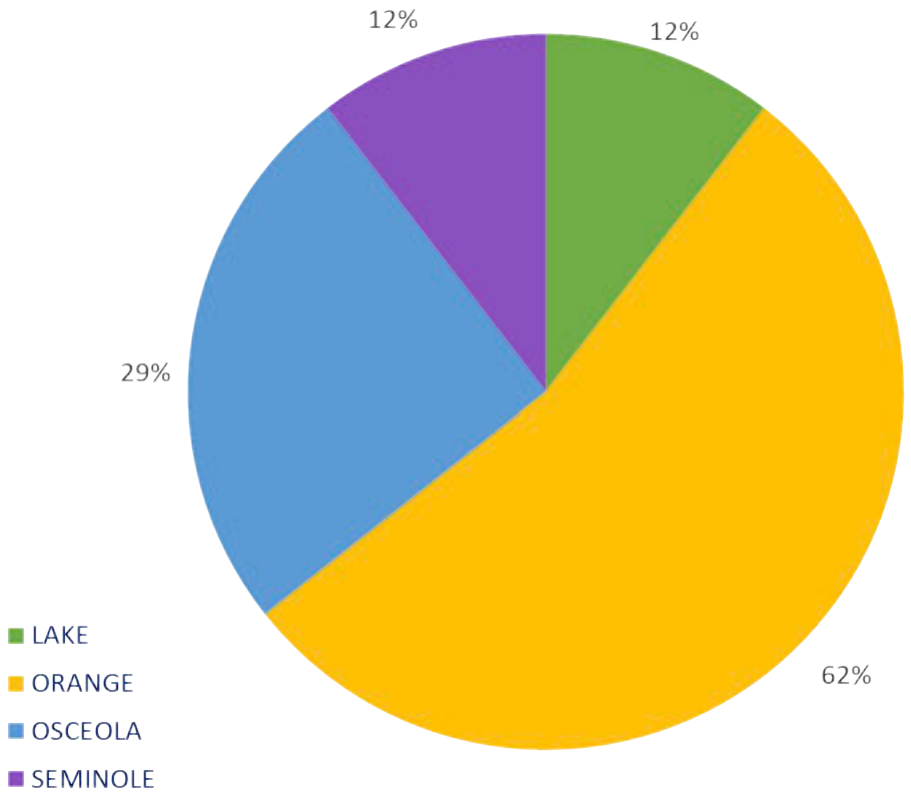
Source: Florida Agency For Healthcare Administration (AHCA)

TABLE 7.14: TOTAL COMPREHENSIVE REHAB BEDS (2019)

County	Comprehensive Rehabilitation Beds
Orange	83 beds among Collaborative partner hospitals
	• AdventHealth Winter Park • AdventHealth Orlando • Orlando Health Orlando Regional Medical Center
	Beds among non-affiliated organizations
Orange	• Nemours Children's Hospital (5 beds)
Osceola	• Osceola Regional Medical Center (28 beds)
Seminole	• Central Florida Regional Hospital (13 beds) • Encompass Health Rehabilitation Hospital (60 beds)

Source: Florida Agency For Healthcare Administration (AHCA)

CHART 7.100: TOTAL LICENSED ADULT PSYCHIATRIC BEDS (2019)



Source: Florida Agency For Healthcare Administration (AHCA)

TABLE 7.15: TOTAL PSYCHIATRIC TREATMENT FACILITY BEDS (2019)

County	Own	Facility Type	Name	Licensed Beds
Lake	NFP	Adult Psychiatric Hospital	Lifestream Behavioral Center	41
	NFP	Residential Treatment Facility	Lifestream Behavioral Center (4 locations)	51
	NFP	Adult Psychiatric Hospital	LRMC Senior Behavioral Center	21
Orange	NFP	Adult Psychiatric Hospital	AdventHealth Orlando	59
	NFP	Adult Psychiatric Hospital	Aspire Health Partners	90
		Residential Treatment Facility	Aspire Health Partners (2 locations)	52
	FP	Adult Psychiatric Hospital	Central Florida Behavioral Hospital	109
	FP	Child/Adolescent Psychiatric Hospital	Central Florida Behavioral Hospital	65
	FP	Intensive Residential Treatment Facility	LaAmistad Residential Treatment Center	40
	FP	Residential Treatment Facility	LaAmistad Behavioral Health Services	45
	FP	Residential Treatment Facility	Pasadena Villa	16
	FP	Residential Treatment Facility	Pasadena Villa at LaSalle	5
	FP	Residential Treatment Facility	Pasadena Village at Lake Highland	5
	FP	Residential Treatment Facility	Pasadena Village at North Shore	3
	FP	Residential Treatment Facility	Pasadena Villa at Summerlin Park	5
	FP	Adult Psychiatric Hospital	University Behavioral Center	64
	FP	Child/Adolescent Psychiatric Hospital	University Behavioral Center	32
Osceola	FP	Adult Psychiatric Hospital	Blackberry Center	50
	FP	Adult Psychiatric Hospital	Osceola Regional Medical Center	25
	NFP	Residential Treatment Facility	Park Place Behavioral Health Care	15
Seminole	NFP	Residential Treatment Facility	Aspire Health Partners	12
	NFP	Residential Treatment Facility	Lakewood Center (2 locations)	55
	NFP	Adult Psychiatric Hospital	Orlando Health South Seminole Hospital	62
	NFP	Child/Adolescent Psychiatric Hospital	Orlando Health South Seminole Hospital	8

Source: Florida Agency For Healthcare Administration (AHCA)

TABLE 7.28: TOTAL SUBSTANCE ABUSE BEDS (2019)

COUNTY	ADULT SUBSTANCE ABUSE
Lake	5 beds
	• Lifestream Behavioral Center
Orange	16 beds
	• University Behavioral Center
Osceola	14 beds
	• Blackberry Center
Seminole	10 beds
	• Orlando Health South Seminole Hospital

Source: Florida Agency For Healthcare Administration (AHCA)

CHAPTER EIGHT

Health Disparities

Lake Louisa Sate Park
Clermont, FL

Lake County

Health disparities (differences in health outcomes between groups that reflect social inequalities) related to access, preventative care and food access exist within and Seminole County and the state. Income, race and education affect lifestyle in addition to access to care rates of preventative testing, chronic diseases, births, infant mortality and mental health. These disparities demonstrate the need for concerted action to achieve health equity and overall health improvement for the entire population. An opportunity for action exists in data collection; consistently in the data sourced for this chapter there are gaps across racial and ethnic groups. These gaps are in the publicly available data and make it difficult to understand the disparities and needs of diverse populations; until the disparities and needs are fully understood it is not possible to address them.

Preventative Care Disparities

MAMMOGRAM AGES 40 AND OLDER BY RACE/ETHNICITY (2007-2016)

The available data for women ages 40 and older who have received mammograms is complete for White women in Lake County from 2007 to 2016 but is unavailable for Black and Hispanic women. The gaps in the available data do not allow a comprehensive snapshot for comparison between populations at the county level. The percentage of White women ages 40 and over who have received mammograms has decreased in Lake County from 2007 to 2016 from 69.6 percent to 56.1 percent.

At the state level the percentage of White women receiving a mammogram decreased from 65.4 percent in 2007 to 60.9 percent in 2016. Black women have also seen a decrease at the state level from 70.2 percent in 2007 to 61.7 percent in 2016, which is almost double the percentage of decline seen for White women during the same time period. There was a decrease at the state level from 2007 (63.2 percent) to 2016 (60.7 percent) for Hispanic women, making it the smallest decrease at the state level in all groups. (See Charts 8.1-8.3)

PAP TEST AGES 18 AND OLDER BY RACE/ETHNICITY (2007-2016)

The available data for women ages 18 and older who have received a Pap test in the past year is complete for White women in Lake County from 2007 to 2016 but is unavailable for Black and Hispanic women. The gaps in the available data do not allow a comprehensive snapshot for comparison between populations at the county level. There has been a decline for racial and ethnic groups across the state from 2007 to 2016. This comparison can be made across groups as there is complete data at the state level. In Lake County the percentage of White women ages 18 and older who received a Pap test in the past year decreased from 68.2 percent in 2007 to 37.6 percent in 2016.

At the state level, the percentage of White women ages 18 and older who received a Pap test in the past year decreased from 64.4 percent in 2007 to 46 percent in 2010, the largest decline across all groups. The percentage also decreased for Black women (70.9 percent to 55.8 percent) and Hispanic women (64.5 percent to 51.5 percent) in the same time frame. (See Charts 8.4-8.6)

SIGMOIDOSCOPY/COLONOSCOPY AGES 50 AND OLDER BY RACE/ETHNICITY (2007-2016)

The available data for adults who have received a sigmoidoscopy/colonoscopy is complete for White adults in Lake County from 2007 to 2016 but is unavailable for Black and Hispanic adults. The gaps in the available data do not allow a comprehensive snapshot for comparison between populations at the county level. Complete data is available at the state level during this time. In Lake County the percentage of White adults who received a sigmoidoscopy/colonoscopy decreased from 58.5 percent to 52.5 percent from 2007 to 2016.

From 2007 to 2016 at the state level, White adults were the only group with a decrease (56.8 percent to 55.9 percent). The percentage of Black adults at the state level who received a sigmoidoscopy/colonoscopy increased from 48.9 percent in 2007 to 51.2 percent in 2016. The percentage increased for Hispanic adults from 39 percent to 49.6 percent at the state within the same time frame. (See Charts 8.7-8.9)

BLOOD STOOL TEST ADULT AGES 50 YEARS AND OLDER BY RACE/ETHNICITY (2007-2016)

The available data for adults ages 50 and older who have received a blood stool test in the past year is complete for White adults but is not available for Black and Hispanic adults at the county level. There is complete data for all groups at the state level. The percentage for White adults decreased from 2007 to 2016 in Lake County from 23.4 percent to 15.5 percent.

In the state from 2007 to 2016 the percentage of adults receiving a blood stool test decreased for White adults (23.3 percent to 15.7 percent) as well as Black adults (21.7 percent to 18.6 percent). While the percentage for Hispanic adults at the state level almost doubled from 8.7 percent to 15.4 percent. (See Charts 8.10-8.12)

PSA TEST ADULT AGES 50 YEARS AND OLDER BY RACE/ETHNICITY (2007-2016)

The available data for men ages 50 and older who have received a PSA (Prostate Specific Antigen) test in the past two years from 2007 to 2016 is complete for White men at the county level, but unavailable for Black and Hispanic men. Complete data is available for all groups at the state level. For White men in Lake County, the percentage increased from 61 percent in 2007 to 79.1 percent in 2010 then decreased to 57.9 percent, which was an overall decrease.

There has been a decline across all groups at the state level for adult men 50 and older receiving a PSA test from 2007 to 2016, although the percentage fluctuated for White and Hispanic men. The percentage of White men ages 50 and older receiving the test decreased from 63.1 percent to 58.2 percent from 2007 to 2016 and for Black men the numbers dropped from 71.5 percent to 48.4 percent for the same time frame. The percentages for Hispanic men declined the least during these years from 51.8 percent to 47 percent. (See Charts 8.13-8.15)

Chronic Condition Disparities

ADULTS WITH DIABETES BY RACE/ETHNICITY (2002-2016)

The data available for adults diagnosed with diabetes is complete for White adults but limited for Black and Hispanic adults in Lake County between 2002 and 2016. Complete data is available for all groups at the state level. The percentage of White adults with diabetes in Lake County fluctuated with an overall increase from 10.1 percent in 2002 to 11.1 percent in 2016. Data was only available for Black adults in 2016 (18.5 percent). The percentage of Hispanic adults in the county with diabetes increased from 3.4 percent in 2002 to 14.5 percent in 2016, although data was not available for 2010.

All groups have seen an increase at the state level from 2002 and 2016, although the percentage fluctuated. The percentage of White adults increased the least from eight percent to 11.5 percent, for Black adults the increase was the highest from 10.6 percent to 14.5 percent, and the numbers for Hispanic adults rose from 7.1 percent to 10.9 percent. (See Charts 8.16-8.18)

HYPERTENSION (HIGH BLOOD PRESSURE) BY RACE/ETHNICITY (2002-2013)

Complete data is available for White adults, there are gaps for Hispanic adults and data is unavailable for Black adults in Lake County who have ever been told they have high blood pressure between 2002 and 2013. Complete data is available for all groups at the state level. For White adults, in Lake County the percentage of adults who have ever been told they have high blood pressure increased from 26.3 percent in 2002 to 42.5 percent in 2013. The percentage for Hispanic adults increased between 2002 (20.5 percent) and 2013 (27.7 percent), although data was unavailable in 2010.

There has been an increase across all groups at the state level in the percentage of adults who have been told they have high blood pressure from 2002 to 2013, although the percentage has fluctuated during this time. The percentage of White adults increased the most in all groups from 28.7 percent in 2002 to 38.4 percent in 2013, the percentages rose the least in Black adults from 32.2 percent in 2002 to 33.7 percent in 2013, Hispanic adults increased from 21.1 percent to 28.3 percent during this time. (See Charts 8.19 – 8.21)

STROKE BY RACE/ETHNICITY (2007-2016)

There is complete data for White adults in Lake County who have ever been told they had a stroke, with limited data available for Hispanic adults and no data available for Black adults. Complete data is available at the state level for adults in all groups. There has been an overall increase from 2007 to 2016 in the percentage of White adults who have been told they had a stroke in Lake County from 4.1 percent to 6.4 percent. The percentage for Hispanic adults was 1.4 percent in 2007, unavailable in 2010 and zero in 2013 and 2016.

At the state level the percentage for White adults has increased from 3.5 percent (2007) to 4.2 percent (2016), for Black adults the rise has been from 3.7 percent (2007) to 3.9 percent (2016). Hispanic adults increased less than a third from 1.4 percent (2007) to 1.8 percent (2016). (See Charts 8.22-8.24)

CORONARY HEART DISEASE BY RACE/ETHNICITY (2012-2017)

There is complete data at the county and state level for coronary heart disease per 100,000, with the rate fluctuating. In Lake County the rate for White adults increased slightly from 98.7 in 2012 to 99.7 in 2017. The rate for Black adults decreased from 114.2 to 90.5 and the rate for Hispanic adults decreased from 73.4 to 52.7 during the same timeframe.

At the state level there has been a decrease in age-adjusted death rates per 100,000 from coronary heart disease across all groups, although the rates fluctuated between 2012 and 2017. At the state level, rates for White adults declined from 103 in 2012 to 92.8 in 2017; the largest decrease was in Black adult rates during the same time from 113.4 to 95.1, and rates for Hispanics adults fell from 87.3 to 81.4. (See Charts 8.25-8.27)

COLORECTAL CANCER BY RACE/ETHNICITY (2012-2016)

There is complete data at the county and state level for colorectal cancer incidence per 100,000. The rate for White adults in Lake County fluctuated between 2012 and 2016 with an overall decrease from 49.6 to 40.4. The rate for Black adults fluctuated during this time with a net increase from 27.9 to 33.9 during this time. The rate for Hispanic adults also fluctuated with an overall increase from 27.7 in 2012 to 31.8 in 2016. During this time the Lake County rate for White adults was consistently higher than the state while the rate for Black and Hispanic adults was consistently lower.

The rate across the state for White adults remained relatively steady between 2012 (36.1) and 2016 (35.5). The rate for Black adults increased slightly from 41.5 in 2012 to 43.3 in 2014 then decreased to 38.9 in 2016. The rate for Hispanic adults decreased from 2012 (33.9) to 2016 (33.3). (See Chart 8.28-8.30)

FEMALE BREAST CANCER BY RACE/ETHNICITY (2012-2016)

Complete data is available at the county and state for breast cancer incidence per 100,000. The rate for White adults in Lake County fluctuated with an overall decrease from 138.7 in 2012 to 132.6 in 2016. The rate for Black adults in the county also decreased from 129.3 in 2012 to 101.3 in 2016. The rate for Hispanic adults fluctuated with an overall increase from 62.9 in 2012 to 96.8 in 2016.

The rate for White adults across the state remained fairly steady between 2012 (117.4) and 2016 (119.7). The rate for Black adults was steady between 2012 (109.7) and 2015 (109.3) then increased to 114.9 in 2016. The state rate for Hispanic adults fluctuated with an increase from 88.2 in 2012 to 92 in 2016. (See Charts 8.31-8.33)

LUNG CANCER BY RACE/ETHNICITY (2012-2016)

Complete data is available for the county and state for lung cancer incidence per 100,000 between 2012 and 2016. The rate in Lake County fluctuated for all groups with all having a net decrease between 2012 and 2016. During this time, in Lake County the rate for White adults decreased from 85.8 to 65.2, Black adults decreased from 86.8 to 37.8 and Hispanic adults decreased from 47.1 to 31.5.

The incidence rate at the state level for White adults decreased from 65.3 in 2012 to 59.1 in 2016. The rate for Black adults also decreased during this timeframe from 51.7 to 43.9. The rate for Hispanic adults across the state fluctuated with a decrease between 2012 (35.6) to 2014 (32.8) before the rate increased to 35 in 2016. (See Charts 8.34-8.36)

ADULTS WITH ASTHMA BY RACE/ETHNICITY (2007-2016)

There is complete data for White adults and gaps for Black and Hispanic adults in Lake County for adults who have asthma from 2007 to 2016. Complete data is available for all groups at the state level. For White adults in Lake County the percentage was the same in 2007 and 2016 (5.5 percent) although peaked at 9.4 percent in 2013. Data was only available for Black adults in Lake County in 2016 (7.4 percent). The percentage of Hispanic adults with asthma in the county increased from 2.7 percent in 2007 to 9.7 percent in 2013 then decreased to 1.8 percent in 2016, data was not available in 2010.

The percentage of White adults with asthma across the state increased from 6.4 percent in 2007 to 8.3 percent in 2010 and 2013 then decreased to 6.9 percent in 2016. The percentage for Black adults fluctuated between 2007 and 2016 with no change overall as the percentage in both of those years was 7.6 percent. The percentage for Hispanic adults fluctuated with a net increase from 4.8 percent in 2007 to 5.9 percent in 2016. (See Charts 8.37-8.39)

Leading Causes of Death Disparities

When looking at the leading causes of death disparities, the Florida Department of Health classifies Hispanics as White Hispanics and Black Hispanics. The Black/Other category includes all Non-Hispanic Blacks.

In 2017, in Lake County the leading causes of death for White and Black/Other groups were heart diseases (227, 207.2) and cancer (221.5, 171.6). The third leading cause of death for Whites was unintentional injury (69.4) and cerebrovascular disease for Blacks/Others (63.9).

In Lake County, the leading causes of death for White Hispanic and Black Hispanic groups were cancer (89.3, 46.1) and heart diseases (82.7, 32.9) followed by unintentional injury (33.2, 15.3). (See Table 8.1)

Birth Characteristics Disparities

INFANT MORTALITY BY RACE/ETHNICITY (2012-2017)

Complete data is available for all groups at the county and state level. The infant mortality rate per 1,000 live births for all groups fluctuated from 2012 to 2017. The county rate fluctuated in all groups with the rate increasing for White babies (4.5 to 5.0) and Hispanic babies (3.6 to 10.7) between 2012 and 2017. During this timeframe the rate decreased for Black babies in Lake County (13.5 to 10.2).

The state rate for White babies did not fluctuate much between 2012 and 2017, with an overall decrease from 4.6 to 4.4. The state rate increased for Black babies from 10.7 in 2012 to 11.6 in 2016 then decreased to 10.8 in 2017. The Hispanic infant mortality rate increased at the state from 4.4 to 5.2 during the same timeframe. (See Charts 8.40-8.42)

BIRTHS WITH SELF-PAY FOR DELIVERY PAYMENT SOURCE (2004-2017)

Complete data is available for all groups at the county and state level. The percentage of births with self-pay for delivery fluctuated for all groups in both Lake County and the state from 2004 to 2017. The percentage in Lake County decreased for births to White women (8.8 percent to 4.9 percent) and Hispanic women (27.1 percent to 12.1 percent) during this time. Between 2004 and 2017 the percentage increased for Black women (3.1 percent to 3.3 percent), although the county was lower than the state for all years.

The percentages for the state decreased for births to White women (8.3 percent to 6.4 percent), Black women (4.9 percent to 4.8 percent) and Hispanic women (16.6 percent to 10 percent). (See Charts 8.43-8.45)

BIRTHS TO MOTHERS WITH LESS THAN HIGH SCHOOL EDUCATION BY RACE/ETHNICITY (2004-2017)

Complete data is available for all groups at the county and state level. The percentage of births to mothers with less than a high school education fluctuated for all groups in both Lake County and the state from 2004 to 2017, with a decrease observed overall.

The percentage in Lake County decreased for births to White women (23.6 percent to 10.6 percent), Black women (29.1 percent to 12.3 percent) and Hispanic women (48.9 percent to 14.8 percent).

The percentages for the state also decreased for births to White women (19.9 percent to 11.7 percent), Black women (25.9 percent to 14.2 percent) and Hispanic women (31.7 percent to 17.9 percent). (See Charts 8.46-8.48)

BIRTHS TO UNWED MOTHERS BY RACE/ETHNICITY (2004-2017)

Complete data is available for all groups at the county and state level. Between 2004 and 2017, the percentage of births to unwed mothers increased in Lake County for births to White women (34.9 percent to 42.7 percent), Black women (66.4 percent to 74.7 percent) and Hispanic women (43.8 percent to 48.3 percent).

During this same time, the percentage of births to unwed mothers at the state also increased for White women (34.6 percent to 41.9 percent) and Hispanic women (43 percent to 50.5 percent). The percentage for Black women decreased slightly from 67.7 percent to 67.6 percent. (See Charts 8.49-8.51)

BIRTHS TO MOTHERS WHO WERE OBESE DURING PREGNANCY BY RACE/ETHNICITY (2004-2017)

Complete data is available for all groups at the county and state level. The percentage of births to mothers who were obese during pregnancy rose across all groups in Lake County and the state from 2004 to 2017. During this time, the percentage of births to mothers who were obese during pregnancy increased in Lake County for births to White women (21.2 percent to 27.8 percent), Black women (29.2 percent to 37.3 percent) and Hispanic women (21.8 percent to 30.3 percent).

The percentages of births to mothers who were obese during pregnancy at the state also increased for White women (16.8 percent to 22.9 percent), Black women (27.5 percent to 34.6 percent) and Hispanic women (16 percent to 23.4 percent). (See Charts 8.52-8.54)

REPEAT BIRTHS TO MOTHERS AGES 15-19 BY RACE/ETHNICITY (2004-2017)

Complete data is available for all groups at the county and state level. The percentage of repeat births to mothers ages 15 to 19 decreased in Lake County and the state from 2004 to 2017, although the percentage fluctuated.

During this time, the percentages of repeat births to mothers ages 15 to 19 decreased in Lake County for births to White women (19.1 percent to 12.6 percent), Black women (41.2 percent to 20.9 percent) and Hispanic women (31.4 percent to 10.8 percent).

The percentages of repeat births to mothers ages 15 to 19 at the state also decreased for White women (17.1 percent to 14.8 percent), Black women (22.4 percent to 15.8 percent) and Hispanic women (19.5 percent to 15 percent). (See Charts 8.55-8.57)

PRETERM BIRTH RATE <37 WEEKS BY RACE/ETHNICITY (2004-2017)

Complete data is available for all groups at the county and state level. The percentage for preterm births decreased for all groups at the state level from 2004 to 2017, although the percentage fluctuated. Preterm births for White mothers decreased from 2004 to 2017 in Lake County from 10.3 percent to 8.9 percent. Preterm births in Lake County also decreased for Hispanic mothers from 2004 (9.3 percent) to 2017 (8.3 percent). The percentage of preterm births for Black mothers in the county increased from 12.6 percent to 16.1 percent during the same timeframe.

The largest decline at the state level was in the percentages for White mothers (10.1 percent to 9.1 percent), followed by Black mothers (14.6 percent to 14 percent) and Hispanic mothers (9.4 percent to 9.1 percent). (See Charts 8.58-8.60)

LOW BIRTH WEIGHT (<2500 GRAMS) BY RACE/ETHNICITY (2004-2017)

Complete data is available for all groups at the county and state level. The percentage of low birth weight babies varied across groups from 2004 to 2017. In Lake County the percentage of low birth weight babies born to White mothers fluctuated during this time with an overall decrease from 7.2 percent to 6.4 percent. The percentage also decreased for births to Hispanic mothers (7.1 percent to 5.7 percent). The percentage increased for births to Black mothers during this time (9.8 percent to 15.5 percent).

Low birth weight births to White mothers at the state remained relatively consistent between 7.1 percent and 7.4 percent. When looking at 2004 to 2017, the percentage was the same for White mothers (7.2 percent). The percentage increased for births to Black mothers (13.1 percent to 13.8 percent) and Hispanic mothers (seven percent to 7.3 percent). (See Charts 8.61-8.63)

BIRTHS COVERED BY MEDICAID BY RACE/ETHNICITY (2004-2017)

Complete data is available for all groups at the county and state level. The percentage of births covered by Medicaid increased from 2004 to 2017 in Lake County and the state for all groups. The percentage of Medicaid births covered for White mothers increased in Lake County (35.1 percent to 47.9 percent). The percentage in the county also increased for births to Black women (55.5 percent to 71.8 percent) and Hispanic women (38.4 percent to 55.5 percent) during the same time.

Births to White women covered by Medicaid also increased for the state (32.2 percent to 43.8 percent) during the same years. Births to Black women (53.7 percent to 68.4 percent) and Hispanic women (37.6 percent to 52.2 percent) increased between 2004 and 2017. (See Charts 8.64-8.66)

Quality of Life/Mental Health Disparities

Please note the data sourced for this chapter is from FLHealthCHARTS, which does not provide the same race and ethnicity options for all indicators. In the section below, White refers to Non-Hispanic White adults, Black refers to Non-Hispanic Black adults and Hispanic refers to all Hispanic adults regardless of race.

ADULTS WHO HAD POOR MENTAL HEALTH 14 OR MORE DAYS OF THE PAST 30 BY RACE/ ETHNICITY (2007-2016)

Complete data is available for White adults and limited for Black and Hispanic adults who had poor mental health 14 or more days of the past 30 in Lake County between 2007 and 2016. Complete data is available at the state level for all groups during this time. The percentage of White adults with 14 or more poor mental health days in the past 30 days increased in Lake County from 8.2 percent in 2007 to 13.4 percent in 2016. Data was only available for Black adults in Lake County in 2016 (2.6 percent). The percentage for Hispanic adults in the county decreased from 13.2 percent in 2007 to nine percent in 2016, data was not available in 2010.

For the state the percentage of White adults who had poor mental health 14 or more days in the past 30 has steadily increased from 9.1 percent in 2007 to 12.2 percent in 2016. The percentage for Black adults fluctuated with an overall decrease from 12.8 percent in 2007 to 10.8 percent in 2016. The percentage for Hispanic adults in the state increased from 10.2 percent in 2007 to 14.7 percent in 2010 then decreased to 9.9 percent in 2016. (See Charts 8.67-8.69)

ADULTS WHO HAD POOR MENTAL HEALTH 14 OR MORE DAYS OF THE PAST 30 BY INCOME

Complete data is available for all groups at the county and state level. The percentage of adults who had poor mental health 14 or more days of the past 30 with income less than $25K increased in Lake County from 6.7 percent in 2007 to 21.8 percent in 2016. In the county the percentage decreased slightly for those with incomes between $25K-$49K (13.6 percent to 13.2 percent) during that same time. For those with incomes of $50K or greater the percentage of adults reporting poor mental health 14 or more days of the past 30 increased from 6.6 percent in 2007 to 7.1 percent in 2016.

The percentage of those with poor mental health 14 or more days in the past 30 in the state increased for all income groups between 2007 and 2016. The percentage increased for those with incomes less than $25K from 16.1 percent to 17.8 percent, from 11.3 percent to 11.9 percent for those with incomes between $25K-$49K and from 5.7 percent to 7.6 percent for those with incomes of $50K or greater. (See Charts 8.70-8.72)

ADULTS WHO HAD POOR MENTAL HEALTH 14 OR MORE DAYS OF THE PAST 30 BY EDUCATION (2007-2016)

Complete data is available for all groups at the county and state level for adults who reported poor mental health 14 or more days of the past 30. For those with less than a high school education in Lake County the percentage fluctuated with an overall increase from 9.9 percent in 2007 to 24.7 percent in 2016. For those with a high school diploma or GED in the county the percentage increased from 11.5 percent in 2007 to 14.6 in 2016. The percentage of those with higher than a high school education also increased from 6.7 percent in 2007 to 9.9 percent in 2016.

For those with less than a high school education across the state the percentage of those reporting poor mental health 14 or more days in the past 30 increased from 15.8 percent in 2007 to 22 percent in 2010 then decreased to 15.3 percent in 2016. A similar trend occurred for those with a high school diploma or GED increasing from 11 percent to 13.6 percent then decreasing to 12.1 percent during this time. The percentage fluctuated for those with higher than a high school education with an overall increase from 8.2 percent in 2007 to 10.1 percent in 2016. (See Charts 8.73-8.75)

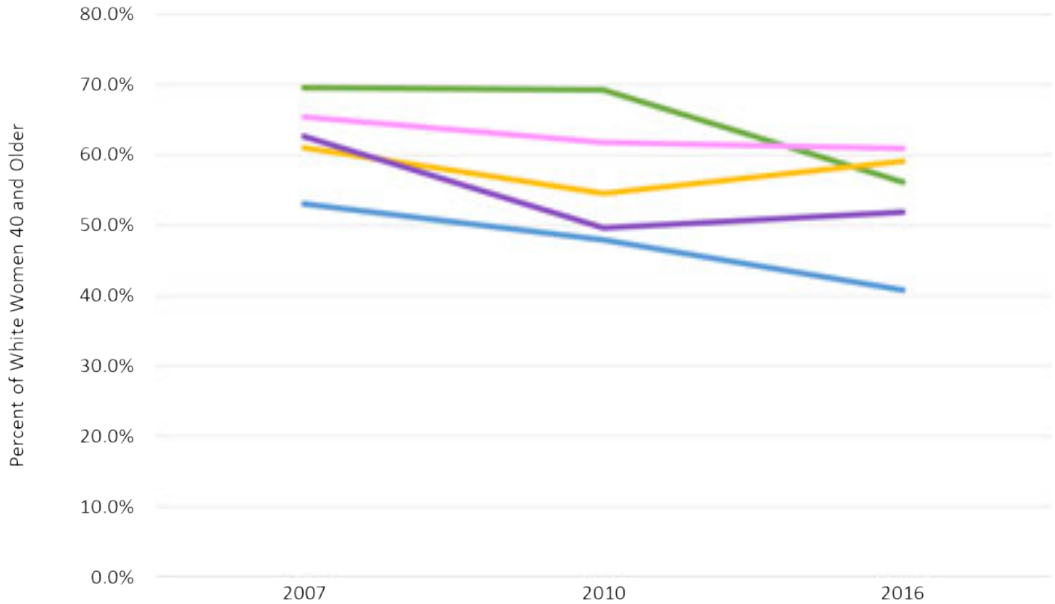
Healthcare Access Disparities

INSURANCE COVERAGE BY RACE/ETHNICITY (2007-2016)

Complete data is available for White adults and limited for Black and Hispanic adults who have insurance coverage in Lake County. Complete data is available for the state, with the percent covered increasing. Insurance coverage increased across the state during this time for White adults (87.8 percent to 89.5 percent), Black adults (77.2 percent to 81 percent) and Hispanic adults (61.4 percent to 71.1 percent).

The percentage of White adults with insurance coverage decreased in Lake County from 88.9 percent to 87.3 percent) between 2007 and 2016. Data for Black adults in the county with insurance coverage was only available in 2016 (54.7 percent). There was an increase in Hispanic adults with coverage from 61.6 percent in 2007 to 74.8 percent in 2016, data was not available in 2010. (See Charts 8.76-8.78)

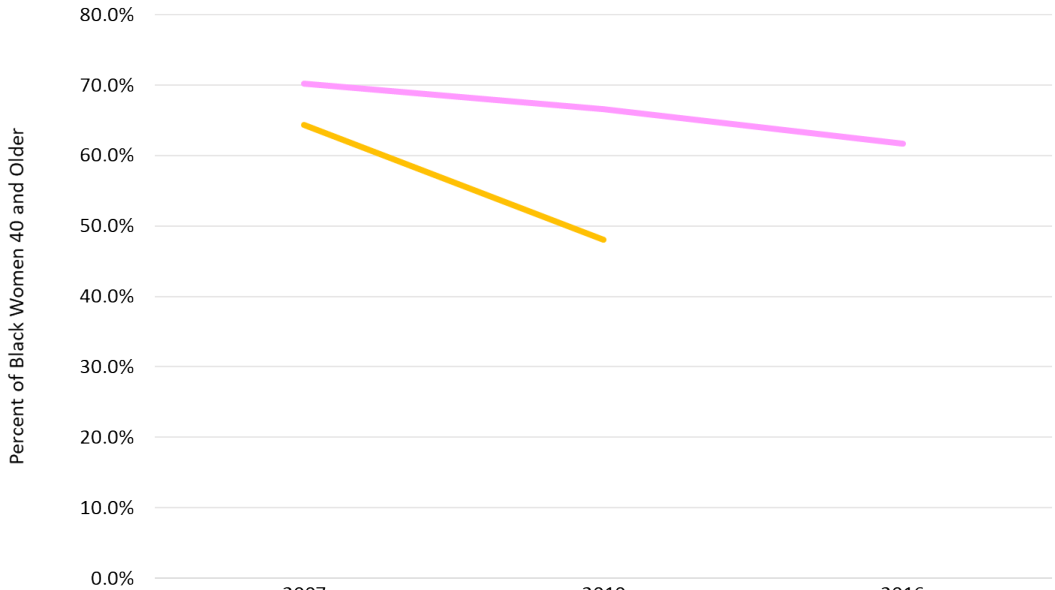
CHART 8.1: PERCENT OF WHITE WOMEN AGES 40 AND OLDER WHO RECEIVED MAMMOGRAMS (2007-2016)



	2007	2010	2016
LAKE	69.6%	69.3%	56.1%
ORANGE	61.0%	54.5%	59.1%
OSCEOLA	53.1%	47.9%	40.8%
SEMINOLE	62.7%	49.6%	51.9%
FLORIDA	65.4%	61.8%	60.9%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

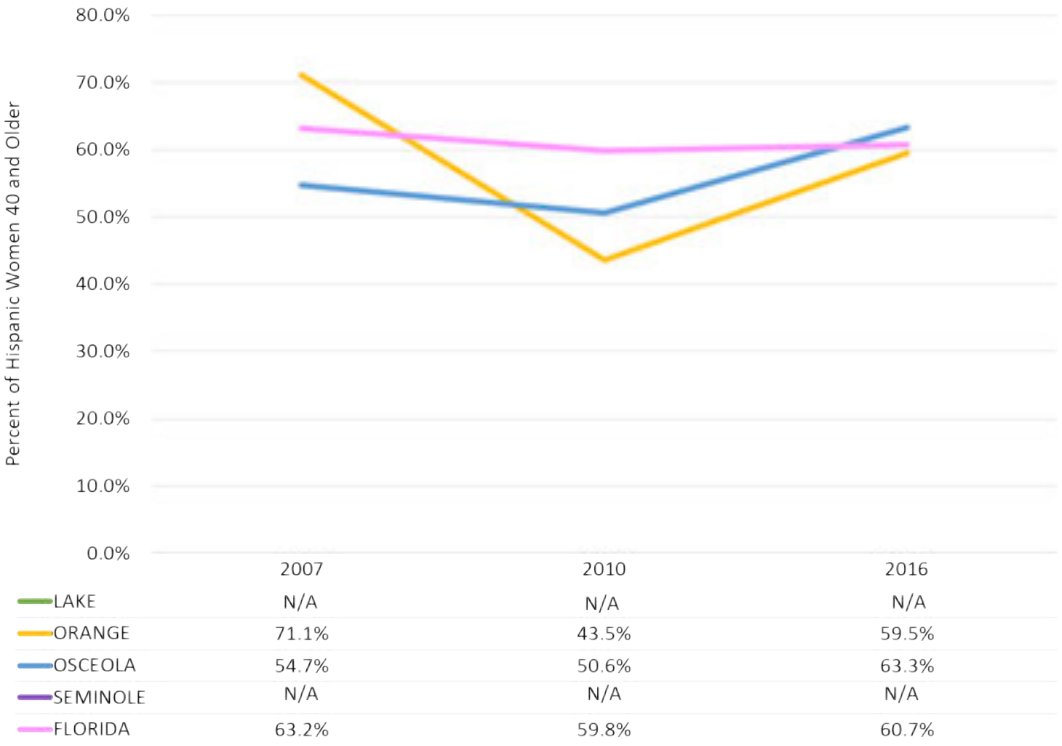
CHART 8.2: PERCENT OF BLACK WOMEN AGES 40 AND OLDER WHO RECEIVED MAMMOGRAMS (2007-2016)



	2007	2010	2016
LAKE	N/A	N/A	N/A
ORANGE	64.4%	48.0%	N/A
OSCEOLA	N/A	N/A	N/A
SEMINOLE	N/A	N/A	N/A
FLORIDA	70.2%	66.6%	61.7%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

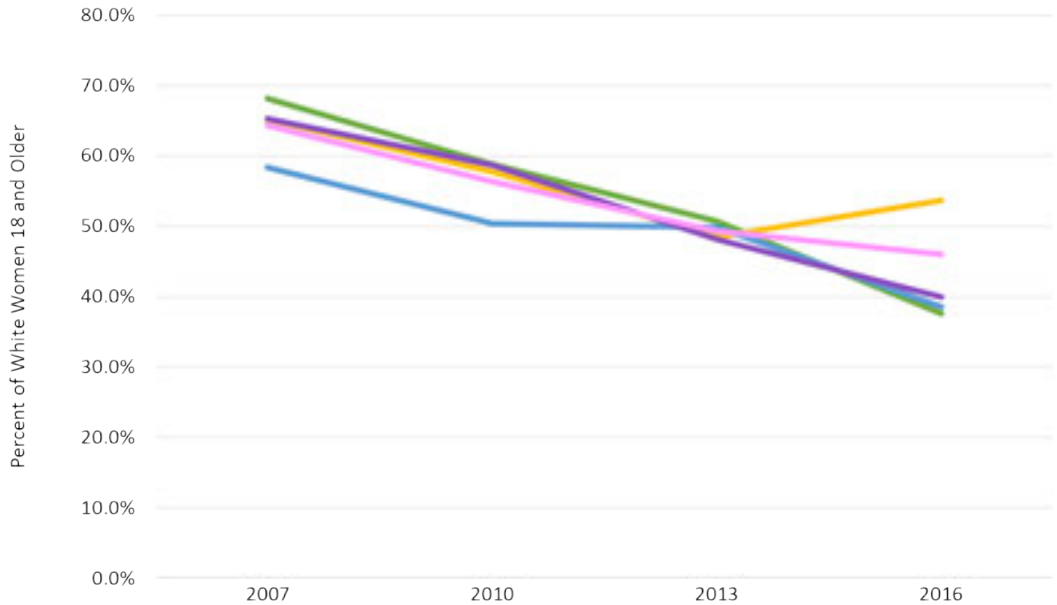
CHART 8.3: PERCENT OF HISPANIC WOMEN AGES 40 AND OLDER WHO RECEIVED MAMMOGRAMS (2007-2016)



	2007	2010	2016
LAKE	N/A	N/A	N/A
ORANGE	71.1%	43.5%	59.5%
OSCEOLA	54.7%	50.6%	63.3%
SEMINOLE	N/A	N/A	N/A
FLORIDA	63.2%	59.8%	60.7%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

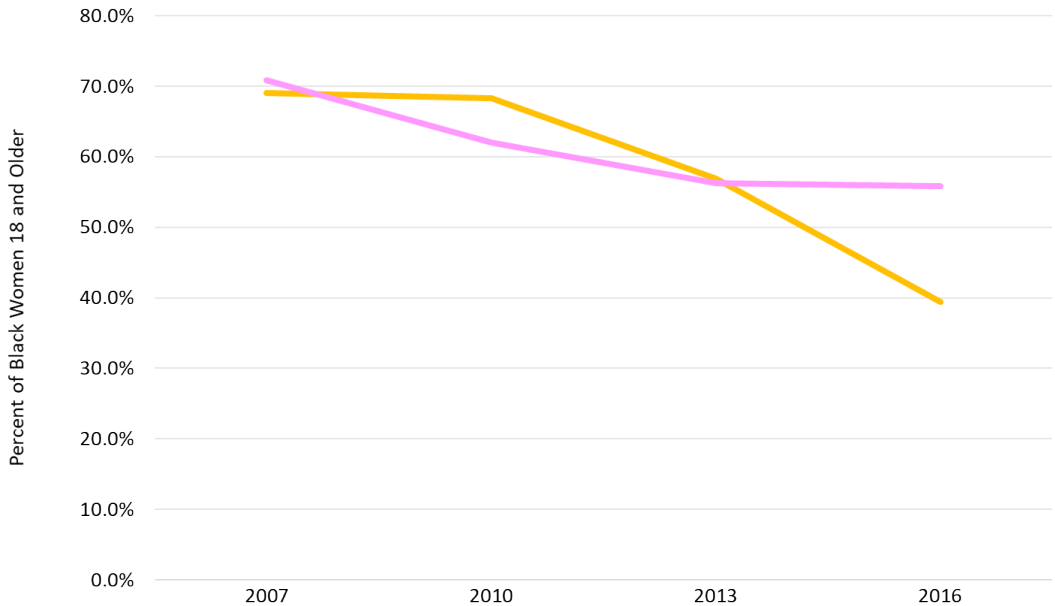
CHART 8.4: WHITE WOMEN AGES 18 YEARS AND OLDER WHO RECEIVED PAP TEST IN PAST YEAR (2007-2016)



	2007	2010	2013	2016
LAKE	68.2%	58.8%	50.7%	37.6%
ORANGE	65.2%	57.8%	48.5%	53.7%
OSCEOLA	58.4%	50.4%	49.9%	38.6%
SEMINOLE	65.3%	58.7%	48.2%	40.0%
FLORIDA	64.4%	56.4%	49.3%	46.0%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

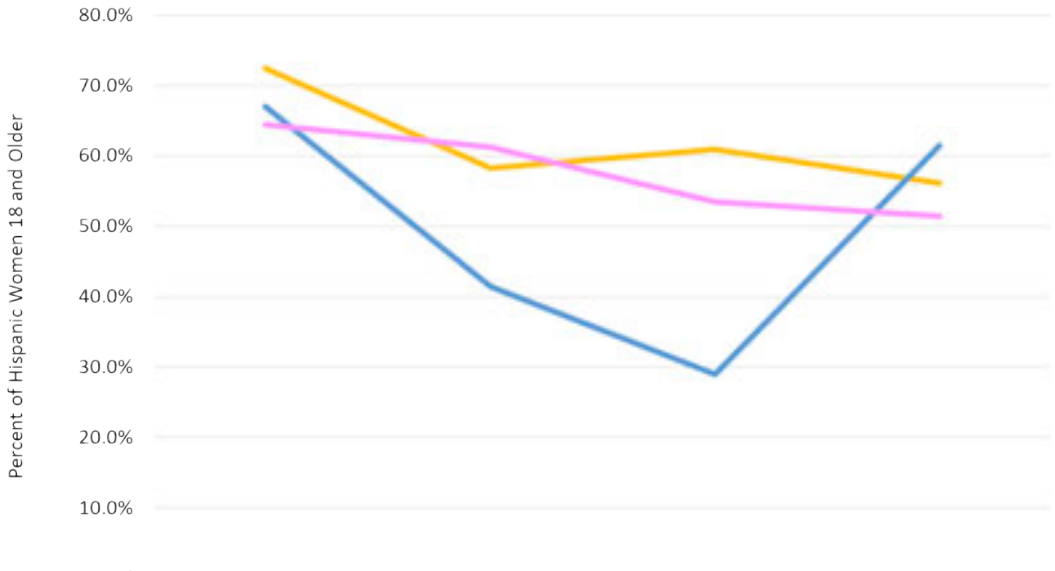
CHART 8.5: BLACK WOMEN AGES 18 YEARS AND OLDER WHO RECEIVED PAP TEST IN PAST YEAR (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	69.0%	68.3%	56.9%	39.4%
OSCEOLA	N/A	N/A	N/A	N/A
SEMINOLE	N/A	N/A	N/A	N/A
FLORIDA	70.9%	62.0%	56.3%	55.8%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

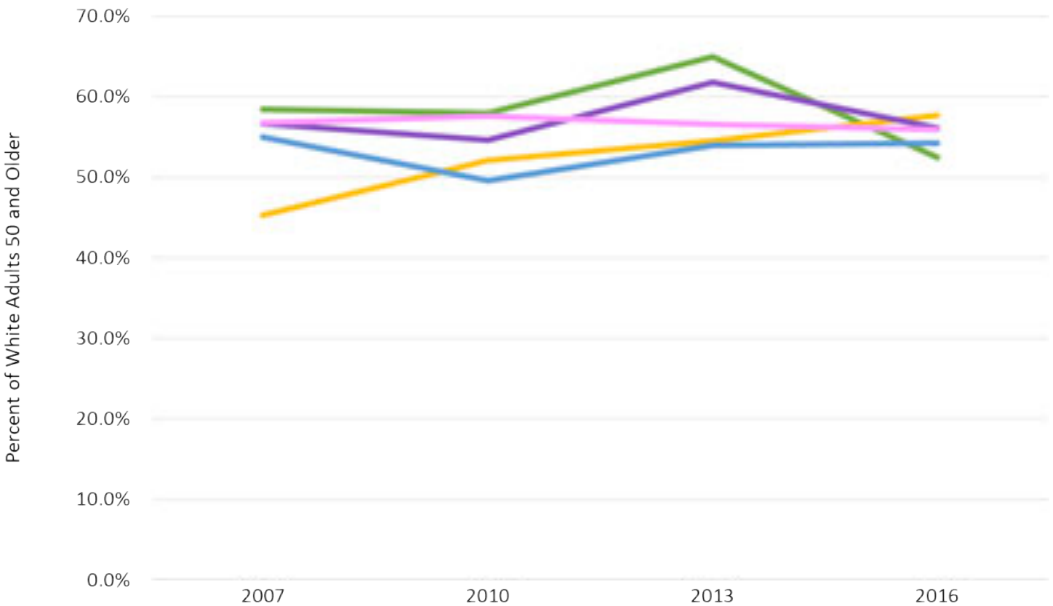
CHART 8.6: HISPANIC WOMEN AGES 18 YEARS AND OLDER WHO RECEIVED PAP TEST IN PAST YEAR (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	72.4%	58.3%	60.9%	56.1%
OSCEOLA	67.0%	41.4%	29.0%	61.5%
SEMINOLE	N/A	N/A	N/A	N/A
FLORIDA	64.5%	61.3%	53.5%	51.5%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

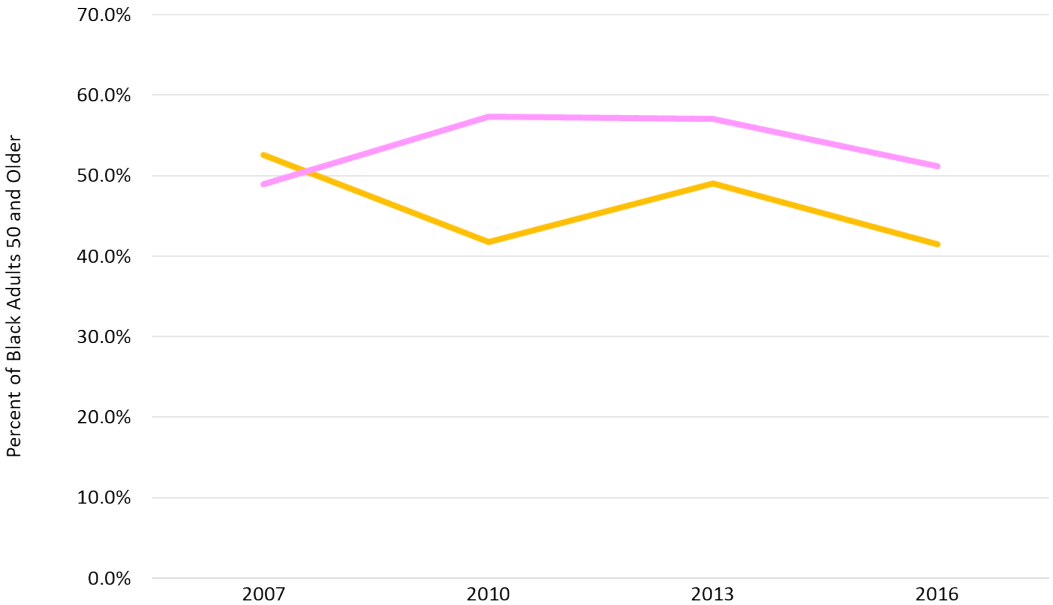
CHART 8.7: WHITE ADULTS AGES 50 AND OLDER WHO RECEIVED SIGMOIDOSCOPY OR COLONOSCOPY (2007-2016)



	2007	2010	2013	2016
LAKE	58.5%	58.0%	65.0%	52.5%
ORANGE	45.3%	52.1%	54.5%	57.7%
OSCEOLA	55.0%	49.6%	54.0%	54.3%
SEMINOLE	56.7%	54.6%	61.8%	56.1%
FLORIDA	56.8%	57.6%	56.6%	55.9%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

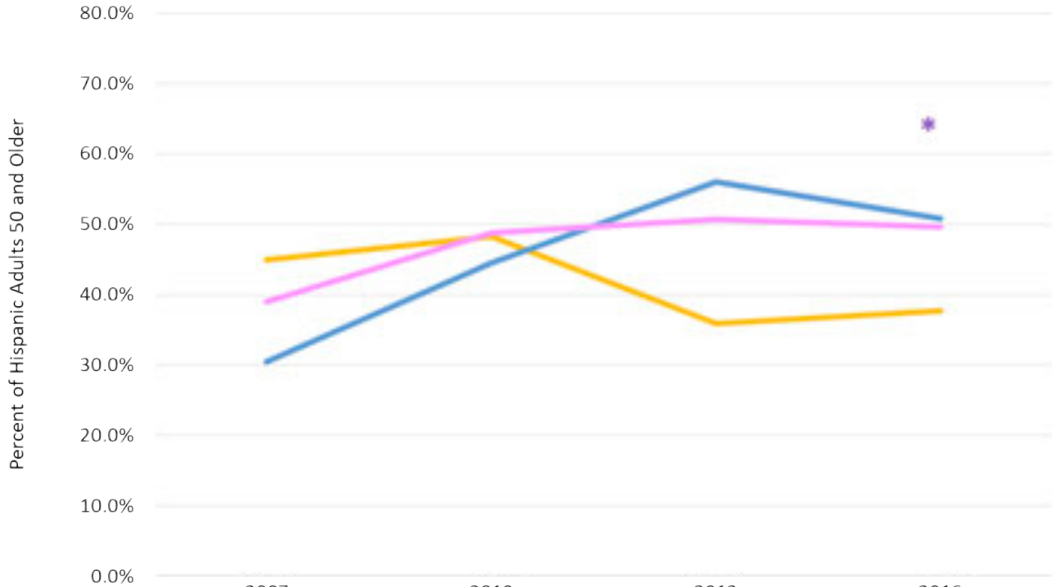
CHART 8.8: BLACK ADULTS AGES 50 AND OLDER WHO RECEIVED SIGMOIDOSCOPY OR COLONOSCOPY (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	52.6%	41.8%	49.0%	41.5%
OSCEOLA	N/A	N/A	N/A	N/A
SEMINOLE	N/A	N/A	N/A	N/A
FLORIDA	48.9%	57.3%	57.1%	51.2%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

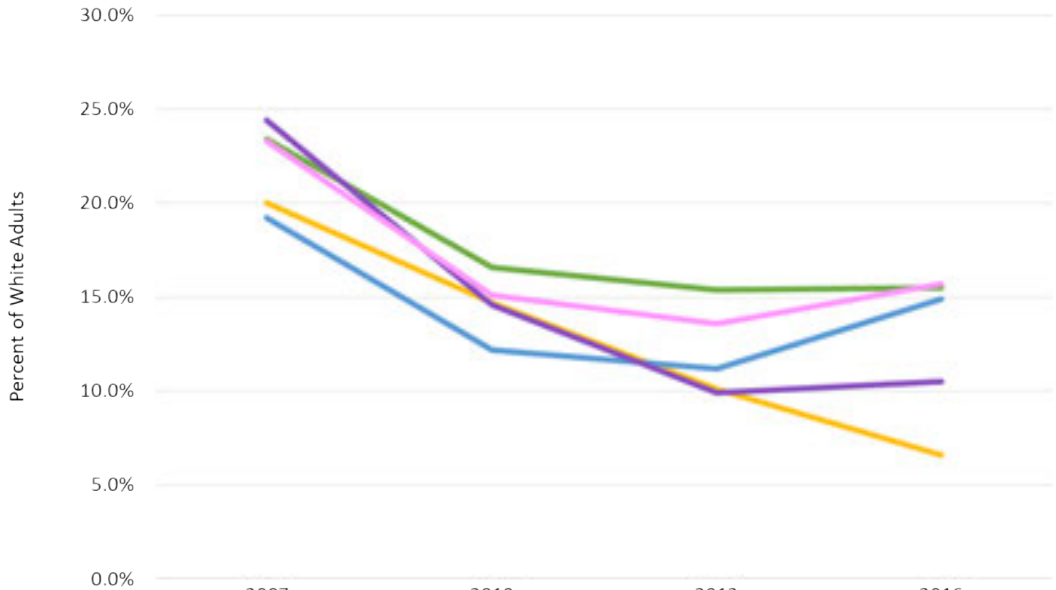
CHART 8.9: HISPANIC ADULTS AGES 50 AND OLDER WHO RECEIVED SIGMOIDOSCOPY OR COLONOSCOPY (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	45.0%	48.3%	35.9%	37.7%
OSCEOLA	30.5%	44.5%	56.0%	50.8%
SEMINOLE	N/A	N/A	N/A	70.6%
FLORIDA	39.0%	48.8%	50.7%	49.6%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

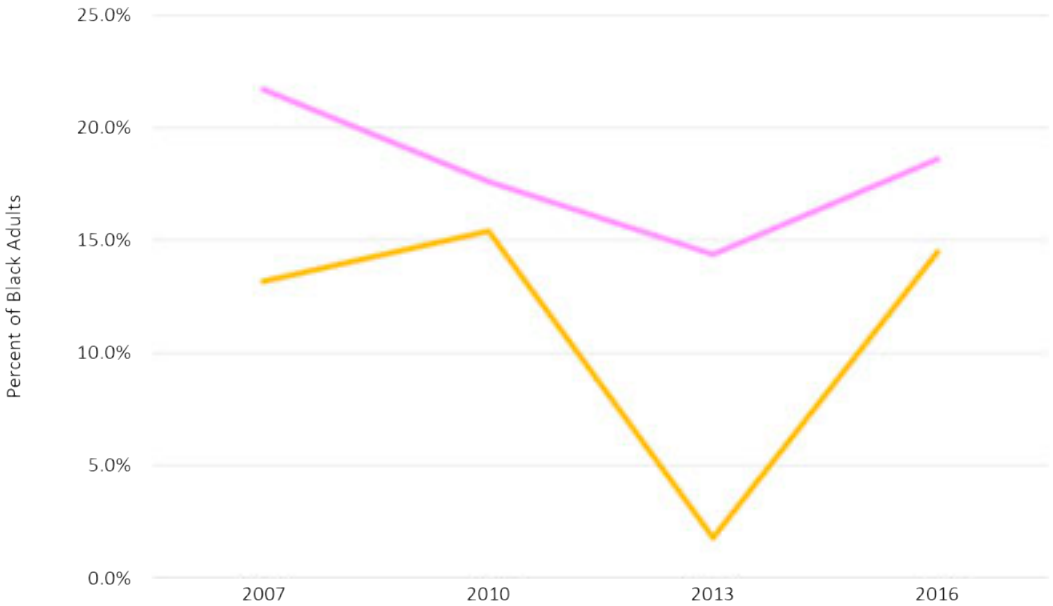
CHART 8.10: WHITE ADULTS AGES 50 AND OLDER WHO RECEIVED A BLOOD STOOL TEST IN THE PAST YEAR (2007-2016)



	2007	2010	2013	2016
LAKE	23.4%	16.6%	15.4%	15.5%
ORANGE	20.0%	14.7%	10.1%	6.6%
OSCEOLA	19.2%	12.2%	11.2%	14.9%
SEMINOLE	24.4%	14.6%	9.9%	10.5%
FLORIDA	23.3%	15.1%	13.6%	15.7%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

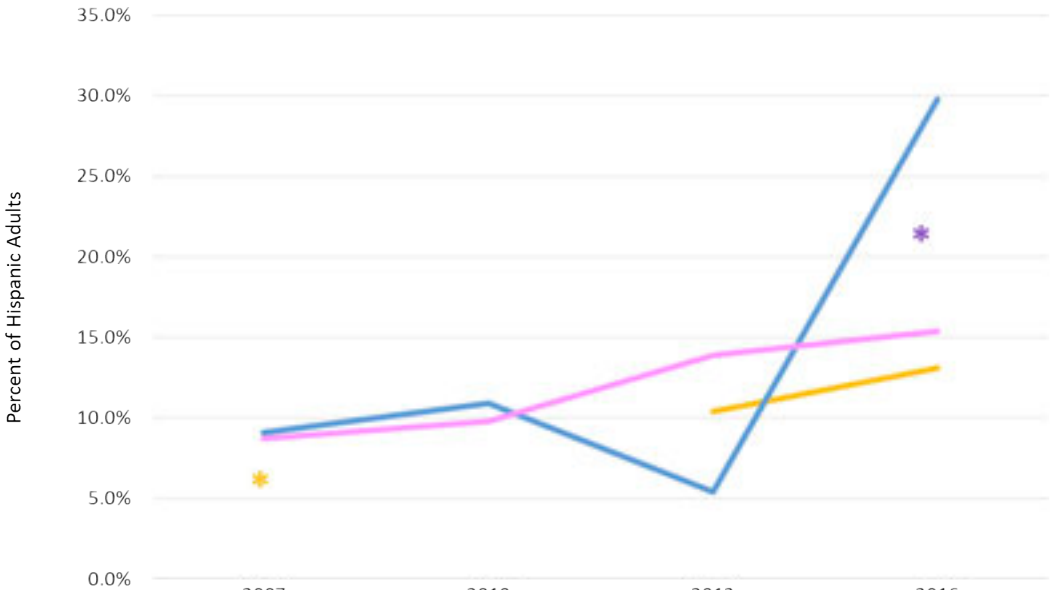
CHART 8.11: BLACK ADULTS AGES 50 AND OLDER WHO RECEIVED A BLOOD STOOL TEST IN THE PAST YEAR (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	13.2%	15.4%	1.8%	14.5%
OSCEOLA	N/A	N/A	N/A	N/A
SEMINOLE	N/A	N/A	N/A	N/A
FLORIDA	21.7%	17.6%	14.4%	18.6%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

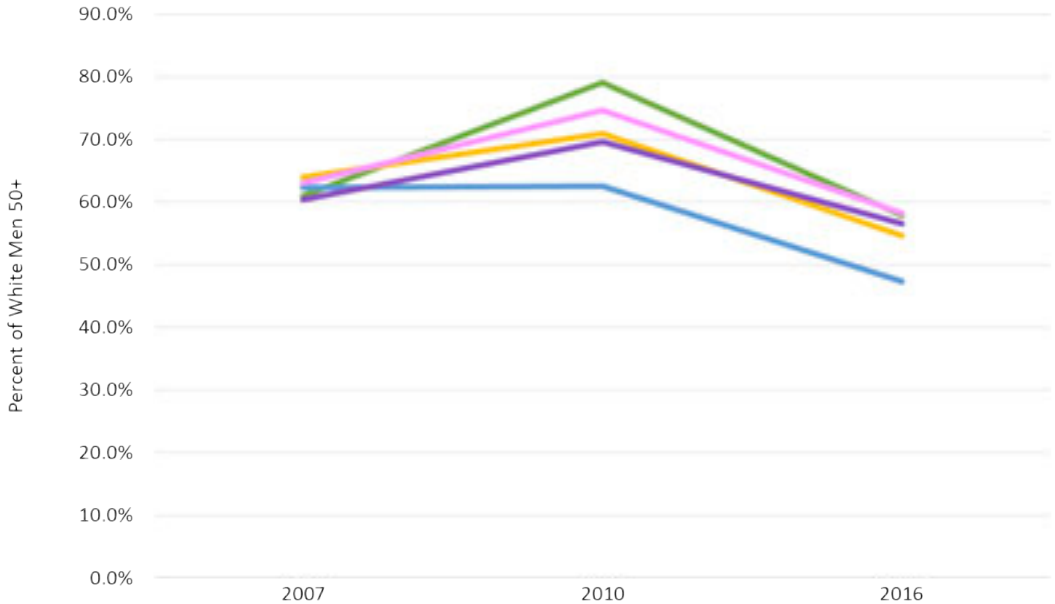
CHART 8.12: HISPANIC ADULTS AGES 50 AND OLDER WHO RECEIVED A BLOOD STOOL TEST IN THE PAST YEAR (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	8.3%	N/A	10.4%	13.1%
OSCEOLA	9.1%	10.9%	5.4%	29.8%
SEMINOLE	N/A	N/A	N/A	24.6%
FLORIDA	8.7%	9.8%	13.9%	15.4%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

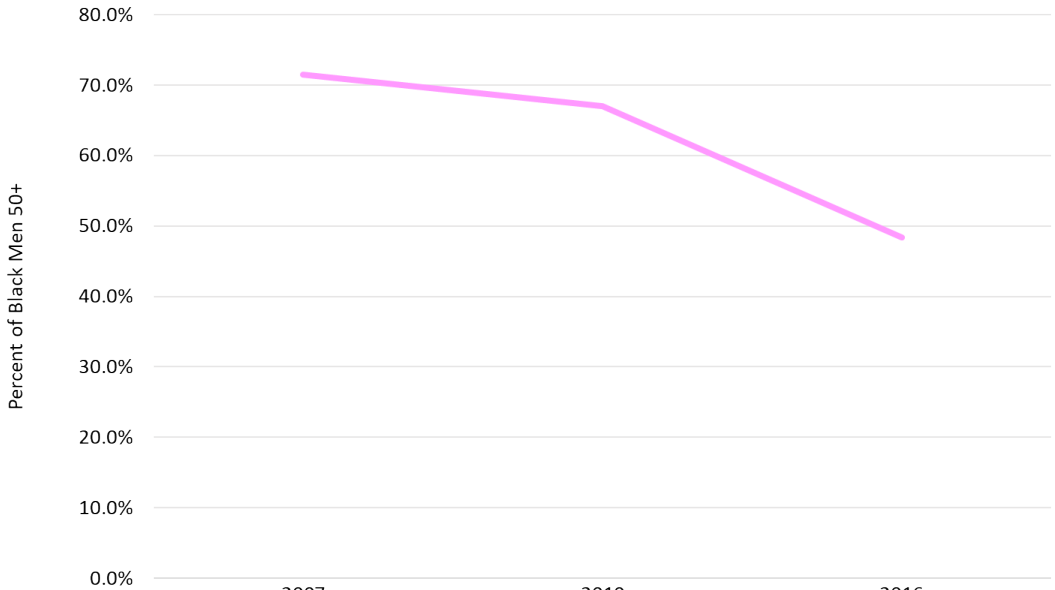
CHART 8.13: WHITE MEN AGES 50 AND OLDER WHO RECEIVED A PSA TEST IN THE PAST TWO YEARS (2007-2016)



	2007	2010	2016
LAKE	61.0%	79.1%	57.9%
ORANGE	64.0%	70.9%	54.7%
OSCEOLA	62.3%	62.6%	47.4%
SEMINOLE	60.4%	69.6%	56.6%
FLORIDA	63.1%	74.7%	58.2%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

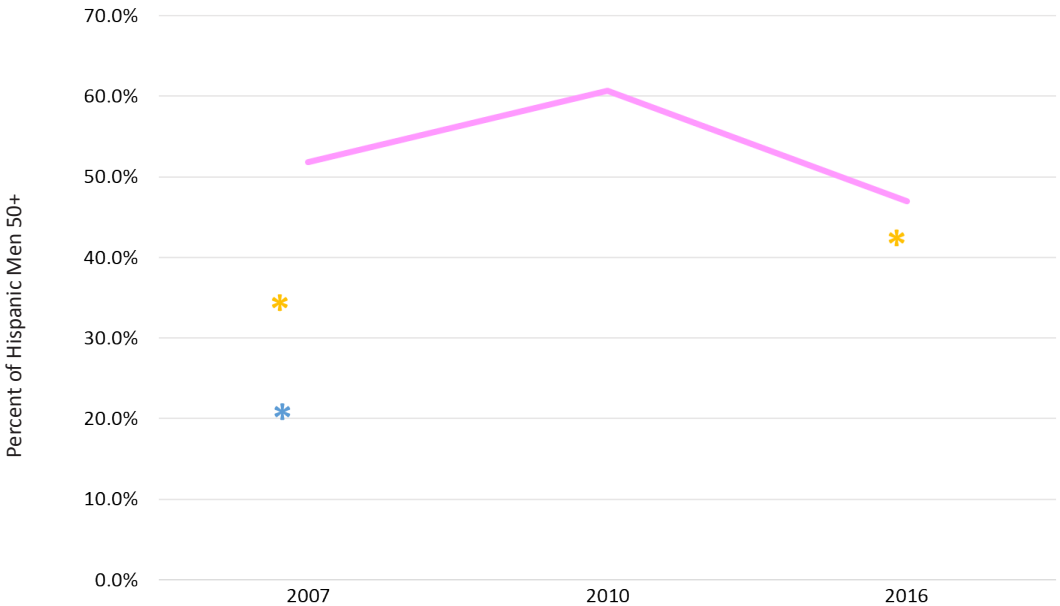
CHART 8.14: BLACK MEN AGES 50 AND OLDER WHO RECEIVED A PSA TESTS IN THE PAST TWO YEARS (2007-2016)



	2007	2010	2016
LAKE	N/A	N/A	N/A
ORANGE	N/A	N/A	N/A
OSCEOLA	N/A	N/A	N/A
SEMINOLE	N/A	N/A	N/A
FLORIDA	71.5%	67.0%	48.4%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

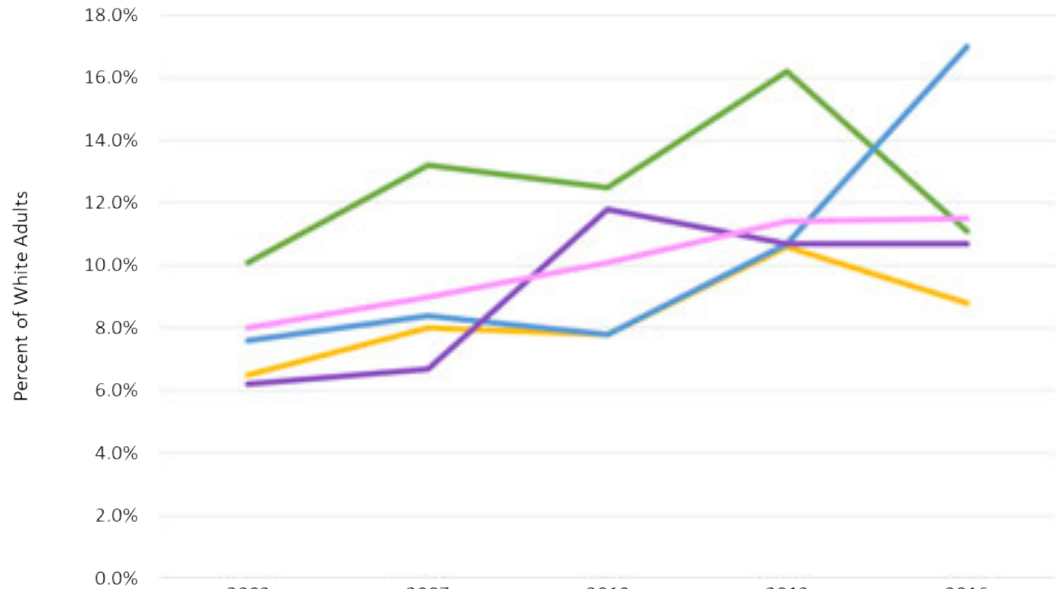
CHART 8.15: HISPANIC MEN AGES 50 AND OLDER WHO RECEIVED A PSA TEST IN THE PAST TWO YEARS (2007-2016)



	2007	2010	2016
LAKE	N/A	N/A	N/A
ORANGE	39.3%	N/A	48.2%
OSCEOLA	27.3%	N/A	N/A
SEMINOLE	N/A	N/A	N/A
FLORIDA	51.8%	60.7%	47.0%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

CHART 8.16: WHITE ADULTS WITH DIAGNOSED DIABETES (2002-2016)



	2002	2007	2010	2013	2016
LAKE	10.1%	13.2%	12.5%	16.2%	11.1%
ORANGE	6.5%	8.0%	7.8%	10.6%	8.8%
OSCEOLA	7.6%	8.4%	7.8%	10.7%	17.0%
SEMINOLE	6.2%	6.7%	11.8%	10.7%	10.7%
FLORIDA	8.0%	9.0%	10.1%	11.4%	11.5%

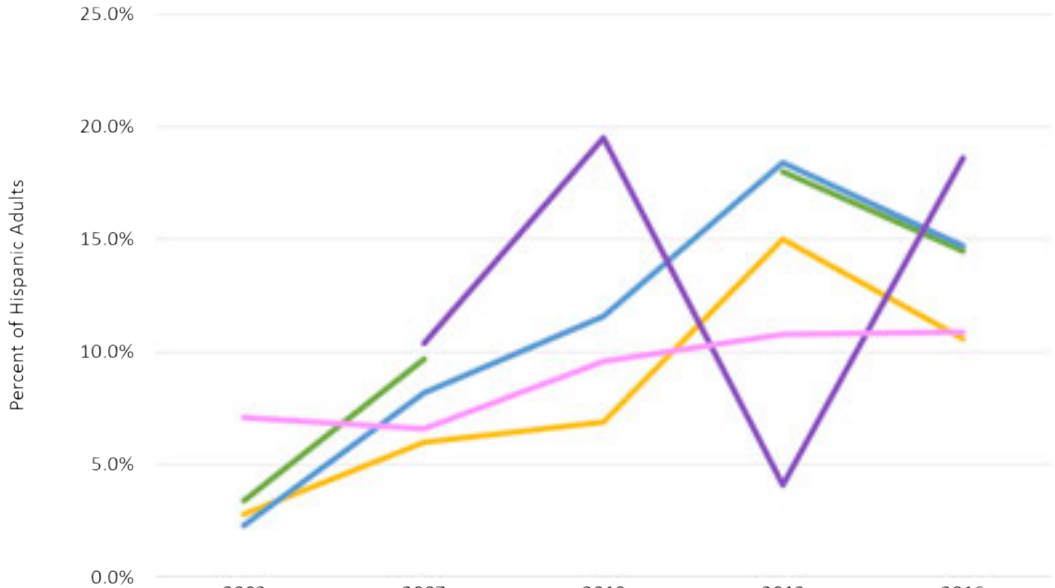
Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

CHART 8.17: BLACK ADULTS WITH DIAGNOSED DIABETES (2002-2016)

	2002	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A	18.5%
ORANGE	17.1%	13.4%	21.5%	6.4%	10.9%
OSCEOLA	N/A	22.8%	30.1%	8.5%	3.6%
SEMINOLE	3.6%	12.5%	N/A	10.4%	9.4%
FLORIDA	10.6%	12.4%	13.1%	12.3%	14.5%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

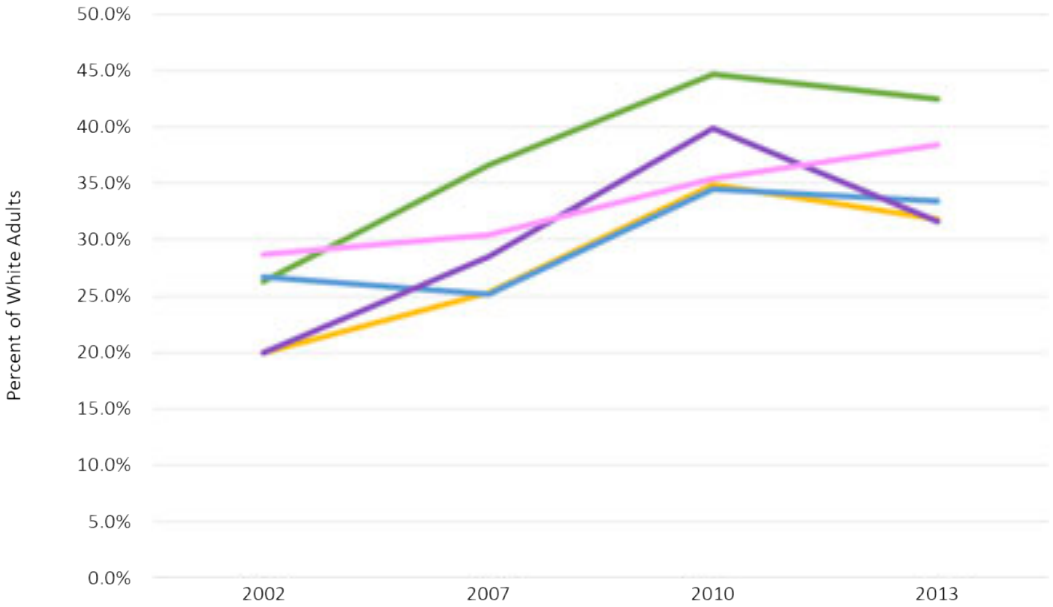
CHART 8.18: HISPANIC ADULTS WITH DIAGNOSED DIABETES (2002-2016)



	2002	2007	2010	2013	2016
LAKE	3.4%	9.7%	N/A	18.0%	14.5%
ORANGE	2.8%	6.0%	6.9%	15.0%	10.6%
OSCEOLA	2.3%	8.2%	11.6%	18.4%	14.7%
SEMINOLE	N/A	10.4%	19.5%	4.1%	18.6%
FLORIDA	7.1%	6.6%	9.6%	10.8%	10.9%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

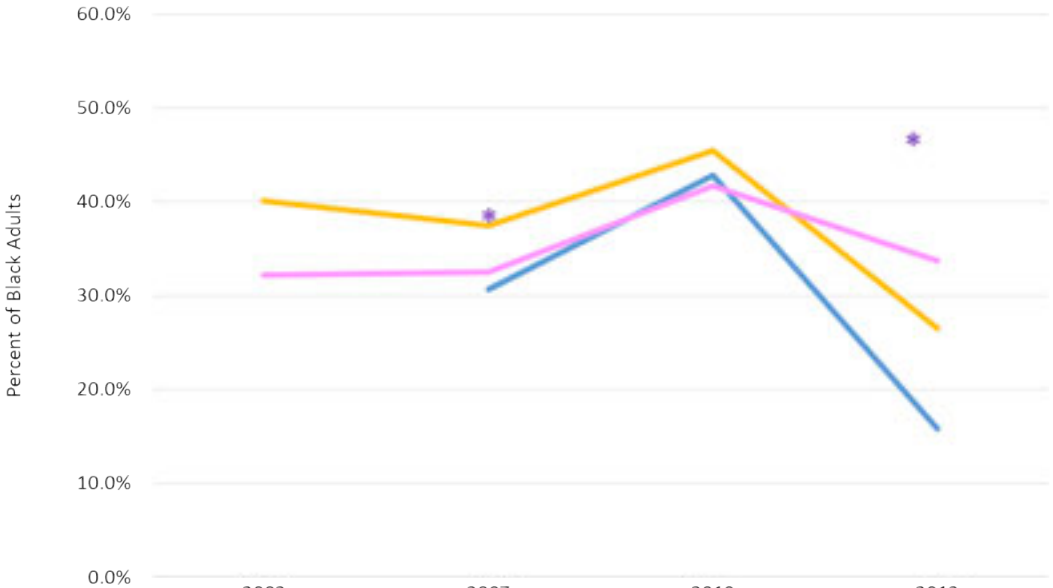
CHART 8.19: WHITE ADULTS WHO HAVE BEEN TOLD THEY HAVE HYPERTENSION (2002-2013)



	2002	2007	2010	2013
LAKE	26.3%	36.6%	44.7%	42.5%
ORANGE	20.0%	25.3%	34.9%	31.8%
OSCEOLA	26.7%	25.2%	34.5%	33.4%
SEMINOLE	20.0%	28.5%	39.9%	31.6%
FLORIDA	28.7%	30.4%	35.4%	38.4%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

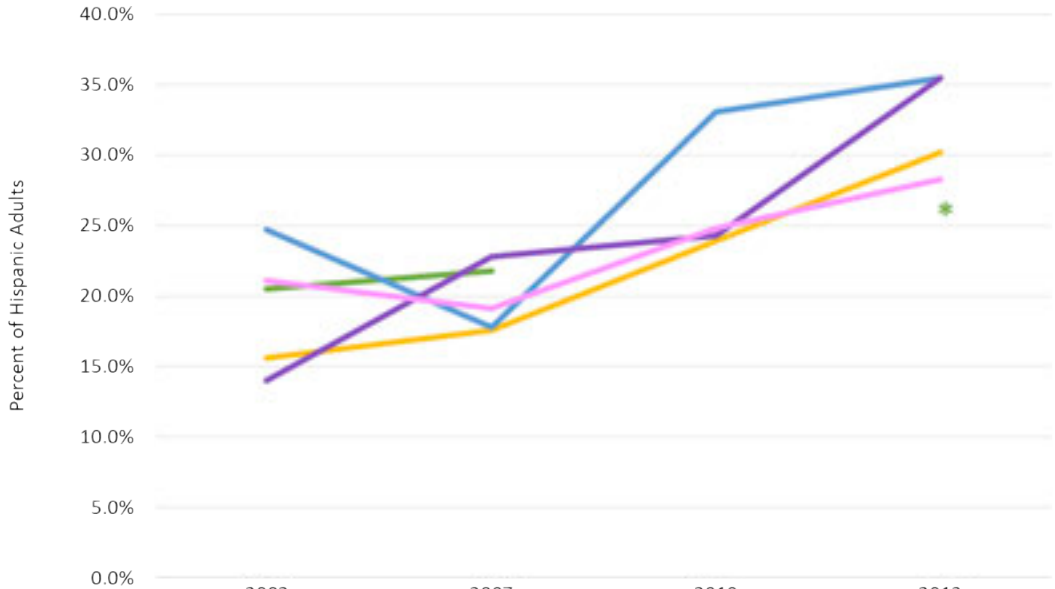
CHART 8.20: BLACK ADULTS WHO HAVE BEEN TOLD THEY HAVE HAVE HYPERTENSION (2002-2013)



	2002	2007	2010	2013
LAKE	N/A	N/A	N/A	N/A
ORANGE	40.1%	37.5%	45.5%	26.5%
OSCEOLA	N/A	30.7%	42.8%	15.8%
SEMINOLE	N/A	45.7%	N/A	52.0%
FLORIDA	32.2%	32.5%	41.7%	33.7%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

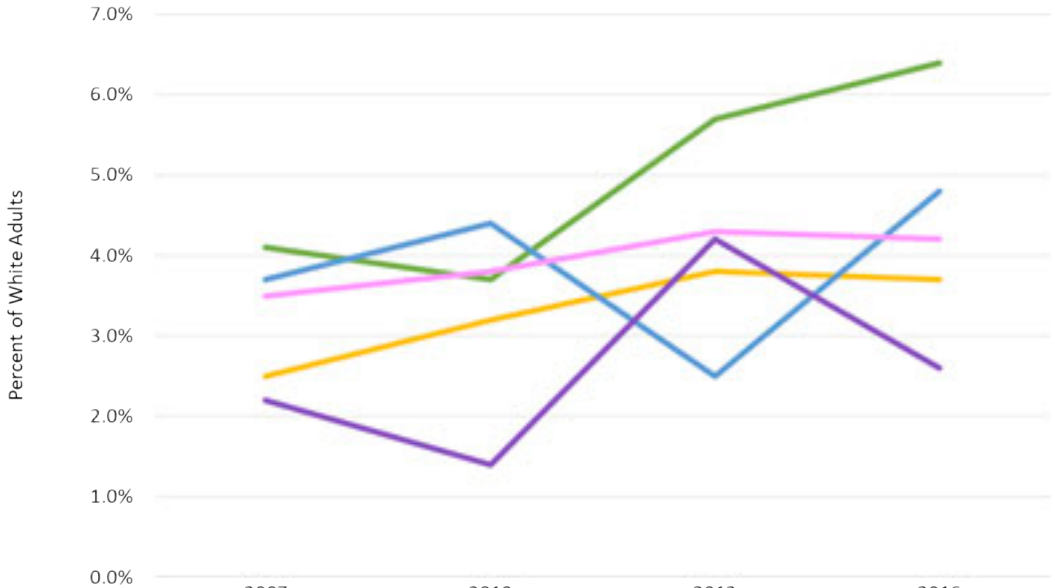
CHART 8.21: HISPANIC ADULTS WHO HAVE BEEN TOLD THEY HAVE HYPERTENSION (2002-2013)



	2002	2007	2010	2013
LAKE	20.5%	21.8%	N/A	27.7%
ORANGE	15.6%	17.6%	23.9%	30.2%
OSCEOLA	24.7%	17.8%	33.1%	35.5%
SEMINOLE	14.0%	22.8%	24.3%	35.5%
FLORIDA	21.1%	19.1%	24.8%	28.3%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

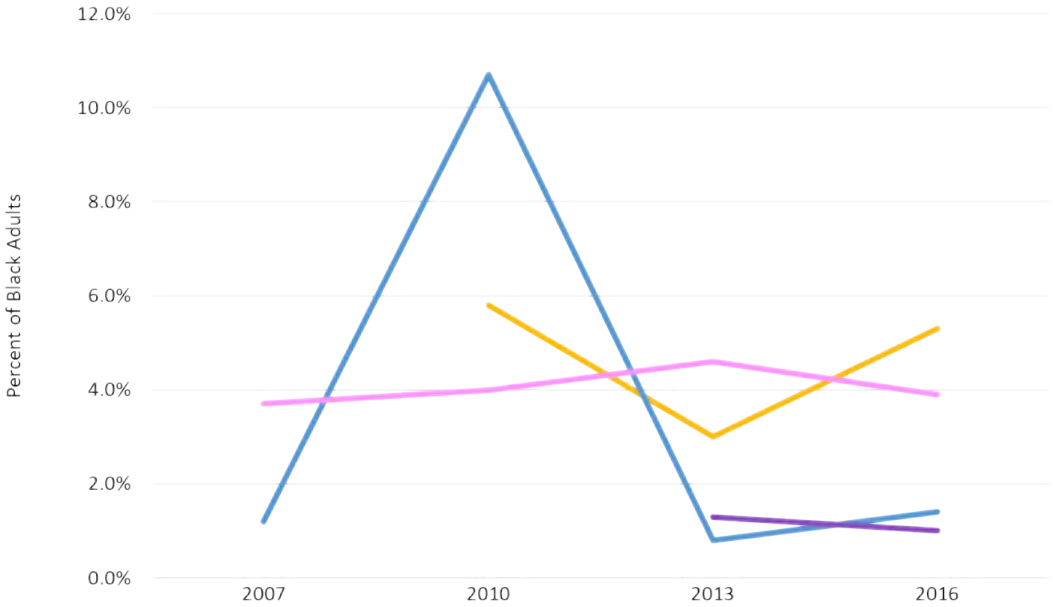
CHART 8.22: WHITE ADULTS WHO HAVE BEEN TOLD THEY HAD A STROKE (2007-2016)



	2007	2010	2013	2016
LAKE	4.1%	3.7%	5.7%	6.4%
ORANGE	2.5%	3.2%	3.8%	3.7%
OSCEOLA	3.7%	4.4%	2.5%	4.8%
SEMINOLE	2.2%	1.4%	4.2%	2.6%
FLORIDA	3.5%	3.8%	4.3%	4.2%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

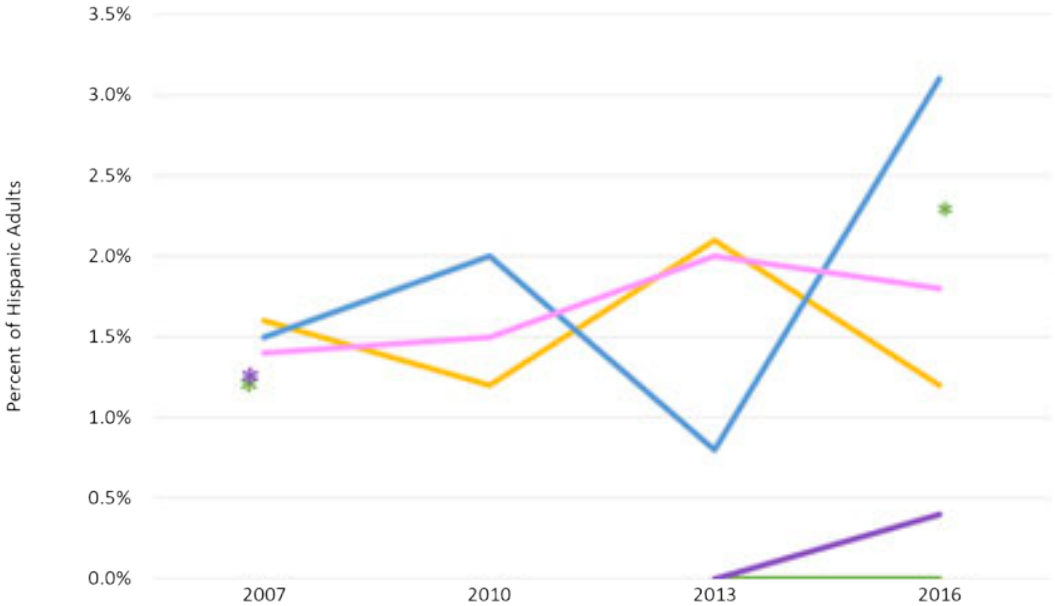
CHART 8.23: BLACK ADULTS WHO HAVE BEEN TOLD THEY HAD A STROKE (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	N/A
ORANGE	N/A	5.8%	3.0%	5.3%
OSCEOLA	1.2%	10.7%	0.8%	1.4%
SEMINOLE	N/A	N/A	1.3%	1.0%
FLORIDA	3.7%	4.0%	4.6%	3.9%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

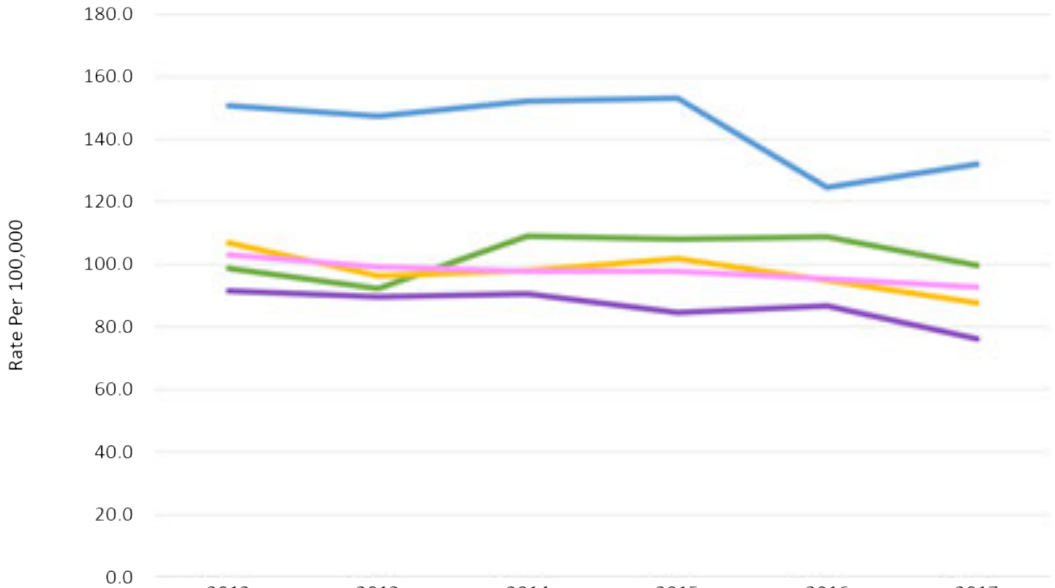
CHART 8.24: HISPANIC ADULTS WHO HAVE BEEN TOLD THEY HAD A STROKE (2007-2016)



	2007	2010	2013	2016
LAKE	1.4%	N/A	0.0%	0.0%
ORANGE	1.6%	1.2%	2.1%	1.2%
OSCEOLA	1.5%	2.0%	0.8%	3.1%
SEMINOLE	1.5%	N/A	0.0%	0.4%
FLORIDA	1.4%	1.5%	2.0%	1.8%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

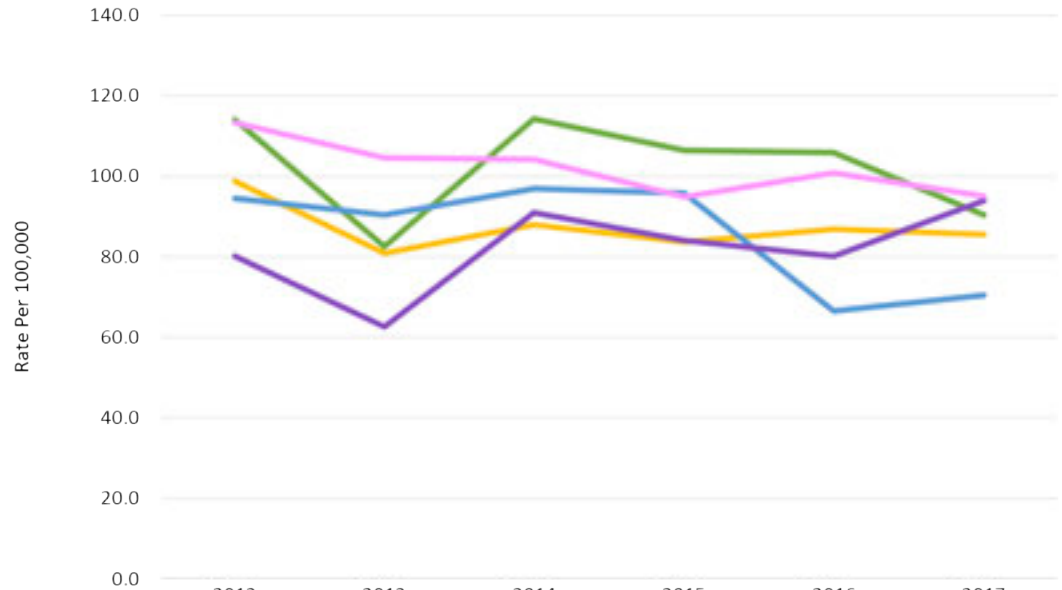
CHART 8.25: WHITE AGE-ADJUSTED DEATH RATE FOR CORONARY HEART DISEASE (2012-2017)



	2012	2013	2014	2015	2016	2017
LAKE	98.7	92.2	109.0	108.1	108.8	99.7
ORANGE	106.8	96.4	98.0	101.9	95.0	87.7
OSCEOLA	150.8	147.5	152.2	153.2	124.7	132.0
SEMINOLE	91.5	89.6	90.6	84.7	86.8	76.3
FLORIDA	103.0	99.3	97.9	97.7	95.3	92.8

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

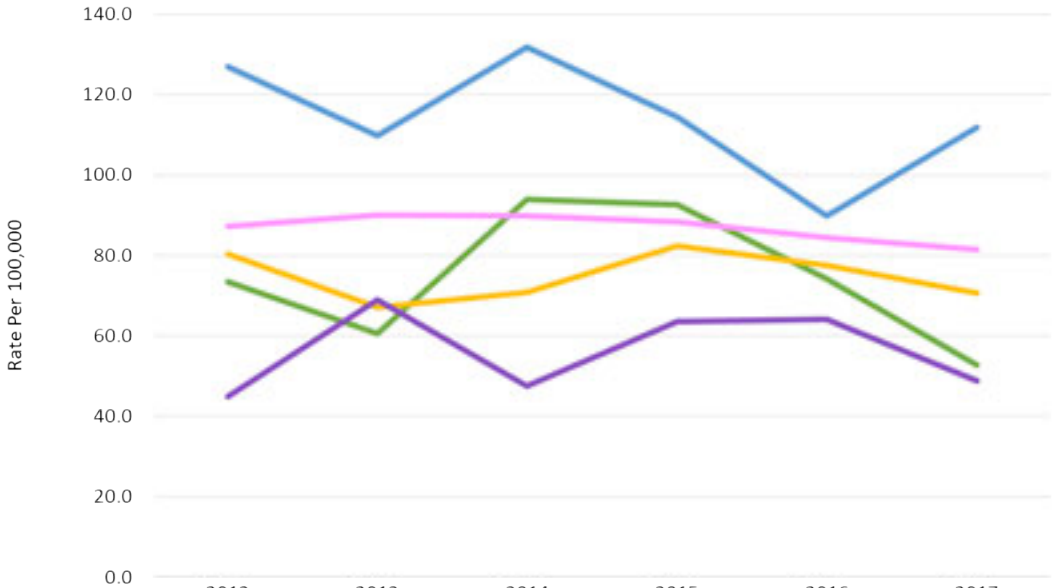
CHART 8.26: BLACK AGE-ADJUSTED DEATH RATE FOR CORONARY HEART DISEASE (2012-2017)



	2012	2013	2014	2015	2016	2017
LAKE	114.2	82.6	114.3	106.5	105.9	90.5
ORANGE	98.8	81.0	88.0	83.7	86.8	85.6
OSCEOLA	94.5	90.4	96.9	95.9	66.5	70.4
SEMINOLE	80.2	62.7	90.9	84.0	80.2	94.0
FLORIDA	113.4	104.6	104.3	94.9	100.9	95.1

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

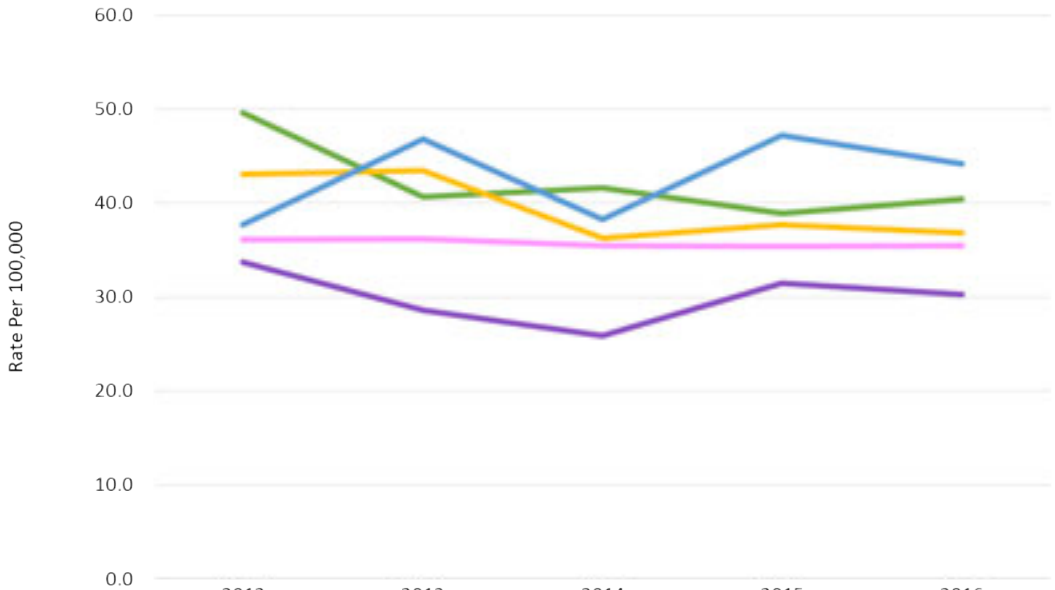
CHART 8.27: HISPANIC AGE-ADJUSTED DEATH RATE FOR CORONARY HEART DISEASE (2012-2017)



	2012	2013	2014	2015	2016	2017
LAKE	73.4	60.6	94.0	92.7	74.3	52.7
ORANGE	80.3	67.2	70.8	82.4	77.6	70.6
OSCEOLA	127.0	109.9	131.9	114.5	89.8	111.9
SEMINOLE	44.9	68.9	47.5	63.5	64.1	48.8
FLORIDA	87.3	90.0	89.9	88.3	84.4	81.4

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

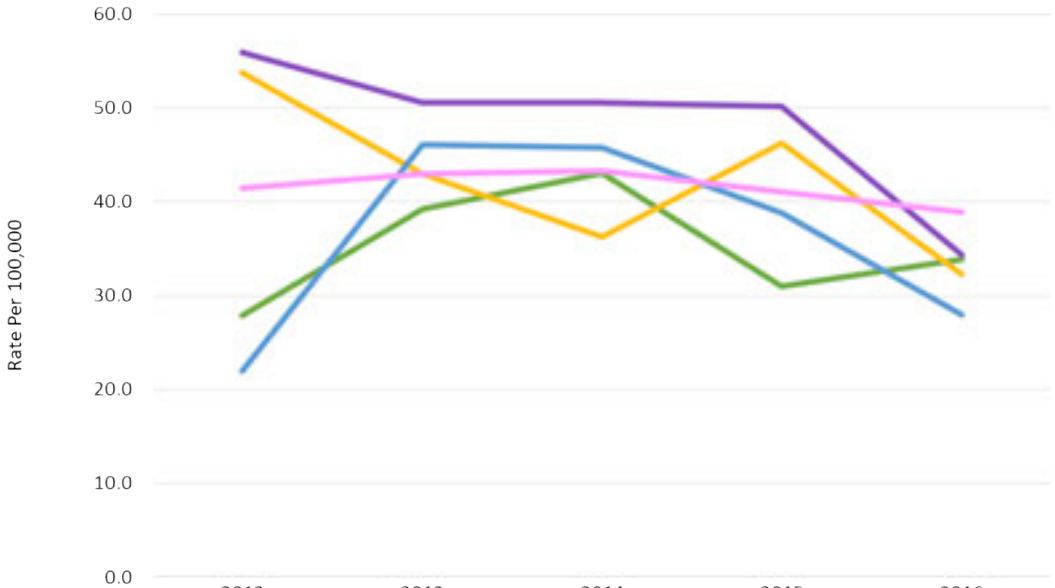
CHART 8.28: WHITE AGE-ADJUSTED COLORECTAL CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	49.6	40.7	41.6	38.9	40.4
ORANGE	43.1	43.5	36.3	37.7	36.8
OSCEOLA	37.7	46.8	38.3	47.2	44.2
SEMINOLE	33.7	28.6	25.9	31.5	30.3
FLORIDA	36.1	36.2	35.5	35.4	35.5

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

CHART 8.29: BLACK AGE-ADJUSTED COLORECTAL CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	27.9	39.2	43.1	31.0	33.9
ORANGE	53.8	43.0	36.3	46.3	32.3
OSCEOLA	22.0	46.1	45.8	38.8	28.0
SEMINOLE	55.9	50.6	50.6	50.2	34.4
FLORIDA	41.5	43.0	43.3	41.1	38.9

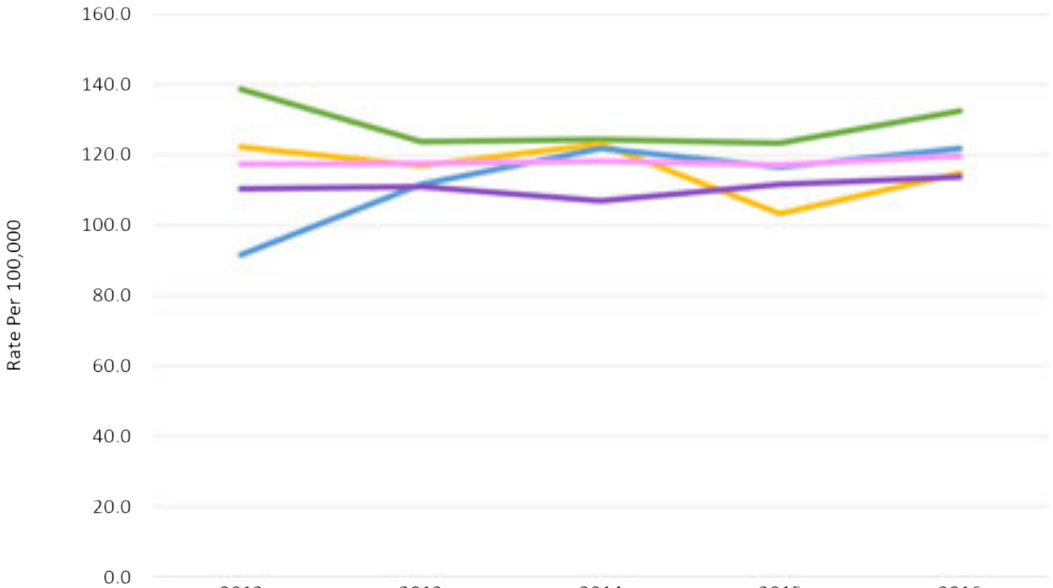
Source: FLHealthCHARTS: University of Miami (FL) Medical School, Florida Cancer Data System

CHART 8.30: HISPANIC AGE-ADJUSTED COLORECTAL CANCER INCIDENCE (2012-2016)

	2012	2013	2014	2015	2016
LAKE	27.7	19.8	32.3	27.3	31.8
ORANGE	30.8	34.8	29.8	32.9	33.4
OSCEOLA	26.8	44.7	29.5	40.4	31.8
SEMINOLE	31.0	16.8	16.3	23.4	25.5
FLORIDA	33.9	35.1	34.0	32.7	33.3

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

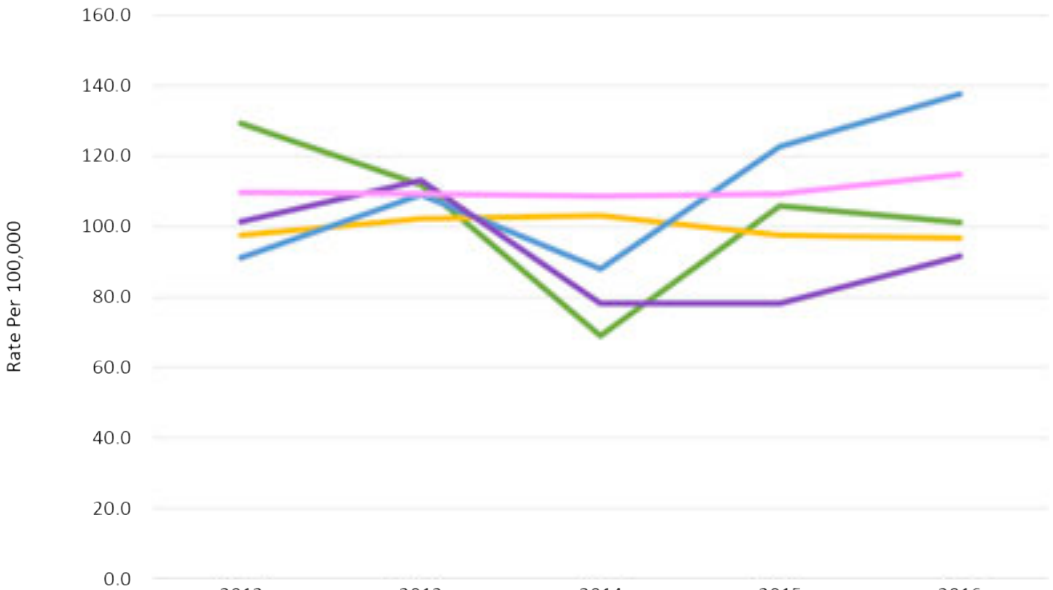
CHART 8.31: WHITE FEMALE BREAST CANCER INCIDENCE (2012-2016))



	2012	2013	2014	2015	2016
LAKE	138.7	123.7	124.4	123.4	132.6
ORANGE	122.3	117.0	123.1	103.3	114.9
OSCEOLA	91.7	111.6	121.9	116.6	121.9
SEMINOLE	110.3	111.0	106.9	111.7	113.7
FLORIDA	117.4	117.7	118.3	117.2	119.7

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

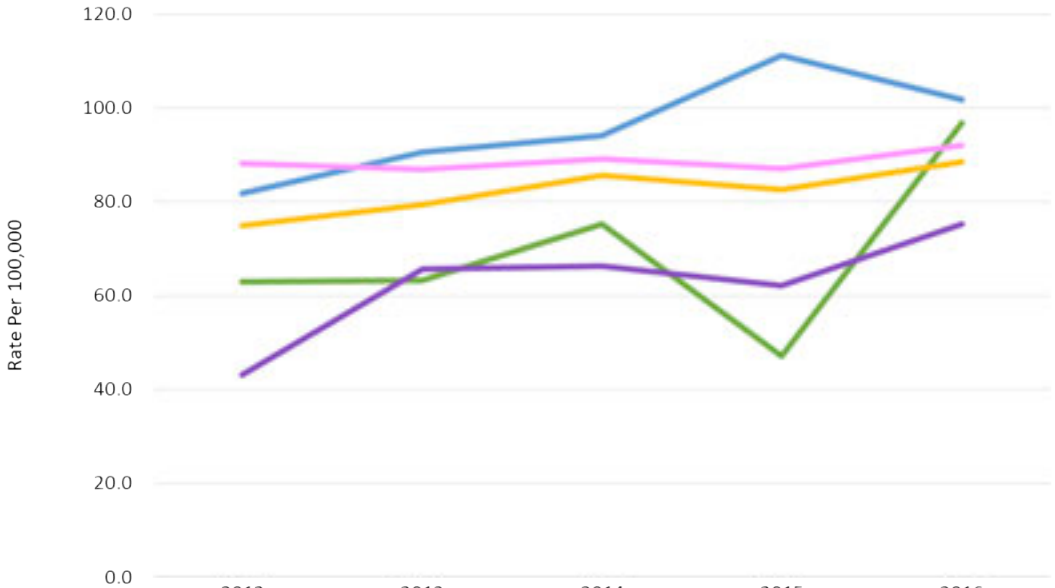
CHART 8.32: BLACK FEMALE BREAST CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	129.3	111.9	69.0	106.0	101.3
ORANGE	97.7	102.3	103.1	97.7	96.7
OSCEOLA	91.3	109.2	88.0	122.8	137.6
SEMINOLE	101.5	113.2	78.2	78.3	91.7
FLORIDA	109.7	109.3	108.7	109.3	114.9

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

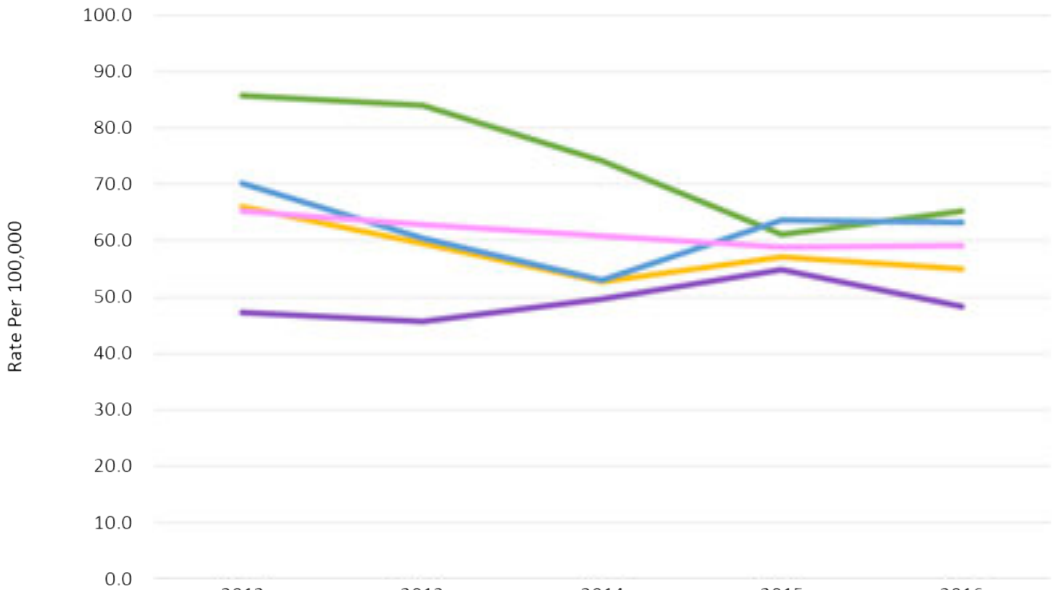
CHART 8.33: HISPANIC FEMALE BREAST CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	62.9	63.3	75.2	47.2	96.8
ORANGE	74.9	79.5	85.6	82.6	88.5
OSCEOLA	81.8	90.6	94.2	111.2	101.8
SEMINOLE	43.2	65.7	66.4	62.2	75.2
FLORIDA	88.2	87.0	89.1	87.1	92.0

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

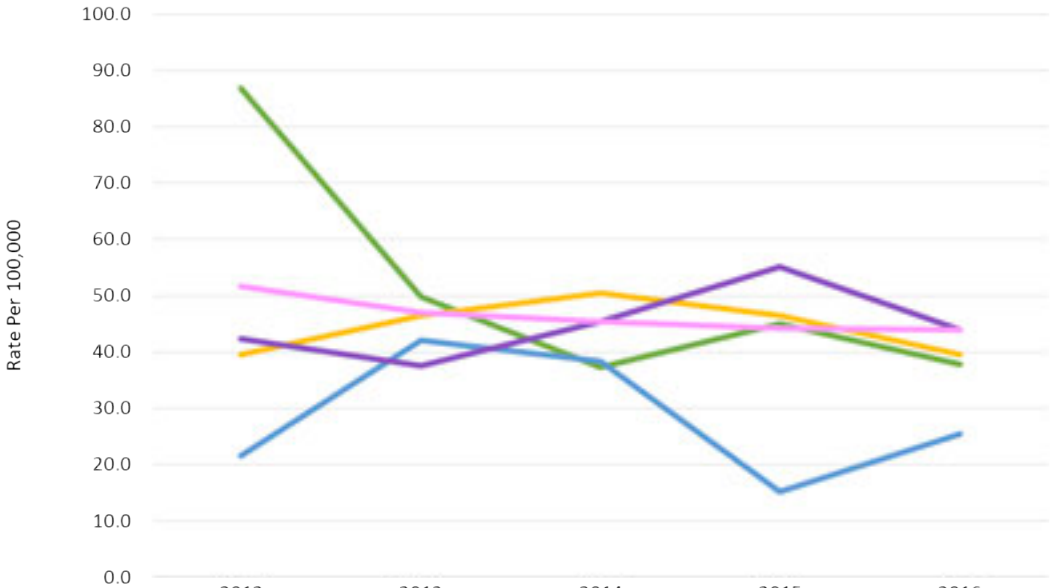
CHART 8.34: WHITE LUNG CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	85.8	84.0	74.2	61.1	65.2
ORANGE	66.0	59.5	52.8	57.1	55.0
OSCEOLA	70.2	60.4	53.0	63.6	63.3
SEMINOLE	47.3	45.7	49.7	54.9	48.3
FLORIDA	65.3	62.9	60.9	58.9	59.1

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

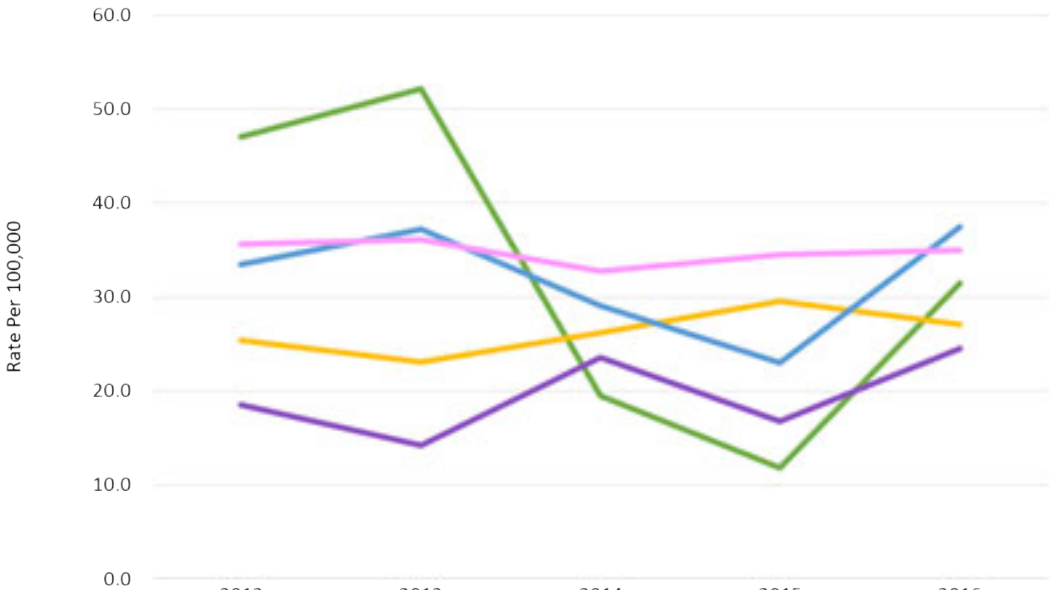
CHART 8.35: BLACK LUNG CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	86.8	49.8	37.3	45.0	37.8
ORANGE	39.5	46.5	50.5	46.5	39.6
OSCEOLA	21.6	42.1	38.3	15.2	25.4
SEMINOLE	42.4	37.5	45.4	55.2	44.0
FLORIDA	51.7	47.0	45.4	44.2	43.9

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

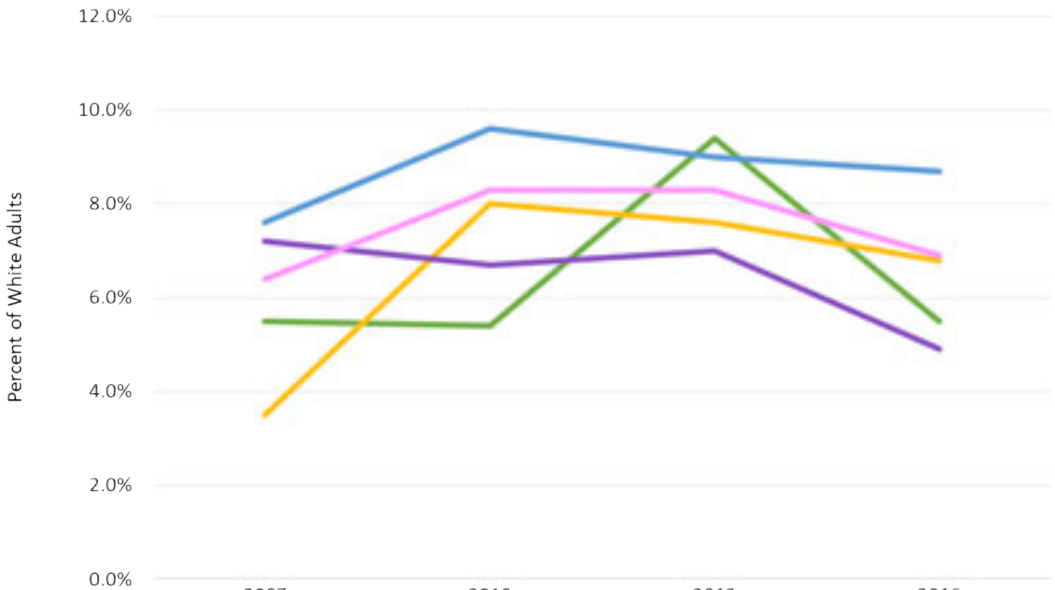
CHART 8.36: HISPANIC LUNG CANCER INCIDENCE (2012-2016)



	2012	2013	2014	2015	2016
LAKE	47.1	52.2	19.5	11.8	31.5
ORANGE	25.4	23.1	26.2	29.6	27.1
OSCEOLA	33.5	37.2	29.1	23.0	37.5
SEMINOLE	18.5	14.2	23.6	16.8	24.5
FLORIDA	35.6	36.1	32.8	34.5	35.0

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

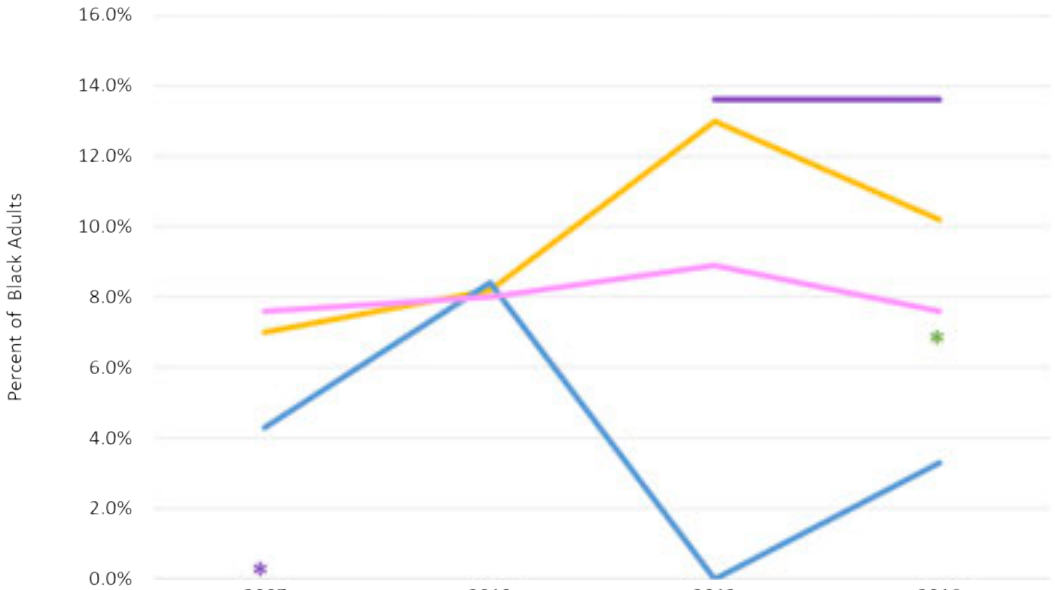
CHART 8.37: WHITE ADULTS CURRENTLY WITH ASTHMA (2007-2016)



	2007	2010	2013	2016
LAKE	5.5%	5.4%	9.4%	5.5%
ORANGE	3.5%	8.0%	7.6%	6.8%
OSCEOLA	7.6%	9.6%	9.0%	8.7%
SEMINOLE	7.2%	6.7%	7.0%	4.9%
FLORIDA	6.4%	8.3%	8.3%	6.9%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

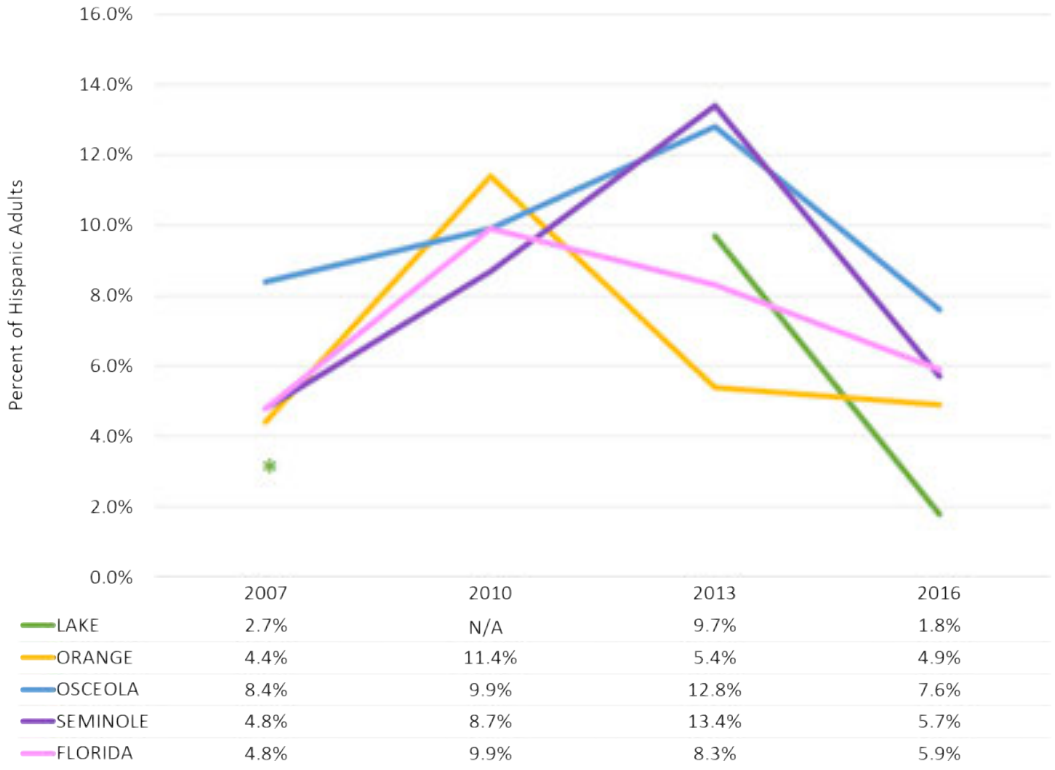
CHART 8.38: BLACK ADULTS CURRENTLY WITH ASTHMA (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	7.4%
ORANGE	7.0%	8.2%	13.0%	10.2%
OSCEOLA	4.3%	8.4%	0.0%	3.3%
SEMINOLE	1.3%	N/A	13.6%	13.6%
FLORIDA	7.6%	8.0%	8.9%	7.6%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

CHART 8.39: HISPANIC ADULTS CURRENTLY WITH ASTHMA (2007-2016)



	2007	2010	2013	2016
LAKE	2.7%	N/A	9.7%	1.8%
ORANGE	4.4%	11.4%	5.4%	4.9%
OSCEOLA	8.4%	9.9%	12.8%	7.6%
SEMINOLE	4.8%	8.7%	13.4%	5.7%
FLORIDA	4.8%	9.9%	8.3%	5.9%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

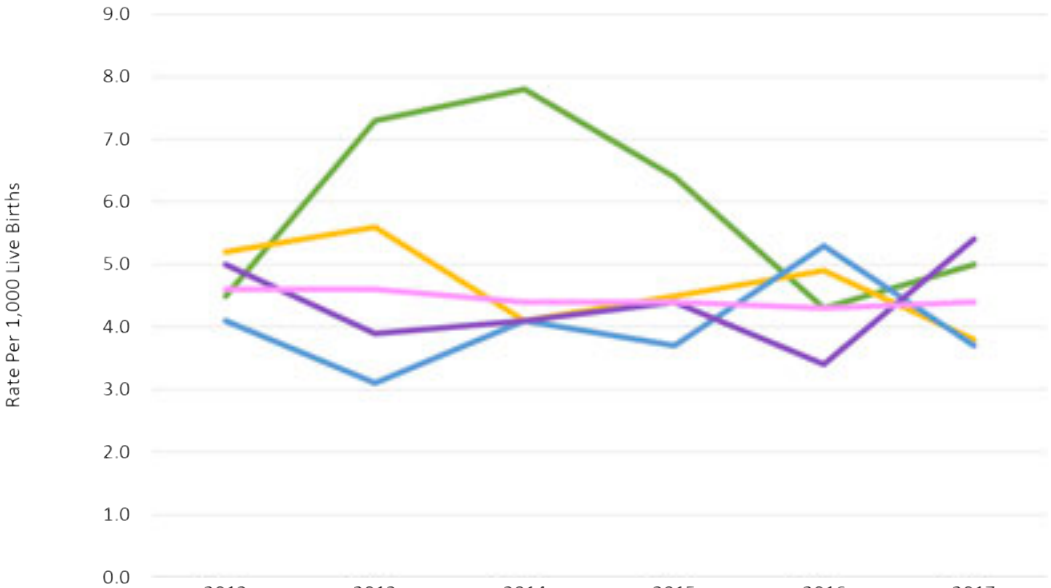
TABLE 8.1: LEADING CAUSES OF DEATH BY RACE/ETHNICITY PER 100,000, LAKE COUNTY (2017)

Highest rates for each condition are highlighted in red.

	White	Black/ Other	White Hispanic	Black Hispanic
Heart diseases	227.0	207.2	82.7	32.9
Cancer	221.5	171.6	89.3	46.1
Cerebrovascular diseases	47.5	63.9	25.7	11.3
Chronic lower respiratory disease	47.4	25.6	12.2	7.3
Unintentional injury	69.4	43.0	33.2	15.3
Diabetes mellitus	22.5	45.5	21.7	9.8

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

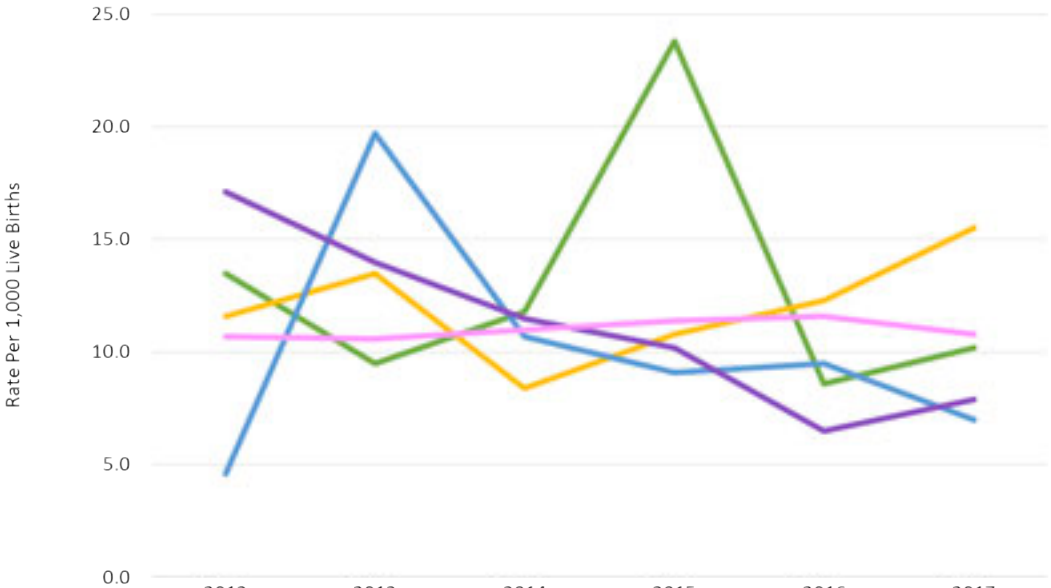
CHART 8.40: WHITE INFANT MORTALITY RATE (2012-2017)



	2012	2013	2014	2015	2016	2017
LAKE	4.5	7.3	7.8	6.4	4.3	5.0
ORANGE	5.2	5.6	4.1	4.5	4.9	3.8
OSCEOLA	4.1	3.1	4.1	3.7	5.3	3.7
SEMINOLE	5.0	3.9	4.1	4.4	3.4	5.4
FLORIDA	4.6	4.6	4.4	4.4	4.3	4.4

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

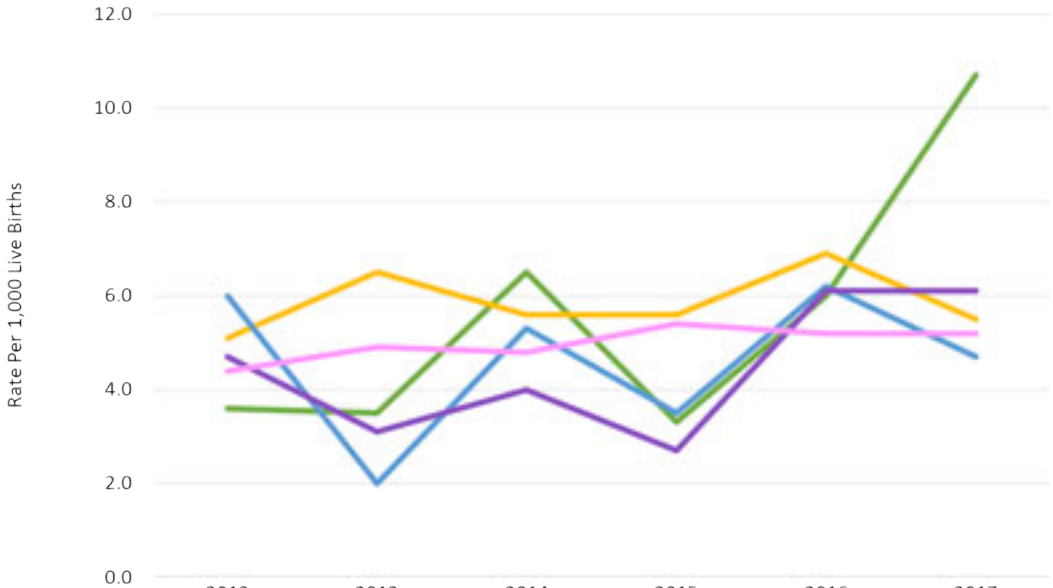
CHART 8.41: BLACK INFANT MORTALITY RATE (2012-2017)



	2012	2013	2014	2015	2016	2017
LAKE	13.5	9.5	11.8	23.8	8.6	10.2
ORANGE	11.6	13.5	8.4	10.8	12.3	15.5
OSCEOLA	4.6	19.7	10.7	9.1	9.5	7.0
SEMINOLE	17.1	14.0	11.5	10.2	6.5	7.9
FLORIDA	10.7	10.6	11.0	11.4	11.6	10.8

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

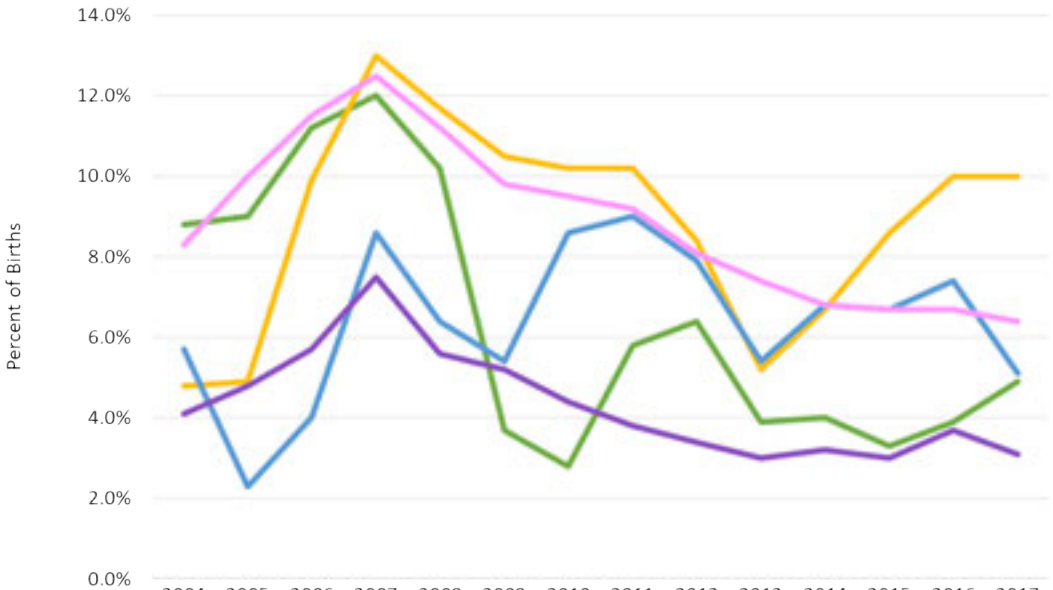
CHART 8.42: HISPANIC INFANT MORTALITY RATE (2012-2017)



	2012	2013	2014	2015	2016	2017
LAKE	3.6	3.5	6.5	3.3	6.0	10.7
ORANGE	5.1	6.5	5.6	5.6	6.9	5.5
OSCEOLA	6.0	2.0	5.3	3.5	6.2	4.7
SEMINOLE	4.7	3.1	4.0	2.7	6.1	6.1
FLORIDA	4.4	4.9	4.8	5.4	5.2	5.2

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

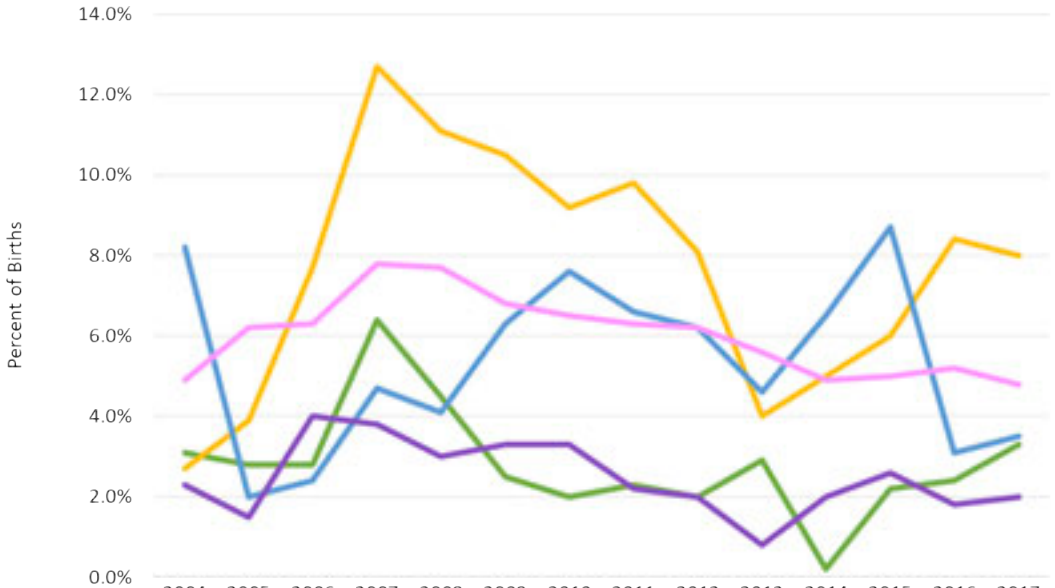
CHART 8.43: BIRTHS TO WHITE WOMEN WITH SELF-PAY FOR DELIVERY PAYMENT SOURCE (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	8.8%	9.0%	11.2%	12.0%	10.2%	3.7%	2.8%	5.8%	6.4%	3.9%	4.0%	3.3%	3.9%	4.9%
ORANGE	4.8%	4.9%	9.9%	13.0%	11.7%	10.5%	10.2%	10.2%	8.4%	5.2%	6.7%	8.6%	10.0%	10.0%
OSCEOLA	5.7%	2.3%	4.0%	8.6%	6.4%	5.4%	8.6%	9.0%	7.9%	5.4%	6.8%	6.7%	7.4%	5.1%
SEMINOLE	4.1%	4.8%	5.7%	7.5%	5.6%	5.2%	4.4%	3.8%	3.4%	3.0%	3.2%	3.0%	3.7%	3.1%
FLORIDA	8.3%	10.0%	11.5%	12.5%	11.2%	9.8%	9.5%	9.2%	8.1%	7.4%	6.8%	6.7%	6.7%	6.4%

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

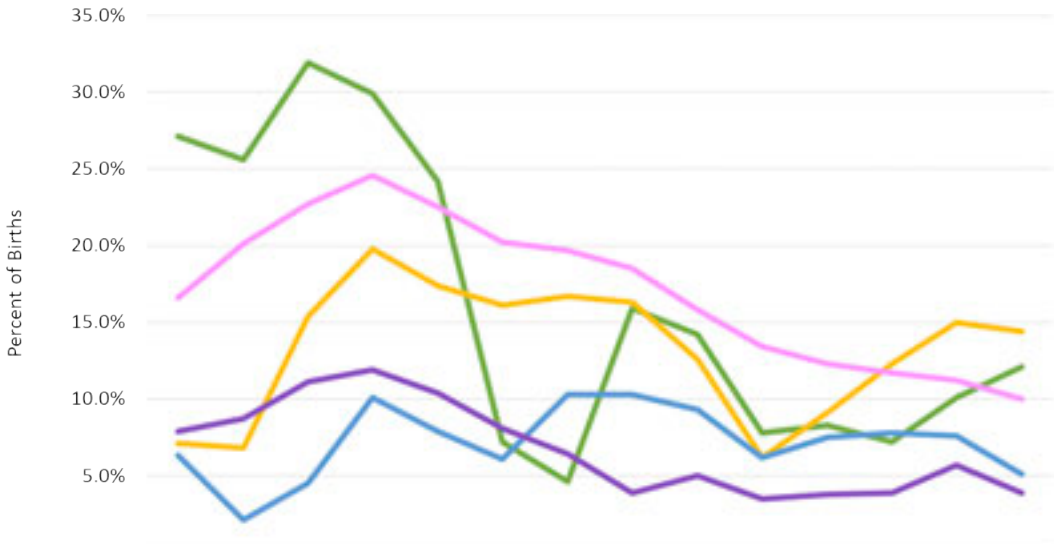
CHART 8.44: BIRTHS TO BLACK WOMEN WITH SELF-PAY FOR DELIVERY PAYMENT SOURCE (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	3.1%	2.8%	2.8%	6.4%	4.5%	2.5%	2.0%	2.3%	2.0%	2.9%	0.2%	2.2%	2.4%	3.3%
ORANGE	2.7%	3.9%	7.7%	12.7%	11.1%	10.5%	9.2%	9.8%	8.1%	4.0%	5.0%	6.0%	8.4%	8.0%
OSCEOLA	8.2%	2.0%	2.4%	4.7%	4.1%	6.3%	7.6%	6.6%	6.2%	4.6%	6.5%	8.7%	3.1%	3.5%
SEMINOLE	2.3%	1.5%	4.0%	3.8%	3.0%	3.3%	3.3%	2.2%	2.0%	0.8%	2.0%	2.6%	1.8%	2.0%
FLORIDA	4.9%	6.2%	6.3%	7.8%	7.7%	6.8%	6.5%	6.3%	6.2%	5.6%	4.9%	5.0%	5.2%	4.8%

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

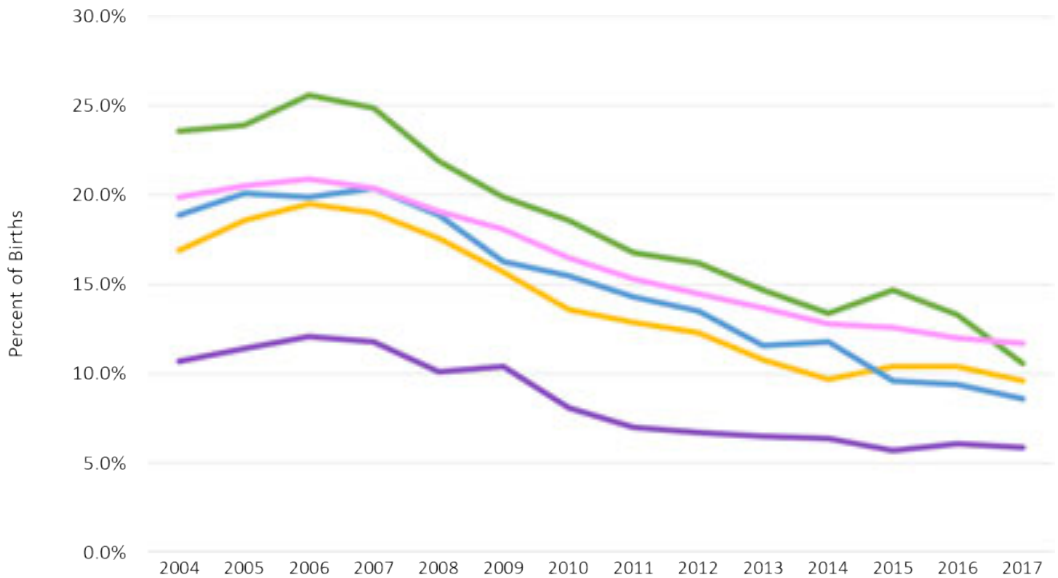
CHART 8.45: BIRTHS TO HISPANIC WOMEN WITH SELF-PAY FOR DELIVERY PAYMENT SOURCE (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	27.1%	25.6%	31.9%	29.9%	24.2%	7.2%	4.6%	15.9%	14.2%	7.8%	8.3%	7.2%	10.1%	12.1%
ORANGE	7.1%	6.8%	15.4%	19.8%	17.4%	16.1%	16.7%	16.3%	12.6%	6.2%	9.1%	12.3%	15.0%	14.4%
OSCEOLA	6.3%	2.1%	4.5%	10.1%	7.9%	6.1%	10.3%	10.3%	9.3%	6.2%	7.5%	7.8%	7.6%	5.1%
SEMINOLE	7.9%	8.7%	11.1%	11.9%	10.4%	8.1%	6.4%	3.9%	5.0%	3.5%	3.8%	3.9%	5.7%	3.9%
FLORIDA	16.6%	20.1%	22.7%	24.6%	22.5%	20.2%	19.7%	18.5%	15.8%	13.4%	12.3%	11.7%	11.2%	10.0%

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

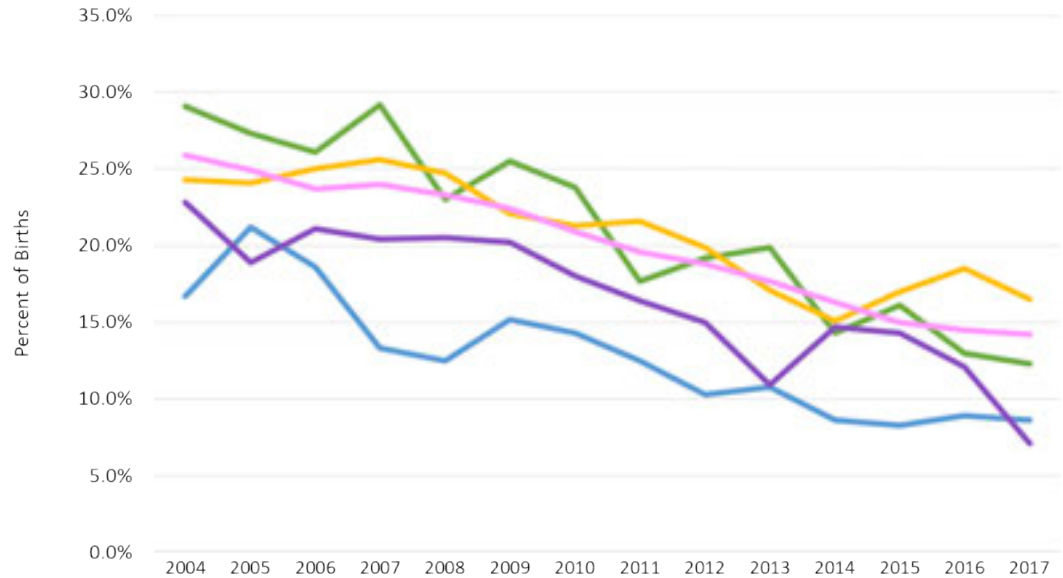
CHART 8.46: WHITE MOTHERS WITH LESS THAN A HIGH SCHOOL EDUCATION (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	23.6%	23.9%	25.6%	24.9%	21.9%	19.9%	18.6%	16.8%	16.2%	14.7%	13.4%	14.7%	13.3%	10.6%
ORANGE	16.9%	18.6%	19.5%	19.0%	17.6%	15.7%	13.6%	12.9%	12.3%	10.8%	9.7%	10.4%	10.4%	9.6%
OSCEOLA	18.9%	20.1%	19.9%	20.4%	18.9%	16.3%	15.5%	14.3%	13.5%	11.6%	11.8%	9.6%	9.4%	8.6%
SEMINOLE	10.7%	11.4%	12.1%	11.8%	10.1%	10.4%	8.1%	7.0%	6.7%	6.5%	6.4%	5.7%	6.1%	5.9%
FLORIDA	19.9%	20.5%	20.9%	20.4%	19.1%	18.1%	16.5%	15.3%	14.5%	13.7%	12.8%	12.6%	12.0%	11.7%

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

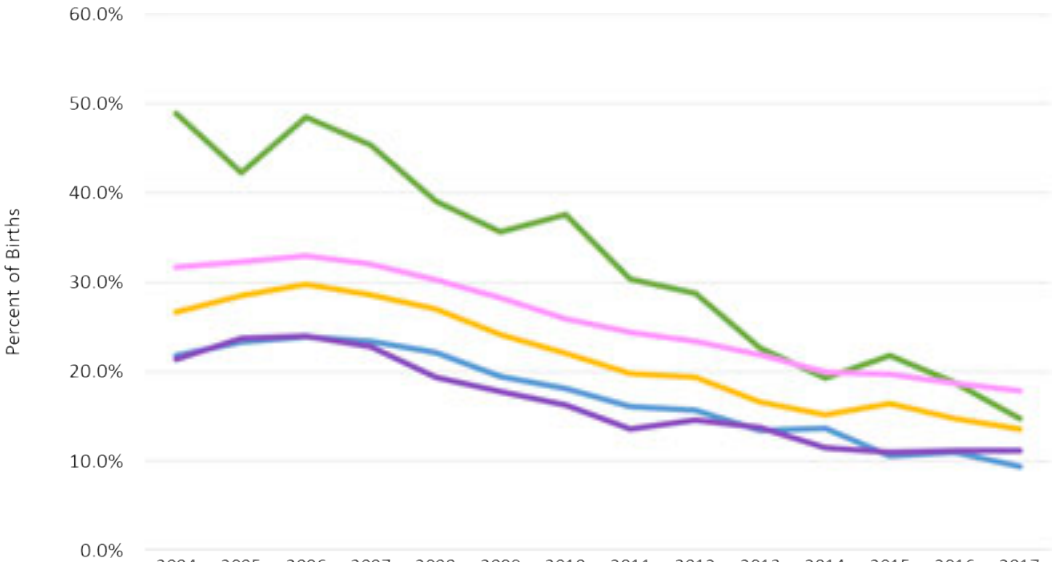
CHART 8.47: BLACK MOTHERS WITH LESS THAN A HIGH SCHOOL EDUCATION (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	29.1%	27.3%	26.1%	29.2%	23.0%	25.5%	23.8%	17.7%	19.2%	19.9%	14.3%	16.1%	13.0%	12.3%
ORANGE	24.3%	24.1%	25.0%	25.6%	24.7%	22.1%	21.3%	21.6%	19.9%	17.1%	15.1%	17.0%	18.5%	16.5%
OSCEOLA	16.7%	21.2%	18.6%	13.3%	12.5%	15.2%	14.3%	12.5%	10.3%	10.8%	8.6%	8.3%	8.9%	8.6%
SEMINOLE	22.8%	18.9%	21.1%	20.4%	20.5%	20.2%	18.0%	16.4%	15.0%	10.9%	14.7%	14.3%	12.1%	7.1%
FLORIDA	25.9%	24.9%	23.7%	24.0%	23.3%	22.4%	20.9%	19.6%	18.8%	17.7%	16.3%	15.0%	14.5%	14.2%

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

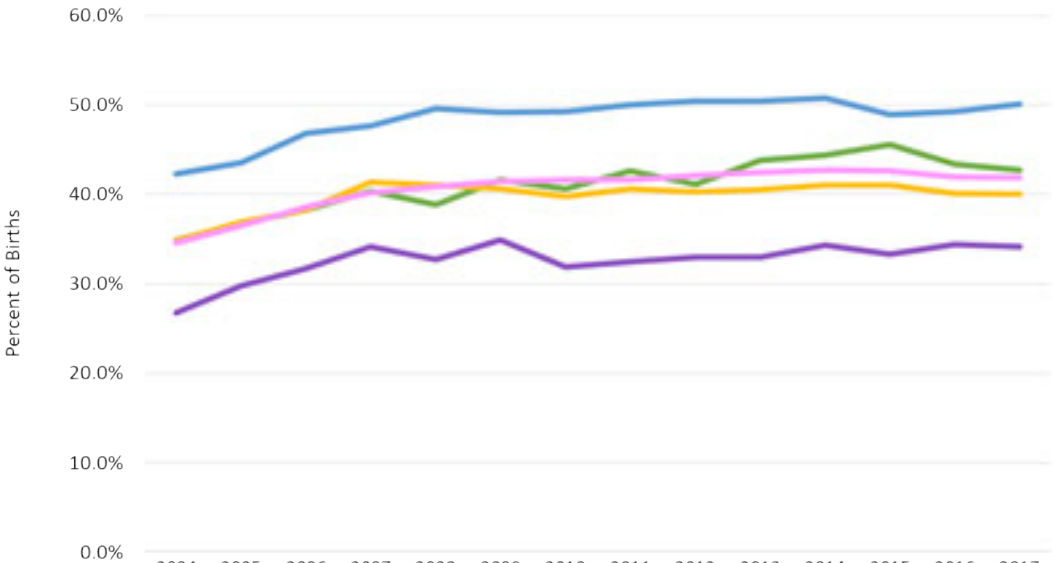
CHART 8.48: HISPANIC MOTHERS WITH LESS THAN A HIGH SCHOOL EDUCATION (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	48.9%	42.3%	48.5%	45.4%	39.1%	35.7%	37.6%	30.4%	28.8%	22.7%	19.3%	21.8%	18.8%	14.8%
ORANGE	26.7%	28.5%	29.8%	28.6%	27.0%	24.2%	22.1%	19.8%	19.4%	16.6%	15.2%	16.5%	14.8%	13.6%
OSCEOLA	21.8%	23.3%	23.9%	23.4%	22.2%	19.5%	18.1%	16.1%	15.7%	13.4%	13.7%	10.6%	11.0%	9.4%
SEMINOLE	21.4%	23.8%	24.0%	22.8%	19.4%	17.8%	16.3%	13.6%	14.6%	13.8%	11.5%	11.0%	11.2%	11.2%
FLORIDA	31.7%	32.3%	33.0%	32.1%	30.3%	28.3%	25.9%	24.4%	23.4%	21.9%	20.0%	19.7%	18.7%	17.9%

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

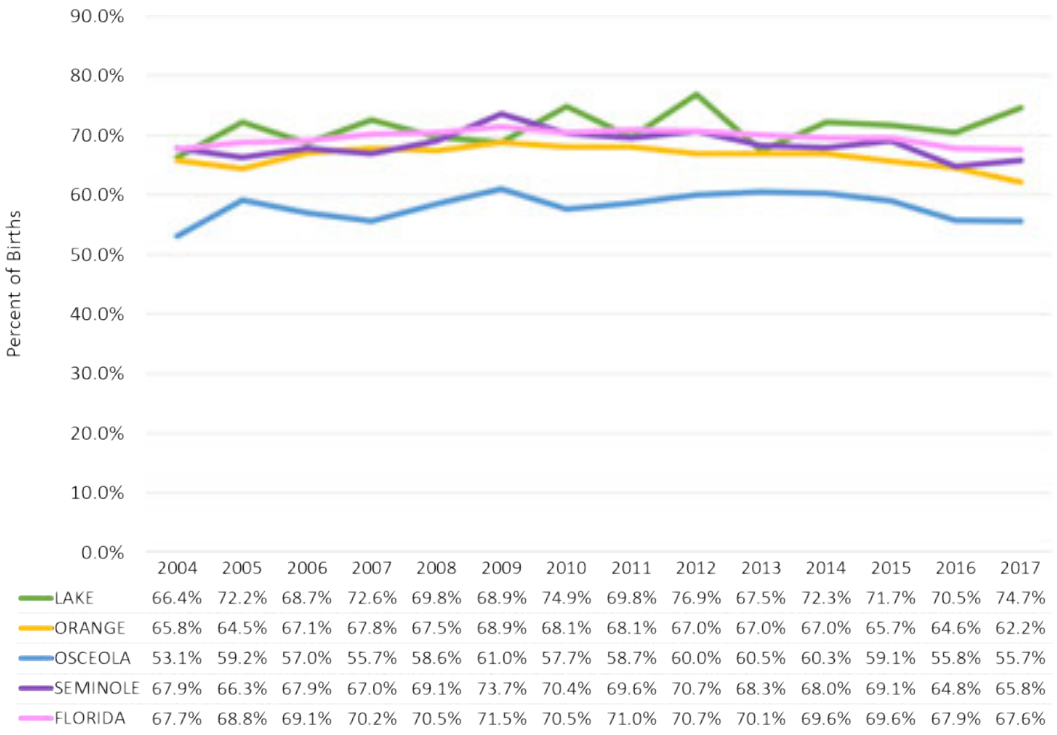
CHART 8.49: BIRTHS TO UNWED WHITE MOTHERS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	34.9%	36.8%	38.3%	40.4%	38.9%	41.6%	40.6%	42.6%	41.1%	43.8%	44.4%	45.6%	43.4%	42.7%
ORANGE	34.8%	36.9%	38.3%	41.4%	41.0%	40.6%	39.8%	40.6%	40.3%	40.5%	41.0%	41.0%	40.1%	40.0%
OSCEOLA	42.3%	43.6%	46.8%	47.7%	49.6%	49.2%	49.3%	50.0%	50.4%	50.4%	50.8%	48.9%	49.3%	50.1%
SEMINOLE	26.8%	29.8%	31.7%	34.2%	32.7%	34.9%	31.9%	32.5%	33.0%	33.0%	34.3%	33.3%	34.4%	34.2%
FLORIDA	34.6%	36.5%	38.6%	40.2%	40.9%	41.5%	41.6%	41.6%	42.1%	42.5%	42.7%	42.6%	42.0%	41.9%

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

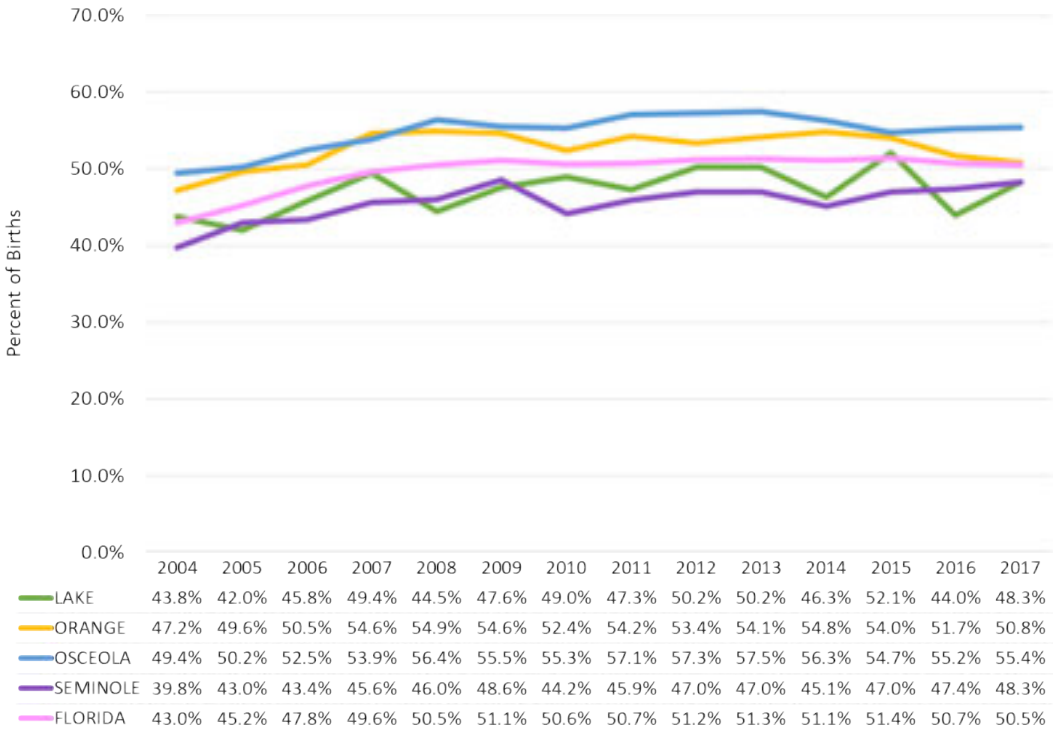
CHART 8.50: BIRTHS TO UNWED BLACK MOTHERS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	66.4%	72.2%	68.7%	72.6%	69.8%	68.9%	74.9%	69.8%	76.9%	67.5%	72.3%	71.7%	70.5%	74.7%
ORANGE	65.8%	64.5%	67.1%	67.8%	67.5%	68.9%	68.1%	68.1%	67.0%	67.0%	67.0%	65.7%	64.6%	62.2%
OSCEOLA	53.1%	59.2%	57.0%	55.7%	58.6%	61.0%	57.7%	58.7%	60.0%	60.5%	60.3%	59.1%	55.8%	55.7%
SEMINOLE	67.9%	66.3%	67.9%	67.0%	69.1%	73.7%	70.4%	69.6%	70.7%	68.3%	68.0%	69.1%	64.8%	65.8%
FLORIDA	67.7%	68.8%	69.1%	70.2%	70.5%	71.5%	70.5%	71.0%	70.7%	70.1%	69.6%	69.6%	67.9%	67.6%

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

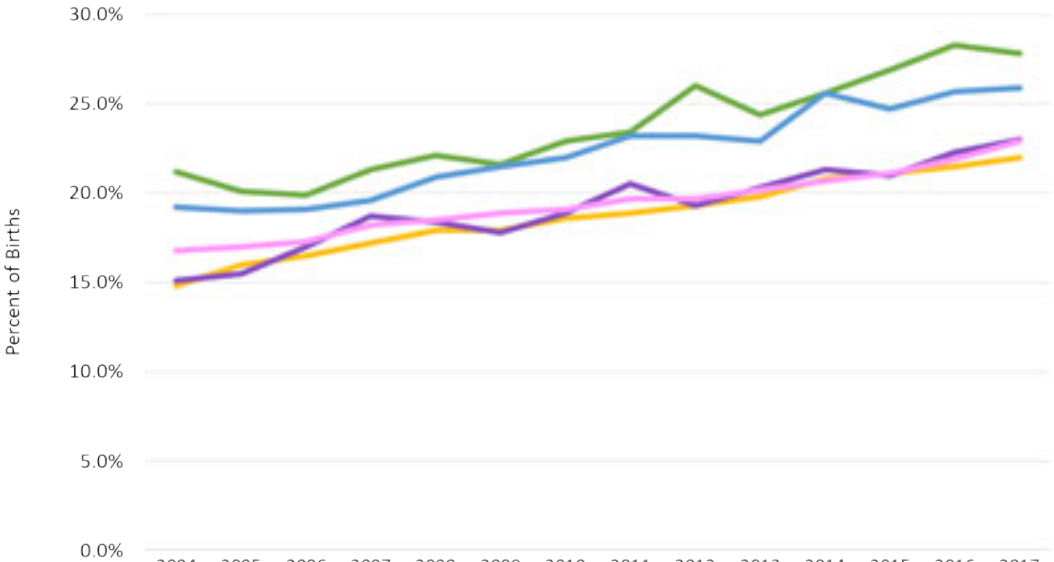
CHART 8.51: BIRTHS TO UNWED HISPANIC MOTHERS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	43.8%	42.0%	45.8%	49.4%	44.5%	47.6%	49.0%	47.3%	50.2%	50.2%	46.3%	52.1%	44.0%	48.3%
ORANGE	47.2%	49.6%	50.5%	54.6%	54.9%	54.6%	52.4%	54.2%	53.4%	54.1%	54.8%	54.0%	51.7%	50.8%
OSCEOLA	49.4%	50.2%	52.5%	53.9%	56.4%	55.5%	55.3%	57.1%	57.3%	57.5%	56.3%	54.7%	55.2%	55.4%
SEMINOLE	39.8%	43.0%	43.4%	45.6%	46.0%	48.6%	44.2%	45.9%	47.0%	47.0%	45.1%	47.0%	47.4%	48.3%
FLORIDA	43.0%	45.2%	47.8%	49.6%	50.5%	51.1%	50.6%	50.7%	51.2%	51.3%	51.1%	51.4%	50.7%	50.5%

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

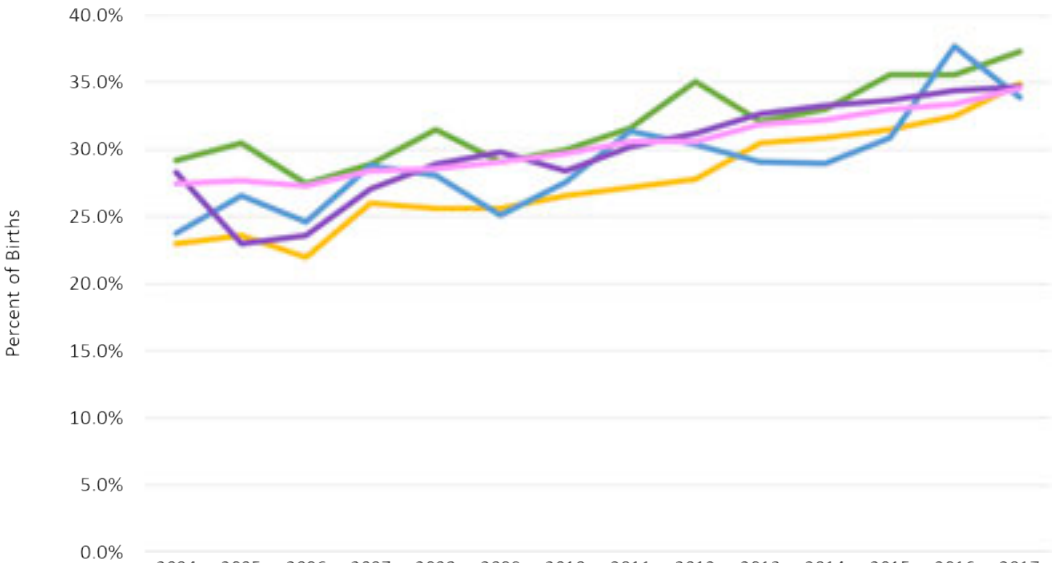
CHART 8.52: BIRTHS TO WHITE WOMEN WHO WERE OBESE DURING PREGNANCY (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	21.2%	20.1%	19.9%	21.3%	22.1%	21.6%	22.9%	23.4%	26.0%	24.4%	25.6%	26.9%	28.3%	27.8%
ORANGE	14.8%	16.0%	16.5%	17.2%	17.9%	17.9%	18.6%	18.9%	19.3%	19.8%	20.8%	21.1%	21.5%	22.0%
OSCEOLA	19.2%	19.0%	19.1%	19.6%	20.9%	21.5%	22.0%	23.2%	23.2%	22.9%	25.6%	24.7%	25.7%	25.9%
SEMINOLE	15.1%	15.5%	17.0%	18.7%	18.4%	17.8%	18.9%	20.5%	19.3%	20.3%	21.3%	21.0%	22.3%	23.0%
FLORIDA	16.8%	17.0%	17.3%	18.2%	18.5%	18.9%	19.1%	19.7%	19.7%	20.2%	20.7%	21.1%	21.9%	22.9%

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

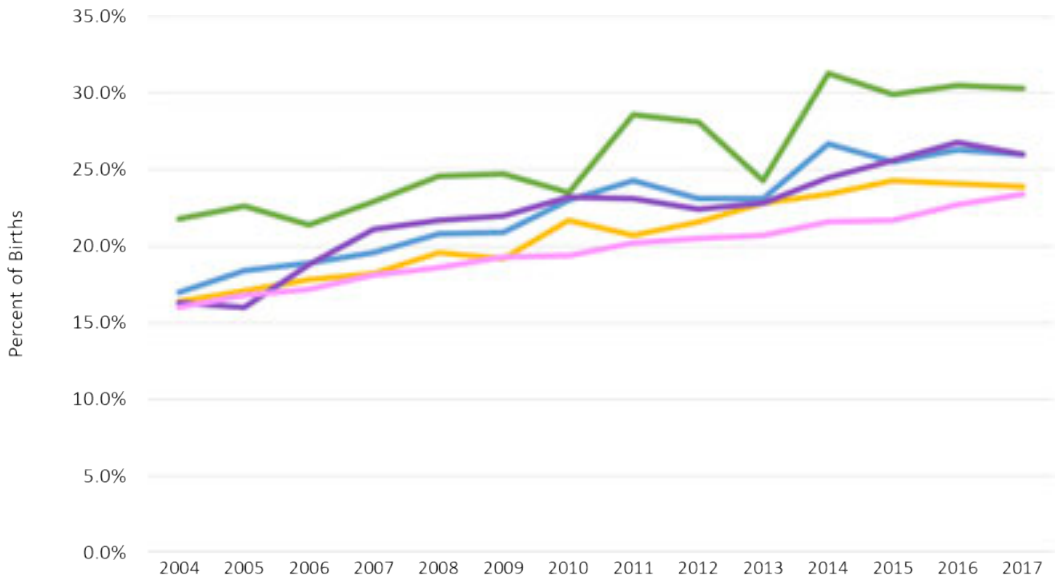
CHART 8.53: BIRTHS TO BLACK WOMEN WHO WERE OBESE DURING PREGNANCY (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	29.2%	30.5%	27.5%	28.9%	31.5%	29.1%	30.0%	31.6%	35.1%	32.1%	33.0%	35.6%	35.6%	37.3%
ORANGE	23.0%	23.6%	22.0%	26.0%	25.6%	25.6%	26.6%	27.2%	27.8%	30.5%	30.9%	31.5%	32.5%	34.9%
OSCEOLA	23.8%	26.6%	24.6%	28.8%	28.1%	25.1%	27.6%	31.4%	30.4%	29.1%	29.0%	30.9%	37.7%	33.9%
SEMINOLE	28.3%	23.0%	23.6%	27.1%	28.9%	29.8%	28.4%	30.2%	31.2%	32.7%	33.3%	33.7%	34.4%	34.7%
FLORIDA	27.5%	27.7%	27.3%	28.4%	28.6%	29.1%	29.7%	30.6%	30.6%	31.9%	32.2%	33.0%	33.4%	34.6%

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

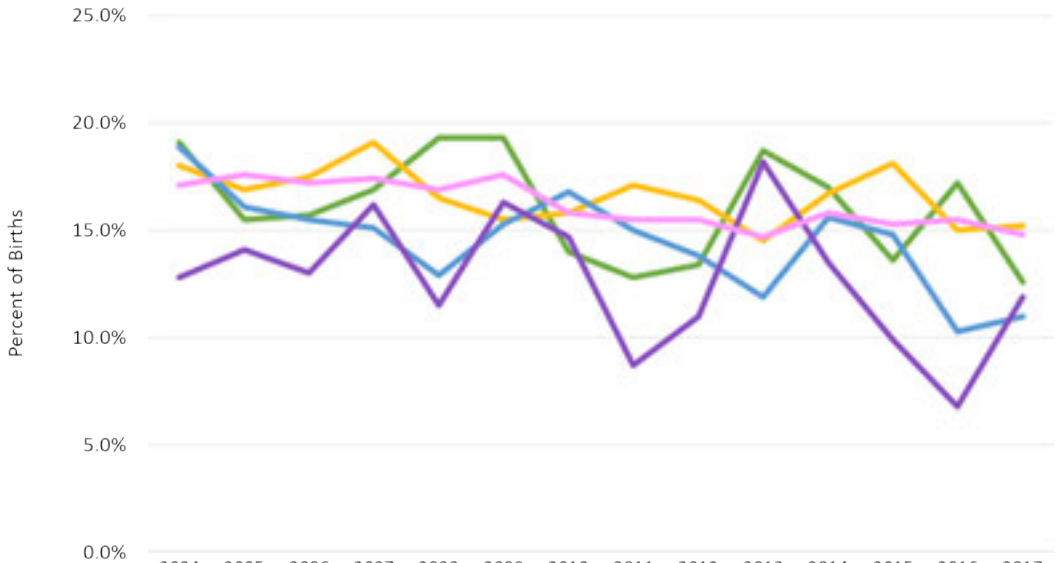
CHART 8.54: BIRTHS TO HISPANIC WOMEN WHO WERE OBESE DURING PREGNANCY (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	21.8%	22.6%	21.4%	22.9%	24.6%	24.7%	23.5%	28.6%	28.1%	24.3%	31.3%	29.9%	30.5%	30.3%
ORANGE	16.4%	17.1%	17.8%	18.2%	19.6%	19.2%	21.7%	20.7%	21.6%	22.8%	23.4%	24.3%	24.1%	23.9%
OSCEOLA	17.0%	18.4%	18.9%	19.6%	20.8%	20.9%	23.0%	24.3%	23.1%	23.1%	26.7%	25.5%	26.3%	26.0%
SEMINOLE	16.3%	16.0%	18.8%	21.1%	21.7%	22.0%	23.2%	23.1%	22.4%	22.8%	24.5%	25.6%	26.8%	26.0%
FLORIDA	16.0%	16.8%	17.2%	18.1%	18.6%	19.3%	19.4%	20.2%	20.5%	20.7%	21.6%	21.7%	22.7%	23.4%

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

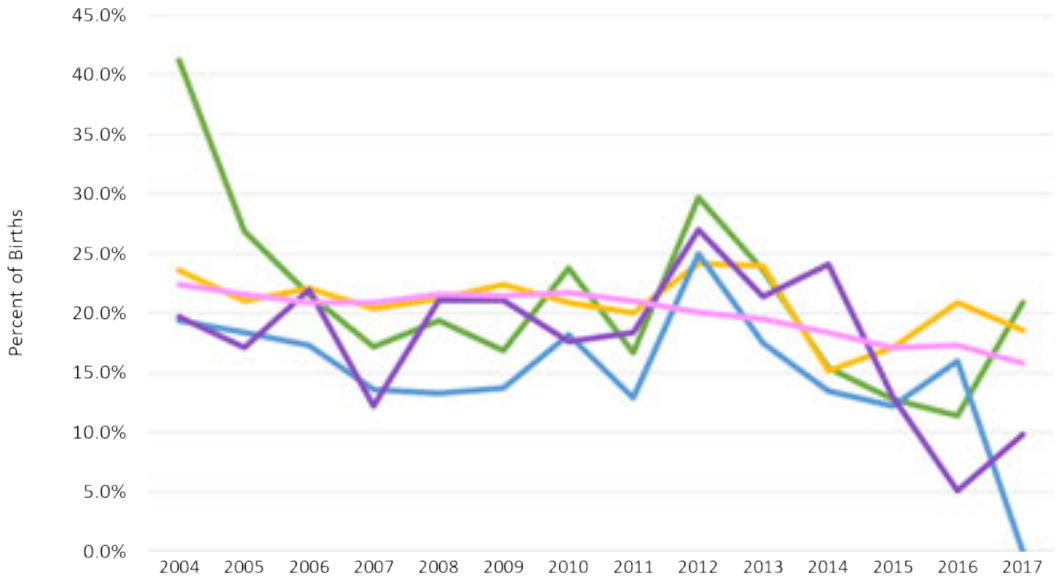
CHART 8.55: REPEAT BIRTHS TO WHITE MOTHERS AGES 15-19 (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	19.1%	15.5%	15.7%	16.9%	19.3%	19.3%	14.0%	12.8%	13.4%	18.7%	17.0%	13.6%	17.2%	12.6%
ORANGE	18.0%	16.9%	17.5%	19.1%	16.5%	15.5%	15.8%	17.1%	16.4%	14.5%	16.7%	18.1%	15.0%	15.2%
OSCEOLA	18.9%	16.1%	15.5%	15.1%	12.9%	15.3%	16.8%	15.0%	13.8%	11.9%	15.6%	14.8%	10.3%	11.0%
SEMINOLE	12.8%	14.1%	13.0%	16.2%	11.5%	16.3%	14.7%	8.7%	11.0%	18.2%	13.5%	9.9%	6.8%	11.9%
FLORIDA	17.1%	17.6%	17.2%	17.4%	16.9%	17.6%	15.8%	15.5%	15.5%	14.7%	15.8%	15.3%	15.5%	14.8%

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

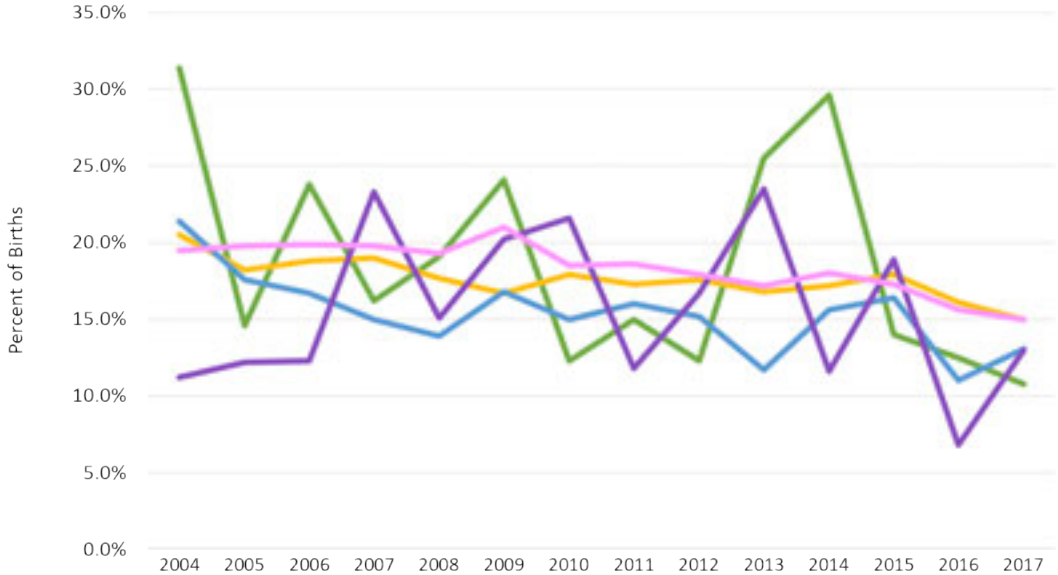
CHART 8.56: REPEAT BIRTHS TO BLACK MOTHERS AGES 15-19 (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	41.2%	26.9%	21.6%	17.2%	19.4%	16.9%	23.8%	16.7%	29.7%	23.6%	15.4%	12.8%	11.4%	20.9%
ORANGE	23.6%	21.0%	22.1%	20.4%	21.2%	22.4%	20.9%	20.0%	24.2%	24.0%	15.2%	17.1%	20.9%	18.6%
OSCEOLA	19.4%	18.4%	17.3%	13.6%	13.3%	13.7%	18.2%	12.9%	25.0%	17.5%	13.5%	12.2%	16.0%	0.0%
SEMINOLE	19.7%	17.1%	22.0%	12.2%	21.1%	21.1%	17.6%	18.4%	27.0%	21.4%	24.1%	13.0%	5.1%	9.8%
FLORIDA	22.4%	21.6%	20.9%	20.9%	21.6%	21.5%	21.7%	21.0%	20.1%	19.5%	18.4%	17.1%	17.3%	15.8%

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

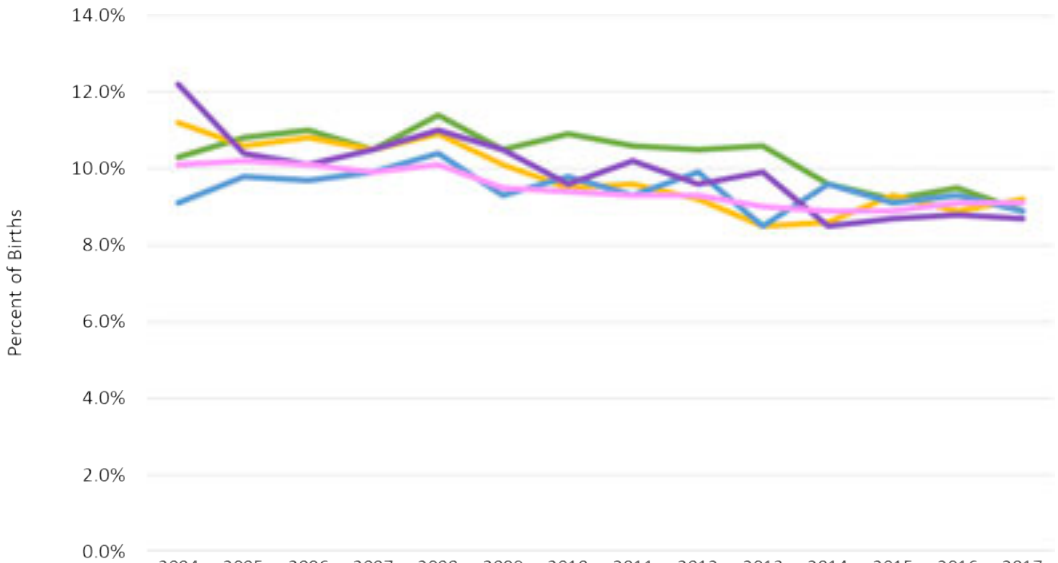
CHART 8.57: REPEAT BIRTHS TO HISPANIC MOTHERS AGES 15-19 (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	31.4%	14.6%	23.8%	16.2%	19.1%	24.1%	12.3%	15.0%	12.3%	25.5%	29.6%	14.0%	12.5%	10.8%
ORANGE	20.5%	18.2%	18.8%	19.0%	17.7%	16.7%	17.9%	17.3%	17.6%	16.8%	17.2%	17.9%	16.1%	15.0%
OSCEOLA	21.4%	17.6%	16.7%	15.0%	13.9%	16.8%	15.0%	16.0%	15.2%	11.7%	15.6%	16.4%	11.0%	13.1%
SEMINOLE	11.2%	12.2%	12.3%	23.3%	15.1%	20.2%	21.6%	11.8%	16.7%	23.5%	11.6%	18.9%	6.8%	13.0%
FLORIDA	19.5%	19.8%	19.9%	19.8%	19.3%	21.0%	18.5%	18.6%	17.9%	17.2%	18.0%	17.3%	15.6%	15.0%

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

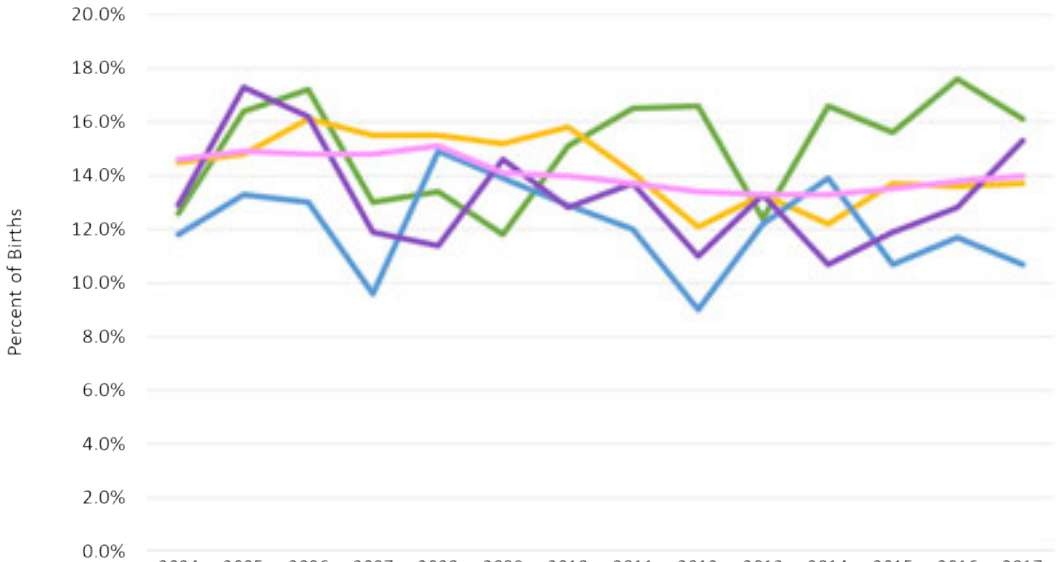
CHART 8.58: WHITE PRETERM BIRTH RATE <37 WEEKS (2004-2007)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	10.3%	10.8%	11.0%	10.5%	11.4%	10.5%	10.9%	10.6%	10.5%	10.6%	9.6%	9.2%	9.5%	8.9%
ORANGE	11.2%	10.6%	10.8%	10.5%	10.9%	10.1%	9.5%	9.6%	9.2%	8.5%	8.6%	9.3%	8.9%	9.2%
OSCEOLA	9.1%	9.8%	9.7%	9.9%	10.4%	9.3%	9.8%	9.3%	9.9%	8.5%	9.6%	9.1%	9.3%	8.9%
SEMINOLE	12.2%	10.4%	10.1%	10.5%	11.0%	10.5%	9.6%	10.2%	9.6%	9.9%	8.5%	8.7%	8.8%	8.7%
FLORIDA	10.1%	10.2%	10.1%	9.9%	10.1%	9.5%	9.4%	9.3%	9.3%	9.0%	8.9%	8.9%	9.1%	9.1%

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

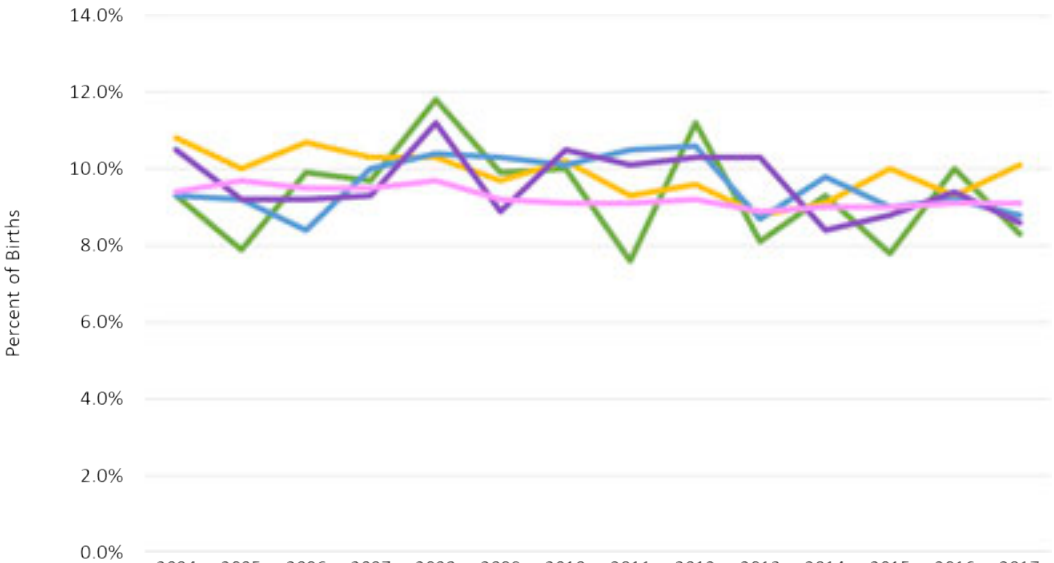
CHART 8.59: BLACK PRETERM BIRTH RATE <37 WEEKS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	12.6%	16.4%	17.2%	13.0%	13.4%	11.8%	15.1%	16.5%	16.6%	12.4%	16.6%	15.6%	17.6%	16.1%
ORANGE	14.5%	14.8%	16.1%	15.5%	15.5%	15.2%	15.8%	14.1%	12.1%	13.3%	12.2%	13.7%	13.6%	13.7%
OSCEOLA	11.8%	13.3%	13.0%	9.6%	14.9%	13.9%	12.9%	12.0%	9.0%	12.2%	13.9%	10.7%	11.7%	10.7%
SEMINOLE	12.9%	17.3%	16.2%	11.9%	11.4%	14.6%	12.8%	13.7%	11.0%	13.3%	10.7%	11.9%	12.8%	15.3%
FLORIDA	14.6%	14.9%	14.8%	14.8%	15.1%	14.1%	14.0%	13.7%	13.4%	13.3%	13.3%	13.5%	13.8%	14.0%

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

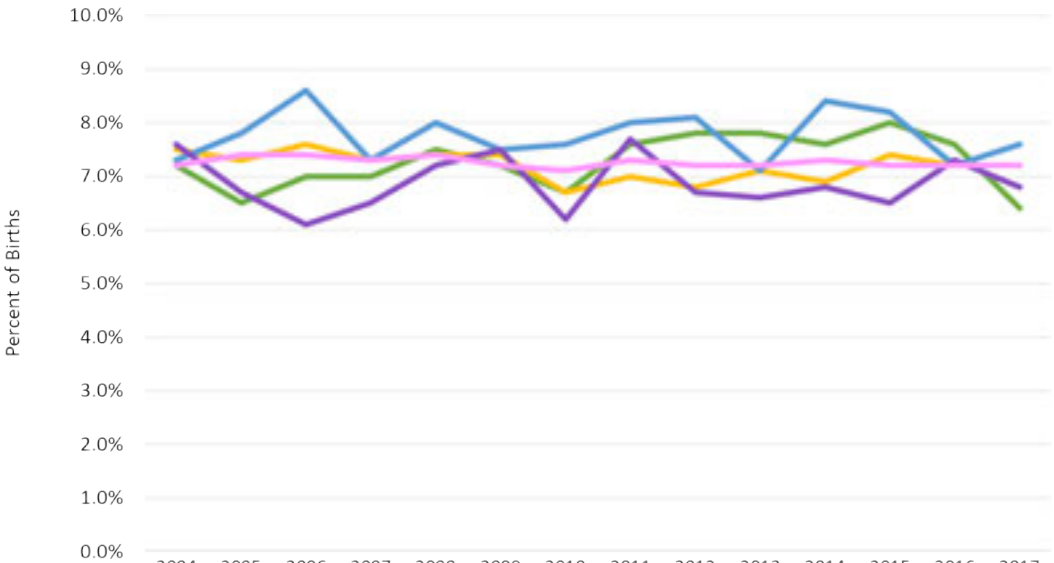
CHART 8.60: HISPANIC PRETERM BIRTH RATE <37 WEEKS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	9.3%	7.9%	9.9%	9.7%	11.8%	9.9%	10.0%	7.6%	11.2%	8.1%	9.3%	7.8%	10.0%	8.3%
ORANGE	10.8%	10.0%	10.7%	10.3%	10.3%	9.7%	10.2%	9.3%	9.6%	8.8%	9.1%	10.0%	9.3%	10.1%
OSCEOLA	9.3%	9.2%	8.4%	10.0%	10.4%	10.3%	10.1%	10.5%	10.6%	8.7%	9.8%	9.0%	9.2%	8.8%
SEMINOLE	10.5%	9.2%	9.2%	9.3%	11.2%	8.9%	10.5%	10.1%	10.3%	10.3%	8.4%	8.8%	9.4%	8.6%
FLORIDA	9.4%	9.7%	9.5%	9.5%	9.7%	9.2%	9.1%	9.1%	9.2%	8.9%	9.0%	9.0%	9.1%	9.1%

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

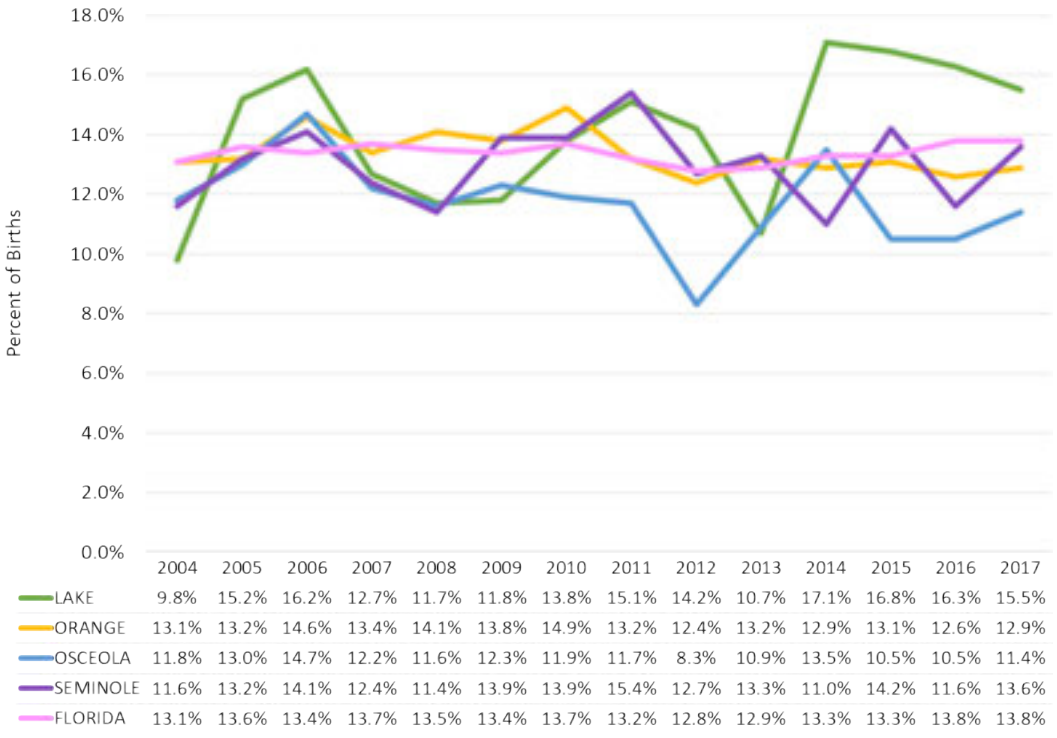
CHART 8.61: WHITE LOW BIRTH WEIGHT BIRTHS <2500 GRAMS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	7.2%	6.5%	7.0%	7.0%	7.5%	7.2%	6.7%	7.6%	7.8%	7.8%	7.6%	8.0%	7.6%	6.4%
ORANGE	7.5%	7.3%	7.6%	7.3%	7.4%	7.4%	6.7%	7.0%	6.8%	7.1%	6.9%	7.4%	7.2%	7.2%
OSCEOLA	7.3%	7.8%	8.6%	7.3%	8.0%	7.5%	7.6%	8.0%	8.1%	7.1%	8.4%	8.2%	7.2%	7.6%
SEMINOLE	7.6%	6.7%	6.1%	6.5%	7.2%	7.5%	6.2%	7.7%	6.7%	6.6%	6.8%	6.5%	7.3%	6.8%
FLORIDA	7.2%	7.4%	7.4%	7.3%	7.4%	7.2%	7.1%	7.3%	7.2%	7.2%	7.3%	7.2%	7.2%	7.2%

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

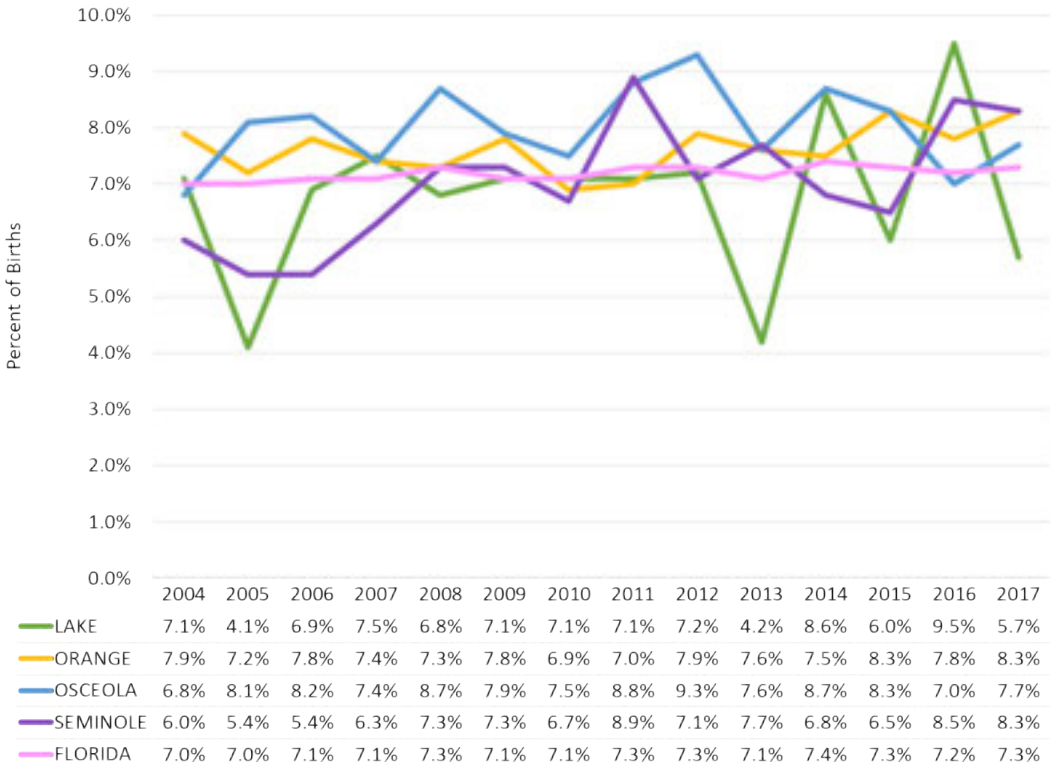
CHART 8.62: BLACK LOW BIRTH WEIGHT BIRTHS <2500 GRAMS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	9.8%	15.2%	16.2%	12.7%	11.7%	11.8%	13.8%	15.1%	14.2%	10.7%	17.1%	16.8%	16.3%	15.5%
ORANGE	13.1%	13.2%	14.6%	13.4%	14.1%	13.8%	14.9%	13.2%	12.4%	13.2%	12.9%	13.1%	12.6%	12.9%
OSCEOLA	11.8%	13.0%	14.7%	12.2%	11.6%	12.3%	11.9%	11.7%	8.3%	10.9%	13.5%	10.5%	10.5%	11.4%
SEMINOLE	11.6%	13.2%	14.1%	12.4%	11.4%	13.9%	13.9%	15.4%	12.7%	13.3%	11.0%	14.2%	11.6%	13.6%
FLORIDA	13.1%	13.6%	13.4%	13.7%	13.5%	13.4%	13.7%	13.2%	12.8%	12.9%	13.3%	13.3%	13.8%	13.8%

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

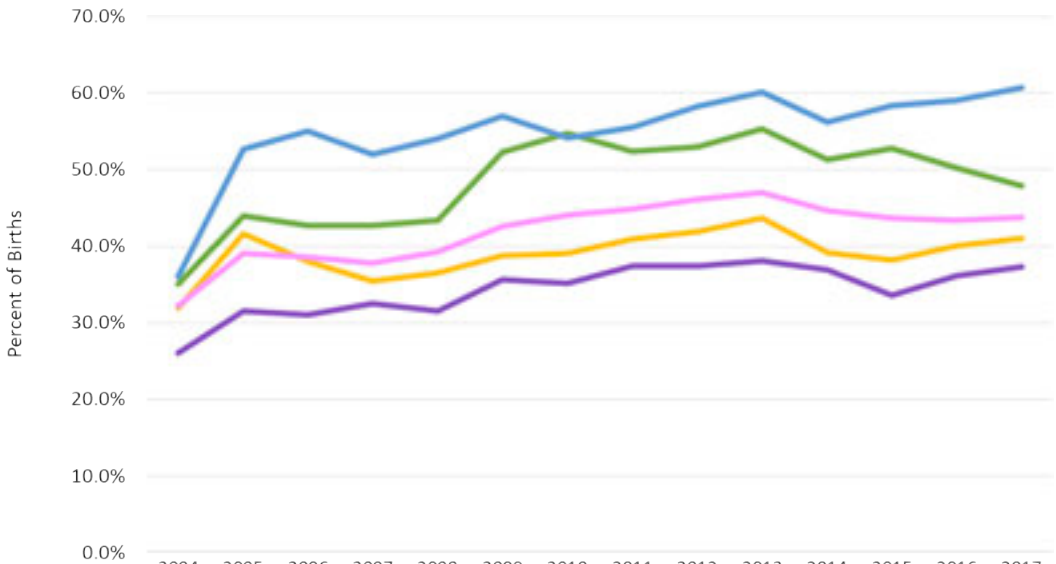
CHART 8.63: HISPANIC LOW BIRTH WEIGHT BIRTHS <2500 GRAMS (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	7.1%	4.1%	6.9%	7.5%	6.8%	7.1%	7.1%	7.1%	7.2%	4.2%	8.6%	6.0%	9.5%	5.7%
ORANGE	7.9%	7.2%	7.8%	7.4%	7.3%	7.8%	6.9%	7.0%	7.9%	7.6%	7.5%	8.3%	7.8%	8.3%
OSCEOLA	6.8%	8.1%	8.2%	7.4%	8.7%	7.9%	7.5%	8.8%	9.3%	7.6%	8.7%	8.3%	7.0%	7.7%
SEMINOLE	6.0%	5.4%	5.4%	6.3%	7.3%	7.3%	6.7%	8.9%	7.1%	7.7%	6.8%	6.5%	8.5%	8.3%
FLORIDA	7.0%	7.0%	7.1%	7.1%	7.3%	7.1%	7.1%	7.3%	7.3%	7.1%	7.4%	7.3%	7.2%	7.3%

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

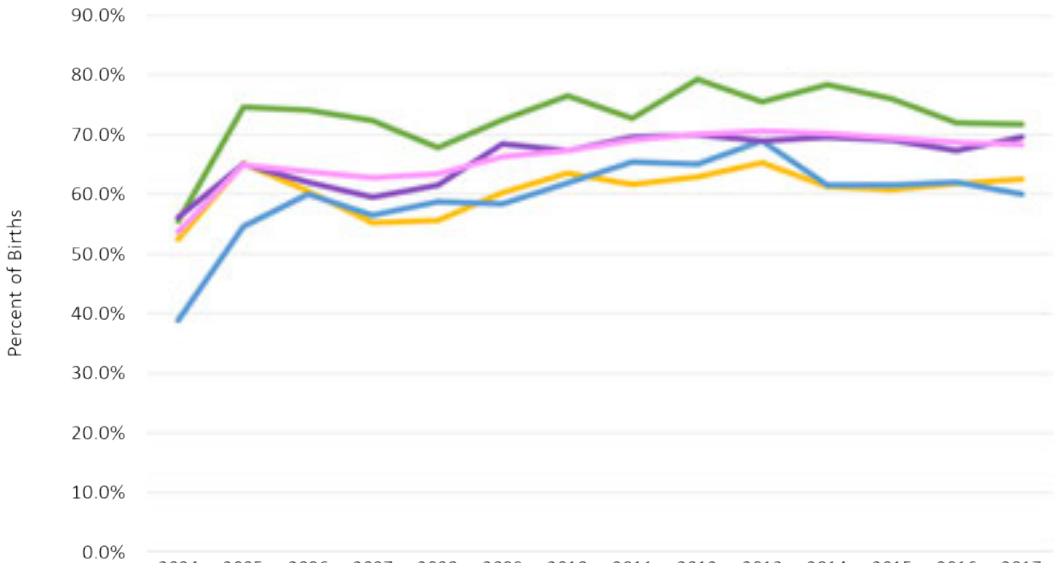
CHART 8.64: WHITE BIRTHS COVERED BY MEDICAID (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	35.1%	44.0%	42.7%	42.7%	43.4%	52.3%	54.7%	52.4%	53.0%	55.3%	51.3%	52.8%	50.2%	47.9%
ORANGE	31.9%	41.6%	38.0%	35.5%	36.5%	38.8%	39.1%	40.9%	41.9%	43.7%	39.2%	38.2%	40.1%	41.0%
OSCEOLA	36.0%	52.7%	55.0%	52.0%	54.0%	57.0%	54.1%	55.5%	58.3%	60.1%	56.2%	58.4%	59.0%	60.7%
SEMINOLE	26.1%	31.5%	31.0%	32.5%	31.5%	35.6%	35.2%	37.4%	37.4%	38.1%	36.9%	33.6%	36.1%	37.3%
FLORIDA	32.2%	39.1%	38.6%	37.8%	39.3%	42.6%	44.1%	44.8%	46.1%	47.0%	44.7%	43.7%	43.4%	43.8%

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

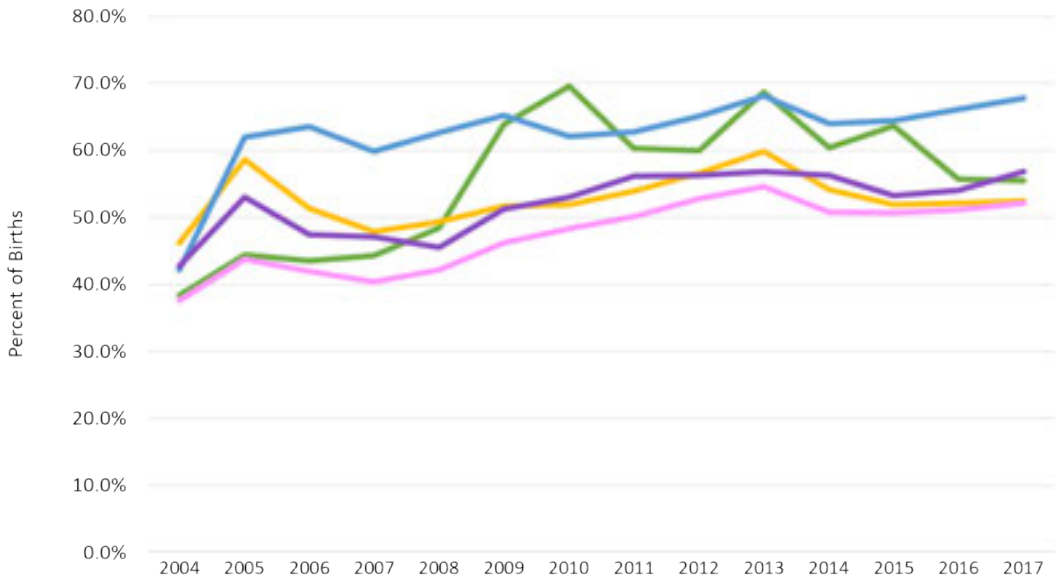
CHART 8.65: BLACK BIRTHS COVERED BY MEDICAID (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	55.5%	74.7%	74.2%	72.4%	67.9%	72.5%	76.5%	72.8%	79.3%	75.5%	78.4%	76.0%	72.0%	71.8%
ORANGE	52.5%	65.2%	60.6%	55.3%	55.7%	60.3%	63.6%	61.7%	63.0%	65.4%	61.3%	60.8%	61.8%	62.6%
OSCEOLA	38.9%	54.7%	60.1%	56.5%	58.8%	58.4%	62.0%	65.5%	65.1%	69.0%	61.6%	61.6%	62.1%	60.1%
SEMINOLE	56.1%	65.1%	62.1%	59.5%	61.6%	68.5%	67.4%	69.6%	70.0%	69.0%	69.6%	69.1%	67.4%	69.6%
FLORIDA	53.7%	64.9%	63.8%	62.8%	63.5%	66.3%	67.3%	69.1%	70.1%	70.6%	70.2%	69.5%	68.7%	68.4%

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

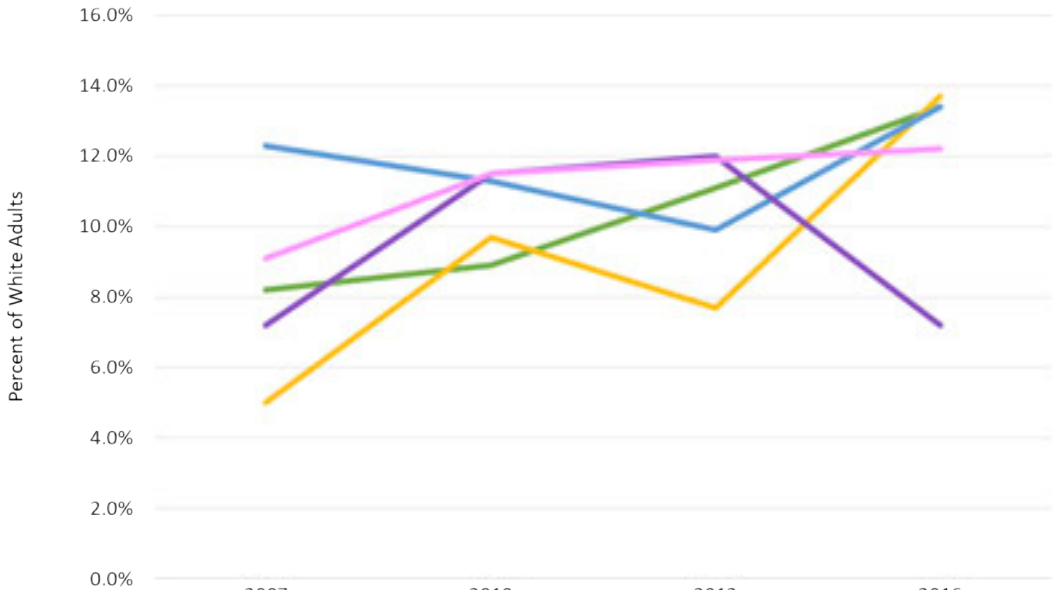
CHART 8.66: HISPANIC BIRTHS COVERED BY MEDICAID (2004-2017)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LAKE	38.4%	44.4%	43.5%	44.3%	48.5%	63.9%	69.6%	60.3%	60.0%	68.7%	60.4%	63.7%	55.7%	55.5%
ORANGE	46.2%	58.6%	51.4%	47.9%	49.4%	51.7%	51.9%	53.9%	56.6%	59.9%	54.2%	51.9%	52.2%	52.5%
OSCEOLA	42.2%	62.0%	63.6%	59.9%	62.7%	65.2%	62.1%	62.8%	65.1%	68.2%	64.0%	64.5%	66.1%	67.8%
SEMINOLE	42.8%	53.1%	47.4%	47.1%	45.6%	51.3%	53.1%	56.2%	56.3%	56.8%	56.3%	53.3%	54.1%	56.9%
FLORIDA	37.6%	43.8%	42.0%	40.4%	42.2%	46.2%	48.3%	50.1%	52.8%	54.6%	50.8%	50.7%	51.1%	52.2%

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

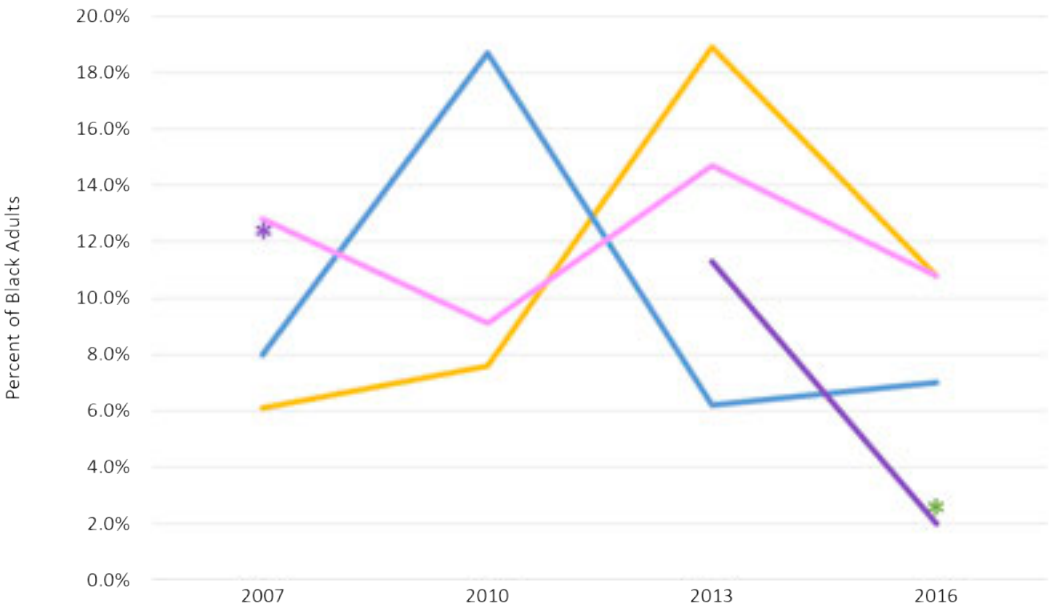
CHART 8.67: WHITE ADULTS WHO HAD POOR MENTAL HEALTH 14 OR MORE OF THE PAST 30 DAYS (2007-2016)



	2007	2010	2013	2016
LAKE	8.2%	8.9%	11.1%	13.4%
ORANGE	5.0%	9.7%	7.7%	13.7%
OSCEOLA	12.3%	11.3%	9.9%	13.4%
SEMINOLE	7.2%	11.5%	12.0%	7.2%
FLORIDA	9.1%	11.5%	11.9%	12.2%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

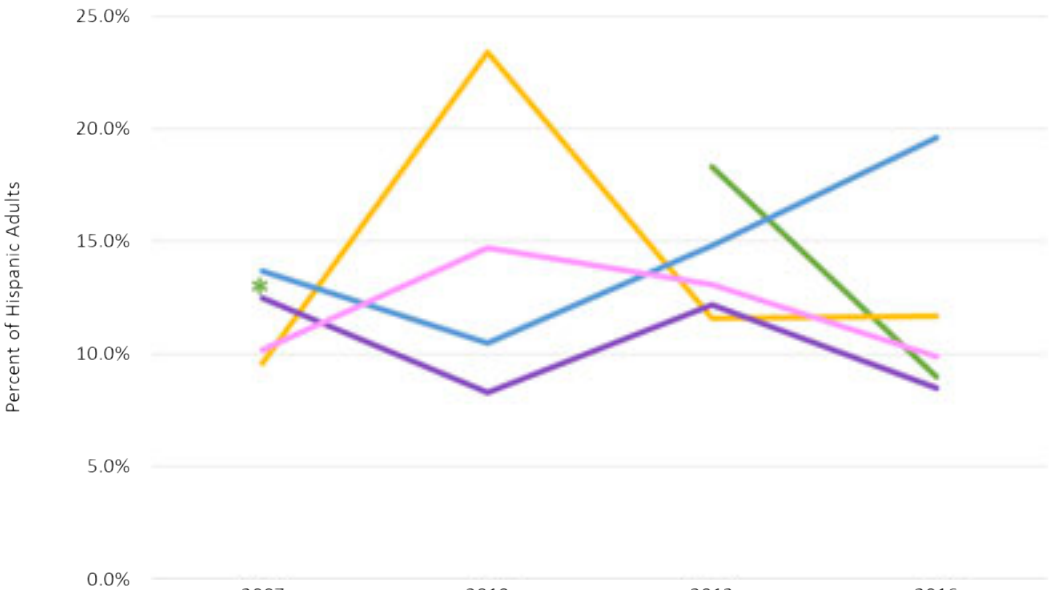
CHART 8.68: BLACK ADULTS WHO HAD POOR MENTAL HEALTH 14 OR MORE OF THE PAST 30 DAYS (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	2.6%
ORANGE	6.1%	7.6%	18.9%	10.8%
OSCEOLA	8.0%	18.7%	6.2%	7.0%
SEMINOLE	12.4%	N/A	11.3%	2.0%
FLORIDA	12.8%	9.1%	14.7%	10.8%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

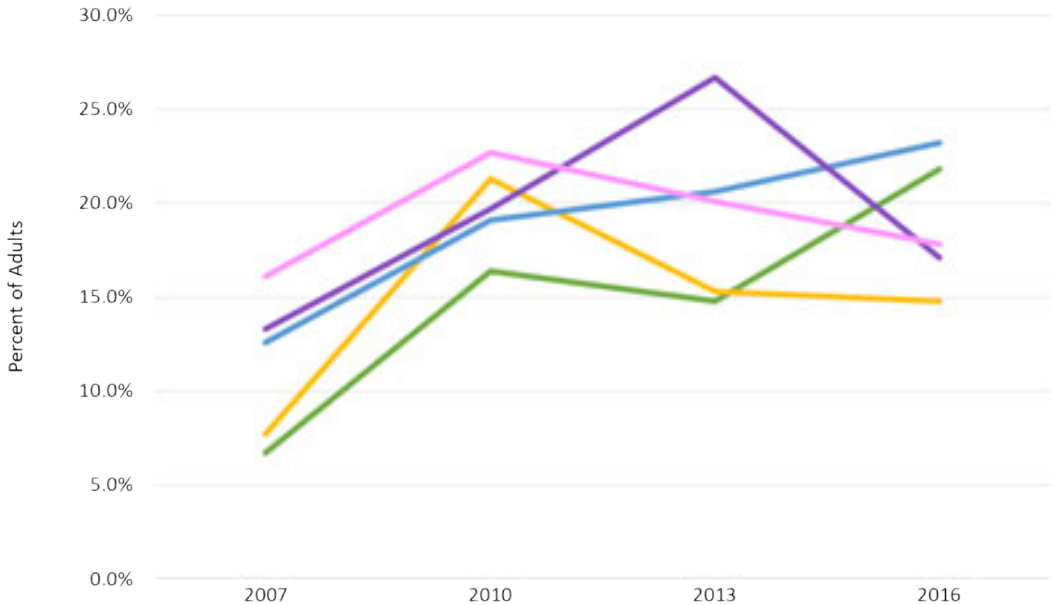
CHART 8.69: HISPANIC ADULTS WHO HAD POOR MENTAL HEALTH 14 OR MORE OF THE PAST 30 DAYS (2007-2016)



	2007	2010	2013	2016
LAKE	13.2%	N/A	18.3%	9.0%
ORANGE	9.6%	23.4%	11.6%	11.7%
OSCEOLA	13.7%	10.5%	14.8%	19.6%
SEMINOLE	12.5%	8.3%	12.2%	8.5%
FLORIDA	10.2%	14.7%	13.1%	9.9%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

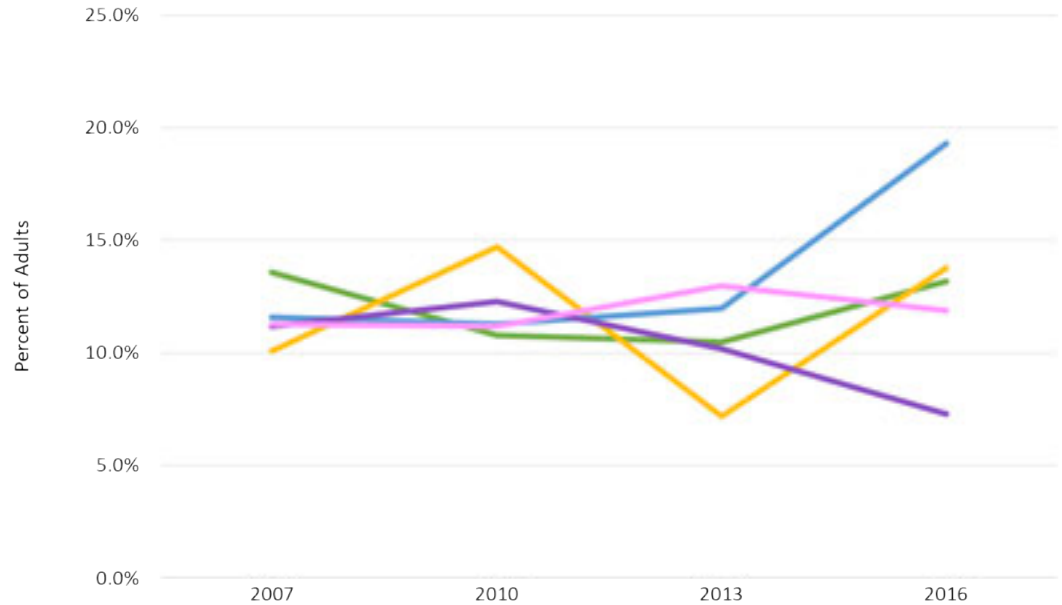
CHART 8.70: POOR MENTAL HEALTH, INCOME <25K (2007-2016)



	2007	2010	2013	2016
LAKE	6.7%	16.4%	14.8%	21.8%
ORANGE	7.7%	21.3%	15.3%	14.8%
OSCEOLA	12.6%	19.1%	20.6%	23.2%
SEMINOLE	13.3%	19.7%	26.7%	17.1%
FLORIDA	16.1%	22.7%	20.1%	17.8%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

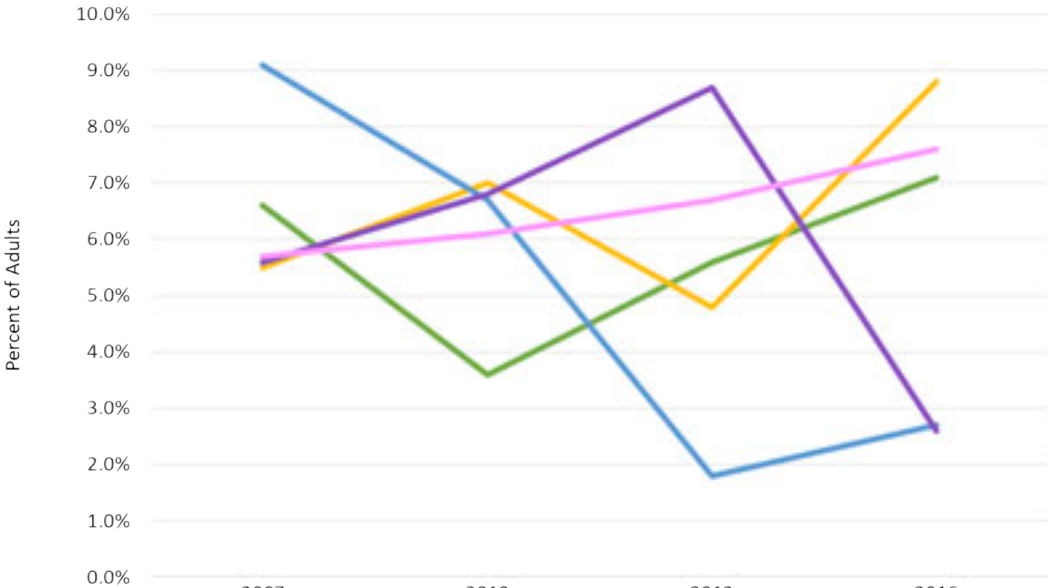
CHART 8.71: POOR MENTAL HEALTH, INCOME $25K-$49K (2007-2016)



	2007	2010	2013	2016
LAKE	13.6%	10.8%	10.5%	13.2%
ORANGE	10.1%	14.7%	7.2%	13.8%
OSCEOLA	11.6%	11.3%	12.0%	19.3%
SEMINOLE	11.2%	12.3%	10.2%	7.3%
FLORIDA	11.3%	11.2%	13.0%	11.9%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

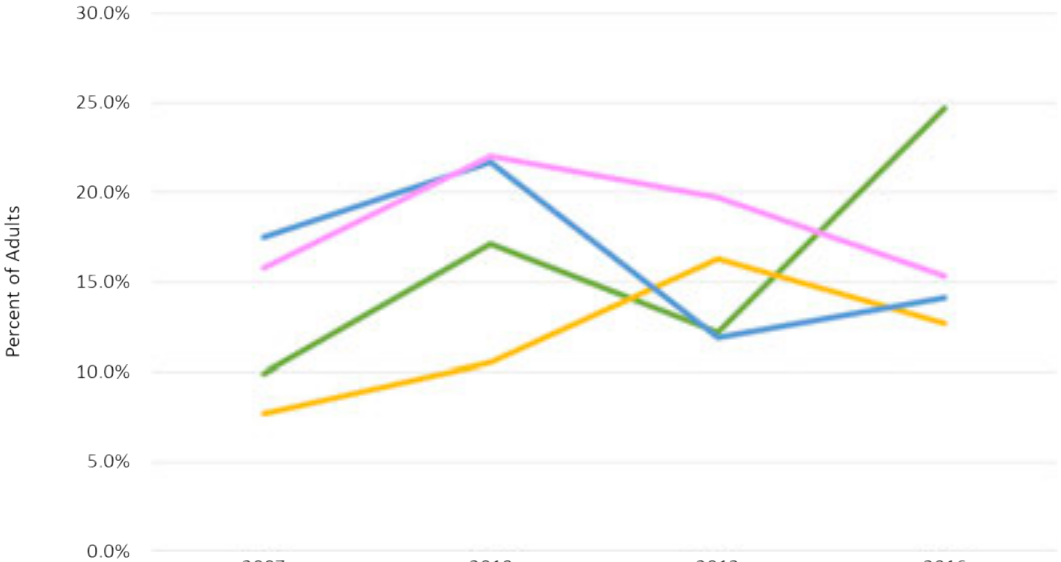
CHART 8.72: POOR MENTAL HEALTH, INCOME $50K+ (2007-2016)



	2007	2010	2013	2016
LAKE	6.6%	3.6%	5.6%	7.1%
ORANGE	5.5%	7.0%	4.8%	8.8%
OSCEOLA	9.1%	6.7%	1.8%	2.7%
SEMINOLE	5.6%	6.8%	8.7%	2.6%
FLORIDA	5.7%	6.1%	6.7%	7.6%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

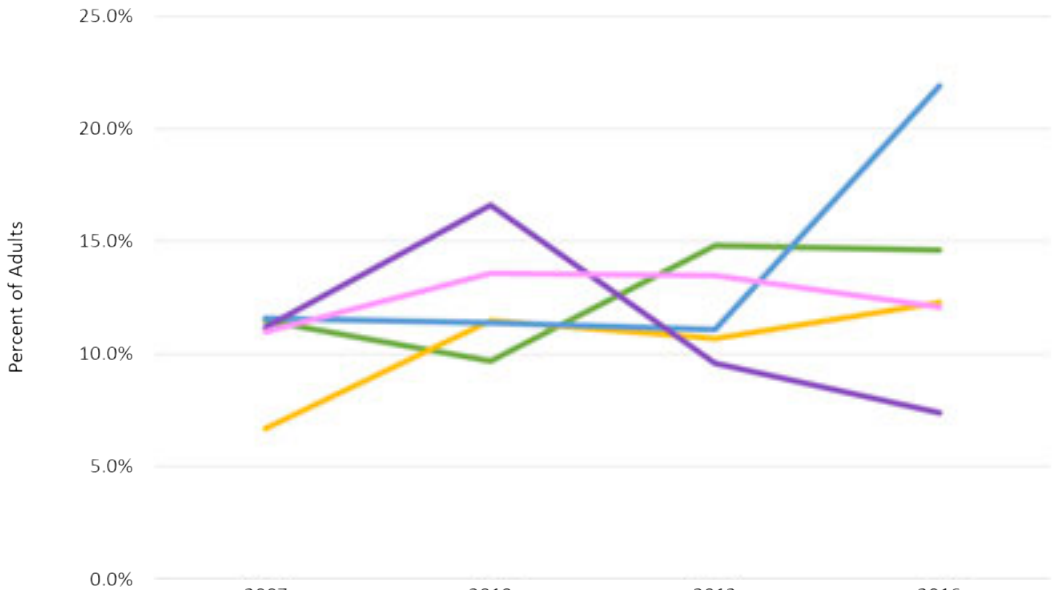
CHART 8.73: POOR MENTAL HEALTH, EDUCATION <HIGH SCHOOL (2007-2016)



	2007	2010	2013	2016
LAKE	9.9%	17.1%	12.2%	24.7%
ORANGE	7.7%	10.5%	16.3%	12.7%
OSCEOLA	17.5%	21.7%	11.9%	14.1%
SEMINOLE	N/A	N/A	N/A	N/A
FLORIDA	15.8%	22.0%	19.7%	15.3%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

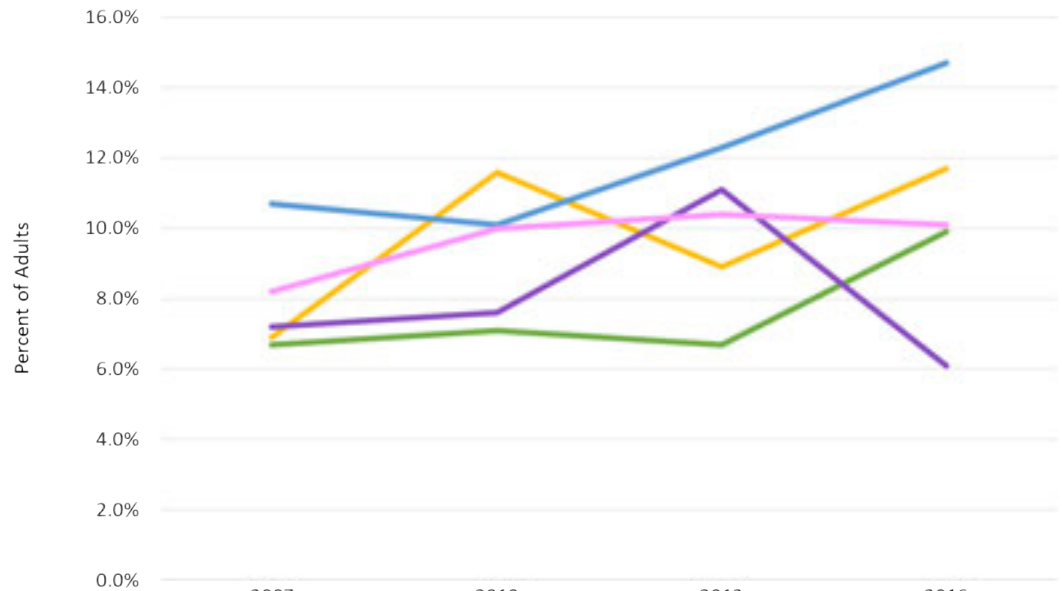
CHART 8.74: POOR MENTAL HEALTH, EDUCATION HIGH SCHOOL-GED (2007-2016)



	2007	2010	2013	2016
LAKE	11.5%	9.7%	14.8%	14.6%
ORANGE	6.7%	11.5%	10.7%	12.3%
OSCEOLA	11.6%	11.4%	11.1%	21.9%
SEMINOLE	11.2%	16.6%	9.6%	7.4%
FLORIDA	11.0%	13.6%	13.5%	12.1%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

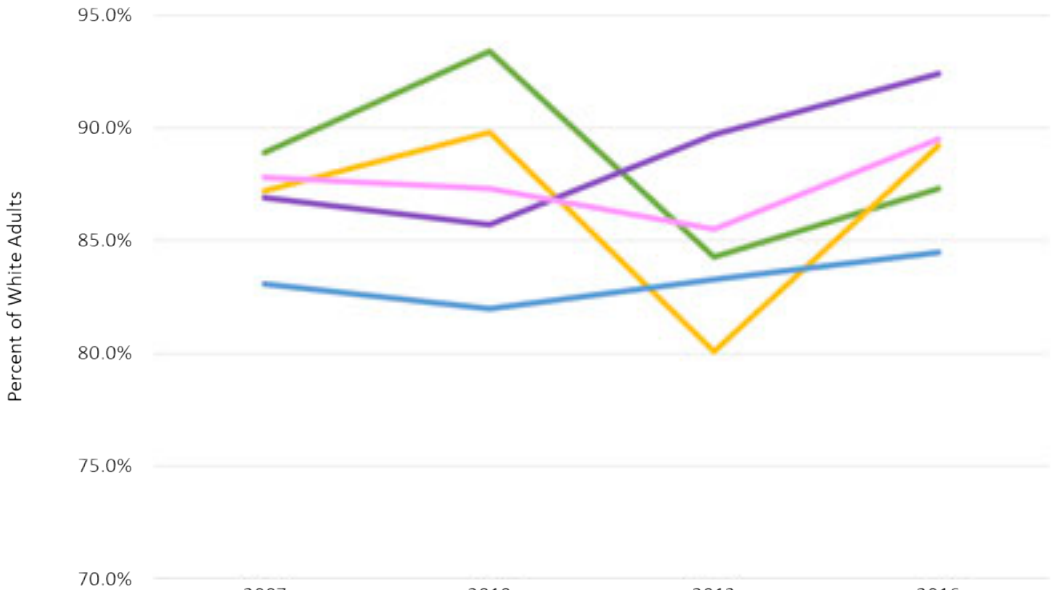
CHART 8.75: POOR MENTAL HEALTH, EDUCATION >HIGH SCHOOL (2007-2016)



	2007	2010	2013	2016
LAKE	6.7%	7.1%	6.7%	9.9%
ORANGE	6.9%	11.6%	8.9%	11.7%
OSCEOLA	10.7%	10.1%	12.3%	14.7%
SEMINOLE	7.2%	7.6%	11.1%	6.1%
FLORIDA	8.2%	10.0%	10.4%	10.1%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

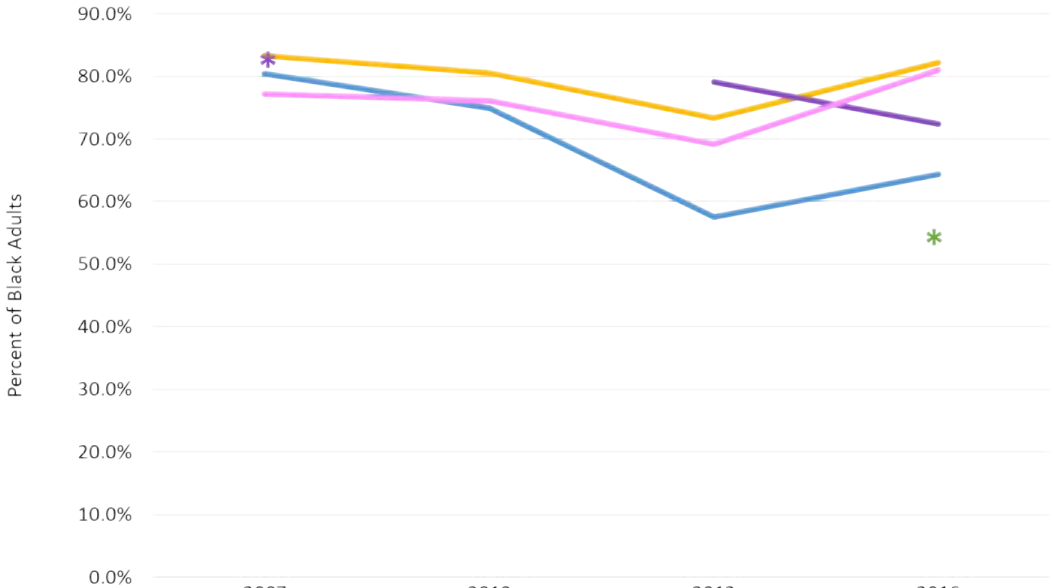
CHART 8.76: WHITE INSURANCE COVERAGE (2007-2016)



	2007	2010	2013	2016
LAKE	88.9%	93.4%	84.3%	87.3%
ORANGE	87.2%	89.8%	80.1%	89.2%
OSCEOLA	83.1%	82.0%	83.3%	84.5%
SEMINOLE	86.9%	85.7%	89.7%	92.4%
FLORIDA	87.8%	87.3%	85.5%	89.5%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

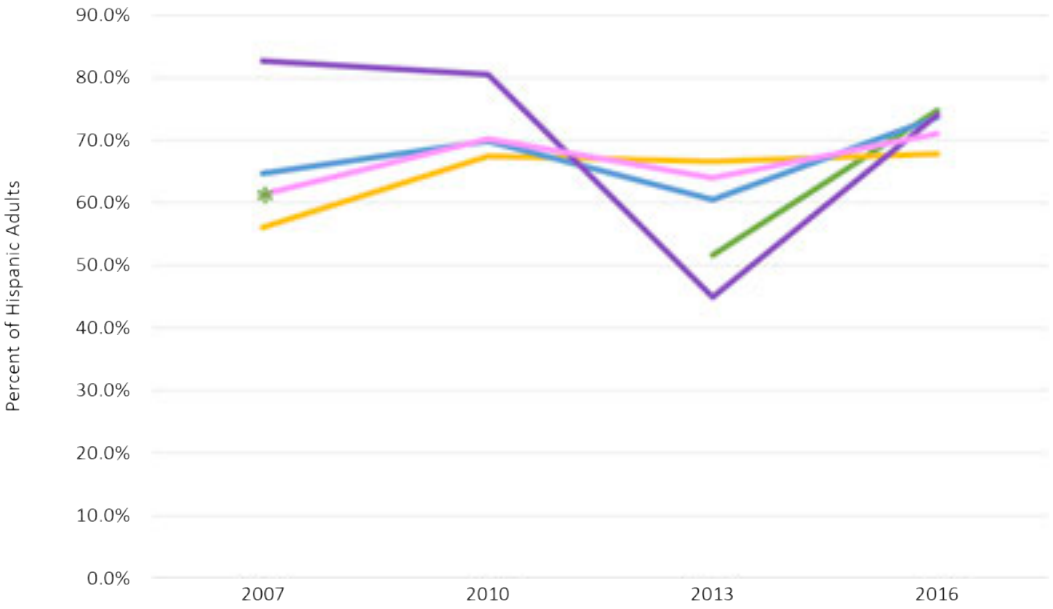
CHART 8.77: BLACK INSURANCE COVERAGE (2007-2016)



	2007	2010	2013	2016
LAKE	N/A	N/A	N/A	54.7%
ORANGE	83.3%	80.5%	73.4%	82.2%
OSCEOLA	80.4%	74.9%	57.5%	64.4%
SEMINOLE	82.8%	N/A	79.1%	72.4%
FLORIDA	77.2%	76.1%	69.2%	81.0%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System
*Represents a single data point where there has been inconsistent data for a county

CHART 8.78: HISPANIC INSURANCE COVERAGE (2007-2016)



	2007	2010	2013	2016
LAKE	61.6%	N/A	51.7%	74.8%
ORANGE	56.1%	67.5%	66.7%	67.9%
OSCEOLA	64.7%	69.9%	60.5%	73.7%
SEMINOLE	82.7%	80.5%	45.0%	74.1%
FLORIDA	61.4%	70.3%	64.0%	71.1%

Source: FLHealthCHARTS: Florida Department of Health, Florida Behavioral Risk Factor Surveillance System

CHAPTER NINE

Hot Spotting Summary

Hickory Point Recreation Park
Tavares, FL

Lake County

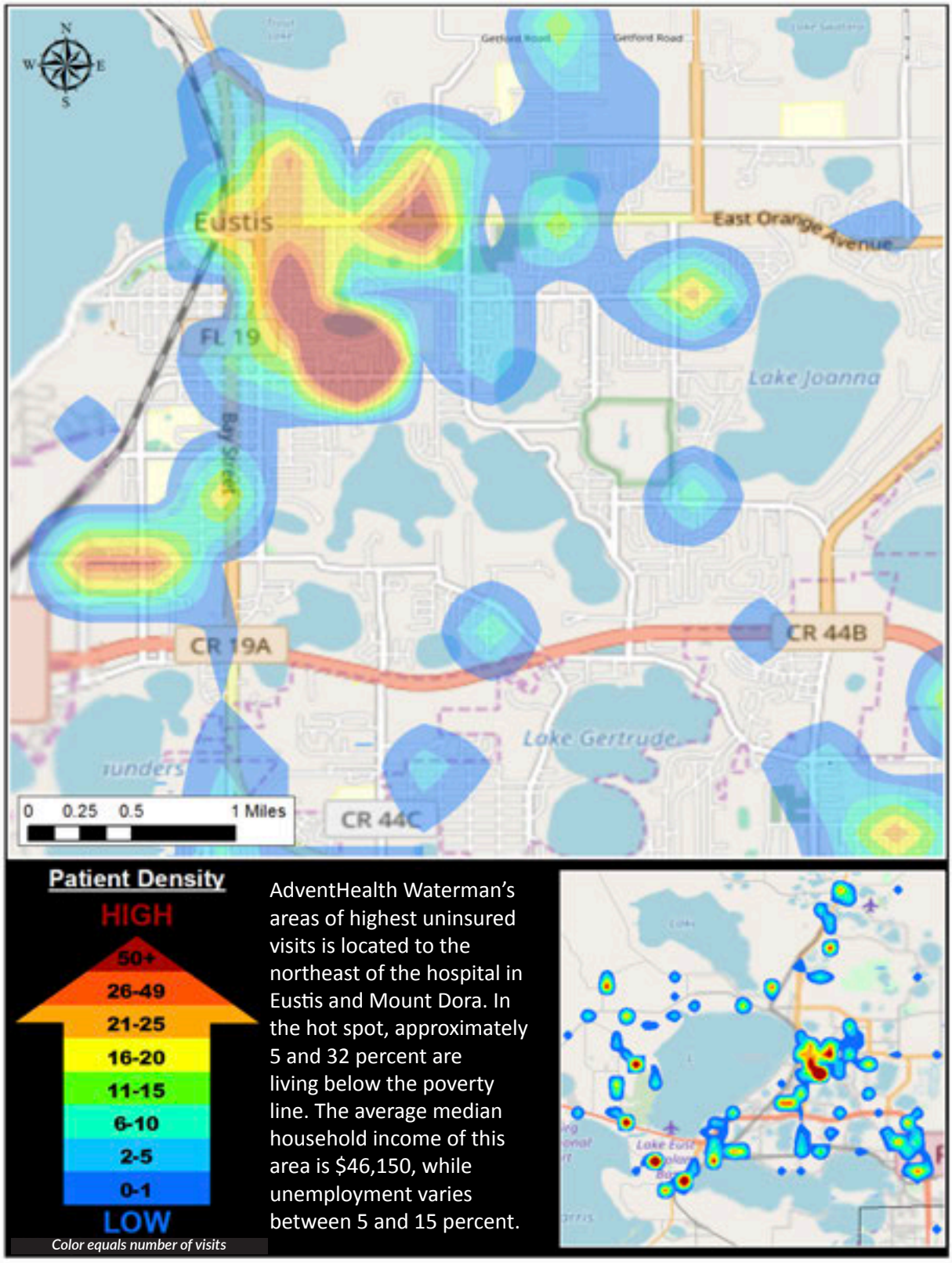
Hospital Utilization: Hot Spotting

Hot spotting is a geographical analysis of uninsured visits to a hospital. These geographic areas were created from the addresses of uninsured visits and converted to census tracts for the purpose of generating the hot spot maps. The hot spotting analysis generates a color-coded map that illustrates the geographic areas within a census tract where there is high utilization among the uninsured. These indicators guide and support strategic program deployment to meet the needs of those who experience the most barriers to care. By addressing these needs in the community, it is possible to decrease needs and increase access. Please note that the patient density color bar on each map shows the number of visits that correspond to each hot spot color, with red indicating the highest patient density and blue the lowest.

Inpatient and outpatient (emergency department) data for uninsured patients from the Hospital for fiscal years 2016, 2017 and 2018 were used in this analysis. In addition to the standard hospital uninsured patient data in most hot spotting projects, this hot spotting analysis includes economic variables and conditions of the area to analyze the correlation between healthcare utilizations and the socioeconomic conditions in which people live.

Figure 9.1 illustrates the uninsured inpatient hot spot analysis for AdventHealth Waterman.

FIGURE 9.1: ADVENTHEALTH WATERMAN UNINSURED INPATIENT HOT SPOT ANALYSIS



Tables 9.1 through 9.6 outline the uninsured inpatient specific hot spot analysis for AdventHealth Waterman. The analysis includes all uninsured inpatient visits (Table 9.1) and focuses on those visits within the hot spot for fiscal years 2016 through 2018 (Tables 9.2 through 9.5). Table 9.6 displays the census tracts, what zip code(s) they are in and the economic conditions for the hot spot. In the top five census tracts (the hot spot) from which the most frequent uninsured inpatient visits are generated, the average unemployment rate is about nine percent; approximately 19 percent of the population is living below the federal poverty level. The average annual median household income is $46,150. The 354 uninsured inpatient visits from within the hot spot cost more than $13 million and accounted for 12.1 percent of all uninsured inpatient visits between 2016 and 2018 (Table 9.1). Almost three-fourths (74.1 percent) of uninsured inpatient visits were made by White patients. Additionally, patients aged 50-59 accounted for 27.1 percent of uninsured inpatient visits.

Sepsis, unspecified organism, was the most frequent primary diagnosis code and had the highest total cost from uninsured inpatient visits within this hot spot at 4.5 percent and with a total cost of more than $600,000 between 2016 and 2018. Acidosis and essential (primary) hypertension were the most frequent secondary diagnoses from uninsured inpatient visits within this hot spot at 3.4 percent each and with a total cost of more than $300,000 and $290,347, respectively, for the same time period. The primary diagnosis with the highest average cost per uninsured inpatient visit was non-ST elevation (NSTEMI) myocardial infarction with an average cost of $102,048. To protect patient privacy, any analysis that resulted in fewer than five visits or if a certain diagnosis had less than 200,000 new cases per year is not included, except for total cost per diagnosis.

TABLE 9.1: ADVENTHEALTH WATERMAN UNINSURED INPATIENT VISIT COMPARISON (2016-2018)

Criteria*	Data Snapshot
Total uninsured inpatient visits	2,917
Total uninsured inpatient visits in hot spot	354
Total uninsured inpatient cost	$99,300,718
Total uninsured inpatient cost in hot spot	$13,081,885
Percent of uninsured inpatient visits in hot spot	12.1%
Total homeless uninsured inpatient visits	22
Homeless visits as a percent of all uninsured inpatient visits	0.8%
Total cost for uninsured inpatient homeless visits	$761,076

*Note: Includes individuals listed as homeless, unknown or homeless shelter/service facility for each of the total uninsured rows above; however, these individuals are not included in hot spot specific rows.
Source: AdventHealth Waterman Uninsured Inpatient Data

TABLE 9.2: ADVENTHEALTH WATERMAN TOP 5 MOST FREQUENT UNINSURED INPATIENT PRIMARY DIAGNOSIS CODES (2016-2018)

Top 5* Primary Diagnosis Codes	Total Visits	Total Cost	% of all Visits in Hot Spot	Avg. Cost per Visit
A41.9 Sepsis, unspecified organism	16	$685,361	4.5%	$42,835
R07.89 Other chest pain	15	$391,346	4.2%	$26,090
K80.00 Calculus of gallbladder with acute cholecystitis without obstruction	7	$317,241	2.0%	$45,320
N17.9 Acute kidney failure, unspecified	7	$95,832	2.0%	$13,690
I21.4 Non-ST elevation (NSTEMI) myocardial infarction	6	$612,290	1.7%	$102,048
I25.110 Atherosclerotic heart disease of native coronary artery with unstable angina pectoris	6	$466,610	1.7%	$77,768
L03.113 Cellulitis of right upper limb	6	$138,440	1.7%	$23,073

*Top 7 listed due to multiple diagnoses with same number of total visits.
Source: AdventHealth Waterman Uninsured Inpatient Data

TABLE 9.3: ADVENTHEALTH WATERMAN TOP 5 MOST FREQUENT UNINSURED INPATIENT SECONDARY DIAGNOSIS CODES (2016-2018)

Top 5* Secondary Diagnosis Codes	Total Visits	Total Cost	% of all Visits in Hot Spot	Avg. Cost per Visit
E87.2 Acidosis	12	$312,652	3.4%	$26,054
I10 Essential (primary) hypertension	12	$290,347	3.4%	$24,196
E87.1 Hypo-osmolality and hyponatremia	11	$238,651	3.1%	$21,696
N39.0 Urinary tract infection, site not specified	10	$237,985	2.8%	$23,799
F17.210 Nicotine dependence, cigarettes, uncomplicated	7	$116,830	2.0%	$16,690
J18.9 Pneumonia, unspecified organism	7	$233,333	2.0%	$33,333

*Top 6 listed due to multiple diagnoses with same number of total visits.
Source: AdventHealth Waterman Uninsured Inpatient Data

TABLE 9.4: ADVENTHEALTH WATERMAN TOP 5 HIGHEST COST UNINSURED INPATIENT PRIMARY DIAGNOSIS CODES (2016-2018)

Top 5 Highest Cost Primary Diagnosis Codes	Total Visits	Total Cost	% of all Visits in Hot Spot	Avg. Cost per Visit
A41.9 Sepsis, unspecified organism	16	$685,361	4.5%	$42,835
I33.0 Acute and subacute infective endocarditis*		$646,267		
I21.4 Non-ST elevation (NSTEMI) myocardial infarction	6	$612,290	1.7%	$102,048
I25.110 Atherosclerotic heart disease of native coronary artery with unstable angina pectoris	6	$466,610	1.7%	$77,768
R07.89 Other chest pain	15	$391,346	4.2%	$26,090

*To protect patient privacy, any analysis that resulted in fewer than five visits or if a certain diagnosis had less than 200,000 new cases per year is not included, except for total cost per diagnosis.
Source: AdventHealth Waterman Uninsured Inpatient Data

TABLE 9.5: ADVENTHEALTH WATERMAN UNINSURED INPATIENT VISITS BY RACE, ETHNICITY AND AGE (2016-2018)

Race	Number	%	Ethnic Group*	Number*	%*	Age	Number	%
American Indian or Alaskan Native	0	0.0%	Hispanic or Latino			0-18	10	2.8%
Asian	1	0.3%	Multiple			19-29	52	14.7%
Black or African American	65	18.4%	Non-Hispanic or non-Latino			30-39	83	23.4%
Multiple	0	0.0%	Unknown			40-49	89	25.1%
Native Hawaiian or Pacific Islander	0	0.0%				50-59	96	27.2%
Other	24	6.8%				60-69	22	6.2%
Unknown	1	0.4%				70-79	0	0.0%
White	262	74.1%				80+	2	0.6%

*Due to individual hospitals conducting their own data pulls, no ethnic group data from AdventHealth Waterman is available.
Source: AdventHealth Waterman Uninsured Inpatient Data

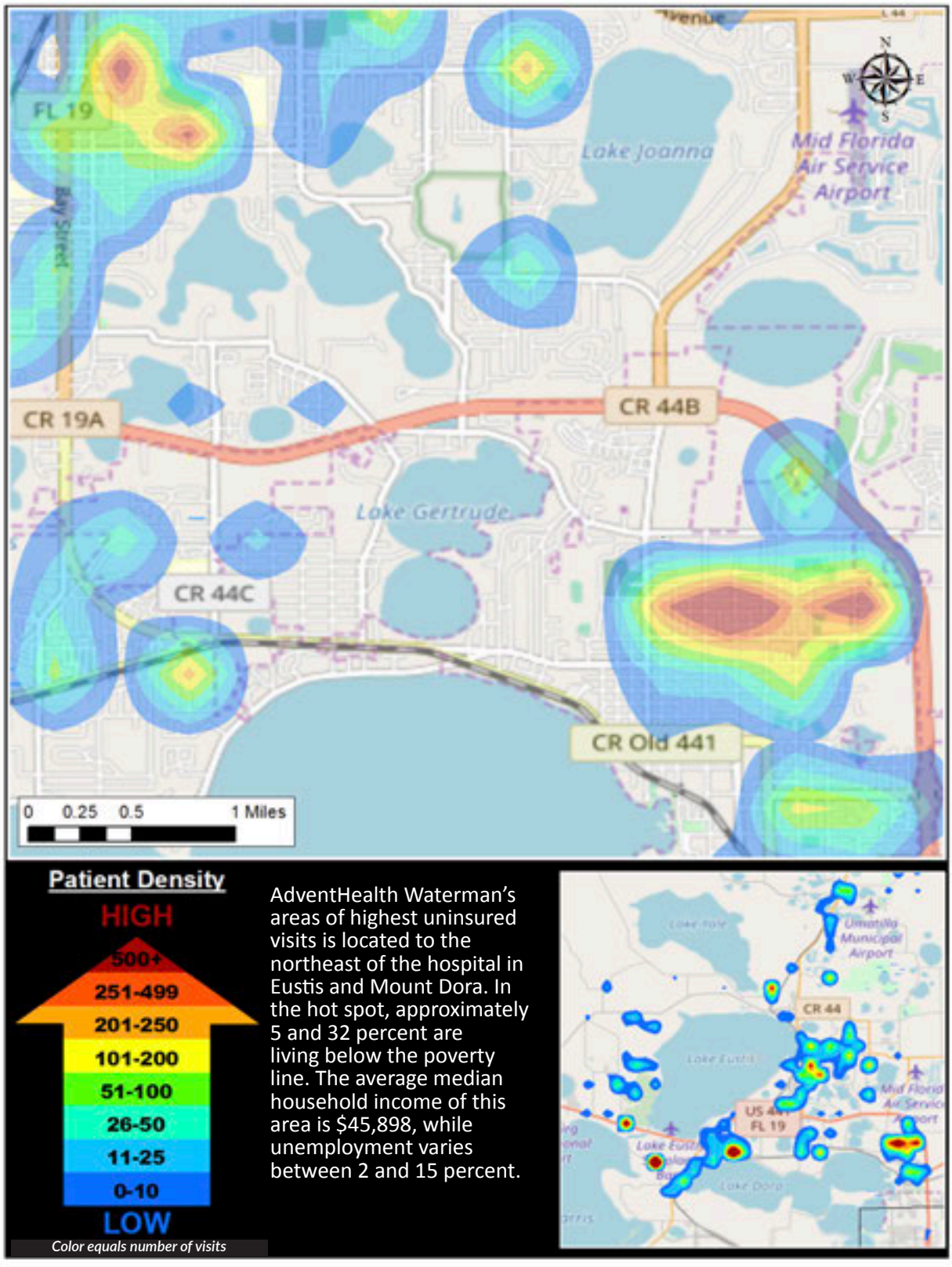
TABLE 9.6: ADVENTHEALTH WATERMAN ECONOMIC CHARACTERISTICS OF TOP 5 CENSUS TRACTS (2012-2019)

Census Tract	Census Tract within Zip Code(s)	% Unemployed	Median HH Income	% Below Poverty
12-069-030902	32732, 32757, 32776	4.7%	$70,122	4.7%
12-069-030105	32702, 32726, 32736, 32784	7.0%	$46,900	13.6%
12-069-030204	32726	8.6%	$38,693	26.6%
12-069-030206	32726, 32736	14.8%	$30,395	31.9%
12-069-030914	32757	9.7%	$44,638	17.4%
Average		8.9%	$46,150	18.8%

Source: ProximityOne | Source: U.S. Census Bureau

Figure 9.2 illustrates the uninsured outpatient hot spot analysis for AdventHealth Waterman.

FIGURE 9.2: ADVENTHEALTH WATERMAN UNINSURED OUTPATIENT HOT SPOT ANALYSIS



Tables 9.7 through 9.12 outline the uninsured outpatient specific hot spot analysis for AdventHealth Waterman. The analysis includes all uninsured outpatient visits (Table 9.1) and focuses on those visits within the hot spot for fiscal years 2016 through 2018 (Tables 9.8 through 9.11). Table 9.12 displays the census tracts, what zip code(s) they are in and the economic conditions for the hot spot. In the top five census tracts (the hot spot) from which the most frequent uninsured outpatient visits are generated, the average unemployment rate is about eight percent; approximately 18 percent of the population is living below the federal poverty level. The average annual median household income is $45,898. The 3,649 uninsured outpatient visits from within the hot spot cost more than $14.9 million and accounted for 13.5 percent of all uninsured outpatient visits between 2016 and 2018 (Table 9.1). More than half (62.7 percent) of uninsured outpatient visits were made by White patients. Additionally, patients aged 19-29 accounted for 33.3 percent of uninsured outpatient visits.

Urinary tract infection, site not specified, was the most frequent primary diagnosis code and had the highest total cost from uninsured outpatient visits within this hot spot at 2.8 percent and with a total cost of more than $600,000 between 2016 and 2018. Essential (primary) hypertension was the most frequent secondary diagnosis from uninsured outpatient visits within this hot spot at 3.4 percent and with a total cost of more than $300,000 for the same time period. The primary diagnosis with the highest average cost per uninsured outpatient visit was unspecified abdominal pain with an average cost of $7,492.

TABLE 9.7: ADVENTHEALTH WATERMAN UNINSURED OUTPATIENT VISIT COMPARISON (2016-2018)

Criteria*	Data Snapshot
Total uninsured outpatient visits	26,975
Total uninsured outpatient visits in hot spot	3,649
Total uninsured outpatient cost	$112,724,859
Total uninsured outpatient cost in hot spot	$14,955,204
Percent of uninsured outpatient visits in hot spot	13.5%
Total homeless uninsured outpatient visits	364
Homeless visits as a percent of all uninsured outpatient visits	1.3%
Total cost for uninsured outpatient homeless visits	$1,160,520

*Note: Includes individuals listed as homeless, unknown or homeless shelter/service facility for each of the total uninsured rows above; however, these individuals are not included in hot spot specific rows.
Source: AdventHealth Waterman Uninsured Outpatient Data

TABLE 9.8: ADVENTHEALTH WATERMAN TOP 5 MOST FREQUENT UNINSURED OUTPATIENT PRIMARY DIAGNOSIS CODES (2016-2018)

Top 5* Primary Diagnosis Codes	Total Visits	Total Cost	% of all Visits in Hot Spot	Avg. Cost per Visit
N39.0 Urinary tract infection, site not specified	101	$613,548	2.8%	$6,075
J06.9 Acute upper respiratory infection, unspecified	82	$182,921	2.2%	$2,231
J40 Bronchitis, not specified as acute or chronic	69	$220,534	1.9%	$3,196
K08.89 Other specified disorders of teeth and supporting structures	64	$50,136	1.8%	$783
K04.7 Periapical abscess without sinus	63	$64,321	1.7%	$1,021
R07.89 Other chest pain	63	$396,679	1.7%	$6,296

*Top 6 listed due to multiple diagnoses with same number of total visits.
Source: AdventHealth Waterman Uninsured Outpatient Data

TABLE 9.9: ADVENTHEALTH WATERMAN TOP 5 MOST FREQUENT UNINSURED OUTPATIENT SECONDARY DIAGNOSIS CODES (2016-2018)

Top 5 Secondary Diagnosis Codes	Total Visits	Total Cost	% of all Visits in Hot Spot	Avg. Cost per Visit
I10 Essential (primary) hypertension	123	$398,550	3.4%	$3,240
Z72.0 Tobacco use	108	$300,741	3.0%	$2,785
F17.200 Nicotine dependence, unspecified, uncomplicated	71	$200,136	1.9%	$2,819
R11.2 Nausea with vomiting, unspecified	66	$425,802	1.8%	$6,452
K02.9 Dental caries, unspecified	63	$96,183	1.7%	$1,527

Source: AdventHealth Waterman Uninsured Outpatient Data

TABLE 9.10: ADVENTHEALTH WATERMAN TOP 5 HIGHEST COST UNINSURED OUTPATIENT PRIMARY DIAGNOSIS CODES (2016-2018)

Top 5 Highest Cost Primary Diagnosis Codes	Total Visits	Total Cost	% of all Visits in Hot Spot	Avg. Cost per Visit
N39.0 Urinary tract infection, site not specified	101	$613,548	2.8%	$6,075
R10.9 Unspecified abdominal pain	59	$442,050	1.6%	$7,492
R07.89 Other chest pain	63	$396,679	1.7%	$6,296
F10.129 Alcohol abuse with intoxication, unspecified	41	$288,825	1.1%	$7,045
R51 Headache	54	$242,311	1.5%	$4,487

Source: AdventHealth Waterman Uninsured Outpatient Data

TABLE 9.11: ADVENTHEALTH WATERMAN UNINSURED OUTPATIENT VISITS BY RACE, ETHNICITY AND AGE (2016-2018)

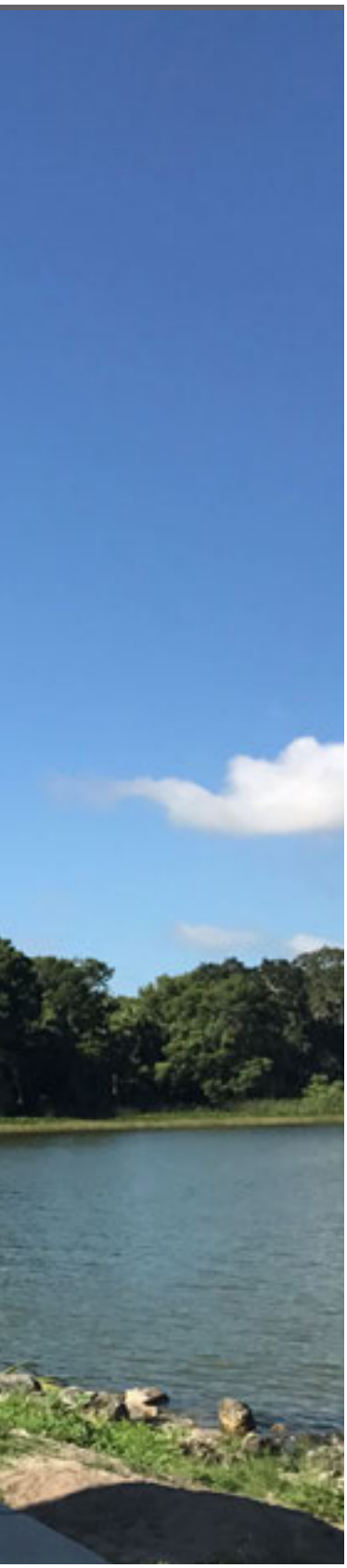
Race	Number	%	Ethnic Group*	Number*	%*	Age	Number	%
American Indian or Alaskan Native	3	0.1%	Hispanic or Latino			0-18	309	8.5%
Asian	8	0.2%	Multiple			19-29	1,215	33.3%
Black or African American	832	22.8%	Non-Hispanic or non-Latino			30-39	971	26.6%
Multiple	25	0.7%	Unknown			40-49	640	17.6%
Native Hawaiian or Pacific Islander						50-59	392	10.7%
Other	480	13.3%				60-69	110	3.0%
Unknown	7	0.2%				70-79	8	0.2%
White	2,289	62.7%				80+	4	0.1%

*Due to individual hospitals conducting their own data pulls, no ethnic group data from AdventHealth Waterman is available.
Source: AdventHealth Waterman Uninsured Outpatient Data

TABLE 9.12: ADVENTHEALTH WATERMAN ECONOMIC CHARACTERISTICS OF TOP 5 CENSUS TRACTS (2012-2019)

Census Tract	Census Tract within Zip Code(s)	% Unemployed	Median HH Income	% Below Poverty
12-069-030206	32726, 32736	14.8%	$30,395	31.9%
12-069-030105	32702, 32726, 32736, 32784	7.0%	$46,900	13.6%
12-069-030902	32736, 32757, 32776	4.7%	$70,122	4.7%
12-069-030912	32757	2.4%	$43,380	14.8%
12-069-030204	32726	8.6%	$38,693	26.6%
Average		7.5%	$45,898	18.3%

Source: ProximityOne
Source: U.S. Census Bureau



CHAPTER TEN

Priorities and Compliance

Mt. Dora Light House
Mt. Dora, FL

Lake County

Priority Selection

On April 3, 2019 AdventHealth Waterman joined with other members of the Collaborative in Lake County to hold a county specific prioritization meeting. The committee met to review high level findings as well as resources identified in the Community Asset Inventory to gain a comprehensive understanding of the needs and areas of opportunity.

The criteria outlined in chapter two was then utilized to generate an aggregated number for each identified need in order to develop a ranking to determine potential impact in addressing the needs, the results of which are below. The top priorities for Lake County are in rank order listed in Table 10.1.

The criteria used is outlined below:

1. Accountable organization: The extent to which this issue is important to address in this action planning effort either for the health system or the community.
2. Magnitude of the problem: The degree to which the problem leads to death, disability, or impaired quality of life and/or could be an epidemic based on the rate or percent of population that is impacted by the issue.
3. Impact on health outcomes: The extent to which the issue impacts health outcomes and/or is a driver of other conditions.
4. Capacity/resources: The extent to which systems and resources are in place or available to implement evidence-based solutions.

TABLE 10.1: LAKE COUNTY PRIORITIES

Identified Need	Accountability	Magnitude	Impact	Capacity	Total A+M+I+C
Prevention: General Preventative Care	8.6	8.7	8.8	9.2	35.3
Chronic Disease: Diabetes (Children and Adults)	6.6	8.9	9.7	7.8	33.0
Chronic Disease: Obesity	6.0	9.4	10.0	6.5	31.9
Birth Characteristics: Infant Mortality	8.7	7.3	9.2	6.5	31.7
Chronic Disease: Childhood Obesity	6.1	9.0	10.0	6.0	31.1
Leading Cause of Death: Cancer	6.9	7.6	9.7	6.3	30.5
Leading Cause of Death: Cardiovascular Disease	6.4	8.7	8.8	6.5	30.4
Economic Conditions: Employment/Livable Wage	5.7	9.0	10.0	5.2	29.9
Access to Health Care: Cost of care/insurance/medications	7.1	9.1	9.5	4.2	29.9
Communicable Disease: Childhood Immunizations	8.7	7.0	6.8	7.3	29.8
Behavioral Risks: Substance Abuse	5.1	8.9	9.3	6.5	29.8
Quality of Life/Mental Health: Depression screenings	7.0	7.7	7.7	7.3	29.7
Communicable Disease: HIV/AIDS	7.7	7.7	7.0	7.2	29.6
Access to Health Care: Awareness of Available Services	8.1	7.7	7.3	5.2	28.3
Built Environment: Access to Affordable Food/Food Desert	6.1	8.3	8.3	4.7	27.4
Economic Conditions: Housing/Homeless	3.1	8.6	10.0	5.7	27.4
Access to Health Care: Health Literacy	6.4	7.9	8.3	4.7	27.3
Chronic Disease: Asthma/COPD	6.3	6.9	8.2	5.7	27.1
Birth Characteristics: Substance exposed infants	6.9	6.9	7.3	5.5	26.6
Chronic Disease: Breast Cancer	6.3	6.6	7.0	6.5	26.4
Injury: Preventable injuries/unintentional deaths	5.6	6.1	8.5	5.7	25.9
Access to Health Care: Transportation	5.4	8.6	7.0	4.8	25.8
Injury: Falls	7.7	5.9	5.8	6.0	25.4
Health Care Providers and Facilities: Bilingual Providers/cultural competency	7.9	6.4	6.2	4.8	25.3
Chronic Disease: Lung Cancer	6.3	5.6	7.0	6.2	25.1

TABLE 10.1: LAKE COUNTY PRIORITIES, CONTINUED

Identified Need	Accountability	Magnitude	Impact	Capacity	Total A+M+I+C
Quality of Life/Mental Health: Lack of Services/Providers	5.7	7.3	7.5	4.2	24.7
Economic Condition: Family Stability (children as well as seniors)	4.6	7.0	8.5	4.0	24.1
Health Care Providers and Facilities: Specialists	6.7	6.4	5.7	5.0	23.8
Behavior Risk: Lifestyle choices	4.7	6.9	7.5	4.2	23.3
Behavioral Risks: Lack of Substance Abuse Services/Providers	4.4	6.1	7.5	5.0	23.0
Built Environment: Access to Safe Places for Recreation/Safe Sidewalks	4.3	6.6	6.5	5.5	22.9
Chronic Disease: Colorectal Cancer	4.9	5.4	6.2	6.0	22.5
Quality of Life/Mental Health: Stigma	3.7	8.0	5.5	5.3	22.5
Access to Health Care: Immigrants/Undocumented Individuals	2.9	3.9	5.3	3.0	15.1
Birth Characteristics: Births to Uninsured Mothers	4.9	2.4	4.0	3.2	14.5

The top priorities for AdventHealth Waterman were identified by the top 10 needs as indicated with the most votes. The top 10 needs are listed below.

TABLE 10.2: ADVENTHEALTH WATERMAN TOP PRIORITIES

Identified Need
Access to Care: Cost of care, Insurance, Medication for Cancer
Prevention: Screenings, Well Visits, and Behavioral Risk Factors
Diabetes: Type II
Obesity: Adult and Children
Cardiovascular Disease
Birth Characteristics: Infant Mortality
Economic Conditions: Employment and Livable Wage
Communicable Diseases: Childhood Immunizations
Behavioral Risks: Substance Abuse
Quality of Life/Mental Health: Depression Screenings

Priority Issues to be Addressed

Members of the Hospital Health Needs Assessment Committee reviewed the top 10 needs listed above to determine where AdventHealth Waterman could have the biggest impact. The HHNAC identified the following priorities to be addressed by AdventHealth Waterman:

1. Access to Care: Cost of Care, Insurance, Medications for Cancer
   Focusing on social determinants of health, including poverty, the uninsured and transportation. Access to care for cancer was selected due to the concerns regarding the rising cost of health care services and the ease of access to available resources.

2. Prevention: Screenings, Well Visits and Behavioral Risk Factors
   Focusing on all ethnicities and age groups, this issue was selected because data showed that this issue ranked as the number one top priority needing to be addressed in Lake County and the focus put on prevention will aid in the over-all health and well-being of the community.

3. Diabetes: Type II
   Focusing on all ethnicities ages 18+, this condition was selected because data shows that diabetes is one of the leading chronic diseases in Lake County, and the percentage of adults with diagnosed diabetes in Lake County is higher than the state average.

4. Obesity: Adult and Children
   Focusing on all ethnicities and all age groups, this condition was selected because data shows the proportion of obese adults in Lake County is higher than the Healthy People 2020 goal, and there is a strong community concern about the impact of obesity on both children and adults.

5. Cardiovascular Disease
   Focusing on all ethnicities and age groups, this condition was selected because data shows that even though there is a decrease in mortality, heart disease is still the second leading causes of death in Lake County.

Priority Issues That Will Not be Addressed

The 2019 Hospital Health Needs Assessment Committee also identified the following community health issues that AdventHealth Waterman will not address. The list below includes these issues and an explanation of why the Hospital is not addressing them.

1. Birth Characteristics: Infant Mortality
   While this issue appears to be an issue for Lake County, especially among obese mothers, other local organizations such as the Lake County Department of Health are already working to address poor birth outcomes. Additionally, when compared to other nearby communities, AdventHealth Waterman community has overall lower mortality rates.

2. Economic Conditions: Employment/Livable Wage
   AdventHealth Waterman recognizes that addressing issues surrounding poverty and the negative effects on health warrant attention. After discussion, the CHNAC agreed that addressing these economic conditions requires a broader partnership than the CHNAC, such as large employers from other industries; local, state and federal government officials; and more.

3. Communicable Diseases: Childhood Immunizations
   While AdventHealth Waterman can administer immunizations and successfully treat communicable diseases, the Lake County Department of Health is in a much better position to educate and offer immunizations at a free or reduced cost.

4. Behavioral Risks: Substance Abuse (Drugs, Alcohol, Tobacco)
   Addiction is understood to be a component of poor mental health. Local behavioral health partners, such as Lifestream Behavioral Health, is in a better position to address substance abuse. We are committed to working to improving the health and wellness of our communities, and fully support local government and wellness coalitions in their efforts to positively impact these issues.

5. Quality of Life/Mental Health: Depression Screenings
   AdventHealth Waterman is committed to working with community partner Lifestream Behavioral Health to improve the quality of life of all, especially for those suffering from mental health and depression. As Lake County's behavioral health center, Lifestream is more suited to spearhead this issue.

Written Comments Regarding 2016 Needs Assessment

There were no substantive written comments received regarding the 2016 AdventHealth Waterman Community Health Needs Assessment.

Review of Strategies Undertaken In the 2016 Community Health Plan

The 2016 AdventHealth Waterman Community Health Needs Assessment was posted on AdventHealth Waterman's website.

Activities and accomplishments from AdventHealth Waterman's Implementation Plan include the following:

Priority- Access to care: Focusing on social determinants of health, including poverty, the uninsured and transportation

- To date, have connected over 4,168 uninsured community residents and patients to the Primary Health Clinic (a free internal clinic providing services for patients who are below 150 percent of the federal poverty line).
- Transitioned over 11 percent of low-income patients from the emergency department to the Primary Health Clinic for post-discharge follow-up.

Priority – Obesity: addressing the need through reduction of associated health risks and mortality

- Provided community health risk assessments to more than 1100 individuals to assess risk for obesity related diseases. Participants were educated on healthy eating and exercise habits, as well as connected to available community and hospital resources.
- Provided health education classes though the Creation Health Bible School for 138 children through referrals from local physicians.
- Engaged more than 1200 individuals in walking and creative programing to encourage physical activity. Programs focused on the importance of practicing a healthy lifestyle to maintain a healthy weight.

Priority – Heart Disease: addressing the need to reduce the burden of cardiovascular disease and eliminate disparities associated with heart disease and stroke

- Provided more than 445 cardiac health assessments and screenings (blood pressure and cholesterol) for individuals. 100 percent of individuals with high cholesterol or blood pressure were referred to physicians, the Hospital's free clinic or a local Federally Qualified Healthcare Center for follow-up care.
- Provided Early Heart Attack Education handouts to local employers and providers at community health/wellness events; to all patients discharged from the ED; and cardiac support classes to increase awareness and decrease incidence.

Priority – Diabetes: addressing the need by reducing the number of new cases through early diagnosis and prevention awareness and education

- To date have provided more than 440 glucose screenings to the community, with a referral rate of 100 percent for individuals with elevated glucose rates for follow up care or to diabetes education classes.
- Educated more than 328 individuals through the AdventHealth Waterman Diabetes Self-Management Program. The program teaches everyday strategies focusing on nutrition, exercise and disease management.
- Hosted diabetes support groups for more than 200 individuals for those with diabetes or pre-diabetes. Attendees are educated on the disease and self-management and provided a venue for open discussion, support and community connectivity.
- Created a program focusing on mothers who are managing gestational diabetes. Education, support and testing supplies have been provided to more than 90 mothers to date.

Priority – Colorectal and Cervical Cancer: addressing incidence through education and early screenings

- Provided education and screenings for cervical and colon cancer to 44 participants with follow up care scheduled when needed.
- Conducted community outreach events at a food and personal care items distribution center and in low income housing communities to educate women on HPV, cervical cancer, risk reduction and screenings. Efforts also included connecting women to gynecologic cancer prevention resources.

Review and Approval

Approvals

On December 6, 2019 the AdventHealth Waterman Board of Directors approved the Community Health Needs Assessment findings, priorities and final report. A link to the 2019 Community Health Needs Assessment was posted on the Hospital's website prior to December 31, 2019.

Next Steps

The local CHNAC will work with AdventHealth Waterman to develop a measurable implementation strategy to address the priority issues. The 2020-2022 Community Health Plan will be completed and posted on the Hospital's website prior to May 15, 2020.