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# COMMUNITY HEALTH NEEDS ASSESSMENT (CHNA) FEBRUARY 2023

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June 30, 2023

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Department of Health in Madison County  
Madison County Memorial Hospital



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# The Department of Health in Madison County and Madison County Memorial Hospital collaborated on the development of the 2023 Community Health Needs Assessment

## Department of Health Mission

To protect, promote and improve the health of all people in Florida through integrated state, county, and community efforts.

## Department of Health Vision

To be the healthiest state in the Nation



## Department of Health Values (ICARE)

**Innovation:** We search for creative solutions and manage resources wisely.

**Collaboration:** We use teamwork to achieve common goals and solve problems.

**Accountability:** We perform with integrity and respect.

**Responsiveness:** We achieve our mission by serving our customers and engaging our partners.

**Excellence:** We promote quality outcomes through learning and continuous performance improvement.



**Madison County  
Memorial Hospital**

To enhance the quality of life by continuously improving the health of the people of our community.

## Madison County Memorial Hospital Values

Faith, Family, and Local History

Madison County Memorial Hospital: **Community Health Needs Assessment Report FY 2023**

Contact Person: **Tammy Stevens, CEO**

Date of Written Report: **August 7, 2023**

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# Acknowledgements

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Participating agencies are representative of public and private health providers, child welfare, education, local government, local law enforcement, faith-based, social service, and mental health agencies that serve Madison County

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# Executive Summary

The Department of Health in Madison County (DOH-Madison) and Madison County Memorial Hospital (MCMH) have collaborated to produce the 2023 Community Health Assessment for Madison County. This meets the requirements for both entities to involve the community in a participatory process to plan health priorities for the next three years.

This Community Health Assessment (CHA) serves to inform the Madison County community for the purposes of decision making, the prioritization of health problems, and the development, implementation, and evaluation of community health improvement plans. The overarching goals of this report include:

- Analysis of the Socioeconomic Barriers to Health and the impact on the health of Madison County residents.
- Examination of the current health status across Madison County as compared to Florida.
- Identification of the current health concerns among Madison County residents within the social and economic context of their community.
- Documentation of community strengths, resources, forces of change, and opportunities for health service provision to inform funding and programming priorities of Madison County.

## Collaboration Process

To begin the Community Health Assessment process, the MCMH Chief Executive Officer and the DOH-Madison Administrator approached potential community partners through mail, email and by phone to ensure that the invitation list was all-inclusive. This initiative ensured that all four assessments were well-attended. New partnerships for both entities have resulted from community outreach efforts, particularly from the City of Greenville.

DOH-Madison and MCMH were co-leads of the CHA Steering Committee. Once the three priority areas were chosen for the Community Health Improvement Plan (CHIP) by the community partners attending the Health Summit, committee chairs were chosen from community partners through a nomination process, to ensure that the community felt ownership of the assessment and the plan. This cycle of the CHA focused on service mapping and preventing service duplication, particularly in the Chronic Disease priority area.

The Steering Committee reviewed drafts of the CHA document. The final draft was reviewed and approved by the participating community partners, and by DOH-Madison and Madison County Memorial Hospital.

## Mobilizing for Action Through Planning and Partnerships (MAPP) Process

An overview of the Mobilizing for Action through Planning and Partnership (MAPP) process was discussed to educate the community about the development process of the CHA. The MAPP process serves as a resource to classify the priorities of the community and functions to identify resources to develop action plans in the community. This strategic planning tool, driven by the community, is conducted to assess the health within the community in order to identify issues and improve the well-

being of the public. The MAPP process alters how we see public health planning and creates a health model focused on the community at large.

*Figure 1. Roadmap of MAPP Process*



### ***Community Themes and Strengths Assessment***

The Community Themes and Strengths Assessment, identifies issues that residents of the community deem as the most important, along with distinguishing any resources available to aid in improving the health of the community.

The Community Themes and Strengths Assessment was performed in 2022 by direct solicitation of residents to complete a standardized survey (See Appendix 1). Residents were approached at county school board meetings, county commission meetings, community events, health fairs and at local establishments. Residents had the option to complete a printed survey at the solicitation location or to access an online platform to complete the survey. Many of the questions had an option to capture qualitative data in text fields to get a more complete picture.

Hard copy data were entered into the online platform. Data were exported from the electronic dataset into Excel and analyzed using pivot tables and other Excel tools.

### ***Community Health Status Assessment***

The Community Health Status Assessment distinguishes and prioritizes quality of life and community health issues. The Health Summit to discuss the Community Health Status Assessment was held on December 16, 2022, at the DISC Village Office in Greenville, Florida. Community participants developed the Visioning Statement that is included in the assessment, listened to data presentation on health indicators, and broke into groups to discuss the major health indicator topic areas. At the end of the day, the group voted to choose the three priority areas to address in the CHIP that was launched April 1, 2023.

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### ***Local Public Health System Assessment***

The Local Public Health System Assessment puts the spotlight on the network of organizations and agencies in the community and how well the ten Essential Services are being delivered. The Local Public Health Assessment was divided into two parts, an external assessment, and an internal assessment. The external assessment was held at the health summit. During that time, we discussed Essential Public Health Services 3, 4, 5, 7 and 9. The internal assessment was held with DOH-Madison staff. Essential Services 1, 2, 6, 8 and 10 were addressed.

### ***Forces of Change Assessment***

The Forces of Change Assessment focuses on recognizing forces or factors/trends that will affect the health of the community and the local public health system. The Forces of Change Assessment was performed on December 16, 2022, in conjunction with the Community Health Status Assessment, to identify community strengths, weaknesses, opportunities and threats in specific topic areas.

### **Data Sources**

The following data sources were utilized to develop this community health assessment. These data include both primary and secondary data sources. According to the National Association of County and City Health Officials (NACCHO), primary data is defined as data collected directly, such as surveys, focus groups and key informant interviews. Secondary data are defined as data not collected directly, such as surveillance data, population data and incidence rates.

### ***Florida Cancer Registry – Secondary Data***

The Florida Cancer Data System (FCDS) is Florida's legislatively mandated, population-based, statewide cancer registry. The FCDS is a joint project of the Florida Department of Health and the University of Miami Miller School of Medicine.

### ***Florida CHARTS – Primary and Secondary Data***

The Florida Department of Health, Office of Statistics and Assessment maintains the Community Health Assessment Resource Tool Set (CHARTS) is commonly used to conduct community health assessments, prioritize health issues at the state and local level, and monitor changes in health indicators over time. This resource includes primary data through several surveys, and secondary data, including health indicator data.

### ***Behavioral Risk Factor Surveillance System (BRFSS) – Primary Data in Florida CHARTS***

This state-based telephone surveillance system is designed to collect data on individual risk behaviors and preventive health practices related to the leading causes of morbidity and mortality.

### ***Florida Youth Tobacco Survey (FYTS) – Primary Data in Florida CHARTS***

The FYTS tracks indicators of tobacco use and exposure to second-hand smoke among Florida public middle and high school students and provides data for monitoring and evaluating tobacco use among youth in the Florida Tobacco Prevention and Control Program.

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### ***Florida Youth Substance Abuse Survey (FYSAS) – Primary Data in Florida CHARTS***

This survey is given to middle and high school youth in public schools. This survey tracks indicators assessing risk and protective factors for substance abuse, in addition to substance abuse prevalence. The FYSAS and the FYRBS below are administered on alternating years.

### ***Florida Youth Risk Behavior Survey – Primary Data in Florida CHARTS***

This survey is given to middle and high school youth in public schools. The survey tracks indicators of behaviors that contribute to unintentional injuries and violence, substance use, physical activity, and dietary behaviors.

### ***Florida-[HealthFinder], Florida Agency for Health Care Administration (AHCA) – Secondary Data***

The Inpatient Data Query provides performance and outcome data and information on selected medical conditions and procedures in Florida health care facilities.

### ***Robert Wood Johnson County Health Rankings***

The County Health Rankings rate the health of nearly every county in the nation. The Robert Wood Johnson Foundation collaborates with the University of Wisconsin Population Health Institute to provide this database.

### ***United States Census Bureau – Primary and Secondary Data***

The U.S. Census Bureau collects detailed information on population demographics including age, sex, race, education, employment, income, and poverty. Data are also collected through the American Community Survey.

## **Data Limitations**

All data presented in the following assessment are current as of December 2022, and whenever possible, comparisons were made between Madison County and the state of Florida as a whole. Some trend lines are three-year discrete rates to control for static trend lines and years where the rate was zero. Three-year discrete rates can give a more fluid view of the overall trend up or down.

It should be noted that data from the Community Themes and Strengths and Strengths Assessment, and the Forces of Change Assessment are representative of the persons who participated in the assessment. Data may or may not be generalizable to the entire Madison County community.

All survey data was used as supplemental information to further inform the group about health indicators. This data offers supporting or negating documentation of health indicators found in Florida CHARTS and other quantifiable sources.

To achieve optimal health activity, Madison County needs to:

- Conduct root cause analyses to strategically create a better future.
- Further develop resources (economic, health, education) to create a strong community.
- Take ownership of socioeconomic barriers to health.



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# Madison County Memorial Hospital



MCMH is in the heart of Madison County, one block north of west US Hwy 90, in downtown Madison. It is about fifty miles east of Tallahassee along the Interstate 10 corridor. Madison County shares a border with the State of Georgia, and the city of Madison is only about thirty miles south of Valdosta, Georgia. MCMH was founded in 1937. Today it is one of only 12 hospitals in Florida designated as a Critical Access Hospital. MCMH has 25 private patient rooms and provides several outpatient services. The governing board of Madison County Health and Hospital District (the district) is made up of seven directors appointed

by the Governor of Florida. These directors serve staggered four-year terms and are selected from applications submitted to the governor's office. The District leases the hospital building to Madison County Memorial Hospital, Inc., a 501(c)(3) not-for-profit organization. The board directors that serve the district are the same people as the board directors that serve the not-for-profit corporation. This has been the leadership structure since 1983. With an emphasis on patient-centered care, MCMH engages the patient's entire family and strives to provide innovative services for our community.

## Emergency Services

Emergency specialists consist of physicians, physician assistants, nurse practitioners, licensed nurses, emergency technicians and respiratory therapists who stand ready to accommodate a variety of emergency procedures such as-diagnostics, accident, injury, stabilization, and transport.

## Telemedicine

In 2015 the hospital implemented a TeleStroke program by one of the latest technologies in emergency stroke care with a tele-medicine robot named R.E.T.A, (**R**emote **E**mergency **T**elemedicine **A**ssistant). This service provides the emergency room professionals with remote board-certified neurologists available 24/7. These neurologists examine the patient, evaluate the CT scan of their brain, and make recommendations to the MCMH team for the best possible patient outcomes. In 2019 inpatient TeleCardiology consultations were added with Board Certified Cardiologists to listen to heart sounds by way of a Bluetooth stethoscope and provide a face-to-face assessment through a telemedicine robot. During 2022, TeleBehavioral Health was implemented.

## Inpatient Services

Inpatient services include all other services as needed when serving acute care or observation patients who are staying in the hospital for treatment. Additionally, MCMH offers Swing Bed services to patients who no longer require acute inpatient services but instead need extra time for healing. This program is provided to patients who require skilled nursing services or rehabilitation services such as: physical, occupational, and speech therapy before returning home safely. Skilled services include IV antibiotics, rehabilitation therapy, tube feedings and nutritional stabilization, wound care, and respiratory therapy. Patients receive a private room along with personalized care tailored to their needs through a team of

physicians, nurses, physical, speech, and occupational therapists, respiratory, radiology and laboratory technicians, dietitians, activities coordinator, chaplains, and a case manager.

## Outpatient Services

MCMH Outpatient services include laboratory, diagnostics, rehabilitation, respiratory, wound care, endoscopy, and elective surgery. Outpatient rehabilitation services, including speech and physical and occupational therapy. These services allow patients who may have been injured in a car accident or experienced a stroke or heart attack to get back to living an independent life. Together, the rehabilitation team has over 50 years combined experience and works directly with the patient to increase function and performance, and to maximize their potential for returning to work, school, community, and home with enhanced daily living skills.

## Operating Room

MCMH's Operating Room provides a variety of elective surgery procedures prescribed by your medical provider. The Operating Room Suite consists of a large operating room, four private treatment/recovery rooms, and a procedure room. The following surgical services are currently available:

- Abscesses/Hematomas
- Abscess Incision & Drainage
- Breast Biopsy
- Central Lines
- Chest Tubes
- Circumcision (ages five and older)
- Gallbladder Removal
- Hernia Repair
- Gastrostomy Feeding Tube Insertion
- Hemorrhoidectomy
- Implanted Venous Access Devices
- Paracentesis
- Skin Cancers
- Thoracentesis
- Vasectomy



## Endoscopy

MCMH Endoscopy program diagnoses and treats a wide range of gastrointestinal conditions. A full range of educational services, diagnostics and therapeutic gastrointestinal endoscopic services are offered: 1) Upper endoscopy (EGD); 2) Sigmoidoscopy; 3) Colonoscopy; 4) Esophageal dilation; 5) Polyp removal, biopsies, follow-up, and referral.

## Diagnostic Services

MCMH diagnostic services include - Endoscopy, Radiology, Laboratory, and Respiratory/Cardiopulmonary. MCMH Radiology Department provides digital diagnostic imaging services such as X-Ray, CT-Scan, Mammography, and Ultrasound; Ultrasound includes venous, vascular, and echocardiograms. These services are critical in helping the medical team determine a patient's current condition as well as provide preventive services to mitigate chronic conditions.



## Mobile Wellness Unit



MCMH launched new services to help residents stay healthy to aid in minimizing the effects of chronic diseases. In 2019 the program kick-off started with Diabetes and Breast Cancer Awareness education. In 2020 wellness coaching and health education was added. Then in 2021-2022 COVID vaccination outreach and testing was implemented. The Mobile Wellness Unit (MWU) at MCMH offers COVID-19 vaccines, Rapid Antigen testing, and education to the community free of charge. MCMH is committed to the health & wellness of our community. We participate in community events and travel to local schools for vaccination/testing as well.

Community engagement, health education and mental wellness services have been provided by MWU throughout the region. In 2022 the Hospital was awarded a \$5 million dollar grant from the USDA to expand the MWU into a brick-and-mortar wellness center. Construction is set to begin in 2023 to house a variety of health and wellness services:

- **Behavioral Health**-individual, group, expressive and play therapy, crisis stabilization, anxiety, and depression from COVID and other triggers, and TeleMental health.
- **Cardiopulmonary Rehabilitation**- oxygen therapy, chest physiotherapy, pulmonary function, etc.
- **Aging Well**-chronic disease, mental wellness, palliative, and other services for over 65 populations.
- **Health Education & Outreach**-lunch and learns, education classes, etc.
- **Infusion Therapy**-to treat COVID, Cancer, and other conditions.
- **Wellness Coaching**-fitness, nutrition, men's health, women's health, alternative wellness.
- **Wound Care**-immune deficiencies, cancer, infectious disease, etc.
- **Rotating Specialist**-Orthopedic, Primary Health, Respiratory, etc.

MCMH provides big-city services in a small-town atmosphere to meet the healthcare needs of Madison County residents.

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# Vision Statement

Vision is the fundamental basis for guidance, both physically and metaphorically. Ultimately, it facilitates the direction of the planning process and creates the foundation for the CHA and the CHIP. Prior to beginning the data presentation on the health indicators in Madison County, a Themes and Strengths Visioning Assessment session was conducted. After a brief discussion about ideal qualities of health, the attendees were asked two significant questions, “What does a healthy community mean?” and, “What are the characteristics of a healthy Madison County?” The participants worked independently and collectively to identify common community themes and strengths and brainstormed to discuss and answer the above questions.

Answers were self-recorded on a notecard and then placed on a sticky wall in the front of the auditorium. Once responses were compiled, the attendees conjoined as each response was read aloud and categorically placed. Accordingly, the community members envisioned a healthy Madison County to have (1) access, (2) comprehensive, collaborative cooperation, and (3) resource and infrastructure development.

Elements of the visioning exercise included participants engaging in group discussions and creating vision statements that reflected on the themes and key values examined throughout the summit. Although statements varied, the priority key values were consistent in all the statements. Each of the statements were presented and the community members voted to select the ideal vision statement for Madison County. After minor revisions, by a show of hands, the partners favored the adoption of, **“Together we will achieve a healthy, safe, and vibrant Madison County for all,”** as the new vision.

## Vision Statements

The following vision statements were created during the visioning session.

- By 2026, Madison County will be a community that will have access to greater health resources through infrastructure development as a result of community collaboration and cooperation.
- To promote collaborative access to resources for a holistic, healthy community.
- Madison County will be a place where the citizens, businesses, and healthcare community unite to ensure the availability of resources to access what we need in order to be the physically, mentally, socially, emotionally, and spiritually healthy community we aspire to be.
- By 2026, Madison County will provide unparalleled health services through a synergistic approach to strong infrastructure, informative access, and unbiased collaboration that creates a unified standard of community health.
- Making Madison County healthy one life at a time through collaboration of agencies to create overall health in the community.

During the visioning session, members were asked to establish common themes and strengths pertaining to the two significant questions: “What does a healthy community mean?” and “What are the characteristics of a healthy Madison County?” Based off the participants’ individual ideas, a series of community-led, open-ended discussions were conducted, which identified three reoccurring themes: We, the community, envision a healthy Madison County to have (1) access, (2) comprehensive, collaborative cooperation, and (3) resource and infrastructure development.

**Table 1. Visioning Information by Category**

<b>Access</b>	
<b><i>We desire Madison County to be a place where everyone:</i></b>	<b><i>We want to create a community that encompasses:</i></b>
Has access to care for all populations.	Health care resources (mental, physical, spiritual, and substance abuse help).
Access to education, mental health services, and substance abuse treatment.	Un-fragmented system of care.
Has resources to meet the needs of residents:	Specialized Health Training.
• Health Care	Comprehensive health care availability.
• Mental and social health	Local, affordable healthcare, quality care access.
• Transportation	Vibrant ancillary–rehabilitation/nursing homes.
• Education	Preventative resources and public health.
• Employment	Coordination of hospital and public health services.
Knows resources available/where to find them.	Healthy Babies
Has healthy food options and access to grocery stores with affordable choices.	Higher birth weights, lower body mass index (BMI), lower teen pregnancy, and lower STD rates.
Has access to parks and recreational activities.	Improved nutritional food options - healthy lifestyle.
Has opportunities for residential activities.	Safe built environment>crime, drugs, police brutality
Removes silos to support needs.	Career and education opportunities.
	Cooperation among residents
<b>Comprehensive, Collaborative Cooperation</b>	
<b><i>A healthy community is one that is:</i></b>	
Knowledgeable of the concerns of its citizens.	Able to provide quality healthcare.
Able to identify health needs.	Can react and/or provide timely services.
Thriving – where everyone is moving forward (i.e., health, economics, and education).	Tailors’ community development of creative solutions to address the issues of citizens.
Participation in monthly town hall meetings.	Reaches common goals together as a group.
Puts positive words into successful actions.	Increases faith-based outreach and participation.
Unified	
<b>Resource and Infrastructure Development</b>	
<b><i>We desire Madison County to be a place with improved infrastructure – medical facilities, businesses, and opportunities – that is more enticing for people to move here.</i></b>	
<b><i>What does a healthy community look like?</i></b>	
Residents thriving in all aspects of their lives to include physical, emotional, financial, and social well-being and health.	A community with services such as hospitals, public health senior center, day care, and psychological counseling that meet the health and family needs.
A healthy community is one that not only has jobs, but good paying jobs.	Attractive environments for businesses and professionals.
Well maintained roads, bridges, sewer systems, and water infrastructure.	Access to good schools and colleges.
Steady growth and planning.	Progressive infrastructure.
Adequate medical facilities.	Controlled/low crime rates.

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# Madison County Profile

## Geography

Madison County encompasses 716 square miles, of which 20 square miles is water. Its northern border is shared with the state of Georgia and is adjacent to Jefferson County to the west, Taylor County to the south, Hamilton County to the east, and Suwannee and Lafayette Counties to the southeast. Madison County houses the city of Madison, as well as the towns of Greenville and Lee. Unincorporated communities include Cherry Lake, Hamburg, Hanson, Hopewell, Lamont, Lovett, Pinetta, and Sirmans.

Madison County is bordered on three sides by rivers: the Aucilla River on the western border, the Withlacoochee on the northern border, and the Suwannee River on the eastern border. Water management is under the jurisdiction of the Suwannee River Water Management District.



## Education and Libraries

Public schools are managed under the Madison County School District. There are three elementary schools, one elementary combined with middle school and one high school. In addition, there is one charter high school grades 9-12 and one charter school for grades K-8.

North Florida College is in Madison, Florida and offers two-year degrees and certification programs.

Madison County public libraries operate under the Suwannee River Regional Library System. Branch libraries are located Madison, Greenville, Lee and Pinetta.

## Transportation

Major roadways include Interstate 10, US 19/27, US 90, US 221, as well as state roads 6, 14, 53 and 145. One rail line provides rail service in the area. The CSX line runs east and west through the county. The closest airports are Valdosta, Georgia, Tallahassee, Florida and Jacksonville, Florida. There is limited public transportation provided by Big Bend Transit, Inc.

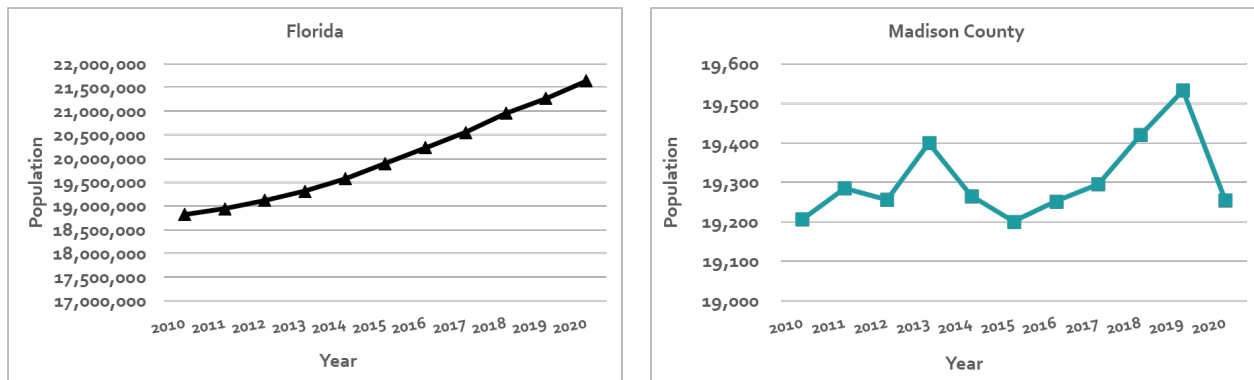
## Water

Local rivers and lakes are under the purview of the Suwannee River Water Management District. The web site lists recreational opportunities, flood maps, permit requirements, and water quality monitoring.

## Madison County Population Demographics

Figure 2 shows population trends over time for Madison County and Florida. Madison County experienced a population decrease in 2020. Note that 2020 is the most current year for confirmed population data. Provisional population data confirm an increase in 2021 and a decrease in 2022. Madison County's 2020 population was 19,254. Provisional data for 2021 estimate the population at 19,952 and 18,969 for 2022.

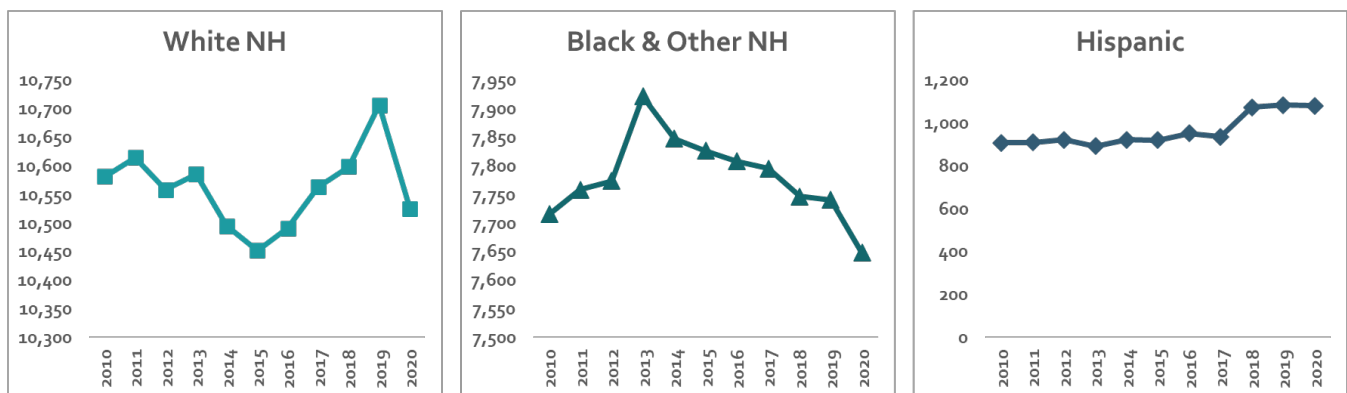
*Figure 2. Population Trends for Madison County and Florida*



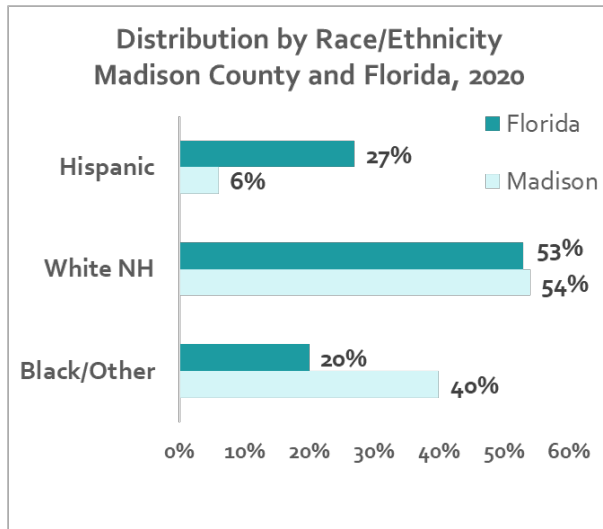
## Population by Race/Ethnicity, Gender, and Age

Figure 3 depicts population trends by race and ethnicity for Madison County. Note that Black and Other, non-Hispanic includes residents who are listed in the 2020 Census as Black, American Indian, Alaskan, Asian, Other, Unknown and Multiracial. Minority races other than Black represent a small percentage of residents. Florida CHARTS data are combined into a Black & Other category. Data for this assessment is consistent with Florida CHARTS.

*Figure 3. Population Trends by Race and Ethnicity, Madison County*



There have been decreases in the White, non-Hispanic population and the Black & Other Race, non-Hispanic population for Madison County. Provisional 2022 data for Madison County numbers the population for White, non-Hispanics as 10,331, followed by 7,478 for Black & Other, non-Hispanics and 1,160 for Hispanics.

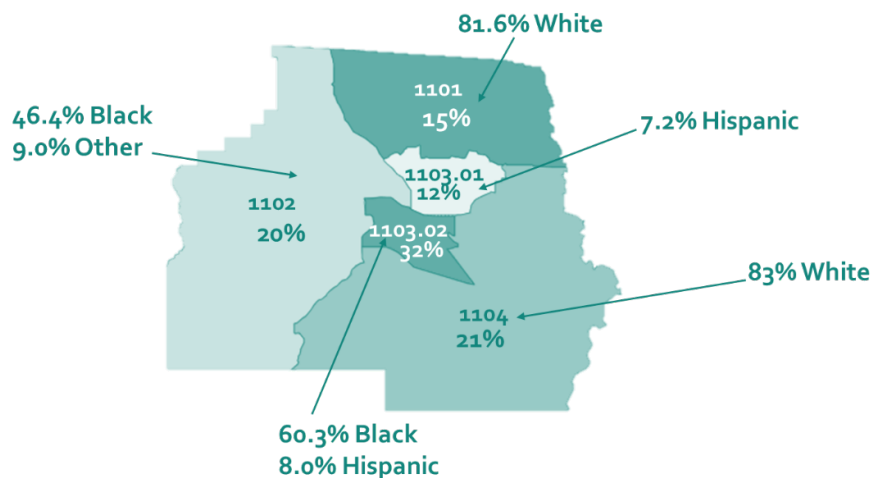


**Figure 4. 2020 Population by Race and Ethnicity**

White, non-Hispanic residents comprised the majority for both Madison County and Florida in 2020. Madison County had a much higher percentage of Black & Other non-Hispanics compared to Florida. The state of Florida had a much higher percent of Hispanic residents than does Madison County, although it should be noted that the percent of Hispanic residents in Madison County increased by two percent in two years. Males represented 53% of Madison County's population in 2020 and females accounted for 47%. The median age of Madison County residents was 44.2 years, slightly higher than the state of Florida at 42.2 years.

### **Population by Census Tract, Madison County**

Figure 5 shows the percentage of population by census tract, along with race/ethnicity distributions. More than half of Madison County's population reside in census tracts 1102, 1103.02 and 1104. Census tracts with the highest percentage of Hispanic residents were 1103.01 and 1103.02. Black residents were more likely to live in census tracts 1102 and 1103.02. Census tracts 1101 and 1104 had the highest percentage of White residents.



**Figure 5. Population Distribution by Census Tract, Madison County, 2016-2020**

Census tract information by race/ethnicity, gender and age group are listed in Table 2. Data are shown as the percentage of population for each census tract. Summary information for specific populations is listed below for the years 2016-2020 combined.

- Census tracts with the highest number of school age children ages 5-19 - tracts 1103.02 and 1104.
- Census tracts 1103.02 and 1102 had the highest number of women of childbearing ages 15-44.
- Census tracts 1104 and 1101 had the highest number of seniors ages 65+.

**Table 2. Percent of Population Distributions by Census Tract, Madison County, 2016-2020**

Race	1101	1102	1103.01	1103.02	1104
White	77.7	43.9	58.2	30.0	79.5
Black	15.6	46.4	33.0	60.3	11.7
Other	0.0	3.1	0.0	0.2	0.1
Multiracial	0.4	6.0	1.7	1.6	1.0
Hispanic (All Races)	6.3	0.5	7.2	8.0	7.1



<b>Gender</b>	<b>1101</b>	<b>1102</b>	<b>1103.01</b>	<b>1103.02</b>	<b>1104</b>
Male	51.3	46.0	47.5	66.2	47.7
Female	48.7	54.0	52.5	33.8	52.3

<b>Age Group</b>	<b>1101</b>	<b>1102</b>	<b>1103.01</b>	<b>1103.02</b>	<b>1104</b>
< 5	3.3	5.9	6.0	5.0	3.6
5-9	7.3	6.0	1.8	5.3	3.3
10-14	0.7	10.6	6.3	2.5	8.2
15-19	4.1	6.6	11.2	4.8	6.2
20-24	2.7	4.7	2.4	6.5	4.7
25-34	10.1	13.2	9.2	20.1	13.0
35-44	10.8	9.0	12.7	14.8	8.6
45-54	14.5	12.2	12.3	14.7	9.0
55-59	4.6	8.5	10.2	5.6	9.5
60-64	8.7	5.9	8.4	5.4	8.4
65-74	21.7	11.6	12.9	8.5	15.4
75+	11.4	5.9	6.6	6.9	10.1

### ***Disabled Population Estimates for Madison County***

The American Community Survey conducted by the U.S. Census Bureau asks questions about household members with disabilities. Data gathered from these surveys are used to estimate the number and percentage of a county or state population with a disability. These data are reported annually for large counties, every three years for medium size counties and every five years for small counties. Because Madison County has less than 20,000 population, it is small.

The American Community Survey questions cover the six types of disability listed below. Anyone in the household meeting one or more of these criteria are considered to have a disability. More detailed information is available on the U.S. Census website [www.census.gov/health/disability](http://www.census.gov/health/disability).

- Hearing - deaf or having serious difficulty hearing.
- Vision - blind or having serious difficulty seeing, even when wearing glasses.
- Cognitive - Because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions.
- Ambulatory - Having serious difficulty walking or climbing stairs.
- Self-care - Having difficulty bathing or dressing.
- Independent living - Because of a physical, mental, or emotional problem, having difficulty doing errands alone such as visiting a doctor's office or shopping.

The 2017-2021 American Community Survey conducted by the U.S. Census Bureau shows that approximately 2,598 residents, or 16.2% of Madison County's population were disabled. Table 3 below provides estimates and percentages by age group. Data were not available by gender or race/ethnicity.

Table 3. Disabled Population Estimates by Age Group, Madison County

Age Group	Estimated Number	Percent of Population
< 18 Years	105	3.2%
18-64 Years	1,110	12.0%
65+ Years	1,383	40.0%

Table 4 provides the percent of Madison County population with a disability for 2016-2020 combined. The total percent of disabled population in Madison County was listed as 15.9%. Census tract 1102 had the highest percent of population with a disability, followed by census tract 1101, 1104, 1103.02 and 1103.01. Census tract 1102 had the highest percent of disabled population for all the age groups.

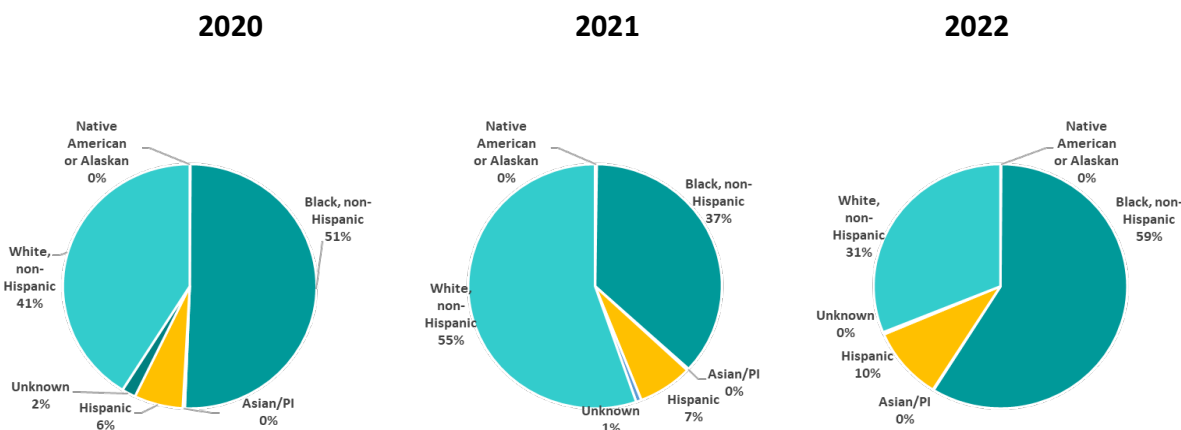
**Table 4. % of Madison County Population with a Disability by Census Tract 2016-2020 Combined**

	1101	1102	1103.01	1103.02	1104
Percent of Population with a Disability (15.9%)	16.1	22.0	12.4	13.4	14.8
Under Age 18 With a Disability (2.1%)	0.0	4.1	2.1	0.0	3.2
Ages 18-64 With a Disability (13.4%)	8.0	23.5	14.4	11.4	9.1
Ages 65+ With a Disability (34.9%)	36.7	43.6	15.5	36.0	35.6

### DOH-Madison Service Population

Data is provided for the calendar years 2020, 2021 and 2022. The advent of the COVID-19 epidemic starting in March 2020 impacted the demographics of DOH-Madison's service population. This is due to the numbers of people seeking testing and later vaccines for COVID-19. Most people seen for COVID-19 services were new patients that did not seek other services at the health department.

**Figure 6. DOH-Madison Client Demographics, 2020-2022, by Year.**



### Health Disparity and Population

The Centers for Disease Control and Prevention defines health disparities as, “preventable circumstances relating to individuals' health status based on social factors such as income, ethnicity, education, age and gender.” This report includes health disparities as part of the analyses of reportable diseases, injuries, chronic conditions, birth outcomes, mental health diagnoses and substance use indicators. When available, a disease or condition is reported as a health disparity if the percentage of total disease or health condition exceeds the percent of total population by race/ethnicity or gender. For example, if the percent of Black & Other, non-Hispanic diabetes deaths is higher than 40%, which is the percent of population for Black & Other, non-Hispanics in Madison County, it shows that Black & Other, non-Hispanic residents are disproportionately impacted.



# Socioeconomic Barriers to Health

**Figure 7. Socioeconomic Barriers**

When analyzing health indicators, it is important to also examine the socioeconomic barriers to health. These are non-health related issues that affect individual health outcomes and by extension, the overall health of a community. This concept was introduced to the public originally through the Healthy People 2020 initiative.

The updated Healthy People 2030 initiative definition of socioeconomic barriers to health as, “The conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.” The Healthy People 2030 goal is, “Create social and physical environments that promote good health for all.”

The World Health Organization and the National Academies of Sciences, Engineering and Medicine have emphasized the importance and cost effectiveness of addressing the socioeconomic barriers to health to improve overall health outcomes. Figure 7 shows that addressing socioeconomic factors has the broadest impact on public health, when compared to individual counseling and education, patient treatments, preventive interventions, and legal or educational campaigns.

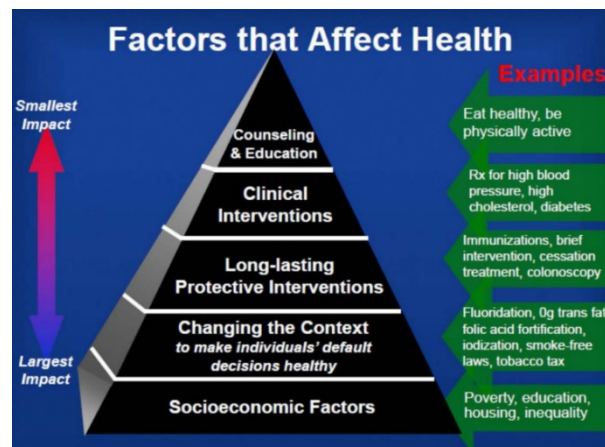
The Socioeconomic Barriers to Health are divided into the categories of Access to Health Care, Economic Stability, Education, Neighborhood and Built Environment, and Social and Community Context. Each of these categories is addressed in this section.

## Access to Health Care

Access to health care includes access to primary care, health insurance, health literacy and transportation/telehealth access. Some of the negative outcomes that can occur without access to health care include:

- Limited or no access to primary care means less preventive health services and no early detection of health care issues.
- Lack of insurance and/or high out-of-pocket costs means less preventive care.
- Physician shortages can mean longer wait times and delayed care.
- Lack of transportation can lead to only emergency care.
- Limited or no access to broadband internet is a barrier to accessing telehealth services.
- Persons who do not speak English are less likely to receive health care services and preventive screenings.

Figures 8 and 9 give an inventory of health care facilities and health care providers. Madison County comprises one hospital and three nursing homes. There are no inpatient mental health, substance abuse, or rehabilitation/skilled nursing facilities. Note that the licensed clinicians shown below may



not practice in Madison County. Residential address is linked to clinician licenses in the Department of Health Medical Quality Assurance system.

In 2020, the ratio of Madison County Health Department employees to residents was 1 employee for every 120.5 Madison County residents. This compares to 1 employee for every 42.9 residents for the state of Florida combined.

**Figure 8. Health Care Facilities, by Type, Madison County, 2020**

▪ 25 Hospital Beds	▪ 0 Intensive Residential Treatment Facility (IRTF) Beds
▪ 25 Acute Care Beds	▪ 0 NICU Beds
▪ 0 Adult Psychiatric Beds	▪ 0 Rehab Beds and 0 Skilled Nursing Unit Beds
▪ 0 Adult Substance Abuse Beds	▪ 0 Specialty Beds
▪ 0 Child/Adolescent Psychiatric Beds	▪ 238 Nursing Home Beds

**Figure 9. Health Care Providers, by Type, Madison County, Fiscal Year 2020-2021**

▪ 5 Licensed, Active MDs <ul style="list-style-type: none"> <li>○ 1 Family Practice Physician</li> <li>○ 2 Internal Medicine</li> <li>○ 0 OB/GYN</li> <li>○ 0 Pediatrician</li> <li>○ 0 Other practice</li> </ul>	▪ 23 Full-Time Health Department employees
▪ 17 EMTs/Paramedics	▪ 26 ARNPs
• 5 Licensed Dentists	▪ 166 Registered Nurses
▪ 10 Dental Hygienists	▪ Licensed Mental/Behavioral Health Providers <ul style="list-style-type: none"> <li>○ 2 Clinical Social Workers</li> <li>○ 0 Marriage and Family Therapists</li> <li>○ 6 Mental Health Counselors</li> <li>○ 1 Psychologist</li> </ul>

The most recent Robert Wood Johnson Foundation County Health Rankings estimates the ratio of residents to primary care physicians to be 9,250 residents to one physician in Madison County, 1,370 residents per one physician for Florida and 1,310 residents for one physician for the United States. Table 6 shows the ratios for dentists and mental health providers from the County Health Rankings.

**Table 6. Ratio of Health Care Providers to Residents, Robert Wood Johnson Foundation, 2022**

	<b>Madison</b>	<b>Florida</b>	<b>U.S.</b>
Dentists	1:3,740	1:1,630	1:1,400
Mental Health Providers	1:1,700	1:550	1:350

Health insurance can impact the ability to access health care. There may be primary care providers located in a local area; however, these providers may not accept certain types of health insurance. This is particularly true for Medicaid and Medicaid HMOs.

In 2020, approximately 14.5% of residents ages 19-64 were uninsured, as were 5% of residents less than 19 years of age. About 50% of Madison County's residents were enrolled in either Medicaid or

Medicare. Approximately 26.3% were enrolled in Medicaid and 24% were enrolled in Medicare. The most recent Robert Wood Johnson County Health Rankings estimate the number of uninsured people in Madison County to be 17%, compared to 16% for Florida and 11% for the United States.

**Figure 10. Percent of Population Enrolled in Medicaid, Madison County and Florida**

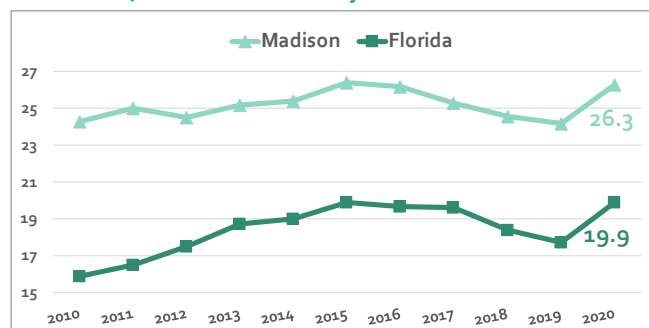


Figure 10 shows an increase in the percent of population enrolled in Medicaid for Madison County and for Florida in 2020. This is most likely due to the advent of the COVID-19 epidemic. Madison County has consistently had a higher percentage of population enrolled in Medicaid than the state of Florida. Medicaid eligibility data as of December 31, 2021, calculate 5,654 residents, or 28% of the population for Madison

County, are eligible for Medicaid.

Madison County ranked 14 out of 67 counties with the highest percent of population enrolled in Medicaid. The Northwest and North Central areas of Florida include most of the counties with high Medicaid enrollment rates.

Table 7 provides health insurance data by census tract for the years 2016-2020 combined. Census tracts 1102 and 1103.01 had the highest percent of population without health insurance, and the highest percent of population with public health insurance. Residents in census tracts 1104 and 1101 were more likely to have private health insurance.

**Table 7. Health Care Coverage by Census Tract, Madison County, 2016-2020 Combined**

	1101	1102	1103.01	1103.02	1104
With private health insurance	61.4	45.2	60.6	51.6	63.8
With public health insurance	40.3	53.4	42.0	48.8	39.1
No health insurance coverage	12.5	15.2	13.7	8.3	10.8
<19 years of age no health insurance	5.7	5.3	7.6	3.8	4.3

With telehealth becoming more widely utilized, the need for broadband internet connections is increasing. In 2020, 61.8% of Madison County households had access to broadband internet, compared to 85.4% for Florida as a whole.

## Economic Stability

Economic stability includes employment, wages, poverty, and food insecurity. Some of the negative outcomes associated with economic stability are listed below.

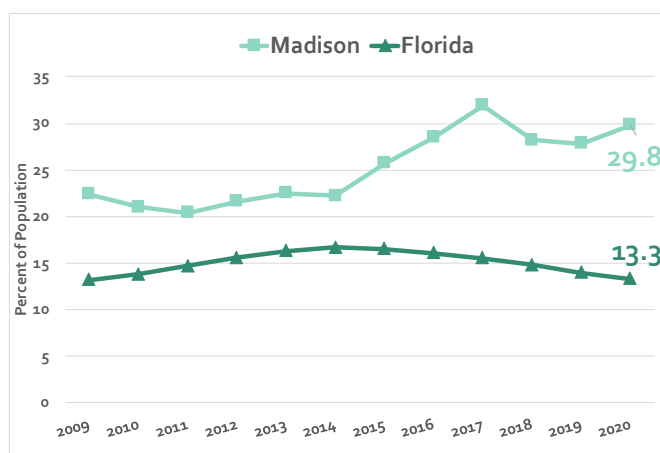
- Persons who are unemployed or underemployed will most likely not have access to health insurance or be able to pay out-of-pocket.
- Poverty can lead to issues with health insurance, food insecurity, inadequate housing, access to medical services and transportation.

- Adults who are food insecure are more likely to be obese and suffer from chronic diseases.
- Children who do not eat regularly or do not eat a variety of healthy foods are at risk for developmental and mental health issues, as well as obesity.

The link between economic stability and health outcomes was recently reinforced in the Journal of American Medical Association (JAMA) publication, “History of Low Hourly Wage and All-Cause Mortality Among Middle-aged Workers,” released on February 21, 2023. The findings stated that workers who had wages below the poverty line for a family of four over an extended period were 38% more likely to die within 12 years than those who did not have low wages. The risk doubled for workers who met the poverty criteria above and had periods of unemployment. Follow the link [JAMA Article February 2023](#) to read the entire article.

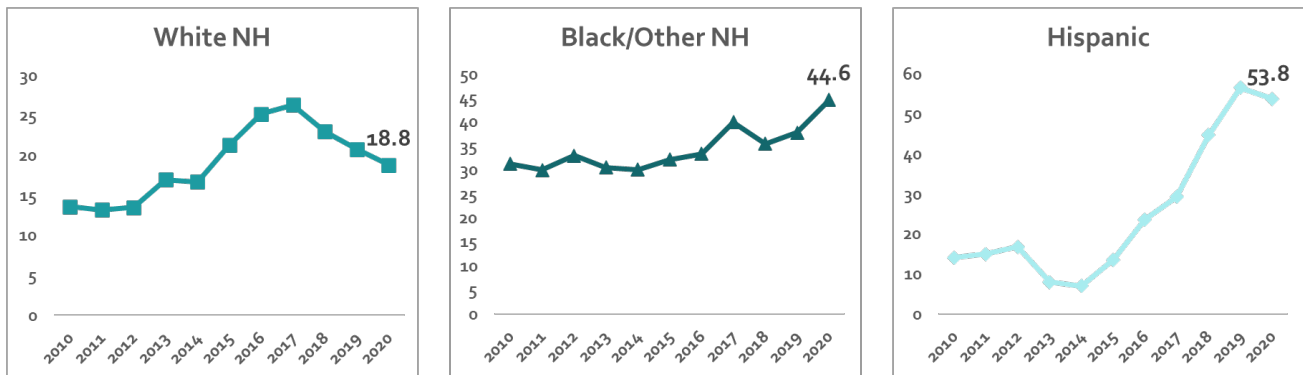
**Figure 11. Individual Poverty Rates  
Madison County and Florida**

Figure 11 depicts the individual poverty rates for Madison County and Florida. Refer to Appendix 2 for the definition of poverty levels for 2020. The poverty rate for Madison County ranked the highest in the state in 2020. Madison’s poverty rate was more than twice that of the state of Florida. The percentage of persons under age 18 living in poverty in Madison County in 2020 was 44.7%, compared to 18.7% for Florida. Approximately 33.4% of Madison County residents ages 65+ were living below 150% poverty level in 2020, compared to 20.0% for Florida. Fifty percent of individuals in Madison County were living below 200% poverty level in 2020, compared to 33% for Florida.



2020 individual poverty rates by race and ethnicity show a disparity even though poverty levels for each of the racial and ethnic groups were higher than the state of Florida. Approximately 18.8% of White, non-Hispanic residents were below poverty level in 2020, compared to 44.6% for Black & Other, non-Hispanic residents and 53.8% of Hispanic residents. Figure 12 shows Madison trend lines for the years 2010-2020 by race and ethnicity.

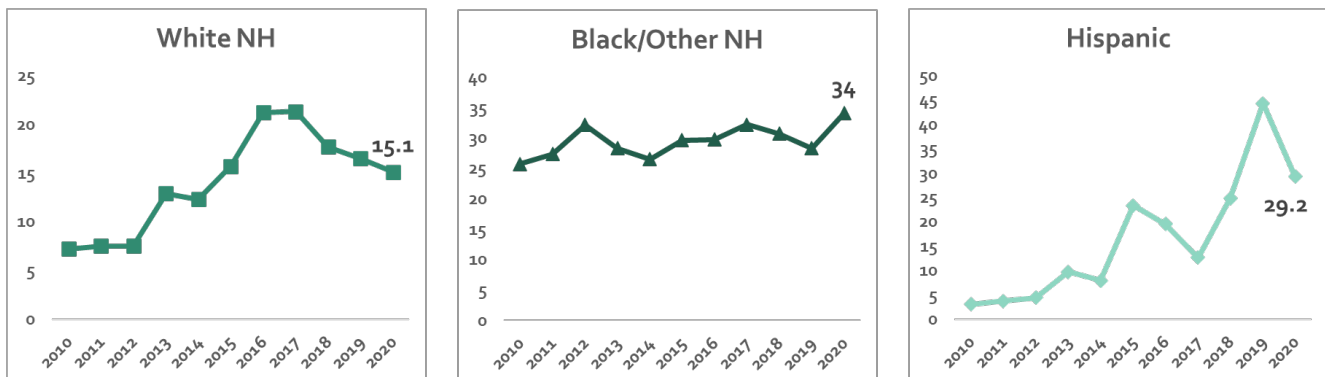
**Figure 12. % of Individuals Below Poverty Level, by Race & Ethnicity Madison County, 2010-2020**



Poverty data by household mirrors that of individuals. In 2020, 21.9% of Madison County families lived below the poverty level, compared to 9.4% for Florida. For female head of household families with children under age 18, the percent living below poverty level was 57.3% for Madison County and 31.8% for Florida.

Family poverty rates by race and ethnicity also show disparities. The percent of Black & Other, non-Hispanic families and the percent of Hispanic families living below poverty in 2020 was twice that of White, non-Hispanic families, or more. Figure 13 shows Madison trend lines for the years 2010-2020 by race and ethnicity.

**Figure 13. Percent of Families Below Poverty Level, by Race & Ethnicity, Madison County, 2010-2020**



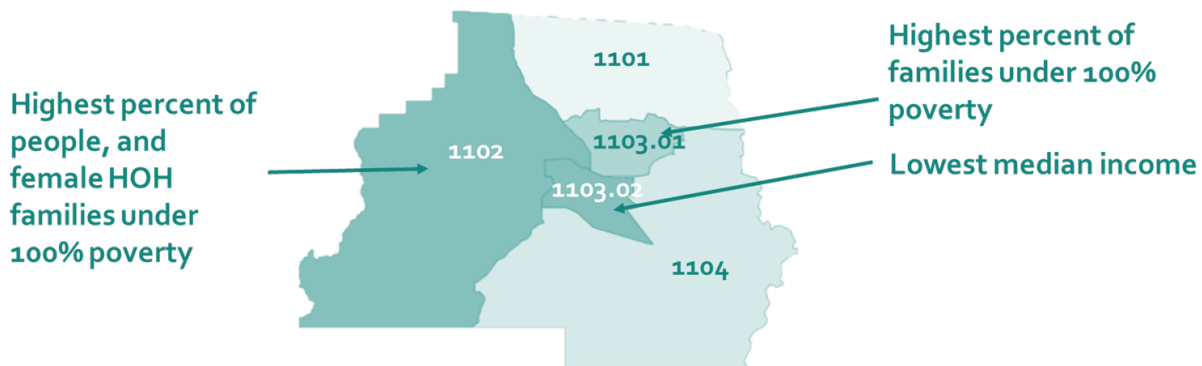
The median income for Madison County residents in 2020 was \$35,240, compared to \$61,177 for the state of Florida. Data by race and ethnicity are not available for 2020 but are reported for 2021. The 2021 data show that the median income for White residents in Madison County was \$49,726. This compares to \$24,475 for Black residents and \$51,230 for Hispanic residents. Note that the Hispanic data includes all races and will be duplicated in either the White or Black income data.

Table 8 and Figure 14 below show income and poverty data by census tract for Madison County for years 2016-2020 combined. Census tract 1103.02 had the lowest median income for the time period. Census tract 1102 had the highest percent of residents living below poverty level and the highest percent of female head of households living below poverty level.

**Table 8. Income and Poverty Data by Census Tract, Madison County, 2016-2020 Combined**

	1101	1102	1103.01	1103.02	1104
Median Income (\$)	37,917	39,375	28,137	27,385	41,285
Percent of People Under 100% Poverty	15.7	40.8	34.1	32.9	23.6
Percent of Families Under 100% Poverty	17.6	24.8	26.1	20.7	21.5
Percent of Female HOH Families Under 100% Poverty	22.6	51.7	36.8	46.5	35.1

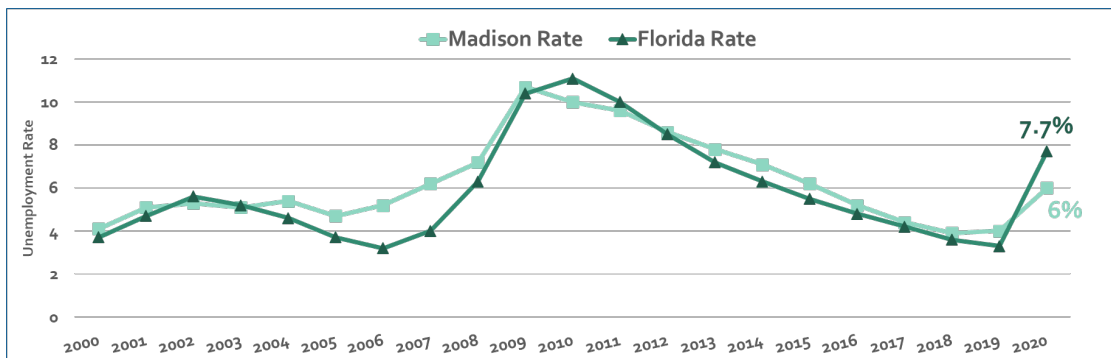
**Figure 14. Income and Poverty Data by Census Tract, Madison County, 2016-2020 Combined**



Employment data are provided as unemployment rates and percent of civilian labor force unemployed. The Unemployment Rate is the ratio of unemployed to the civilian labor force, expressed as a percent. For these data, just a percentage is provided. The data source is the United States Department of Labor, Bureau of Labor Statistics. The Unemployed Civilian Labor Force is the number of persons in the civilian labor force age 16 and over who are unemployed divided by the total number of people in the civilian labor force age 16 and over, expressed as a percent. For this data, both a count and a percentage are provided. The data source is United States Bureau of the Census, American Community Survey, Table DP03.

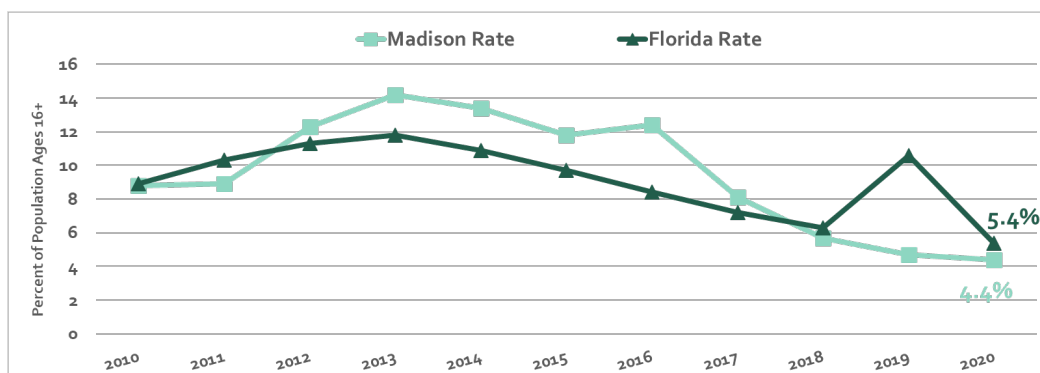
Madison County's unemployment rates and percent of civilian workforce unemployed are less than the state of Florida. The unemployment rates statewide, and in Madison County, increased significantly in 2020, from 4% to 6% for Madison County, and from 3.3% to 7.7% for Florida. This is most likely due to the beginning of the COVID-19 epidemic.

**Figure 15. Unemployment Rates, 2000-2020, Madison County and Florida**



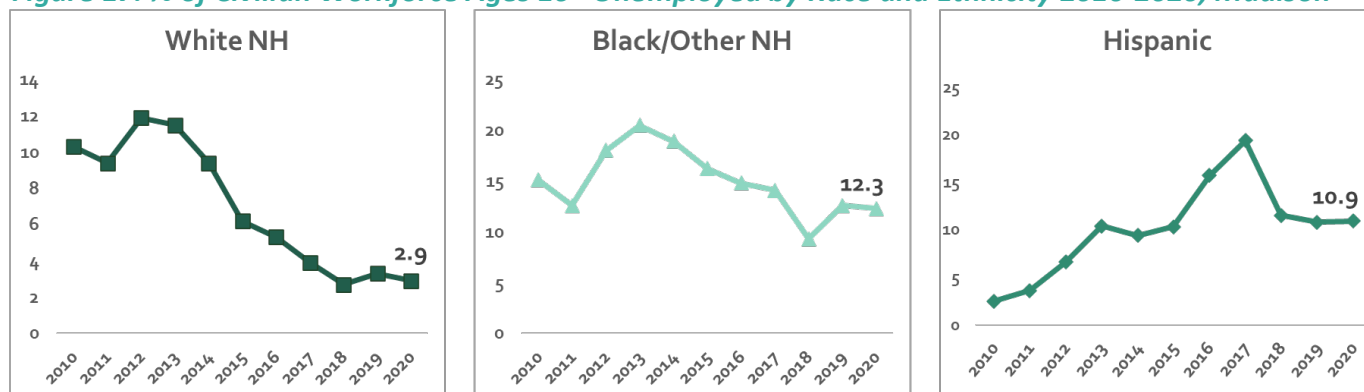
The percentage of civilian workforce unemployed does not reflect the same increase for 2020. The percentage of unemployed residents ages 16+ for Madison County was 4.4%, compared to 5.4% for Florida.

**Figure 16. % of Civilian Workforce Ages 16+ Unemployed, 2010-2020 Madison County and Florida**



There are some differences when looking at these data by race and ethnicity. Figure 17 shows that the percent of White, non-Hispanic Madison County residents ages 16+ and unemployed, was 2.9% in 2020, compared to 12.3% for Black & Other, non-Hispanic residents and 10.9% for Hispanic residents.

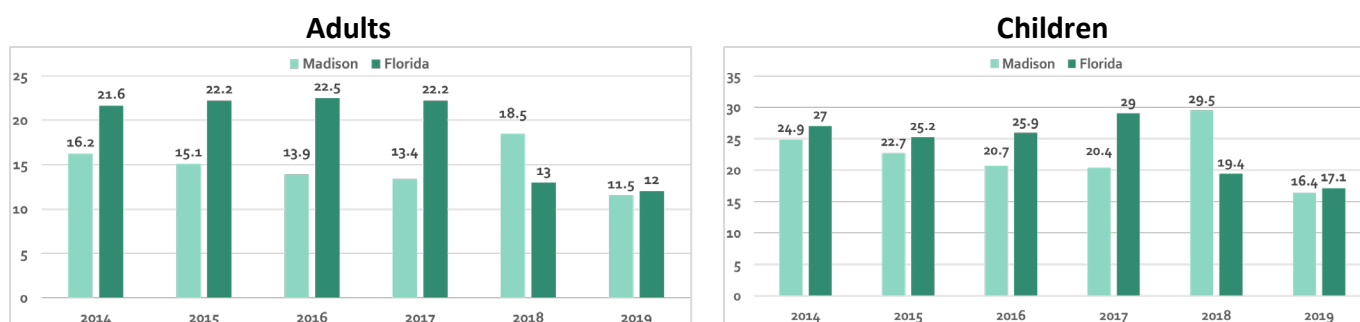
**Figure 17. % of Civilian Workforce Ages 16+ Unemployed by Race and Ethnicity 2010-2020, Madison**



Access to food and nutritional food is a subset of economic stability. Food insecurity rates for adults and children are available through 2019. The food insecurity rate is the percentage of population that does not have consistent access to healthy food. From 2014-2018, Madison County's food insecurity rate was higher than the state. This rate dropped below the state in 2019, prior to the start of the COVID-19 epidemic in 2020. Data for 2020 and 2021 are not yet available. These data are not available by race or ethnicity.



**Figure 18. Food insecurity rates for adults and children, 2014-2019, Madison County**



Data from Feeding America estimates that the overall food insecurity rate for Madison County in 2020 was 16.5%, with 3,070 residents who were food insecure. Breakdowns by race and ethnicity show the food insecurity rate for White, non-Hispanic residents to be 9.0%, 25.0% for Black residents of all ethnicities and 22.0% for Hispanic residents of all races. Food insecurity rates for Madison County residents under age 18 was 26.6% in 2020, with 900 residents who were food insecure.

## Education

This Socioeconomic Barrier to Health category includes early childhood education and development, high school graduation, enrollment in higher education, English as a Second Language, and literacy levels. Some of the negative outcomes associated with education are listed below.

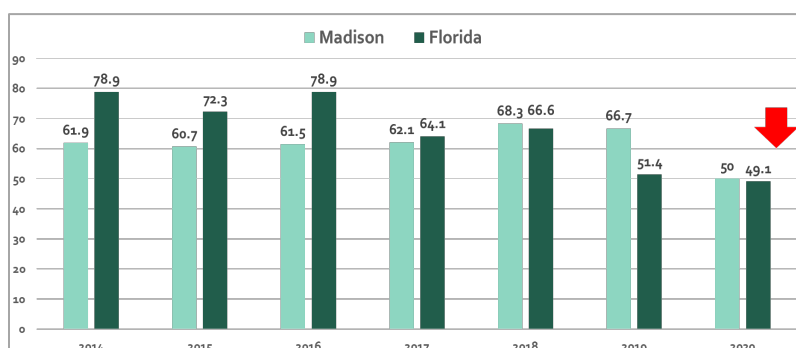
- Lack of higher education can mean lesser-paying jobs with more safety hazards, less opportunity for health insurance, and less opportunity for adequate housing.
- Health literacy is linked to overall literacy. People with low literacy levels may find it difficult to understand written or verbal instructions from a health care provider or pharmacist.

The Early Steps Program serves infants and toddlers under three years of age who have developmental delays or an established condition likely to result in a developmental delay. Examples of these conditions are autism spectrum disorder, cerebral palsy, Down Syndrome, deafness and hard of hearing and visual impairment.

Positive early learning experiences are crucial for later success in school, the workplace and the community. Families benefit from early intervention by being able to better meet their children's needs. Early intervention services also benefit the community by lowering the costs of special education and social welfare programs.

**Figure 19. Percent of Children < 3 Served by Early Steps**

Figure 19 depicts the percentage of children under age 3 served by Early Steps in Madison County and Florida. The percentage of children served by Early Steps was higher for Madison County than for Florida since 2018. There was a substantial decrease in the percent served for 2020, most likely





due to the beginning of the COVID-19 epidemic.

Table 9 lists the percentage of children entering Kindergarten who score 500 or higher on the Florida Kindergarten Readiness Screener. State law requires screening for all public-school kindergarten students within the first 30 days of the school year. Kindergarten teachers use the results to help understand each child's readiness for school and plan lessons to meet individual needs. There was a significant increase in the percent of Madison County Kindergartners readiness for school in 2020. Note that the school year indicated below runs from September through June annually.

**Table 9. % of Children Ready for Entering Kindergarten, 2017-2020 Madison County and Florida**

School Year	Madison County	Florida
2017	47.4	53.9
2018	51.0	52.7
2019	50.3	53.4
2020	64.0	56.9

Table 10 compares the percent of third grade students with passing Florida Standards Assessment (FSA) English and Math scores by school year. Note that testing did not take place during the 2019-2020 school year due to COVID-19. Madison County reported decreases in the percent of third grade students with passing English and Math scores from 2016-17 until 2019-2020. There was a slight increase in English scores during 2020-21. These trends are consistent with the state and show the impact of the COVID-19 epidemic on test scores.

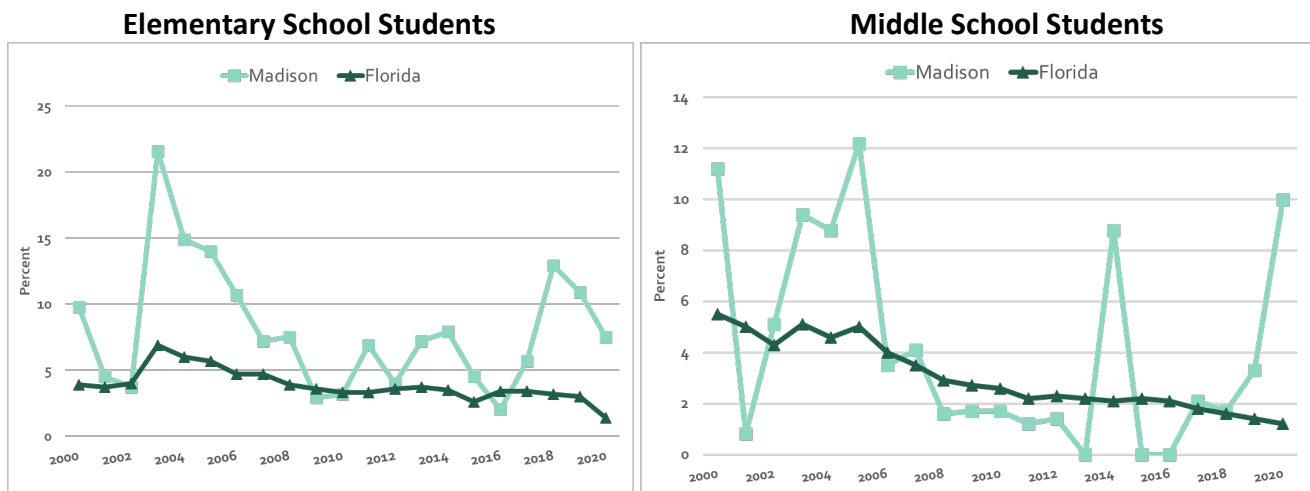
**Table 10. % of Third Grade Students with Passing FSA English/Math Scores, 2014-2020  
Madison County and Florida**

School Year	Madison English %	Florida English %	Madison Math %	Florida Math %
2014	43	54	40	59
2015	47	54	63	61
2016	55	58	66	62
2017	55	57	60	62
2018	40	58	45	62
2019	Not Reported	Not Reported	Not Reported	Not Reported
2020	44	56	44	51

Figure 20 represents trend lines for the percent of elementary and middle school students not promoted for both Madison County and Florida. The trend lines for Florida show declines over time, while Madison County's trend lines are more static. Data are not available by race/ethnicity or gender.

The percent of Madison County elementary school students not promoted decreased from 12.9% in 2018 to 7.5% in 2020. The percentage of Madison County middle school students not promoted increased significantly from 3.3% in 2019 to 10.0% in 2020.

**Figure 20. % Elementary & Middle School Students Not Promoted, 2000-2020 Madison and Florida**



**Figure 21. Graduation Rates for Madison County and Florida, 2011-2020**

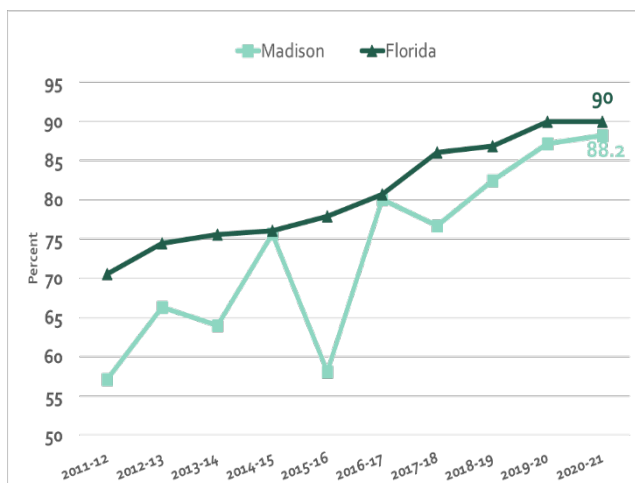


Figure 21 provides graduation rate trend lines for Madison County and Florida. Note that Madison County's graduation rates were less than those of Florida during the period; however, Madison County's rates have been improving and were slightly below the state for the 2020 school year.

When analyzing data for the 2020-2021 school year by gender, the graduation rate for males was 85%, compared to 90.7% for females.

Data by race shows that the graduation rate for Black, non-Hispanics was 92.0% and 83.3% for

White, non-Hispanics. Data for Hispanic students was not available.

School year 2020-2021 graduation rates for students with disability were 96% and 86.5% for students who did not have a disability. The graduation rate for disadvantaged students was 87.1%, compared to 86.5% for students not disadvantaged. The definition of disadvantaged is any student determined to be eligible for free or reduced-price school meals under the National School Lunch Program.

In 2020, the percent of Madison County's population ages 25 and older with no high school diploma was 20.1%, compared to 11.5% for Florida. Figure 22 compares the percent of Madison County population ages 25+ with no high school diploma by race and ethnicity over the period 2010-2020. The percent of non-white residents of Madison County ages 25+ with no high school diploma was more than twice that of white, non-Hispanic residents in 2020. The percent in 2020 increased for white, non-Hispanic residents of Madison County and decreased slightly for Black and Other, non-Hispanic residents as well as Hispanic residents.

**Figure 22. % of Population Ages 25+ With No High School Diploma, by Race and Ethnicity  
Madison County, 2010-2020**

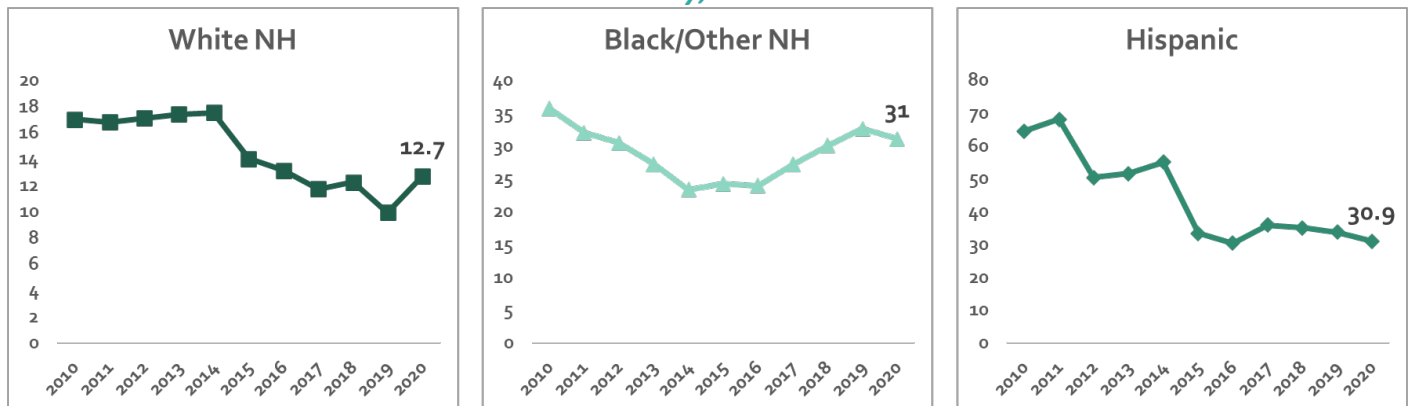


Figure 23 shows the percentage of population with a bachelor's degree or higher for Madison County and Florida from 2009-2020. Madison County residents were less likely to have a college degree compared to the state. In 2020, 30.5% of Florida residents had a bachelor's degree or higher, compared to 13.8% for Madison County residents. About 18% of White, non-Hispanic residents of Madison County had a bachelor's degree or higher in 2020, followed by 7.5% of Black & Other, non-Hispanic residents and 22.4% of Hispanic residents.

**Figure 23. % of Population Bachelor's Degree or Higher, 2009-2020 Madison County and Florida**

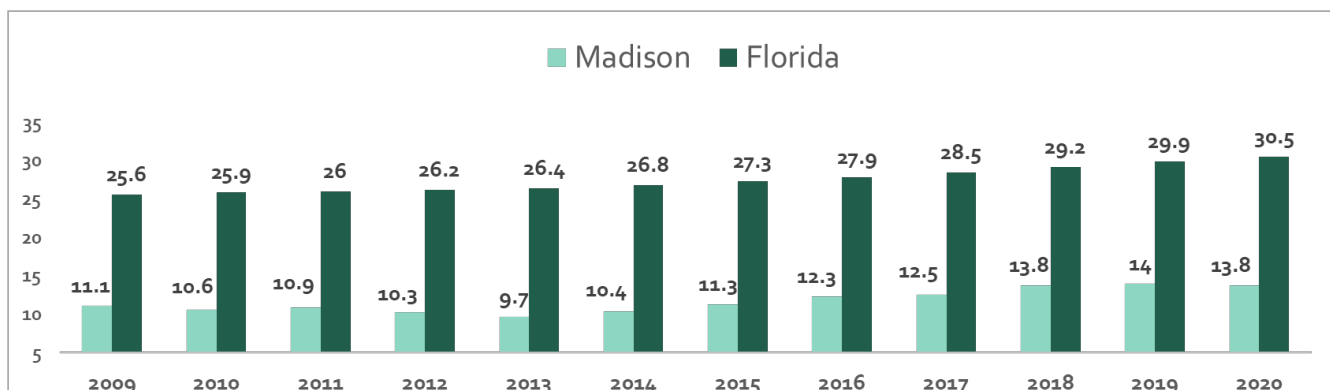
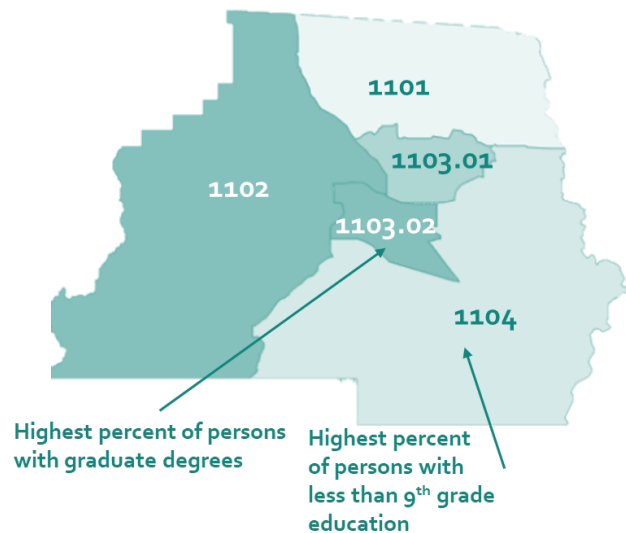


Table 11 and Figure 24 show Madison County education data by census tract for the combined years of 2016-2020. Data are shown as percentage of population ages 25+ for each census tract. Census tract 1104 had the highest percent of population with less than a 9<sup>th</sup> grade education and census tract 1103.02 had the highest percent of population with some high school. Census tract 1103.01 had the highest percent of population with a bachelor's degree. The highest percent of population with a graduate degree during the period was 1103.02.

**Table 11. Education Data by Census Tract 2016-2020, % of Population Ages 25+ Madison County**

	1101	1102	1103.01	1103.02	1104
Less than 9 <sup>th</sup> grade completed	3.9	5.3	5.0	5.9	7.0
Some high school completed	9.8	13.9	9.4	21.4	11.4
High school graduate	32.9	37.4	32.5	42.4	34.1
Some college	19.5	17.2	26.0	13.8	23.5
Associate degree	13.8	10.7	9.0	7.9	11.2
Bachelor's degree	16.6	11.8	13.2	3.1	7.6
Graduate degree	3.5	3.7	5.0	5.6	5.2

**Figure 24. Education Data by Census Tract, 2016-2020, Percent of Population Ages 25+ Madison County**

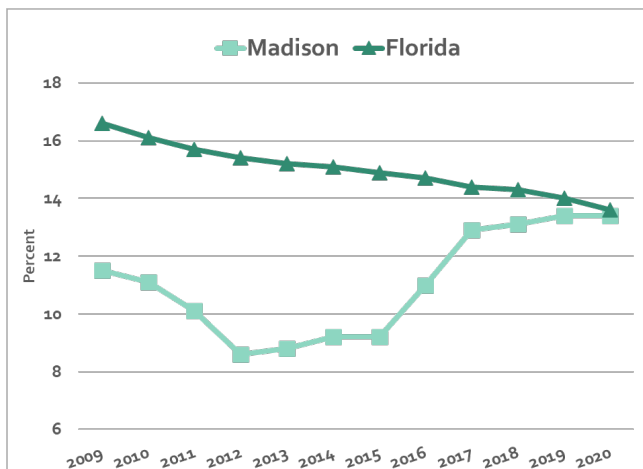


## Nighborhood and Built Environment

Nighborhood and Built Environment includes access to housing, quality and safety of housing, quality and safety of neighborhood, transportation and homelessness. Substandard housing can impact health outcomes by increasing the likelihood of asthma or other conditions related to a poor environment.

Injuries also happen more often if a property has not been maintained. Substandard housing may have health risks like vermin, water leaks, mold, heat/AC issues. Some of the negative health outcomes associated with neighborhood and built environment are listed below.

- Poor water quality can lead to illnesses such as Giardia.
- Poor air quality can lead to cardiovascular issues and to issues with fetal and child development.
- Lack of air conditioning can lead to heat-related disease and death, as well as health hazards associated with mold growth.

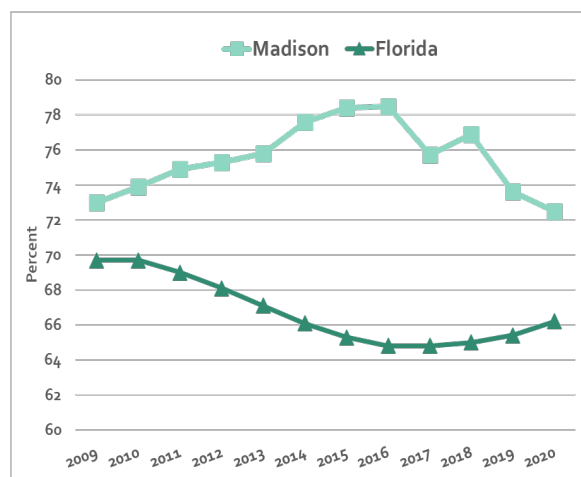


**Figure 25. % of Individuals Living in Different House in Prior Year, 2009-2020 Madison County/Florida**

Figure 25 shows the percentage of Madison County residents who lived in a different house in the previous year. This measure is an indicator of housing stability, which is essential information for analyses about employment, housing, education, health care, and the elderly. It is also used by local governments to forecast the demand for new public facilities such as schools, hospitals, libraries, and fire and police stations.

The trend line shows that Madison County has historically had lower percentages of residents who moved annually, when compared to Florida. However, the percentage of movers has decreased over time for Florida and increased over time in Madison County. In 2020, the percent of residents who moved in the previous year was 13.4% in Madison County and 13.6% for Florida.

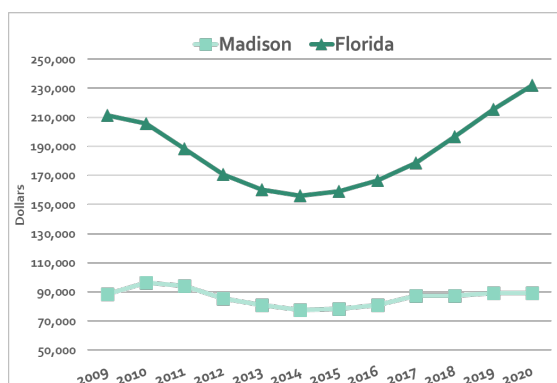
When analyzing these data by race and ethnicity, data show that Black & Other, non-Hispanic and Hispanic residents were more likely to have moved in the previous 12 months than White, non-Hispanic residents. Data for 2020 show that 17.5% of Hispanic residents moved in the prior year, compared to 13.1% for Florida. Approximately 18.4% of Black & Other, non-Hispanic Madison County residents moved in the prior year, compared to 15.5% for Florida. Percentages for White, non-Hispanic residents in 2020 were 9.2% in Madison County and 13.1% in Florida.



**Figure 26. Percentage of Owner-Occupied Housing Units, 2009-2020  
Madison County and Florida**

Figure 26 is trend lines for the percent of owner-occupied housing units for Madison County and Florida. This indicator refers to the percentage of housing units that are lived in by their owners. Housing units can be a house, apartment, mobile home, a single room or group of rooms that are considered separate. A housing unit is owner-occupied if the owner or co-owner lives in the unit, even if it is mortgaged or not fully paid for. This is another indicator of housing stability.

Madison County has consistently had a higher percentage of owner-occupied housing units than the state of Florida, although the percentage has been decreasing since 2018. In 2020, 72.5% of housing units in Madison County were owner occupied, compared to 66.2% in Florida. Data by race and ethnicity for 2020 show that 71.4% of Hispanic residents owned their home, compared to 52.7% for Florida. The percentage of Black & Other, non-Hispanic homeowners was 56.4% in Madison County and 46.4% in Florida in 2020. For White, non-Hispanic homeowners, the 2020 percentages were 83.6% in Madison County and 70.9% in Florida.



**Figure 27. Median Owner-Occupied Unit Values 2009-2020, Madison County and Florida**

Another indicator of housing stability is the median value of owner-occupied housing, shown in Figure 27. The median value is defined as the value where half of the housing values are higher, and half are lower. This indicator is used to develop assistance plans that target low-income, disabled, and elderly residents.

Median home values in Madison County have consistently been below those of the state and have not experienced the increases in value that Florida has. In 2020, Madison County's median home value was \$81,000, compared to \$232,000 for Florida.

Table 12 shows housing quality indicators for Madison County for 2016-2020 combined. There were no housing quality indicators in Madison County that were identified as an issue. Only 0.3% of owner-occupied housing units in Madison County lacked kitchen facilities, compared to 0.7% for Florida. There was a total of 0.2% of housing units in Madison County with no heat source identified, compared to 2.0% for Florida.

**Table 12. Housing Quality Data by Census Tract, 2016-2020, Madison County**

	<b>1101</b>	<b>1102</b>	<b>1103.01</b>	<b>1103.02</b>	<b>1104</b>
Percent of homes lacking complete plumbing facilities	0.0	0.2	0.0	0.0	0.0
Percent of homes lacking kitchen facilities	1.1	0.6	0.0	0.0	0.0
Percent of homes heated with electricity	85.2	87.8	74.8	74.5	85.9
Percent of homes heated with utility gas	0.0	1.6	4.6	18.9	0.0
Percent of homes heated with bottled, tank or LP gas	11.6	8.8	13.6	6.6	12.2
Percent of homes heated with fuel oil, kerosene	0.0	0.0	1.6	0.0	0.1
Percent of homes heated with wood	2.4	1.6	5.4	0.0	1.8
Percent of homes not heated	0.7	0.2	0.0	0.0	0.0

Access to transportation is included under neighborhood and built environment although it could be included in most of the other socioeconomic barriers to health. As noted in previous sections, transportation has an impact on Access to Health Care, and Economic Stability and Education.

The majority of Madison County residents ages 16+ commute to work alone in a car, truck, or van. Census tracts 1103.02 and 1101 had the highest percentage of population driving alone to work. There were about 11% of workers who carpooled to work. Workers carpooled more often in census tract 1102. The highest percentage of the population using public transportation was in census tract 1102. This is most likely because census tract 1102 had the highest percentage of households with no vehicle. Less than 1% of Madison County residents commuting to work used public transportation or walked to work.

**Table 13. Transportation to Work by Census Tract, Ages 16+, 2016-2020, Madison County**

	<b>1101</b>	<b>1102</b>	<b>1103.01</b>	<b>1103.02</b>	<b>1104</b>
Carpooled in Car, Truck or Van (10.7%)	9.2	16.5	7.2	7.6	13.0
Drove Alone in Car, Truck or Van (84.7%)	89.2	72.1	84.7	89.3	85.9
Used Public Transportation (0.7%)	0.0	3.8	0.0	0.0	0.0
Used Taxicab, Motorcycle, Bicycle or Other Means (1.5%)	1.6	4.3	0.0	1.3	0.8
Walked to Work (0.7%)	0.0	0.8	3.2	0.0	0.0
Worked at Home (1.7%)	0.0	2.5	4.8	1.7	0.1

Mean Travel Time to Work – Minutes (28.6)	30.3	35.7	19.9	26.9	29.5
No Vehicles in the Household (9.8%)	6.3	8.6	14.9	18.2	1.0
1 Vehicle in the Household (36.9%)	39.1	38.2	32.0	41.9	31.2
2 Vehicles in the Household (35%)	34.1	33.7	34.3	26.6	46.9
3 or More Vehicles in the Household (18.4%)	20.6	19.6	18.7	13.3	21.0

## Social and Community Context

Factors that are included in this social determinant of health are discrimination and segregation, crime and incarceration, and social cohesion. Healthy People 2030 defines Social Cohesion as, “the strength of relationships and the sense of solidarity among members of a community.” A community with high social cohesion is one that works toward the well-being of everyone, fights exclusion and marginalization of subpopulations, offers opportunities for upward mobility, and promotes trust. Discrimination is a barrier to social cohesion. Some of the negative health outcomes associated with social and community context are listed below.

- Persons who were incarcerated have less chance of obtaining gainful employment.
- Persons incarcerated and with addictions issues may have health issues related to the addiction.
- Continuity of care for health conditions when incarcerated and released.
- Social networks can spread health behaviors, also known as social contagion. Examples are smoking, drinking, and eating behaviors.
- Lack of social cohesion can lead to isolation, insomnia, and emotional stress.

Figure 28 shows trends of neighborhood racial segregation. Racial residential segregation as measured through the Dissimilarity Index, the differential distribution of individuals by race or other social or income factors. When the Racial Residential Segregation Index is less than 0.3 the county’s population is “well integrated”. Values between 0.3 and 0.6 indicate the county’s population is “moderately segregated”. Values above 0.6 indicate the county’s population is “very segregated.” In 2020, the Racial Residential Segregation Index was 0.4 for Madison County and 0.5 for Florida.

**Figure 28. Racial Residential Segregation, 2015-2020, Madison County and Florida**

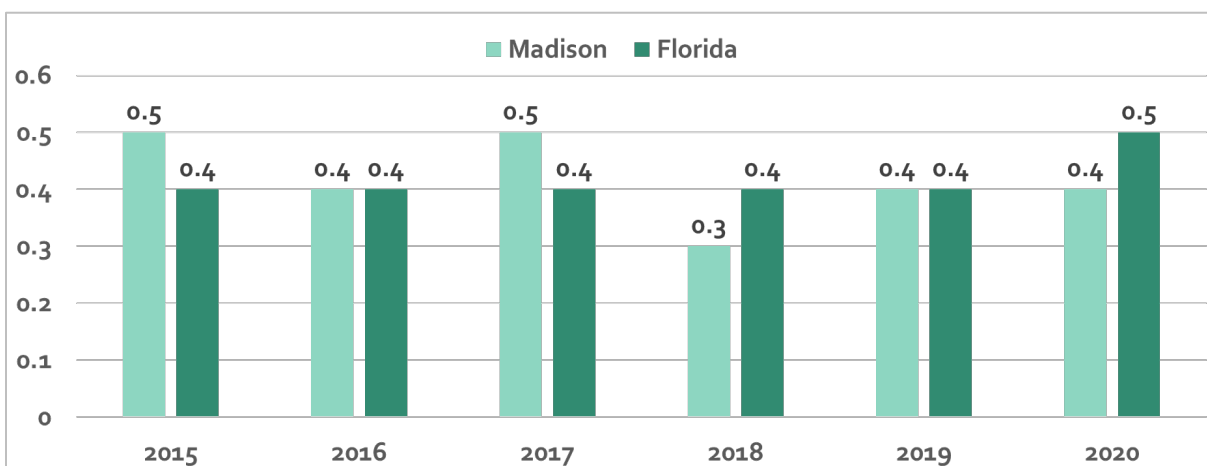


Figure 29 is the incarceration rate per 1,000 population for Madison County and Florida over time. The incarceration rate is the percentage of resident population incarcerated at the state or county level

during the year. Figure 29 shows the decrease in the incarceration rate in 2020 for both Madison County and Florida. This is most likely due to the COVID-19 epidemic when some law enforcement agencies made the decision to limit arrests to violent crimes. Data are not available by race/ethnicity or gender.

**Figure 29. Incarceration Rate Per 1,000 Population, 2014-2020, Madison County and Florida**

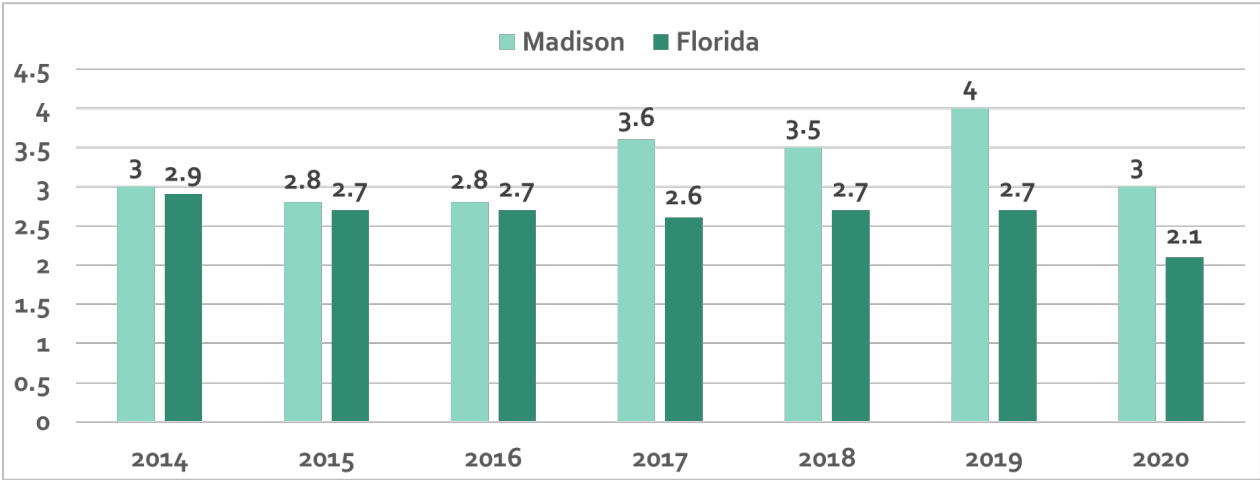
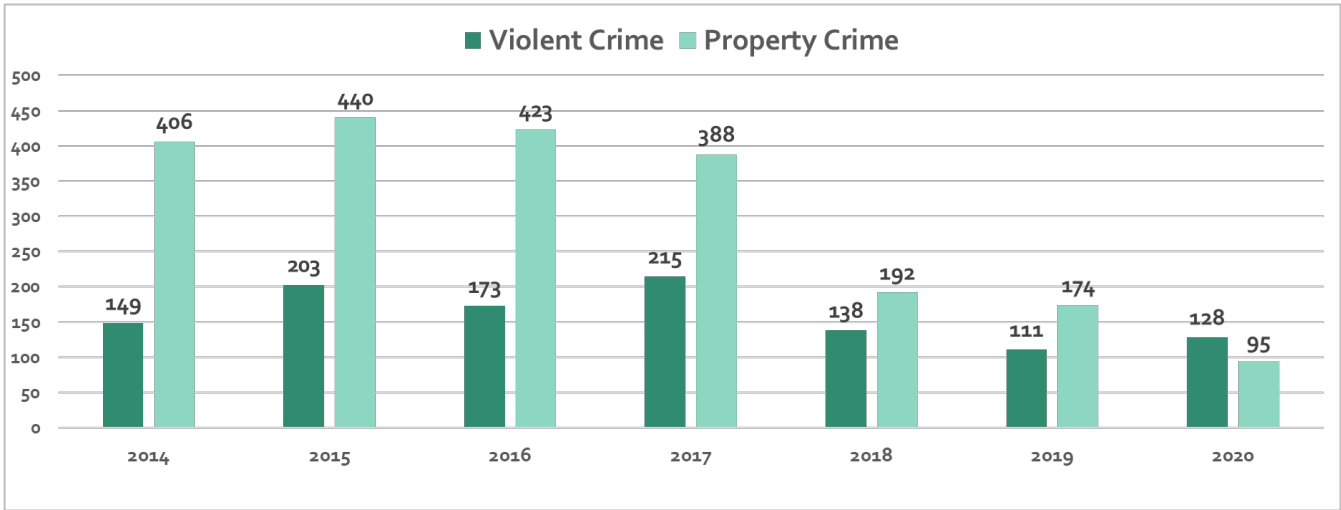


Figure 30 provides data on the number of violent crimes and property crimes committed in Madison County from 2014-2020. Data show a downward trend in both types of crime beginning in 2018.

**Figure 30. Madison County Crime Trends, 2014-2020**



### Significant Findings, Socioeconomic Barriers to Health

This section details some of the significant findings for all the socioeconomic barriers to health. These are listed below by category.

#### Access to Health Care

- Robert Wood Johnson County Health Ranking data for health care provider to resident ratios were disproportionately larger for Madison County, compared to the state.
  - 1 physician per 9,250 residents



- 1 dentist per 3,740 residents
- 1 mental health provider per 1,700 residents
- Almost 15% of Madison County residents ages 19-64 were uninsured along with 5% of residents less than 19 years of age.
- Approximately 26% of Madison County residents were enrolled in Medicaid and 24% were enrolled in Medicare.
- Only 61.8% of Madison County residents had access to broadband internet needed for telehealth services.

### ***Economic Stability***

- Madison County's poverty rates ranked highest in the state in 2020. This included individual, family, and female head of household poverty rates.
- Poverty rates for Hispanic and Black & Other, non-Hispanic residents in Madison County were more than twice that of White, non-Hispanic residents.
- Madison County unemployment rates and the percentage of civilian workforce ages 16+ who were unemployed were both less than the state of Florida in 2020. These increased slightly, most likely due to the start of the COVID-19 epidemic. These rates were significantly higher for Hispanic and Black & Other, non-Hispanic residents in Madison County.
- Data from Feeding America estimated that 16.5%, or 3,070 Madison County residents, were food insecure in 2020. The percentage of food insecure Black residents was 25% and 22% for Hispanic residents. The percentage of food insecure Madison County residents under age 18 was 27%.

### ***Education in Madison County in 2020 Compared to Florida***

- Madison County had a higher Early Steps Program utilization rate compared to Florida.
- Madison County had a higher percentage of ready to start kindergarten compared to Florida.
- Madison County 3<sup>rd</sup> grade Florida Standards Assessment scores were lower than Florida.
- Madison County had higher percentages of elementary and middle school students not promoted, compared to Florida.
- Madison County 2020 graduation rate 88.2%, compared to 90% for Florida. Madison County graduation rates have been improving since the 2017-2018 school year.
- Madison County's residents ages 25+ without a high school diploma 20%, compared to Florida at 11.5%. The percent for Black & Other, non-Hispanic residents with no high school diploma was 31%, compared to 31% for Hispanic residents and 13% for White, non-Hispanic residents.
- Madison County residents were less likely to have a bachelor's degree/higher, compared to Florida.

### ***Neighborhood and Built Environment***

- During 2020, Madison County had a lower percentage of residents who moved in the previous 12 months, compared to Florida. Madison County's percentage has been increasing over time and is now close to the percentage for Florida. This is a housing stability indicator.
- The percentage of Madison County residents who own the housing unit in which they live is higher than the state of Florida. The percentage has been decreasing since 2015. This is also a housing stability indicator.
- 84% of White, non-Hispanic residents of Madison County owned their home, followed by 71% for Hispanic residents and 56% for Black & Other, non-Hispanic residents.

- The median home value for Madison County was far below that of Florida in 2020. Home values in Florida are increasing annually, while Madison County home values remain level.
- For the combined period of 2016-2020, about 10% of Madison County households did not have a vehicle. Approximately 11% of residents carpooled to work.

### ***Social and Community Context***

- The 2020 Dissimilarity Index places Madison County in the moderately segregated category with a score of 0.4. This compares to 0.5 for the state of Florida.
- Madison County's 2020 incarceration rate was 3 per 1,000 residents, compared to 2.1 for Florida.
- Madison County numbers of violent crimes/property crimes have been decreasing since 2017.

## **Life Expectancy and Cause of Death**

The Robert Wood Johnson County Health Rankings for 2022 ranks Madison County 65 out of the 67 counties in Florida for overall health, meaning only two counties in Florida were determined to be unhealthier than Madison County. One indicator of measurement for this is years of potential life lost (YPLL) to persons under age 75. This is expressed as number of years per 100,000 people in order to compare Madison County to other counties or to the state as a whole. For the combined years of 2018-2020, the YPLL for persons ages 75 and younger was 7,300 for the United States, 7,500 for the state of Florida and 11,000 for Madison County. The YPLL for Black residents of Madison County was 13,100, compared to 10,200 for White residents.

Table 14 shows estimated life expectancy in years by census tract as well as overall for Madison County and Florida for the period of 2015-2019 combined. The chart includes average years as a total and by gender. Madison County residents lived almost four years less than residents of Florida. Females had a higher life expectancy than males in Madison County and Florida, as well as every census tract except 1103.02. Data was not available by race or ethnicity.

***Table 14. Life Expectancy, Madison County and Florida, Years 2015-2019***

<b>Census Tract Code</b>	<b>Total</b>	<b>Males</b>	<b>Females</b>
1101	78.7 (76.4 - 80.9)	76.3 (72.7 - 79.9)	81.5 (78.7 - 84.2)
1102	74.6 (71.8 - 77.4)	Data not sufficient	79.7 (76.0 - 83.4)
1103.01	80.0 (77.3 - 82.6)	76.4 (73.0 - 79.8)	Data not sufficient
1103.02	75.6 (73.8 - 77.4)	75.9 (73.6 - 78.2)	74.4 (71.5 - 77.3)
1104	77.2 (75.0 - 79.4)	74.5 (71.1 - 77.9)	80.1 (77.3 - 82.8)
Madison County	76.0 (75.0 - 77.0)	74.2 (72.8 - 75.6)	78.0 (76.5 - 79.4)
State Total	79.7 (79.7 - 79.8)	76.9 (76.9 - 77.0)	82.6 (82.5 - 82.6)

Table 15 shows the leading causes of death in Madison County in 2020. Note that chronic diseases represented four of the ten leading causes of deaths and accounted for 50% of the deaths in 2020.

***Table 15. Ten Leading Causes of Death, Madison County, 2020 (N=306)***

<b>Cause of Death</b>	<b>Deaths</b>	<b>% of Total</b>
Malignant Neoplasm (Cancer)	67	22

Heart Diseases	55	18
Other Causes of Death	52	17
COVID-19	34	11
Cerebrovascular Diseases	20	7
Chronic Lower Respiratory Disease	18	6
Unintentional Injury	14	5
Diabetes Mellitus	9	3
Essen Hypertension and Hypertensive Renal Disease	6	2
Nephritis, Nephrotic Syndrome, Nephrosis	6	2

Included in the 306 total deaths for 2020 were 106 deaths among racial and ethnic minorities. Table 16 shows the ten leading causes of death for non-white residents in Madison County in 2020. Some of the ranking order was different when comparing to overall deaths; however, chronic diseases still represented four out of ten minority resident causes of death in 2020. Chronic diseases accounted for 48% of minority deaths in 2020. Note that homicide was represented in the ten leading causes of death for minorities but not in the total deaths.

**Table 16. Ten Leading Causes of Death for Minorities, Madison County, 2020 (N=106)**

Cause of Death	Deaths	% of Total
Malignant Neoplasm (Cancer)	23	22
Other Causes of Death	18	17
COVID-19	16	15
Heart Diseases	15	14
Cerebrovascular Diseases	9	8
Chronic Lower Respiratory Disease	4	4
Diabetes Mellitus	4	4
Unintentional Injury	4	4
Essen Hypertension and Hypertensive Renal Disease	3	3
Homicide	3	3

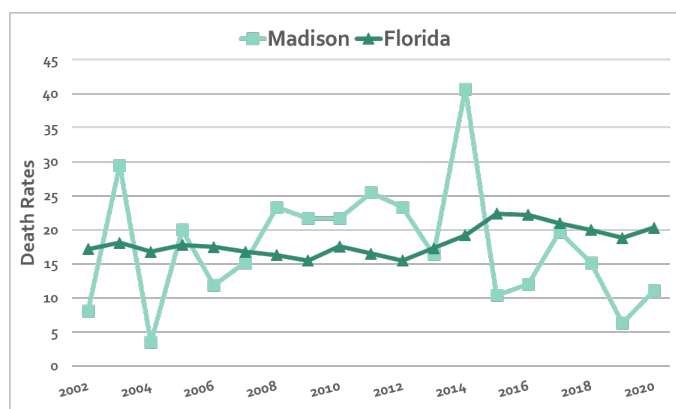
## Chronic Diseases

As noted in the previous section, chronic diseases represented 50% of all deaths for Madison County residents in 2020. Table 17 provides more information on chronic disease deaths in 2020. Any disease with zero deaths in 2020 is not listed in the table below. Note that there were no deaths from nutritional deficiencies in 2020; however, there were two deaths in 2019 and three deaths in 2021.

**Table 17. Deaths Due to Chronic Diseases, Madison County, 2020**

Cause of Death	Deaths
All Cancers	67
Heart Attack	55
Coronary Heart Disease	28
Stroke	20
Chronic Lower Respiratory Disease	18

Diabetes	9
Renal Failure	6
Chronic Liver Disease and Cirrhosis	4
Alzheimer's Disease	3
Parkinson's Disease	2
Aortic Aneurysm and Dissection	1
Emphysema	1



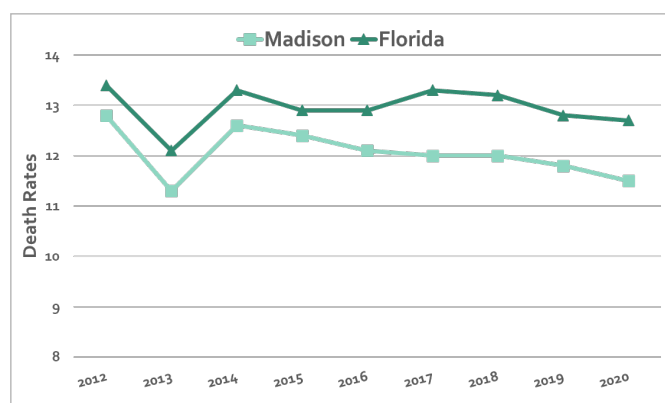
**Figure 31. Alzheimer Disease Death Rates 2002-2020, Madison County and Florida**

The analysis left includes chronic diseases that have high numbers of deaths and hospitalizations, or those that are a priority statewide. This includes Alzheimer's Disease, cancer, diabetes, heart disease, stroke, and hypertension.

### Alzheimer's Disease

Madison County was ranked in the first quartile for Alzheimer's Disease death rates in 2020, meaning that Madison County's death rates were lower than 75% of the counties in Florida. Death rates due to Alzheimer's Disease have been below that of Florida since 2016.

Of the 85 Alzheimer's Disease deaths among Madison County residents during 2002-2020, 79% were White, non-Hispanic, 19% were Black & Other, non-Hispanic, and 2% were Hispanic.



**Figure 32. Probable Alzheimer's Disease Case Rates 2012-2020, Madison County and Florida**

Madison County ranked in the second quartile for probable Alzheimer's Disease case rates in 2020. The case rate for Madison County was 11.5 per 100,000 population, compared to 12.7 for Florida.

There were 3,901 probable Alzheimer's Disease Cases reported for Madison County between

2012 and 2020. This translates to an average of 433 probable cases per year. Data are not available by race, ethnicity, or gender.

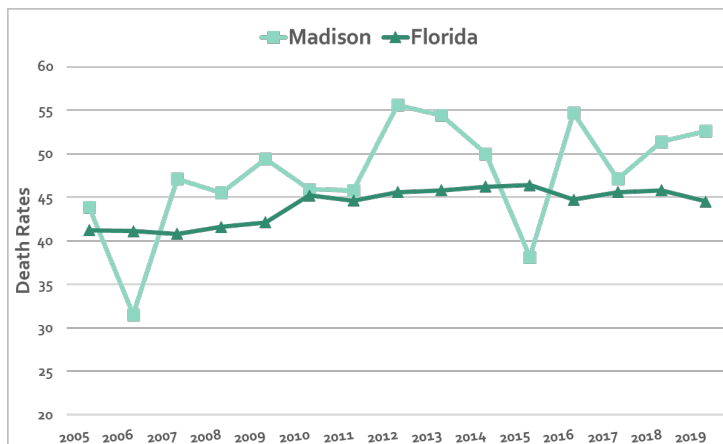
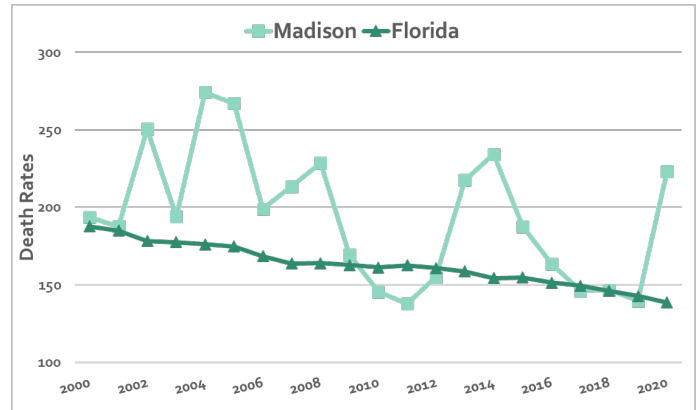
**Figure 33. Cancer Death Rates, 2000-2020  
Madison County and Florida (All Cancers)**

## Cancer

Madison County ranked third highest in the state for cancer death rates in 2020. The trend line in Figure 33 shows a large increase in cancer deaths in 2020. Deaths from cancers represented 22% of all deaths in Madison County in 2020.

There were 505 cancer deaths among Madison County residents between 2010-2020. Of these, 70% were white, non-Hispanic, 29% were black & other, non-Hispanic and 1% were Hispanic.

One of the primary contributing causes of cancer deaths is the percentage of cancer cases that are at an advanced stage when diagnosed. Cancer cases that have spread from the primary site to other lymph nodes, organs or tissues are considered to be at an advanced stage. As shown in Figure 34, the percentage of advanced stage cases diagnoses for Madison County has been higher than the state since 2015. In 2019, approximately 52.6% of cancer cases in Madison County were at an advanced stage when diagnosed. The average percentage of cancer cases diagnosed at an advanced stage between 2005 and 2019 was 47.8%. Data are not available after 2019, and data are not available by race/ethnicity.



**Figure 34. Percent of Cancer Cases at  
Advanced Stage When Diagnosed, 2005-  
2019 Madison County and Florida**

Table 18 shows cancer deaths type of cancer for calendar year 2020. Any type of cancer with a zero value in 2020 is not listed below. Lung cancer accounted for the highest number of deaths in Madison County in 2020, followed by prostate, breast, and lymphoid cancers.

**Table 18. 2020 Cancer Deaths, by Type of Cancer, Madison County**

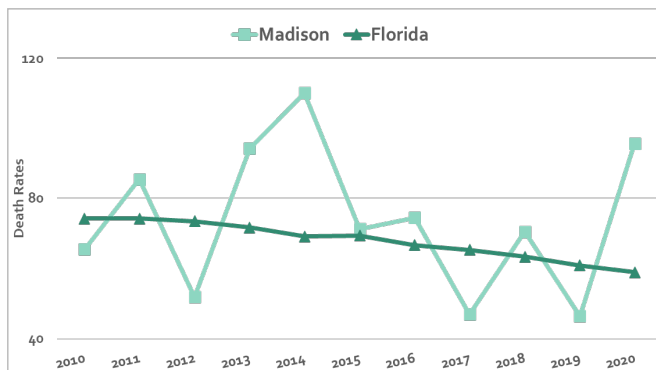
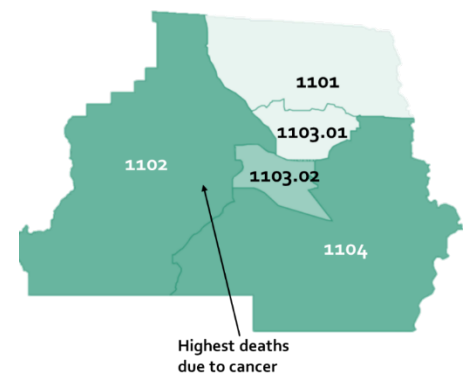
Type of Cancer	Deaths
Lung	21
Prostate	5
Breast	4
Lymphoid and Related Tissue	4
Melanoma	3
Pancreatic	3
Stomach	3

Esophagus	2
Kidney and Renal Pelvis	2
Leukemia	2
Liver & Bile Ducts	2
Uterine	2
Bladder	1
Brain and Central Nervous System	1
Colorectal	1
Ovarian	1

Madison County cancer deaths by census tract for the combined years of 2016-2020 are shown below in Figure 35. Census tract 1104 had the highest number of cancer deaths with 60, followed by tract 1102 with 47, 1103.02 with 38, 1103.01 with 37 and 1101 with 37 deaths.

**Figure 35. Cancer Deaths by Census Tract, 2016-2020 Combined, Madison County**

The death rate trend line for Tobacco-Related Cancers mirrors that of the trend line for all cancers. Many of the most diagnosed cancers among Madison County residents are tobacco-related cancers. These include Acute myeloblastic leukemia, bladder, bronchus, cervix, esophagus, kidney, lip, lung, oral cavity, pancreas, pharynx, stomach, and trachea cancers.



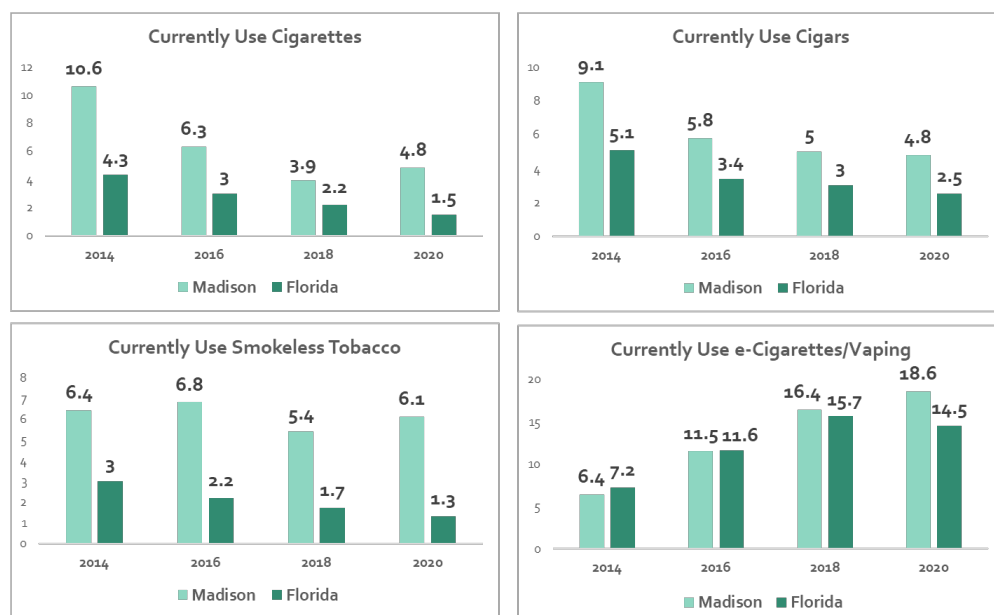
**Figure 36. Tobacco Related Cancer Death Rates 2010-2020, Madison County and Florida**

Figure 36 shows the tobacco-related cancer death rates trend line per 100,000 population. The rate for Madison County was 95.7 in 2020, significantly higher than the state at 58.9.

Of the 219 Madison County deaths due to tobacco-related cancers between 2010 and 2020, 159, or 73%, were white, non-Hispanic. Fifty-five, or 25%, were black and other, non-Hispanic, and five, or 2%, were Hispanic.



**Figure 37. Youth Tobacco Survey Results, 2014-2020, Madison County and Florida**



The Youth Tobacco Survey is conducted by the Florida Department of Health in public middle and high schools in Florida. Data are released for the state and for the 67 county health departments on alternating years. County level data were released in 2020. Figure 37 below shows that the percentage of Madison County public school students currently using

cigarettes increased slightly between 2018 and 2020 and students currently using cigars decreased slightly during the same period. There was an increase in the percent of Madison County students currently using smokeless tobacco and significant increases in the percent of Madison County students vaping. In 2020, almost 20% of Madison County students responded that they currently used e-cigarettes.

2020 e-cigarette use demographic data show that 15.7% of middle school respondents and 32.9% of high school respondents used vape products. Data by gender include 27.6% of males and 24.9% of females used e-cigarettes at the time of the survey. Data for white, non-Hispanic participants were suppressed due the small number of responses; however, 32.7% of black, non-Hispanic respondents and 20.3% of Hispanic respondents used vape products at the time of the survey.

## Diabetes

**Figure 38. Diabetes Death Rates, 2010-2020  
Madison County and Florida**

Madison County has consistently had higher death rates due to diabetes than the state of Florida since 2013 as shown in Figure 38. Madison County ranked 16<sup>th</sup> highest in the state for diabetes death rates in 2020.

When analyzing the 85 diabetes deaths among Madison County residents by race, ethnicity and gender, these deaths were almost evenly distributed-49% white, non-Hispanic, 49% black & other, non-Hispanic and 2% were Hispanic. Fifty percent of the deaths were male and 50% were female.

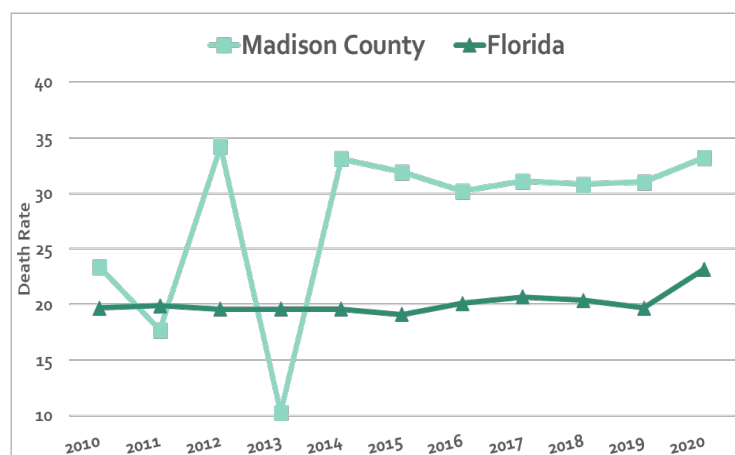
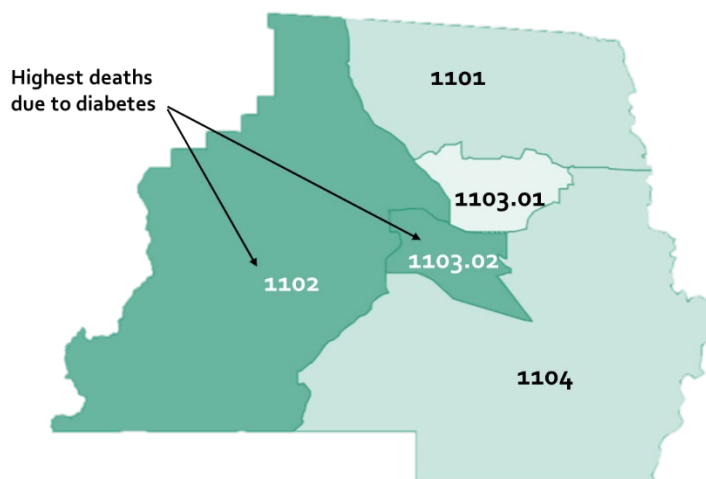
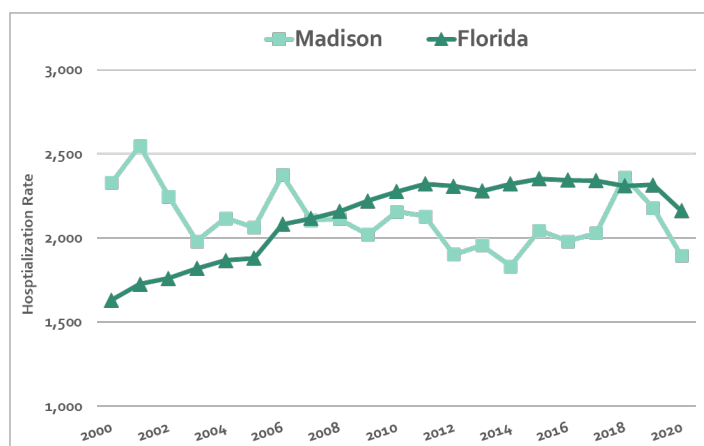


Figure 39 is a map of diabetes deaths that occurred between 2016 and 2020 in Madison County. There was a total of 38 deaths reported for the period. Of these, 14, or 37% were reported in census tract 1103.02 and 10, or 26% were reported in census tract 1102.



**Figure 39. Diabetes Deaths by Census Tract, Madison County, 2016-2020 Combined**



**Figure 40. Hospitalization Rates Per 100,000 Population 2000-2020, Madison County and Florida**

Madison County hospitalization rates for diabetes, or any other condition, have historically been lower than the state of Florida. These rates are shown for hospitalization of Madison County residents in Florida hospitals and do not account for residents who traveled to Valdosta Georgia for hospital care. Hospitalization rates for diabetes in Madison County and Florida decreased in 2020.

Diabetes hospitalization data for the period 2010-2020 indicate that most Madison County resident hospitalizations occurred among White, non-Hispanics (56%). Black, non-Hispanic residents represented 43% of the hospitalizations during the period and Hispanic residents accounted for 1%. Data are not available by gender.

There were 86 Florida hospitalizations of Madison County residents for diabetes related amputations during the years 2010-2020. The majority of these were white, non-Hispanic (77%) and black & other, non-Hispanic (23%). Data for Hispanics was not reported. Data are not available by gender.

Table 19 shows risk factors for diabetes reported by the 2022 Robert Wood Johnson County Health Rankings. Madison County had higher percentages of diabetics, adult obesity, and physically inactive residents than the state of Florida. Madison County had lower percentages with respect to exercise access and the food environment index. Note that the food environment index combines two measures of food access: the percentage of the population that is low-income and has low access to a grocery store, and the percentage of the population that did not have access to a reliable source of food during the past year, food insecurity.

**Table 19. Risk Factors for Diabetes, Madison County and Florida  
2022 Robert Wood Johnson County Health Rankings**

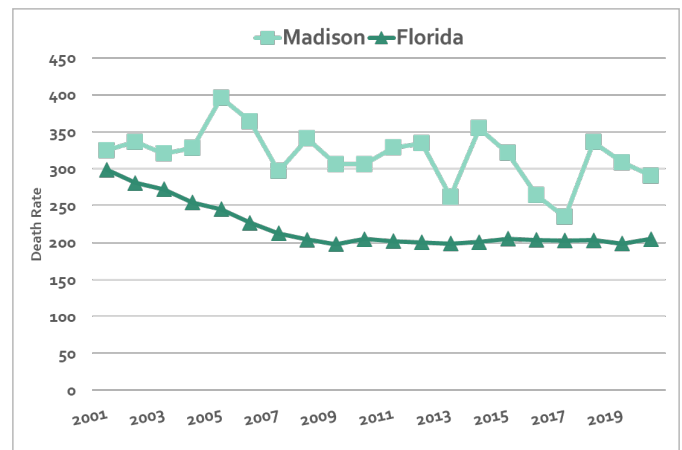
Risk Factor	Madison County	Florida
Diabetic	14%	9%
Adult Obesity	37%	26%
Physically Inactive	36%	26%
Access to Exercise Opportunities	46%	87%
Food Environment Index	6.4	7.0

## Cardiovascular Diseases

This category includes major cardiovascular diseases such as coronary heart disease, stroke, peripheral arterial diseases, heart disease, and aortic aneurysm and dissection. Heart diseases include Acute Myocardial Infarction (heart attack) and heart failure.

**Figure 41. Cardiovascular Disease Death Rates  
2000-2020, Madison County and Florida**

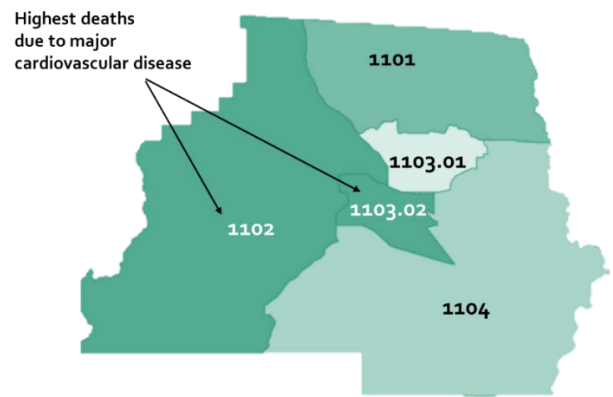
Analysis of all major cardiovascular diseases combined show that Madison County has disproportionately higher death rates than the state. Madison County ranked in the 4<sup>th</sup> quartile for these death rates in 2020 with the seventh highest death rate per 100,000 population in the state.



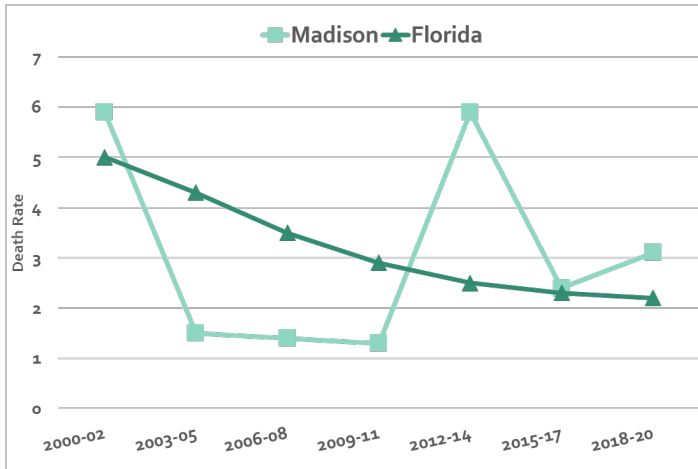
Data by race and ethnicity for the years 2010-2020 show that 64% of the deaths were White, non-Hispanic, 35% were Black & Other, non-Hispanic and 1% were Hispanic. Data by gender show that 49% of major cardiovascular disease deaths were males and 51% were females.

It is worth noting that most deaths were among White, non-Hispanic residents; however, when comparing death rates per 100,000 population, racial and ethnic minorities in Madison County are impacted. For example, in 2020 the death rate for Madison County White, non-Hispanic residents was 299.7, for Black & Other, non-Hispanic residents was 285.3 and 0% for Hispanic residents. Madison County death rates were substantially higher compared to Florida.

Data by census tract for Madison County for years 2016-2020 show higher numbers of deaths in census tracts where high proportions of Black & Other, non-Hispanic residents reside. Census tract 1103.02 accounted for 37% of deaths during the five-year period, followed by tracts 1101 and 1102 with 22% each, tract 1103.01 with 11% and tract 1104 with 8%.



**Figure 42. Deaths Due to Major Cardiovascular  
Disease, 2016-2020, Madison County**



## Aortic Aneurysm and Dissection

Figure 43. Aortic Aneurysm and Dissection Death Rates, 2000-2020, 3-Year Discrete Rates Madison County and Florida

An aortic aneurysm occurs when a weak spot in the wall of the aorta begins to bulge. An aneurysm increases the risk of dissection, which is a tear in the lining of the aorta.

Actual numbers of deaths due to aortic aneurysm and dissection are small, therefore rates are shown as 3-year discrete trends. The

Madison County death rate in 2020 was 2.7 per 100,000 population, compared to 2.1 for Florida. It should be noted that the 2021 rate dramatically increased for Madison County to 6.3, compared to 2.2 for Florida.

Of the 15 deaths due to aortic aneurysm and dissection between 2000-2020, 80% were white, non-Hispanic and 20% were Black & Other, non-Hispanic. There were no Hispanic deaths during the time frame. A total of 67% of these deaths were male and 33% were female.

## Atherosclerosis

Atherosclerosis is a disease in which plaque builds up in arteries which interferes with the flow of oxygen-rich blood to the body. Atherosclerosis can lead to serious problems, including coronary artery disease, carotid artery disease, and peripheral arterial disease that blocks the blood supply to the heart, brain or arms, legs, or pelvis. During 2000-2020, there was one death due to Atherosclerosis in Madison County. It should be noted that there was one Atherosclerosis death recorded in 2021 in Madison County.

## Coronary Heart Disease

Figure 44. Coronary Heart Disease Death Rates 2000-2020, Madison County and Florida

Coronary heart disease (CHD) is a narrowing of the small blood vessels that supply blood and oxygen to the heart, also known as hardening of the arteries. Madison County ranked 25<sup>th</sup> highest in the state for coronary heart disease death rates in 2020.

Of the 396 CHD deaths among Madison County residents during 2010-2020, 63% were White, non-Hispanic, 36% were Black & Other, non-Hispanic and 1% were Hispanic. Males accounted for 55% of the CHD deaths and females represented 45% of the deaths during the time frame.

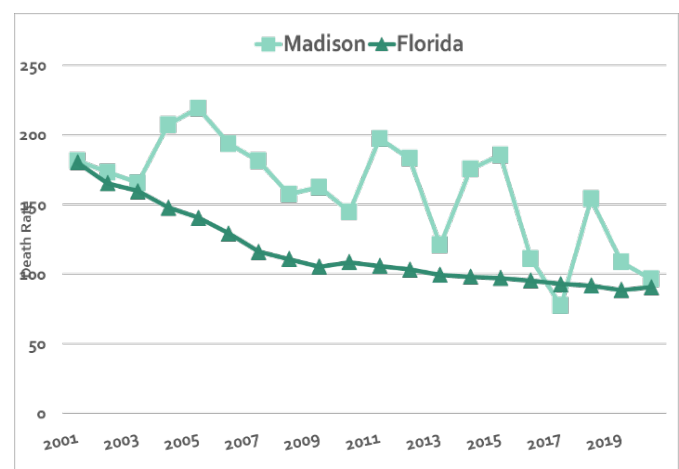
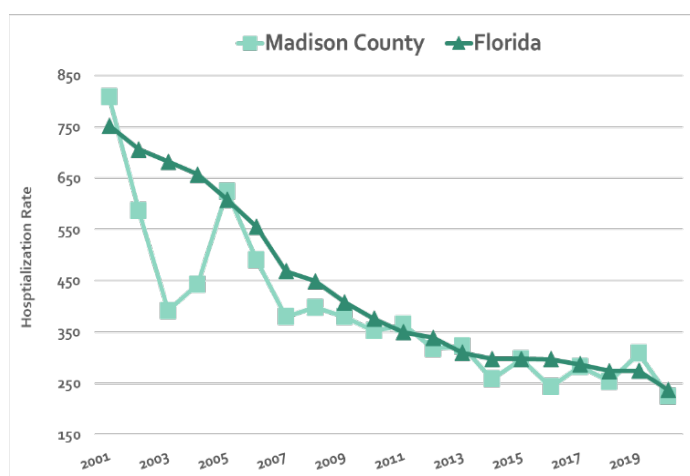
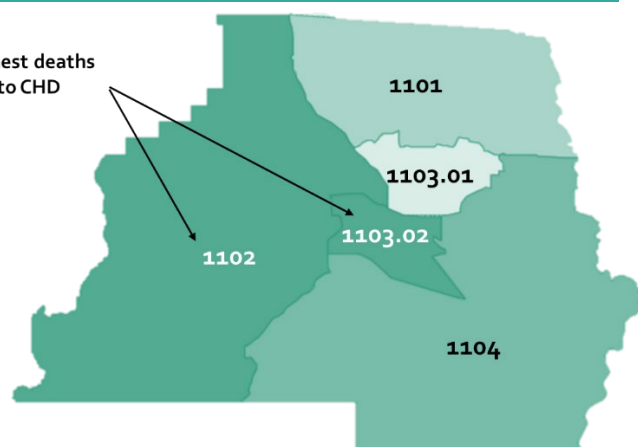


Figure 45 shows Madison County coronary heart disease deaths by census tract for the years 2016-2020. Census tract 1103.02 accounted for 31% of the deaths, followed by tract 1102 with 25%, 1104 with 18%, 1101 with 17% and 1103.01 with 10%.

**Figure 45. Coronary Heart Disease Deaths by Census Tract, 2016-2020, Madison County**

Highest deaths due to CHD



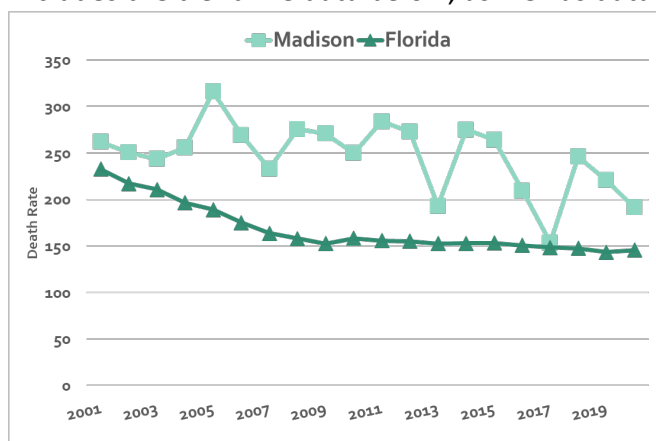
**Figure 46. CHD Hospitalization Rates, 2000-2020 Madison County and Florida**

Figure 46 shows that hospitalizations due to coronary heart disease have been decreasing for both Madison County and Florida. Hospitalization data for Madison County does not include any residents who were hospitalized in Georgia.

There were 799 hospitalizations during 2010-2020 among Madison County residents in Florida hospitals. Approximately 69% were White, non-Hispanic and 31% were Black & Other, non-Hispanic, and no Hispanics hospitalized.

## Heart Diseases

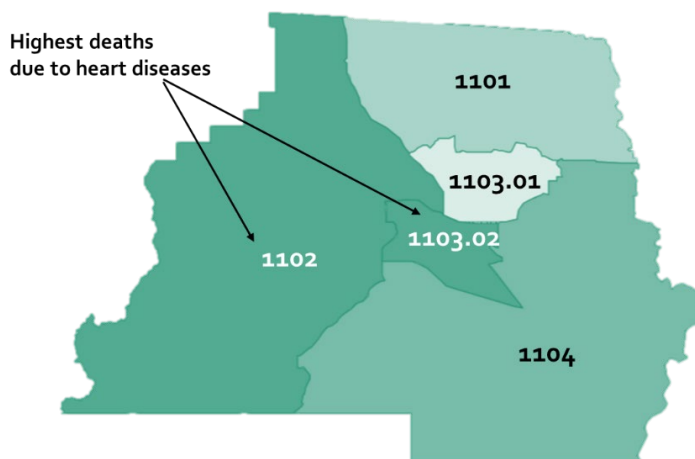
The data for heart diseases is consistent with the larger category of cardiovascular diseases. This includes the trendline data below, as well as data by race/ethnicity, and census tract.



**Figure 47. Heart Disease Death Rates, 2000-2020 Madison County and Florida**

Analysis of heart diseases show that Madison County has disproportionately higher death rates than the state. Madison County ranked in the 4<sup>th</sup> quartile for these death rates in 2020 with the 12<sup>th</sup> highest death rate per 100,000 population in the state.

Data by race and ethnicity for the years 2010-2020 show that 65% of the deaths were White, non-Hispanic, 34% were Black & Other, non-Hispanic and 1% were Hispanic. Data by gender show that 51% of heart disease deaths were males and 49% were females.



Data by census tract for Madison County for years 2016-2020 show higher numbers of deaths in census tracts where high proportions of Black & Other, non-Hispanic residents reside. Census tract 1103.02 accounted for 31% of deaths during the five-year period, followed by tract 1102 with 21%, tract 1104 with 19%, tract 1101 with 18% and tract 1103.01 with 10%.

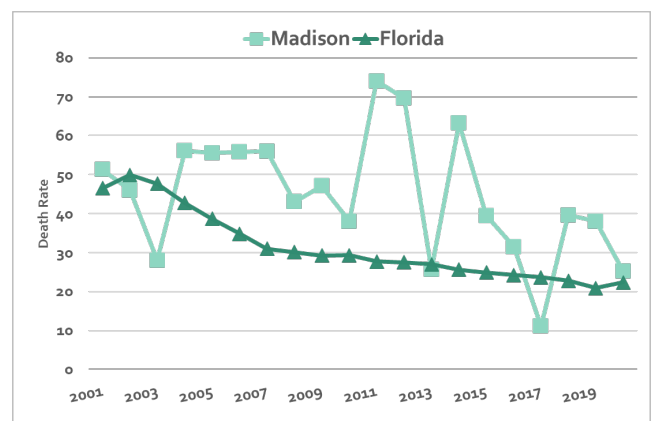
**Figure 48. Heart Disease Deaths by Census Tract, 2016-2020, Madison County**

### **Acute Myocardial Infarction (Heart Attack)**

Acute Myocardial Infarction, or heart attack, is a subset of heart diseases and data are generally consistent with the larger category. Although the actual numbers of annual heart attack deaths in Madison County are small, the rates per 100,000 population are higher compared to Florida.

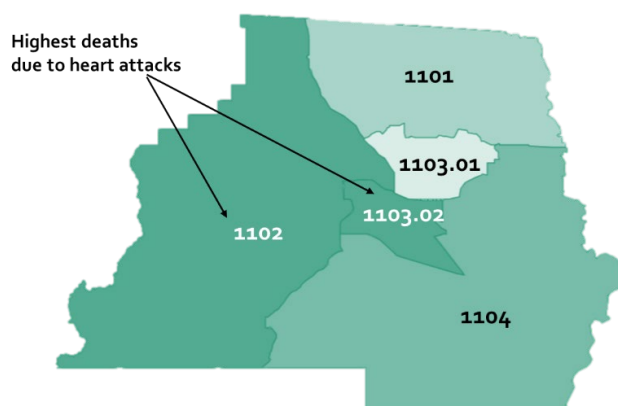
**Figure 49. Death Rates Due to Heart Attack 2000-2020, Madison County and Florida**

Madison County ranked in the third quartile for heart attack death rates in 2020. It should be noted that the 2020 death rate per 100,000 population for Madison County was 25.2, compared to 22.3 for Florida. Data by race and ethnicity for the years 2010-2020 show that 60% of the deaths were White, non-Hispanic, 39% were Black & Other, non-Hispanic and 1% were Hispanic. Data by gender show that 51% of heart attack deaths were males and 49% were females.

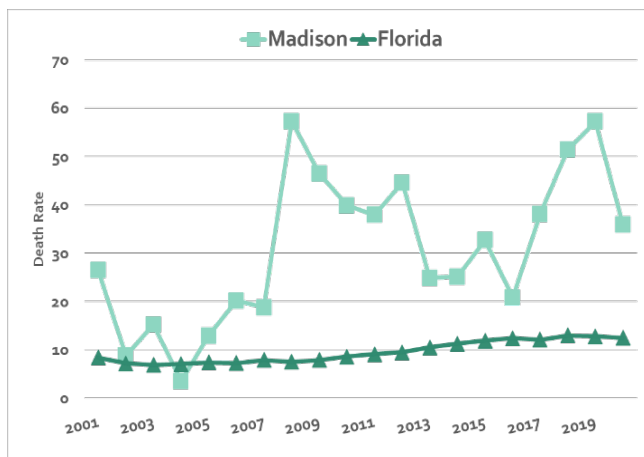


**Figure 50. Heart Attack Deaths by Census Tract, 2016-2020, Madison County**

Figure 50 shows Madison County heart attack deaths by census tract for the years 2016-2020. Of the 27 deaths during the time frame, census tract 1103.02 accounted for 41% of the deaths, followed by tract 1102 with 26%, 1104 with 15%, 1103.01 with 11% and 1101 with 7%.







### Congestive Heart Failure

Congestive heart failure is also a subset of heart diseases. Congestive heart failure is a condition in which the heart can no longer pump enough blood to the rest of the body.

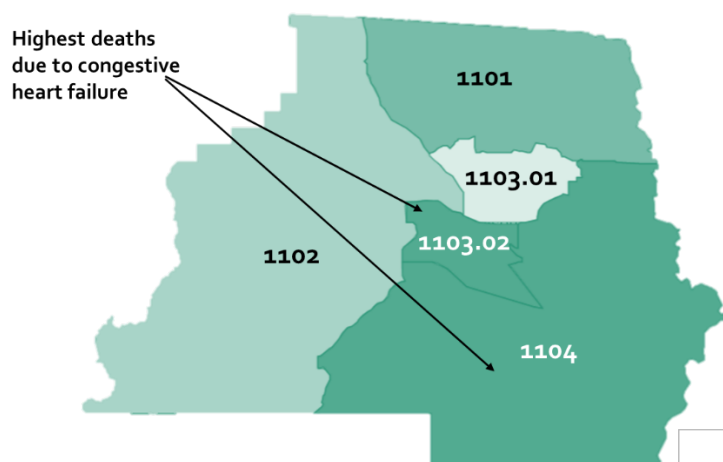
**Figure 51. Congestive Heart Failure Death Rates 2000-2020, Madison County and Florida**

Analysis of congestive heart failure shows that Madison County has disproportionately higher death rates than the state. Madison County ranked in the 4th quartile for these death rates in

2020 with the 6<sup>th</sup> highest death rate per 100,000 population in the state.

Data by race and ethnicity for the years 2010-2020 show that 81% of the deaths were White, non-Hispanic, 19% were Black & Other, non-Hispanic and 1% were Hispanic. Data by gender show that 36% of congestive heart disease deaths were males and 64% were females.

Congestive heart failure death data by census tract reflect the differences in demographics, compared to major cardiovascular diseases. Data by census tract for the years 2016-2020 show a total of 43 deaths during the period. Of the total, census tracts 1103.02 and 1104 each accounted for 26% of the deaths, followed by tract 1101 with 23%, 1102 with 14%, and 1103.01 with 12%.

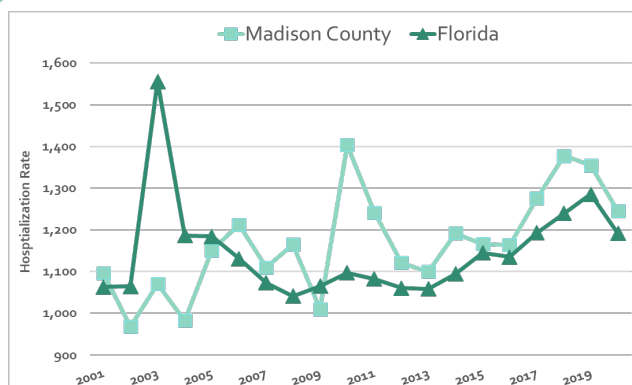


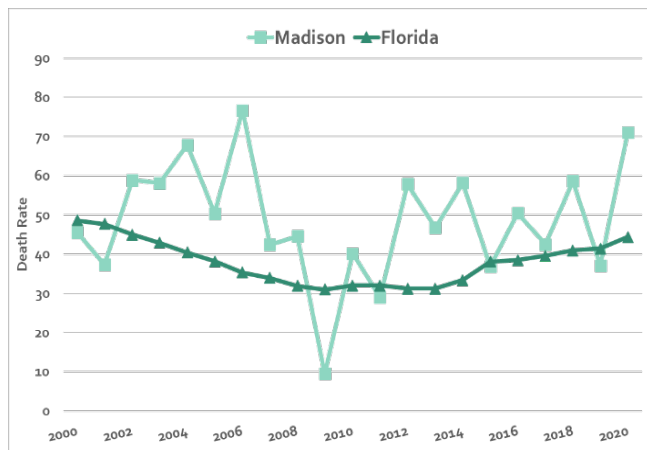
**Figure 52. Congestive Heart Failure Deaths by Census Tract, 2016-2020, Madison County**

Hospitalizations due to congestive heart failure in Madison County have been higher than in the state since 2010. Madison residents may also be seeking hospital care in Georgia, which would mean actual rates are higher than those listed.

**Figure 53. Congestive Heart Failure Hospitalizations 2000-2020, Madison & Florida**

Madison County congestive heart failure hospitalization data for 2010-2020 show that White, non-Hispanics represented 59% of hospitalizations while Black & Other, non-Hispanics accounted for 41%. Hispanics represented less than 1% of the hospitalizations for the period. Data are not available by gender.





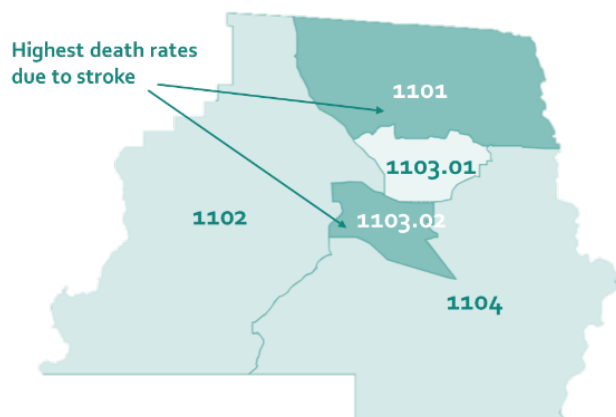
## Stroke and Hypertension

**Figure 54. Stroke Death Rates, 2000-2020  
Madison County and Florida**

Madison County has typically had higher death rates due to stroke, compared to the state of Florida. Madison County ranked 4<sup>th</sup> highest in the state for stroke death rates in 2020. The 2020 stroke death rate was 71.0 per 100,000 population for Madison County and 44.4 for Florida.

Of the 140 reported stroke deaths among Madison County residents during 2010-2020, 62% were white, non-Hispanic, 35% were black & other, non-Hispanic, and 3% were among Hispanics. Females accounted for more deaths during the time period than males. Females represented 61% of the Madison County stroke deaths and males accounted for 39% of stroke deaths.

Figure 55 gives an illustration of stroke deaths in Madison County by census tract for 2016-2020 combined. The highest number of stroke deaths were in census tracts 1101 and 1103.02.

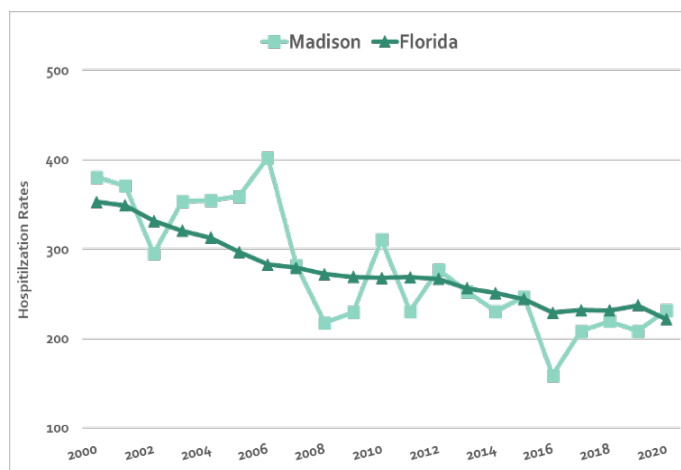


**Figure 55. Madison County Stroke Deaths,  
by Census Tract, 2016-2020**

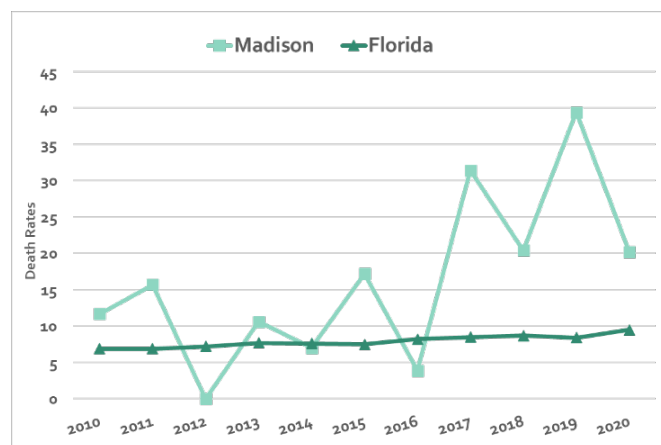
Stroke hospitalization rates for Madison County have been at or below those of the state from 2011-2019. The stroke hospitalization rate for Madison County increased in 2020 to be slightly higher than the state of Florida. Stroke hospitalization trends by race/ethnicity are different from the demographic data regarding stroke deaths. The 2020 hospitalization rate for non-white residents was 316.7, compared to 179.2 for white residents.

**Figure 56. Stroke Hospitalization Rates, 2000-2020  
Madison County and Florida**

One of the contributing factors to strokes is hypertension. Figure 57 provides a trend line for hypertension deaths for Madison County and Florida. Madison County has had significantly higher death rates due to hypertension compared to Florida. During the period 2016-2020, 58% of total hypertension deaths were among White, non-Hispanic residents and 42% were Black & Other, non-Hispanic. There were no Hispanic hypertension



deaths recorded during the period. As in Madison County stroke deaths, the majority were female (57%), with 43% attributed to males.



**Figure 57. Hypertension Death Rates, 2010-2020, Madison County and Florida**

Table 20 lists risk factors for cardiovascular disease according to the Robert Wood Johnson Foundation 2022 County Health Rankings. Madison County had higher percentages of adult current smokers, adult obesity, and physically inactive residents.

**Table 20. Risk Factors for Cardiovascular Disease and Stroke, Madison County and Florida 2022 Robert Wood Johnson County Health Rankings**

Risk Factor	Madison County	Florida
Adults who are current smokers	24%	15%
Adult Obesity	37%	26%
Physically Inactive	36%	26%

## Significant Findings Chronic Disease

This section details some of the significant findings for priority chronic diseases. These are listed below by category.

### Overall Findings – Robert Wood Johnson Foundation Health Rankings 2022

- According to the Robert Wood Johnson 2022 County Health Rankings, Madison County had a higher percentage of obese or overweight residents, compared to the state of Florida.
- About 36% of Madison County residents were determined to be physically inactive, compared to 26% for Florida. Only 46% of Madison County residents had access to exercise opportunities, compared to 87% for Florida.
- Madison County residents were more likely to be food insecure, compared to Florida. Madison County's food environment index was 6.4, compared to 7.0 for Florida.
- About 24% of Madison County adults were smokers in 2020, compared to 15% for Florida.
- These are all contributing risk factors for most chronic diseases.

### Cancer Indicators 2020

- Madison County had the third highest death rate due to all cancers among the 67 Florida counties.
- While most of the Madison County deaths from cancers were white, non-Hispanic, cancer deaths were also the leading cause of death for the minority population in Madison County.
- Lung, prostate, breast, and lymphoid cancers represented 50% of all cancer deaths in 2020.
- Madison County tobacco-related cancer deaths spiked in 2020.

- In 2019, more than half of the cancer cases among Madison County residents were diagnosed at an advanced stage. Data was not yet available for 2020.
- Madison County youth were more likely to be current users of cigarettes, cigars, smokeless tobacco, and e-cigarettes, compared to Florida as a whole. All four categories showed an increase in habitual use between 2018 and 2020 in Madison County.

### ***Cardiovascular Disease Indicators 2020***

- Madison County had the 7<sup>th</sup> highest death rate due to cardiovascular diseases in the state in 2020.
- Although White and non-Hispanics represented most cardiovascular disease deaths and hospitalizations, all subpopulations were affected.
- Census tracts 1102 and 1103.02 had the highest number of coronary heart disease deaths during 2016-2020.

### ***Diabetes Indicators 2020***

- Diabetes deaths affected almost every subpopulation equally in 2020. Approximately 49% of Madison County deaths were White, non-Hispanic, 49% were Black & Other, non-Hispanic and 2% were Hispanic. Males and females both accounted for 50% of the deaths.
- Census tracts 1102 and 1103.02 had the highest number of diabetes deaths during 2016-2020.
- White, non-Hispanics comprised the majority of Madison County residents who were hospitalized and who were hospitalized due to amputation from diabetes.

### ***Stroke and Hypertension Indicators 2020***

- Madison County ranked fourth highest for stroke deaths among the 67 counties in Florida in 2020.
- Most stroke deaths in Madison County were among female white, non-Hispanic residents.
- Hypertension deaths in Madison County were also among female white, non-Hispanic residents.

## **Injury and Violence**

This category encompasses all external causes of death and/or injury. It should be noted that data are attributed to Madison County if the crime or injury event occurred in Madison County. The persons who are crime victims or accident victims may not be Madison County residents.

***Figure 58. Death Rates for All External Causes 2000-2020, Madison County and Florida***

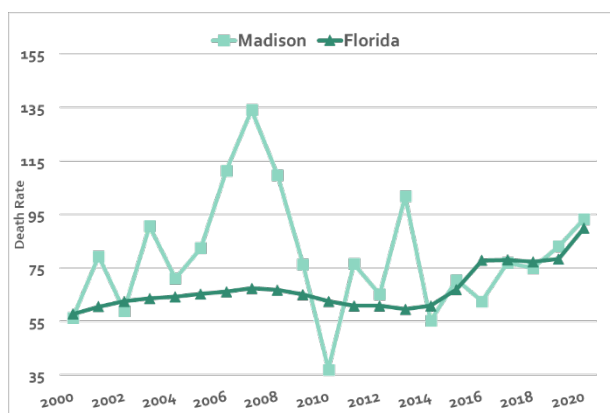
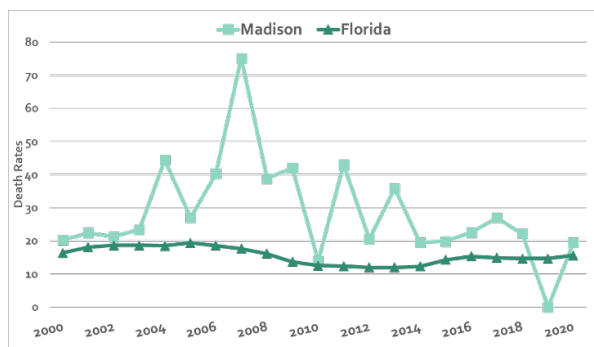


Figure 58 is a trend line for deaths due to all external causes for Madison County and Florida. Madison County's death rates have been close to those of Florida since 2014.

Data for 2016-2020 combined show that 68% of Madison County deaths were male and 32% were female. The majority of deaths during the time period were white, non-Hispanic (63%), followed by black and other, non-Hispanic (35%), and Hispanic (2%).

## Injury

Injuries include motor vehicle crashes, firearm discharge, drowning, falls, unintentional fires, surgical and medical complications, and poisoning.



### Motor Vehicle Crash

**Figure 59. Motor Vehicle Crash Death Rates 2000-2020, Madison County and Florida**

Motor vehicle crash death rates are shown in Figure 59. Of the 119 deaths due to motor vehicles between 2000-2020 in Madison County, 60% were white, non-Hispanic, 36% were black & other, non-Hispanic and 9% were Hispanic. Two thirds of the deaths occurring in the

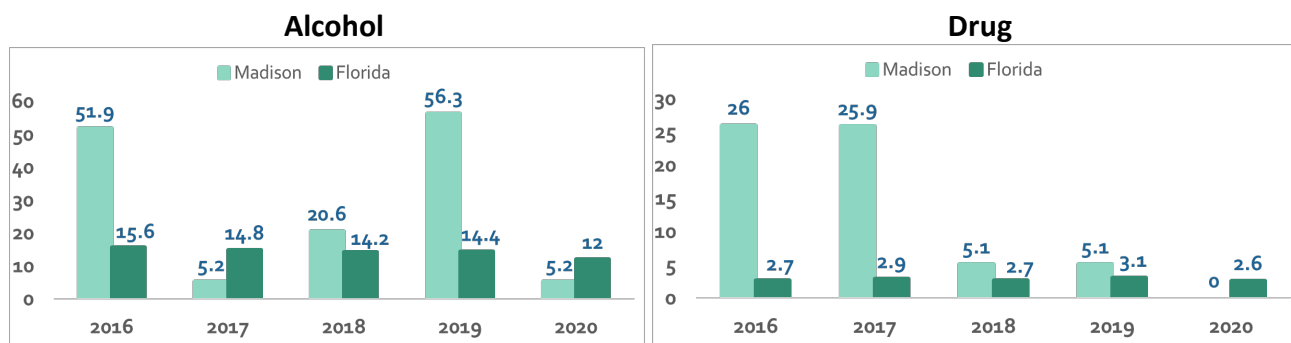
twenty-year period were males and one third were females.

Madison County has had lower death rates due to alcohol-confirmed motor vehicle crashes than the state of Florida. This indicator has only been measured since 2016. There were no alcohol-confirmed fatal crashes in 2020 in Madison County. Data are not available by race, ethnicity, or gender.

Conversely, Madison County has had higher death rates due to drug-confirmed motor vehicle crashes than the state of Florida until 2020. This indicator has also been measured since 2016. There were no drug-confirmed fatal crashes in 2020 in Madison County. Data are not available by race, ethnicity, or gender.

Figure 60 shows alcohol and drug-confirmed motor vehicle crash injury rates for Madison County and Florida. Injury rates fluctuate for small counties like Madison. Because the population is small, low numbers of crashes still produce large rates per 100,000 population. These include any crashes that occur in Madison County, regardless of the driver's residence county or state. Data are not available by race, ethnicity, or gender.

**Figure 60. Alcohol and Drug Confirmed Injury Rates, 2016-2020, Madison County and Florida**



In 2020, the motor vehicle crash rate for ages 15-17 was 57.4 for Madison County and 33.3 for Florida. 2020 crash rates for ages 18-20 were 73.4 for Madison County and 61.5 for Florida. Data are not available by race, ethnicity, or gender.

## Firearm Discharge

**Figure 61. Firearm Discharge Death Rates 2000-2020, Madison County and Florida**

Figure 61 provides trend lines for death rates due to firearms discharge for Madison County and Florida. Madison County had higher death rates than Florida for most of the time frame. There were 59 deaths due to firearms discharge in Madison County from 2000-2020. Of these, 39 or 66% were white, non-Hispanic, 20 or 34% were black and other, non-Hispanic. There were no reported Hispanic deaths during the time frame. Note that five firearm discharge deaths occurred in 2020 alone in Madison County.

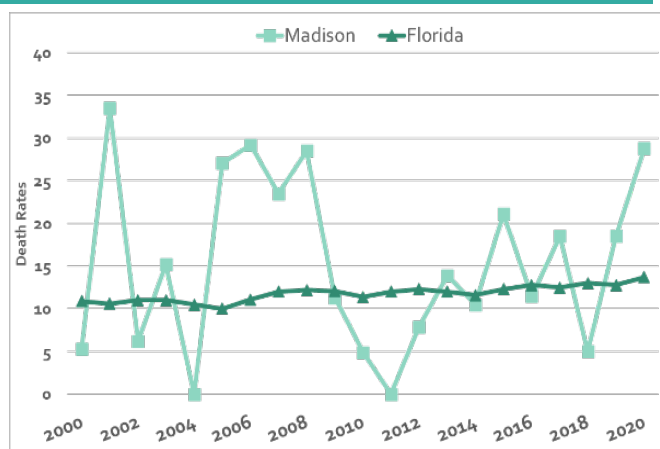


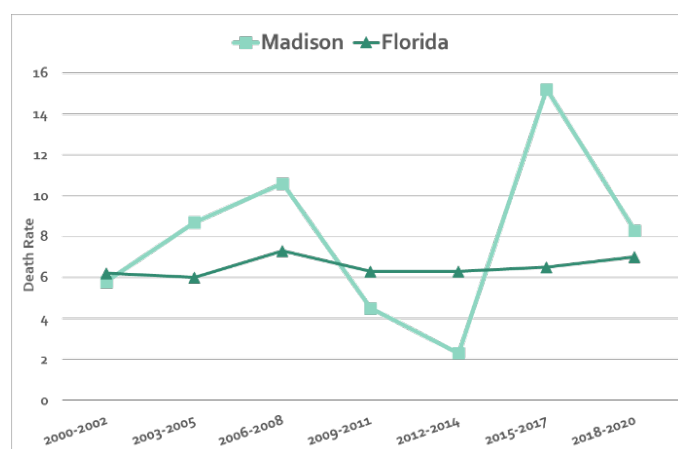
Table 21 provides the number of fatal injuries due to drowning, falls, unintentional fire, surgical and medical complications, and unintentional poisoning for the period 2000-2020.

**Table 21. Demographic Data for Fatal Injury Events, Madison County, 2000-2020**

Injury Type and Total Cases	White	Black & Other	Hispanic	Male	Female
Drowning (N=15)	47%	53%	0%	87%	13%
Falls (N=36)	81%	17%	3%	42%	58%
Unintentional Fire (N=8)	49%	13%	38%	62%	38%
Surgical & Medical Complications (N=11)	82%	18%	0%	36%	64%
Unintentional Poisoning (N=23)	61%	33%	0%	65%	35%

## Violence

Violence includes homicide, aggravated assault, domestic violence, and forcible sex offenses.



## Homicide

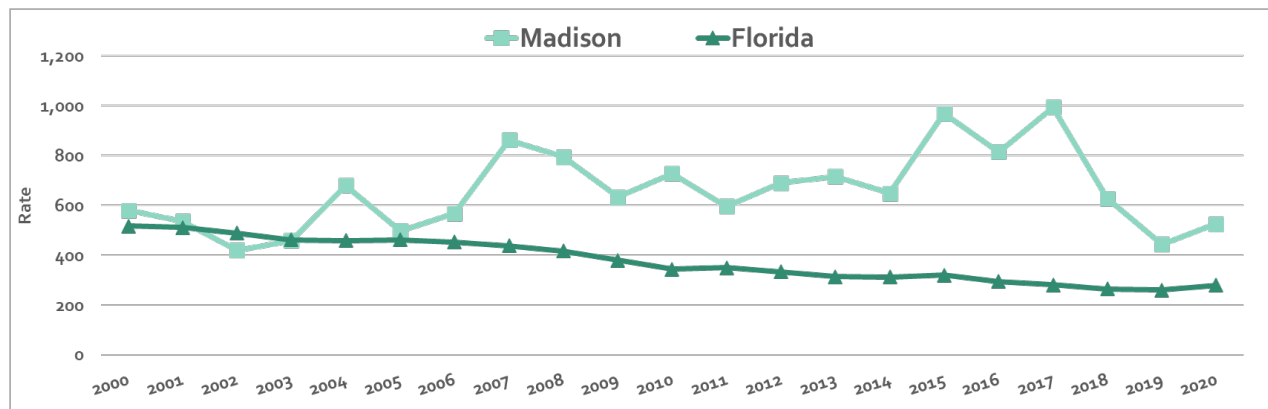
**Figure 62. Homicide Death Rates 2000-2020 3-Year Discrete Rates Madison County & Florida**

Figure 62 shows homicide death rates for Madison County and Florida. The trend lines are presented as three-year discrete data because there are some years with zero values for Madison County. Madison County had 30 homicide deaths between 2000 and 2020. Of these, 26 (87%) were male and four (13%) were female. Ten deaths (33%) were white, non-Hispanic, 19 deaths (63%) were black and other, non-Hispanic and one death (3%) was Hispanic.

## Aggravated Assault

Madison County has had higher rates of aggravated assault compared to Florida. In 2020, the aggravated assault rate for Madison County was 526.2 per 100,000 people, compared to 279.9 for Florida. Data are not available by race/ethnicity or gender.

**Figure 63. Aggravated Assault Rates Per 100,000 Population, 2000-2020, Madison County & Florida**

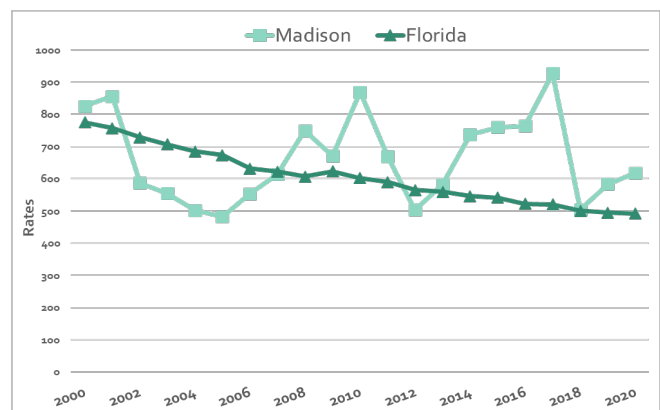


## Domestic Violence

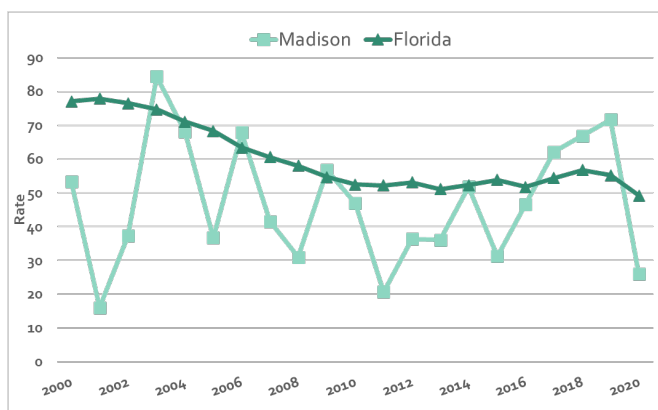
**Figure 64. Domestic Violence Offense Rates 2000-2020, Madison County and Florida**

Madison County has a higher rate of reported domestic violence offenses compared to the state of Florida since 2012. Madison ranked 20<sup>th</sup> out of 67 counties for domestic violence offense rates. Nineteen counties had higher rates than Madison.

In 2020, the domestic violence offense rate for Madison County was 618.1 per 100,000 population, compared to 492.2 for Florida. Data are not available by race/ethnicity or gender.



## Forcible Sex Offenses



Madison County's rate of reported forcible sex offenses dropped below that of Florida in 2020. These rates were 26.0 for Madison County and 49.2 for Florida. There were 180 reported forcible sex offenses in Madison County during 2000-2020. Data are not available by race/ethnicity or gender.

**Figure 65. Forcible Sex Offense Rates, 2000-2020, Madison County and Florida**



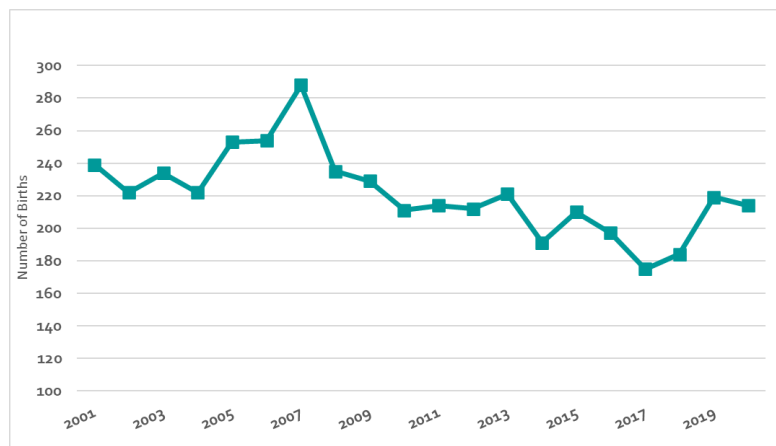
## Significant Findings – Injury and Violence

- External cause events that occur in Madison County are attributed to Madison County regardless of the residence location of the injured person.
- Most deaths due to all external causes were white, non-Hispanic and male.
- Black, non-Hispanics accounted for most drowning deaths and unintentional poisonings.
- Homicide victims were more likely to be Black, non-Hispanic and male.

# Maternal and Child Health

Included in this priority area are birth trends, infant mortality and contributing factors, characteristics of birth mothers, and indicators listed in the 2020 Pregnancy and Young Child Profile for Madison County. Madison County ranked in the fourth quartile for the indicators listed below in 2020.

- Births among unwed teen mothers ages 15-19.
- Women ages 15-34 with bacterial STIs.
- Births to obese mothers.
- Multiple births.
- Critical congenital heart defects.
- Non-fatal intentional poisonings ages 1-5.
- Children under age 5 covered by KidCare.
- Severe maternal morbidity, which is the presence of a complication during a birth hospitalization. This occurred in 10 births for 2020 alone. Seven of the 10 were Black & Other, non-Hispanic.



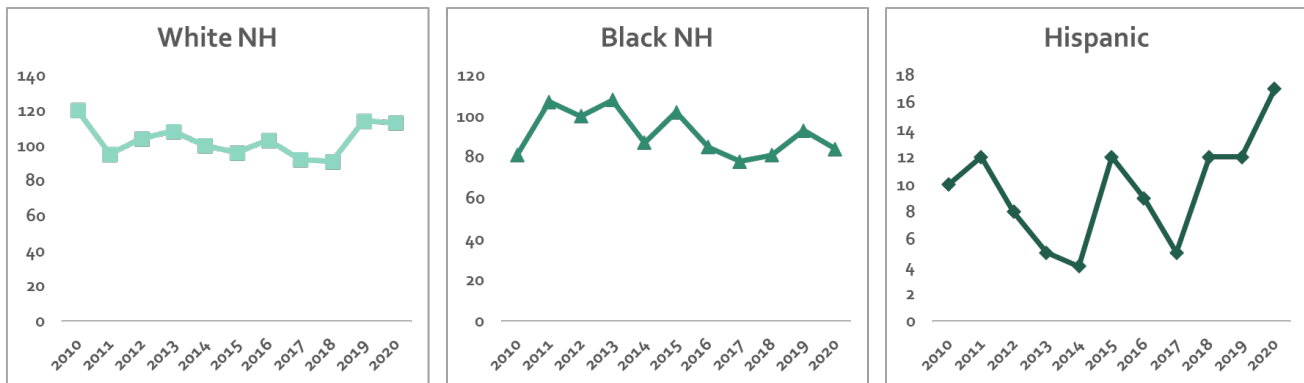
## Birth Trends

**Figure 66. Number of Births by Year, Madison County, 2001-2020**

Figure 66 shows the number of annual births for Madison County from 2001 until 2020. There has been a gradual decrease in the number of births since 2007. The average number of annual births for the time period was 221. Of the 4,424 Madison County births that occurred during 2001-2020, 48% were

White, non-Hispanic, 47% were Black & Other, non-Hispanic and 5% were Hispanic. Birth trend lines by race and ethnicity are shown below in Figure 67.

**Figure 67. Birth Trends by Race and Ethnicity, Madison County, 2010-2020**



## Infant Mortality

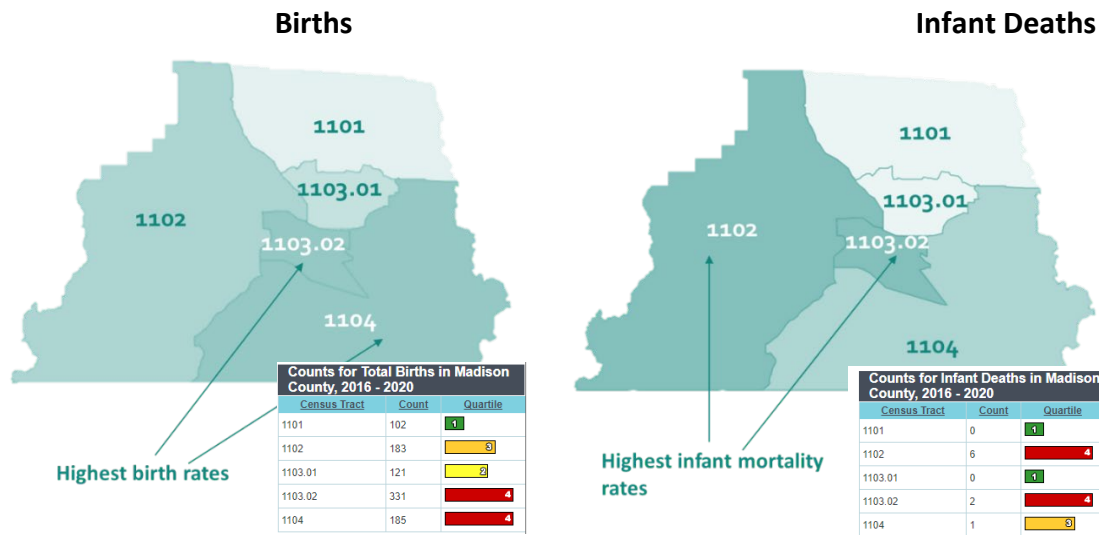
Madison County ranked in the second quartile in 2020 but fell to the fourth quartile for 2021. While infant mortality numbers are small, the rates per 1,000 births are high due to the small population. A total of 23 infant deaths occurred during the time period of 2010-2020. Of these, 18 were Black & Other, non-Hispanic, four were White, non-Hispanic and one was Hispanic. Data show that Black & Other, non-Hispanic births accounted for 45% of total births during 2010-2020 and 78% of the infant deaths during the same time period. Table 22 lists the ten leading causes of infant deaths during 2010-2020, and the percentage of infant deaths. Disorders related to preterm births and low-birth weight ranked in the top two causes of infant mortality.

**Table 22. Causes of Infant Deaths, 2010-2020 Combined, Madison County**

Cause of Death (N=23)	% of Total Deaths
Disorders Related to Short Gestation and Low Birth Weight	17%
Other Non-rankable Causes of Death	17%
Newborn Affected by Maternal Complications of Pregnancy	13%
Neonatal Hemorrhage	13%
Sudden Infant Death Syndrome	13%
Unintentional Injuries	9%
Renal Failure & Other Kidney Disorders	4%
Newborn Affected by Complications of Placenta, Cord, and Membranes	4%
Pulmonary Hemorrhage Originating in the Perinatal Period	4%
Necrotizing Enterocolitis of Newborn	4%

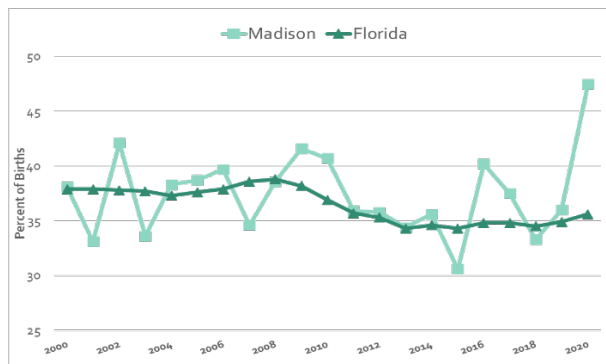
Figure 68 compares census tract information for birth rates and infant mortality rates for the combined time period of 2016-2020. Note that census tract 1102 was not one of the highest two census tracts for birth rates but is one of the highest two census tracts for infant mortality rates. This means that 3% of births in census tract 1102 resulted in an infant death, compared to 1% of births in census tract 1103.02 and 1% in census tract 1104.

**Figure 68. Census Tract Comparison of Births and Infant Deaths, 2016-2020**  
Madison County



## Pregnancy Interval

It is ideal for women to wait at least 18 months between pregnancies in order to allow the body to recover from the pregnancy and birth. Waiting this length of time allows the mother to bond with each baby individually and be less stressed out by multiple children who are close in age. Shorter pregnancy intervals can result in a higher risk of maternal health issues, and negative birth outcomes such as preterm births and low birthweight.



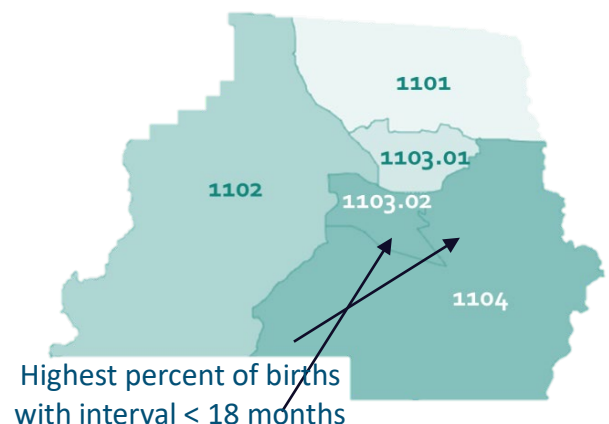
**Figure 72. Percent of Repeat Pregnancies With < 18 Months Interval, 2000-2020**

Figure 72 shows the percentage of repeat births with an interval of less than 18 months for Madison County and Florida. In 2020, the percent for Madison County was 47.5%, compared to 35.6% for Florida. Madison County experienced a large increase in the percent of pregnancies with less than 18-month interval in 2020, possibly due to the COVID-19

epidemic.

**Figure 73. Percent of Births with Inter-Pregnancy Interval < 18 Months, Madison County, 2016-2020**

For the time period of 2016-2020, 227 of the 582 repeat births to Madison County mothers had an interval of less than 18 months. This includes 142 of 251 repeat births (42%) to White, non-Hispanic mothers, 85 of 246 repeat births to Black & Other, non-Hispanic mothers (35%) and 12 of 31 repeat births to Hispanic mothers (39%). Census



tracts 1103.02 and 1104 had the highest percentage of repeat pregnancies with an interval of less than 18 months.

## Characteristics of Birth Mother

This section examines some characteristics of the birth mother that can impact birth outcomes. These include weight, age, and the extent to which the birth mother has a support network. Breastfeeding initiation is also discussed in this section.

### Overweight or Obese

Women who are overweight or obese at the time of pregnancy are more likely to be diagnosed with chronic diseases like diabetes, which in turn, can impact birth outcomes and the health of the baby. Figure 75 provides trend lines for the percent of women overweight and the percent of women obese at the time of pregnancy, for Madison County and Florida. Pregnant women in Madison County were less likely to be overweight but more likely to be obese, when compared to all pregnant women in Florida.

**Figure 75. Percent of Pregnant Women Overweight or Obese at Time of Pregnancy 2010-2020, Madison County and Florida**

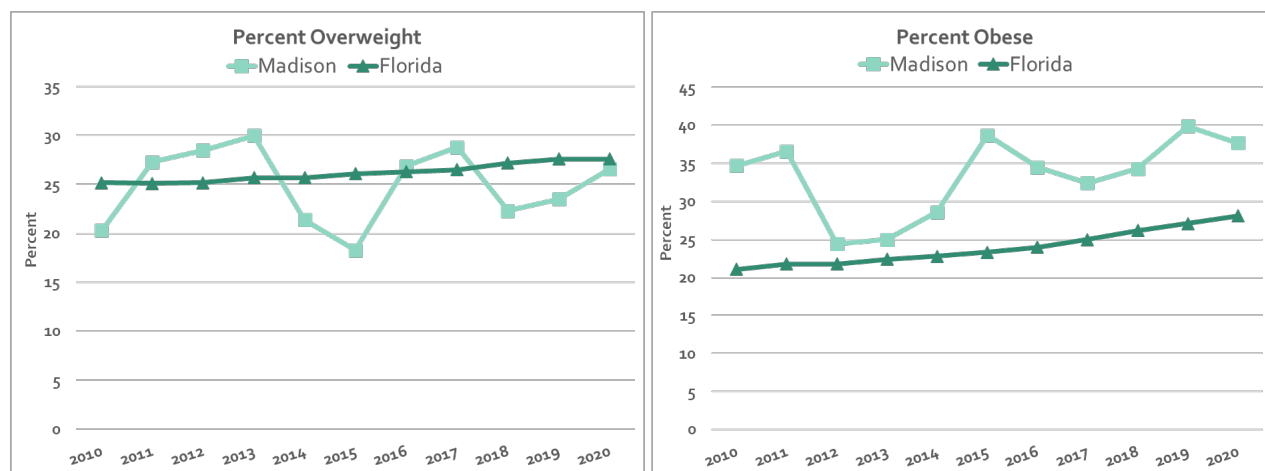


Table 23 provides Madison County overweight and obesity data by race and ethnicity for the combined years of 2010-2020. Hispanic women were more likely to be overweight at the time of pregnancy. Black & Other, non-Hispanic women were more likely to be obese at the time of pregnancy.

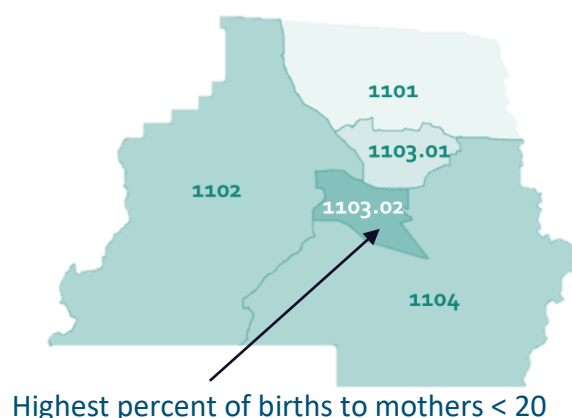
**Table 23. Percent of Pregnant Women Overweight or Obese at Time of Pregnancy By Race and Ethnicity, Madison County, 2010-2020 Combined**

Race/Ethnicity	Percent Overweight	Percent Obese
White, non-Hispanic	26%	29%
Black & Other, non-Hispanic	23%	42%
Hispanic	41%	25%

### Age

Pregnancies among women under age 20 are more likely to result in preterm and low birth-weight births. Adolescents are more likely to have anemia, high blood pressure/preeclampsia during

pregnancy and there is a greater risk of the baby's head being wider than the pelvic opening, known as cephalopelvic disproportion. Teen mothers are more likely to drop out of school, which limits employment opportunities. Table 24 breaks down Madison County annual teen births by year and age group. Table 24 also shows the percentage of total teen births teen births by year. Teen births represented 10% of all births in Madison County in 2010. This percentage decreased to 5% of all births in 2020.



**Table 24. Teen Births by Year, Madison County, 2010-2020**

Year	Number Births to Ages < 14	Number Births to Ages 15-17	Number Births to Ages 18-19	Total Births to Ages < 20	% of Total Births That Were to Ages < 20
2010	0	6	15	21	10%
2011	0	5	15	20	9%
2012	0	10	18	28	13%
2013	2	1	16	19	9%
2014	0	1	9	10	5%
2015	1	5	10	16	8%
2016	0	2	15	17	9%
2017	0	3	8	11	6%
2018	0	3	8	11	6%
2019	0	3	4	7	3%
2020	0	1	9	10	5%

There were 56 births to mothers ages less than 20 in Madison County for the time period 2016-2020 combined. Of these, 46% were to White, non-Hispanic mothers, 52% were to Black & Other, non-Hispanic mothers and 2% were to Hispanic mothers. Figure 76 shows births to mothers ages less than 20 by census tract for the period 2016-2020. Pregnancies among women ages 35 and older are also more likely to result in complications. There is a higher risk of birth defects and chromosomal conditions such as Down syndrome. Fertility treatments make multiple pregnancies more likely, and these present a higher risk. Miscarriages are also more likely among women ages 35 and older. Table 25 provides the number of births to mothers ages 35 and older for Madison County during 2010-2020, along with the percentage of all births that occurred to mothers ages 35 and older. The percentage of births to mothers ages 35+ is increasing over time.

**Table 25. Births to Mothers Ages 35+, Madison County, 2010-2020**

Year	Total Births to Ages 35+	Total Births Madison County	% of Total Births That Were to Ages 35+
2010	18	211	9%
2011	19	214	9%
2012	23	212	11%
2013	19	221	9%
2014	21	191	11%
2015	21	210	10%
2016	14	197	7%
2017	17	175	10%
2018	19	184	10%
2019	27	219	12%
2020	34	214	16%

There were 111 births to mothers ages 35+ in Madison County for the time period 2016-2020 combined. Of these, 63% were to White, non-Hispanic mothers, 32% were to Black & Other, non-Hispanic mothers and 5% were to Hispanic mothers. These data are not available by census tract.

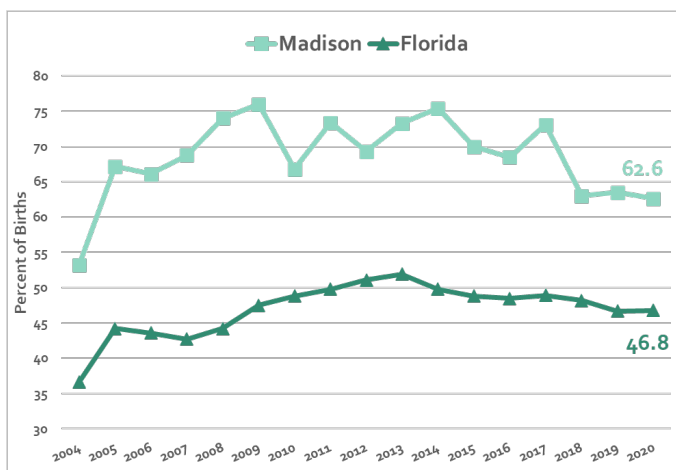
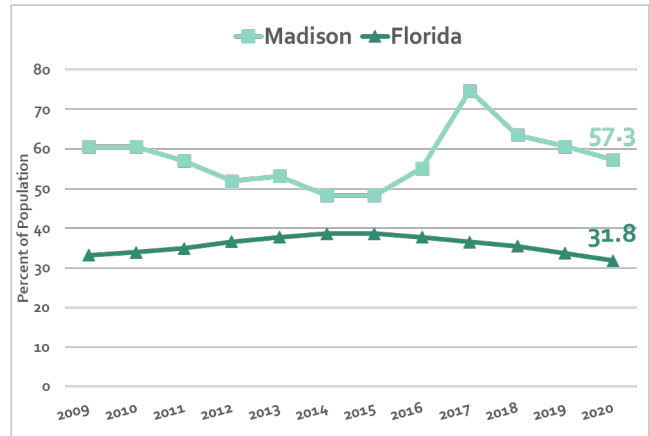
### **Support Network**

Pregnant women who do not have a support network, meaning a financially contributing partner or family member or friend, have a higher risk of pregnancy and birth complications. This is mainly due to stress associated with economic stability and all of the socioeconomic barriers to health. In the past, this has been measured through the two indicators of births to unwed mothers, and births with fathers acknowledged on the birth certificate. These indicators are no longer an accurate predictor because of the trend to have relationships and families without the arrangement of marriage.

The most reliable data available is poverty data. As previously stated in the Socioeconomic Barriers to Health Section, poverty is a significant issue for Madison County, and this is especially true where females are the head of the household and the primary means of financial support for children. Figure 77 depicts trend lines for percent of female head of households with children ages 0-17 living below poverty level for Madison County and Florida. More than 50% of female head of households with children 0-17 were living below poverty level in Madison County, except for the years 2014 and 2015. Almost 60% were living below poverty level in 2020 in Madison County.

**Figure 77. Percent of Female Head of Households with Children 0-17 Living Below Poverty Level 2009-2020, Madison County and Florida**

Another possible indicator is the percentage of births covered by Medicaid. Many women unemployed or underemployed do not have access to private health insurance. Figure 78 provides a trend line for the percent of births covered by Medicaid for Madison County and Florida. The percentage of births covered by Medicaid for Madison County has been significantly higher than that of Florida. In 2020, 62.6% of Madison County births were covered by Medicaid, compared to 46.8% for Florida.



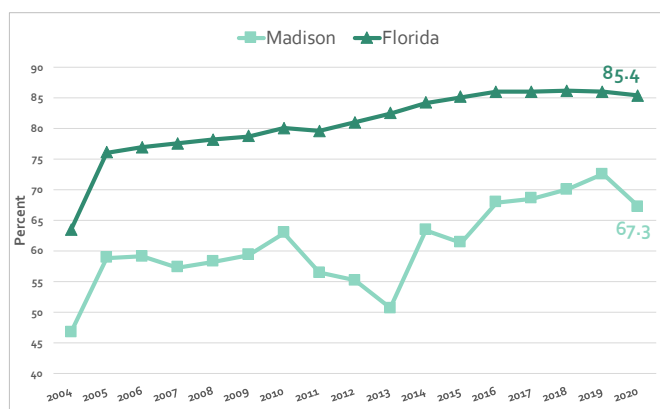
**Figure 78. Percent of Births Covered by Medicaid, 2004-2020, Madison County and Florida**

Data for years 2016-2020 combined by race and ethnicity show that 55% of births to White, non-Hispanic mothers were covered by Medicaid, followed by 81% of births to Black & Other, non-Hispanic mothers and 49% of births to Hispanic mothers.

### Breastfeeding Initiation

Breastfeeding has benefits for nursing mothers and their infants. According to the American Academy of Pediatrics, breastfeeding can reduce the risk of sudden infant death syndrome (SIDS), and help protect the baby from infectious diseases, obesity, diabetes, leukemia, and tooth decay. Some studies have linked higher IQ scores to breastfeeding. Nursing mothers' benefit by helping to form a bond with their infants, as well as help the mother's body to recover from pregnancy and childbirth.

**Figure 79. Breastfeeding Initiation Rates, 2004-2020 Madison County and Florida**



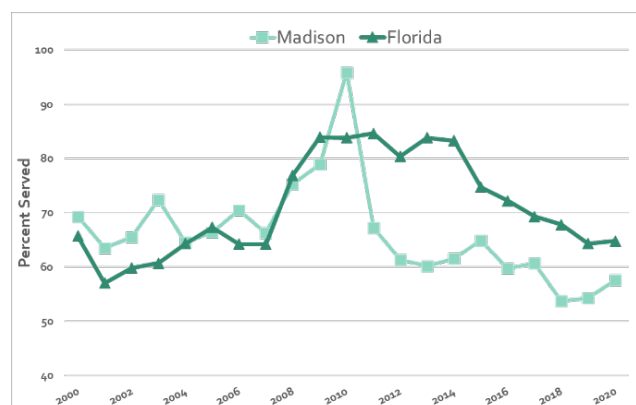
Madison County mothers have been less likely to breastfeed, compared to Florida. Figure 79 shows that breastfeeding initiation rates for Madison County have been significantly below those of Florida since 2004.

It should be noted that there have been discrepancies in the breastfeeding initiation data collection across county health department programs and the Bureau of Vital Statistics. In an effort to promote data integrity, the local Healthy



Start Coalition of Jefferson, Madison and Taylor Counties has worked with local hospitals to educate staff on data collection. Data for the five-year time period of 2016-2020 indicates an overall initiation rate of 69%. This includes 81% of White, non-Hispanic mothers, 54% of Black & Other, non-Hispanic mothers and 87% of Hispanic mothers who initiated breastfeeding.

## Women, Infants and Children (WIC) Services



**Figure 80. Percent of Population Eligible for WIC Services and Received Services 2000-2020, Madison County and Florida**

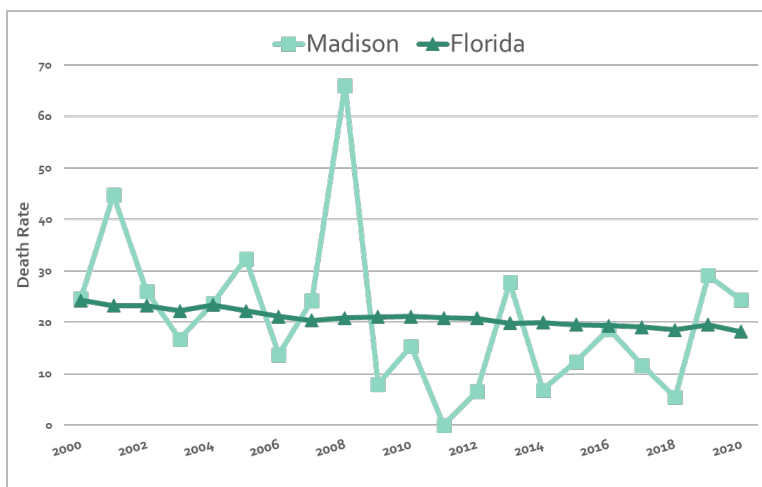
The percent of women, infants and children who are eligible for services and were served by the WIC program has been significantly lower than the state since 2010. The percentage of eligible women and children served in 2020 was 57.6% in Madison County and 64.8% in Florida. Preliminary data for 2021 show that Madison's percent served in 2021 was 69.1%, compared to 63.0% for Florida.

The increase for Madison County may be because telehealth and other remote services were used due to the COVID-19 pandemic. It should be noted that WIC client breastfeeding initiation services dropped significantly during the same time period. The percentage of WIC infants ever breastfed was 78.2% for Madison County in 2020 and 66.1% in 2021. This is likely due to the fact that breastfeeding education usually takes place in-person.

## Breast, Cervical and Ovarian Cancer Among Females

**Figure 81. Breast Cancer Death Rates, 2000-2020 Madison County and Florida**

Figure 81 shows breast cancer death rates among females in Madison County and in Florida. Madison County experienced an increase in breast cancer deaths in 2019, and a slight decrease in 2020. Madison County's rates exceeded those of Florida during those two years.



There were 15 breast cancer deaths in Madison County in 2016-2020. Twelve, or 80%, were White, non-Hispanic. Three deaths, or 20%, were Black & Other, non-Hispanic. Note there were no deaths due to breast cervical or ovarian cancer among Hispanic females in Madison County during 2000-2020.

There have been 20 ovarian cancer deaths among Madison County female residents during 2000-2020. Thirteen, or 65% were White, non-Hispanic and seven, or 35% were Black & Other, non-Hispanic.

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There have been five cervical cancer deaths among Madison County female residents during 2000-2020. Four of the five were White, non-Hispanic and one of the five was Black & Other, non-Hispanic.

### **Significant Findings Maternal and Child Health**

This section details some of the significant findings for maternal and child health. These are listed below by category.

#### ***Infant Mortality***

- 78% of infant deaths during 2010-2020 were among Black & Other, non-Hispanics.
- Most infant deaths-2016-2020 occurred to mothers who resided in census tracts 1102 and 1103.02.

#### ***Factors Contributing to Infant Mortality***

- Most preterm births and low birth-weight births occurred to Black & Other, non-Hispanic mothers.
- Repeat births with pregnancy intervals of < 18 months occurred in all racial and ethnic groups.
- Hispanic women were more likely to be overweight at the time of pregnancy. Black & Other, non-Hispanic women were more likely to be obese at the time of pregnancy.
- Teen births dropped from 10% of all births in 2010 to 5% of all births in 2020.
- Births to mothers ages 35+ increased to 16% in 2020.
- Data for years 2016-2020 combined by race and ethnicity show that 55% of births to White, non-Hispanic mothers were covered by Medicaid, followed by 81% of births to Black & Other, non-Hispanic mothers and 49% of births to Hispanic mothers.

#### ***Breastfeeding***

- Breastfeeding initiation rates for Madison County fell to 67.3 compared to 85.4 for Florida.
- Black & Other, non-Hispanic women were less likely to breastfeed compared to Hispanic mothers and White, non-Hispanic mothers.

#### ***Other Factors***

- The percentage of WIC eligible persons served in 2020 in Madison County was 57.6%.
- The percentage of WIC infants ever breastfed was 78.2% for Madison County in 2020 and 66.1% in 2021. This is likely because breastfeeding education usually takes place in person.

## **Reportable Diseases**

The following analysis details cases of reportable diseases by category. These include Sexually Transmitted Infections (STIs) including HIV/AIDS, COVID-19, Influenza and Pneumonia, and Tuberculosis. Other reportable diseases will be listed by the categories Central Nervous System Diseases and Bacteremias, Enteric, Food and Waterborne Diseases, Vaccine Preventable Diseases, Vector-borne and Zoonotic Diseases, and Non-categorized Reportable Diseases.

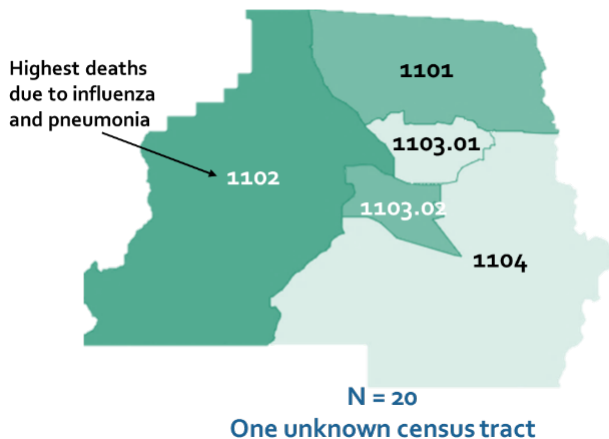
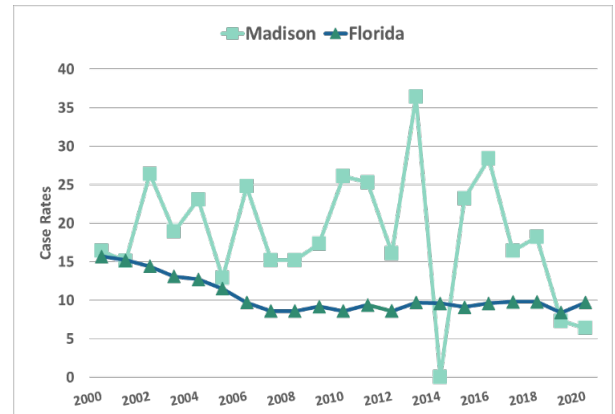
## COVID-19

There were 34 deaths due to COVID-19 in Madison County in 2020, the first year of the pandemic. Of these, 50% were White, non-Hispanic, 47% were Black & Other, non-Hispanic and 3% were Hispanic. Deaths were equal among male and female residents, at 17 respectively.

## Influenza and Pneumonia

**Figure 82. Influenza and Pneumonia Death Rates 2000-2020, Madison County and Florida**

Madison County has typically had higher death rates due to influenza and pneumonia than the state. However, rates dropped below the state in 2019. Madison County was in the first quartile for influenza and pneumonia death rates in 2020. Of the 51 deaths among Madison County residents during 2010-2020, 75% were White, non-Hispanic, 25% were Black & Other, non-Hispanic and 0% were Hispanic. Males accounted for 39% of the deaths and females accounted for 61%.



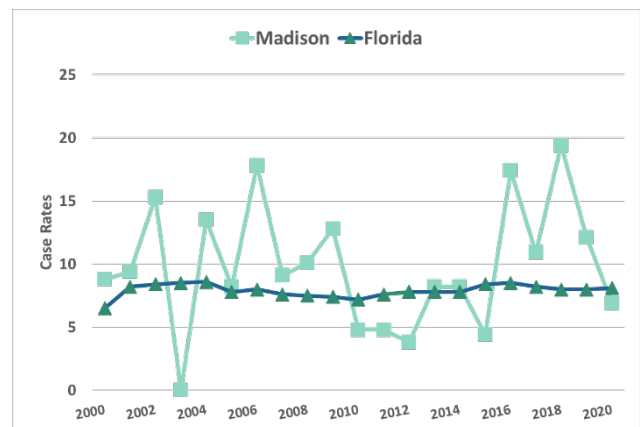
Census tract data for Madison County during 2016-2020 show that most deaths occurred in tract 1102 at 25%, followed by tracts 1101 and 1103.02 at 20% each, and tracts 1103.01 and 1104 at 15% each. Unknown census tract accounted for the remaining 5%.

**Figure 83. Influenza and Pneumonia Deaths by Census Tract, 2016-2020, Madison County**

## Septicemia

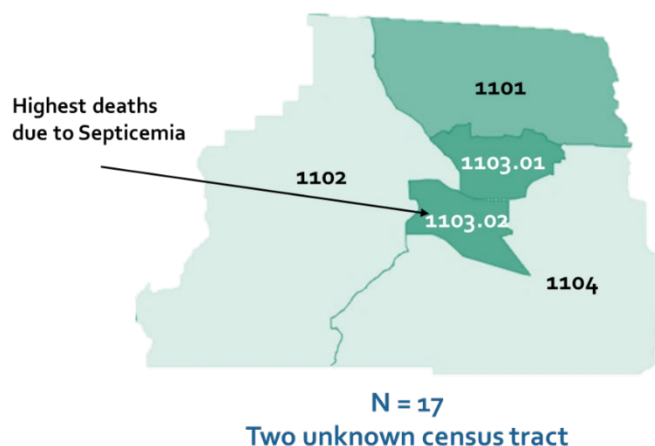
Septicemia is an infection which can be life-threatening by damaging tissues and organs in the body. Children and elderly people are more at-risk for septicemia, along with persons who have weakened immune systems. Madison County ranked in the second quartile for septicemia deaths in 2020.

**Figure 84. Septicemia Death Rates 2000-2020, Madison County and Florida**



Of the 25 deaths that occurred during 2010-2020 among Madison County residents, 48% were White, non-Hispanic, 52% were Black & Other, non-Hispanic and 0% were Hispanic. Forty percent (40%) of the deaths were male and 60% were female.

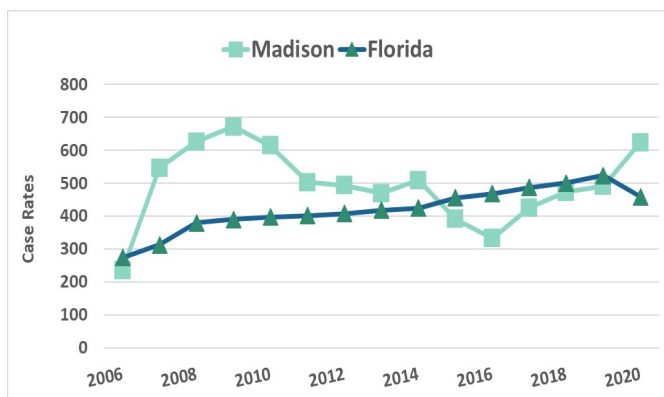
Census tract data for Madison County during 2016-2020 show that most septicemia deaths occurred in tract 1103.02 at 47%, followed by tract 1103.01 at 18%, tract 1101 at 12%, and tracts 1102 and 1104 at 6% each. Unknown census tract accounted for the remaining 12%.



**Figure 85. Septicemia Deaths by Census Tract, 2016-2020, Madison County**

## Sexually Transmitted Infections

HIV/AIDS and Viral Hepatitis are included in this section although they can be acquired through multiple transmission routes.



## Chlamydia

**Figure 86. Chlamydia Case Rates 2006-2020, Madison County and Florida**

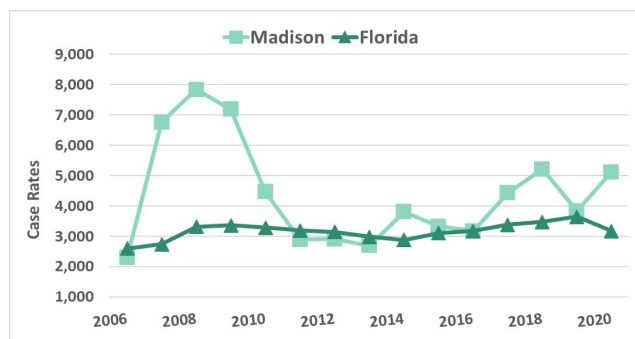
Madison County ranked in the fourth quartile for reported chlamydia cases in 2020. Madison County had the tenth highest rate per 100,000 population at 623.2, compared to 458.5 for Florida. The 2020 rate per 100,000 population for White, non-Hispanic residents in Madison County was 66.5, compared to 624.7 for Black & Other non-Hispanic residents and 92.5 for Hispanic residents.

non-Hispanic residents and 92.5 for Hispanic residents.

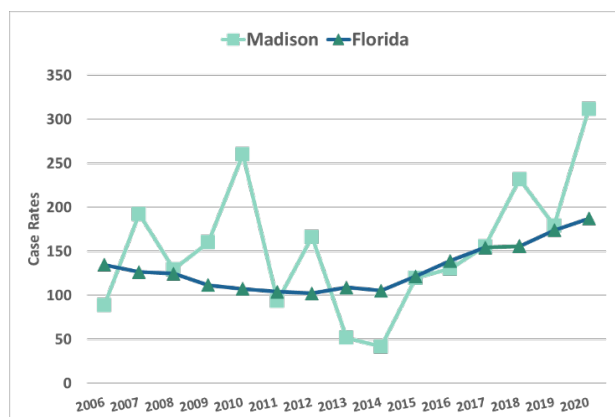
The highest percent of reported chlamydia cases for Madison County during 2010-2020 were among Black & Other, non-Hispanic residents at 80%, followed by White, non-Hispanic residents at 17% and Hispanic residents at 3%.

**Figure 87. Chlamydia Case Rates-Females Ages 15-19 2006-2020, Madison County and Florida**

Untreated bacterial STDs like chlamydia can result in long-term fertility issues in females. Figure 87 shows that case rates among females ages 15-19 in Madison County increased in 2020. Data are consistent with the overall chlamydia case rates for Madison County as this is a subset of the total. The 2020 case rate for Madison County was 5,116.3, compared to 3,169.0 for Florida.



There were 228 cases of chlamydia reported among females ages 15-19 for Madison County during 2010-2020. Of these, there were 117 chlamydia cases reported with a known race and ethnicity. The racial and ethnic breakdown for the 117 cases shows that 75% were Black & Other, non-Hispanic, 20% were White, non-Hispanic and 5% were Hispanic.



## Gonorrhea

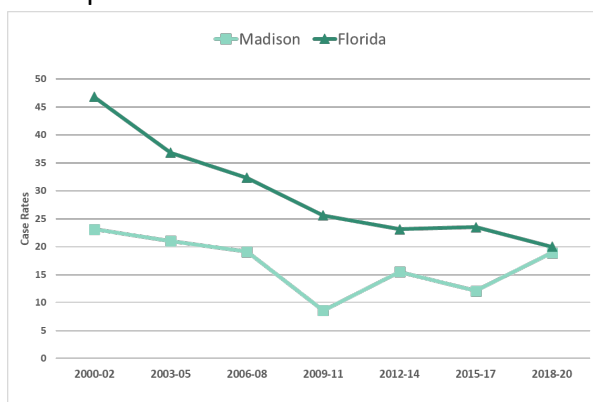
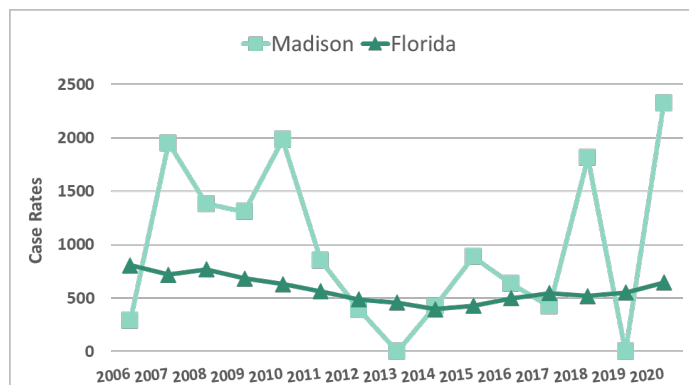
**Figure 88. Gonorrhea Case Rates  
2006-2020, Madison County and Florida**

Gonorrhea cases and case rates increased in 2020 in Madison County. Madison County ranked in the fourth quartile in 2020 for gonorrhea case rates. Madison County had the seventh highest rate per 100,000 population at 311.6, compared to 187.1 for Florida. The 2020 rate per 100,000 population for White, non-Hispanic residents in Madison County

was 66.5, compared to 127.4 for Black & Other non-Hispanic residents and 0.0 for Hispanic residents. The highest percent of reported gonorrhea cases for Madison County during 2010-2020 were among Black & Other, non-Hispanic residents at 82%, followed by White, non-Hispanic residents at 16% and Hispanic residents at 2%.

**Figure 89. Gonorrhea Case Rates-Females  
Ages 15-19 2006-2020, Madison County & Florida**

Figure 89 shows that gonorrhea case rates among females ages 15-19 in Madison County increased in 2020. Data are consistent with the overall gonorrhea case rates for Madison County as this is a subset of the total. The 2020 case rate for Madison County was 2,625.6, compared to 645.8 for Florida. All of the reported gonorrhea cases among Madison County females ages 15-19 in 2020 were Black & Other, non-Hispanic.



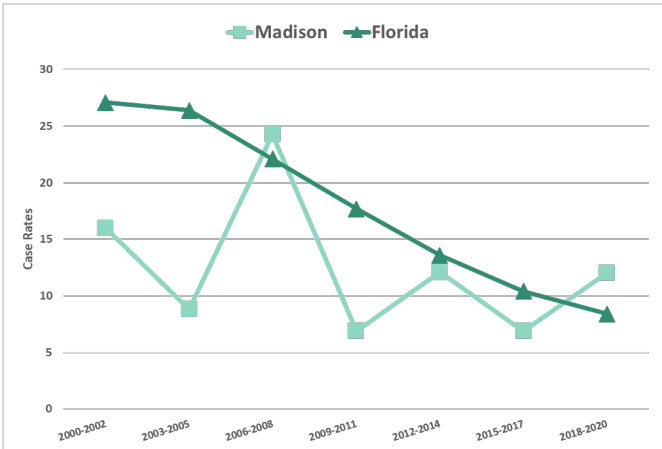
**Figure 90. HIV Infection Case Rates  
3-Year Discrete Rates  
2000/2002 - 2018/2020, Madison County and Florida**

There were 48 cases of gonorrhea reported among females ages 15-19 for Madison County during 2010-2020. Of these, there were 28 gonorrhea cases reported with a known race and ethnicity. The racial and ethnic breakdown for the 30 cases shows that 79% were Black & Other, non-Hispanic, 21% were White, non-Hispanic and 0% were Hispanic.

## HIV/AIDS

Figure 90 shows three-year discrete case rates for HIV infection for Madison County and Florida. Three-year discrete rates were chosen as there are several years that Madison County had no HIV cases reported. Madison County had an increase in HIV case rates during the 2018-2020 time period, although the rate is still less than Florida.

Of the 30 HIV cases reported during 2010-2020 in Madison County, 86% were Black & Other, non-Hispanic, 7% were White, non-Hispanic, and 7% were Hispanic. Males accounted for 63% of these cases and females accounted for 37%.



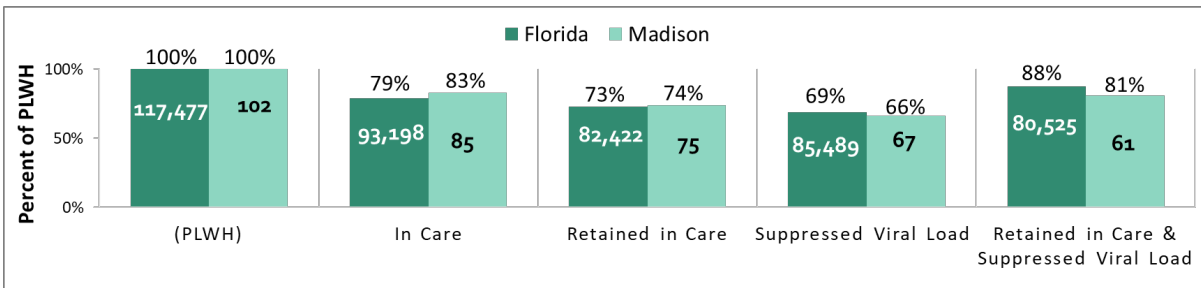
**Figure 91. AIDS Case Rates**  
3-Year Discrete Rates 2000/2002 - 2018/2020, Madison County and Florida

AIDS case rates are also expressed as three-year discrete case rates for Madison County and Florida. An AIDS case is reported when a person with HIV has a laboratory test CD4 count less than 200 cells/mm<sup>3</sup> or is diagnosed with an opportunistic infection. Cases are reported in the year in which the criteria are met. This may or may not be in the same year as a person's HIV diagnosis.

Madison County experienced an increase in the AIDS case rate during 2018-2020 and exceeded that of Florida. Of the 20 AIDS cases reported during 2010-2020 in Madison County, 85% were among Black & Other residents, 10% were among White, non-Hispanic residents and 5% were among Hispanic residents. Figure 92 below shows the percentage of Madison County and Florida residents living with HIV as well as whether they are receiving medical care and whether they have a suppressed viral load.

**Figure 92. Persons Living with HIV Along the HIV Care Continuum, 2020, Madison County and Florida**

- Persons with HIV (PWH) is defined as the number of persons living with an HIV diagnosis in this area at the end of each respective calendar year, data as of 6/30/2021.
- In Care: PWH with at least one documented VL or CD<sub>4</sub> lab, medical visit, or prescription from 1/1/2020 through 3/31/2021, data as of 6/30/2021. Out of Care: PWH with no documented VL or CD<sub>4</sub> lab, medical visit, or prescription from 1/1/2020 through 3/31/2021, data as of 6/30/2021.
- Retained in Care: PWH with two or more documented VL or CD<sub>4</sub> labs, medical visits, or prescriptions at least three months apart from 1/1/2020 through 6/30/2021, data as of 6/30/2021.
- In Care with Suppressed Viral Load: PWH with at least one documented VL or CD<sub>4</sub> lab, medical visit, or prescription from 1/1/2020 through 3/31/2021 that also has a suppressed VL (<200 copies/mL) on the last VL from 1/1/2020 through 3/31/2021, data as of 6/30/2021.





## ***Syphilis***

Syphilis infections are increasing in Florida. It should be noted that the number of reported syphilis cases for Madison County does not support trend data at this time, although cases are increasing slightly.

There was one infectious syphilis case diagnosed in Madison County in 2020. There have been six cases since 2013. There have been 16 early syphilis cases diagnosed in Madison County from 2006 to 2020. There have been no congenital syphilis cases diagnosed in Madison County during 2006-2020. Three cases were White, non-Hispanic males, nine were Black & Other non-Hispanic males, two were Black & Other non-Hispanic females, one case Hispanic male and one case unknown.

## ***Viral Hepatitis***

Viral hepatitis has several strains. For this analysis, Hepatitis A, B and C are included. There have been no cases of Hepatitis D, E or G reported in Madison County since data collection in 2006. Data for Hepatitis A, B and C are not available by race, ethnicity, or gender.

- People are infected with Hepatitis A from contaminated food or water, or close contact with a person or object that is contaminated. There is a vaccine available to prevent Hepatitis A. There were four cases of Hepatitis A diagnosed in Madison County during 2000-2020. The most recent case was diagnosed in 2019.
- Hepatitis B is transmitted through body fluids from an infected person. This can occur through sexual contact, sharing needles or paraphernalia or from a mother to baby during birth. There is a vaccine to prevent Hepatitis B. During 2000-2020, Madison County had seven acute Hepatitis B cases, including one case in 2020. There were 28 cases of chronic Hepatitis B reported during the time frame, including four cases in 2020.
- Hepatitis C is transmitted via contact with infected blood, most often by sharing needles or injection drug supplies. A lot of people are unaware that they are infected with Hepatitis C because they have no symptoms. There is no vaccine for Hepatitis C. During 2000-2020, there was one acute Hepatitis C case reported for Madison and reported in 2020. There have been 242 chronic Hepatitis C cases reported during the time frame, including 12 cases reported in 2020.

## ***Tuberculosis***

There were 13 Tuberculosis cases diagnosed in Madison County during the twenty-year period of 2000-2020. There have been no cases diagnosed since 2018. There were no cases of Tuberculosis diagnosed in children under age 15 during the period. Data are not available by race, ethnicity, or gender. There was one death due to Tuberculosis in 2000.

## ***Vaccine Preventable Diseases***

These are diseases that have available vaccines to prevent acquiring the disease.

***Table 28. Cases of Vaccine Preventable Diseases, 2001-2020, Madison County***

<b>Disease or Condition</b>	<b>Cases</b>
Meningococcal Disease	1
Pertussis	2
Varicella (Chickenpox)	3



## Vector-borne and Zoonotic Diseases

Vector-borne diseases are transmitted to people and animals through mosquitoes, ticks and fleas.

Zoonotic diseases are animal diseases which are transmissible to people. There was a total of four (4) cases of Ehrlichiosis in Madison County between 2001 and 2020.

## Significant Findings Reportable Diseases

This section details some of the significant findings for reportable diseases. These are listed below by category.

### COVID-19

- COVID-19 deaths impacted all race/ethnicities and all genders equally. 50% were White, non-Hispanic, 47% were Black & Other, non-Hispanic and 3% were Hispanic. Deaths were equal among male and female residents, at 17 respectively.

### Septicemia

- Septicemia deaths were almost evenly distributed among White, non-Hispanics (48%) and Black & Other, non-Hispanics (52%). Forty percent (40%) of the deaths were male and 60% were female.

### Sexually Transmitted Diseases

- Black & Other, non-Hispanic residents of Madison County were disproportionately impacted by all bacterial STDs and HIV/AIDS.
- Chlamydia cases increased in 2020 among females ages 15-19.
- Gonorrhea cases increased significantly in 2020 among females ages 15-19.
- HIV and AIDS case rates increased during 2018-2020. The HIV case rate was below the state of Florida but is now almost equal to that of Florida.
- Madison County had a higher percentage of persons with HIV/AIDS in care and retained in care but lower percentages of suppressed viral loads than the state. Possible reasons for this include medication adherence issues, medication access issues or changes to medication regimen.

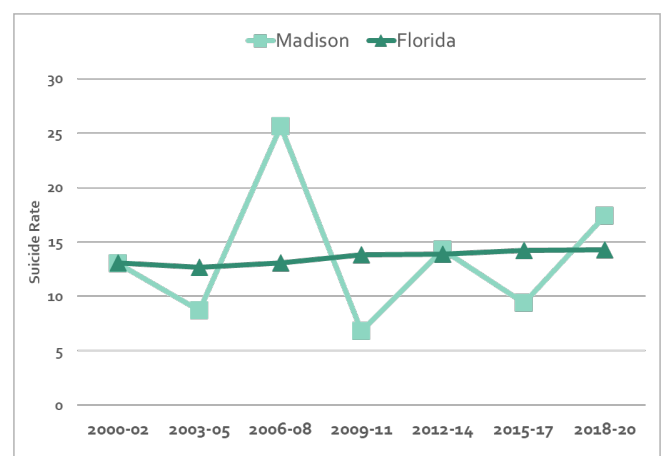
# Social and Behavioral Health

This section includes mental health indicators and substance use disorder indicators.

## Suicide

**Figure 93. Suicide Death Rates, 2000-2020, 3-Year Discrete Rates, Madison County and Florida**

Three-year discrete rates were chosen for this indicator to reduce annual fluctuation in rates and to better show trends for Madison County. Madison County experienced an increase in the suicide death rates for the period 2018-2020. The Madison County rate was



17.1 per 100,000 population compared to 14.3 for the state of Florida. Madison County ranked in the second quartile for suicide death rates in 2020.

There were 26 suicide deaths in Madison County during 2010-2020, including three in 2020. Data by race and ethnicity show that 88% of the suicide deaths were among White, non-Hispanics, 8% were among Black & Other, non-Hispanics and 4% were among Hispanics. Data by gender show that 69% of the suicide deaths during the time frame were male and 31% female. Table 31 shows 2010-2020 suicide death data for Madison County by age group with 25-34 accounting for the highest percentage; however, all age groups had at least one suicide death over the ten years except for ages < 18.

**Table 31. Suicide Deaths by Age Group, Madison County, 2010-2020**

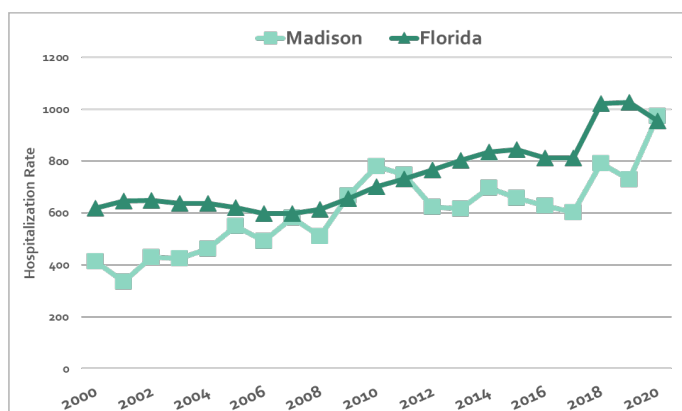
Age Group	Suicide Deaths
< 18	0 (0%)
18-24	4 (15%)
25-34	7 (27%)
35-44	2 (8%)
45-54	5 (19%)
55-64	5 (19%)
65-74	1 (4%)
75+	2 (8%)

**Table 32. Suicide Deaths by Method, Madison County, 2010-2020 Combined**

Method	Suicide Deaths
Firearms Discharge	16 (62%)
Drug Poisoning	1 (4%)
Other/Unspecified Means	9 (34%)

Table 32 lists the number of Madison County suicide deaths by method for the years 2010-2020 combined. Most suicides occurred using firearms, followed by Other or Unspecified Means and Drug Poisoning. Note that there were 39 non-fatal self-harm injuries reported during 2019-2020. Of these, nine were hospitalized and 30 were emergency room visits.

## Behavioral Disorders



**Figure 94. Hospitalization Rates for Mental Disorders 2000-2020, Madison County & Florida**

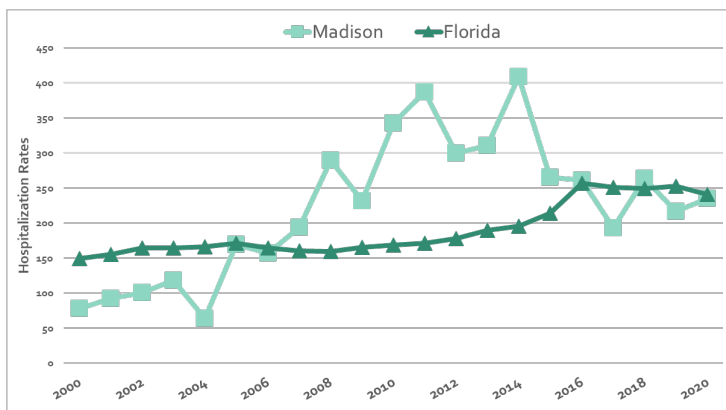
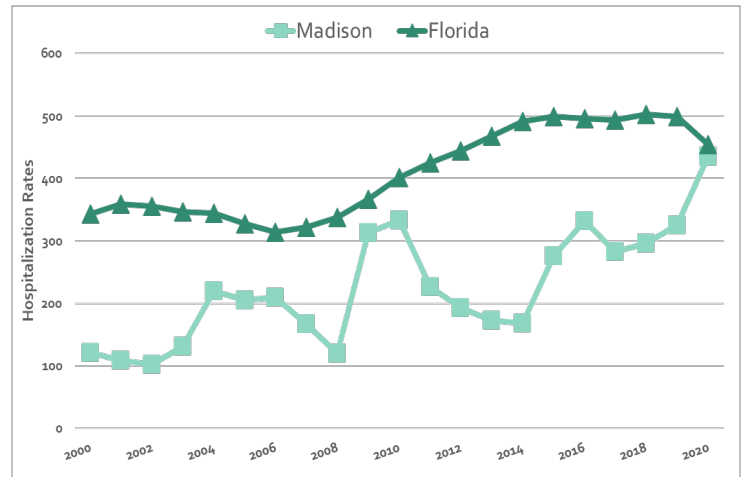
Madison County's mental disorder hospitalization rate per 100,000 population increased in 2020 and exceeded that of Florida. The annual rates do not take into account any resident who was hospitalized in Georgia.

Of the 1,619 hospitalizations among Madison County residents during 2010-2020, 48% were White, non-Hispanic, 51% were Black & Other, non-Hispanic and 1% were Hispanic.

**Figure 95 Hospitalization Rates for Mood & Depressive Disorders, 2000-2020  
Madison County and Florida**

Hospitalization rates due to Mood and Depressive disorders are a subset of Figure 94 above, and the trend lines are similar. Madison County's hospitalization rate increased in 2020 to 435.6, slightly below that of Florida at 454.

Of the 554 hospitalizations for mood and depressive disorders among Madison County residents during 2010-2020, 64% were White, non-Hispanic, 36% were Black & Other, non-Hispanic and 0% were Hispanic.



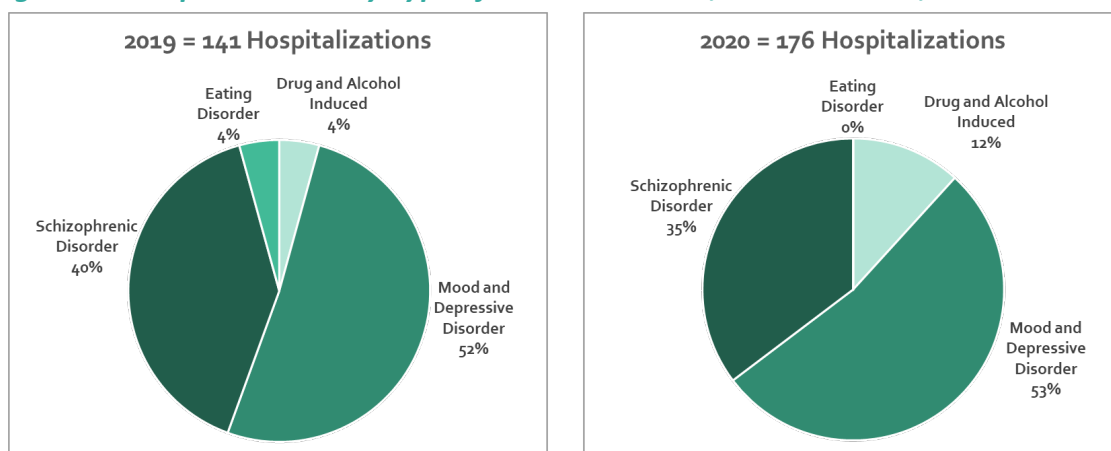
**Figure 96 Hospitalization Rates for Schizophrenic Disorders 2000-2020, Madison County and Florida**

Hospitalization rates for schizophrenic disorders are also a subset of Figure 94; however, the trend line is slightly different. For most of the period, Madison County's hospitalization rates for schizophrenic disorders were higher than the state. The 2020 rates were 234.7 per 100,000

population for Madison County and 240.7 for Florida. Of the 654 hospitalizations for schizophrenic disorders among Madison County residents during 2010-2020, 30% were White, non-Hispanic, 70% were Black & Other, non-Hispanic and 0% were Hispanic.

Figure 97 shows total mental disorder hospitalizations for Madison County for the years 2019 and 2020 by type of mental disorder. Mood and depressive disorders represented the majority of hospitalizations for both years. Note that hospitalizations for eating disorders accounted for 4% of hospitalizations in 2019 and 0% in 2020.

**Figure 97. Hospitalizations by Type of Mental Disorder, 2019 and 2020, Madison County**



There were an estimated 612 seriously mentally ill adults residing in Madison County in 2020. This is defined as having a diagnosed mental disorder that results in serious functional impairment that substantially interferes major life activities in the prior 12 months. Serious mental illnesses include major depression, schizophrenia, bipolar disorder, and other mental disorders that result in serious impairment. These counts are estimates based on the Substance Abuse and Mental Health Services Administration (SAMHSA) estimates of serious mental illness among the population aged 18 and older. Note that the indicator of students with emotional or behavioral disabilities among children Kindergarten through 12<sup>th</sup> grade has not been measured for Madison County since 2018.

## Substance Use Disorders

**Figure 98. Drug Poisoning Death Rates, 2009-2020  
3-Year Discrete Rates, Madison County & Florida**

Drug poisoning deaths include intentional and unintended overdose deaths, including taking the wrong drug, taking a drug in error, and taking a drug inadvertently. Three-year discrete rates were chosen to show trends, including years where there were no deaths. Madison County's death rates continue to be lower than Florida's; however, they are increasing. Of the 21 drug poisoning deaths that occurred among Madison County residents during 2010-2020, 76% were White, non-Hispanic, 24% were Black & Other, non-Hispanic and 0% were Hispanic.

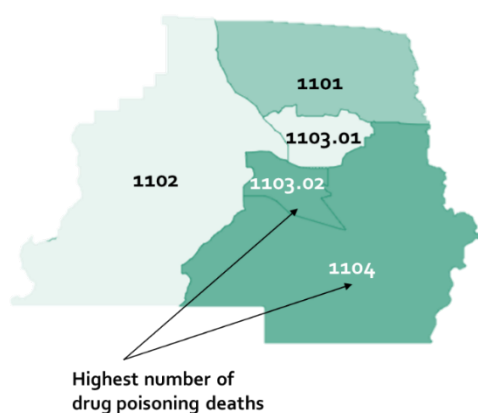
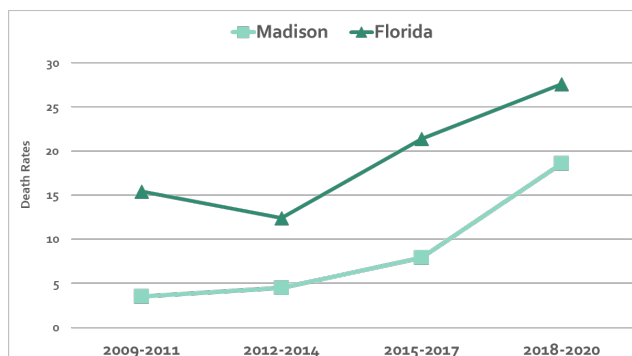
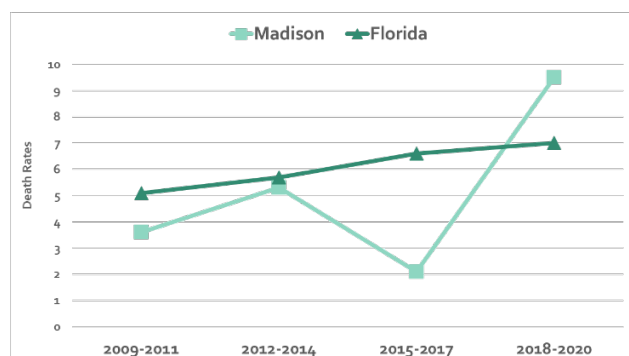


Figure 99 shows drug poisoning deaths by census tract for the years 2016-2020 combined. Most deaths occurred in census tract 1103.02, followed by tracts 1104 and 1101. There were no drug poisoning deaths among residents of census tract 1102 during the five-year timeframe.

**Figure 99. Drug Poisoning Deaths by Census Tract,  
2016-2020 Combined, Madison County**



**Figure 100. Alcoholic Liver Disease Death Rates  
2009-2020, 3-Year Discrete Rates  
Madison County & Florida**

Three-year discrete rates show trends, including years where there were no deaths. Madison County experienced a large increase in the death rate for 2018-2020 exceeding Florida. The alcoholic liver poisoning death rate in 2020 for Madison County was 9.5 per 100,000 population,

compared to 7.0 for Florida. Of the 15 alcoholic liver disease deaths that occurred among Madison County residents during 2010-2020, 73% were White, non-Hispanic, 27% were Black & Other, non-Hispanic and 0% were Hispanic. Males accounted for 80% of the deaths and females 20%.

According to the Substance Abuse Dashboard in Florida CHARTS, there were two fatal overdoses in Madison County in 2020. There were 11,413 opioid prescriptions dispensed to Madison County residents in 2020. There were 38 drug arrests among Madison County residents in 2020. There were 16 non-fatal overdoses with an EMS response during 2019, the most current year of data. Also in 2019, there were 21 documented instances when Naloxone was administered. There were no documented cases of neonatal abstinence syndrome among live births to Madison County residents in 2019. Table 33 provides additional data on drug use and opioid use in Madison County. Data provided for the most recent year available.

**Table 33. Opioid and Drug Use Data, Madison County, by Year of Latest Report**

Indicator	Madison County
<b>Overdose Data 2020</b>	
Drug Overdose Deaths	2
Opioid Overdose Deaths	2
Drug Overdose Death Rate per 100,000 Population	8.6
Opioid Overdose Death Rate per 100,000 Population	8.6
EMS Response to Suspected Non-Fatal Drug Overdose	16
EMS Response to Suspected Non-Fatal Opioid Overdose	1
Non-Fatal Drug Overdose ER Visits	16
All Drug Non-Fatal Overdose Hospitalizations	10
Naloxone Administered	12
<b>Prescriptions and Treatment 2021</b>	
Number of Opioid Prescriptions Dispensed	8,251
Number of Unique Patients	2,240
Prescriptions Dispensed Per Patient	3.7
Adult Substance Abuse Program Enrollees	16
Child Substance Abuse Program Enrollees	66
<b>Risk Behaviors, 2018-2020</b>	
% Adults Who Engage in Heavy or Binge Drinking – 2019	12.3%
% Students Who Rode in a Car Driven by Someone Who Had Been Drinking – 2018	12.8%
% Students Using Vape Products with Marijuana Oil - 2020	26.2%
<b>Consequences, 2019-2020</b>	
Drug Arrests	38=77 Adults, 1 Child
Alcohol Confirmed Motor Vehicle Crashes	9 total/3 fatalities
Drug Confirmed Motor Vehicle Crashes	6 total/1 fatality
Neonatal Abstinence Syndrome	< 5

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## Significant Findings Social and Behavioral Health

This section details significant findings for social and behavioral health listed below by category.

### ***Suicide***

- Suicide death rates increased in 2018-2020 and were higher than the state of Florida.
- Of the 26 suicide deaths during 2010-2020, the majority were White, non-Hispanic (88%), male (69%) and between the ages 25-34 (27%).
- 62% of suicide deaths during 2010-2020 occurred using a firearm.

### ***Behavioral Disorders***

- Mental disorders Hospitalizations during 2010-2020 were almost equally distributed by race and ethnicity. 48% White, non-Hispanic, 51% Black & Other, non-Hispanic and 1% were Hispanic.
- Most hospitalizations in 2019 and 2020 were due to mood and depressive disorders, followed by schizophrenic disorders, drug and alcohol induced disorders and eating disorders.

### ***Substance Use Disorders***

- Madison County's death rates due to drug poisoning were lower than the state's. There was a significant increase in Madison County death rates during 2010-2020.
- Of the 21 drug poisoning deaths that occurred among Madison County residents during 2010-2020, 76% were White, non-Hispanic, 24% were Black & Other, non-Hispanic and 0% were Hispanic.
- 2016-2020-highest number of drug poisoning deaths were in census tracts 1103.02 and 1104.
- Madison County death rates due to alcoholic liver poisoning increased in 2018-2020 and were higher than Florida.
- Deaths from alcoholic liver poisoning during 2010-2020 in Madison County were more likely to be White, non-Hispanic (73%) and male (80%).

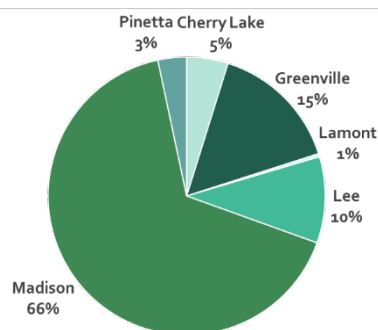
## Community Themes and Strengths

DOH-Madison and MCMH conducted the Community Themes and Strengths Assessment in the form of a community survey that was conducted from June through November 2022. DOH-Madison received supplemental funding to conduct a Protocol for Assessing Community Excellence in Environmental Health (PACE-EH) Assessment. The Steering Committee decided to combine the Community Themes and Strengths survey questions with the larger PACE-EH survey tool.

The final survey tool included the following sections: Community Values; Access to Care, Economic Stability, Access to Healthy Foods, Impact of COVID-19 pandemic, Neighborhood and Built Environment, and Mental Health Assessment. The survey was voluntary; however, participants were offered a grocery store gift certificate if they completed the survey. Participants were required to be age 18 or older and a resident of Madison County. The data analysis shown below is based on 269 surveys of residents.

### **Demographics of Participants**

All participants were asked core demographic information. Participants were asked about age group, race/ethnicity, gender, education, employment status and area of residence within Madison County.



Participants were asked which area of the county described where they resided. Figure 101 shows the breakdown by area. Most residents lived within the city of Madison, followed by Greenville, Lee, Cherry Lake, Pinetta and Lamont.

**Figure 101. Survey Respondents by Area of Residence, Madison County**

Figure 102 provides self-reported race/ethnicity and gender information for the 269 respondents. Most survey participants were female and Black, non-Hispanic. Hispanic participants comprised 6% of the sample.

**Figure 102. Survey Repondent Data by Gender and Race/Ethnicity, Madison County**

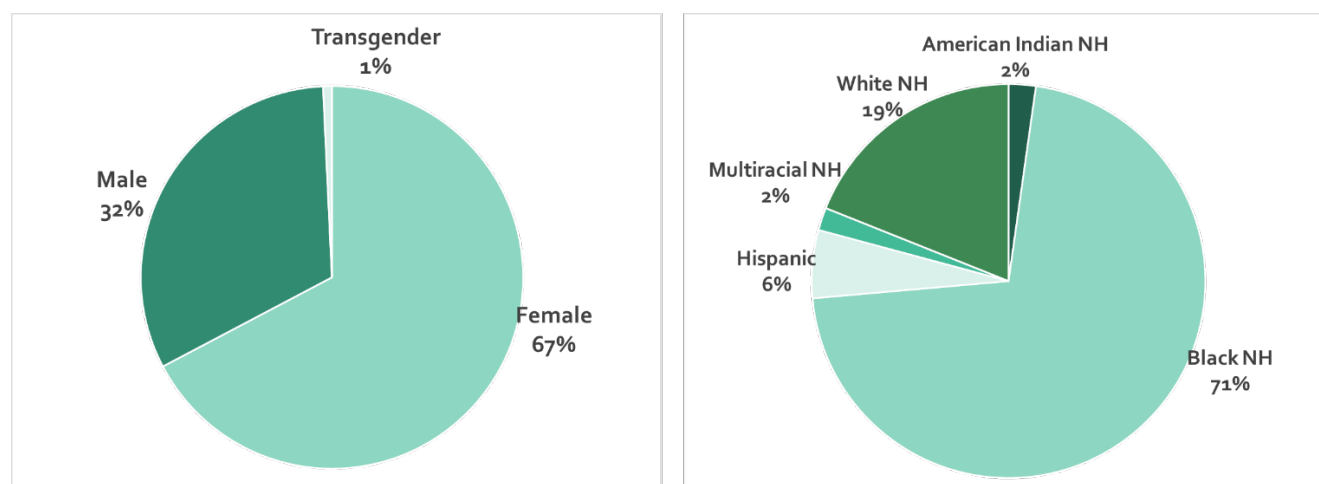


Table 34 shows survey respondent data by age group and area of residence. Participants were required to be at least 18 years of age to be eligible. Overall, about 45% of respondents were ages 60 and older. Cherry Lake and Lee participants were more likely to be ages 18-29. Note that responses for Lamont and Pinetta are combined for analysis purposes due to small numbers.

**Table 34. Survey Respondents Data by Age Group and Area, Madison County**

Area	18-29	30-39	40-49	50-59	60-69	70-79	80+
Cherry Lake	15%	15%	8%	38%	0%	15%	8%
Greenville	2%	17%	20%	17%	34%	7%	2%
Lee	15%	7%	20%	17%	34%	7%	0%
Madison	10%	17%	11%	13%	29%	15%	4%
Lamont/Pinetta	10%	0%	30%	20%	20%	10%	10%
All Participants	9%	15%	15%	16%	28%	13%	4%

Table 35 lists the education level of respondents by area of residence. About 17% of all respondents had less than a high school diploma and 43% of participants had at least some college. Twenty percent of participants had a bachelor's degree or higher.



**Table 35. Survey Respondents Data by Education Level, Madison County**

Area	< High School	Some High School	Graduated or GED	Some College/AA	Bachelor's Degree	Graduate Degree
Cherry Lake	0%	0%	46%	38%	8%	8%
Greenville	12%	10%	46%	22%	7%	2%
Lee	0%	11%	37%	22%	22%	7%
Madison	9%	9%	41%	20%	13%	8%
Lamont/Pinetta	0%	0%	20%	50%	10%	20%
All Participants	8%	9%	41%	23%	13%	7%

Table 36 shows survey respondent data by employment status. Approximately 44% of all respondents were employed full or part-time. Fourteen percent of all participants stated they were disabled and 14% were either a full-time student or unemployed.

**Table 36. Survey Respondents Data by Employment Status, Madison County**

Area	Disabled	Part-time Job	Full-time Job	Retired	Home Parent	Student Unemployed
Cherry Lake	0%	8%	54%	23%	0%	15%
Greenville	22%	12%	32%	15%	5%	15%
Lee	0%	15%	59%	15%	7%	4%
Madison	16%	6%	31%	29%	2%	15%
Lamont/Pinetta	20%	0%	50%	20%	0%	10%
All Participants	14%	8%	36%	25%	3%	14%

Survey participants were asked about their access to email and broadband internet. About 73% of Madison County participants stated they had access. Participants from Greenville (61%), and Lamont and Pinetta combined (60%) were less likely to have access than other areas of the county.

## Access to Care

Survey participants were asked to choose three health issues they considered most important. Table 37 shows the top ten health issues chosen. The most important health issue chosen by Black & Other, non-Hispanic participants and by Hispanic participants was Infectious Diseases (Hepatitis, TB, COVID).

**Table 37. Three Most Important Health Issues Chosen by Survey Respondents, Madison County**

Health Issue	Percent of Responses
Cancer	48%
Infectious Disease (Hepatitis, TB, COVID, etc.)	47%
Diabetes	45%
Obesity, Overweight	43%
Dental Issues	16%
Sexually Transmitted Diseases, HIV/AIDS	15%
Heart Disease and Stroke	15%
Tobacco Use	11%
Drug Use (Prescribed and Other)	11%
Mental Health Issues	9%

Survey participants were asked to identify the most difficult health care services to access in Madison County. Respondents could choose any or all the listed services. Table 38 lists the top ten services that were the most difficult to obtain. Dental care including dentures and primary medical care tied for number one with 38% each.

**Table 38. Most Difficult Health Care Services to Obtain, Madison County**

Health Issue	Percent of Responses
Dental Care Including Dentures	38%
Primary Medical Care	38%
Specialty Medical Care	34%
Mental Health Care	21%
Hospital Care	21%
Vision Care	15%
Prenatal/OB/Labor and Delivery	13%
Emergency Medical Care	10%
X-Rays or Mammograms	9%
Physical Therapy	8%

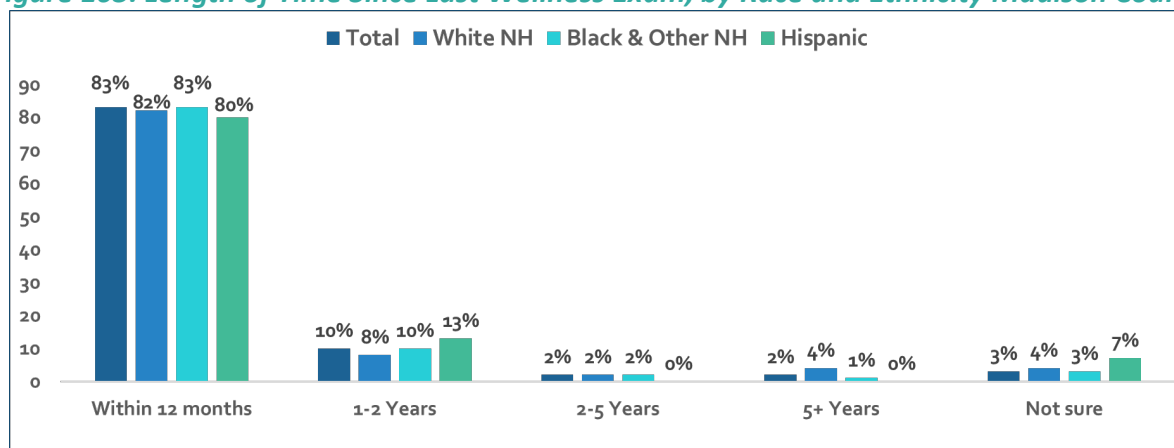
Survey participants were asked about which type(s) of health insurance they currently had. Respondents were able to choose all types of insurance that applied to them. About 12% of survey respondents indicated they did not have any health insurance.

**Table 39. Types of Health Insurance, Madison County Survey Participants**

Type of Insurance	Percent of Responses
Insurance from an employer	27%
Medicaid or Medicaid HMO	25%
Medicare	24%
I do not have any health insurance	12%
Other	10%
Affordable Care Act self-pay plan	6%
Tricare, Military or VA benefits	5%

Survey participants were asked how long it had been since their last wellness exam or physical, excluding emergency care or sick visits. Figure 103 below shows that 83% of survey respondents had been seen for a wellness exam within the previous 12 months, 10% within 1-2 years, 2% within 2-5 years, 2% more than five years and 3% were not sure. White, non-Hispanic participants were slightly more likely to respond that it had been five or more years since their last wellness visit. Hispanic participants were more likely to respond they were not sure how long it had been.

**Figure 103. Length of Time Since Last Wellness Exam, by Race and Ethnicity Madison County**



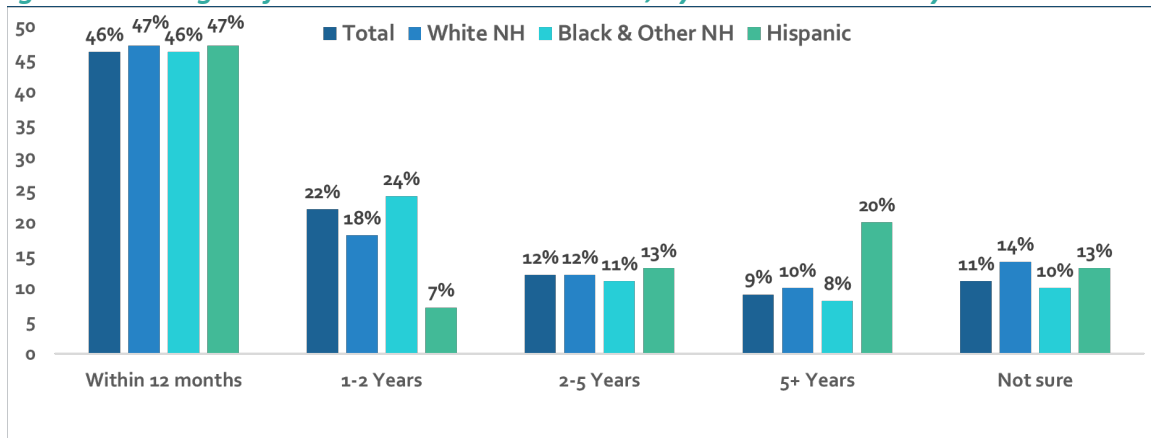
Participants were asked to identify reasons for a delay in seeking medical care and were encouraged to choose all that applied to them. Participants who responded they had medical care in the past 12 months were excluded. Lack of transportation was chosen most often, followed by length of wait time for an appointment and the types of insurance the provider accepted.

**Table 40. Reasons for Delay in Seeking Medical Care, Madison County Participants**

Reason	Percent of Responses
Lack of transportation	19%
Could not get an appointment soon enough	18%
Provider did not take my insurance	16%
No insurance	16%
Could not afford care	16%
No available evening or weekend appointments	9%
Provider was not taking new patients	5%
Language barrier/could not communicate	2%

Survey participants were asked about the length of time since their last dental visit. Figure 104 below shows that 46% of survey respondents had been seen the dentist within the previous 12 months, 22% within 1-2 years, 12% within 2-5 years, 9% more than five years and 11% were not sure. White, non-Hispanic participants and Hispanic participants were slightly more likely to have seen the dentist in the previous year. Black and Other, non-Hispanic participants were more likely to have been seen within 1-2 years. Hispanic participants were more likely to have waited five or more years.

**Figure 104. Length of Time Since Last Dental Visit, by Race and Ethnicity Madison County**



## Economic Stability

Survey participants were asked a series of questions about issues paying for necessities, public assistance, and food insecurity. Table 41 shows survey participant responses regarding goods and services that were difficult to pay for. Respondents could choose response any that applied to them. Utility bills were chosen most often, followed by food, home repairs and rent or mortgage.

**Table 41. Necessities Difficult to Pay For, Madison County Survey Participants**

Type of Necessity	Percent of Responses
Utility Bills	27%
Food for yourself and/or family	25%
Home repairs	20%
Rent or mortgage	16%
Medical bills/prescription drugs	15%
Transportation costs	14%
Clothing	8%
Childcare	6%
Elder care	6%

Participants were asked about any type of public assistance they were currently receiving. A total of 161 participants, or 60%, indicated they were not receiving any public assistance. Of the remaining participants, food assistance was most often received, followed by rent and utilities, workforce assistance and temporary cash assistance. A total of 84 participants, or 31%, indicated they receive assistance with food. Madison and Greenville residents were more likely to receive food assistance than the other areas.

**Table 42. Percent of Respondents Receiving Food Assistance, by Area**

Area	Receiving Food Assistance % of Total Participants
Cherry Lake	0%
Greenville	32%
Lee	11%
Madison	37%
Lamont & Pinetta	20%

Participants were asked what type of food assistance they received. Respondents could choose all that applied to them. A total of 56 participants (21%) received SNAP assistance, 82 participants (30%) visited a food bank/food distribution site. Only 63 participants (23%) stated they had their own garden.

Participants were asked how often they skipped a meal or cut down on the size of their meal so others in their household could eat. A total of 87 respondents, or 32%, indicated they had skipped a meal or reduced their meal size some of the time, most of the time or all of the time. About 16% of participants stated they went hungry in the past year because there was not enough money to buy food.

Most participants (80%) stated that it was very important to eat healthy. However, 63% also indicated that the cost of buying healthy food is a barrier and more than half of the participants (56%) stated they ate fast food once a week or more. Participants were asked what would make it easier to eat healthy. These are listed below in Table 43. Participants were able to choose up to three responses.

**Table 43. What Would Make Healthier Food Choices Easier, Madison County Participants**

Choice	Percent of Yes Responses
Less Expensive	84%
More Time to Prepare/Cook Meals	32%
Community Garden & Teach How to Grow Food	31%
More Farmers Markets or Farm Stands	28%
Knowing How to Prepare Healthy Food	26%
More Convenience Stores that Sell Healthy Food	25%
Knowing How to Garden & Have Garden Space	23%
Healthy Items at Food Bank/Pantry	20%
More Grocery Stores Where I Live/Work	19%
Public Transportation to Healthy Food Markets	12%

## Housing and Neighborhood

Participants were asked about their current living situation. Just over half of respondents (52%) owned their home, 29% rented their home, 14% lived with friends or family and 5% had other living arrangements. Of the 79 respondents who were renting their home, 25% stated they were getting rental assistance. Forty-one percent of participants who were renting their home stated they had difficulty getting the landlord to make repairs. Table 44 shows current living situation by area. Participants from Greenville and Madison were less likely to own their home.

**Table 44. Current Living Situation, By Area, Percent of Respondents**

Area	Own Home	Live With Friends/Family	Rent Home	Other
Cherry Lake	62%	15%	15%	8%
Greenville	51%	15%	22%	12%
Lee	59%	15%	26%	0%
Madison	49%	13%	34%	3%
Lamont & Pinetta	60%	20%	10%	10%

About 88% of respondents felt safe in their home and 91% of respondents felt safe in their neighborhood. The majority, 63%, said their neighborhood had adequate street lighting. Only 15% of

respondents had no smoke detector, carbon monoxide detector or fire extinguisher in their home. More than half of participants, 53%, said they drank bottled water at home, rather than tap water. Only 22% of respondents said they were concerned about bugs in their home.

## Mental Wellness

Participants were asked if they knew where to get adult mental health services and child mental health services. A total of 56% stated they knew where to get both adult and child mental health services, while 44% said they did not know where to get these services. Most respondents (74%) said they could tell when someone was depressed. More than half, 52%, indicated they knew someone with bipolar disorder. About 34% stated they knew someone with schizophrenic disorder. Participants were asked if they would look for mental health, alcohol, or substance use services in a different county. Half of the respondents stated they would seek services in a different county. Slightly less than half, 46%, said they would not tell anyone if they were diagnosed with a mental illness. Table 45 shows responses to the standard mental health assessment questions-to identify how many days in the past two weeks they experienced the symptoms. The table shows the combined percent of respondents who chose, “mild, several days,” “moderate, more than half the days,” or “severe, nearly every day.”

**Table 45. Standard Mental Health Assessment Responses, Madison County Participants**

Indicator	Mild, Moderate or Severe
Little interest or pleasure in doing things	22%
Feeling down, depressed, or hopeless	17%
Feeling more irritated, grouchy or angry than usual	16%
Sleeping less than usual, but still have a lot of energy	22%
Starting lots more projects than usual or doing more risky things than usual	10%
Feeling nervous, anxious, frightened, worried or on edge	15%
Feeling panic or being frightened	9%
Avoiding situations that make you anxious	18%
Unexplained aches and pains in your head, back, joints, abdomen or legs	24%
Feeling that your illnesses are not being taken seriously enough	14%
Thoughts of actually hurting yourself	6%
Hearing things other people can't hear, such as voices even when no one was around	6%
Feeling that someone could hear your thoughts, or that you could hear what another person was thinking	8%
Problems with sleep that affected your sleep quality over all	16%
Unpleasant thoughts, urges or images that repeatedly enter your mind	7%
Feeling driven to perform certain behaviors or mental acts over and over again	6%
Feeling detached or distant from yourself, your body, your physical surroundings or your memories	7%
Not knowing who you really are or what you want out of life	9%
Not feeling close to other people or enjoying your relationships with them	9%
Drinking at least 4 drinks of any kind of alcohol in a single day	7%
Using any tobacco products	12%
Using any recreational drugs or prescription medicine that you do not have a prescription for	3%

# Forces of Change Assessment

The purpose of the Forces of Change Assessment is to identify forces that are or might influence the quality and health of Madison County and the local public health system. Evaluating the events, trends, and factors that impact Madison enables the opportunity to determine the impact of such events and take it into account as action plans are developed to make the community what it aspires to be. The Forces of Change Assessment was held at the Community Health Summit on December 16, 2022. The Forces of Change Assessment identifies factors/trends that affect community health and systems. Forces are a broad all-encompassing category that includes trends, events, and factors.

- Trends are patterns over time, i.e., increasing aging population, decreasing high school graduation.
- Factors are discrete elements, such as being a rural community.
- Events are one-time occurrences, i.e., business closure, a hurricane/chemical spill, new legislation.

Table 46. Forces of Change by Category

Technological		
Force	Threats	Opportunities
<ul style="list-style-type: none"> <li>• Poor or no Internet connectivity.</li> <li>• Telemedicine</li> </ul>	<ul style="list-style-type: none"> <li>• There is not enough Internet availability.</li> </ul>	<ul style="list-style-type: none"> <li>• New initiative to increase bandwidth and decrease connection issues.</li> <li>• MCMH has the capability of TeleStroke and TeleCardio.</li> </ul>
Social		
Force	Threats	Opportunities
<ul style="list-style-type: none"> <li>• Mental health</li> <li>• Substance use</li> <li>• Gang activities</li> <li>• Partnerships</li> </ul>	<ul style="list-style-type: none"> <li>• No inpatient facility for mental health or substance use.</li> <li>• Increase in suicides and mental health crisis situations.</li> <li>• Increased substance use.</li> <li>• Increased gang activities in Greenville and Madison.</li> </ul>	<ul style="list-style-type: none"> <li>• Deployment of Community Action Teams and Mobile Response Teams by Apalachee Center.</li> <li>• DISC Village located in Greenville.</li> <li>• NARCAN distribution.</li> <li>• Coordination of youth mental health and substance use services through the Community Health Improvement Plan Committee.</li> </ul>
Environmental		
Force	Threats	Opportunities
<ul style="list-style-type: none"> <li>• Affordable Housing</li> <li>• Storms and natural disasters</li> <li>• Emerging epidemics and pandemics</li> <li>• Parks</li> <li>• Transportation</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of affordable housing.</li> <li>• Lack of resources to treat, respond to infectious disease epidemics.</li> <li>• Power outages risk connection.</li> <li>• Lack resources for education.</li> <li>• Fluctuations with economy risks provision of Big Bend transit.</li> <li>• Limitations in ridership</li> </ul>	<ul style="list-style-type: none"> <li>• Working with Big Bend Continuum of Care on Housing.</li> <li>• Strong Emergency Operations Center.</li> <li>• Strong hospital and Health Department coordination.</li> <li>• Positive mosquito control.</li> <li>• COVID-19 pandemic funding increased capacity to respond to epidemics.</li> </ul>



		<ul style="list-style-type: none"> <li>Received funds to refurbish parks and add exercise equipment.</li> <li>Shift towards a more user-friendly shuttle system.</li> <li>Big Bend transit increasing services from 3 days a week to 5.</li> </ul>
<b>Education</b>		
<b>Force</b>	<b>Threats</b>	<b>Opportunities</b>
<ul style="list-style-type: none"> <li>Education</li> </ul>	<ul style="list-style-type: none"> <li>Retention of teachers.</li> <li>High school graduation rates are decreasing.</li> <li>Negative education outcomes due to impact of mental health/substance use.</li> </ul>	<ul style="list-style-type: none"> <li>Changes to teacher pay scale at the state level.</li> <li>Coordination of youth mental health and substance use services through the Community Health Improvement Plan Committee.</li> </ul>
<b>Scientific</b>		
<b>Force</b>	<b>Threats</b>	<b>Opportunities</b>
<ul style="list-style-type: none"> <li>Infant Mortality</li> <li>Causes of Death</li> </ul>	<ul style="list-style-type: none"> <li>Increasing infant mortality rates in Madison County</li> <li>High death rates due to chronic diseases</li> </ul>	<ul style="list-style-type: none"> <li>Move to Healthy Start LPN nurse model.</li> <li>Provision of nutrition and mental health counseling services to pregnant women.</li> <li>Breast cancer screening initiatives.</li> <li>Blood pressure self-monitoring classes.</li> <li>Community partners provide education for tobacco cessation and diabetes.</li> </ul>
<b>Economic</b>		
<b>Force</b>	<b>Threats</b>	<b>Opportunities</b>
<ul style="list-style-type: none"> <li>Poverty</li> <li>Employment</li> <li>Food deserts</li> </ul>	<ul style="list-style-type: none"> <li>One of only four Florida counties designated as a persistent poverty county.</li> <li>Limited to no access to fresh fruits and vegetables.</li> <li>Increasing risk of becoming a food dessert.</li> </ul>	<ul style="list-style-type: none"> <li>Recent increase in income levels for Madison County.</li> <li>Potential for increasing economic development.</li> <li>Food locker installed at health department.</li> <li>Resource fairs at libraries to assist residents with obtaining social services.</li> </ul>

**Table 47. Madison County Asset Inventory**

<b>City/County Institutions</b>	<b>Associations/Organizations</b>
Florida Department of Health - Madison County	Tallahassee Memorial Healthcare
Madison County Memorial Hospital	Apalachee Center
Madison County Sheriff's Office	Healthy Start Coalition of Jefferson, Madison, Taylor Counties, Inc.
Madison Correctional Institution	Emergency Operations Center (EOC)
Health Care Providers/ Physician Offices	Kids Incorporated of the Big Bend
Faith Based Community	Department of Children and Families
Madison Shuttle	University of Florida County Extension Office
Big Bend Transit	Florida State University
Madison Senior Center	Florida A&M University
City and County Government	Saint Leo University
Madison County School District	DISC Village
Madison Schools	Big Bend Cares
North Florida College	Big Bend Area Health Education Center
Tri-County Electric	Big Bend Rural Health Network
Madison County Fire and Rescue	Capital Regional Medical Center
Church/clinic	<b>Other</b>
Early Learning Coalition	Strong legislative delegation
Faith-based Clinic for Disadvantaged	Shared Services Council
City of Madison Police	School Superintendent

# Local Public Health Assessment

The Local Public Health Assessment (LPHSA) Workshop for Madison County was conducted using the National Public Health Performance Standards (NPHPS). The National Public Health Performance Standards evaluate the involvement of all the local organizations and entities contributing to health within the community. The NPHPS provides performance standards for public health systems. These standards engage and leverage partnerships to create a stronger foundation for public health preparedness. Subsequently, it helps to identify areas of improvement to address the health issues of the community and promote continuous quality standards.

The LPHSA answers the questions: “What are the activities, competencies, and capacities of our local public health system?” and “How are the Essential Services being provided to our community?” The Local Public Health Assessment was broken into two parts; an external partner workshop was held, in partnership MCMH, during the health summit and an internal staff workshop was conducted with DOH-Madison staff.

The Local Public Health System is a vast network composed of agencies, organizations, businesses, and individuals who are collectively involved in providing the essential public health services in their community. The LPHSA focuses on the overall “public health system” to assure that the contributions of all entities are recognized in the provision of these services. The diagram below accurately illustrates the complex interconnectedness of each entity involved in providing optimal health. The purpose of this assessment is to recognize areas of improvement, strengthen system networks, and quantify the performance of the local system in comparison to the National Public Health Performance Standards.

Community partner recruitment was conducted via phone call, email, and in-person invitations. Included in the invitation and reminder email was a preparatory document outlining the ten essential public health services. In the external LPHSA, five of the Essential Health Services (3, 4, 5, 7, 9) were discussed, as the county decided it was most important to get community input on these specific services. A second internal meeting was held to assess the remaining five Essential Health Services (1, 2, 6, 8, 10), as the county health department has jurisdiction over these services within the public health system.

After the discussion of each Essential Public Health Service, the participants were asked to vote on how well they thought the local public health system met each Model Standard using the voting cards. Prior to each poll, the respective National Public Health Performance Standard of each Essential Service was explained in detail by the facilitator to ensure that all constituents understood them. Table 12, participants voted on the LPHS performance for each Model Standard. The results of each poll were displayed in bar graph form after each poll. The facilitator then stimulated a discussion for any results that did not receive a strong consensus. Re-polling was conducted until consensus was reached.

**Table 48. Essential Service Performance Level System, relative to Optimal Activity**

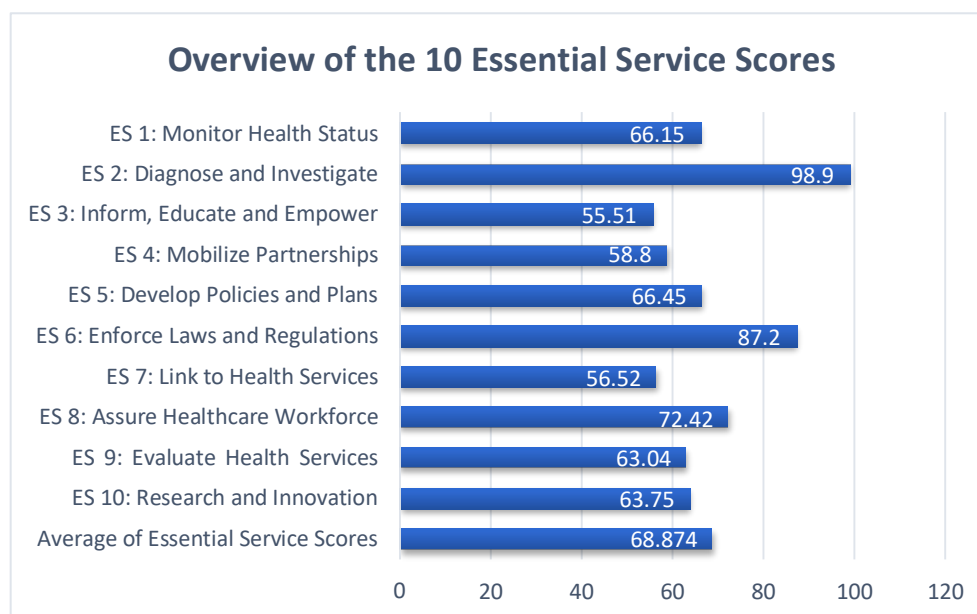
No activity (0%)	0% or absolutely no activity.
Minimal Activity (1%-25%)	Greater than zero, but no more than 25% of the activity described within the question is met within the public health system.

Moderate Activity (26%-50%)	Greater than 25%, but no more than 50% of the activity described within the question is met within the public health system.
Significant Activity (51%-75%)	Greater than 50%, but no more than 75% of the activity described within the question is met within the public health system.
Optimal Activity (76%-100%)	Greater than 75% of the activity described within the question is met within the public health system.

## LPHSA Results – General

The polling assesses how participants feel the local public health system is rated based on national standards. The standards reflect the ideal and serve as a gold standard for quality improvement in the community's public health system. The process provides in-depth descriptions of public health practice. This data can be used to identify areas for system improvement, identify system capacity strengths and weaknesses and strengthen connections between system partners.

*Figure 106. Overview of the 10 Essential Service Scores*



## Priority Areas

While all the health indicators are important, the community participants were asked to choose three areas that would be addressed by the development of the 2023-2026 Community Health Improvement Plan. Participants voted during the Community Health Assessment and the areas chosen to address were Chronic Disease, Maternal and Child Health, and Social and Mental Health. The individual community organizations will continue to address communicable diseases, environmental health, emergency planning and injury/violence both separately and as an integrated entity when applicable. Listed below are the goals and strategies for all of the priority areas.

## Reportable Infectious Diseases

Issue	STDs in Adolescents
Barriers	School boards, funding opportunities, religion
Success	Reduced rate of STDs, Reduced teen pregnancies, Policy changes for sex education, Higher levels of sex education in schools, Access to preventive measures.
Socioeconomic Barriers	Education, Social and Community Context
Next Steps	Educate school board and community, provide access to condoms and birth control, access to sex education.
Agencies Involved	DOH-Madison Sexual Risk Avoidance Education Program, School board, Possible funders

## Chronic Diseases

Issue	Diabetes and Hypertension
Barriers	Lack of providers, specialty care providers, limitations of insurance plans
Success	Decrease prevalence, increase education.
Socioeconomic Barriers	Food insecurity, Health literacy, Exercise opportunities
Next Steps	Refer to CHIP committee for objectives and action plan.
Agencies Involved	DOH-Madison, Madison County Memorial Hospital, North Florida Medical Center, Schools.

## Maternal and Child Health

Issue	Substance and Tobacco Use During Pregnancy
Barriers	Toxic stress, complexity of issues, social norms
Success	Reduced tobacco use during pregnancy.
Socioeconomic Barriers	All of them
Next Steps	Refer to CHIP Committee for objectives and action plan.
Agencies Involved	DOH-Madison, Healthy Start Coalition of JMT, Big Bend AHEC, Home Visiting Programs, Private clinicians

## Injury and Violence

Issue	Violence in household, workplace, school, community
Barriers	No background checks, no adequate training, lack of funding
Success	Less school shootings, more security, more trainings, less social platforms, more gun laws.
Socioeconomic Barriers	Access to mental health services
Next Steps	Awareness campaigns, gun safety education

Agencies Involved	Law enforcement, School district, Department of Children and Families, Hospitals, Mental health agencies
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### Social and Mental Health

Issue	Vaping in Teens
Barriers	Funding, sustainability, expertise, stigma
Success	Decrease substance use in youth and increase mental health services.
Socioeconomic Barriers	Access to Services, Education, Economic, Broadband Internet, Transportation
Next Steps	Education starting in elementary school, refer to CHIP committee for objectives and action plan.
Agencies Involved	Madison County Memorial Hospital, Apalachee Center, Inc., DISC Village, Private clinicians, Big Bend AHEC

## Conclusion

Having followed the MAPP process and considered all data, the CHIP membership approved the three priority areas on March 15, 2023. The group will develop a CHIP and implementation strategy to address Chronic Diseases, Maternal and Child Health, and Social and Mental Health issues in Madison.

### Plans for Sharing CHA with Community Partners and the Community

The Madison CHA will be shared with local government officials, including Madison Board of County Commissioners, Madison City Commissioners, and Madison County School District during board meetings. We will also present the report and findings at community partner meetings at their request as well as meetings hosted by civic organizations, faith-based organizations, and others. We plan to issue a press release informing the community of the assessment availability and post information on the DOH-Madison website.

### Distribution Plan for CHA

Partners on the CHIP distribution list and the Shared Services receive copies of this assessment. All county and city agencies can upload this document to their website. An electronic copy is available on the DOH-Madison and MCMH website and can be shared with their partners. Printed copies are available at DOH-Madison and the county libraries and shared with city and county officials. CHIP development includes a more comprehensive analysis of services offered in the Madison County area to ensure that efforts are not duplicative and to ensure that the community is aware of services currently being offered. The CHIP membership also considers focus groups and/or community surveys to ascertain what the community perceives as the issues and solutions to health issues in Madison County. CHIP membership considers minority health concerns and implements strategies to address minority health when developing the CHIP. The data show that minority communities have been disproportionately affected in some areas of chronic diseases, maternal and child health and social and mental health. CHIP membership will also educate the community about the benefits of achieving health equity in Madison County, and strategies to move toward health equity. "Together we will achieve a healthy, safe, and vibrant Madison County for all."

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# Appendices

Appendix 1	Poverty Calculations
Appendix 2	Community Themes and Strengths Survey
Appendix 3	Health Summit Agenda and Sign-in Sheet
Appendix 4	Meeting Package with Data Slides
Appendix 5	CHIP Distribution List