



# NASSAU COUNTY COMMUNITY HEALTH STATUS ASSESSMENT 2018

A look at the health and well-being of Nassau County residents.

## SUMMARY OF RESULTS: 2018 NASSAU COMMUNITY HEALTH STATUS ASSESSMENT

The Community Health Status Assessment (CHSA) answers the following questions: **1) How healthy are our community residents?** **2) What does the health status of our community look like?** This assessment is accomplished through a comprehensive effort to find the latest and most trusted sources of data that reflect the health of Nassau County, FL residents. Most of the indicators reviewed reflect either rates of morbidity (incidence of a specific illness or condition within a population) or mortality (death from a specific illness or condition within a population). Health indicator results for Nassau County were compared to the state of Florida and other data where available. They were also segmented by various demographic factors including race and ethnicity, gender, age, and income level to identify health disparities and health inequities. Also per the 2018 County Health Rankings, Nassau ranks 17<sup>th</sup> of 67 for Health Behaviors, 17<sup>th</sup> for Clinical Care, 5<sup>th</sup> for Socioeconomic Environment and 57<sup>th</sup> for Physical Environment. These rankings combined to earn Nassau a standing of 23<sup>rd</sup> for health outcomes and 8<sup>th</sup> in health factors. The 2018 CHSA assessment report was prepared by the Health Planning Council of Northeast Florida as part of the Nassau Mobilizing for Action through Planning & Partnership (MAPP) model.

After a review of the CHSA report findings by a Partnership for a Healthier Nassau Community Health Improvement Planning assessment team, the following items were identified as the most important health issues in Nassau County, FL: Health Disparities, Physical Environment and Behavioral Health and Access to Care.

**Health Disparities** - In 2016 Nassau County's population was 77,187 and is less diverse than Florida's population, being 90.4% white vs 75.9% in Florida. The Black or African American and Hispanic or Latino groups make up most of the 9.6% non-white population. While this number is less than 10% of Nassau County's population, the health data for this population is reliable and shows trends of health disparities. Of concern are cancer rates, infant mortality and low birth weights, chronic disease (diabetes and stroke) and HIV rates for non-whites. (See 2018 Nassau County CHSA Fact Sheet)

**Physical Environment** - One concern is Nassau County residents' proximity to parks and recreation areas. In 2016, only 19.2% of Nassau County residents lived within a half mile, or 10-minute walk, from a park. This was 24 percentage points less than all Florida residents, in comparison. The impact of population growth on physical environment is also a concern. Nassau experienced a 6.3% increase in population from 2016 to 2017, increasing from 77,187 to 80,456. <sup>1</sup> This population growth leads to an increase in needs in an environment already low in affordable housing inventory and numbers of health providers, especially for seniors and Medicaid beneficiaries.

**Behavioral Health** - Data shown here demonstrate increases in suicide and Baker Act initiations in Nassau County. Also shown are Health Status and Quality of Life indicators illustrating that Nassau County residents experienced higher numbers of unhealthy mental days, poor mental days and diagnoses of a depressive disorder when compared to the state of Florida.

**Access to Care** - Nassau County has a low provider per population ratio compared to the State and the shortage may lead to longer wait times, delayed care, poor health outcomes and higher costs due to disease progression.

Top 3 Causes of Death in Nassau	Compared to Florida
Cancer (180 deaths per 100,000 population)	Florida (153.5 deaths per 100,000 population)
Heart Disease (162.9 deaths per 100,000 population)	Florida (152.3 deaths per 100,000 population)
Unintentional Injury (61.5 deaths per 100,000 population)	Florida (47.5 deaths per 100,000 population)



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# INTRODUCTION

## Methodology: The MAPP Model

Through community health assessments, we intend to answer questions about community health status and needs. The Health Planning Council of Northeast Florida (HPCNEF) and the Florida Department of Health use the Mobilizing for Action through Planning and Partnerships (MAPP) model – developed by the National Association of County and City Health Officials (NACCHO) and the Centers for Disease Control (CDC) – to complete community assessment processes. The MAPP process is a community-driven, participatory process intended to bring together not only healthcare providers, but also mental health and social service agencies, public safety agencies, education and youth development organizations, recreation agencies, local governments, neighborhood associations, and civic groups to improve community health. By participating in the MAPP process, community stakeholders gain a higher understanding and awareness of their community and local health issues.

The MAPP model was developed to provide a strategic approach to community health improvement by helping communities to identify and use existing resources wisely, consider unique local conditions and needs, and form effective partnerships for action.<sup>1</sup> The model includes six distinct phases (see Figure 1):

1. Partnership development and organizing for success
2. Visioning
3. Four MAPP assessments:
  - Community Health Status Assessment
  - Community Themes & Strengths Assessment
  - Forces of Change Assessment
  - Local Public Health System Assessment
4. Identification of strategic issues
5. Formulation of goals and strategies
6. Action (program planning, implementation, and evaluation)

Figure 1. The MAPP Model



**In Phase 3** (Four MAPP Assessments), primary and secondary data are used to identify gaps and gather information to determine the strategic issues that will become the focus of action plans. **The Community Health Status Assessment** identifies priority community health and quality of life issues using secondary data from a variety of existing sources. Questions answered here include “How healthy are our residents?” and “What does the health status of our community look like?” The Community Health Status Assessment incorporates an analysis of community characteristics including population, environment, health status, access to care and healthcare resources, and healthcare services and utilization.

<sup>1</sup> National Association of City and County Health Officials, 2012

## County Health Rankings: How Does Nassau County Compare?

*County Health Rankings & Roadmaps*, produced by the University of Wisconsin and Robert Wood Johnson Foundation, are a collection of reports that illustrate the overall health of counties in every state across the country and provide a comparison of counties within the same state. Two major categories exist for County Health Rankings: health outcomes and health factors. Health outcomes are measures that describe the current health status of a county. These health outcomes are influenced by a set of health factors. Health factors and their subsequent outcomes may be affected by community-based programs and policies designed to alter their distribution in the community. Counties can improve health outcomes by addressing all health factors with effective, evidence-based programs and policies.<sup>2</sup>

The report ranks Florida counties according to their summary measures of health outcomes and health factors, as well as the components used to create each summary measure. Outcomes rankings are based on an equal weighting of mortality and morbidity measures. The summary health factors rankings are based on weighted scores of four types of factors: behavioral, clinical, social and economic, and environmental.<sup>3</sup>

In 2018, Nassau County ranked 23rd out of the 67 Florida counties in health outcomes, which look at length of life and quality of life, and 8th of 67 counties in health factors. There were significant differences when examining the individual rankings for each of the four topics considered for the health factors score. Health factors include health behaviors (ranked 17th of 67 counties), clinical care (ranked 17th), social and economic factors (ranked 5th), and physical environment (ranked 57th). Table 1 lists the four topics, along with the types of indicators included within each, and the corresponding rank for Nassau County.

**Table 1. Nassau County Health Factors Rankings, 2018**

Health Behaviors	Clinical Care	Socioeconomic	Physical Environment
Tobacco	Access to Care	Education	Air Quality
Diet & Exercise		Employment	Built Environment
Alcohol Use	Quality of Care	Income	Access to Healthy Food
High-Risk Sex		Family/Social Support	Liquor Stores
		Community Safety	
Nassau Rank: 17th	Nassau Rank: 17th	Nassau Rank: 5th	Nassau Rank: 57th

This Community Health Status Assessment presents data grouped in categories similar to those used for the County Health Rankings. In this assessment, you will find data grouped into the following sections: Social & Economic Environment, Physical Environment, Health Behaviors, Health Outcomes, and Healthcare Utilization & Resources.

<sup>2</sup> Robert Wood Johnson Foundation. (2016). *Ranking System*. Retrieved from County Health Rankings and Roadmaps: <http://www.countyhealthrankings.org/ranking-methods/ranking-system>

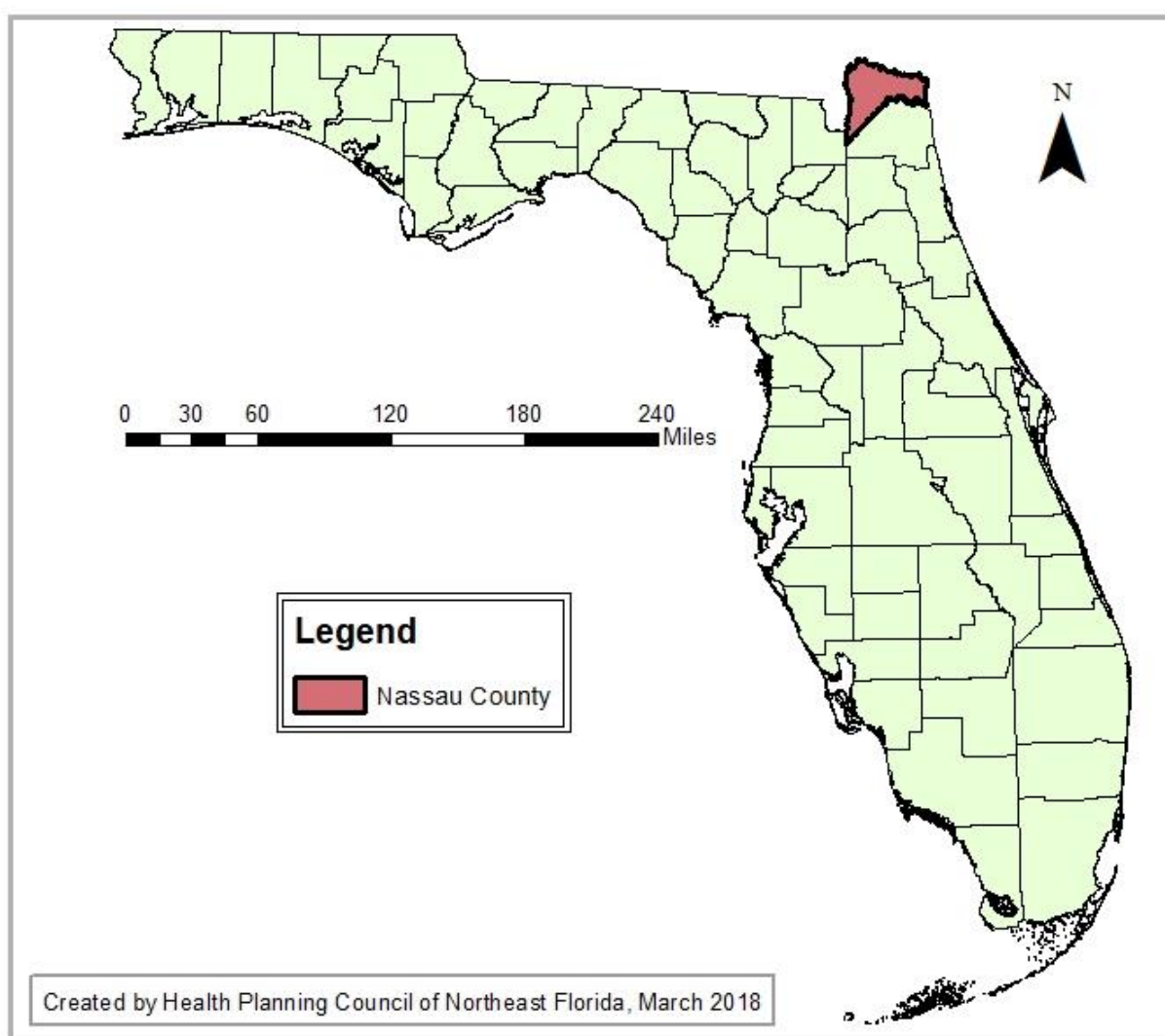
<sup>3</sup> Robert Wood Johnson Foundation. (2016). *Ranking System*.

# SOCIAL & ECONOMIC ENVIRONMENT

## Geography & Background

Native Americans inhabited the land that is now called Nassau County for thousands of years before Europeans settled in the area in the 16<sup>th</sup> and 17<sup>th</sup> centuries.<sup>4</sup> Today, Nassau County encompasses approximately 649 square miles of northeast Florida and has a population density of 113 persons per square mile compared to 351 persons per square mile for Florida.<sup>5</sup> It is bordered by the Atlantic Ocean to the east, Duval County, FL to the south, Baker County, FL to the southwest, Charlton County, GA to the west, and Camden County, GA to the north.<sup>6</sup> The county seat is Fernandina Beach, and a Board of County Commissioners serves as the governing authority. Five members, representing the five county districts, make up the board and are elected at large for staggered four-year terms.<sup>7</sup> Amelia Island's resorts and beaches serve as an attraction for tourism, while the Port of Fernandina serves as a gateway for international business throughout the county and the southeast United States.<sup>8</sup> Map 1 shows the location of Nassau County within Florida.

Map 1. Location of Nassau County within Florida



<sup>4</sup> Johannes, Sr., J.H. (n.d.). *A Brief History of Nassau County, Florida*. Retrieved from <http://www.wnhsfl.org/nassau-county-history.html>

<sup>5</sup> U.S. Census Bureau. (2010). *QuickFact [Data file]*. Available from <https://www.census.gov/en.html>

<sup>6</sup> U.S. Census Bureau. (2000). *State-based County Outline Maps*. Retrieved from [https://www.census.gov/geo/maps-data/maps/stcou\\_outline.html](https://www.census.gov/geo/maps-data/maps/stcou_outline.html)

<sup>7</sup> Nassau County. (2017). *Annual Report 2017*. Retrieved from <http://www.nassaucountyfl.com/DocumentCenter/View/15144>

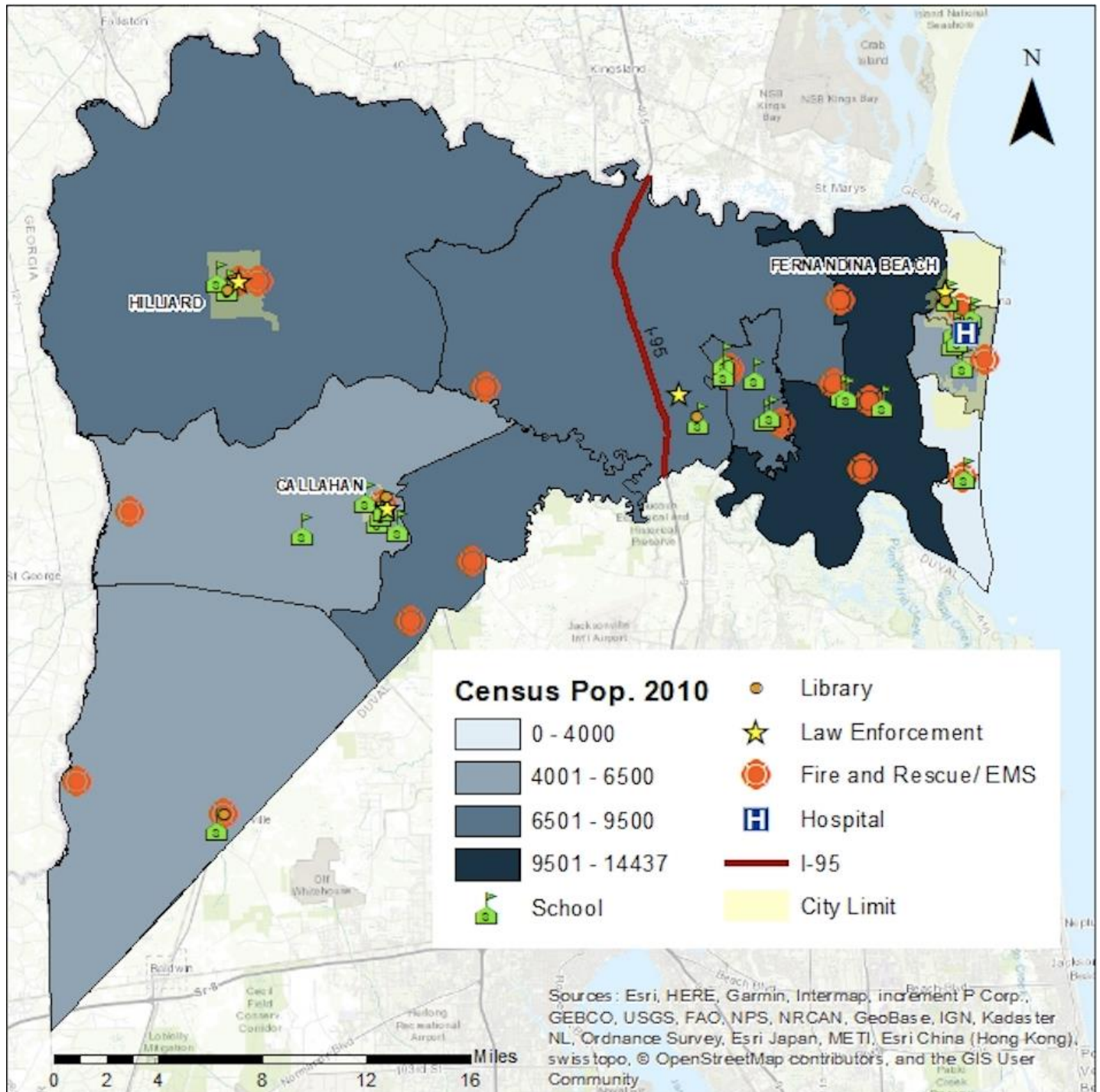
<sup>8</sup> Nassau County Economic Development Board. (2018). *Nassau County: Where Industry Makes History*. Retrieved from <http://www.nassauflorida.com/Nassau-County-Advantages.aspx>



## Asset Mapping

**Error! Reference source not found.** shows the distribution of municipal resources in Nassau County, along with population density displayed by census tract using 2010 Census population data. Fire Stations and emergency services are distributed throughout the county with a higher concentration of these resources found in the east. Law enforcement is found in each of the three city boundaries located in Nassau County. In the western portion of the county, schools are primarily located within the Hilliard and Callahan city limits. Hilliard is located within one of the three most populated census tracts in the county. East of I-95, schools are clustered within Fernandina Beach city limits but are also distributed frequently outside the city limit near more populated census tracts.

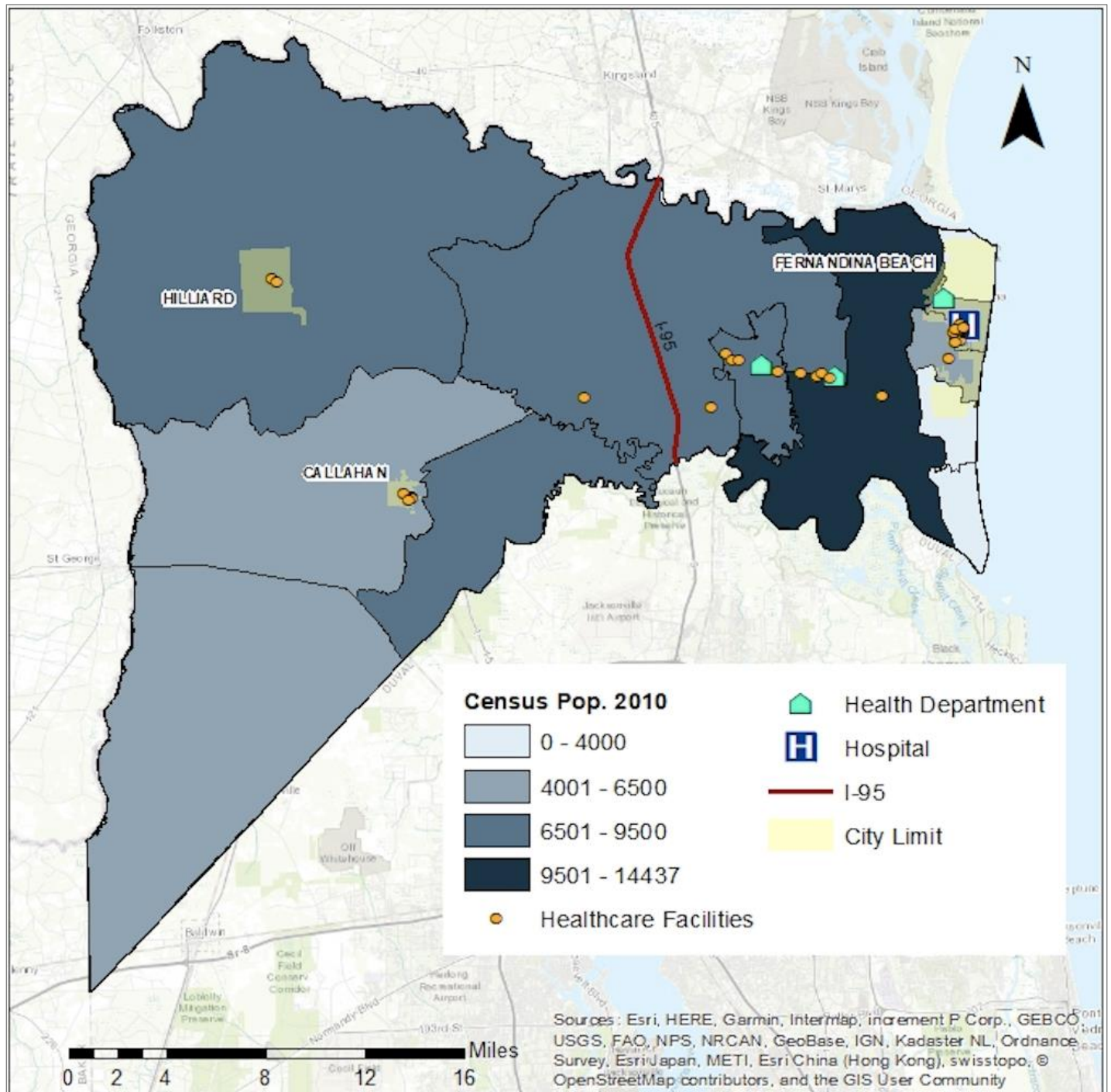
Map 2. Municipal Resources in Nassau County, Florida with 2010 Census Population Density



Data Source: Florida Geographic Data Library | Created March 2018. Notes: Law Enforcement Facilities and Agencies in this dataset consist of FDLE, Federal, Highway Patrol, Law Enforcement, Police, and Sheriff facilities. This data is meant to be used for planning purposes only and is not intended to represent a 100% inventory of municipal facilities.

Map 3 shows the distribution of local health departments, medical centers, and other health resources along with 2010 Census population data. Healthcare facilities shown on this map include doctor's offices, walk-in clinics, and surgical centers. Most healthcare facilities are located east of I-95, with a cluster of these facilities located near Fernandina Beach. Healthcare facilities are also found within Hilliard and Callahan city limits but at a lower frequency. The only hospital in Nassau County is Baptist Medical Center-Nassau in Fernandina Beach. The three health department facilities in Nassau County are located to the east of I-95.

**Map 3. Health Resources\* in Nassau County, Florida with 2010 Census Population Density**

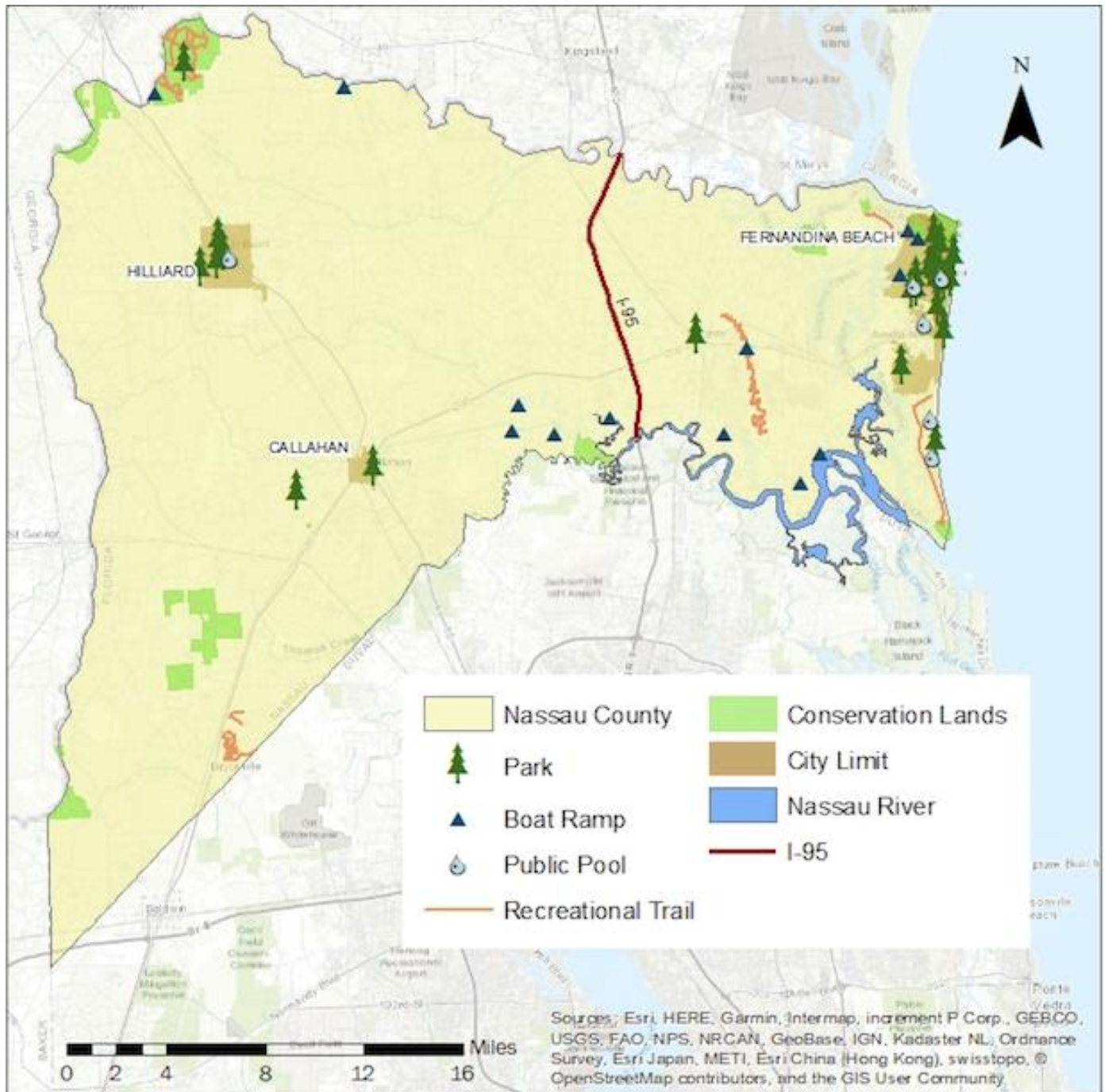


Data Source: Florida Geographic Data Library | Created March 2018. Note: Healthcare facilities include doctor's offices, walk-in clinics, and surgical centers.\*



Map 4 shows the distribution of recreational resources such as parks, pools, boat ramps, recreational trails, and conservation areas. The abundance of recreational resources are located in the eastern portion of the county. Most boat ramp access is located along the Nassau River.

Map 4. Recreational Resources in Nassau County, Florida



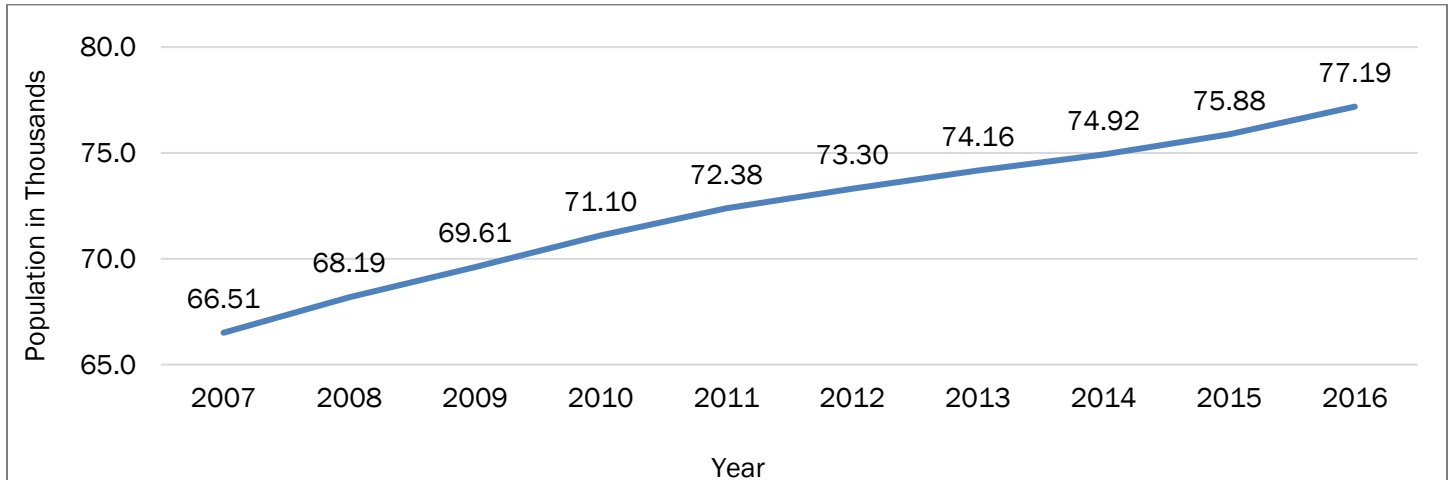
Data Source: Florida Geographic Data Library | Created March 2018.

## Population Characteristics

### Total Population and Population Growth

Nassau County and Florida had an estimated population of 77,187 and 19,934,451, respectively, in 2016. From 2007 to 2016, Nassau County experienced a 16.1% population increase (Figure 2). Florida saw a 10.7% increase over the same period.<sup>9</sup>

Figure 2. Population of Nassau County, 2007-2016

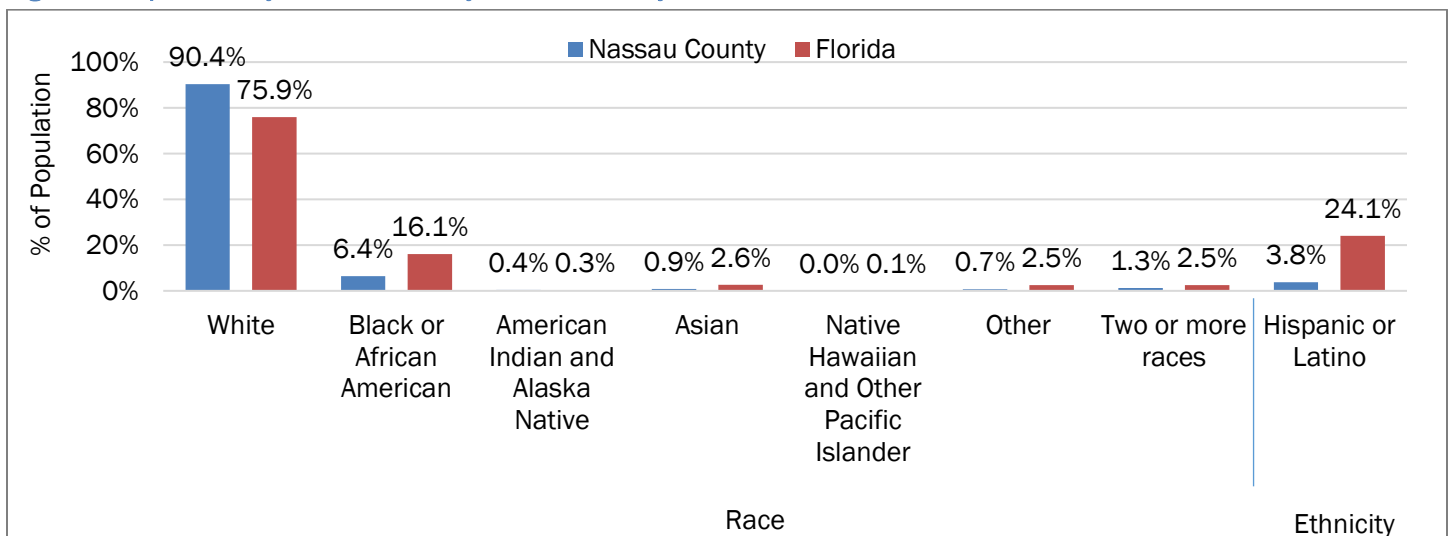


Data Source: 2016 American Community Survey 1-Year Estimates, Table DP05, ACS Demographics and Housing Estimates

### Race and Ethnicity

Nassau County's population is less diverse than Florida's population. Nassau County is 90.4% white compared to 75.9% white in Florida, a difference of 14.5 percentage points. Nassau County's population is only 6.4% Black or African American, compared to 16.1% Black or African American in Florida. Nassau County's population is 3.8% Hispanic or Latino population, which is 20.3 percentage points below Florida. Asian, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and other races were relatively similar across both Nassau County and Florida (Figure 3).<sup>10</sup>

Figure 3. Population by Race & Ethnicity, Nassau County & Florida, 2016



Data Source: 2016 American Community Survey 1-Year Estimates, Table DP05, Demographic and Housing Estimates

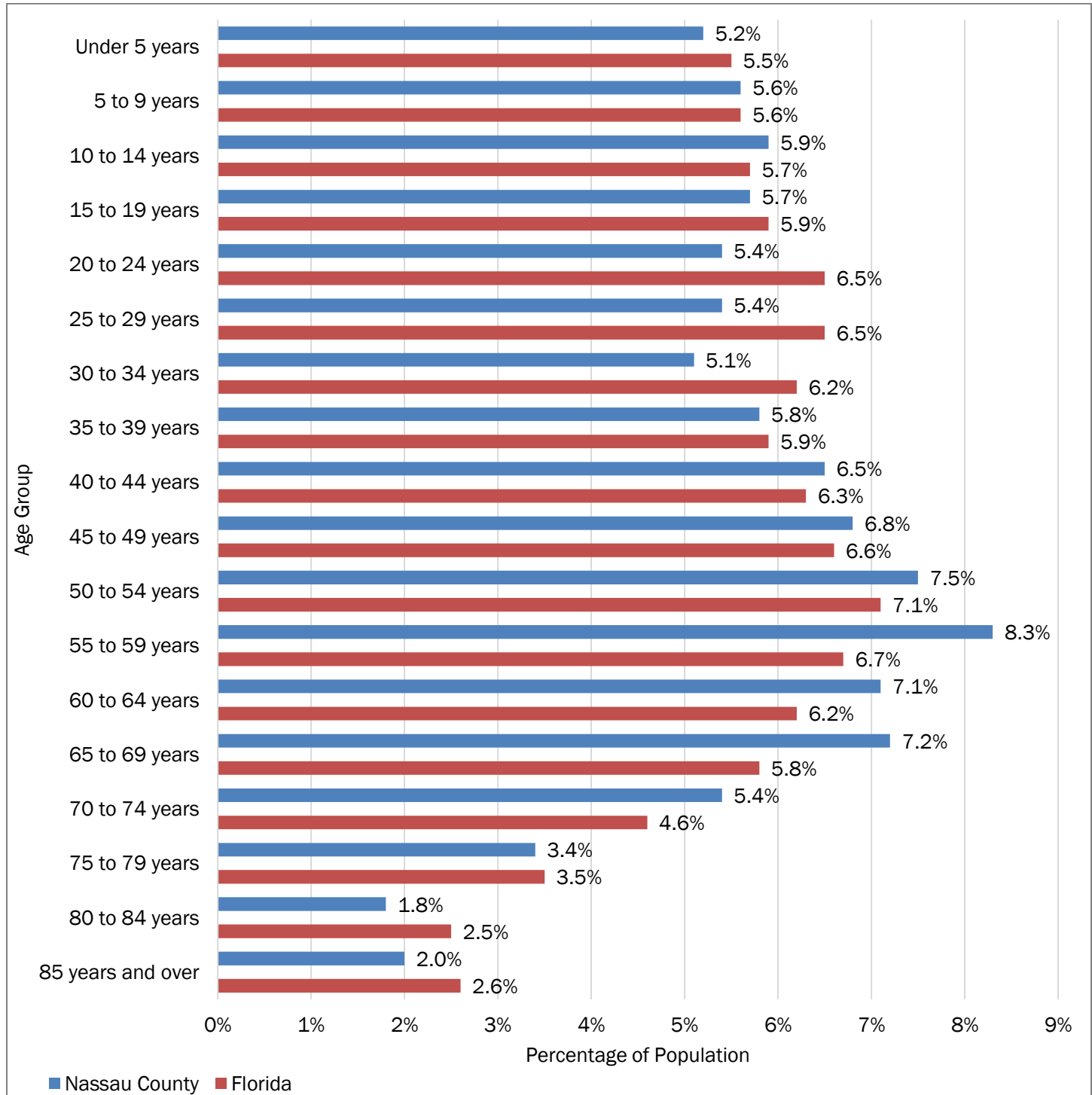
<sup>9</sup> U.S. Census Bureau. (2016). 2016 American Community Survey 1-Year Estimate: Table DP05-ACS Demographic and Housing Estimates [Data file]. Available from <https://factfinder.census.gov>

<sup>10</sup> U.S. Census Bureau, 2016 American Community Survey 1-Year Estimate: Table DP05-ACS Demographic and Housing Estimates

## Age and Gender

The median age for Nassau County was 44.6 years with the median male and female ages at 43.6 and 45.6 years, respectively. Florida trended slightly younger with a median age of 41.6 years and the median male and female ages at 40.1 and 43.1 years respectively. The gender distribution was similar for both areas with Nassau County. Nassau County's population is 50.6% female and 49.4% male, compared to 51.1% female and 48.9% male in Florida.<sup>11</sup> Figure 4 shows the age distribution for Nassau County and Florida.

**Figure 4. Age Distribution, Nassau County & Florida, 2016**



Data Source: 2016 American Community Survey 1-Year Estimates, Table S0101, Age and Sex

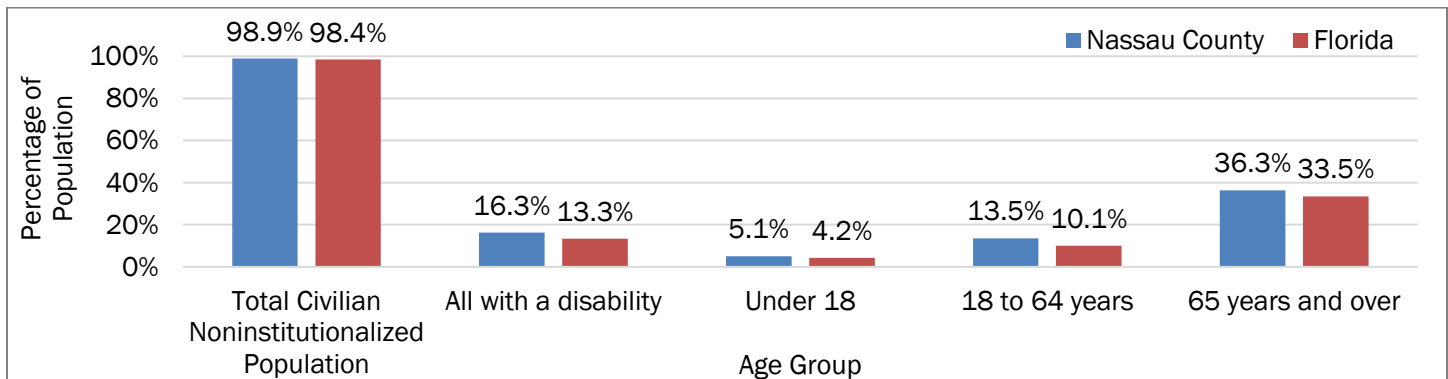
<sup>11</sup> U.S. Census Bureau. (2016). 2016 American Community Survey 1-Year Estimate: Table S0101-Age and Sex [Data file]. Available from <https://factfinder.census.gov>



## Disability Status

Nassau County and Florida had similar percentages of the noninstitutionalized population with a disability. The U.S. Census Bureau defines civilian noninstitutionalized population as “All U.S. civilians not residing in institutional group quarters facilities such as correctional institutions, juvenile facilities, skilled nursing facilities, and other long-term care living arrangements.”<sup>12</sup> The Bureau defines disability as “A long-lasting physical, mental, or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business.”<sup>13</sup> In 2016, 16.3% of Nassau County’s population had a disability compared to 13.3% in Florida. Disability status did not differ significantly by age group between Nassau County and Florida (Figure 5).

**Figure 5. Disability Status of the Civilian Noninstitutionalized Population, Nassau County & Florida, 2016**



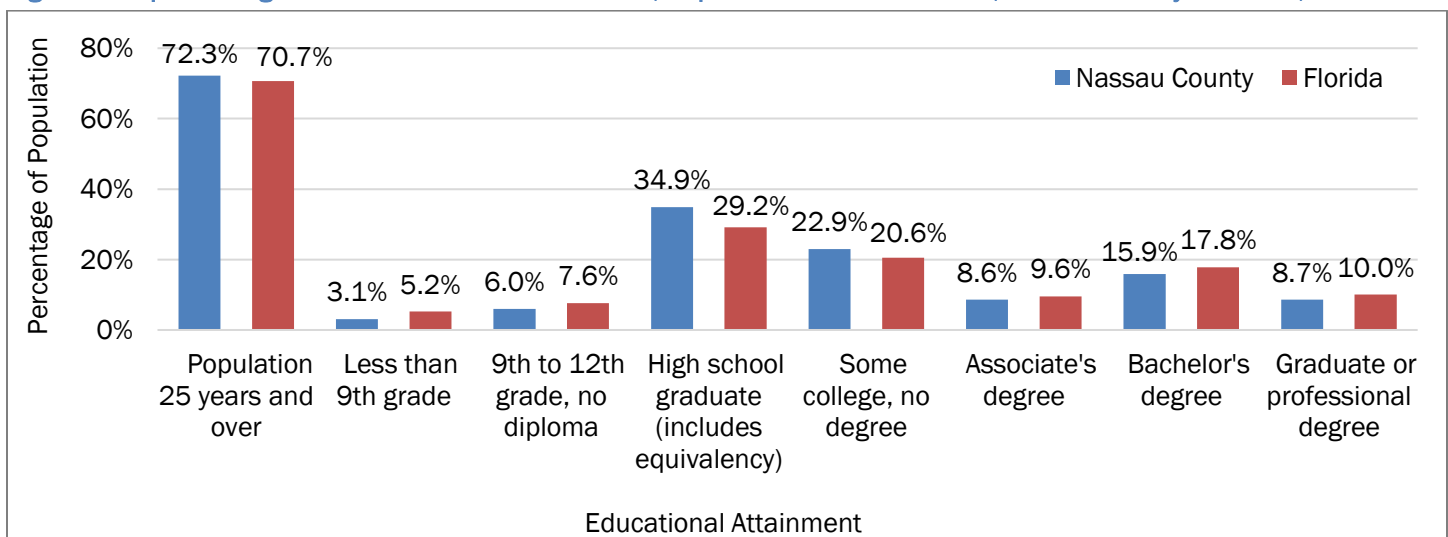
Data Source: 2016 American Community Survey 1-Year Estimates, DP02, Selected Social Characteristics

## Social Factors

### Education

Figure 6 shows the highest level education attained by those age 25 and older in Nassau County and Florida. Nassau County had a higher percentage with a high school diploma or some college at 57.8%, compared to Florida with 49.8%. Florida had a slightly greater portion of the population (27.8%) with a bachelor’s degree or higher compared to Nassau County (24.6%). The percentage of people with less than a high school degree or equivalency for Nassau County and Florida was 9.1% and 12.8%, respectively.

**Figure 6. Reported Highest Level of Education Attained, Population 25 Years & Over, Nassau County & Florida, 2016**



Data Source: 2016 American Community Survey 1-Year Estimates, DP02, Selected Social Characteristics | Prepared by Health Planning Council

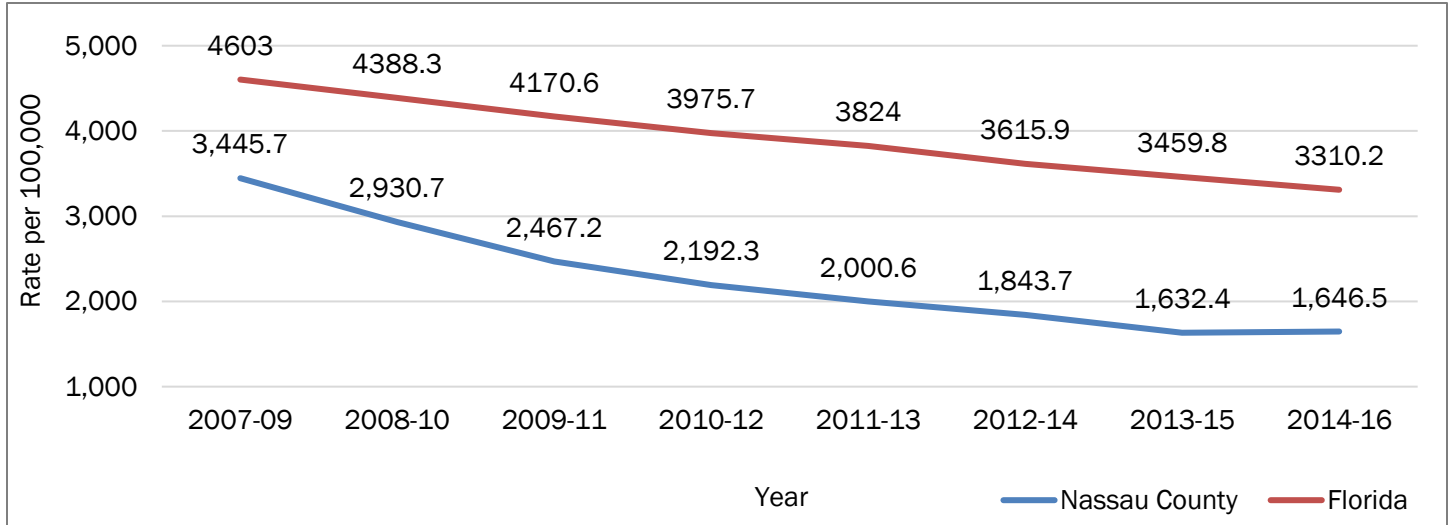
<sup>12</sup> U.S. Census Bureau. (n.d.). *Glossary*. Retrieved from American FactFinder: <https://factfinder.census.gov/help/en/index.htm#glossary.htm>

<sup>13</sup> U.S. Census Bureau. (n.d.). *FactFinder Glossary*. Retrieved from <https://factfinder.census.gov/help/en/index.htm#glossary.htm>

## Crime and Domestic Violence

Index crimes, composed of aggravated assault, burglary, larceny, motor vehicle theft, murder, robbery, and sexual offenses, track the number of offenses reported to law enforcement and not the arrests for the given crimes.<sup>14</sup> From 2007 to 2016, the number of index crimes in Nassau County decreased by 52%. Florida index crime rates decreased by 28% during the same period. Nassau County had a lower index crime rate than Florida from 2007-2016 (Figure 7).<sup>15</sup>

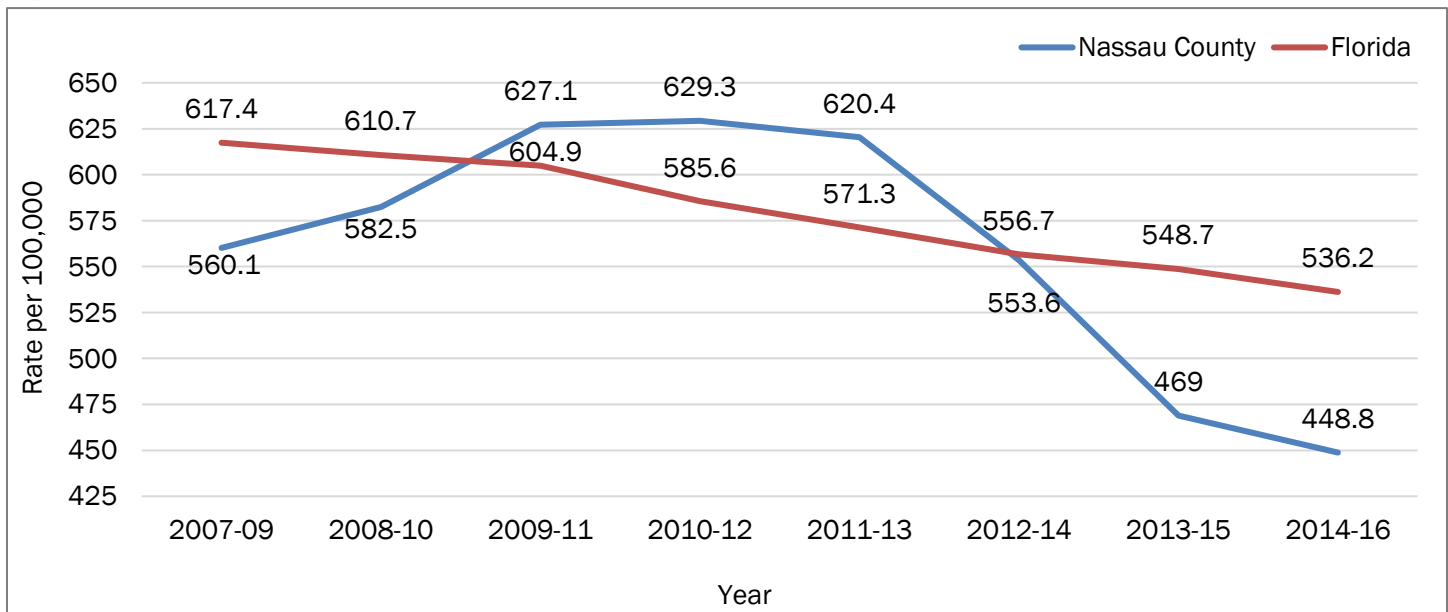
Figure 7. Incidence of Index Crimes, Nassau County & Florida, 2007-2016



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

The incidence rate of domestic violence in Nassau County rose 12.4% from 2007-2009 to 2010-2012 before decreasing by 28.7% from 2010-2012 to 2014-2016. From 2007-2009 to 2014-2016, Florida's domestic violence incidence rate decreased 13.2%. Nassau County's domestic violence incidence rate was 449 per 100,000 population in 2014-2016, which was lower than the Florida rate (Figure 8).<sup>16</sup>

Figure 8. Incidence of Domestic Violence, Nassau County & Florida, 2007-2016



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>14</sup> Florida Department of Law Enforcement. (2016). *Crime in Florida – Clay County*. Retrieved from <http://www.fdle.state.fl.us/FSAC/County-Profiles/Clay.aspx>

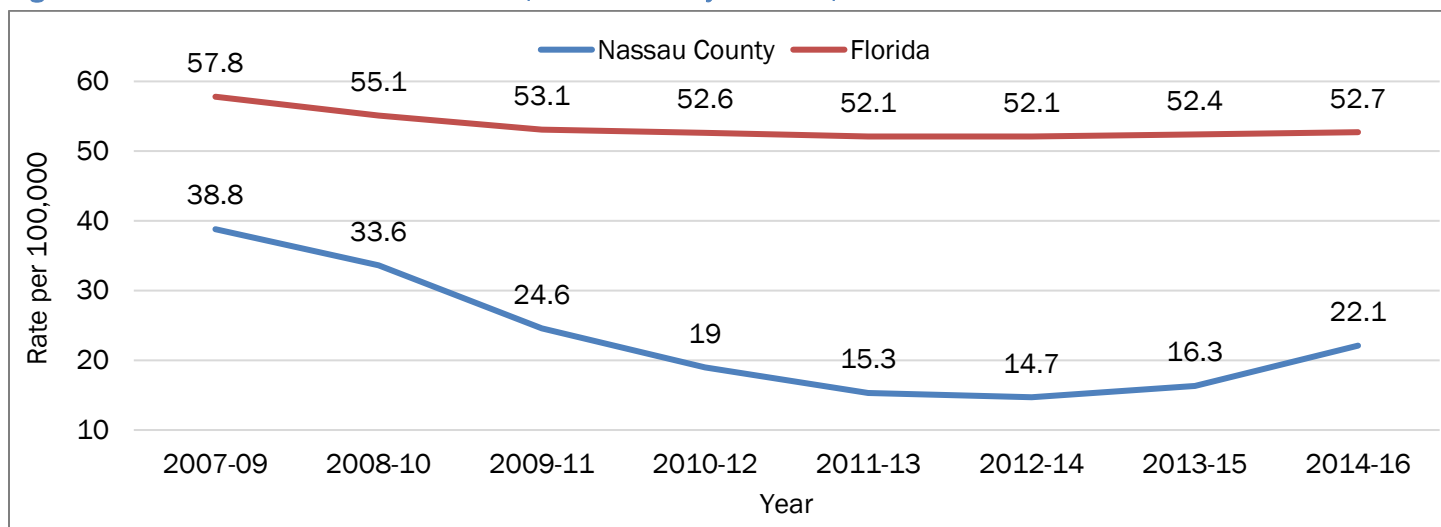
<sup>15</sup> Florida Department of Health. (2017). *Index Crimes* [Data file]. Available from <http://www.flhealthcharts.com>

<sup>16</sup> Florida Department of Health. (2017). *Total Domestic Violence Offenses* [Data file]. Available from <http://www.flhealthcharts.com>

## Sexual Assault

The incidence rate of forcible sex offenses in Nassau County decreased by 62.1% from 2007-2009 to 2012-2014 before increasing by 50.3% from 2012-2014 to 2014-2016. Florida experienced a decrease of 8.8% from 2007-2009 to 2014-2016 (Figure 9).<sup>17</sup>

**Figure 9. Incidence of Forcible Sex Offenses, Nassau County & Florida, 2007-2016**

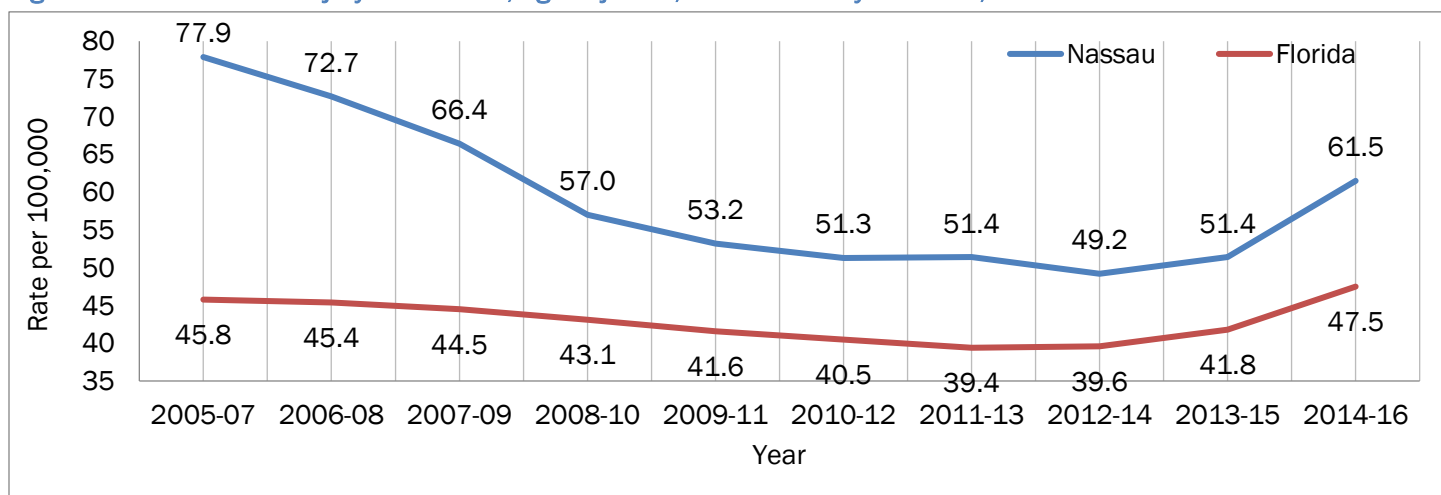


Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

## Unintentional Injury

Unintentional injuries are accidental or unplanned and typically occur in a short period. They include injuries resulting from drowning, motor vehicle crashes, fire, falls, and poisoning.<sup>18</sup> Unintentional injuries are the leading cause of death for people ages 1-44 in the U.S.<sup>19</sup> Nassau County has a higher unintentional injury death rate than the state of Florida with 61.5 injury deaths per 100,000 population compared to 47.5 deaths per 100,000 population in Florida. Nassau County's unintentional injury death rate increased by 25% from 2012-14 to 2014-16 (Figure 10).

**Figure 10. Unintentional Injury Death Rate, Age-Adjusted, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>17</sup> Florida Department of Health. (2017). *Forcible Sex Offenses* [Data file]. Available from <http://www.flhealthcharts.com>

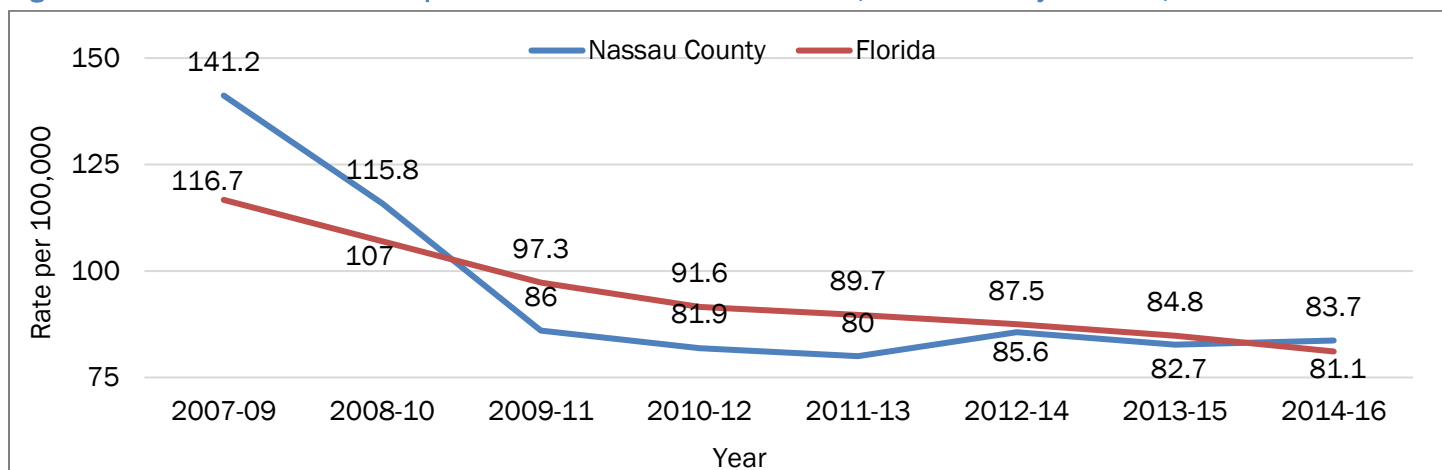
<sup>18</sup> Maine Center for Disease Control and Prevention. (2017). *Maine injury prevention program*. Retrieved from <http://www.maine.gov/dhhs/mecdc/population-health/inj/unintentional.html>

<sup>19</sup> Centers for Disease Control and Prevention. (2017, May 2). *Ten leading causes of death and injury*. Retrieved from [www.cdc.gov/injury/wisqars/leadingcauses.html](http://www.cdc.gov/injury/wisqars/leadingcauses.html)

## Alcohol-Suspected Traffic Crashes

Nassau County saw a 42% decrease in the incidence rate of alcohol-suspected motor vehicle traffic crashes from 2007-2009 to 2010-2012. The county had a rate of 83.7 alcohol-suspected traffic crashes per 100,000 population in 2014-2016. Florida experienced a 31% decrease in incidence from 2007-2009 to 2014-2016 (Figure 11).<sup>20</sup>

**Figure 11. Incidence of Alcohol-Suspected Motor Vehicle Traffic Crashes, Nassau County & Florida, 2007-2016**



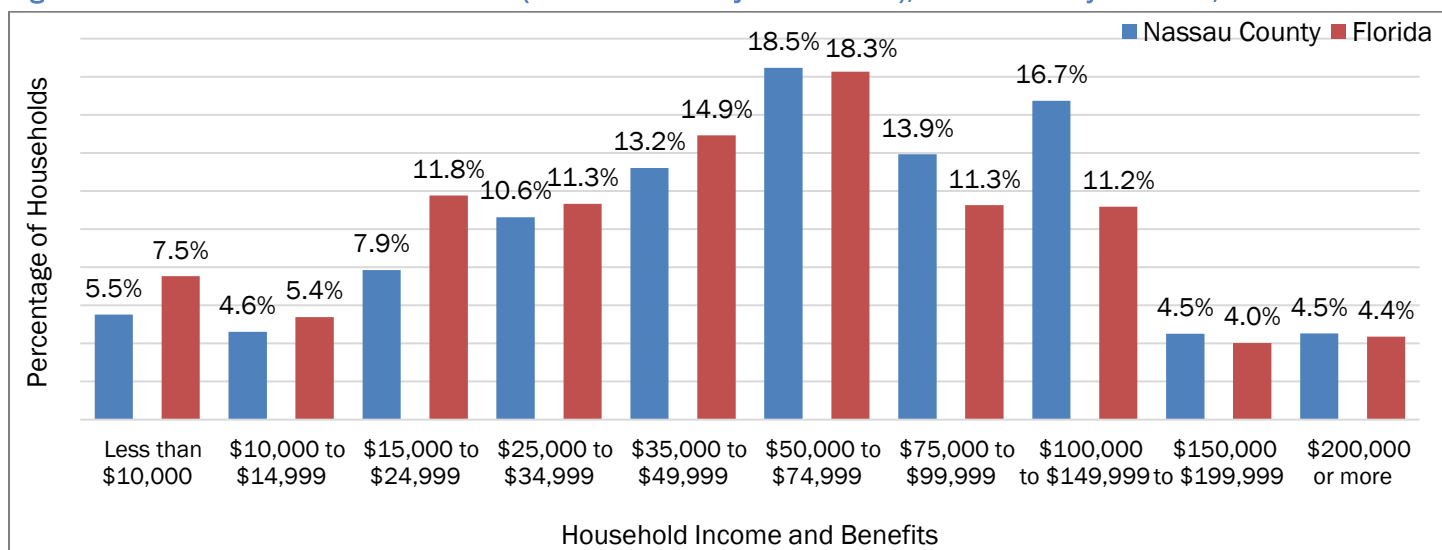
Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

## Economic Factors

### Income

The largest portion (18.5%) of Nassau County households earned \$50,000-\$74,999 in income and benefits, closely followed by households earning \$100,000 to \$149,999 (16.7%). Households earning more than \$50,000 made up 58.1% of Nassau County, compared to 49.2% of Florida households (Figure 12<sup>Error! Reference source not found.</sup>). Per person income was \$31,141 in Nassau County and \$27,598 in Florida in 2016.<sup>21</sup>

**Figure 12. Household Income and Benefits (2016 Inflation-Adjusted Dollars), Nassau County & Florida, 2016**



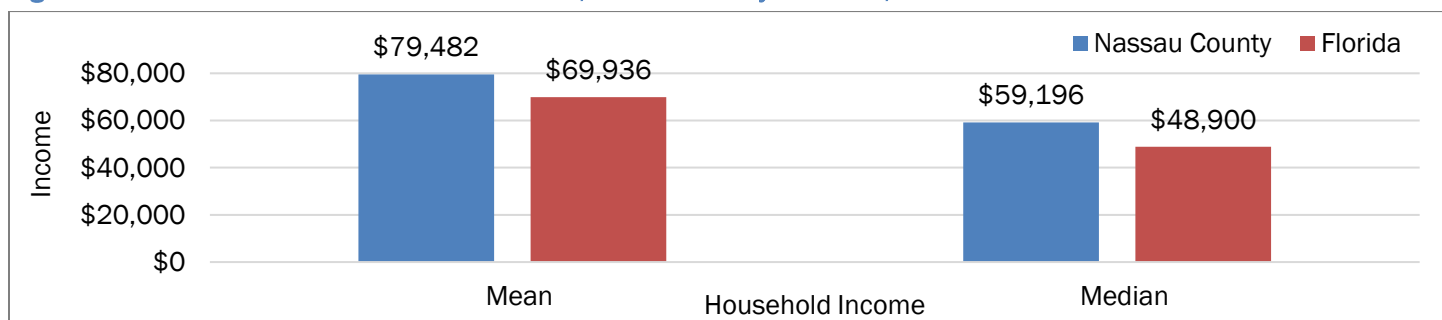
Data Source: 2016 American Community Survey 1-Year Estimates, DP03, Selected Economic Characteristics

<sup>20</sup> Florida Department of Health. (2017). *Alcohol-suspected Motor Vehicle Traffic Crashes* [Data file]. Available from <http://www.flhealthcharts.com>

<sup>21</sup> U.S. Census Bureau. (2016). *2016 American Community Survey 1-Year Estimates: Table DP03-Selected Economic Characteristics* [Data file]. Available from <https://factfinder.census.gov>

Nassau County's mean household income was \$9,546 higher than Florida in 2016. The county's median household income was \$10,296 higher than Florida (Figure 13).<sup>22</sup>

**Figure 13. Mean and Median Household Income, Nassau County & Florida, 2016**



Data Source: 2016 American Community Survey 1-Year Estimates, DP03, Selected Economic Characteristics

### Poverty and Public Assistance

The U.S. Census Bureau determines poverty thresholds by family size and family members' ages, with 48 possible thresholds. Thresholds do not vary geographically and the Bureau updates thresholds annually for inflation. The poverty status calculation sums the incomes of all related family members that live together. If the total family income falls below the poverty threshold, then that family and all its members are considered to be in poverty. If the total family income equals or is greater than the given threshold, then the family and all its members are not in poverty.<sup>23</sup> Table 2 shows poverty thresholds for 2016.<sup>24</sup>

**Table 2. 2016 Poverty Threshold by Size of Family and Number of Children (in Dollars)**

Size of Family Unit	Weighted Average Threshold	Related Children Under 18 Years								
		None	One	Two	Three	Four	Five	Six	Seven	Eight or more
One person (unrelated individual):	12,228									
Under age 65	12,486	12,486								
Aged 65 & older	11,511	11,511								
Two people:	15,569									
Householder under age 65	16,151	16,072	16,543							
Householder 65 and older	14,522	14,507	16,480							
Three people	19,105	18,774	19,318	19,337						
Four people	24,563	24,755	25,160	24,339	24,424					
Five people	29,111	29,854	30,288	29,360	28,643	28,205				
Six people	32,928	34,337	34,473	33,763	33,082	32,070	31,470			
Seven people	37,458	39,509	39,756	38,905	38,313	37,208	35,920	34,507		
Eight people	41,781	44,188	44,578	43,776	43,072	42,075	40,809	39,491	39,156	
Nine people or more	49,721	53,155	53,413	52,702	52,106	51,127	49,779	48,561	48,259	46,400

Data Source: U.S. Census Bureau Poverty Thresholds, 2016 Poverty Threshold

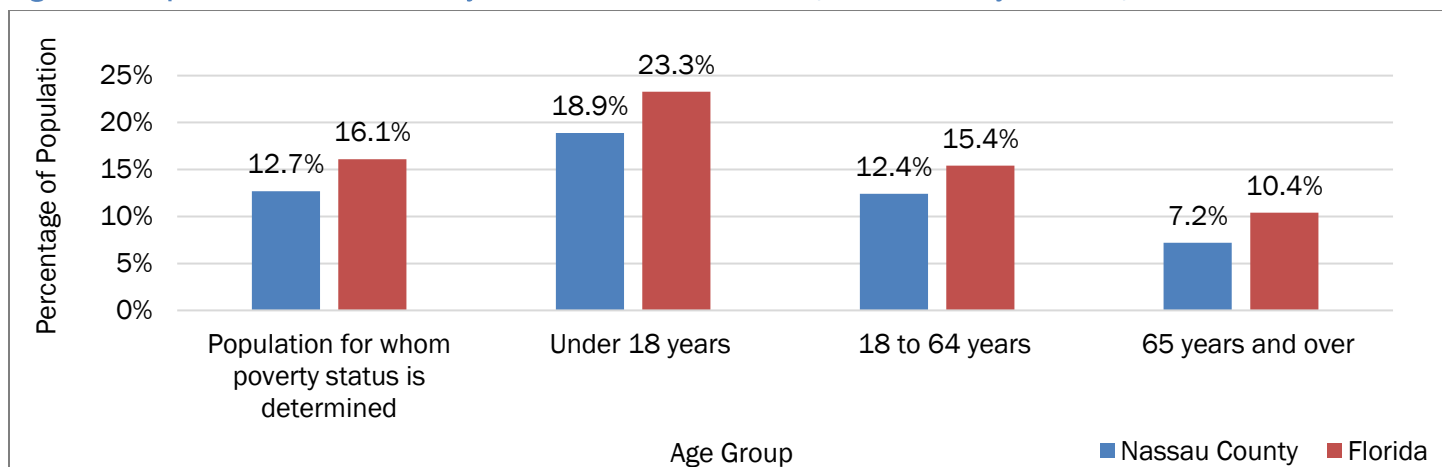
<sup>22</sup> U.S. Census Bureau. 2016 American Community Survey 1-Year Estimates: Table DP03-Selected Economic Characteristics [Data file].

<sup>23</sup> U.S. Census Bureau. Poverty: How the Census Bureau Measures Poverty. Retrieved from <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>

<sup>24</sup> U.S. Census Bureau. (2016). Data: Poverty Thresholds 2016 [Data file]. Retrieved from <https://www2.census.gov/programs-surveys/cps/tables/time-series/historical-poverty-thresholds/thresh16.xls>

Because poverty status cannot be determined for people in institutional group quarters (such as prisons or nursing homes), college dormitories, military barracks, unconventional housing, or those who are not in shelters, the Bureau excludes these groups from poverty measurements. Additionally, the Bureau counts those under the age of 15 who are not living with a family member as unknown.<sup>25</sup> Thus, the total population for whom poverty status was determined was 76,318 for Nassau County and 19,514,334 for Florida. Of the 76,318 people analyzed in Nassau County, 12.7% were in poverty, compared to 16.1% for Florida. Nassau County also had lower poverty rates than Florida by age group, though 18.9% of children under 18 years of age were in poverty (Figure 14).<sup>26</sup>

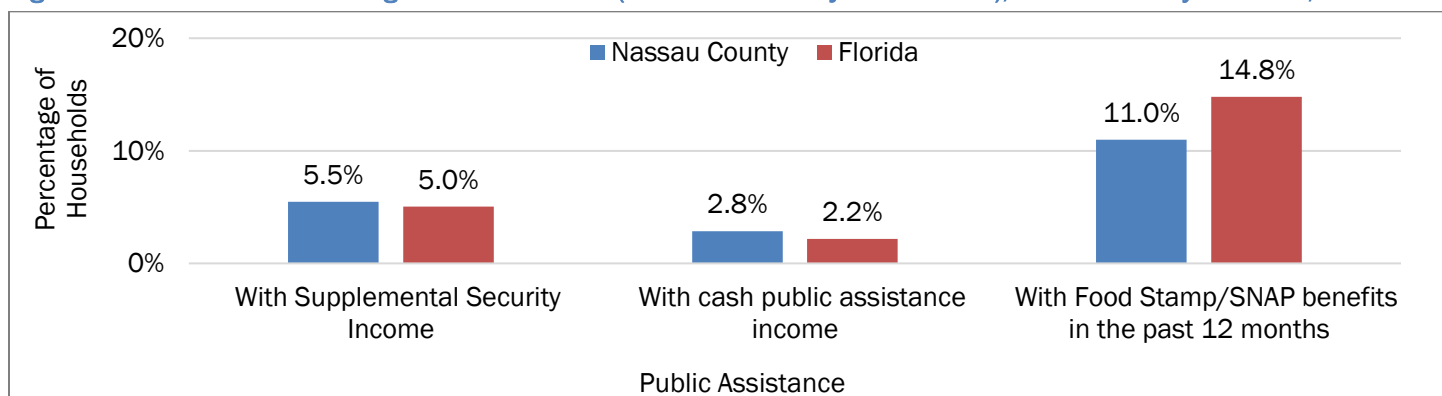
**Figure 14. Population below the Poverty Level in the Past 12 Months, Nassau County & Florida, 2016**



Data Source: 2016 American Community Survey 1-Year Estimates, S1701, Poverty Status in the Past 12 Months

A slightly greater percentage of Nassau County residents, in comparison to Florida, received Supplemental Security Income and cash public assistance, while a smaller percentage of Nassau residents received Food Stamps/SNAP benefits (Figure 15).<sup>27</sup> Supplemental Security Income is a Federal income supplement program “designed to help aged (65 or older), blind, and disabled people, who have little or no income... meet basic needs for food, clothing and shelter.”<sup>28</sup> Cash public assistance, provides aid to low-income families in order for them potentially to become self-supporting.<sup>29</sup>

**Figure 15. Households Receiving Public Assistance (2016 Inflation-Adjusted Dollars), Nassau County & Florida, 2016**



Data Source: 2016 American Community Survey 1-Year Estimates, DP03, Selected Economic Characteristics

<sup>25</sup> U.S. Census Bureau. *Poverty: How the Census Bureau Measures Poverty*. Retrieved from <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>

<sup>26</sup> U.S. Census Bureau. (2016). *2016 American Community Survey 1-Year Estimate: Table S1701, Poverty Status in the Past 12 Months* [Data file]. Available from <https://factfinder.census.gov>

<sup>27</sup> U.S. Census Bureau. *2016 American Community Survey 1-Year Estimates: Table DP03-Selected Economic Characteristics* [Data file]

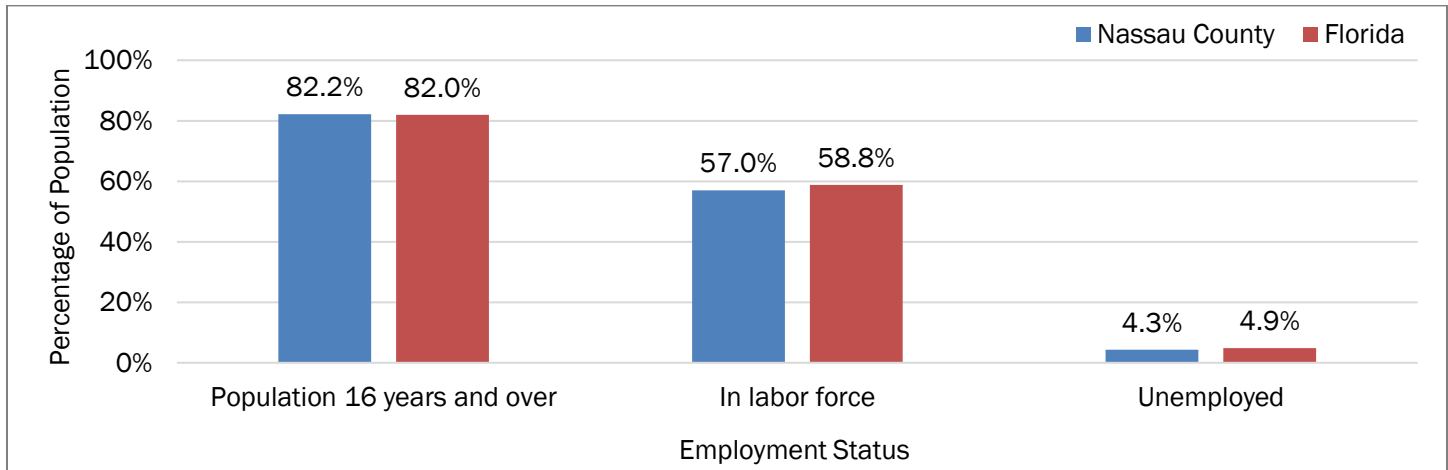
<sup>28</sup> Social Security Administration. (2017). *Supplemental Security Income Home Page*. Retrieved from <https://www.ssa.gov/ssi/>

<sup>29</sup> Florida Department of Children and Families. (2014). *Temporary Cash Assistance (TCA)*. Retrieve from <http://www.myflfamilies.com/service-programs/access-florida-food-medical-assistance-cash/temporary-cash-assistance-tca>

## Labor Force, Employment, and Industry

Figure 16 shows the employment status of those 16 and older in Nassau County and Florida in 2016. About 82% of the population in both Nassau County and Florida is age 16 or older. Of those 16 and older, 57% are in the labor force in Nassau County and 59% in Florida. In 2016, Nassau County and Florida had unemployment rates of 4.3% and 4.9% (Figure 16), respectively, down from 5.5% and 5.7% in 2015.<sup>30</sup>

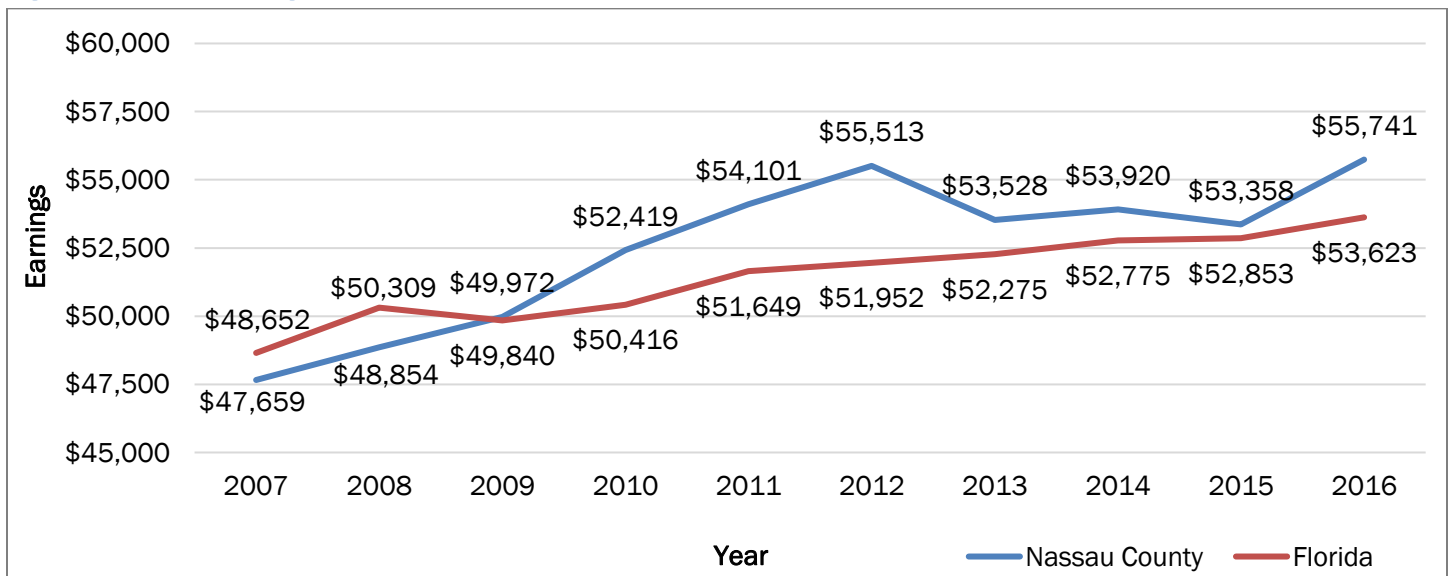
**Figure 16. Employment Status of Population 16 Years and Over, Nassau County & Florida, 2016**



Data Source: 2016 American Community Survey 1-Year Estimates, DP03, Selected Economic Characteristics

Mean earnings in Nassau County remained above Florida from 2009 to 2016. From 2007 to 2012, earnings rose 16.5% in Nassau County compared to 6.8% for Florida. In Nassau County, earnings fell from 2012-2015 before rebounding in 2016; Florida saw a 3.2% increase during this time (Figure 17).<sup>31</sup>

**Figure 17. Mean Earnings in the Past 12 Years (in 2016 Inflation-Adjusted Dollars), Nassau County & Florida, 2007-2016**



Data Source: 2016 American Community Survey 1-Year Estimates, S2001, Earnings in the Past 12 Months

<sup>30</sup> U.S. Census Bureau. 2016 American Community Survey 1-Year Estimates: Table DP03-Selected Economic Characteristics [Data file]

<sup>31</sup> U.S. Census Bureau. (2016). 2016 American Community Survey 1-Year Estimates: Table S2001, Earnings in the Past 12 Months [Data file]. Available from <https://factfinder.census.gov>



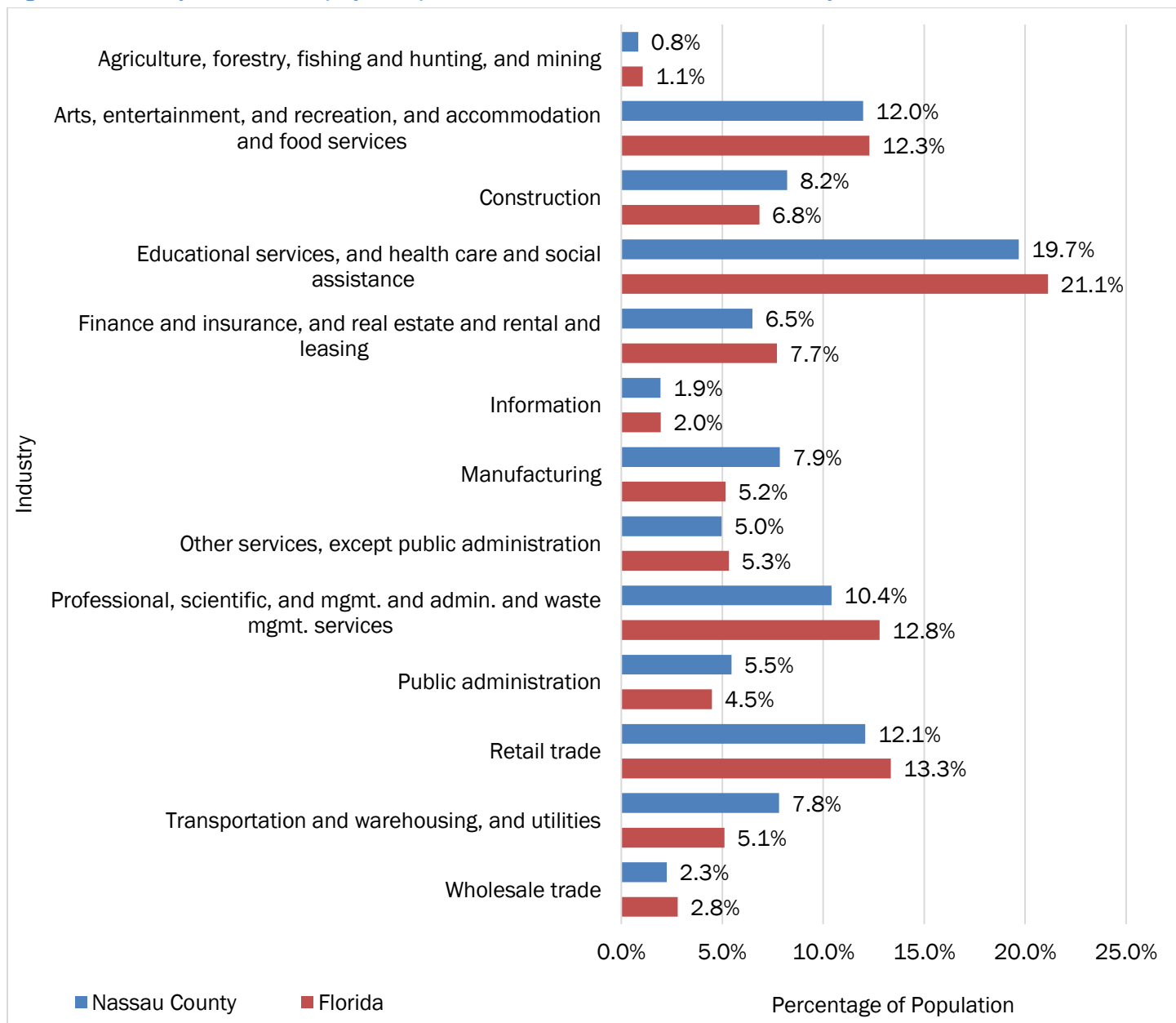
Figure 18 shows the mix of industry in Nassau County and Florida in 2016. In Nassau County, the top three industries, which accounted for 43.8% of all industry in Nassau, were (Figure 18)<sup>32</sup>:

- Educational services, and health care and social assistance (19.7%);
- Retail trade (12.1%); and
- Arts, entertainment, and recreation, and accommodation and food services (12.0%).

By comparison, Florida's top three industries, which accounted for 47.2% of all Florida industry, were:

- Educational services, and health care and social assistance (21.1%);
- Retail trade (13.3%); and professional, scientific, and management, and administrative; and
- Waste management services (12.8%).

**Figure 18. Industry of Civilian Employed Population 16 Years and Over, Nassau County & Florida, 2016**



Data Source: 2016 American Community Survey 1-Year Estimates, DP03, Selected Economic Characteristics

<sup>32</sup> U.S. Census Bureau. 2016 American Community Survey 1-Year Estimates: Table DP03-Selected Economic Characteristics

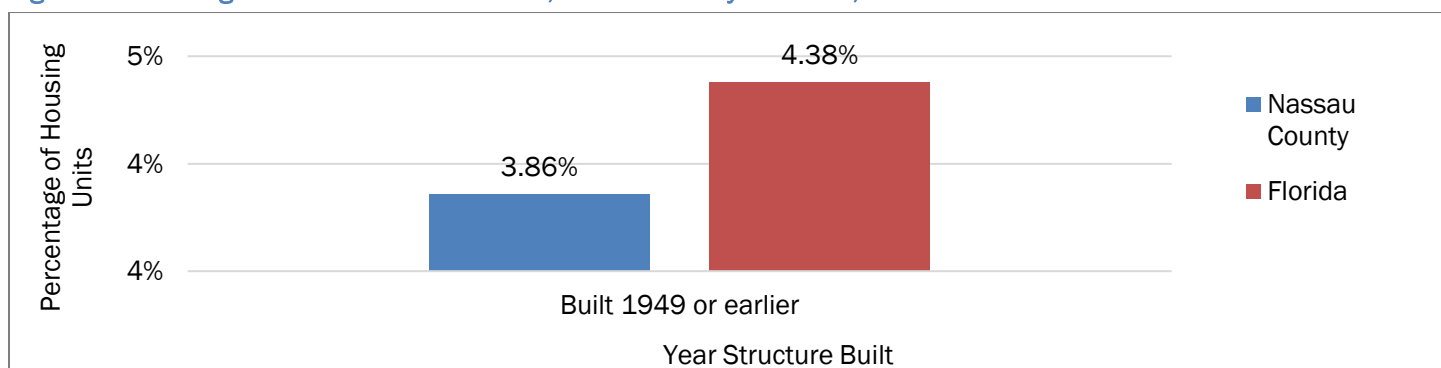


# PHYSICAL ENVIRONMENT

## Housing Conditions

Housing is an important social determinant of health, as people spend a great portion of time inside their homes. Homes built before 1978 are more likely to have issues such as lead, mold, and a lack of smoke and carbon monoxide detectors, all of which pose serious risks to health.<sup>33</sup> In 2016, the estimated total housing units in Nassau County and Florida were 36,152 and 9,152,815, respectively. Of these units, 3.86% and 4.38% were built before 1950 (Figure 19). Of the number of occupied housing units (which totaled 29,214 units for Nassau County and 7,393,262 units for Florida), only 0.16% and 0.28% lacked complete plumbing facilities.<sup>34</sup> The U.S. Census Bureau defines complete plumbing facilities as containing hot and cold running water, a flush toilet, and a bathtub or shower.<sup>35</sup>

Figure 19. Housing Units Built 1949 or Earlier, Nassau County & Florida, 2016

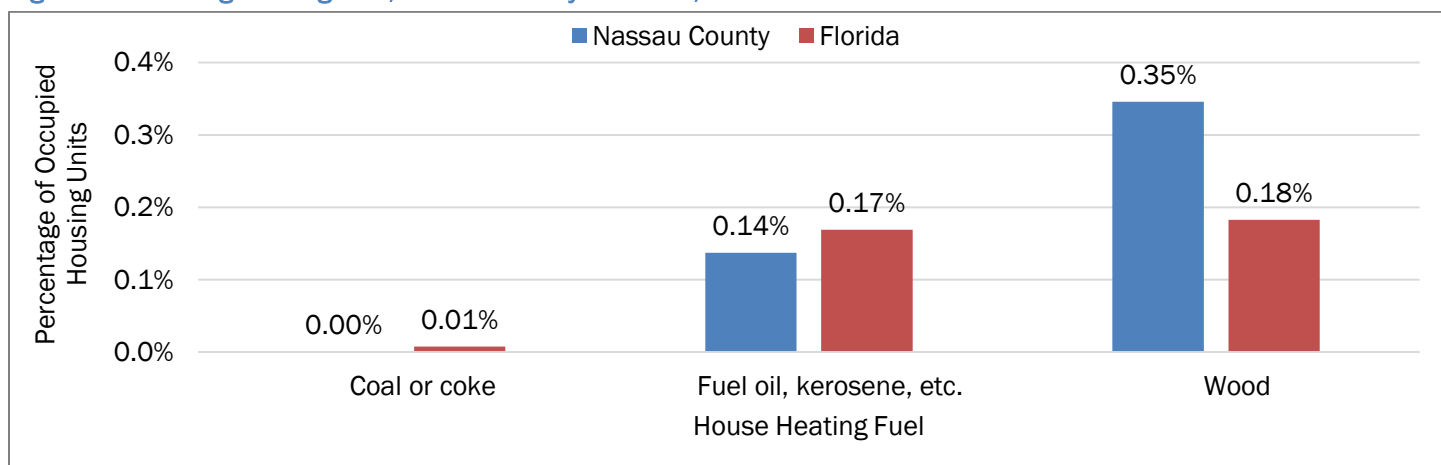


Data Source: 2016 American Community Survey 1-Year Estimates, DP04, Selected Housing Characteristics

## Heating Fuel

Few occupied homes use heating fuel other than electricity or gas in Nassau County and Florida. In Nassau County, 0% (0 households) used coal or coke; 0.14% (40 households) used fuel oil, kerosene, etc., and 0.35% (101 households) used wood in 2016. Household heating fuel in Florida, by comparison, was 0.01% coal or coke, 0.17% fuel oil, kerosene, etc., and 0.18% wood (Figure 20).<sup>36</sup>

Figure 20. Housing Heating Fuel, Nassau County & Florida, 2016



Data Source: 2016 American Community Survey 1-Year Estimates, DP04, Selected Housing Characteristics

<sup>33</sup> Florida Department of Health. (2018). *Housing*. Retrieved from Florida Environmental Public Health Tracking: <https://www.floridatracking.com/>

<sup>34</sup> U.S. Census Bureau. (2016). *2016 American Community Survey 1-Year Estimate: Table DP04, Selected Housing Characteristics* [Data file]. Available from <https://factfinder.census.gov>

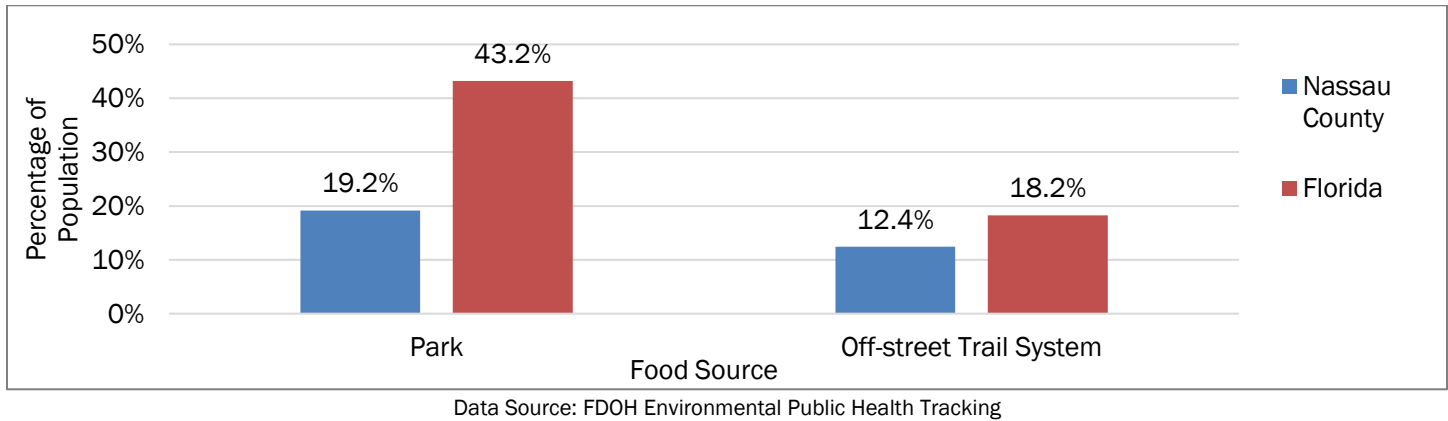
<sup>35</sup> United States Census Bureau. (2015, May 29). *Plumbing and Kitchen Facilities in Housing Units*. Retrieved from Plumbing and Kitchen Facilities in Housing Units: [https://www.census.gov/library/working-papers/2015/acs/2015\\_Raglin\\_01.html](https://www.census.gov/library/working-papers/2015/acs/2015_Raglin_01.html)

<sup>36</sup> U.S. Census Bureau. *2016 American Community Survey 1-Year Estimate: Table DP04, Selected Housing Characteristics*

## Parks and Recreation

In 2016, 19.2% of Nassau County residents lived within a half-mile, or 10 minute walk, from a park. This was 24 percentage points less than all Florida residents, in comparison. About 12% of Nassau County residents were within a half-mile of an off-street trail system, which was less than Florida by 5.8 percentage points (Figure 21).<sup>37</sup>

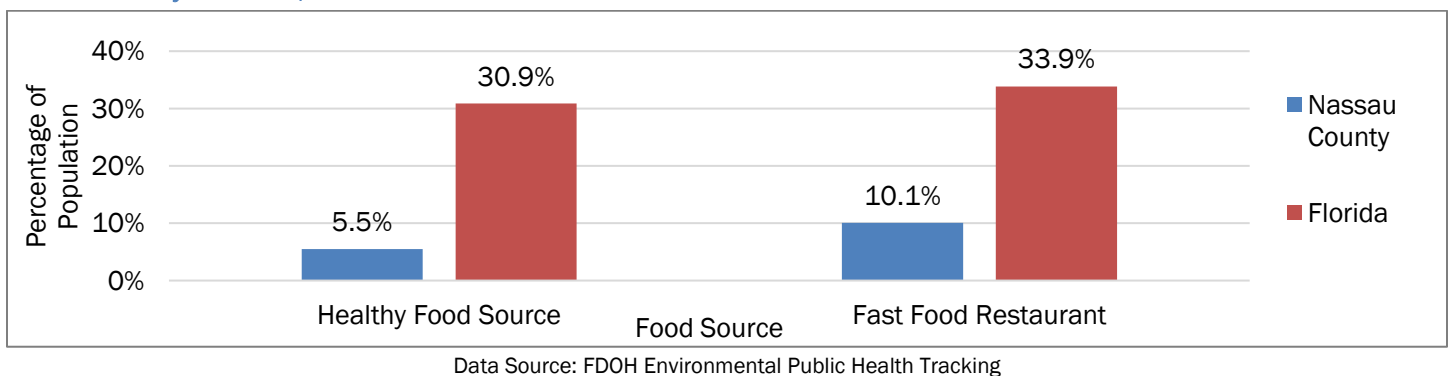
**Figure 21. Population Living within a Half-Mile (or 10-Minute Walk) of a Park or Off-Street Trail System, Nassau County & Florida, 2016**



## Food Accessibility

A healthy food source is defined as grocery stores, supermarkets, and registered produce stands where residents have access to a variety of foods including fresh fruits and vegetables. Fast food restaurants by comparison are inexpensive and convenient food options with high caloric content. In general, Nassau County had a much lower percentage of residents compared to Florida living within a half-mile of either food source. In 2016, 5.5% and 10.1% of Nassau County residents lived within a half-mile of a healthy food source and fast food restaurant, respectively. These were 25.4 and 23.8 percentage points lower than Florida residents (Figure 22).<sup>38</sup>

**Figure 22. Population Living within a Half-Mile (or 10-Minute Walk) of a Healthy Food Source or Fast Food Restaurant, Nassau County & Florida, 2016**



<sup>37</sup> Florida Department of Health. (2017). *Florida Environmental Public Health Tracking: Built Environment* [Data file]. Available from <https://www.floridatracking.com/healthtracking/Topic.htm?i=14>

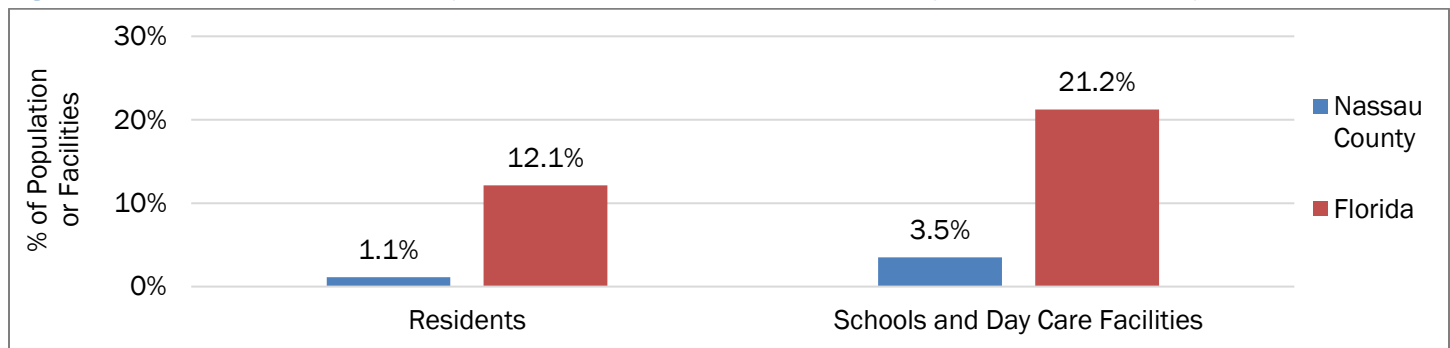
<sup>38</sup> Florida Department of Health. *Florida Environmental Public Health Tracking: Built Environment* [Data file].

## Transportation

### Proximity of the Population to Busy Roadways

Disadvantaged populations experience higher exposure to traffic-related air pollution than those with greater means.<sup>39</sup> In 2016, only 1.1% of Nassau residents lived within 500 feet of a busy road compared to 12% in Florida. Only 3.5% of schools and day care facilities in Nassau County were near a busy road compared to 21% in Florida (Figure 23).<sup>40</sup>

Figure 23. Residents and Schools/Day Care Facilities within 500 Feet of a Busy Road, Nassau County & Florida, 2016

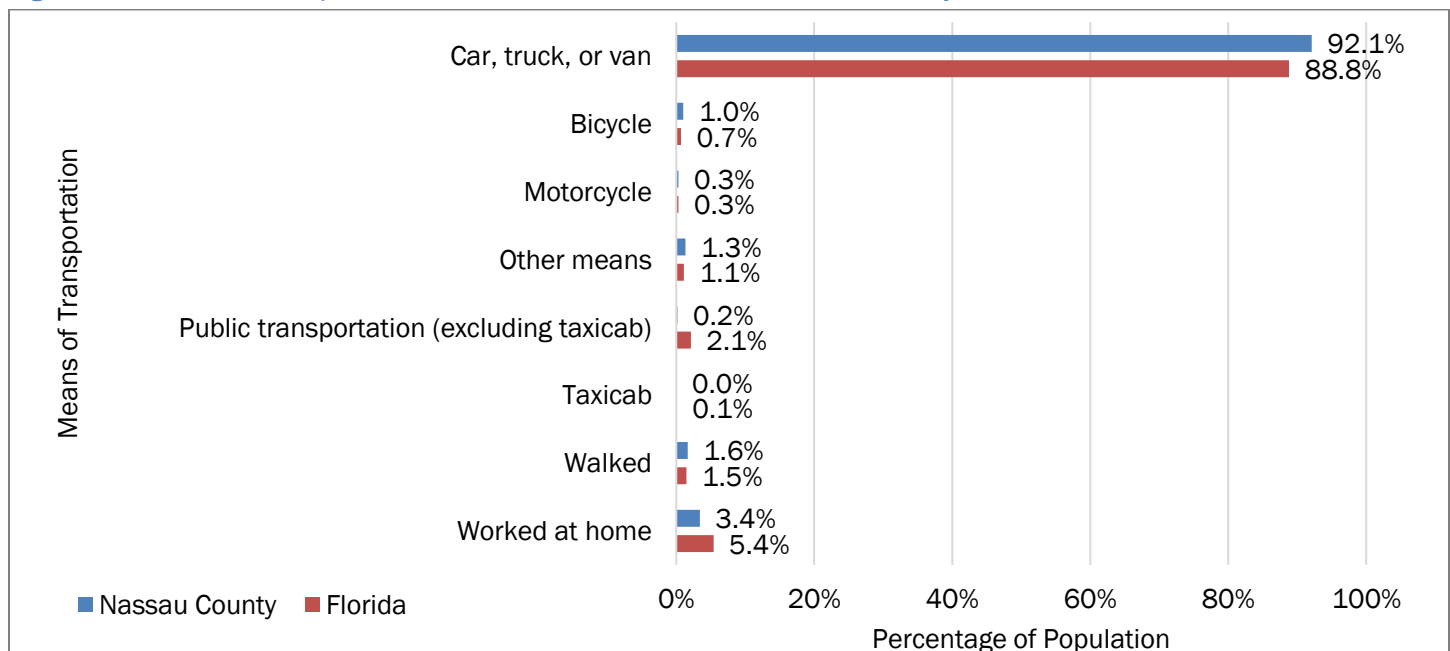


Data Source: FDOH Environmental Public Health Tracking

### Commuting

Nassau County and Florida residents used similar means of commuting to work in 2016. The majority of Nassau County residents (92.1%) traveled to work by car, truck, or van, with 89% driving alone and 11% carpooling. Use of public transportation was low in both areas with 0.2% of Nassau County workers using public transportation compared to 2.1% of Florida workers (Figure 24). These numbers did not change significantly from 2015.<sup>41</sup>

Figure 24. Means of Transportation, Workers 16 Years and Over, Nassau County & Florida, 2016



Data Source: 2015 American Community Survey 1-Year Estimates, B08301, Means of Transportation to Work

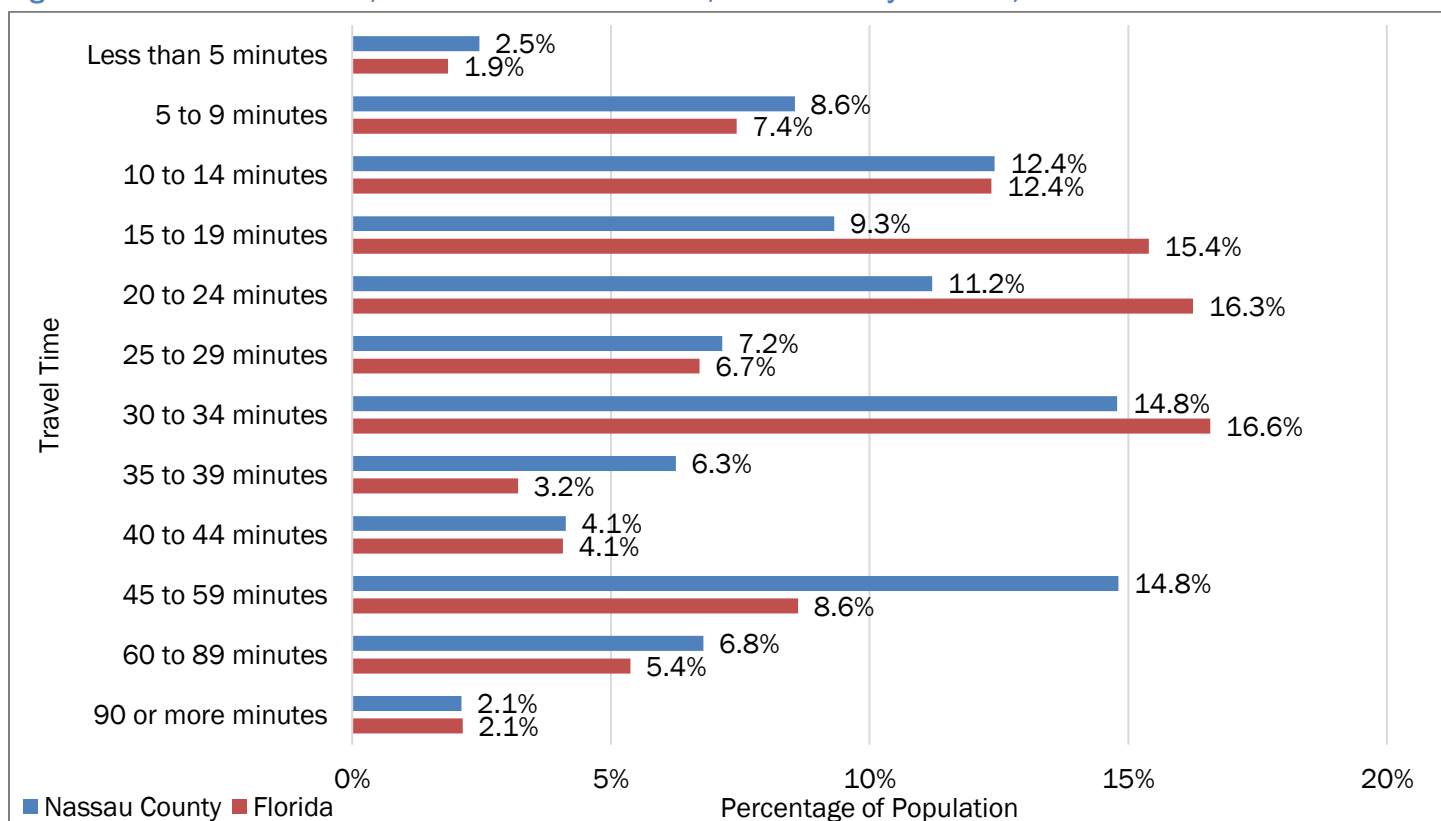
<sup>39</sup> Boehmer, Foster, Henry, Woghiren-Akinnifesi, & Yip. (2013). *Morbidity and Mortality Weekly Report: Residential Proximity to Major Highways – United States, 2010*. Centers For Disease Control and Prevention.

<sup>40</sup> Florida Department of Health. *Florida Environmental Public Health Tracking: Built Environment* [Data file]

<sup>41</sup> U.S. Census Bureau. (2016). *2016 American Community Survey 1-Year Estimate: Table B08301, Means of Transportation to Work* [Data file]. Available from <https://factfinder.census.gov>

Nassau County workers tended to have longer travel times to work than Florida workers in 2016. In Nassau County, 33% of workers 16 years and over spent less than 20 minutes commuting to work compared to 37% of Florida residents. Commutes between 20 and 45 minutes occurred for 44% of Nassau County workers compared to 46.8% of Florida workers, and commutes over 45 minutes occurred for 23.7% of Nassau County workers and 16.1% of Florida workers (Figure 25).<sup>42</sup>

**Figure 25. Travel Time to Work, Workers 16 Years and Over, Nassau County & Florida, 2016**

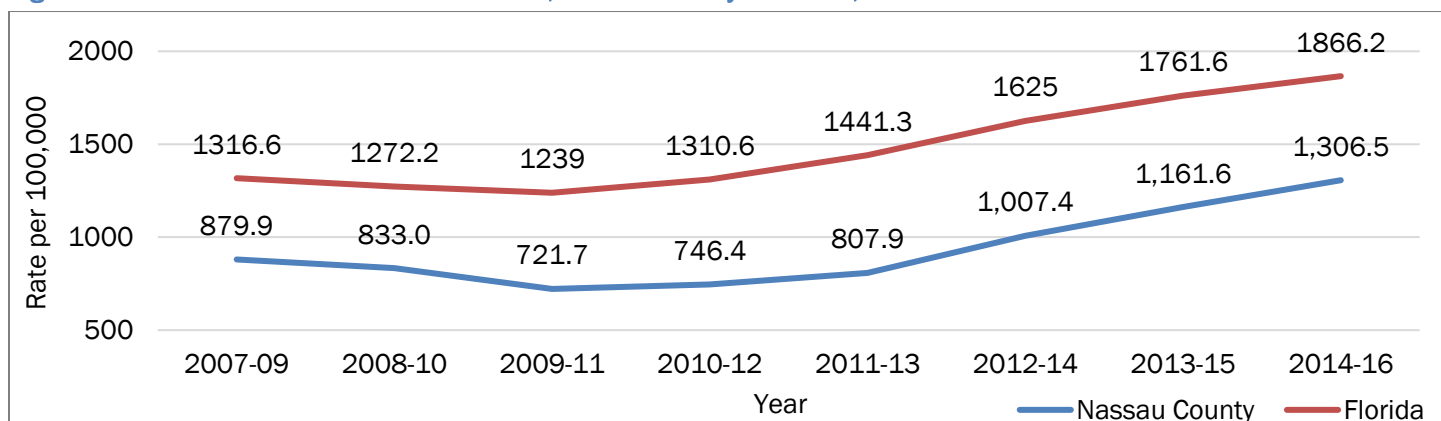


Data Source: 2016 American Community Survey 1-Year Estimates, B08303, Travel Time to Work

## Traffic Crashes

Motor traffic crash rates declined from 2007-2009 to 2009-2011 in both Nassau County and Florida. Crash rates in Nassau County increased 81% from 2009-2011 to 2014-2016 compared to a 51% increase in Florida. Nassau County, however, remained below Florida's crash rate during the same period (Figure 26).<sup>43</sup>

**Figure 26. Total Motor Vehicle Traffic Crashes, Nassau County & Florida, 2007-2016**



Data Source: Florida Health Community Health Assessment Resource Tool Set

<sup>42</sup> U.S. Census Bureau. (2016). 2016 American Community Survey 1-Year Estimate: Table B08303, Travel Time to Work [Data file].

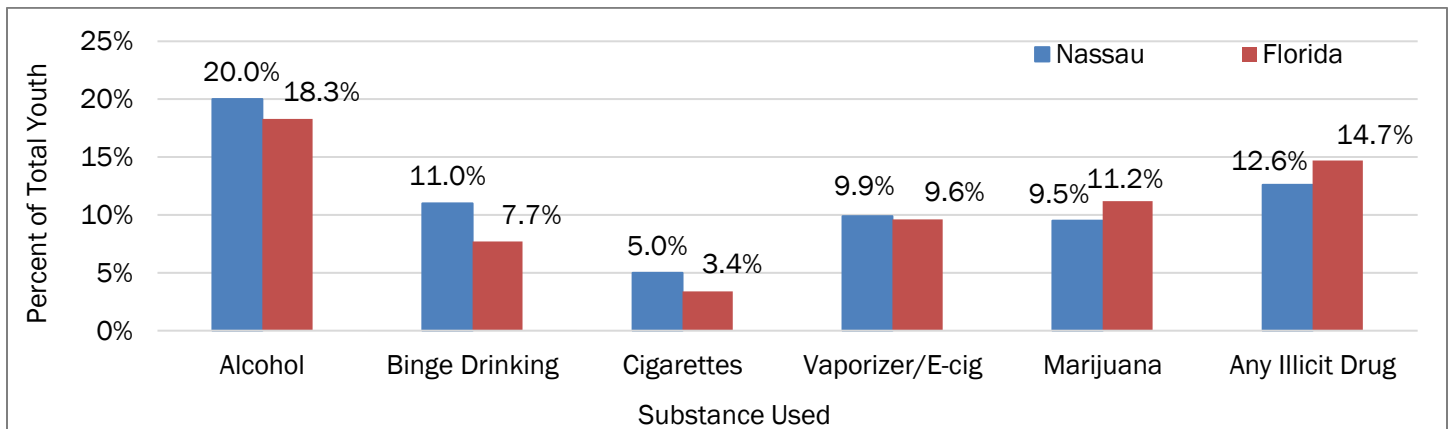
<sup>43</sup> Florida Department of Health. (2017). Total Motor Vehicle Traffic Crashes [Data file]. Available from <http://www.flhealthcharts.com>

# HEALTH BEHAVIORS

## Florida Youth Substance Abuse Survey

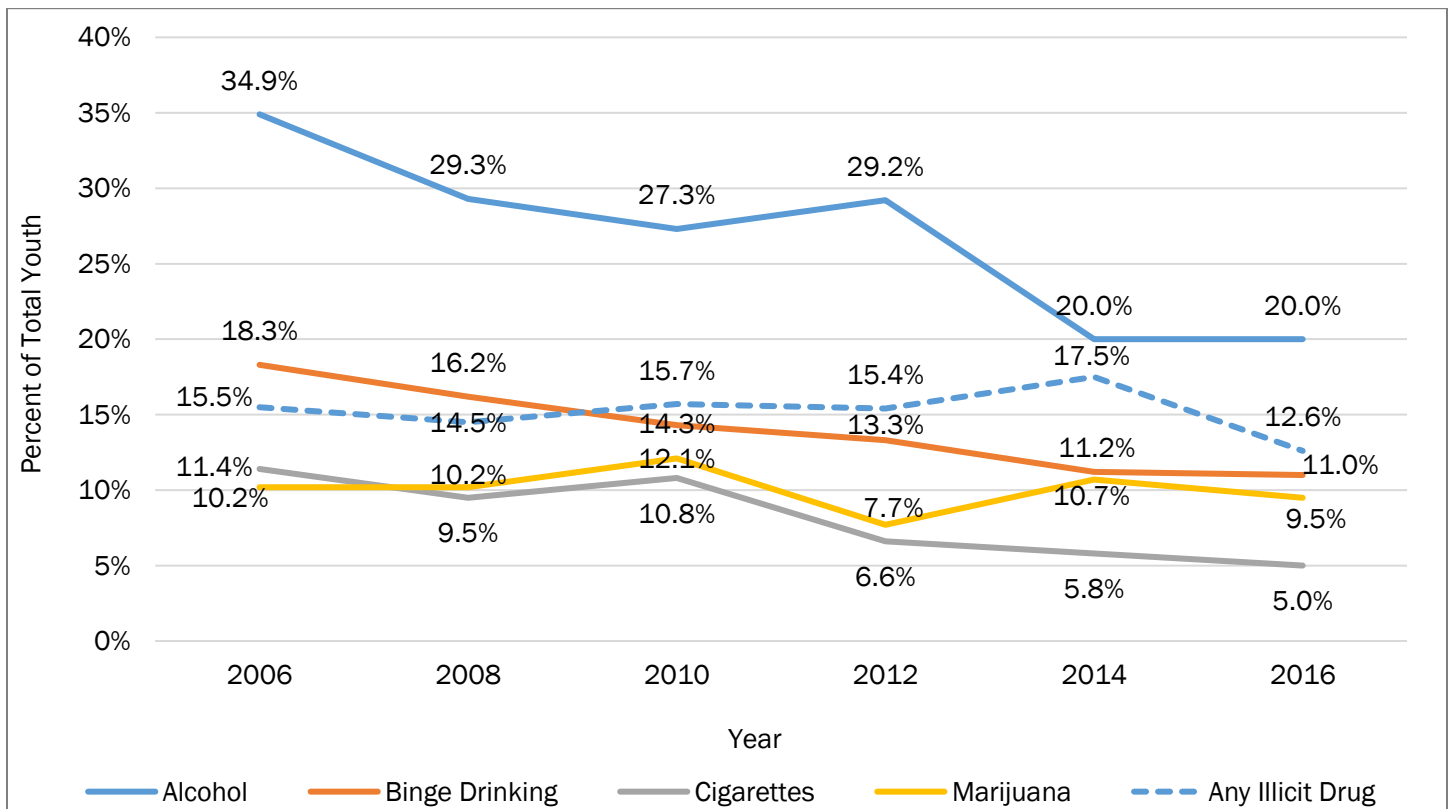
The Florida Youth Substance Abuse Survey (FYSAS) is an annual, statewide school-based survey effort that measures the prevalence of alcohol, tobacco and other drug use; delinquent behaviors; and the risk and protective factors related to these behaviors. The 2016 FYSAS was answered by 725 Nassau County students in grades 6-12. Alcohol was the most commonly used substance among students with a prevalence rate of 43.5% for lifetime use and a prevalence rate of 20% for past 30-day use. Vaporizers and e-cigarettes were the second most commonly used substances among students, with a 28.5% prevalence rate for lifetime use and 9.9% prevalence rate for past 30-day use. Additional findings with state comparisons for 30-day use of various substances are shown in Figure 27. Figure 28 depicts the past 30-day trends among various substances for Nassau County from 2006 to 2016.

Figure 27. Youth Who Reported Using Various Substances in the Past 30 Days, 2016



Source: Florida Youth Substance Abuse Survey-Nassau Report, 2016

Figure 28. Youth Past-30-Day Trend in Various Substance Use for Nassau, 2006-2016



Source: Florida Youth Substance Abuse Survey-Nassau Report, 2016

## Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) “is the nation’s premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. Established in 1984 with 15 states, BRFSS now collects data in all 50 states as well as the District of Columbia and 3 U.S. territories. BRFSS completes more than 400,000 adult interviews each year making it the largest continuously conducted health survey system in the world.”<sup>44</sup>

The Florida BRFSS began reporting health behavior data in 1986 on residents 18 years and over. The 2016 BRFSS is the latest and fifth county-level survey conducted in Florida, estimating the county prevalence of personal health behaviors that contribute to morbidity and mortality. Of Nassau County’s 62,332 adult residents, 495 responded to the 2016 county-level survey.<sup>45</sup> Table 3 shows some of the key findings for Nassau County. *County indicators that are statistically significantly different than the state rate are indicated by an asterisk (\*)*.

**Table 3. Selected BRFSS Data, Nassau County & Florida, 2016**

<b>Alcohol Consumption</b>	<b>Nassau County</b>	<b>Florida</b>	<b>County compared to state</b>
Adults who engage in heavy or binge drinking	12.2%	17.5%	-5.3%*
<b>Cancer Screening</b>	<b>Nassau County</b>	<b>Florida</b>	<b>County compared to state</b>
Women 40 years of age and older who received a mammogram in the past year	54.4%	60.8%	-6.4%
Women aged 50 to 74 who had a mammogram in the past 2 years	73.6%	81.7%	-8.1%
Women who have had a hysterectomy	39.7%	22.7%	17.0%*
Women 18 years of age and older who received a Pap test in the past year	39.2%	48.4%	-9.2%
Women aged 21 to 65 who had a Pap test in the past 3 years	85.1%	78.8%	6.3%
Adults ages 50 years and older who have ever had a blood stool test	30.1%	36.0%	-5.9%
Adults ages 50 years and older who received a blood stool test in the past year	9.3%	16.0%	-6.7%*
Adults 50 years of age and older who have ever had a sigmoidoscopy or colonoscopy	76.4%	69.2%	7.2%*
Adults 50 years of age and older who received a sigmoidoscopy or colonoscopy in the past five years	58.5%	53.9%	4.6%
Adults aged 50 to 75 who had colorectal screening based on the most recent clinical guidelines	76.7%	67.3%	9.4%*
Men 50 years of age and older who received a PSA test in the past two years	58.8%	54.9%	3.9%
<b>Dental Care</b>	<b>Nassau County</b>	<b>Florida</b>	<b>County compared to state</b>
Adults who visited a dentist or a dental clinic in the past year	68.3%	63.0%	5.3%
Adults who had a permanent tooth removed because of tooth decay or gum disease	53.3%	47.3%	6.0%*

<sup>44</sup> Centers for Disease Control and Prevention. (2014, May 16). *About BRFSS*. Retrieved from <https://www.cdc.gov/brfss/about/index.htm>

<sup>45</sup> Florida Department of Health. (2016). *2016 Florida Behavioral Risk Factor Surveillance System (BRFSS) Data Report - Nassau* [Data file. Retrieved from <http://www.floridahealth.gov/statistics-and-data/survey-data/behavioral-risk-factor-surveillance-system/reports/2016%20Reports/Nassau.pdf>

<b>Diabetes</b>	<b>Nassau County</b>	<b>Florida</b>	<b>County compared to state</b>
Adults who have ever been told they had pre-diabetes	9.3%	9.4%	-0.1%
Adults who have ever been told they had diabetes	15.1%	11.8%	3.3%
Average age at which diabetes was diagnosed	51.6	48.2	3.4
<b>Healthcare Access &amp; Coverage</b>	<b>Nassau County</b>	<b>Florida</b>	<b>County compared to state</b>
Adults who could not see a doctor at least once in the past year due to cost	16.8%	16.6%	0.2%
Adults who have Medicare (Medicare is a coverage plan for people 65 or over and for certain disabled people)	43.3%	37.9%	5.4%
Adults with any type of health care insurance coverage	90.4%	83.7%	6.7%*
Adults who have a personal doctor	81.1%	72.0%	9.1%*
Adults who had a medical checkup in the past year	81.7%	76.5%	5.2%
<b>Health Status and Quality of Life</b>	<b>Nassau County</b>	<b>Florida</b>	<b>County compared to state</b>
Adults who said their overall health was "fair" or "poor"	23.1%	19.5%	3.6%
Adults who said their overall health was "good" to "excellent"	76.9%	80.5%	-3.6%
Adults with good physical health for the past 30 days	82.8%	87.1%	-4.3%
Adults with good mental health for the past 30 days	85.6%	88.6%	-3.0%
Average number of unhealthy mental days in the past 30 days	4.1	3.6	0.50
Average number of unhealthy physical days in the past 30 days	5.4	4.0	1.40*
Adults who had poor mental health on 14 or more of the past 30 days	14.4%	11.4%	3.0%
Adults who had poor physical health on 14 or more of the past 30 days	17.2%	12.9%	4.3%
Adults whose poor physical or mental health kept them from doing usual activities on 14 or more of the past 30 days (Among adults who have had at least one day of poor mental or physical health)	23.3%	18.6%	4.7%
Average number of days where poor mental or physical health interfered with activities of daily living in the past 30 days (Among adults who have had at least one day of poor mental or physical health)	7	5.7	1.30
Adults who have ever been told they had a depressive disorder	17.7%	14.2%	3.5%
<b>HIV/AIDS</b>	<b>Nassau County</b>	<b>Florida</b>	<b>County compared to state</b>
Adults less than 65 years of age who have ever been tested for HIV	46.1%	55.3%	-9.2%*
Adults less than 65 years of age who had an HIV test in the past 12 months	12.3%	19.7%	-7.4%*
Adults who had ever been tested for HIV	37.4%	46.9%	-9.5%*

<b>Obesity and Overweight</b>	<b>Nassau County</b>	<b>Florida</b>	<b>County compared to state</b>
Adults who are overweight	35.2%	35.8%	-0.6%
Adults who are obese	30.9%	27.4%	3.5%
Adults who are overweight or obese	66.1%	63.2%	2.9%
Adults who have a healthy weight	32.1%	34.5%	-2.4%
<b>Tobacco Usage</b>	<b>Nassau County</b>	<b>Florida</b>	<b>County compared to state</b>
Adults who are current smokers	12.8%	15.5%	-2.7%
Adult current smokers who tried to quit smoking at least once in the past year	61.7%	62.1%	-0.4%
Adults who are former smokers (currently quit smoking)	33.7%	26.5%	7.2%*
Adults who have never smoked	53.6%	58.0%	-4.4%
Adults who are current e-cigarette users	2.6%	4.7%	-2.1%
Adults who are former e-cigarette users	11.7%	15.5%	-3.8%
Adults who have never used e-cigarettes	85.6%	79.8%	5.8%*

Data Source: Florida Health Community Health Assessment Resource Tool Set

\* Indicates that the difference between Nassau County and Florida is statistically significant.

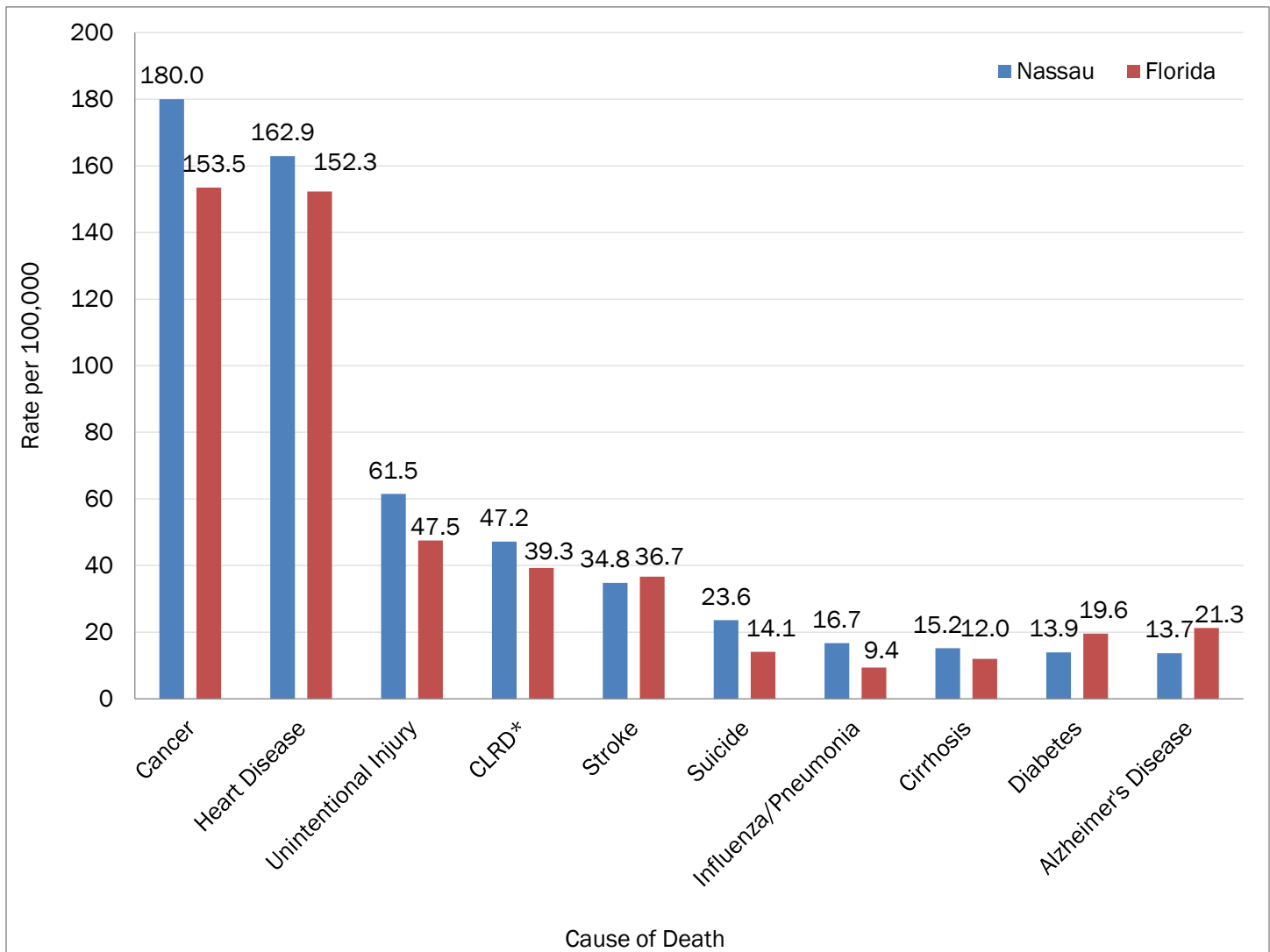


# HEALTH OUTCOMES

## Leading Causes of Death

Figure 29 shows the top ten leading causes of death in Nassau County with a comparison to the state of Florida as a whole. Cancer, heart disease, and unintentional injury are the leading killers in Nassau County. Nassau has a higher mortality rate for cancer (180 versus 153.5 deaths per 100,000 population) compared to the three-year Florida rate. However, the death rates from stroke (36.7 versus 34.8 deaths), diabetes (13.9 versus 19.6 deaths), and Alzheimer's disease (21.3 versus 13.7 deaths) were lower in Nassau County than the rates for Florida during the same period.

Figure 29. Leading Causes of Death, Age-Adjusted, Nassau County & Florida, 2014-2016



\*Chronic Lower Respiratory Disease. Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

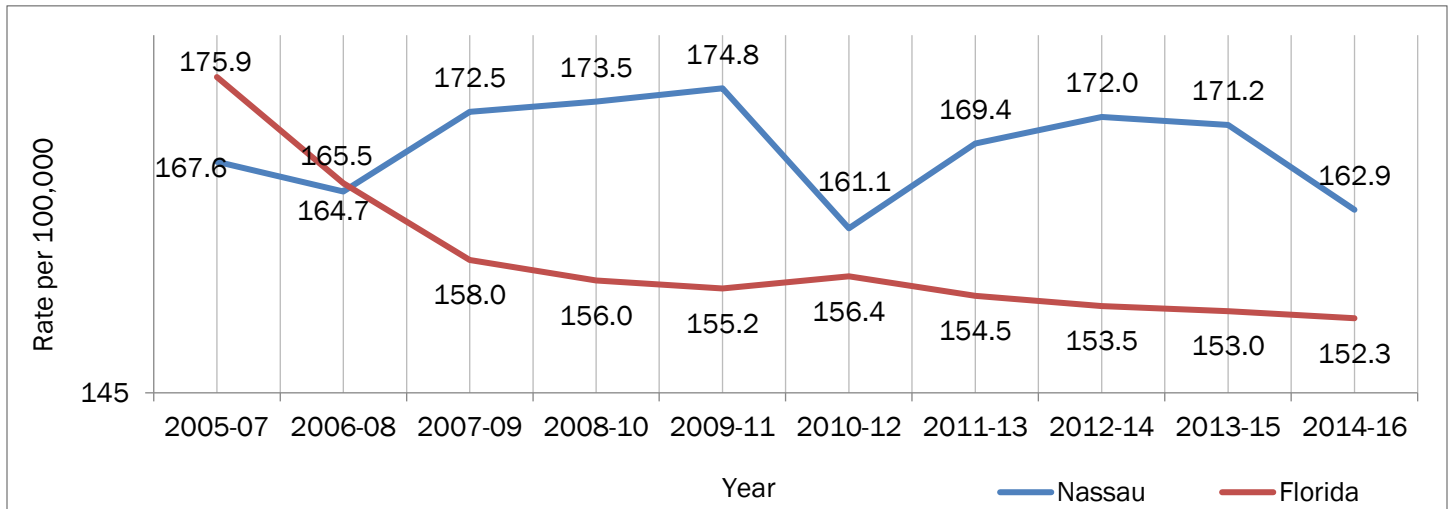
## Chronic Diseases

### Heart Disease

Heart disease remains the nation's leading cause of death, accounting for one in every four deaths in the United States. The most common type of heart disease is coronary heart disease, which can lead to heart attack.<sup>46</sup> Individuals can reduce their risk for heart disease by maintaining a healthy weight, treating chronic health conditions, quitting smoking, and increasing physical activity.<sup>47</sup>

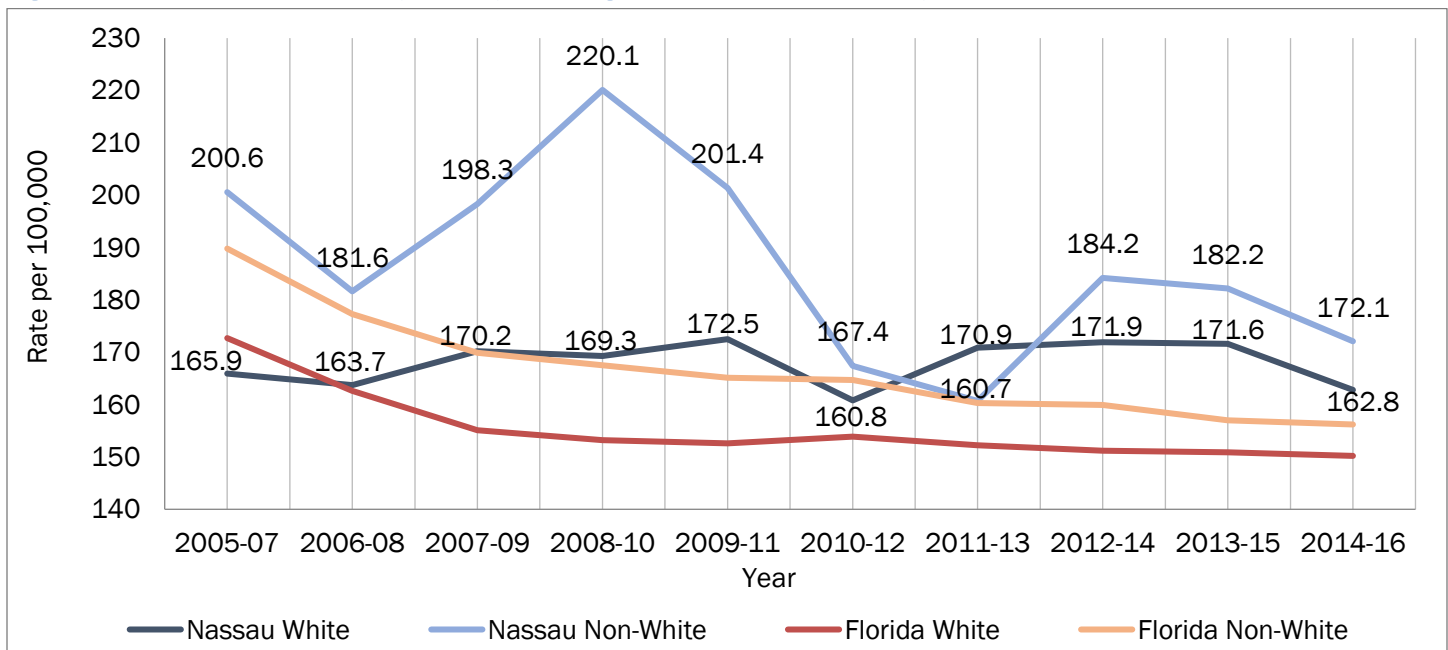
Since 2007-09, Nassau County heart disease mortality rates have remained higher than the state rate (Figure 30). The heart disease mortality rate among non-White Nassau residents peaked in 2008-2010, followed by a rate decrease that has been slowly approaching rates among White Nassau residents (Figure 31).

**Figure 30. Heart Disease Mortality Rate, Age-Adjusted, All Races/Ethnicities, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

**Figure 31. Heart Disease Mortality Rate by Race, Age-Adjusted, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>46</sup> U.S. Centers for Disease Control and Prevention. (2017, November 28). *Heart Disease*. Retrieved from <http://www.cdc.gov/heartdisease/facts.htm>

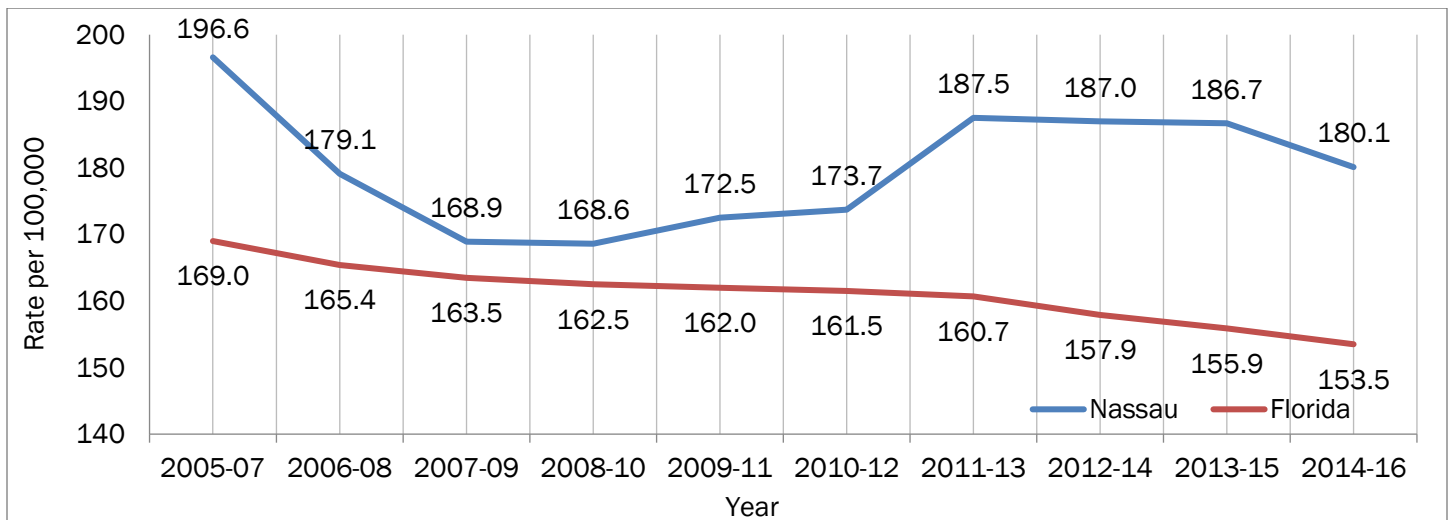
<sup>47</sup> U.S. Centers for Disease Control and Prevention. (2017, November 28). *Know the facts about heart disease*. Retrieved from <https://www.cdc.gov/heartdisease/facts.htm>

## Cancer

Cancer is a large group of diseases characterized by the invasive and uncontrolled growth of abnormal cells.<sup>48</sup> Cancer ranks second only to heart disease as the leading cause of death in the United States.<sup>49</sup> A person can reduce their risk of cancer by avoiding tobacco, limiting alcohol, eating a healthy diet, maintaining a healthy weight, and being physically active.<sup>50</sup>

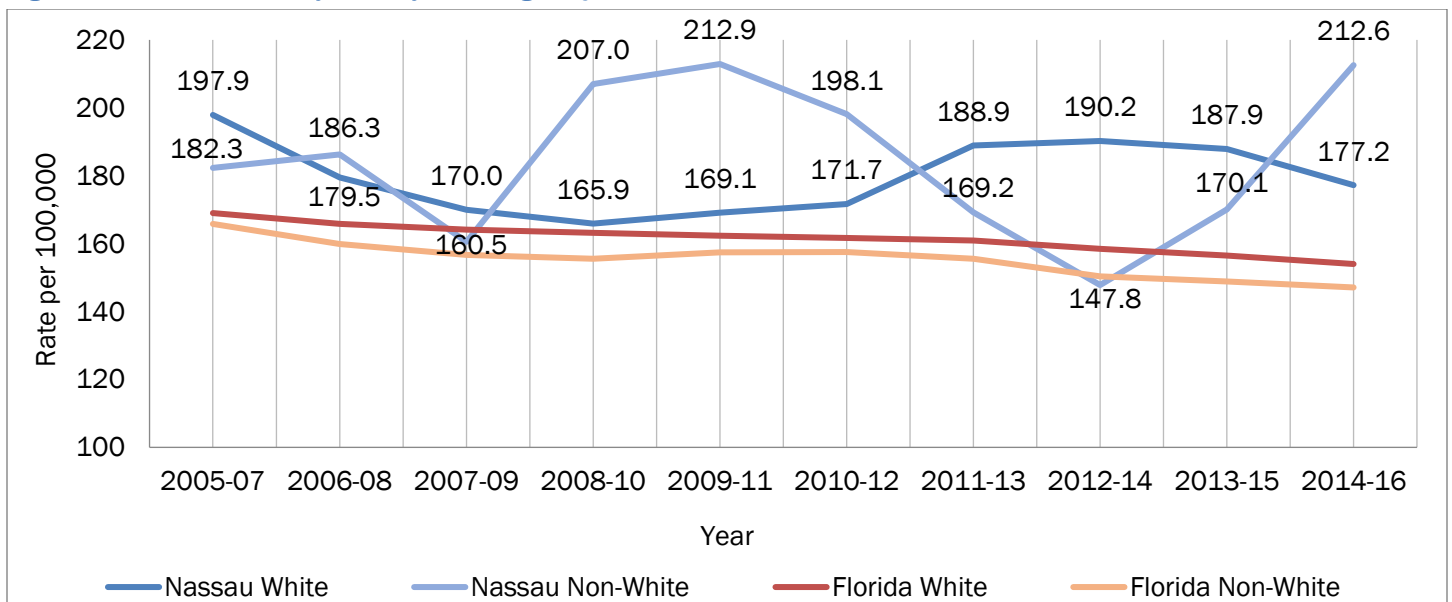
In Nassau County, cancer is the leading cause of death. The cancer mortality rate in Nassau County remained above the state of Florida's for the past decade (Figure 32). Overall, the cancer mortality rate among the White population has declined since 2005-2007. The non-White population's cancer mortality rate increased from 147.8 deaths per 100,000 population in 2012-14 to 212.6 per 100,000 population in 2014-16 (Figure 33).

**Figure 32. Cancer Mortality Rate, Age-Adjusted, All Races/Ethnicities, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

**Figure 33. Cancer Mortality Rate by Race, Age-Adjusted, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>48</sup> National Cancer Institute at the National Institutes of Health. (n.d.). *What Is cancer?* Retrieved from <http://www.cancer.gov/about-cancer/what-is-cancer>

<sup>49</sup> Centers for Disease Control and Prevention. (2017 March 17). *Leading causes of death.* Retrieved from <http://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm>

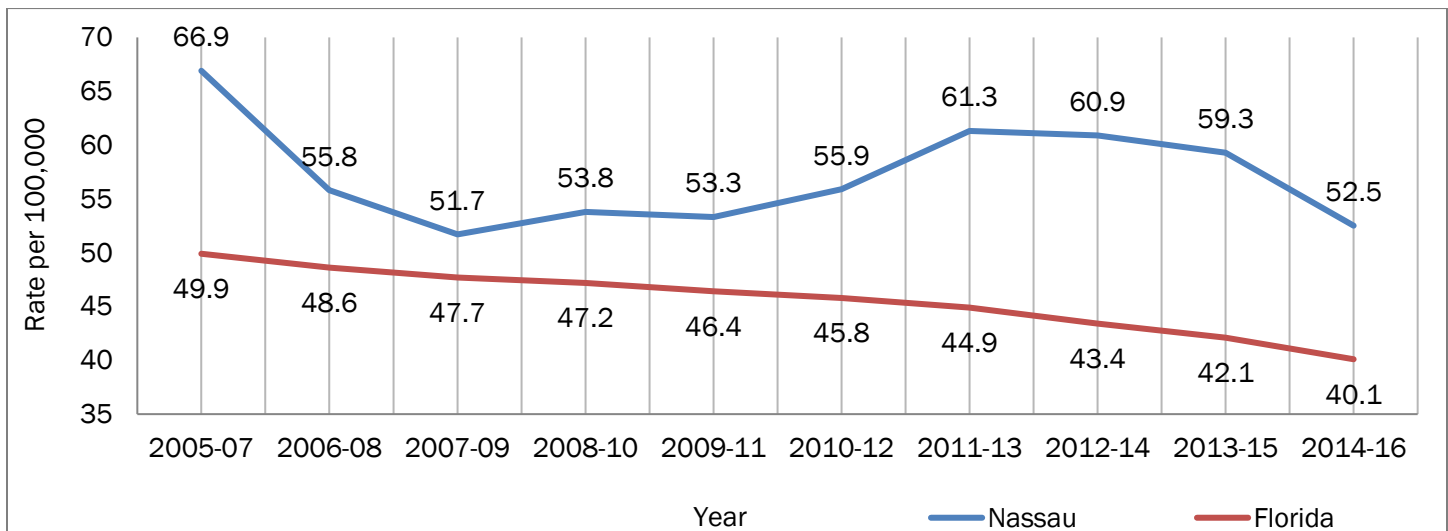
<sup>50</sup> Centers for Disease Control and Prevention. (2018 January 25). *Cancer prevention and control.* Retrieved from <http://www.cdc.gov/cancer/dpcp/prevention/index.htm>

## Lung Cancer

Lung cancer is the leading cause of cancer death and the second most common cancer among both men and women.<sup>51</sup> Cigarette smoking and tobacco products cause an estimated 80% to 90% of lung cancers.<sup>52</sup> The likelihood of developing lung cancer is reduced significantly by not smoking, quitting smoking, and avoiding secondhand smoke.<sup>53</sup>

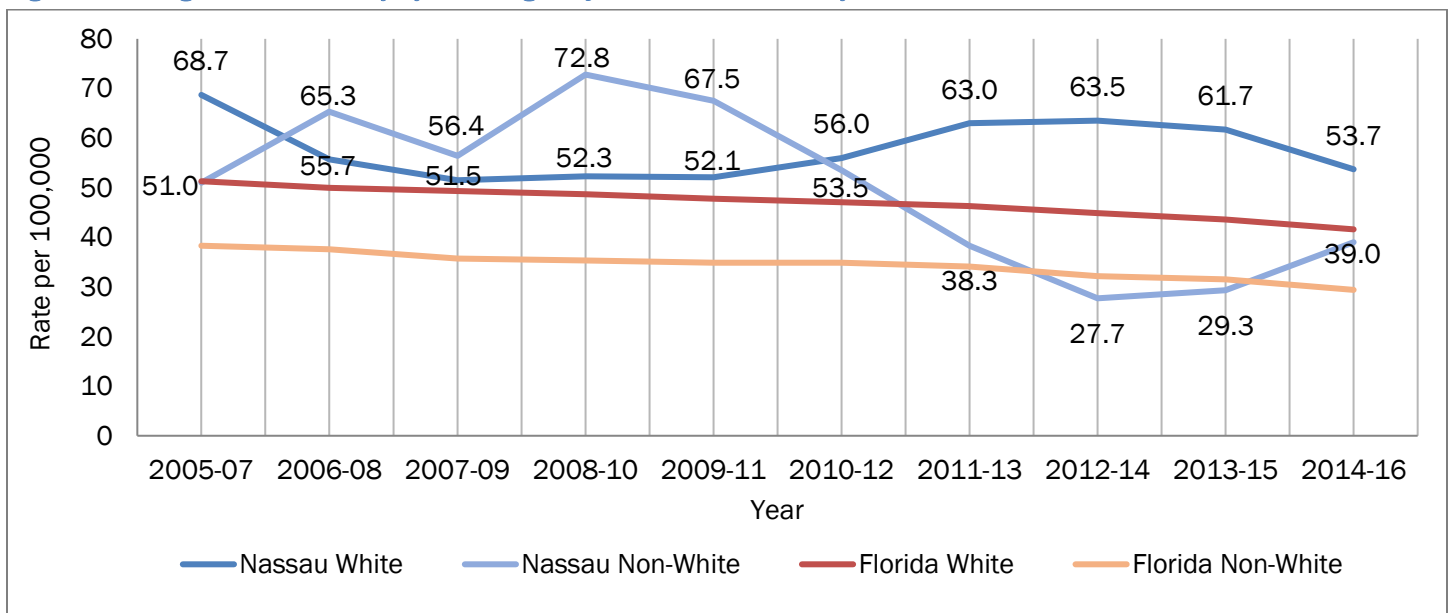
Nassau County had a higher lung cancer mortality rate than the state of Florida over the past decade, though the rate has declined since 2011-13 (Figure 34). Nassau County's White population had a higher lung cancer mortality rate than the non-White population in 2014-16. However, the mortality rate of non-Whites increased from 27.7 deaths per 100,000 population in 2012-14 to 39 deaths per 100,000 in 2014-16 (Figure 35).

**Figure 34. Lung Cancer Mortality Rate, Age-Adjusted, All Races/Ethnicities, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

**Figure 35. Lung Cancer Mortality by Race, Age-Adjusted, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>51</sup> Centers for Disease Control and Prevention. (2018, February 8). *Lung cancer*. Retrieved from <https://www.cdc.gov/cancer/lung/index.htm>

<sup>52</sup> Centers for Disease Control and Prevention. (2017, May 31). *What are the risk factors for lung cancer?* Retrieved from [https://www.cdc.gov/cancer/lung/basic\\_info/risk\\_factor\(rs.htm](https://www.cdc.gov/cancer/lung/basic_info/risk_factor(rs.htm)

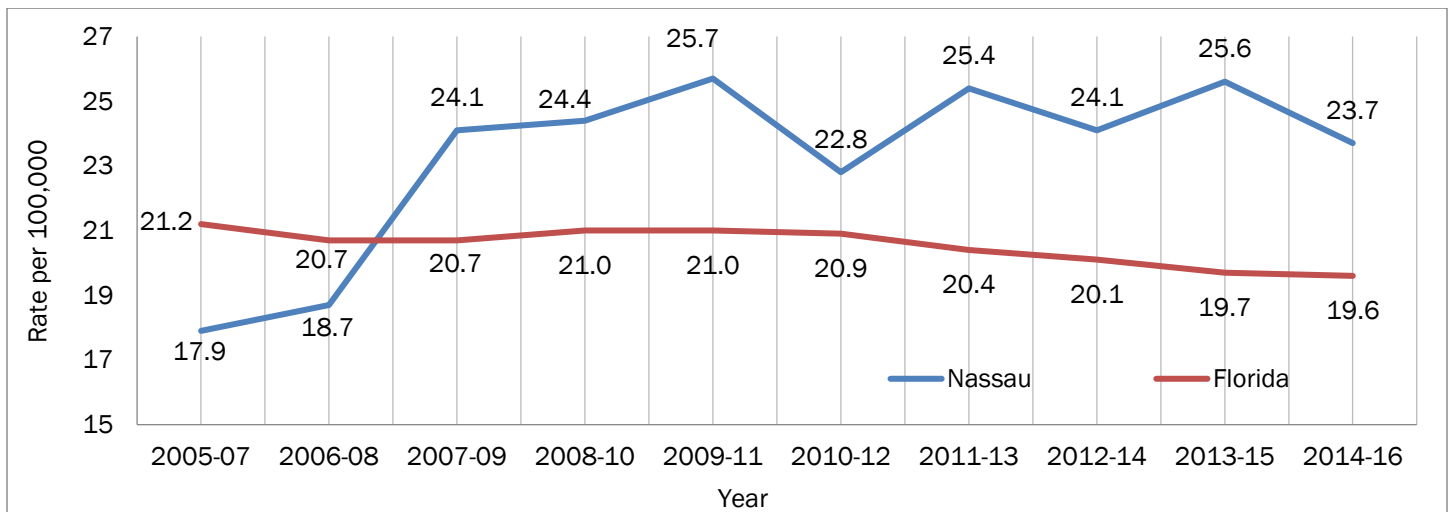
<sup>53</sup> Centers for Disease Control and Prevention. (2018, February 9) *What can I do to reduce my risk of lung cancer?* Retrieved from [https://www.cdc.gov/cancer/lung/basic\\_info/prevention.htm](https://www.cdc.gov/cancer/lung/basic_info/prevention.htm)

## Breast Cancer

Aside from skin cancer, breast cancer is the most common cancer among American women.<sup>54</sup> Doctors recommend routine clinical breast exams and screening mammograms to detect breast cancer in the earliest stages, as this is when treatment is most likely to be effective.<sup>55</sup> The U.S. Preventative Services Task Force recommends women age 50-74 have biennial screening mammograms. Women younger than 50 should decide whether to start regular screening based on their individual health situations.<sup>56</sup>

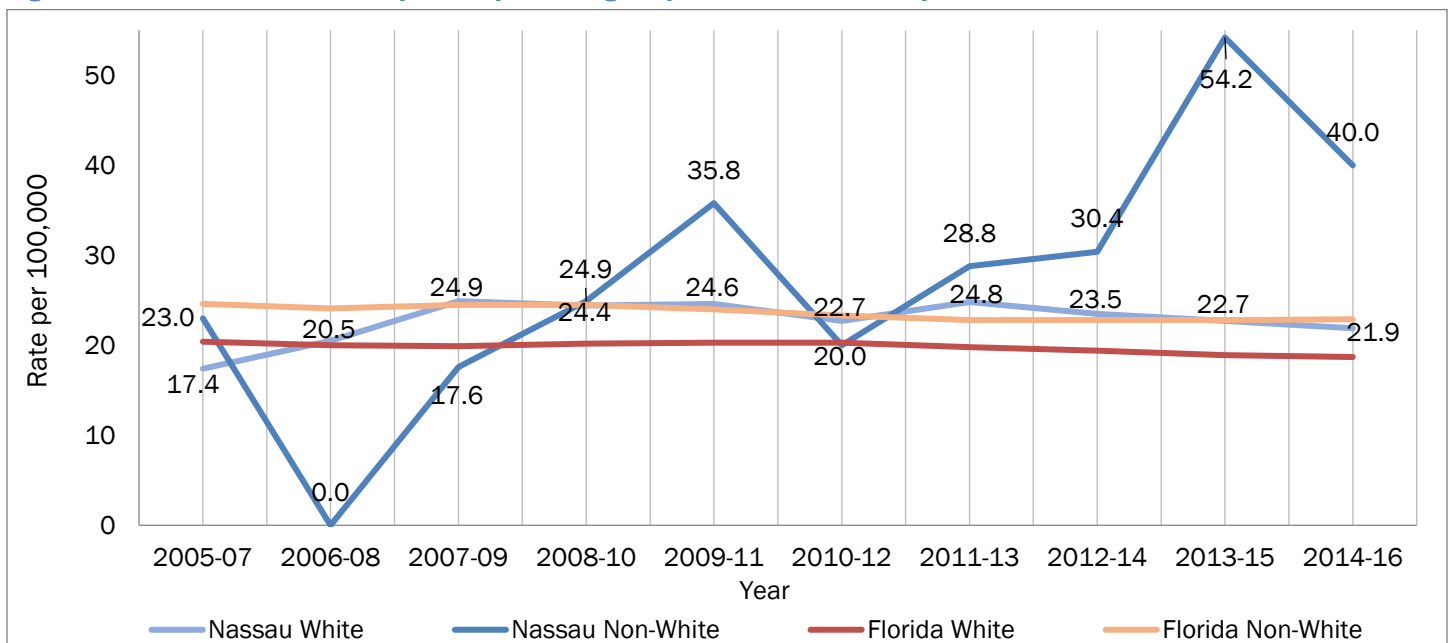
Nassau County's breast cancer mortality has been above the state average since 2007-2009 (Figure 36). In 2013-2015, the mortality rate for Nassau non-Whites was twice the rate for Nassau Whites, Florida Whites, and Florida non-Whites. This trend continued into 2014-2016, though the rate appears to be declining (Figure 37).

**Figure 36. Breast Cancer Mortality Rate, Age-Adjusted, All Races/Ethnicities, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

**Figure 37. Breast Cancer Mortality Rate by Race, Age-Adjusted, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>54</sup> U.S. Center for Disease Control and Prevention. (2018, January 30). *Breast cancer*. Retrieved from <http://www.cdc.gov/cancer/breast/>

<sup>55</sup> National Cancer Institute. (2016, Dec 7). *Mammograms*. Retrieved from <http://www.cancer.gov/types/breast/mammograms-fact-sheet>

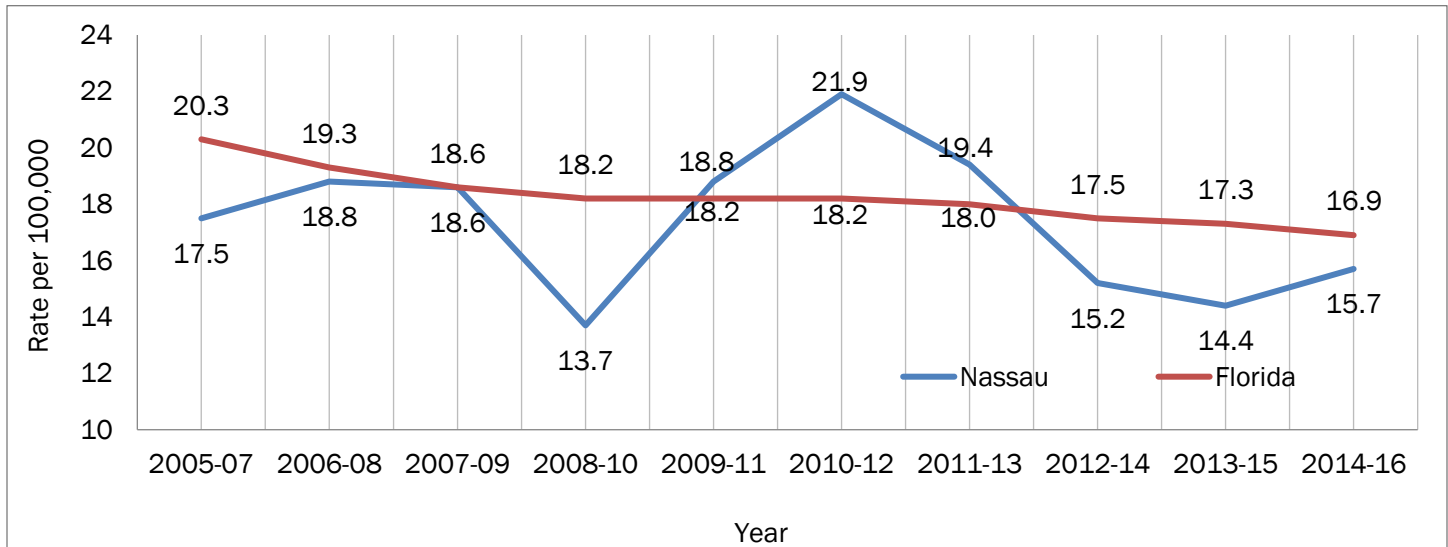
<sup>56</sup> U.S. Preventative Services Task Force. (2016). *Breast cancer: Screening*. Retrieved from <https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/breast-cancer-screening1?ds=1&s=breast%20cancer>

## Prostate Cancer

Prostate cancer is the most commonly diagnosed non-skin cancer in men, and second only to lung cancer in the number of cancer deaths.<sup>57</sup> Currently, there is no scientific consensus on effective strategies to reduce the risk of prostate cancer.<sup>58</sup> Furthermore, there is no agreement on the effectiveness of screening or whether potential benefits outweigh risk.<sup>59</sup> Therefore, public health agencies face significant challenges in determining how to address prostate cancer.

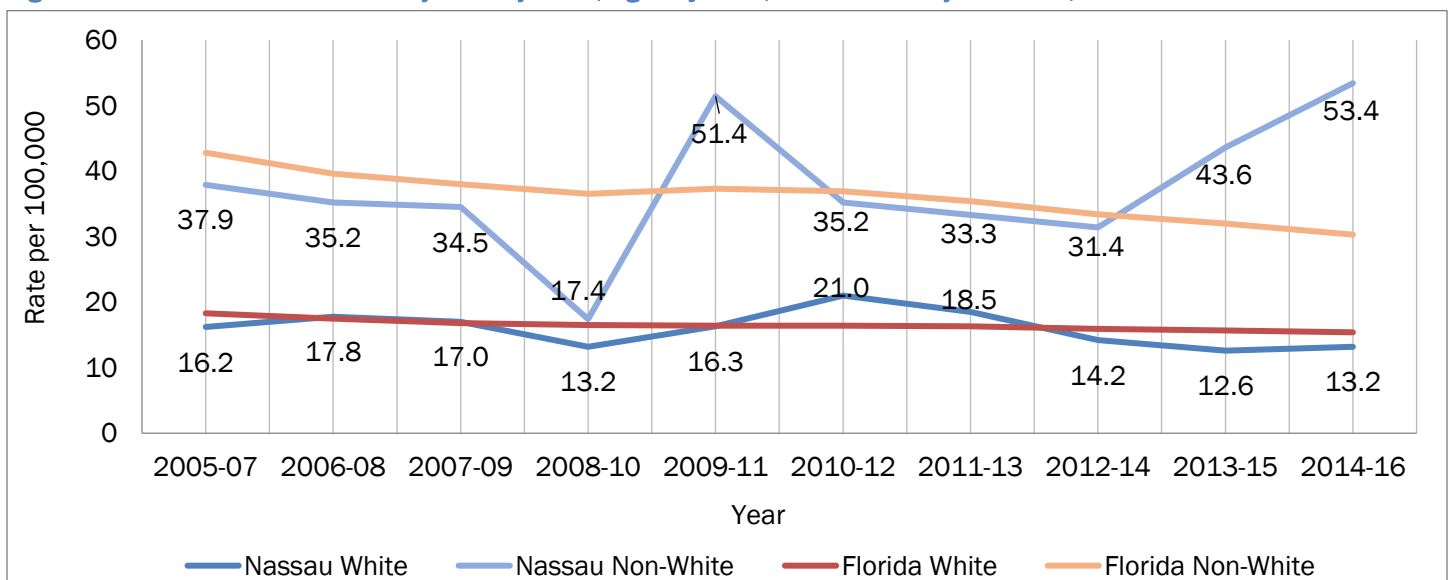
The prostate cancer mortality rate in Nassau County has fluctuated above and below Florida's rate over the past decade. In 2014-16, Nassau County had a prostate cancer mortality rate of 15.7 deaths per 100,000 population (Figure 38). The mortality rate of the non-White population in Nassau County was nearly 4.5 times higher than the mortality rate among Nassau Whites in 2014-16 (Figure 39).

**Figure 38. Prostate Cancer Mortality Rate, Age-Adjusted, All Races/Ethnicities, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

**Figure 39. Prostate Cancer Mortality Rate by Race, Age-Adjusted, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>57</sup> Centers for Disease Control and Prevention. (2016, July 8). *Prostate cancer*. Retrieved from <http://www.cdc.gov/cancer/prostate>

<sup>58</sup> Centers for Disease Control and Prevention. (2016, July 18). *What are the risk factors?* Retrieved from

[https://www.cdc.gov/cancer/prostate/basic\\_info/risk\\_factors.htm](https://www.cdc.gov/cancer/prostate/basic_info/risk_factors.htm)

<sup>59</sup> Centers for Disease Control and Prevention. (2017, July 19). *Should I get screened for prostate cancer?* Retrieved from

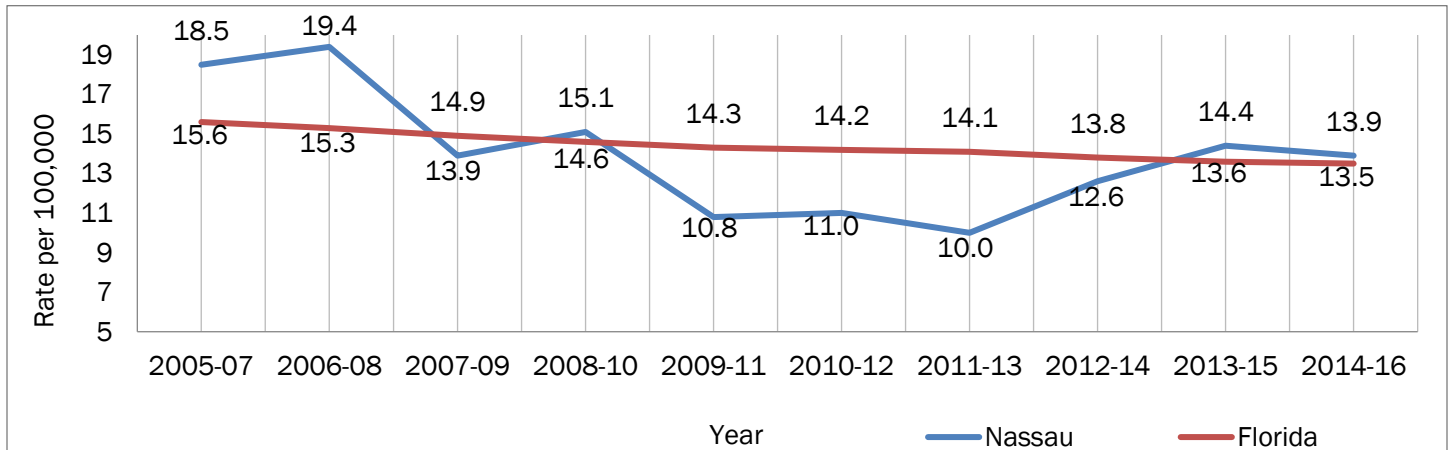
[https://www.cdc.gov/cancer/prostate/basic\\_info/get-screened.htm](https://www.cdc.gov/cancer/prostate/basic_info/get-screened.htm)

## Colorectal Cancer

Colorectal cancer, also called colon cancer, is the third most common cancer among both men and women in the United States. Of the cancers that affect both men and women, colorectal cancer is the second leading cancer killer.<sup>60</sup> Risk factors for colorectal cancer include family history, genetic predisposition, physical inactivity, poor diet, obesity, and tobacco use.<sup>61</sup> Colorectal cancer prevention is a combination of healthy lifestyle choices and age-appropriate screenings to detect and remove precancerous polyps before cancer develops.<sup>62</sup>

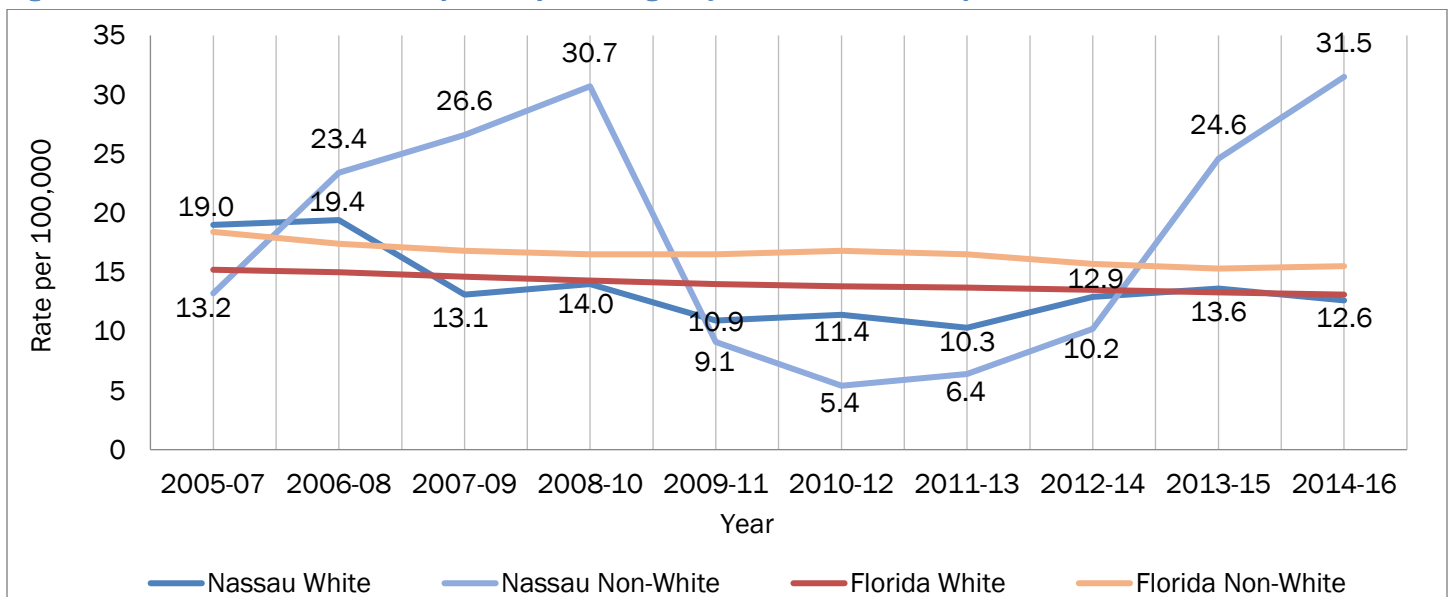
In Nassau County, colorectal cancer mortality rates declined from 2006-08 to 2011-13, but increased to 13.9 deaths per 100,000 population in 2014-16 (Figure 40). The non-White population of Nassau County experienced significant spikes in colorectal cancer mortality rates in 2008-10 and again in 2014-16. In 2014-16, the Nassau non-White rate was more than twice the rate for Nassau Whites, Florida Whites, and Florida non-Whites (Figure 41).

**Figure 40. Colorectal Cancer Mortality, Age-Adjusted, All Races/Ethnicities, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

**Figure 41. Colorectal Cancer Mortality Rate by Race, Age-Adjusted, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>60</sup> Centers for Disease Control and Prevention. (2017 March 23). *Basic information about colorectal cancer*. Retrieved from [http://www.cdc.gov/cancer/colorectal/basic\\_info/index.htm](http://www.cdc.gov/cancer/colorectal/basic_info/index.htm)

<sup>61</sup> Centers for Disease Control and Prevention. (2016 April 25). *What are the risk factors for colorectal cancer?* Retrieved from [https://www.cdc.gov/cancer/colorectal/basic\\_info/risk\\_factors.htm](https://www.cdc.gov/cancer/colorectal/basic_info/risk_factors.htm)

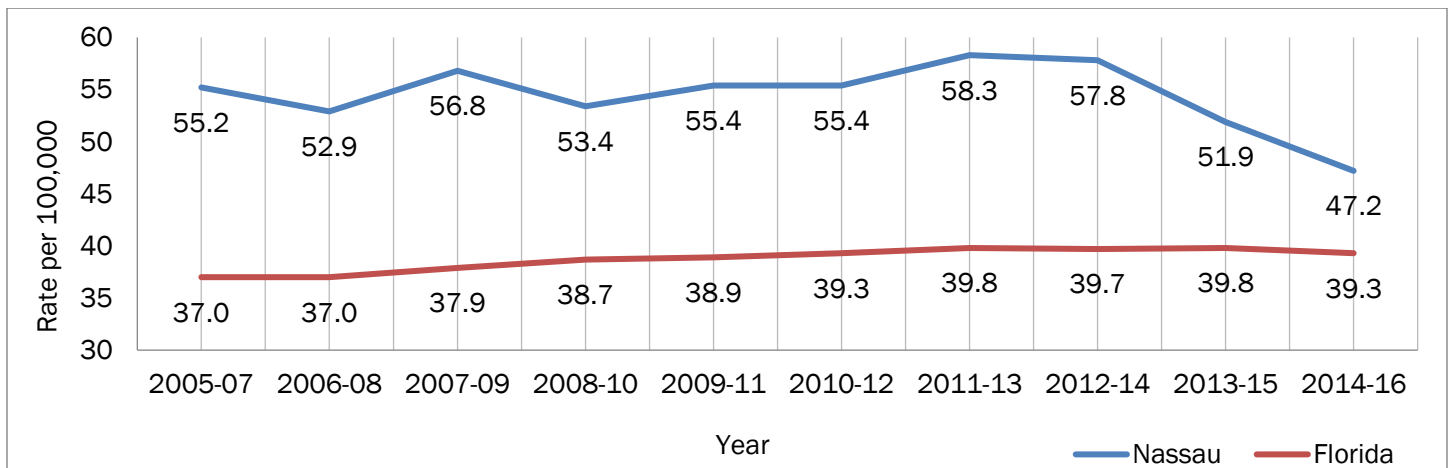
<sup>62</sup> Centers for Disease Control and Prevention. (2018 February 9). *What can I do to reduce my risk of colorectal cancer?* Retrieved from [https://www.cdc.gov/cancer/colorectal/basic\\_info/prevention.htm](https://www.cdc.gov/cancer/colorectal/basic_info/prevention.htm)

## Chronic Lower Respiratory Disease

Chronic lower respiratory disease (CLRD) is a significant cause of death and disability in the United States. More than fifteen million Americans report having chronic obstructive pulmonary disease (COPD), a common type of CLRD. COPD encompasses a group of diseases that cause breathing-related problems, including emphysema, chronic bronchitis, and some cases of asthma. Tobacco use is a key risk factor for development of COPD, but exposure to air pollutants in the home/workplace, secondhand smoke, genetic factors, and respiratory infections are also causes.<sup>63</sup>

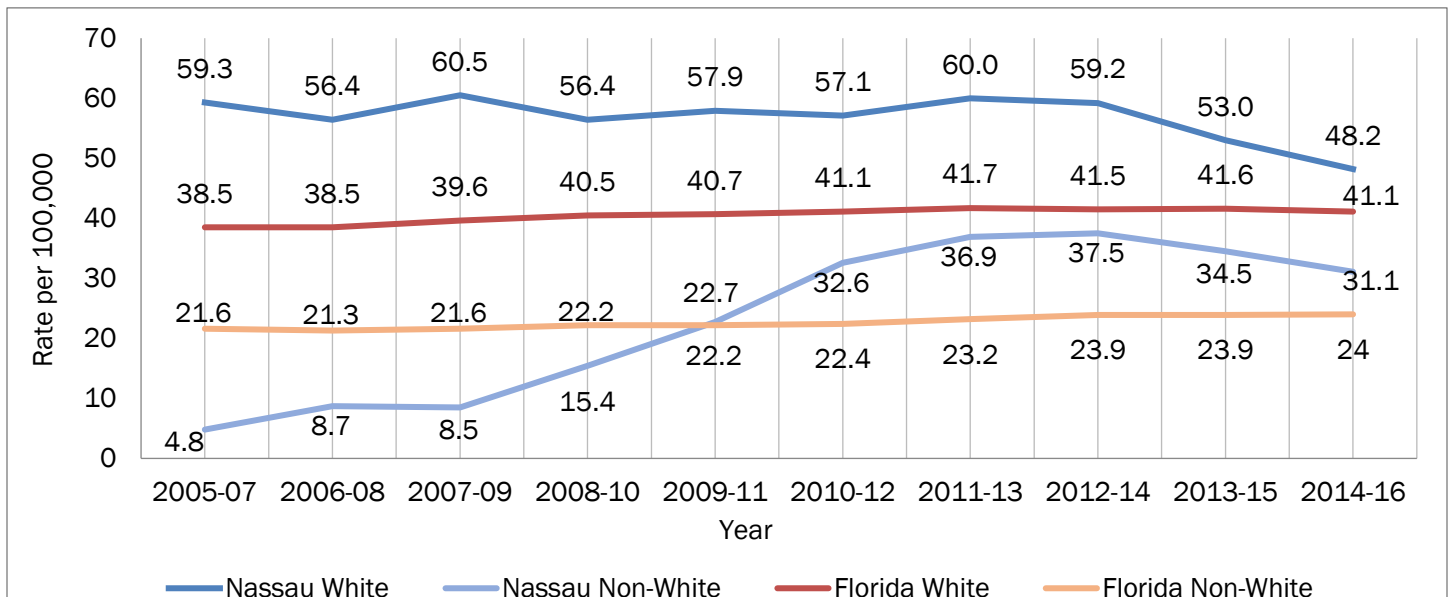
Nassau County consistently had higher rates of chronic lower respiratory disease mortality than Florida over the past decade, though rates have declined since 2011-13 to 47.2 deaths per 100,000 population in 2014-16 (Figure 42). Nassau County Whites consistently had higher chronic lower respiratory disease mortality rates than the Whites and non-Whites across the state of Florida. CLRD tends to affect White Nassau County residents disproportionately, with a mortality rate of 48.2 deaths per 100,000 among White Nassau County residents, compared to 31.1 deaths per 100,000 non-White residents in 2014-2016 (Figure 43).

**Figure 42. Chronic Lower Respiratory Disease Mortality Rate, Age-Adjusted, All Races/Ethnicities, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

**Figure 43. Chronic Lower Respiratory Disease Mortality Rate by Race, Age-Adjusted, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>63</sup> Center for Disease Control and Prevention. (2017 August 4). *Chronic obstructive pulmonary disease (COPD)*. Retrieved from <http://www.cdc.gov/copd>

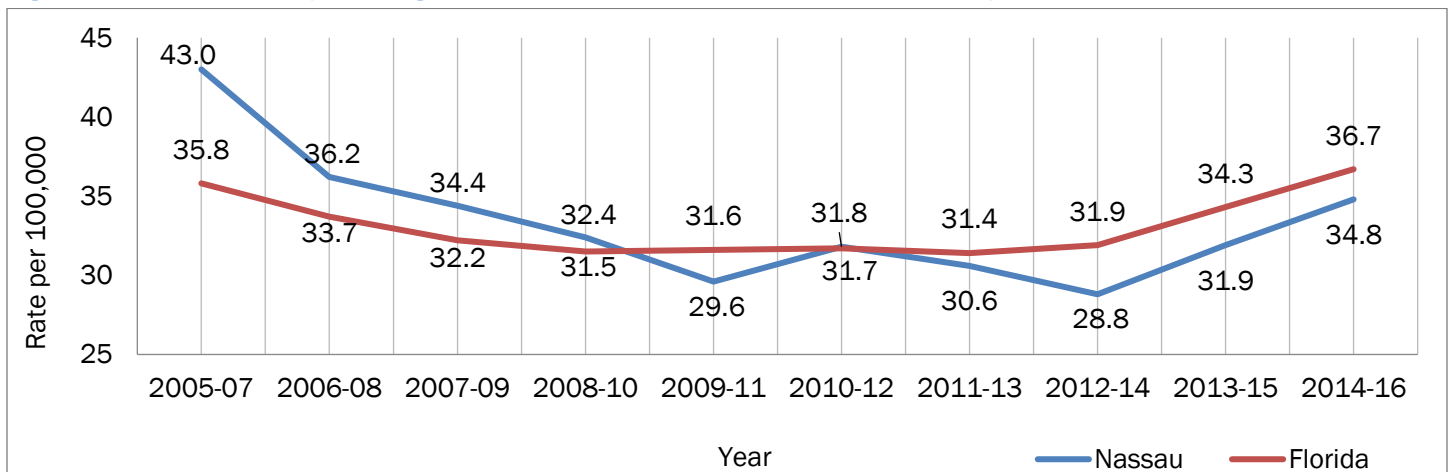


## Stroke

A stroke occurs when the blood supply to the brain is interrupted or when sudden bleeding in the brain occurs.<sup>64</sup> Stroke is the fifth leading cause of death in the U.S. and a significant cause of adult disability, such as paralysis, speech difficulty, and emotional problems.<sup>65</sup> Individuals can reduce their risk for stroke by eating a healthy diet, getting enough exercise, monitoring blood pressure and cholesterol, taking prescribed medications, and managing chronic health conditions.<sup>66</sup>

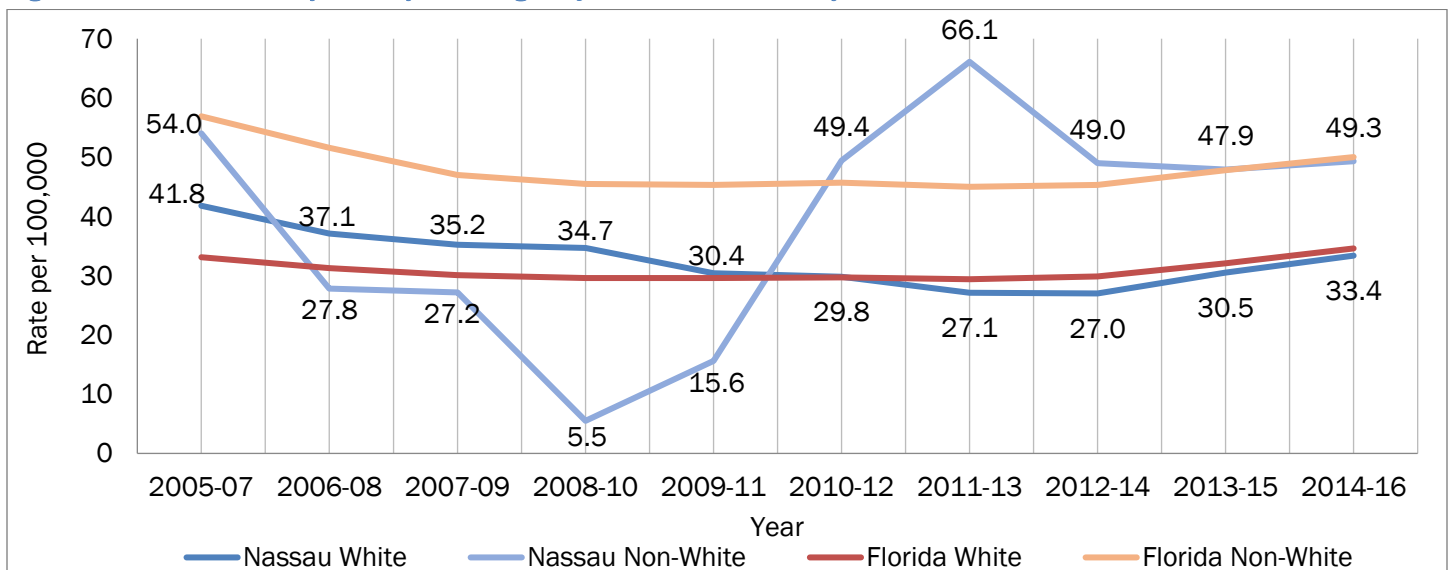
The stroke mortality rate in Nassau County has increased since from a decade low of 28.8 in 2012-14 to 34.8 deaths per 100,000 population in 2014-16 (Figure 44). Nassau County's stroke mortality rate among White residents has been similar to the rate among White Floridians since 2009-11. The stroke mortality rate among Nassau's non-White residents was more than double the rate among White residents in 2011-2013 (66.1 deaths per 100,000 versus 27.1 deaths per 100,000). The stroke mortality rate among non-Whites in Nassau County has been almost identical to the Florida non-White rate in recent years, though Nassau County's non-White population continues to have a higher stroke mortality rate than that of Whites in 2014-16 (Figure 45).

**Figure 44. Stroke Mortality Rate, Age-Adjusted, All Races/Ethnicities, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

**Figure 45. Stroke Mortality Rate by Race, Age-Adjusted, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>64</sup> Centers for Disease Control and Prevention. (2017 November 13). *Stroke*. Retrieved from <http://www.cdc.gov/stroke/>

<sup>65</sup> Centers for Disease Control and Prevention. (2017 September 6). *Stroke facts*. Retrieved from <https://www.cdc.gov/stroke/facts.htm>

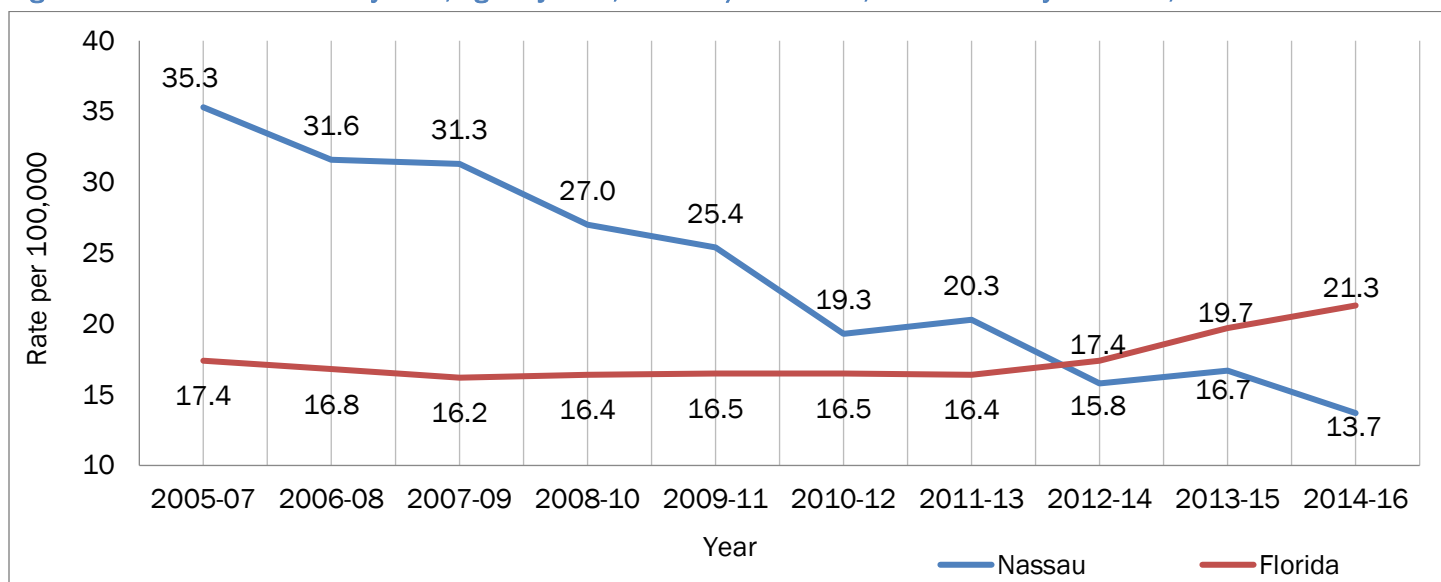
<sup>66</sup> Centers for Disease Control and Prevention. (2017 January 17). *Preventing stroke: What you can do*. Retrieved from <https://www.cdc.gov/stroke/prevention.htm>

## Alzheimer's Disease

Alzheimer's disease is the most common form of dementia, a group of mental disorders causing memory impairment, difficulty with language and object recognition, and loss of the ability to plan, organize, and use abstract thought. The disease is the fifth leading cause of death among persons 65 and older and the sixth leading cause of death in the U.S. There is no known cure, though treatment can help improve quality of life.<sup>67</sup>

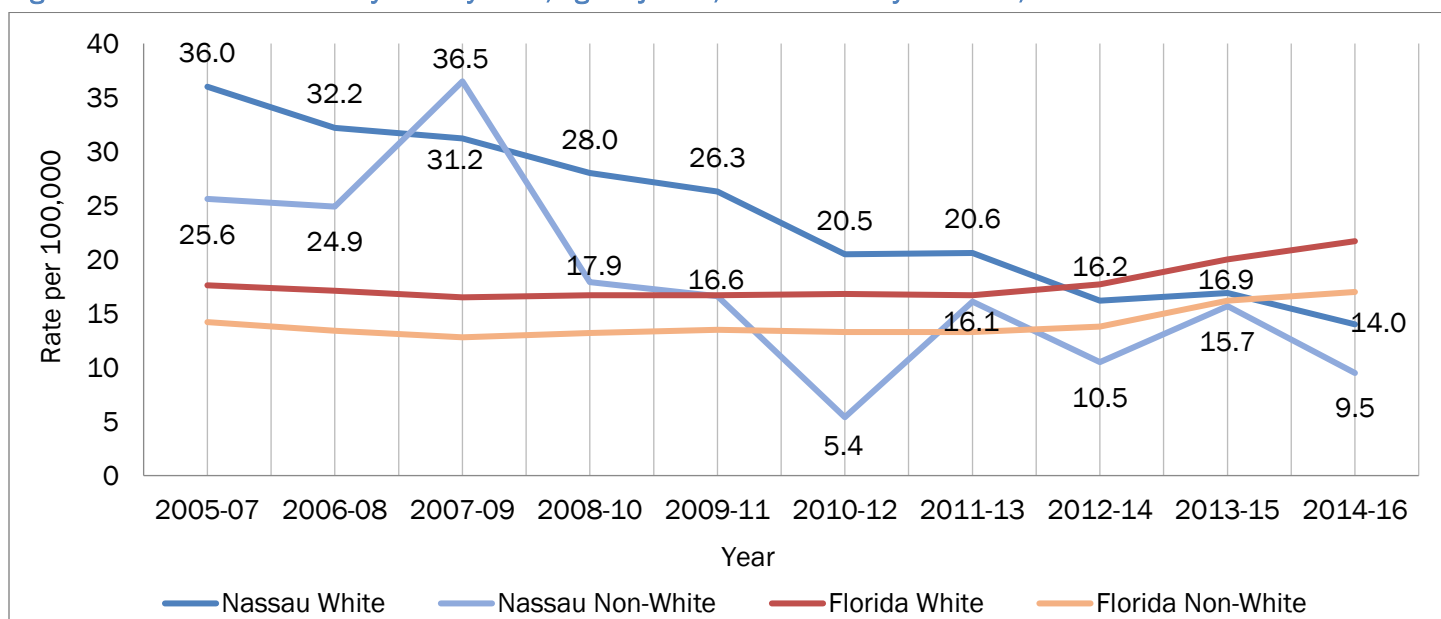
Alzheimer's mortality rates in Nassau County were higher than the state average for almost a decade, but dropped below the state rate to 13.7 deaths per 100,000 population in 2014-16 (Figure 46). Alzheimer's mortality rates among Non-Whites in Nassau County declined since 2007-2009, although there was a rate spike as recently as 2013-2015 (Figure 47).

**Figure 46. Alzheimer's Mortality Rate, Age-Adjusted, All Races/Ethnicities, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

**Figure 47. Alzheimer's Mortality Rate by Race, Age-Adjusted, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

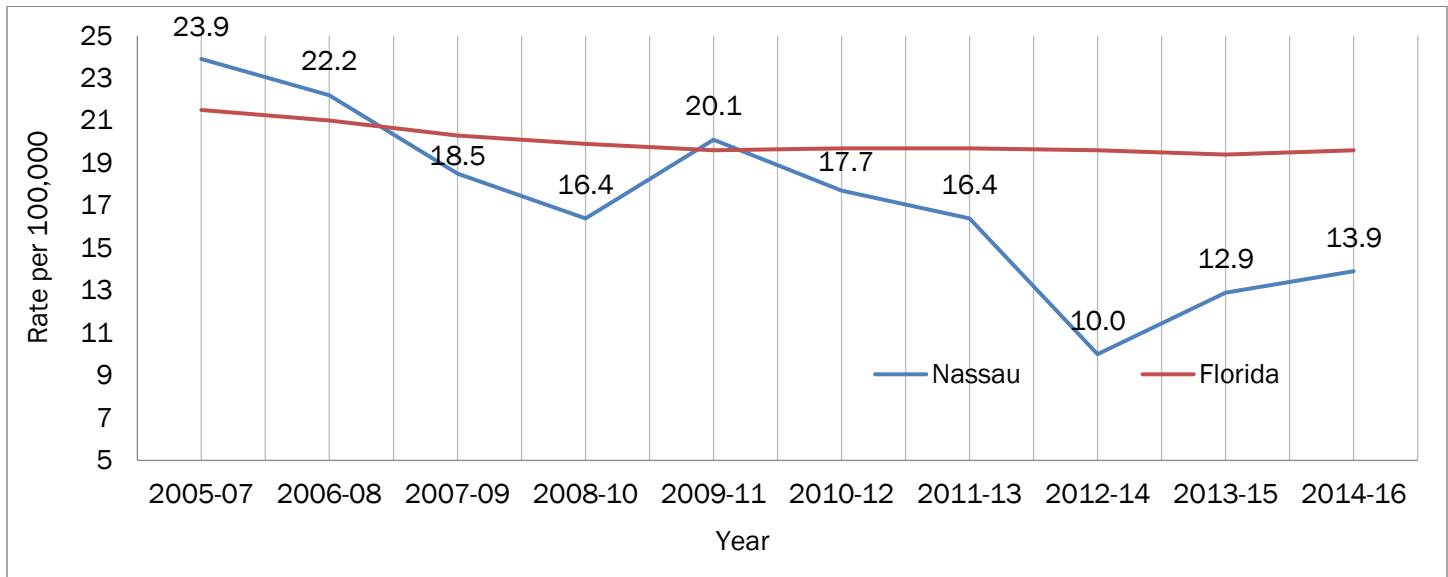
<sup>67</sup> Centers for Disease Control and Prevention. (2017 October 13). *Healthy aging: Alzheimer's disease*. Retrieved from <http://www.cdc.gov/aging/aginginfo/alzheimers.htm>

## Diabetes

Diabetes is a disease that causes abnormally high blood glucose levels. Diabetes is the seventh leading cause of death in the U.S. and can lead to major health problems, such as heart disease and kidney failure. Type 1 diabetes accounts for about 5% of all diagnosed cases.<sup>68</sup> Type 2 diabetes, formerly called adult-onset diabetes because it most often develops in people over age 45, accounts for 90% to 95% of all diabetes cases. Children, teens, and young adults are increasingly developing diabetes because they mirror unhealthy habits of family members. Research shows that weight loss and exercise can prevent or delay type 2 diabetes.<sup>69</sup>

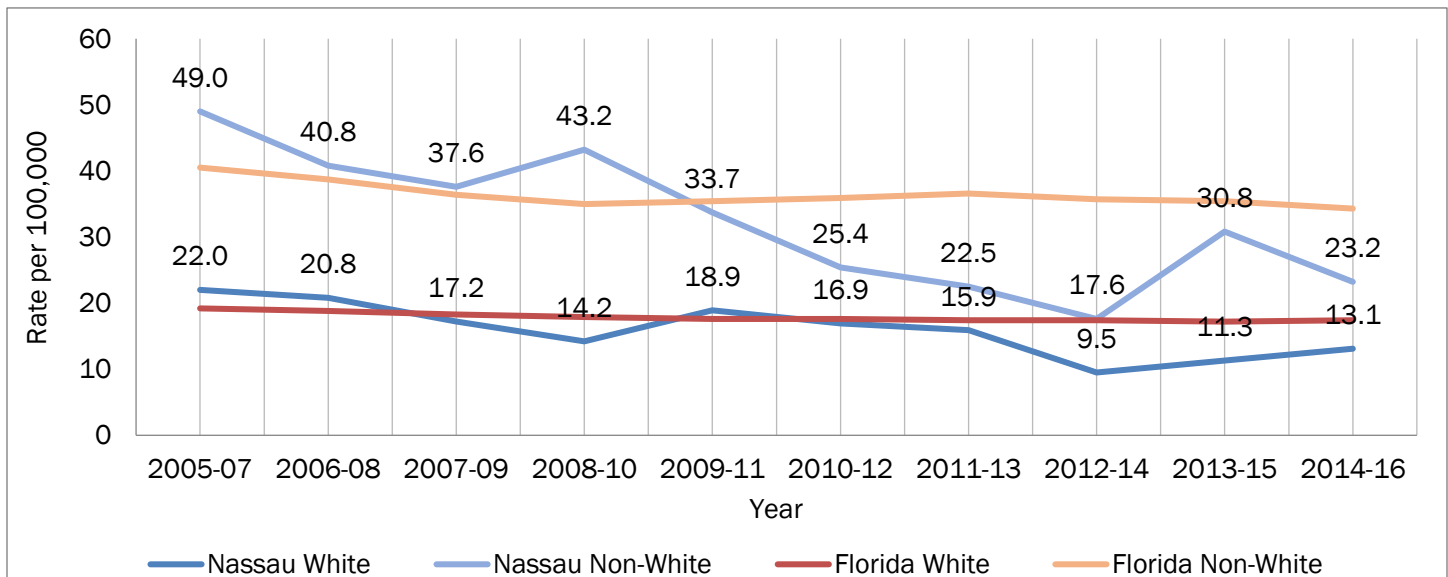
While the Florida diabetes mortality rate has been stable since 2005-07, the Nassau County rate declined from 2005-07 to 2012-14, but increased to 13.9 deaths per 100,000 population in 2014-16 (Figure 48). Diabetes mortality rates among Nassau County non-Whites remained higher than rates among Whites in 2014-16 (Figure 49).

**Figure 48. Diabetes Mortality Rate, Age-Adjusted, All Races/Ethnicities, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

**Figure 49. Diabetes Mortality Rate by Race, Age-Adjusted, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>68</sup> Centers for Disease Control and Prevention. (2017 June 1). *About diabetes*. Retrieved from <https://www.cdc.gov/diabetes/basics/diabetes.html>

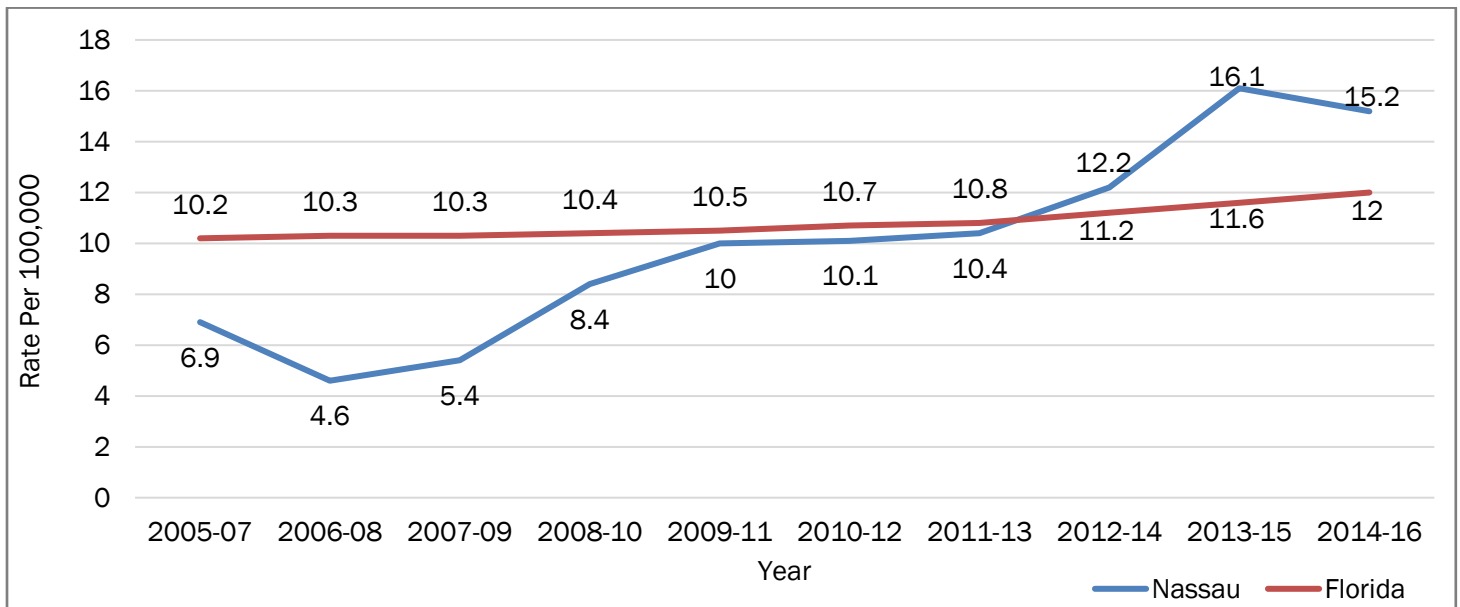
<sup>69</sup> Centers for Disease Control and Prevention. (2017 July 25). *Type 2 diabetes*. Retrieved from <https://www.cdc.gov/diabetes/basics/type2.htm>

## Chronic Liver Disease & Cirrhosis

Aside from the skin, the liver is the largest organ in the human body. The liver helps the body to process food and poisons and to store energy. Liver disease can have many causes including viruses, drugs, poison, cancer, or drinking too much alcohol.<sup>70</sup> The leading cause of cirrhosis, the scarring of liver tissue, in the United States is chronic alcoholism.<sup>71</sup>

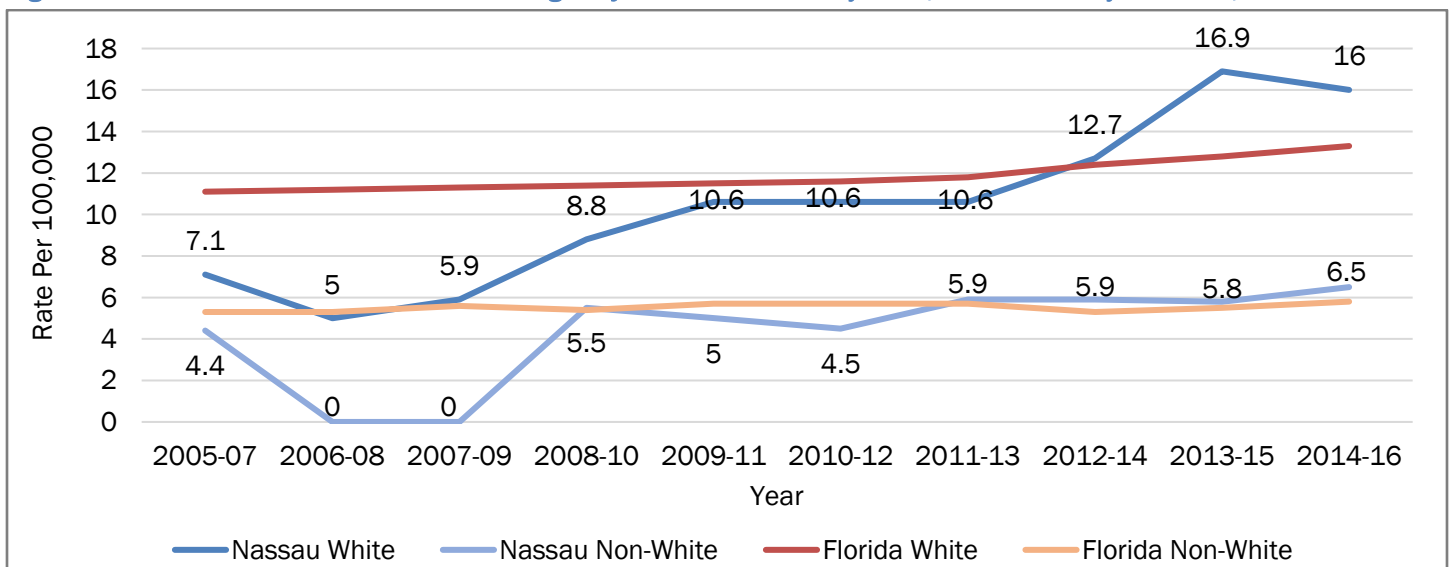
The chronic liver disease and cirrhosis mortality rate was 15.2 per 100,000 population in Nassau County in 2014-16, slightly above the state average (Figure 50). Nassau County's White population has a significantly higher mortality rate for liver disease and cirrhosis than the non-white population (Figure 51).

**Figure 50. Chronic Liver Disease & Cirrhosis Age-Adjusted Death Rate, All Races/Ethnicities, Nassau & Florida, 2005-2016**



Data Source: FL Health Charts | Prepared by Health Planning Council of Northeast Florida

**Figure 51. Chronic Liver Disease & Cirrhosis Age-Adjusted Death Rate by Race, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>70</sup> National Institutes of Health. (2015). *Liver Diseases*. Retrieved from Medline Plus: <http://www.nlm.nih.gov/medlineplus/liverdiseases.html>

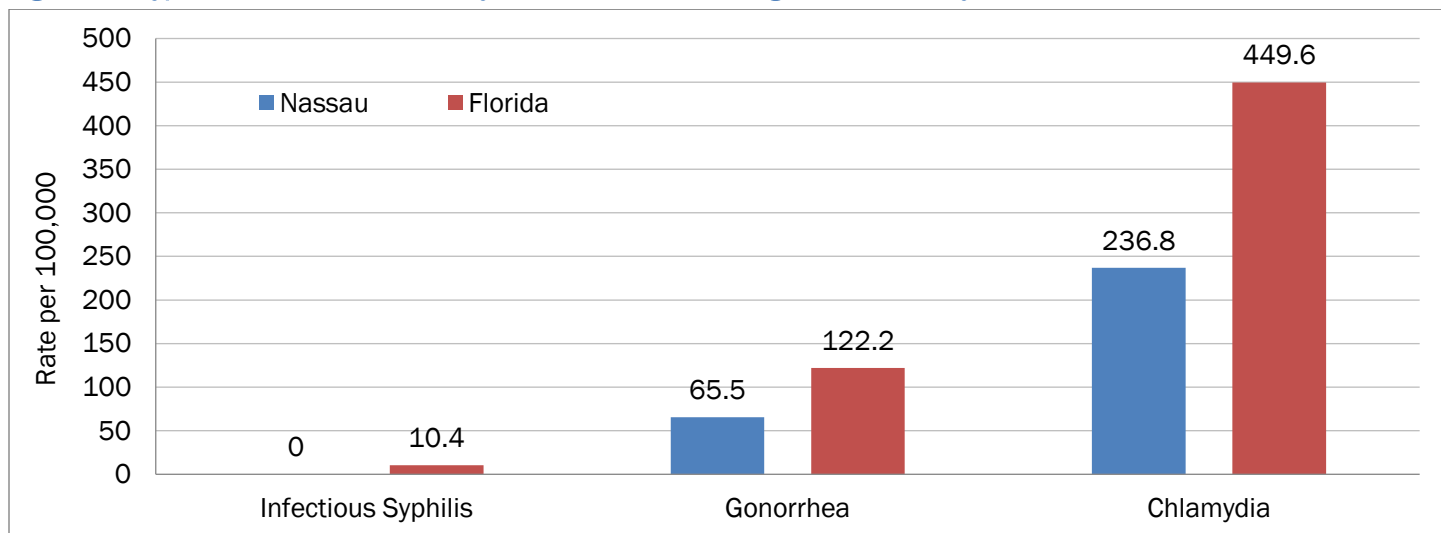
<sup>71</sup> American Liver Foundation. (2015). *Cirrhosis*. Retrieved from American Liver Foundation: <http://www.liverfoundation.org/abouttheliver/info/cirrhosis/>

## Communicable Diseases

### Sexually Transmitted Infections: Syphilis, Gonorrhea, & Chlamydia

Sexually transmitted diseases (STDs) are among the most common infectious diseases in the United States today, affecting more than 20 million men and women each year.<sup>72</sup> Nassau County has a lower rate of STDs than Florida as a whole, with Chlamydia being the most prevalent (Figure 52).

Figure 52. Syphilis, Gonorrhea, & Chlamydia Rates, 3-Year Rolling, Nassau County & Florida, 2014-2016

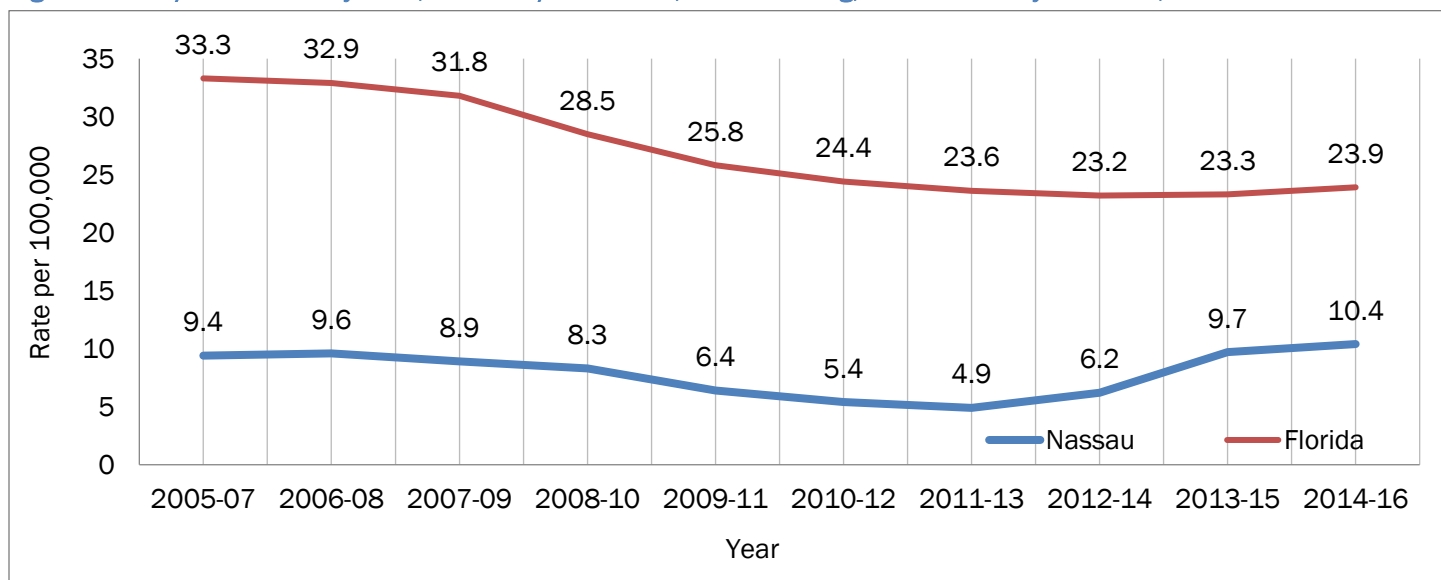


Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

### HIV/AIDS

In 2016, 39,782 people were diagnosed with Human Immunodeficiency Virus (HIV), the virus that causes Acquired Immunodeficiency Syndrome (AIDS).<sup>73</sup> In Nassau County, the HIV/AIDS mortality rate rose from 4.9 deaths per 100,000 population in 2011-13 to 10.4 deaths per 100,000 in 2014-16, which was the county's highest HIV/AIDS death rate in over a decade (Figure 53).

Figure 53. HIV/AIDS Mortality Rate, All Races/Ethnicities, 3-Year Rolling, Nassau County & Florida, 2005-2016



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

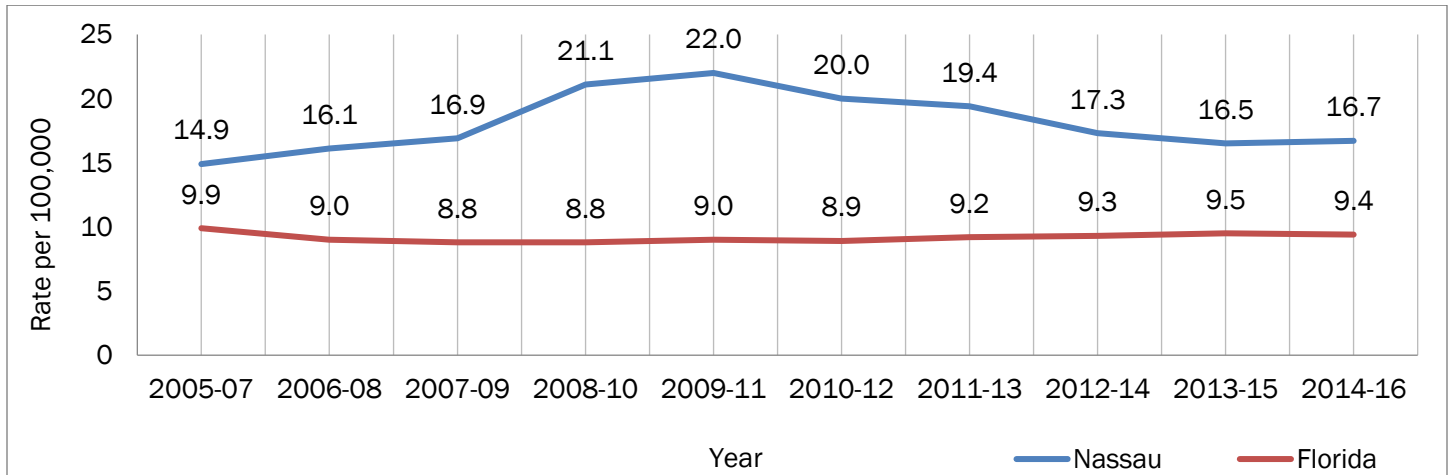
<sup>72</sup> Centers for Disease Control and Prevention. (2018 Jan 16). *Sexually transmitted diseases (STDs)*. Retrieved from <https://www.cdc.gov/std/default.htm>

<sup>73</sup> Centers for Disease Control and Prevention. (2017 Dec 18). *Basic statistics*. Retrieved from <https://www.cdc.gov/hiv/basics/statistics.html>

## Influenza & Pneumonia

Influenza, or the flu, is a contagious respiratory illness that causes mild to severe symptoms and can lead to death. The young, elderly, pregnant women, and people with compromised immune systems have higher risk for serious flu complications, such as pneumonia. Pneumonia is a lung infection caused by bacteria, viruses (e.g., the flu), or fungi. Vaccination can prevent several causes of pneumonia, such as whooping cough, chickenpox, and flu.<sup>74</sup> Together, influenza and pneumonia are the 8<sup>th</sup> leading cause of death in the U.S.<sup>75</sup> From 2009-11 to 2014-16, the influenza and pneumonia mortality rate for Nassau County decreased to 16.7 deaths per 100,000 population, but remained above Florida's rate (Figure 54).

**Figure 54. Influenza & Pneumonia Death Rate, Age-Adjusted, All Races, Nassau County & Florida, 2005-2016**

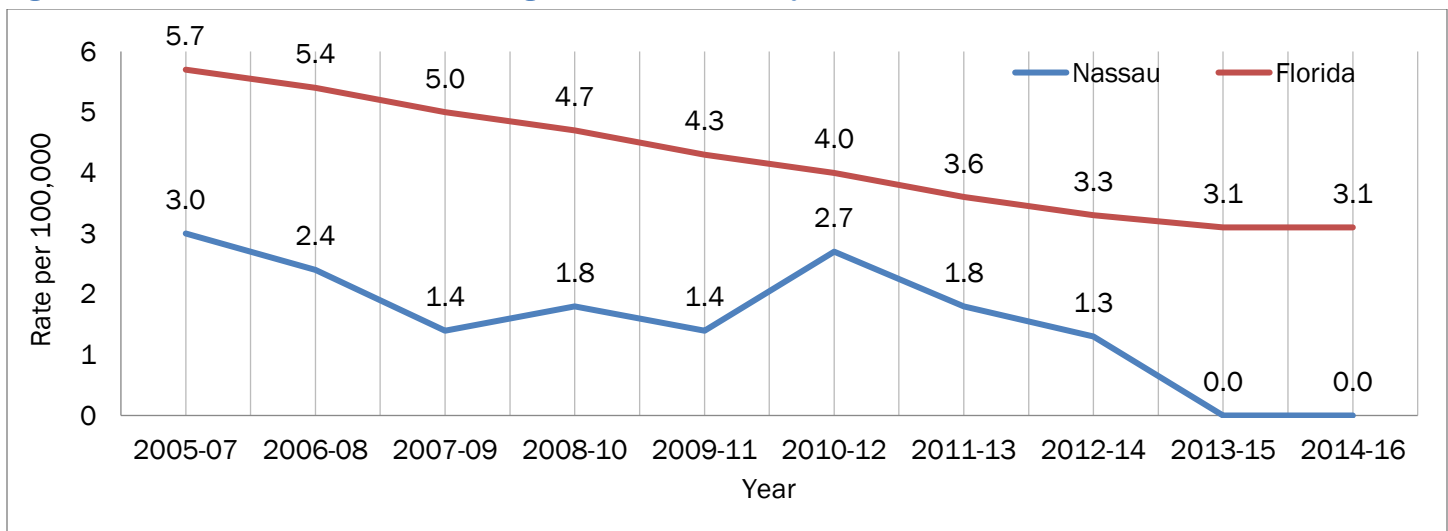


Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

## Tuberculosis

An estimated one fourth of the world's population is infected with *Mycobacterium tuberculosis*, commonly known as Tuberculosis (TB). A total of 9,272 TB cases (a rate of 2.9 cases per 100,000 persons) were reported in the United States in 2016.<sup>76</sup> Nassau County had a lower TB rate than the state of Florida for more than a decade (Figure 55).

**Figure 55. Tuberculosis Rates, 3-Year Rolling Rates, Nassau County & Florida, 2005-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>74</sup> Centers for Disease Control and Prevention. (2017 Aug 29). *Pneumonia*. Retrieved from <https://www.cdc.gov/pneumonia/>

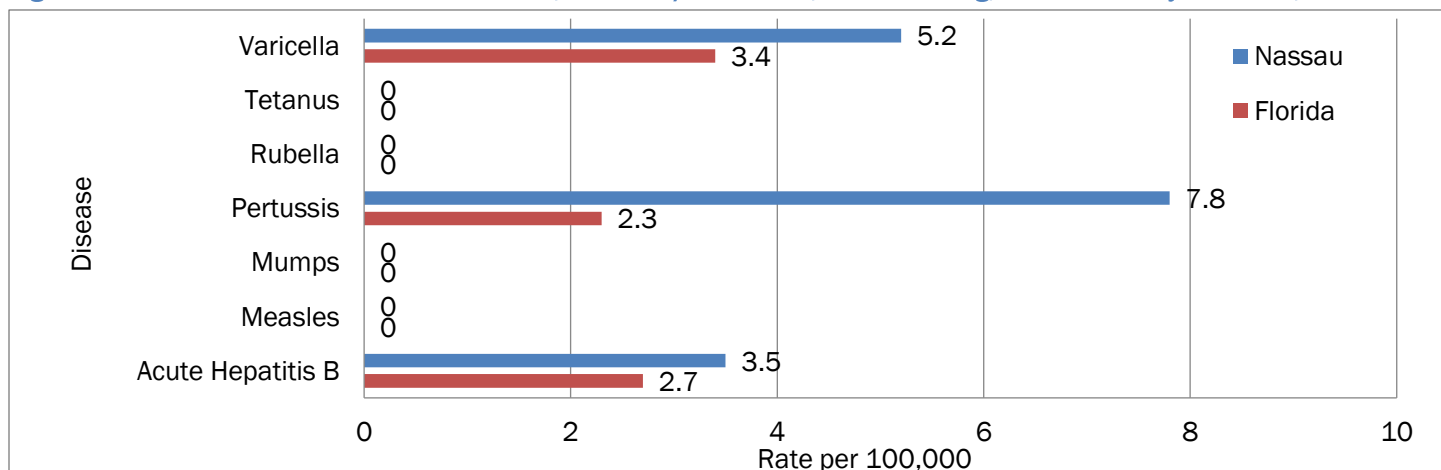
<sup>75</sup> Centers for Disease Control and Prevention. (2017 Mar 17). *Leading causes of death*. Retrieved from <https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm>

<sup>76</sup> Centers for Disease Control and Prevention. (2018 Feb 1). *Data and statistics*. Retrieved from <https://www.cdc.gov/tb/statistics/default.htm>

## Vaccine Preventable Diseases

Vaccine-preventable diseases include diphtheria, influenza, hepatitis A and B, measles, mumps, meningococcal, pneumococcal, polio, pertussis (whooping cough), rotavirus, rubella, tetanus, and varicella (chickenpox). In 2014-2016, there were negligible rates per 100,000 of Tetanus, Rubella, Mumps, and Measles in Nassau County and Florida. The rate of Varicella in Nassau County was higher than Florida (5.2 versus 3.4 per 100,000), and the rate of Pertussis in Nassau County was nearly 3.5 times that of Florida (7.8 versus 2.3 per 100,000) (Figure 56).

**Figure 56. Vaccine Preventable Disease Rates, All Races/Ethnicities, 3-Year Rolling, Nassau County & Florida, 2014-2016**

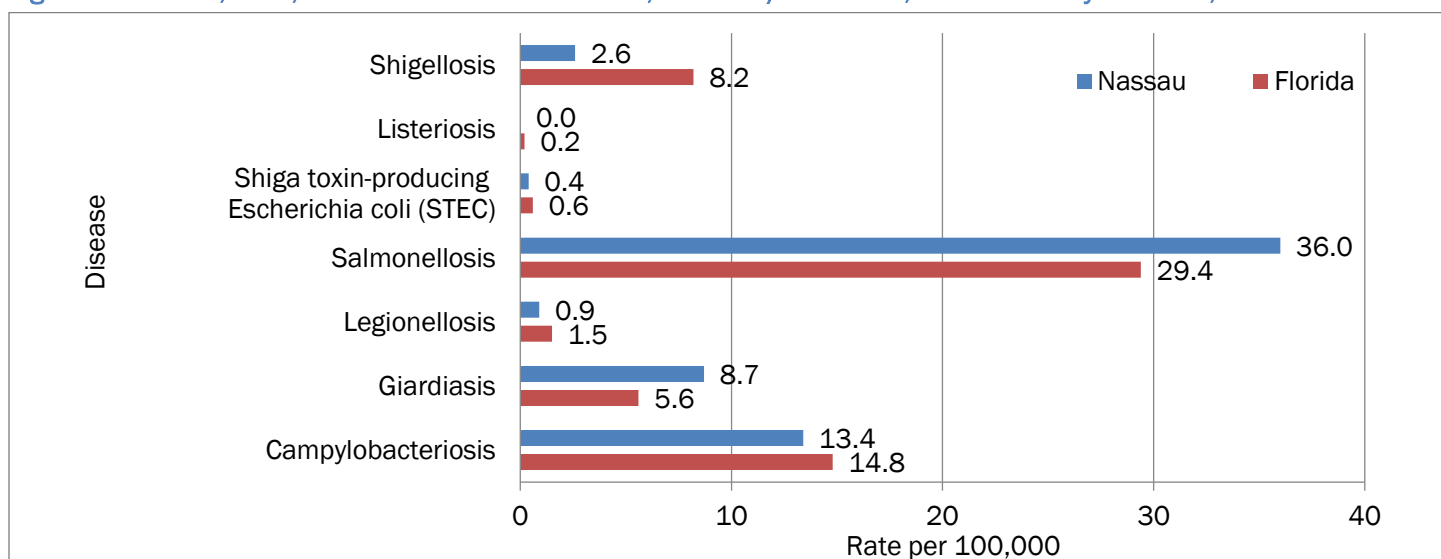


Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

## Enteric, Food, and Waterborne Diseases

Enteric bacteria generally enter the body through the mouth. They can be acquired through ingesting contaminated food and water, by contact with animals or their environments, or by contact with the feces of an infected person. Each year, millions of cases of foodborne illness and thousands of associated mortalities occur in the United States.<sup>77</sup> Approximately 88% of deaths from diarrheal illnesses are attributable to unsafe water, poor sanitation, and inadequate hygiene.<sup>78</sup> Nassau County residents were diagnosed with more cases of Giardiasis and Salmonellosis per 100,000 than the state of Florida in 2014-2016 (Figure 57).

**Figure 57. Enteric, Food, & Waterborne Disease Rates, All Races/Ethnicities, Nassau County & Florida, 2014-2016**



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

<sup>77</sup> Centers for Disease Control and Prevention. (2016 Dec 13). *Enteric diseases epidemiology branch*. Retrieved from <https://www.cdc.gov/nceid/dfwed/edeb/index.html>

<sup>78</sup> Centers for Disease Control and Prevention. (2013) National center for emerging and zoonotic infectious diseases: Our work, our stories, 2011-2012. Retrieved from <https://www.cdc.gov/nceid/pdf/annual-report.pdf#page=90>

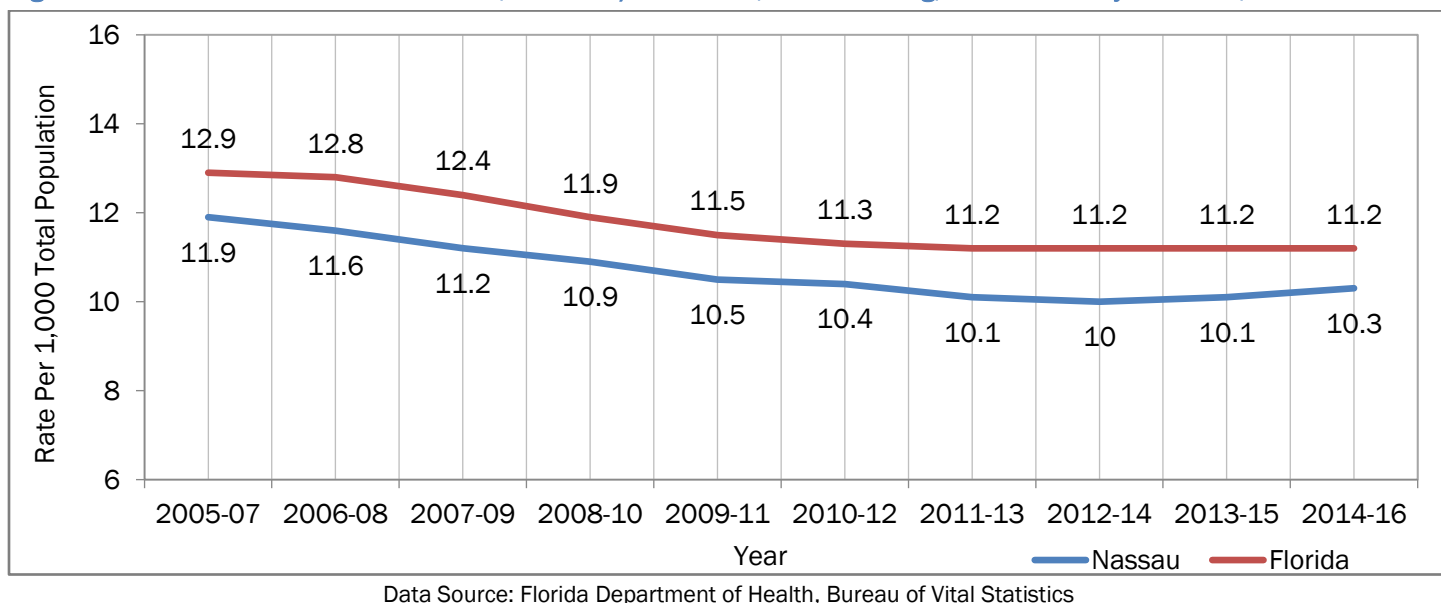


## Maternal & Child Health

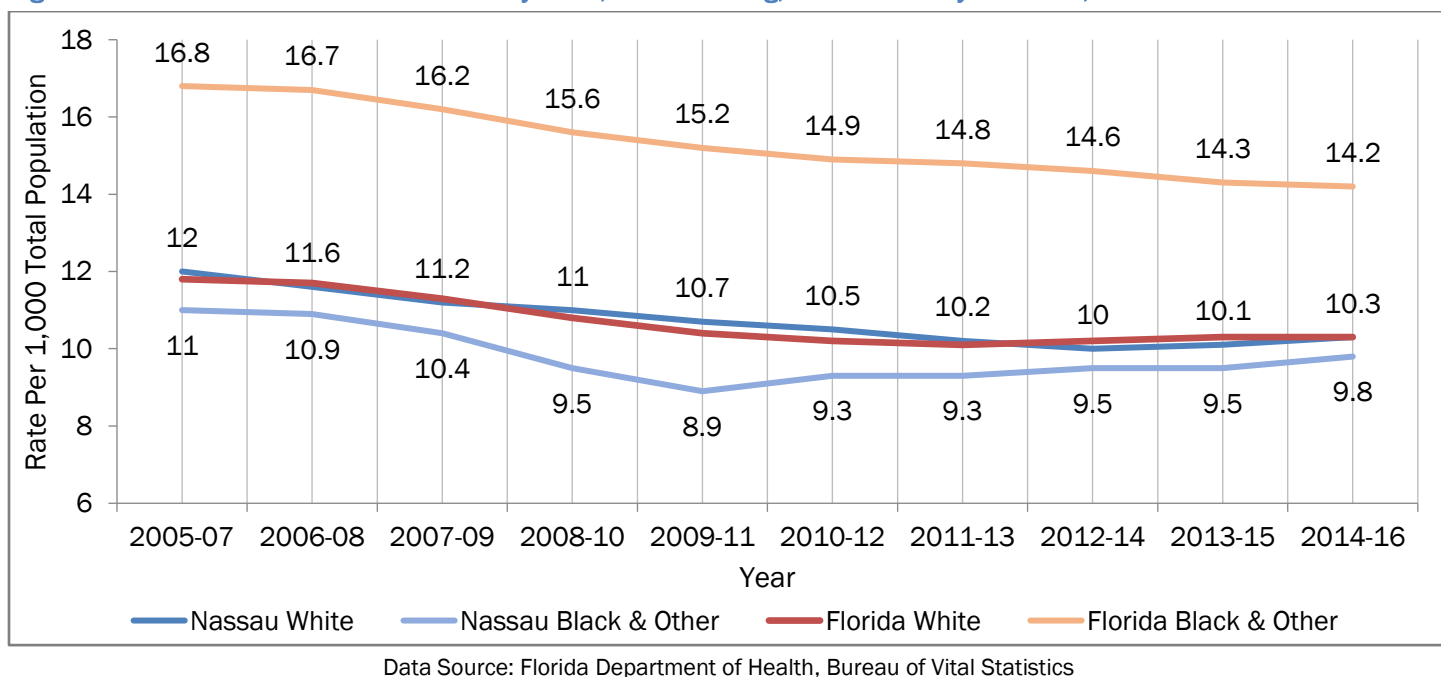
### Total Births

Birth outcomes differ across regions due to many factors, including access to care, quality of care, environmental factors, and the mothers' health behaviors. Birth rates are good indicators of fertility fluctuations over time.<sup>79</sup> Nassau County's total resident live birth rate is slightly lower than Florida's rate for all races. In 2014-16, there were 10.3 births per 1,000 total population for all races in Nassau County compared to 11.2 births per 1,000 in Florida (Figure 58). Birth rates are higher for non-white races in Florida at 14.2 births per 1,000 people in 2014-16. In contrast, Nassau County's non-white population had a lower birth rate than Nassau County's white population, with 9.8 births per 1,000 for non-white races in 2014-16. Overall, births decreased from 2005 to 2016 (Figure 59).

**Figure 58. Total Resident Live Birth Rates, All Races/Ethnicities, 3-Year Rolling, Nassau County & Florida, 2005-2016**



**Figure 59. Total Resident Live Birth Rates by Race, 3-Year Rolling, Nassau County & Florida, 2005-2016**

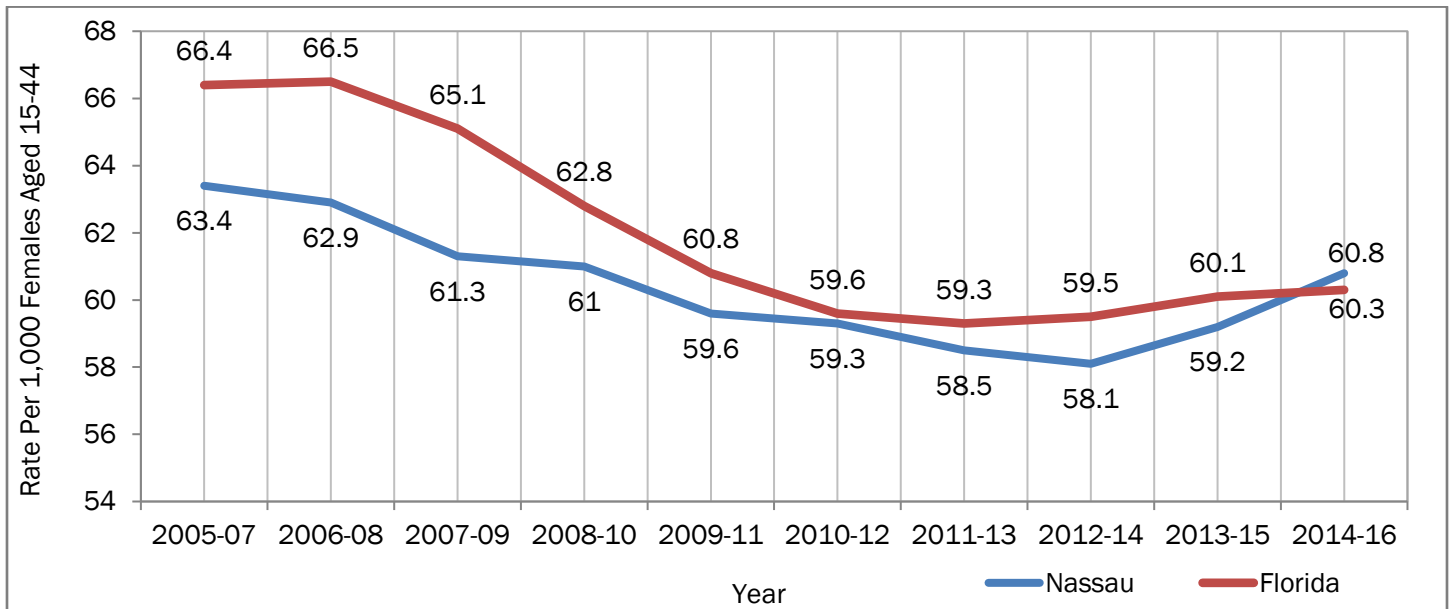


<sup>79</sup> Centers for Disease Control and Prevention. (2017). *Reproductive and Birth Outcomes*. Retrieved from <https://ephtracking.cdc.gov/showRbIndicators>

## Births to Mothers Age 15-44

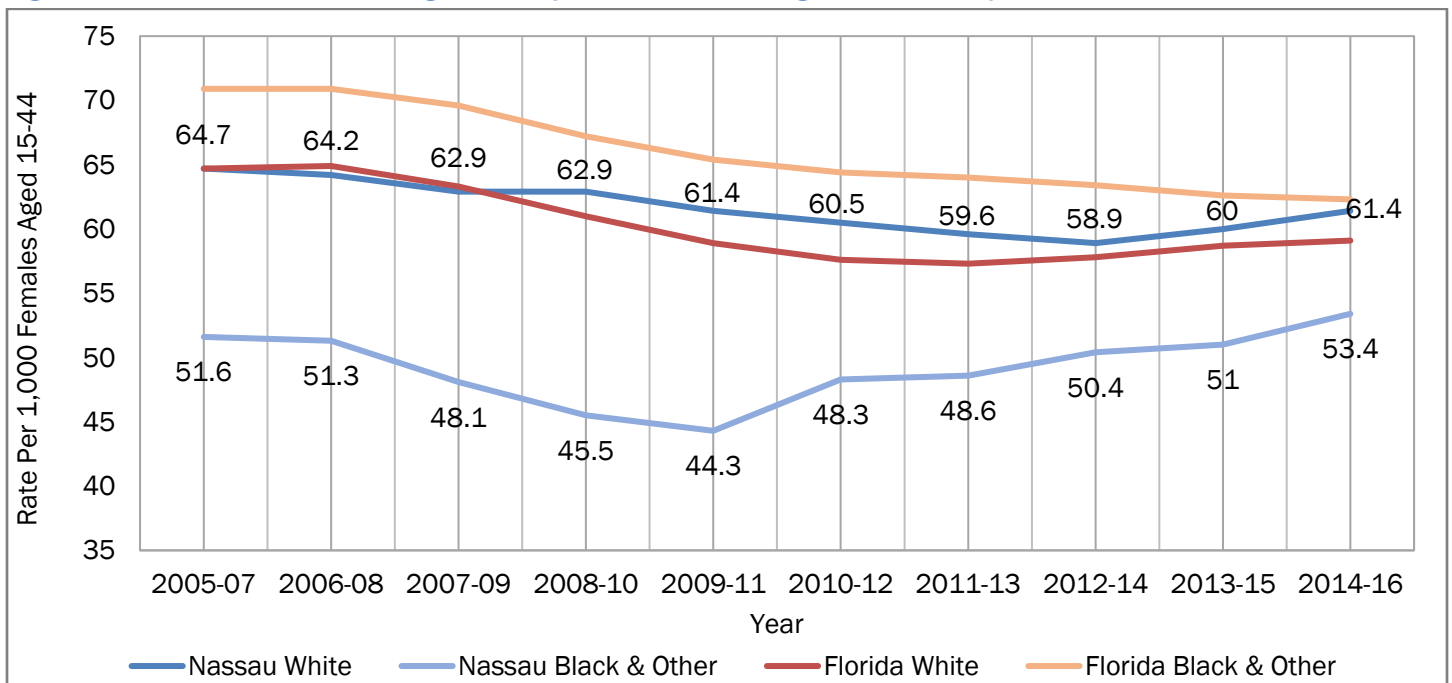
Birth expectations, or women's expectations about having children in the future, are related to sexual activity, contraceptive use, and fertility.<sup>2</sup> Overall, births to women aged 15-44 decreased from 2005-07 to 2014-16. Nassau County's birth rate increased from a low of 58.1 births per 1,000 women aged 15-44 in 2012-14 to 60.8 births in 2014-16 (Figure 60). Births to non-white mothers increased from 44.3 births per 1,000 females aged 15-44 in 2009-11 to 53.4 births in 2014-16 in Nassau County, though Nassau's non-white birth rate remains lower than the white birth rate (Figure 61).

**Figure 60. Birth Rates of Mothers Aged 15-44, All Races/Ethnicities, 3-Year Rolling, Nassau County & Florida, 2005-2016**



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

**Figure 61. Birth Rates of Mothers Age 15-44 by Race, 3-Year Rolling, Nassau County & Florida, 2005-2016**



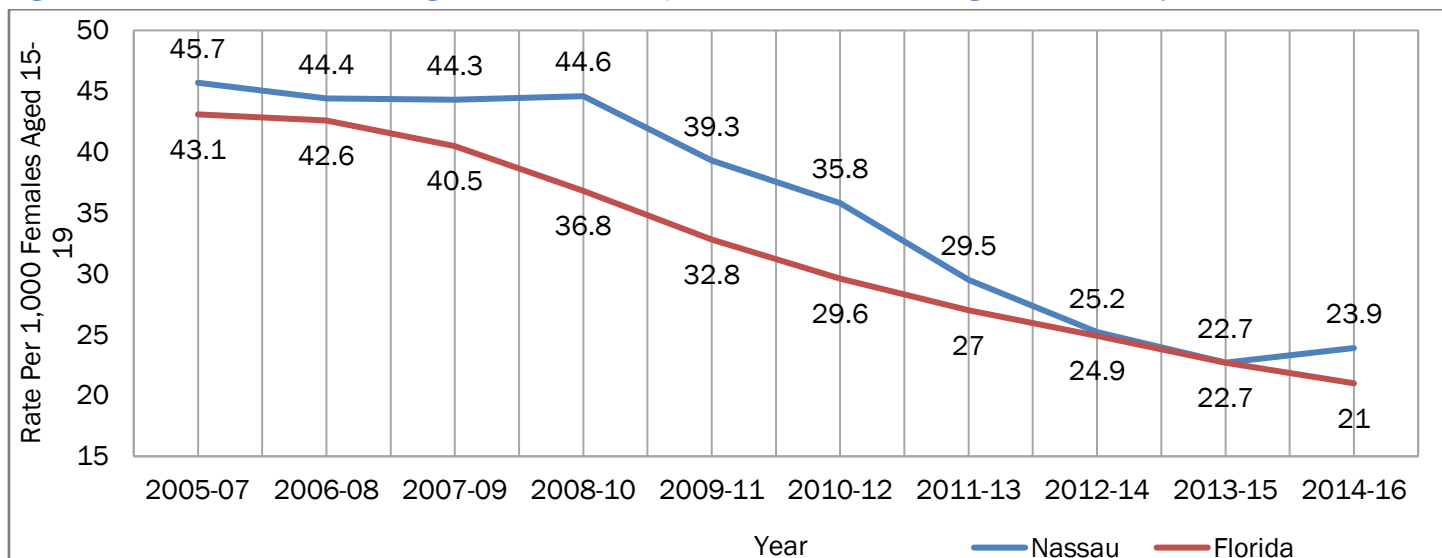
Data Source: Florida Department of Health, Bureau of Vital Statistics

<sup>2</sup> Centers for Disease Control and Prevention. (2016). *Birth Expectations of U.S. Women Aged 15-44*. Retrieved from <https://www.cdc.gov/nchs/products/databriefs/db260.htm>

## Teen Births

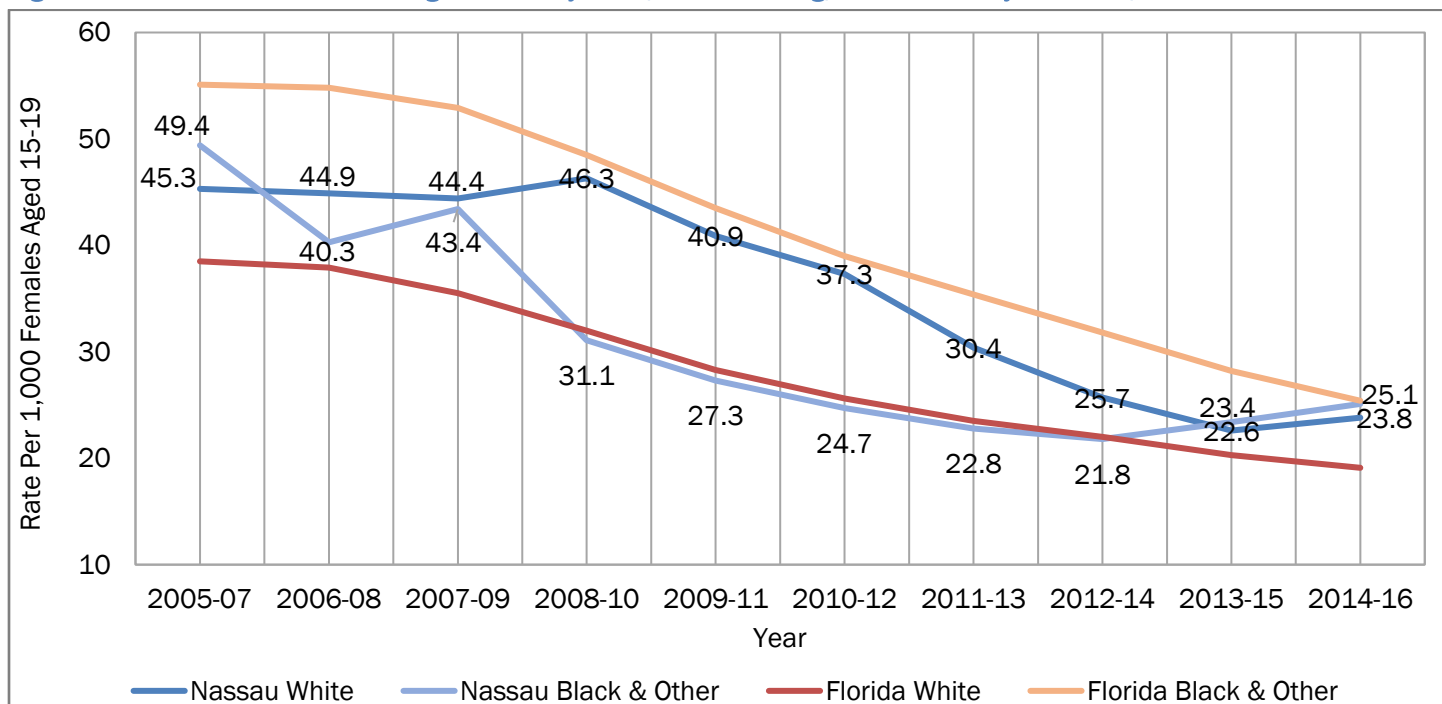
Teen birth rates decreased over the past decade for all races and ethnicities in both Nassau County and Florida. Nassau County teen birth rates dropped from 45.7 births per 1,000 females aged 15-19 in 2005-2007 to 23.9 per 1,000 females aged 15-19 in 2014-2016 (Figure 62). Nassau County's non-White population experienced a slight increase in births to mothers aged 15-19 from 2012-14 to 2014-16 (Figure 63). Evidence suggests that the declines in teen pregnancy may be due to increased use of birth control and decreased sexual activity. However, United States teen pregnancy rates remain substantially higher than other industrialized countries with large disparities between races and ethnicities.<sup>80</sup>

**Figure 62. Birth Rates of Mothers Ages 15-19, All Races/Ethnicities, 3-Year Rolling, Nassau County & Florida, 2005-2016**



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

**Figure 63. Birth Rates of Mothers Ages 15-19 by Race, 3-Year Rolling, Nassau County & Florida, 2005-2016**



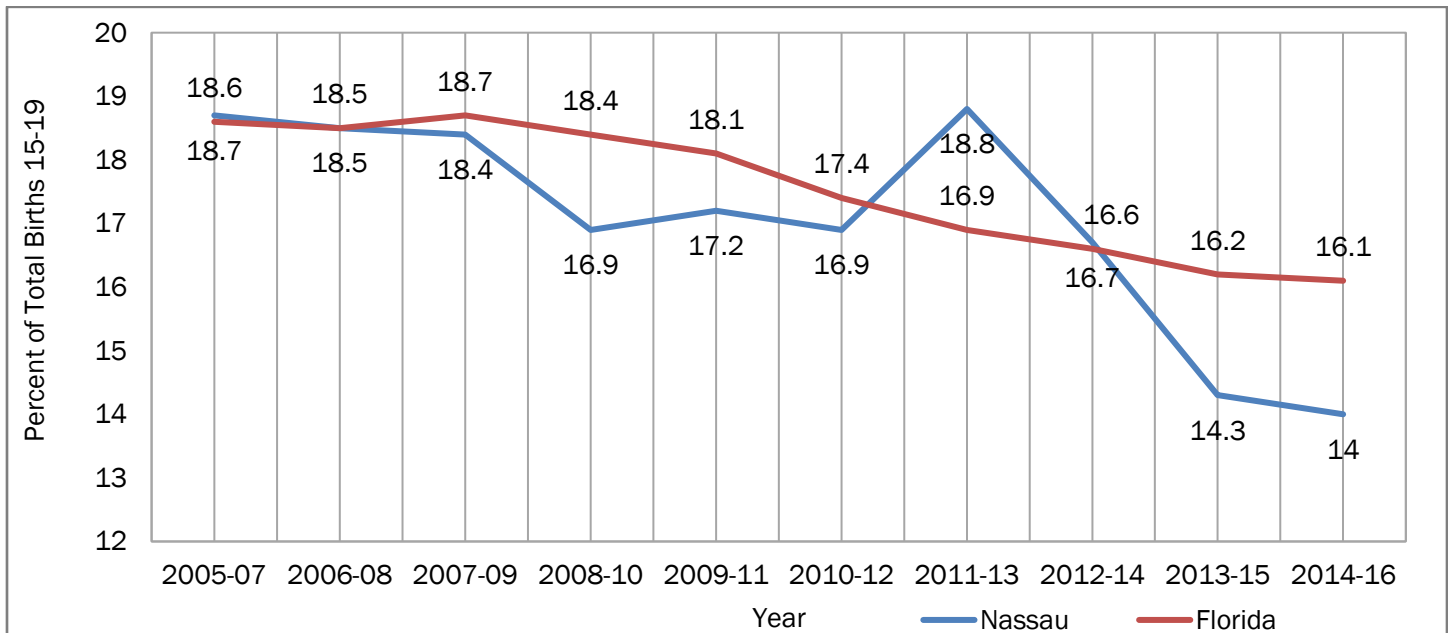
Data Source: Florida Department of Health, Bureau of Vital Statistics

<sup>80</sup> Centers for Disease Control and Prevention. (2017). *About Teen Pregnancy*. Retrieved from <https://www.cdc.gov/teenpregnancy/about/index.htm>

## Repeat Teen Births

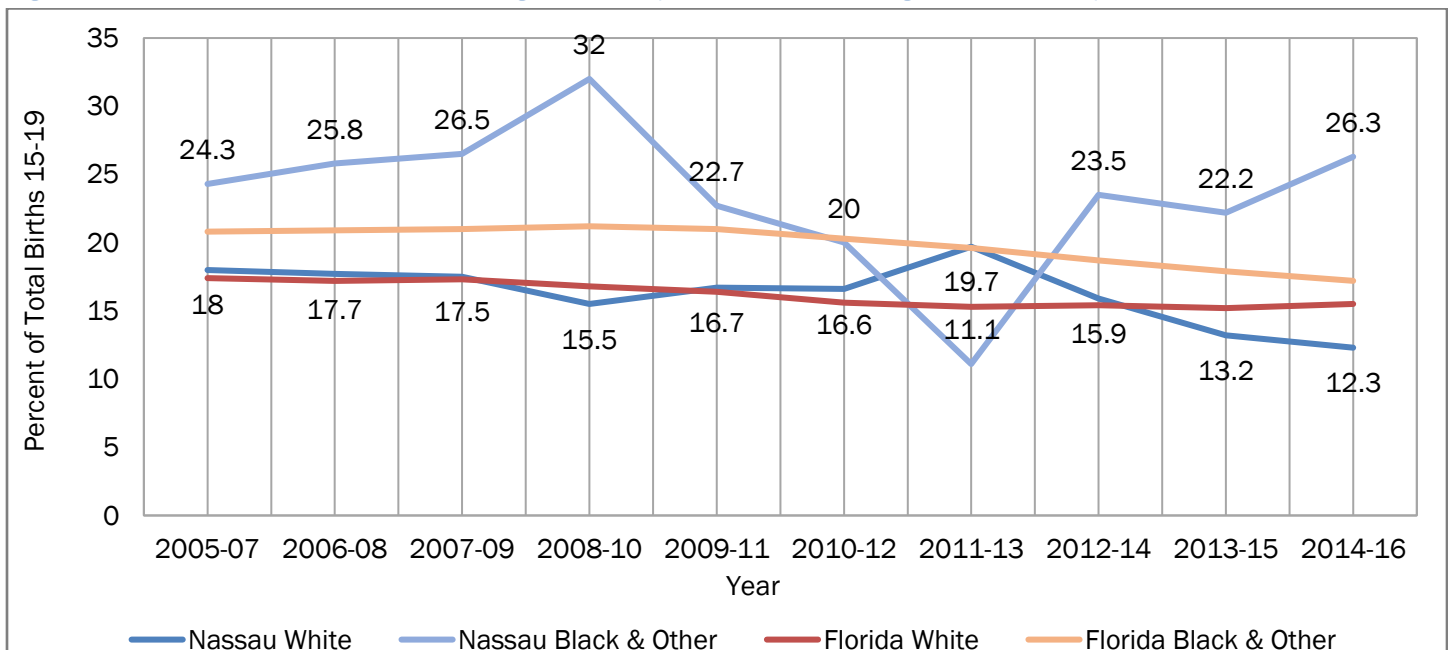
According to the CDC, nearly 1 in 5 births to mothers aged 15 to 19 is a repeat birth. Repeat teen births can affect young mothers, limiting their ability to pursue education.<sup>4</sup> Figure 64 and Figure 65 show repeat births to teen mothers (ages 15-19) as a percent of total births to 15-19 year olds. Nassau County experienced a decline in repeat teen birth rates for all races/ethnicities from 2005-2016, with increases above the Florida rate in 2005-07 and 2011-13. In contrast, non-White repeat teen birth rates increased from 24.3% of total births in 2005-07 to 26.3% of total births in 2014-16 in Nassau, higher than the rate of 12.3% for Nassau White mothers in 2014-2016.

**Figure 64. Repeat Birth Rates of Mothers Ages 15-19, All Races/Ethnicities, 3-Year Rolling, Nassau County & Florida, 2005-2016**



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

**Figure 65. Repeat Birth Rates of Mothers Ages 15-19 by Race, 3-Year Rolling, Nassau County & Florida, 2005-2016**



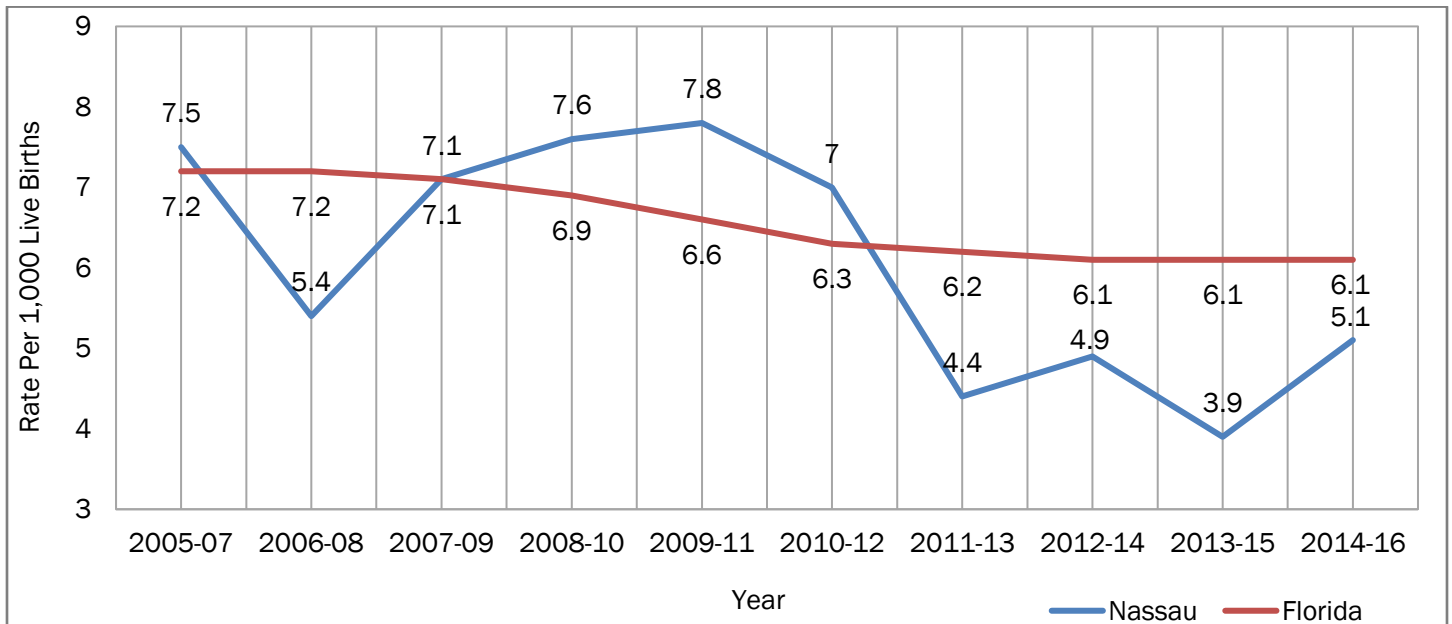
Data Source: Florida Department of Health, Bureau of Vital Statistics

<sup>4</sup> Centers for Disease Control and Prevention. (2013). *Preventing Repeat Teen Births*. Retrieved from <https://www.cdc.gov/vitalsigns/teenpregnancy/index.html>

## Infant Mortality Rate

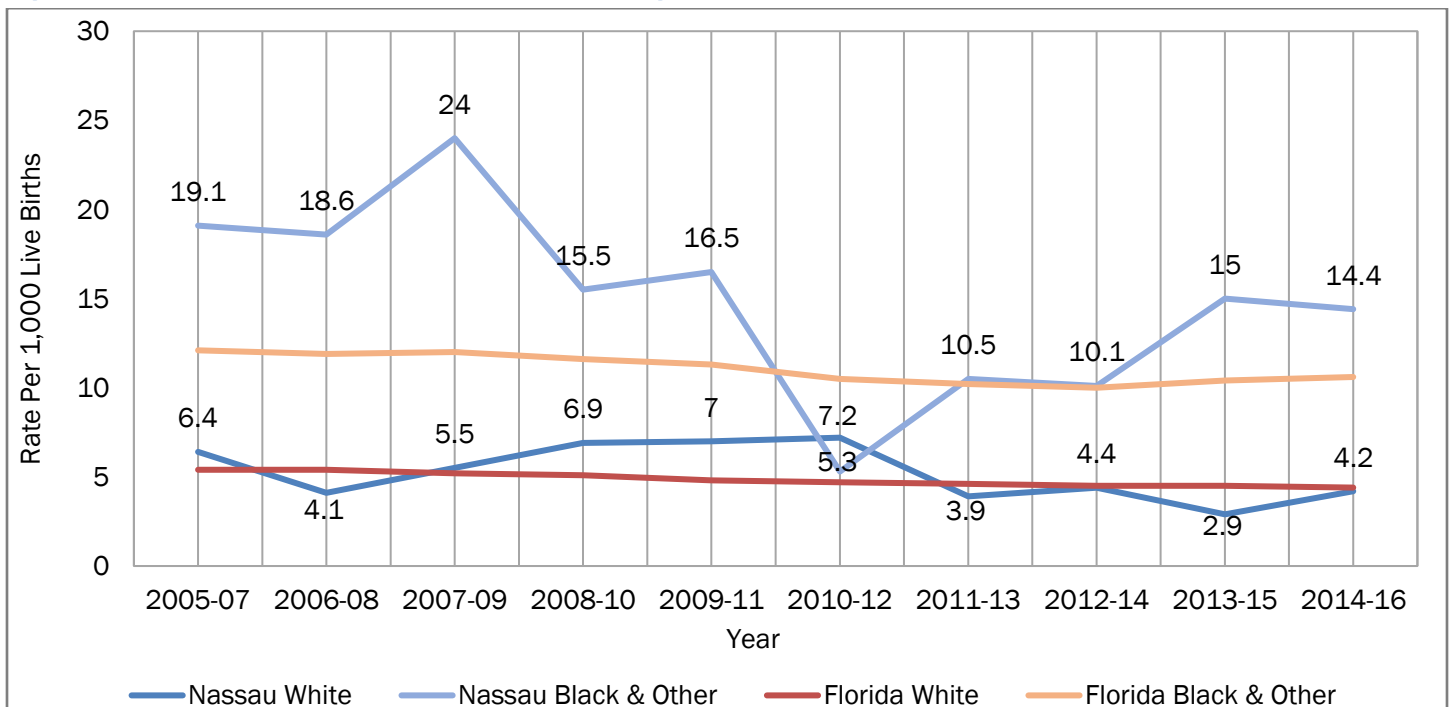
Infant mortality is the death of a live-born baby within the first year of life. The infant mortality rate is the number of infant deaths for every 1,000 live births. This rate is an important marker of the overall health of a society.<sup>5</sup> Nassau County experienced an increase in the infant mortality rate for all races from 2006-08 to 2009-11, but remained below the Florida rate from 2011-13 to 2014-16 (Figure 66). White infant mortality rates are consistently lower than non-White rates in Nassau County. In 2014-16, Nassau's white population had an infant mortality rate of 4.2 deaths per 1,000 live births compared to 14.4 deaths per 1,000 live births in the non-White population (Figure 67).

**Figure 66. Infant Mortality Rates, All Races/Ethnicities, 3-Year Rolling, Nassau County & Florida, 2005-2017**



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

**Figure 67. Infant Mortality Rates by Race, 3-Year Rolling, Nassau County & Florida, 2005-2016**



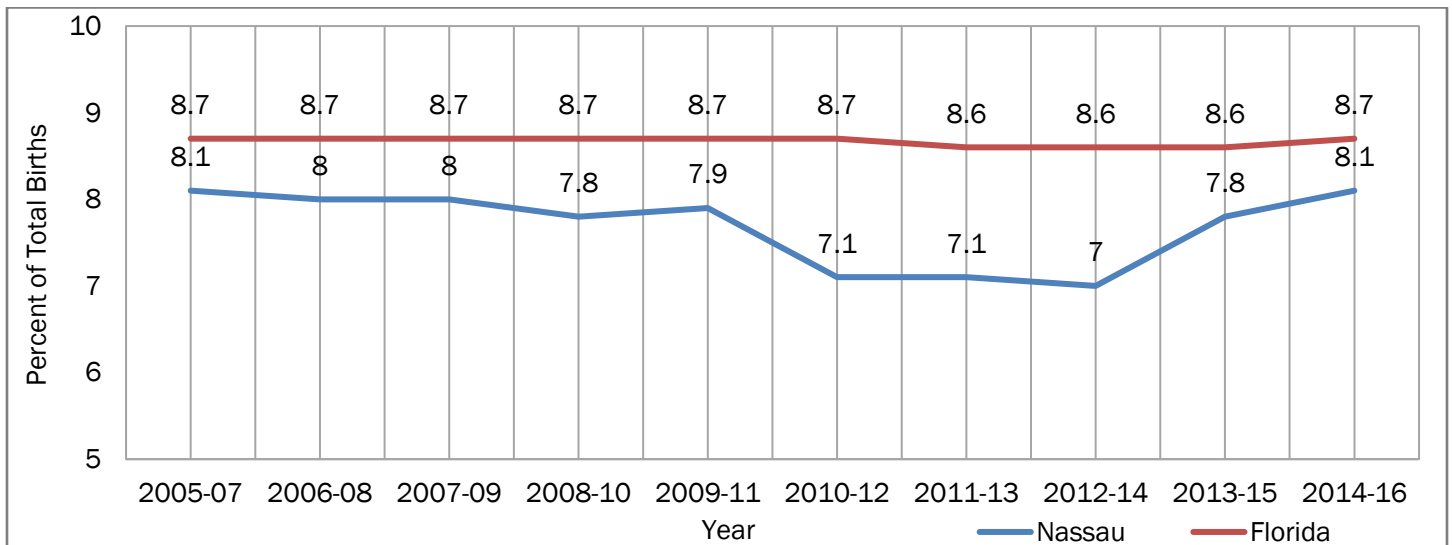
Data Source: Florida Department of Health, Bureau of Vital Statistics

<sup>5</sup> Centers for Disease Control and Prevention. (2018). *Infant Mortality*.  
<https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm>

## Low Birth Weight

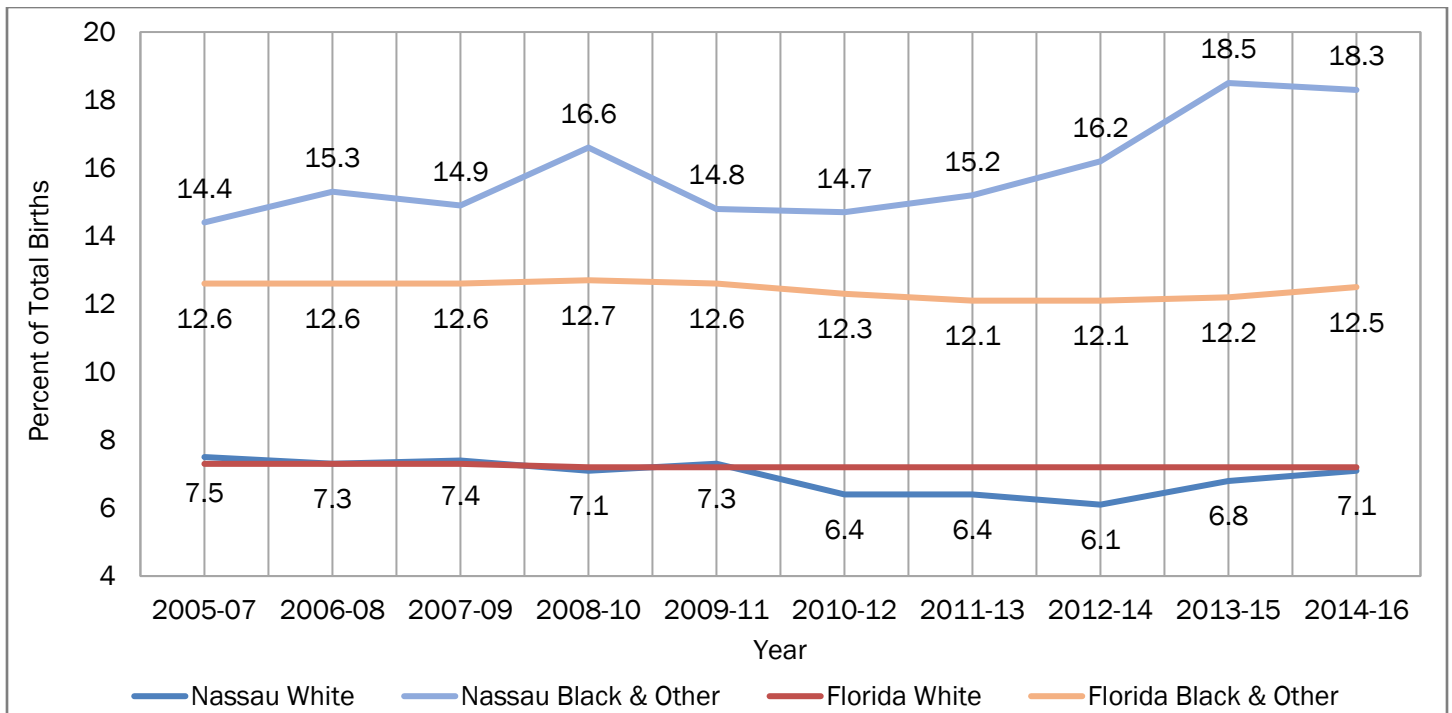
A birth weight less than 5.5 pounds (2,500 grams) is considered a low birth weight. Infants with low birth weight may be at a higher risk for many health problems in comparison to infants born at a normal weight.<sup>6</sup> Over the past decade, the percent of births in Nassau County with low birth weight remained lower than Florida for all races (Figure 68). Non-white births are more likely to have low birth weight in both Nassau County and Florida. The percent of births with low birth weight among Nassau County's non-white population is statistically significantly higher than the white population. In Nassau County, 18.3% of non-white births were low birth weight in 2014-2016 compared to 7.1% of white births (Figure 69).

**Figure 68. Percent of Total Births with Low Birth Weight, All Races/Ethnicities, 3-Year Rolling, Nassau County & Florida, 2005-2016**



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

**Figure 69. Percent of Total Births with Low Birth Weight by Race, 3-Year Rolling, Nassau County & Florida, 2005-2016**



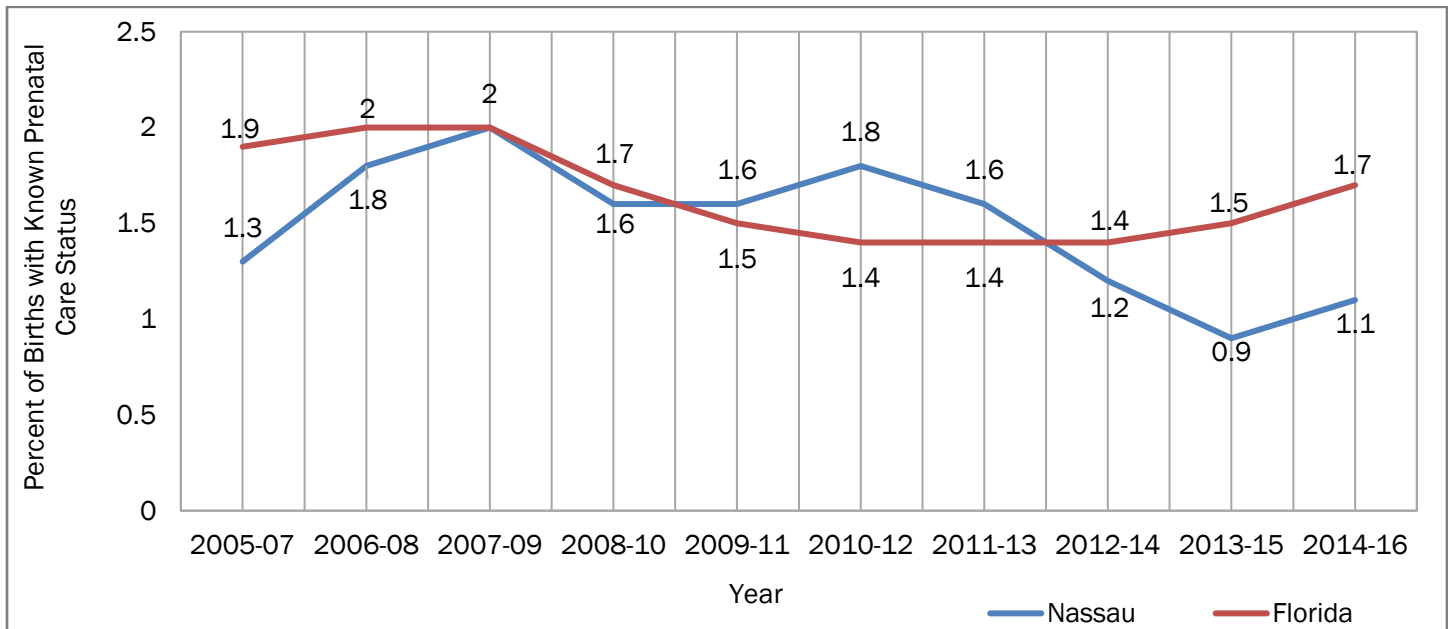
Data Source: Florida Department of Health, Bureau of Vital Statistics

<sup>6</sup> Centers for Disease Control and Prevention. (2017). *Reproductive and Birth Outcomes*.  
<https://ephracking.cdc.gov/showRbLBWGGrowthRetardationEnv.action>

## Prenatal Care

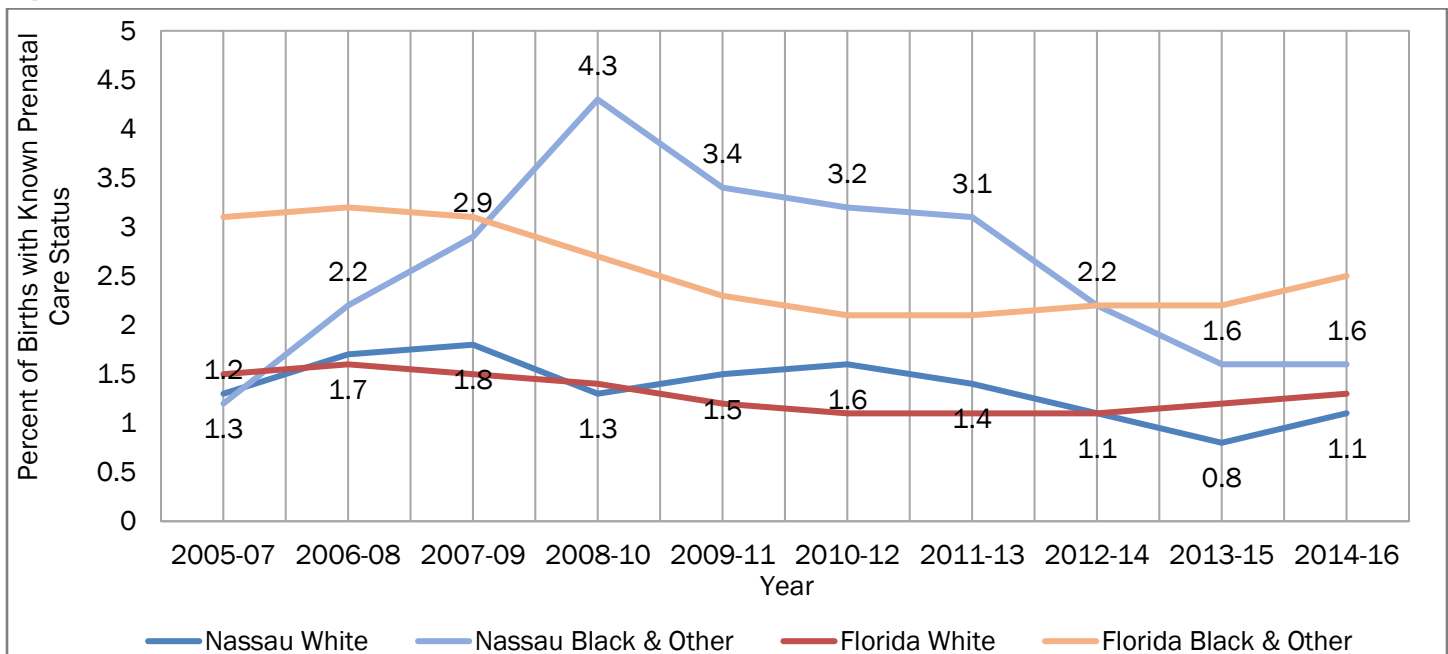
In order to have the best possible outcome for mother and child, early prenatal care is essential. Prenatal care is the health care a woman receives when she is pregnant, and prenatal visits to a healthcare provider are important to monitor the health of the mother and fetus.<sup>7</sup> Of births with known prenatal care status, only 1.1% of mothers had no prenatal care in Nassau County compared to 1.7% of mothers in Florida in 2014-2016 (Figure 70). The non-White population consistently has higher rates of births to mothers with no prenatal care than the white population in both Nassau County and Florida (Figure 71).

**Figure 70. Percent of Births to Mothers with No Prenatal Care, All Races/Ethnicities, 3-Year Rolling, Nassau County & Florida, 2005-2016**



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

**Figure 71. Percent of Births to Mothers with No Prenatal Care by Race, Nassau County & Florida, 2005-2016**



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

<sup>7</sup> Centers for Disease Control and Prevention. (2017). *Pregnancy and Prenatal Care*. Retrieved from <https://www.cdc.gov/healthcommunication/toolstemplates/entertainment/tips/PregnancyPrenatalCare.html>

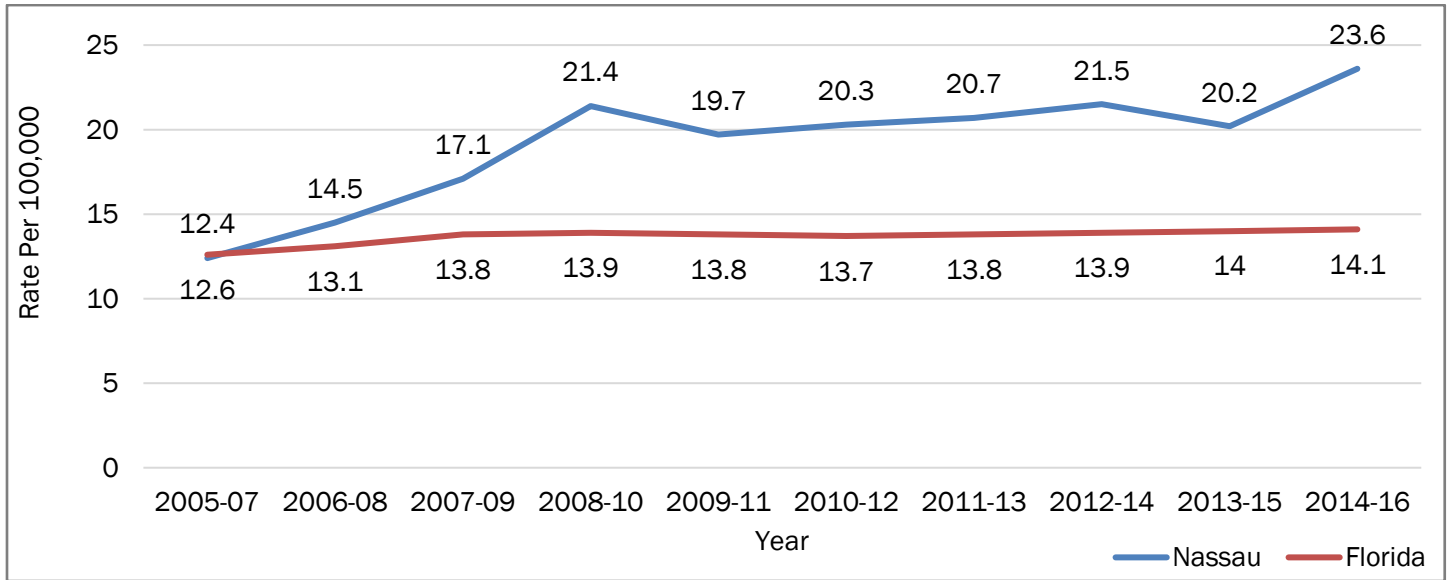


## Behavioral and Mental Health

### Suicide

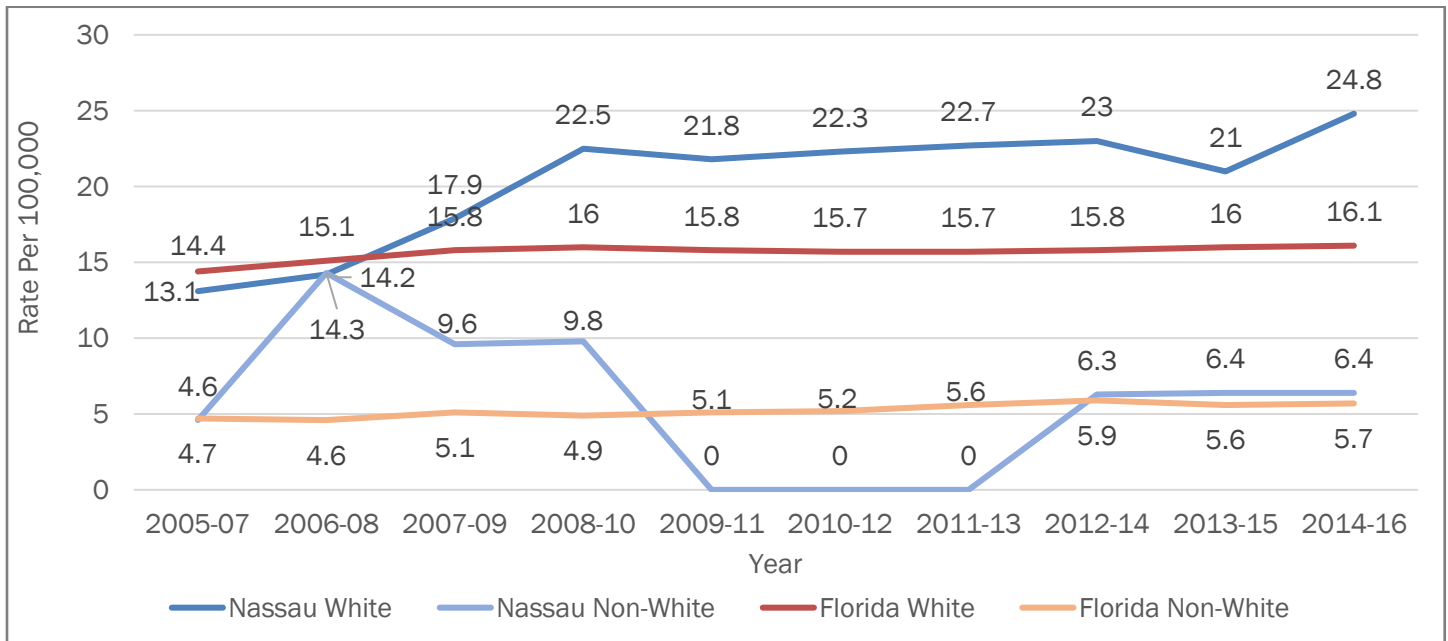
Suicide occurs when a person ends their own life and it is the 10th leading cause of death among Americans.<sup>81</sup> Deaths are not the only consequence of suicide. More people survive suicide attempts than die, and suicide survivors may have serious injuries, such as broken bones, brain damage, or organ failure.<sup>82</sup> Nassau County's suicide death rate increased from 12.4 deaths per 100,000 population in 2005-07 to 23.6 deaths per 100,000 in 2014-16 (Figure 72). Suicide tends to occur much more frequently among white populations than non-white groups (Figure 73).

Figure 72. Suicide Age-Adjusted Death Rate, All Races/Ethnicities, 2005-2016



Data Source: FL Health Charts | Prepared by Health Planning Council of Northeast Florida

Figure 73. Suicide Age-Adjusted Death Rate by Race, 2005-2016



Data Source: FL Health Charts, www.flhealthcharts.com | Prepared by Health Planning Council of Northeast Florida

<sup>81</sup> U.S. Centers for Disease Control and Prevention. (2015, May). *Deaths. Final Data for 2013*. Retrieved from CDC.gov: <http://www.cdc.gov/leadingcausesofdeath>

<sup>82</sup> U.S. Centers for Disease Control and Prevention. (2014, September). *Preventing Suicide*. Retrieved from CDC.gov: <http://www.cdc.gov/Features/PreventingSuicide/>

## Baker Act

In 1971, the Florida Legislature enacted the *Florida Mental Health Act*, a comprehensive revision of the state's mental health commitment laws. The law is widely referred to as the "*Baker Act*" in honor of Maxine Baker, the former state representative who sponsored the Act. The *Baker Act* allows for involuntary exam initiation (also referred to as emergency or involuntary commitment). Initiations can be made by judges, law enforcement officials, physicians, or mental health professionals only when there is evidence that a person has a mental illness and is a harm to self, harm to others, or self-neglectful (as defined in the Baker Act). Examinations may last up to 72 hours and can occur in any of over 100 Florida Department of Children and Families designated receiving facilities statewide.<sup>83</sup>

It is important to note that some individuals for whom forms were received were never actually admitted to the receiving facility because an examination by a physician or psychologist performed prior to admission determined they did not meet criteria. The data also does not include information on what occurred after the initial examination, such as how long individuals stayed at the facility or whether they remained on an involuntary or voluntary basis.<sup>84</sup>

Table 4 shows the total number of reported involuntary exam initiations (i.e. Baker Act) for Nassau County and Florida residents from 2007-2017. Figures 74-76 show the percent of Baker Acts by initiator type.

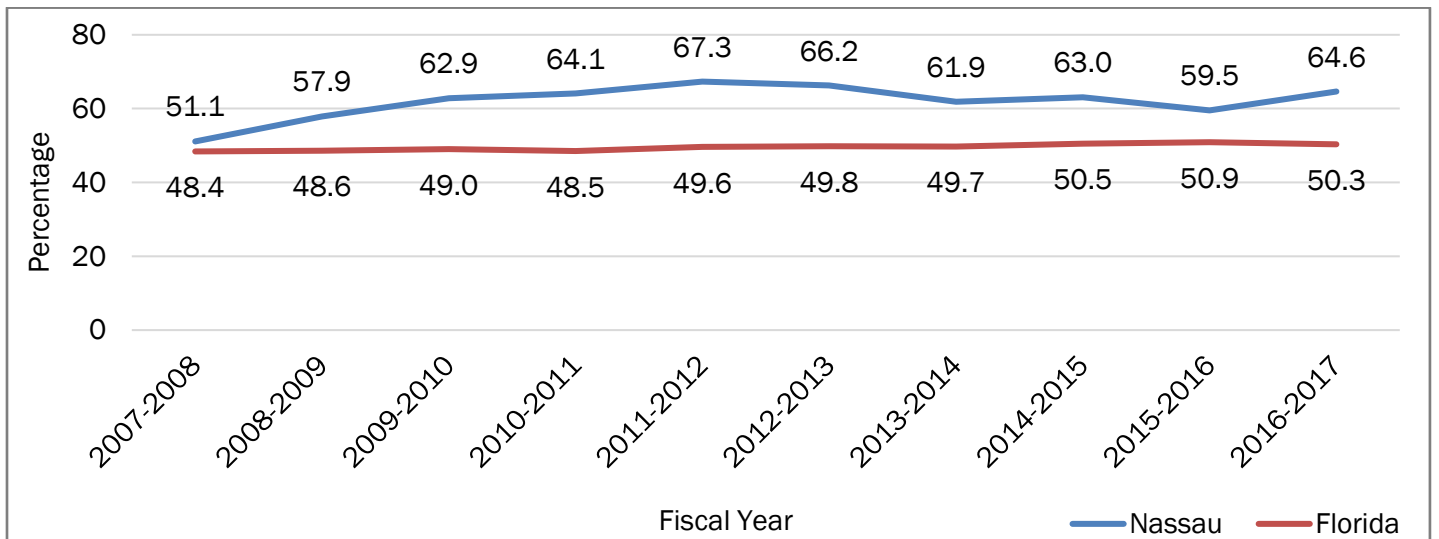
**Table 4. Baker Act Initiations in Nassau County & Florida, 2007-2016**

Fiscal Year	Nassau County Residents				Florida			
	Involuntary Examinations	% of Exams by Initiator Type			Involuntary Examinations	% of Exams by Initiator Type		
		Law Enforcement	Mental Health Professional	Ex-Parte Order of Judge		Law Enforcement	Mental Health Professional	Ex-Parte Order of Judge
2016-2017	557	64.6%	33.4%	2.0%	199,944	50.3%	47.7%	2.0%
2015-2016	405	59.5%	39.0%	1.5%	194,354	50.9%	47.3%	1.9%
2014-2015	395	63.0%	36.5%	0.5%	187,999	50.5%	47.6%	1.9%
2013-2014	252	61.9%	37.7%	0.4%	177,006	49.7%	48.3%	1.9%
2012-2013	234	66.2%	33.3%	0.4%	163,850	49.8%	48.2%	2.0%
2011-2012	205	67.3%	32.7%	0.0%	154,655	49.6%	48.3%	2.1%
2010-2011	181	64.1%	34.8%	1.1%	145,290	48.5%	49.4%	2.2%
2009-2010	253	62.8%	35.6%	1.6%	141,284	49.0%	48.7%	2.3%
2008-2009	273	57.9%	40.7%	1.5%	133,644	48.6%	49.0%	2.4%
2007-2008	225	51.1%	45.8%	3.1%	127,983	48.4%	48.8%	2.8%

<sup>83</sup> Florida Department of Children and Families, 2014.

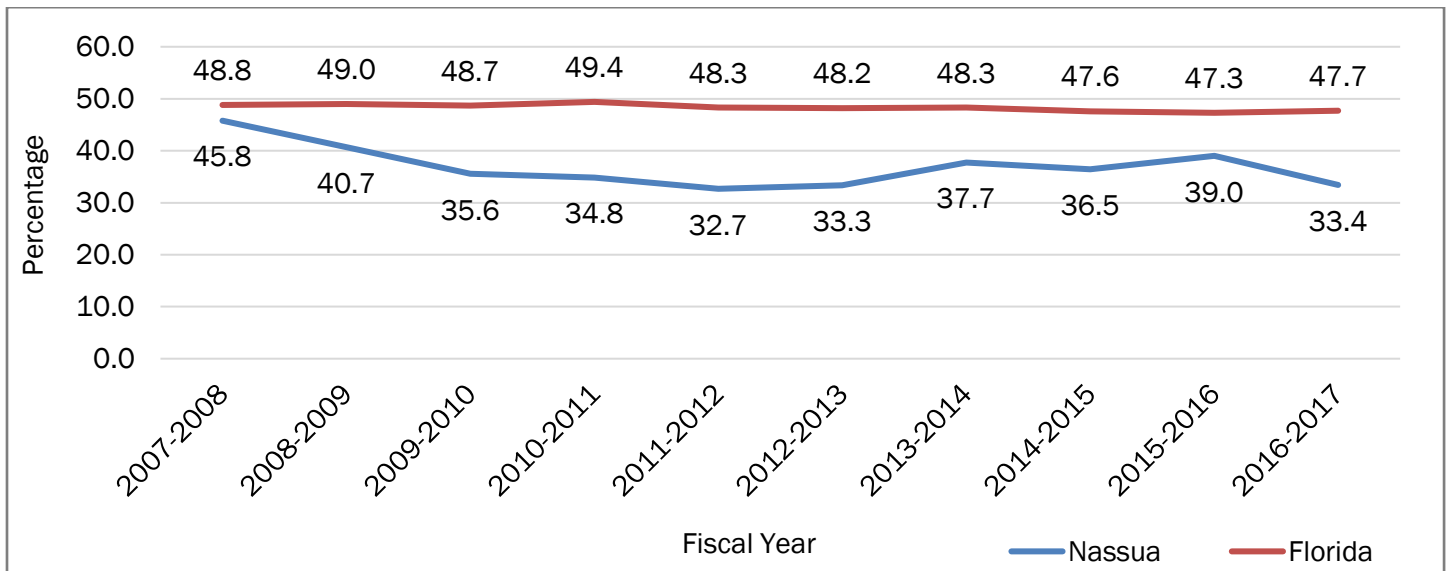
<sup>84</sup> Department of Mental Health Law & Policy. 2014 *Baker Act User Reference Guide: The Florida Mental Health Act*. Tallahassee: Department of Children and Families, Mental Health Program; University of South Florida, Louis de la Parte Florida Mental, 2014.

Figure 74. Percentage of Baker Acts Initiated by Law Enforcement, Nassau County & Florida, 2007-2017



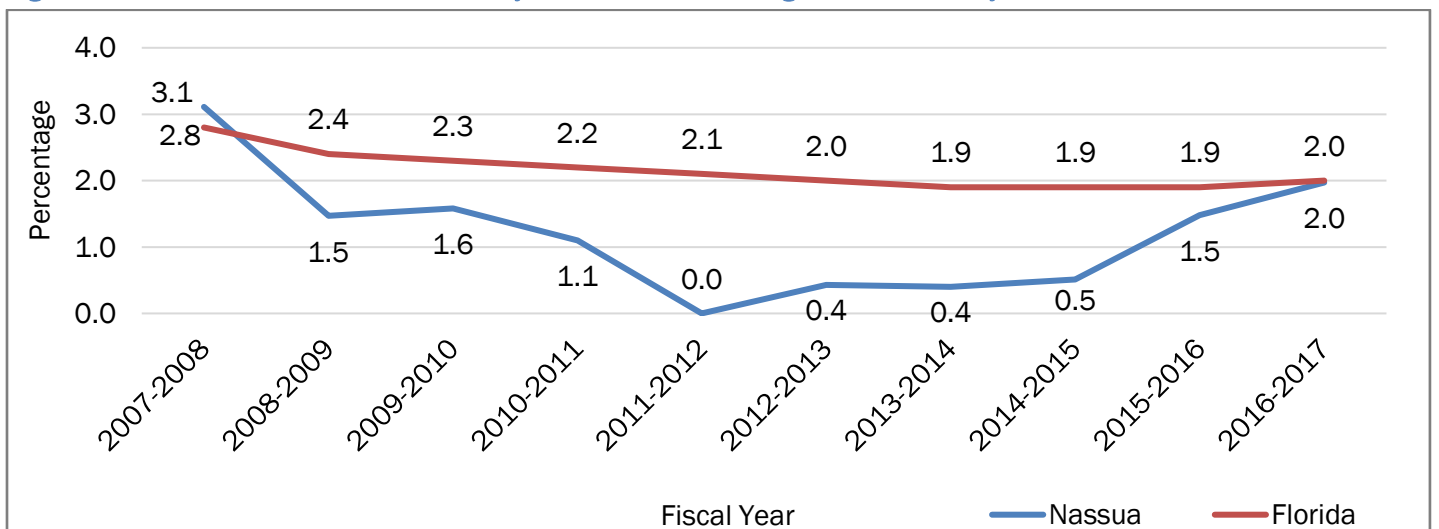
Data Source: University of South Florida

Figure 75. Percent of Baker Acts Initiated by a Mental Health Professional, Nassau County & Florida, 2007-2017



Data Source: University of South Florida

Figure 76. Percent of Baker Acts Initiated by Ex-Parte Order of Judge, Nassau County & Florida, 2007-2017



Data Source: University of South Florida

# HEALTHCARE UTILIZATION & RESOURCES

## Health Resources, Providers, and Facilities

### Health Insurance Coverage

Health insurance coverage, whether privately or publicly funded, is a primary factor in determining access to care for many people. Health insurance is obtained privately through an employer (the individual's own or an immediate family member), purchased independently, or available to certain individuals through government subsidized or publicly funded health coverage programs, such as Medicare, Medicaid, or Military and VA benefits.<sup>85</sup>

The uninsured include both full and part-time employees whose employers do not offer health insurance benefits, low-income persons who do not qualify for Medicaid, early retirees, and others who simply cannot afford costly premiums. Evidence shows uninsured persons experience less positive medical outcomes than their insured counterparts do. The uninsured are also less likely to have a regular source of primary care or seek preventive health services.<sup>86</sup>

Nassau County has a higher rate of insured persons compared to Florida but not the U.S. About 87% of Nassau's total civilian noninstitutionalized population has insurance compared to 84% of Floridians and 88% of all Americans. Among the unemployed, only 55% of Nassau County residents and 52% of Florida residents have health insurance compared to 63% in the U.S. Almost 18% of employed persons in Nassau do not have health insurance (Table 5).

**Table 5. Insurance Coverage in Nassau County, Florida, and the United States, 2012- 2016**

	Nassau	Florida	United States
Total civilian noninstitutionalized	76,329	19,621,207	313,576,137
With health insurance coverage	86.7%	83.6%	88.3%
With private health insurance	68.0%	59.8%	66.7%
With public coverage	34.5%	36.0%	33.0%
No health insurance coverage	13.3%	16.4%	11.7%
Civilian noninstitutionalized population 18 to 64 years	45,419	11,833,949	195,226,024
In labor force:	32,803	8,920,790	149,849,229
Employed:	30,276	8,179,341	138,920,971
With health insurance coverage	82.4%	78.8%	85.8%
With private health insurance	78.2%	73.7%	79.4%
With public coverage	6.7%	7.2%	8.6%
No health insurance coverage	17.6%	21.2%	14.2%
Unemployed:	2,527	741,449	10,928,258
With health insurance coverage	54.7%	51.5%	63.0%
With private health insurance	39.3%	32.1%	37.7%
With public coverage	19.3%	21.6%	27.9%
No health insurance coverage	45.3%	48.5%	37.0%
Not in labor force:	12,616	2,913,159	45,376,795
With health insurance coverage	79.1%	75.9%	82.1%
With private health insurance	55.2%	47.8%	51.7%
With public coverage	31.4%	34.5%	37.2%
No health insurance coverage	20.9%	24.1%	17.9%

Data Source: 2016 American Community Survey 5-Year Estimates, DP03, Selected Economic Characteristics

<sup>85</sup> Center for Disease Control and Prevention. (2017, September). Retrieved from National Center for Health Statistics Health Insurance Data: [https://www.cdc.gov/nchs/data/factsheets/factsheet\\_health\\_insurance.htm](https://www.cdc.gov/nchs/data/factsheets/factsheet_health_insurance.htm)

<sup>86</sup> *Cover the Uninsured*, a National project of the Robert Wood Johnson Foundation, 2010.

## Federal Health Professional Shortage Designation

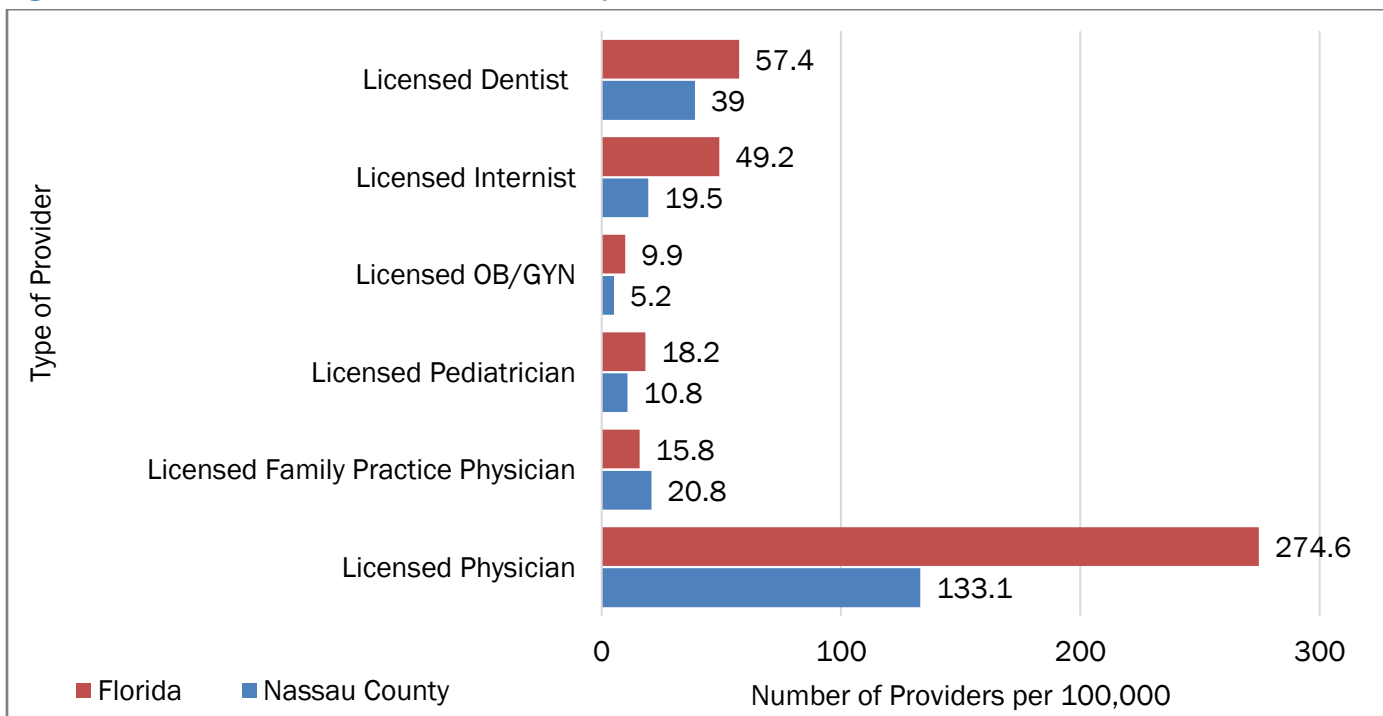
The Human Health Resources and Services (HRSA) develops a shortage designation criteria to determine whether an area or population group is experiencing a health professional shortage. Shortages can be for primary medical care, dental, or mental health provider. In 2017, Nassau County was designated a Health Professional Shortage Area (HPSA) due to lack of primary care service.<sup>87</sup>

## Health Care Providers

A Primary Care Provider (PCP) is a physician, nurse practitioner, clinical nurse specialist, or physician assistant, “who provides, coordinates or helps a patient access a range of health care services.”<sup>88</sup> Primary care providers serve as a patient’s first point of entry for health care services and focus on patient care, rather than disease treatment.<sup>89</sup> The U.S. Health Resources and Services Administration (HRSA) considers general and family practitioners, internists, pediatricians, obstetricians and gynecologists, physician assistants, and nurse practitioners as primary care providers. Additionally, public health nurses and school nurses provide primary care services to designated populations.<sup>90</sup>

Figure 77 shows the rate per 100,000 population of total licensed physicians, various primary care providers, and dentists in Nassau County. Overall, Nassau County has a significantly lower number of licensed physicians per 100,000 people than the state average. Nassau County also has fewer licensed dentists, internists, OB/GYNs, and pediatricians per 100,000 than Florida. Nassau County has slightly more family practice physicians per 100,000 population than Florida.

Figure 77. Total Licensed Providers, Nassau County and Florida, Fiscal Year 2014-15- Fiscal Year 2016-17



Data Source: FL Dept. of Health, Division of Medical Quality Assurance | Prepared by Health Planning Council of NE Florida

<sup>87</sup>Health Resources and Services Administration. (2017, 03 30). HRSA Data Warehouse . Retrieved from <https://datawarehouse.hrsa.gov/tools/analyzers/HpsaFindResults.aspx>

<sup>88</sup> U.S. Centers for Medicare & Medicaid Services. (n.d.). Glossary: Primary Care Provider. Retrieved from HealthCare.gov: <https://www.healthcare.gov/glossary/primary-care-provider/>

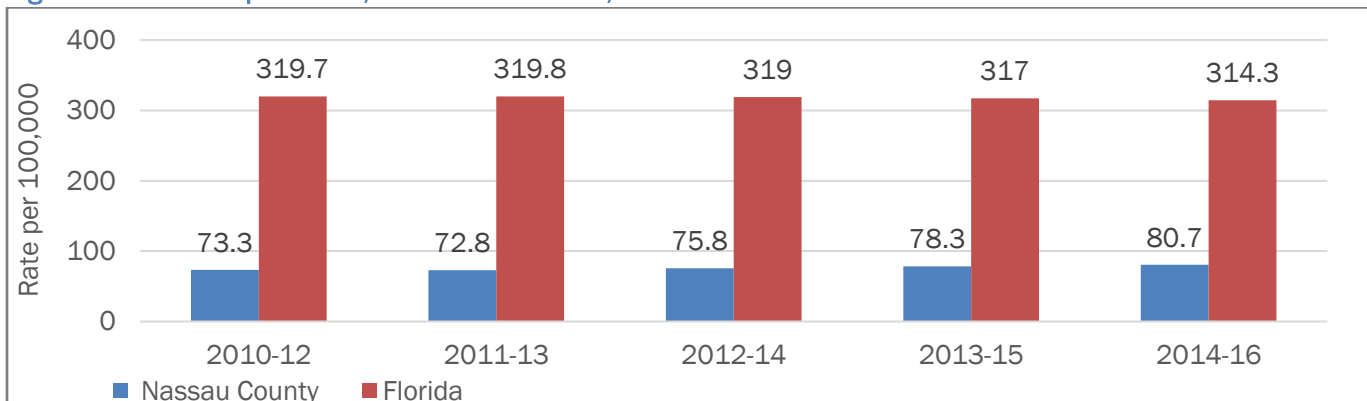
<sup>89</sup> American Academy of Family Physicians. (2018). *Primary Care*. Retrieved from AAFP: <https://www.aafp.org/about/policies/all/primary-care.html>

<sup>90</sup> United States Health Resources and Services Administration. (n.d.). Health Center Program. Retrieved from HRSA.GOV: <https://www.hrsa.gov/sites/default/files/grants/apply/assistance/Buckets/definitions.pdf>

## Health Care Facilities

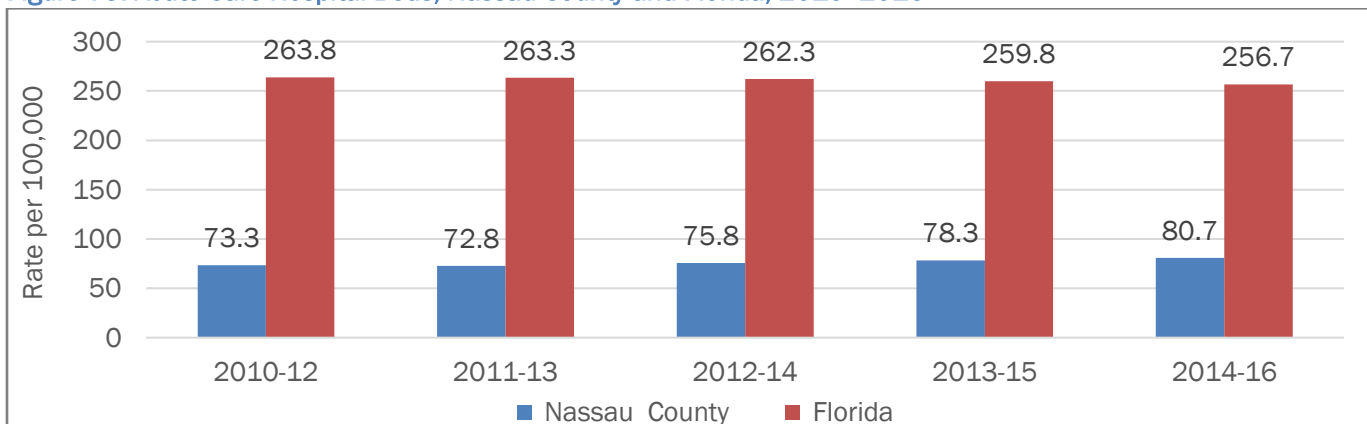
Acute care hospitals play a key role in delivery of health care services, especially in communities where primary and specialist outpatient care shortages may exist. In addition to traditional inpatient services, hospitals may provide extensive diagnostic and treatment services on an outpatient basis. Nassau County has a significantly lower rate of total hospital beds (Figure 78) and acute care beds (Figure 79) than Florida. All hospital beds in Nassau County are considered “acute care” beds, which are “used to provide short-term medical treatment for patients having an acute illness or injury or recovering from surgery or childbirth.”<sup>91</sup> Nassau County has zero specialty hospital beds, such as psychiatric, substance abuse, rehabilitation, long-term care, skilled nursing unit, or neonatal intensive care unit beds.

Figure 78. Total Hospital Beds, Nassau and Florida, 2010-2016



Data Source: Florida Agency for Health Care Administration (AHCA) | Prepared by Health Planning Council of NE Florida

Figure 79. Acute Care Hospital Beds, Nassau County and Florida, 2010- 2016

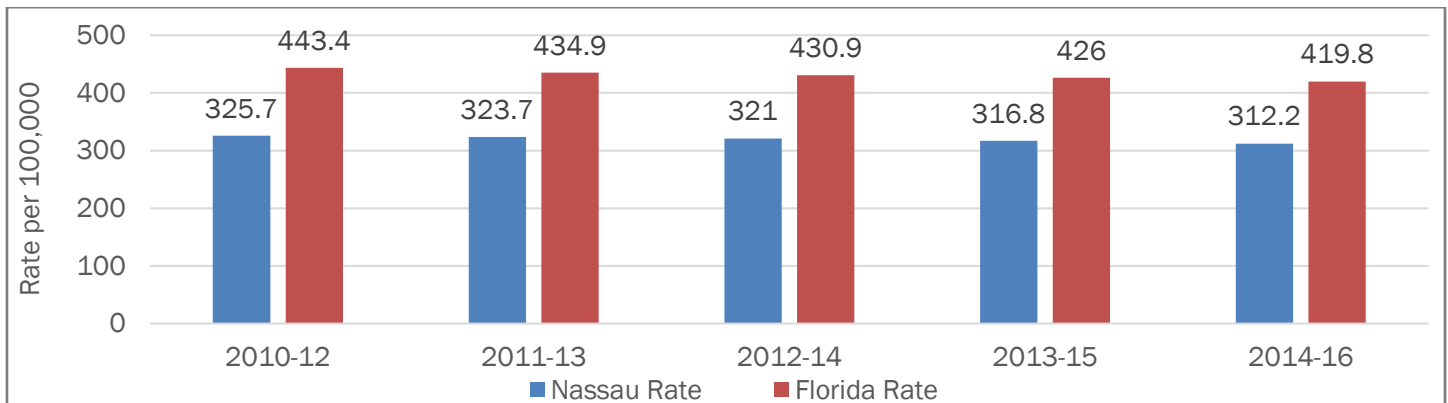


Data Source: Florida Agency for Health Care Administration (AHCA) | Prepared by Health Planning Council of NE Florida

Figure 80 summarizes the number of community nursing home beds in Nassau County. Nassau County has a lower rate of nursing homes beds per 100,000 population than Florida, with 312 nursing home beds per 100,000 people in Nassau County in 2014-16.

<sup>91</sup> Florida Agency for Health Care Administration. (2017). *Facility/Provider Definitions*. Retrieved from FloridaHealthFinder: <http://www.floridahealthfinder.gov/about-ahca/facility-locator-glossary.aspx>

Figure 80. Nursing Home Beds, Nassau County and Florida, 2010- 2016

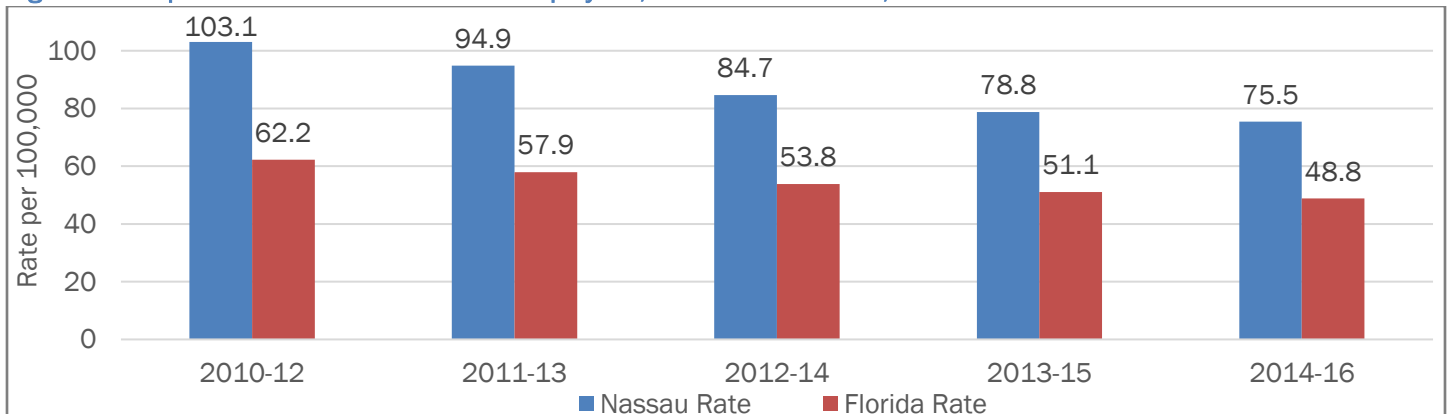


Data Source: Florida Agency for Health Care Administration (AHCA) | Prepared by Health Planning Council of NE Florida

## County Health Department Personnel & Expenditures

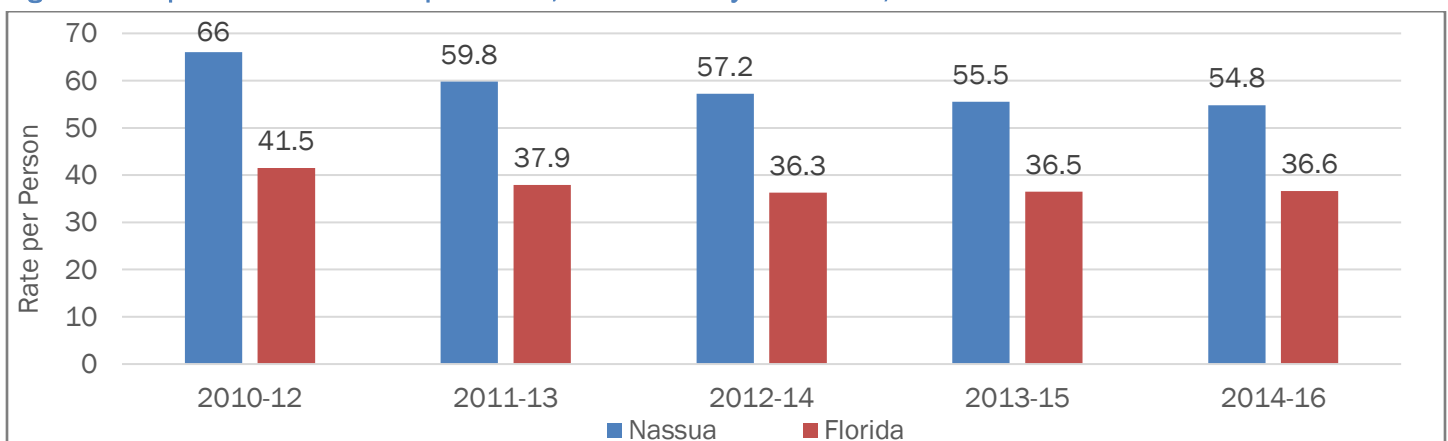
“Nassau County is reported to have a higher rate of full time employment per 100,000 population than Florida for the past 5 years (Figure 8.1) as well as higher spending per county resident compared to the state average (Figure 8.2). These rates, however, do not factor in several dual county programs including the Women, Infants & Children (WIC) and Environmental Health programs which also serve Baker county residents. DOH Nassau provides public health, clinical and field services and has a higher FTE and expenditures than the state average but likely not as great when factoring in additional out-of-county residents who are being served as part of an integrated system and not counted in the calculated population.”

Figure 81. Department of Health Full-Time Employees, Nassau and Florida, 2010-2016



Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida

Figure 82. Department of Health Expenditures, Nassau County and Florida, 2010-2016



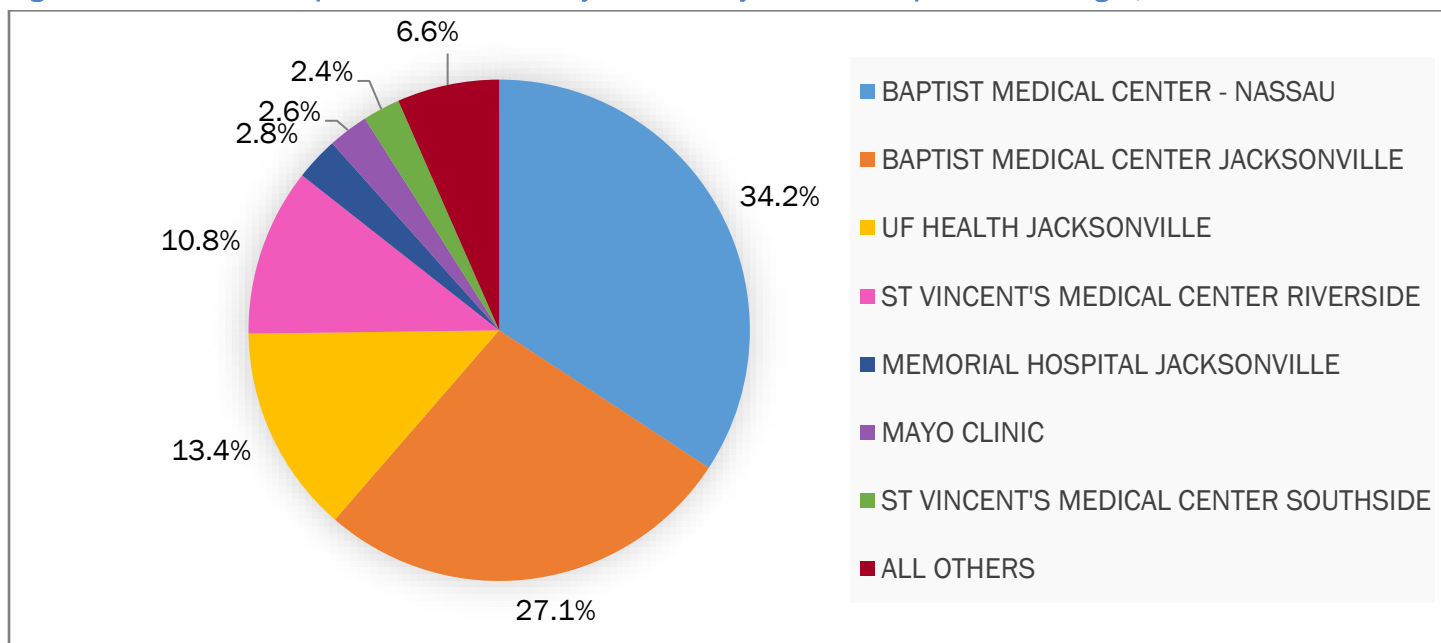
Data Source: FL Health Charts, [www.flhealthcharts.com](http://www.flhealthcharts.com) | Prepared by Health Planning Council of Northeast Florida



## Healthcare Utilization

Figure 83 shows the hospitals most used by Nassau County residents for inpatient services by the number of inpatient discharges in 2016. Baptist Medical Center Nassau (34%) saw the greatest number of Nassau County residents as inpatients, followed by Baptist Medical Center Jacksonville (27%), and UF Health Jacksonville (13%).

**Figure 83. Most Used Hospitals of Nassau County Residents by Number of Inpatient Discharges, 2016**



Data Source: AHCA Inpatient Data File | Prepared by Health Planning Council of Northeast Florida

## Top Reasons for Inpatient Hospital and Emergency Department Visits

The purpose or reason for a hospital admission can be determined by the primary diagnosis code documented at the time of the patient's discharge. Hospitals code within Diagnosis Related Groups (DRGs) as a standard for documentation and billing purposes.

Table 6 shows the top 15 diagnoses for inpatient visits by residents of Nassau County to any hospital in Florida by the number of discharges in 2016. Diagnoses are shown as Medicare Severity Diagnosis Related Groups (DRGs). Table 6 also shows cost, patient age, and payment type for each MS DRG. The most frequent DRG recorded for Nassau County residents (at any hospital) was normal newborn, which accounted for 15% of the top 15 DRGs during 2016. Other leading causes for inpatient visits included joint replacements, vaginal deliveries, digestive disorders, psychoses (psychoses represent a variety of unspecified mental health conditions), and infection.

Table 6. Top 15 Hospital Inpatient Discharges by DRG, Nassau County Residents, All Ages, 2016

Utilization				Cost			Patient Age			Payment Type		
Medicare Severity DRG (MS DRG) Description	Discharges	% of Tot.	Avg. LOS	Total Charges	% of Tot.	Avg. Charge	0-17	18-64	65+	Gov. Ins.	Com. Ins.	Non Pay/Self Pay/Other
Normal newborn	483	14.8%	1.8	\$1,584,021	1.8%	\$3,280	483	0	0	245	228	10
Major joint replacement or reattachment of lower extremity w/o MCC	451	13.8%	2.3	\$29,205,618	32.6%	\$64,757	0	167	284	301	144	6
Vaginal delivery w/o complicating diagnoses	370	11.3%	2	\$5,075,593	5.7%	\$13,718	9	361	0	182	181	7
Esophagitis, gastroent & misc digest disorders w/o MCC	258	7.9%	3.1	\$6,327,804	7.1%	\$24,526	14	167	77	159	71	28
Psychoses	238	7.3%	7.6	\$5,064,380	5.7%	\$21,279	18	197	23	160	54	24
Septicemia w/o MV 96+ hours w MCC	232	7.1%	7.1	\$13,687,072	15.3%	\$58,996	0	91	141	189	28	15
Cesarean section w/o CC/MCC	177	5.4%	2.5	\$4,612,796	5.2%	\$26,061	5	172	0	82	91	4
Neonate w other significant problems	161	4.9%	2.2	\$896,909	1.0%	\$5,571	160	1	0	86	71	4
Cellulitis w/o MCC	156	4.8%	3.1	\$2,712,439	3.0%	\$17,387	18	90	48	92	28	36
Pulmonary edema & respiratory failure	145	4.4%	4.6	\$5,432,658	6.1%	\$37,467	14	48	83	116	21	8
Simple pneumonia & pleurisy w CC	140	4.3%	3.8	\$3,444,224	3.8%	\$24,602	8	57	75	94	34	12
Kidney & urinary tract infections w/o MCC	119	3.6%	3.4	\$2,636,613	2.9%	\$22,156	7	35	77	99	13	7
Cesarean section w CC/MCC	115	3.5%	3.3	\$4,030,188	4.5%	\$35,045	0	115	0	66	49	0
Nutritional & misc metabolic disorders w/o MCC	112	3.4%	2.9	\$2,215,616	2.5%	\$19,782	11	37	64	83	19	10
Renal failure w CC	109	3.3%	3.6	\$2,597,612	2.9%	\$23,831	1	37	71	87	13	9
<b>Grand Total(15)</b>	<b>3,266</b>		<b>3.3</b>	<b>\$89,523,543</b>		<b>\$27,411</b>	<b>748</b>	<b>1,575</b>	<b>943</b>	<b>2,041</b>	<b>1,045</b>	<b>180</b>

Data Source: AHCA Inpatient Data File | Prepared by Health Planning Council of Northeast Florida. Note: CC = complication or comorbidity, MCC = major complication or comorbidity.

Table 7 shows the top 15 emergency room diagnoses of Nassau County residents at any emergency department in 2016. Upper respiratory infections were the top diagnoses, accounting for about 11% of visits for the top 15 diagnoses. Other top emergency department diagnoses were urinary tract infections, chest pain, headaches, bronchitis, and abdominal pain.

**Table 7. Top 15 Emergency Department Diagnoses of Nassau County Residents, All Ages, 2016**

Utilization				Cost			Patient Age			Payment Type		
Principal Diagnosis Description	Visits	% of Tot.	Avg. Hours	Total Charges	% of Tot.	Avg. Charge	0-17	18-64	65+	Gov. Ins.	Com. Ins.	Non Pay/Self Pay/Other
Acute upper respiratory infection, unspecified	704	10.7%	1.98	\$837,320	3.2%	\$1,189	461	219	24	469	126	109
Urinary tract infection, site not specified	634	9.6%	3.77	\$2,303,662	8.8%	\$3,634	86	379	169	370	157	107
Chest pain, unspecified	609	9.3%	5.93	\$3,889,887	14.9%	\$6,387	36	486	87	251	216	142
Other chest pain	567	8.6%	6.35	\$3,748,462	14.3%	\$6,611	43	446	78	243	211	113
Headache	534	8.1%	4.25	\$2,375,071	9.1%	\$4,448	81	386	67	259	199	76
Bronchitis, not specified as acute or chronic	446	6.8%	2.95	\$1,197,949	4.6%	\$2,686	13	349	84	207	100	139
Unspecified abdominal pain	433	6.6%	4.3	\$2,149,977	8.2%	\$4,965	78	319	36	205	144	84
Low back pain	412	6.3%	3	\$1,073,036	4.1%	\$2,604	23	337	52	181	132	99
Fever, unspecified	384	5.8%	3.14	\$836,219	3.2%	\$2,178	306	59	19	249	103	32
Acute pharyngitis, unspecified	377	5.7%	2.05	\$478,989	1.8%	\$1,271	188	183	6	227	79	71
Syncope And Collapse	306	4.7%	7.4	\$2,031,350	7.8%	\$6,638	42	179	85	150	114	42
Dehydration	306	4.7%	4.7	\$1,154,447	4.4%	\$3,773	42	173	91	180	77	49
Dizziness And Giddiness	294	4.5%	5.14	\$1,888,694	7.2%	\$6,424	8	186	100	150	106	38
Noninfective gastroenteritis and colitis, unspecified	294	4.5%	4.11	\$1,245,826	4.8%	\$4,238	81	191	22	124	122	48
Essential (primary) hypertension	273	4.2%	3.44	\$919,345	3.5%	\$3,368	3	152	118	164	69	40
<b>Grand Total(15)</b>	<b>6,573</b>		<b>4.11</b>	<b>\$26,130,234</b>		<b>\$3,975</b>	<b>1,491</b>	<b>4,044</b>	<b>1,038</b>	<b>3,429</b>	<b>1,955</b>	<b>1,189</b>

Data Source: AHCA Emergency Department Data File | Prepared by Health Planning Council of NE FL. Note: CC = complication or comorbidity, MCC = major complication or comorbidity.

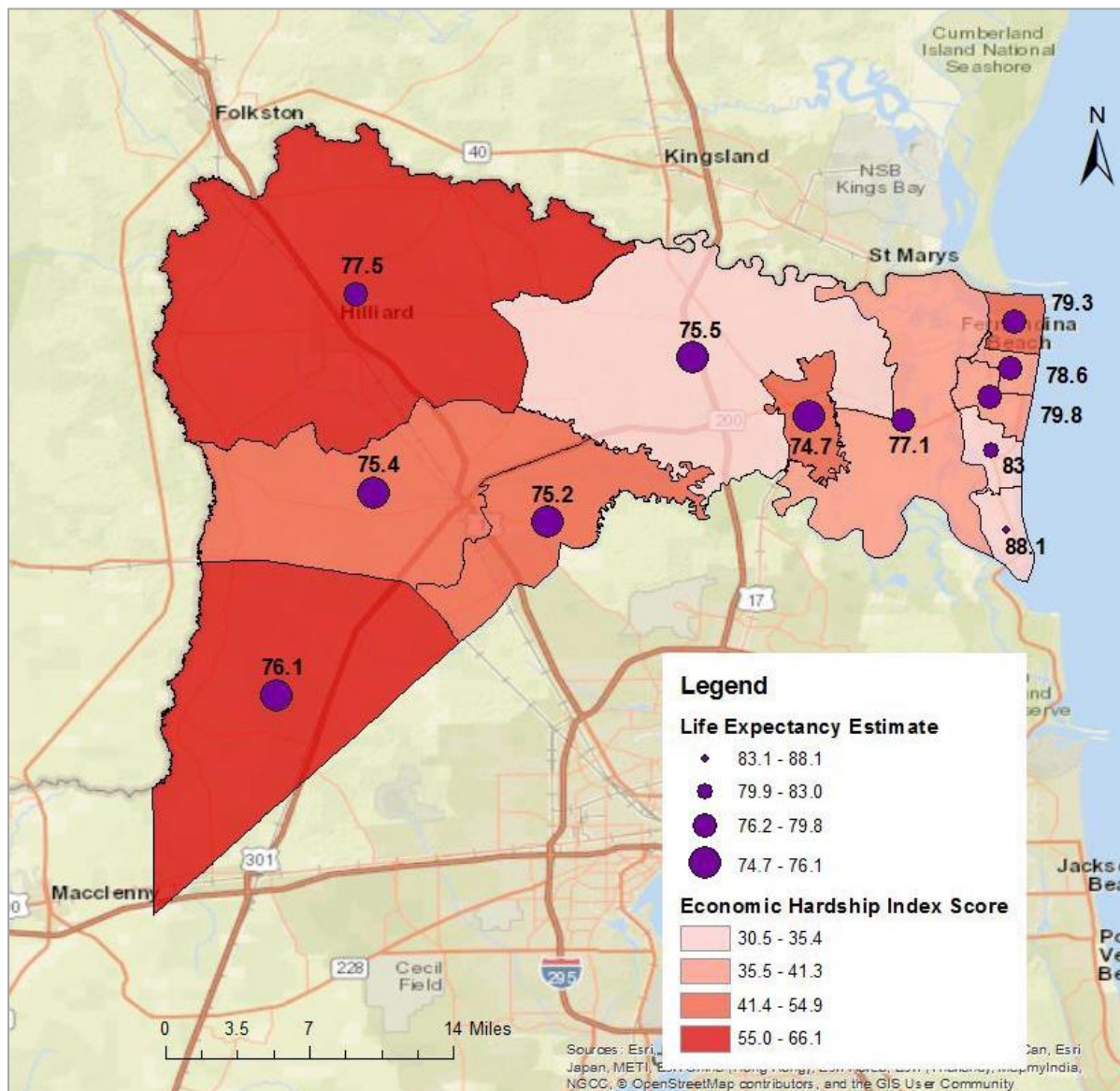
# HEALTH DISPARITIES

## Elevating the Social Determinants of Health

Ensuring the right to health means creating the conditions that enable good health, acknowledging the inequities that perpetuate poor health, and considering health in all policies. For example: research shows that asthmatic children who live in green homes experience a much lower risk of asthma symptoms; communities that improve neighborhood sidewalks help encourage physical activity; better product labeling can help people eat healthier; and boosts in the minimum wage can result in more babies being born at a healthy weight and fewer infant deaths. Becoming the healthiest nation also requires a commitment to achieving health place matters — for example, in Nassau County, there is a difference in average life expectancy depending upon where you live with a range of 74.7 years at the lower end and 88.1 years at the higher end.

The Nassau County EHI score is the average of the following six variables that have been standardized on a scale from 0 to 100: Unemployment (over the age of 16 years), Education (over 25 years of age without a high school diploma), Per capita income level, Poverty (below the federal poverty level), Crowded housing (housing units with more than one person per room), and Dependency (population under 18 or over 64 years of age) (Based on 2009-2014 data). Map 5 shows Life Expectancy estimates versus Economic Hardship Index scores.

Map 5. Life Expectancy and Economic Hardship Index



# SUMMARY OF KEY FINDINGS

## SUMMARY OF RESULTS: 2018 NASSAU COMMUNITY HEALTH STATUS ASSESSMENT

The Community Health Status Assessment (CHSA) answers the following questions: **1) How healthy are our community residents?** **2) What does the health status of our community look like?** This assessment is accomplished through a comprehensive effort to find the latest and most trusted sources of data that reflect the health of Nassau County, FL residents. Most of the indicators reviewed reflect either rates of morbidity (incidence of a specific illness or condition within a population) or mortality (death from a specific illness or condition within a population). Health indicator results for Nassau County were compared to the state of Florida and other data where available. They were also segmented by various demographic factors including race and ethnicity, gender, age, and income level to identify health disparities and health inequities. Also per the 2018 County Health Rankings, Nassau ranks 17<sup>th</sup> of 67 for Health Behaviors, 17<sup>th</sup> for Clinical Care, 5<sup>th</sup> for Socioeconomic Environment and 57<sup>th</sup> for Physical Environment. These rankings combined to earn Nassau a standing of 23<sup>rd</sup> for health outcomes and 8<sup>th</sup> in health factors. The 2018 CHSA assessment report was prepared by the Health Planning Council of Northeast Florida as part of the Nassau Mobilizing for Action through Planning & Partnership (MAPP) model.

After a review of the CHSA report findings by a Partnership for a Healthier Nassau Community Health Improvement Planning assessment team, the following items were identified as the most important health issues in Nassau County, FL: Health Disparities, Physical Environment and Behavioral Health and Access to Care.

**Health Disparities** - In 2016 Nassau County's population was 77,187 and is less diverse than Florida's population, being 90.4% white vs 75.9% in Florida. The Black or African American and Hispanic or Latino groups make up most of the 9.6% non-white population. While this number is less than 10% of Nassau County's population, the health data for this population is reliable and shows trends of health disparities. Of concern are cancer rates, infant mortality and low birth weights, chronic disease (diabetes and stroke) and HIV rates for non-whites. (See 2018 Nassau County CHSA Fact Sheet)

**Physical Environment** - One concern is Nassau County residents' proximity to parks and recreation areas. In 2016, only 19.2% of Nassau County residents lived within a half mile, or 10-minute walk, from a park. This was 24 percentage points less than all Florida residents, in comparison. The impact of population growth on physical environment is also a concern. Nassau experienced a 6.3% increase in population from 2016 to 2017, increasing from 77,187 to 80,456. <sup>1</sup> This population growth leads to an increase in needs in an environment already low in affordable housing inventory and numbers of health providers, especially for seniors and Medicaid beneficiaries.

**Behavioral Health** - Data shown here demonstrate increases in suicide and Baker Act initiations in Nassau County. Also shown are Health Status and Quality of Life indicators illustrating that Nassau County residents experienced higher numbers of unhealthy mental days, poor mental days and diagnoses of a depressive disorder when compared to the state of Florida.

**Access to Care** - Nassau County has a low provider per population ratio compared to the State and the shortage may lead to longer wait times, delayed care, poor health outcomes and higher costs due to disease progression.

Top 3 Causes of Death in Nassau	Compared to Florida
Cancer (180 deaths per 100,000 population)	Florida (153.5 deaths per 100,000 population)
Heart Disease (162.9 deaths per 100,000 population)	Florida (152.3 deaths per 100,000 population)
Unintentional Injury (61.5 deaths per 100,000 population)	Florida (47.5 deaths per 100,000 population)

<sup>1</sup> 2018 Nassau County, FL Growth Trends Report



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FOR  
FLORIDA DEPARTMENT OF HEALTH IN NASSAU COUNTY

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