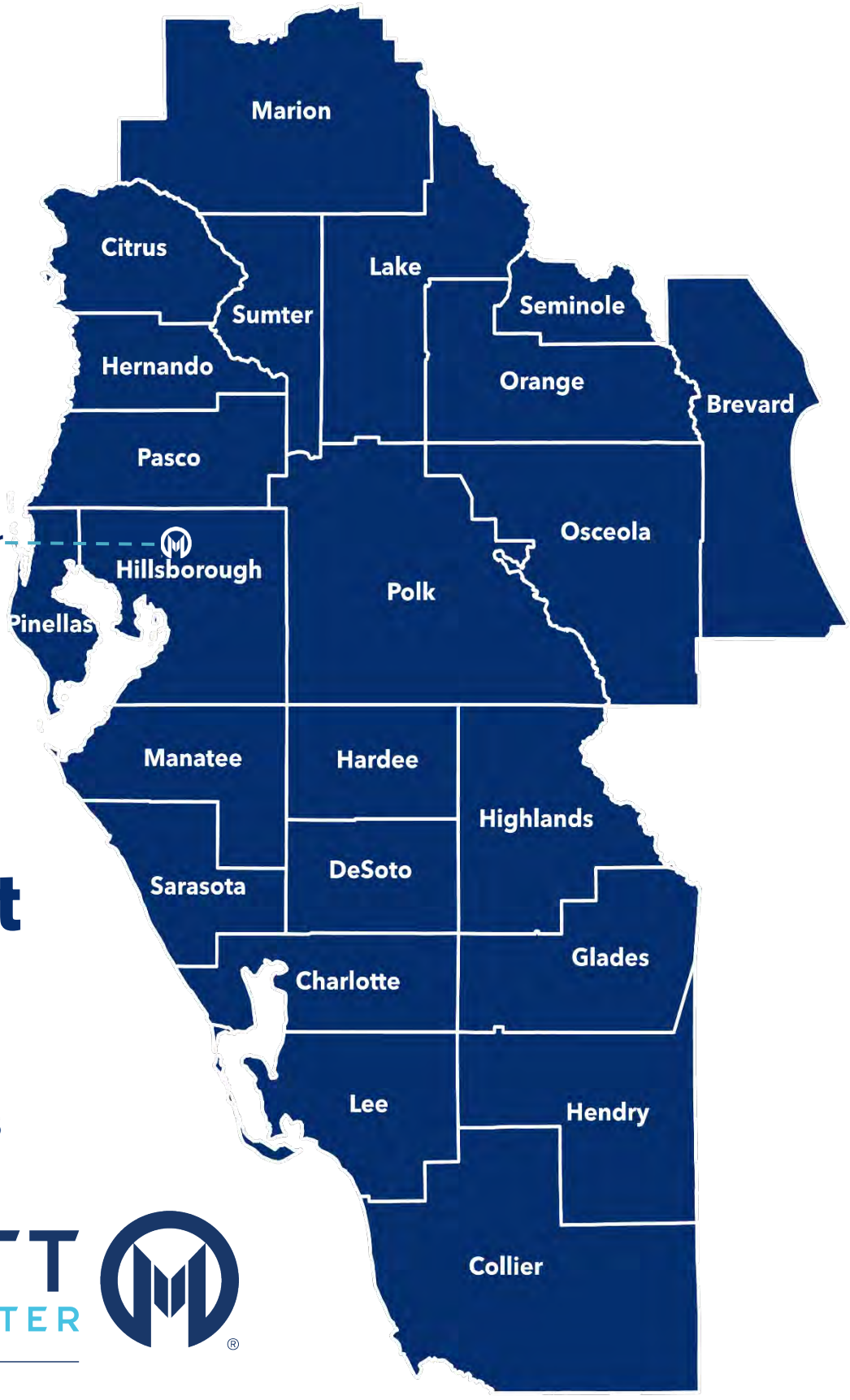

Catchment Area Profile

Volume 2, May 2023

MOFFITT CANCER CENTER

Community Outreach, Engagement & Equity

Table of Contents

Introduction

Understanding Our Community

Catchment Area Risk Factors, Prevention Behaviors, and Screening

Table of Contents

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COEE Data Analyst

Kyle Stein, MS

COEE Applied Research Scientist

Nathanael Stanley, Ph.D., MA

2022

Moffitt Cancer Center's Catchment Area Profile Introduction

May 4th, 2023

Dear Moffitt Faculty, Staff, Community Members, & Community Partners,

Moffitt's Office of Community Outreach, Engagement & Equity (COEE) is dedicated to maximizing the impact in the communities we serve. In collaboration with our Research Integration Committee, we are pleased to present Volume 2 of the Moffitt Catchment Area Profile reflecting our newly expanded 23-county catchment area.

At Moffitt, we seek to provide exceptional care and advance research to prevent and cure all cancers. The catchment area priority cancers are intended to advance research and outreach that can have the greatest impact across our entire community. Based on the information gathered during our 2022 Community Health Needs Assessment, our community and patient advisory boards identified three priorities for Moffitt: Prevention, Education, and Outreach; Access to Screening and Early Detection; and Health Equity. Informed by community priorities, we conducted an in-depth assessment of the cancer burden and disparities to identify catchment area priority cancers that is summarized on p. 54-55.

The Catchment Area Profile provides summaries of the sociodemographic characteristics (e.g., education, insurance coverage), cancer burden (e.g., incidence, mortality, disparities), and risk factors (e.g., prevention and early detection behaviors) we reviewed. This comprehensive report is a call to action for all stakeholders to learn more about the unique cancer burden in our catchment area and the priorities identified by our community. In turn, we can collectively create novel research, education, and outreach initiatives across the cancer continuum to improve the health of the community we serve. We look forward to your ongoing support, engagement, and feedback.

Sincerely,

Susan T. Vadaparampil, PhD on behalf of the COEE Team

Susan Vadaparampil, PhD
Associate Center Director, COEE

"Our team embodies Moffitt's commitment to serving our community. Through community partnerships we provide outreach, education, services, and research that addresses community priorities, allowing us to think globally and act locally."

COEE Research Integration Committee

Moffitt Patient and Community Advisory Board Members


Felicia Bell
TBCCN


Barney Morris
PFAC


Patti Halula
PFAC


Yolanda Patterson
Concorde Institute & TBCCN

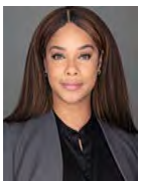

Angela Hill, PharmD
WE-CARE & TBCCN

Moffitt Team Members


Anne Bidelman
PFAC


Khaliah Fleming, EdD
TBCCN


Amanda Hollis
Foundation


Lorrin Rucker
Foundation

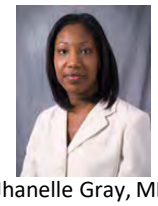
Moffitt Faculty


Dennis Adeegbe, PhD*
Immuno-Oncology


Jennifer Binning, PhD
Cancer Biology & Evolution


Doug Cress, PhD
Cancer Biology & Evolution


Clement Gwede, PhD
Health Outcomes & Behavior Florida CCRAB


Jhanelle Gray, MD
Molecular Medicine
Thoracic Oncology


Peter Kanetsky, PhD
Cancer Epidemiology


Kedar Kirtane, MD
Health Outcomes & Behavior
Head and Neck Oncology


Jeff Lancet, MD
Molecular Medicine
Malignant Hematology


Frederick Locke, MD
Immuno-Oncology
Bone Marrow Transplant


Vani Simmons, PhD
Health Outcomes & Behavior
Tobacco Research Intervention Program


Kosj Yamoah, MD, PhD
Cancer Epidemiology
Radiation Oncology

Charge of the Research Integration Committee

- Participate in strategic planning related to catchment area research at Moffitt
- Serve as liaison between COEE and research and clinical programs and faculty
- Foster engagement from faulty in catchment area research and outreach
- Assist with COEE activities targeted towards Moffitt faculty and community
- Provide recommendations to support research to address catchment area needs

**COEE recognizes the contributions of Dr. Dennis Adeegbe to the RIC and honors his memory.*

Moffitt Cancer Center's Catchment Area Profile Overview

Information Included in the Catchment Area Profile

- Catchment area population demographic characteristics
- Cancer-related risk factors, prevention behaviors, and screening
- Geographically-referenced cancer incidence and mortality rates
- Geographically-referenced population and health behavior metrics
- Locations of FQHCs and mammography-capable clinics
- Non-traditional data, such as geographic comparisons of consumer spending on health expenditure

Purpose of the Catchment Area Profile

To help Moffitt team members and community members:

- Understand the key cancer issues present within Moffitt's 23-county catchment area
- Identify populations disproportionately affected by cancer
- Inform cancer-related community priorities, initiatives, and activities
- Motivate research, outreach, and education to achieve cancer equity

Acknowledgements and Data Sources

Acknowledgements

We acknowledge and thank several Moffitt team members, departments, community members, and community partners that assisted us with preparing and disseminating this Catchment Area Profile:

- Community Health Needs Assessment Consultant/Administrator: The Carnahan Group
- Community Health Needs Assessment Advisors: Tampa Bay Community Cancer Network (TBCCN), Moffitt's Patient and Family Advisory Council (PFAC)
- Community Health Needs Assessment Participants: Moffitt community members, patients, and community leaders
- Reviewers: COEE Research Integration Committee Members: Vani Simmons, PhD (Health Outcomes and Behavior), Clement Gwede, PhD (Health Outcomes and Behavior), Peter Kanetsky, PhD (Cancer Epidemiology), Shelley Tworoger, PhD (Associate Center Director for Population Science) Jenny Vidrine, PhD (Assistant Center Director for Research Community Partnerships, COEE) Kedar Kirtane, MD (Physician Director, Community Clinical Trials Engagement, COEE), Kenisha Avery, MPH (COEE Manager), Morgan Lael (COEE-SCORE Manager)
- Dissemination: Melanie Nelson (COEE Executive Assistant), Kenisha Avery (COEE Manager)

Data Sources

Data from the following sources were used in the development of this Catchment Area Profile:

U.S. Census Bureau
- American Community Survey (ACS), 2016 – 2020
- Census Redistricting Data (Public Law 94-171), 2020
- Consumer Expenditure Surveys (CEX), U.S. Bureau of Labor Statistics, 2022, 2022/2027, accessed through ArcGIS

National Cancer Institute (NCI)
- U.S. Cancer Statistics
- Surveillance, Epidemiology, and End Results Program (SEER), 2015 – 2019

Centers for Disease Control and Prevention (CDC)
- U.S. Cancer Statistics
- Behavioral Risk Factor Surveillance System (BRFSS)
- Division of HIV/AIDS Prevention
- PLACES Local Data for Better Health, CDC model-based estimates, 2018

Florida Department of Health
- Florida Cancer Data System (FCDS), 2015 – 2019
- FLHealthCharts

Moffitt 2022 Community Health Needs Assessment (CHNA)
- 2022 Community Health Needs Assessment, Moffitt Cancer Center: https://moffitt.org/publications/community-benefit/
- 2023 – 2025 Implementation Strategy, Moffitt Cancer Center: https://moffitt.org/publications/community-benefit/

Environmental Systems Research Institute, Inc. (Esri) (2022, 2022 – 2025, 2027)

1 Understanding Our Community

Back to School Event, Sadye Gibbs Martin Community Center, 2021, Plant City

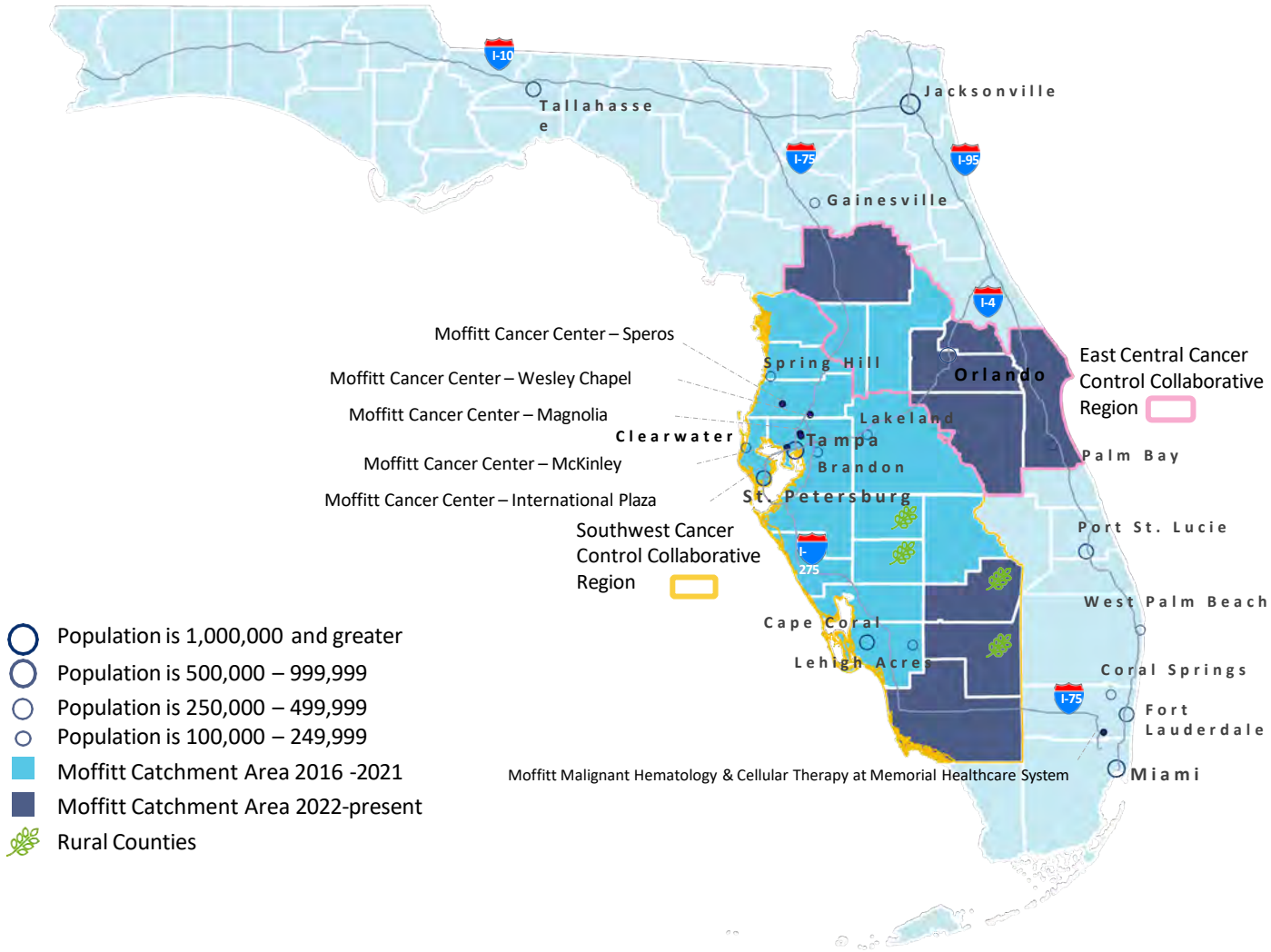
Miles for Moffitt, 2021, Tampa

[Cancer in Our Community Podcast], 4-Part Series, Launched 2021

HPV Elimination Symposium, 2020, Tampa

1.1 Catchment Area: Geography

Map 1: Catchment Area Counties



Catchment Area Overview

- Increased from 15 to 23 counties in January 2022
- Population of 10,209,232 people
- Includes over 47% of Florida's total population
- Largest counties by population: Hillsborough, Orange, Pinellas
- Rural counties: DeSoto, Glades, Hardee, Hendry
- Covers 100% of counties in 2 Cancer Control Collaborative regions: East Central Florida and Southwest Florida

1. U.S. Census Bureau, ACS Demographic and Housing Estimates, 2020 5-Year Survey.

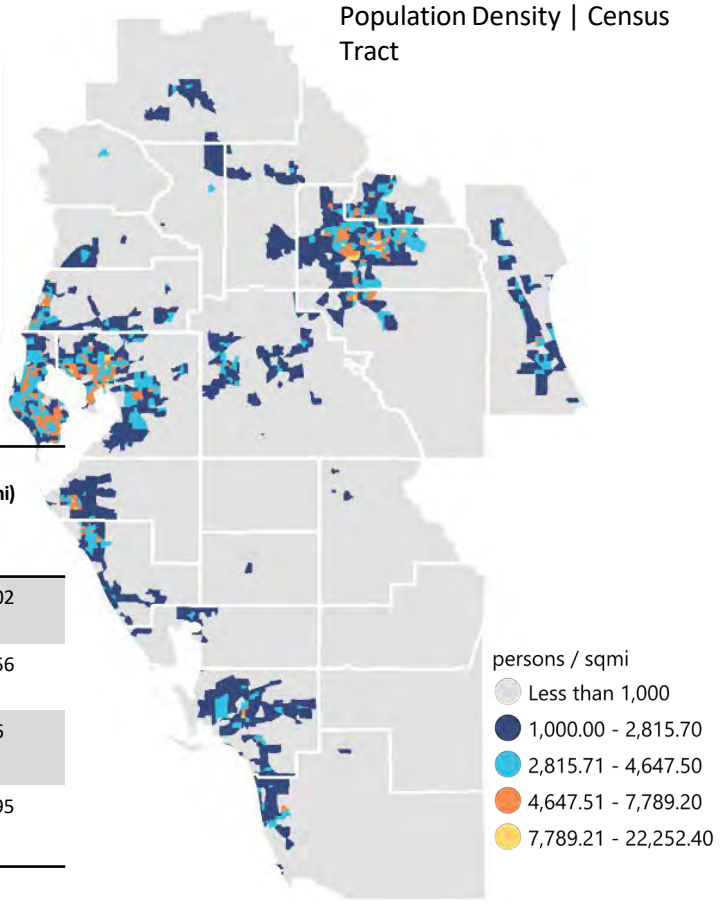
1.2 Catchment Area: Overall Population

Summary

Catchment Area Includes:

- 4 of the 10 largest cities in Florida
- 52% of Florida's Core Based Statistical Areas (CBSAs)
  - 12 metropolitan statistical areas*
  - 3 micropolitan statistical areas*

Map 2: Catchment Area Population Density | Census Tract



Largest Cities in Florida in Catchment Area	2022 Pop	Pop change	Density (sq mi)	Area (sq mi)
3. Tampa	394,809	↑2.56%	3,463	114.02
4. Orlando	321,427	↑4.50%	2,907	110.56
5. St. Petersburg	261,016	↑1.05%	4,219	61.86
8. Cape Coral	201,958	↑4.09%	1,906	105.95

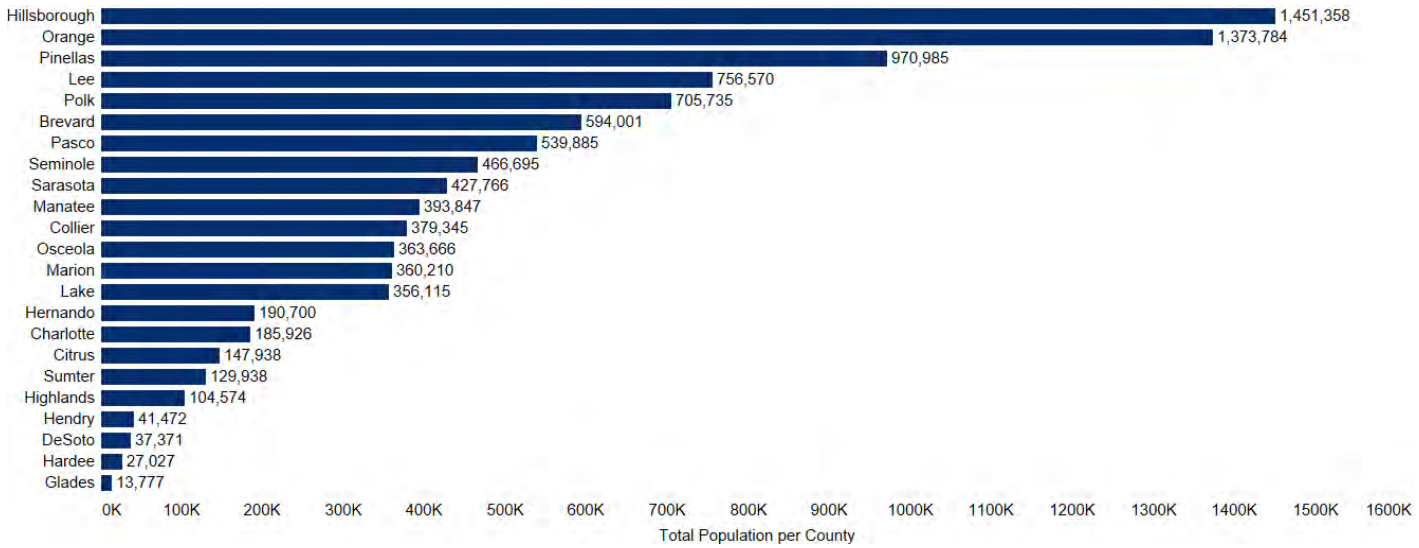


Figure 1: Total Population per Catchment Area County

1. U.S. Census Bureau, ACS Demographic and Housing Estimates, 2020 5 Year Survey.
2. U.S. Census Annual Estimates - 2020 Estimates Calculated via Linear Projection of Previous Estimates.

*Metro and micropolitan statistical areas are defined by population and social and economic integration with the core of the area as measured by commuting ties (Census Bureau, 2022, Housing Patterns and Core-Based Statistical Areas).

1.3 Catchment Area: Priority Populations

Catchment Area Priority Populations Distributions

- Priority populations in our Catchment Area are those groups that experience a disproportionate burden of cancer compared to the majority population
- % of those aged 65+ in the Catchment Area is higher than Florida overall and the United States (US)
- % of Black/AA in the Catchment Area is lower than Florida overall and the U.S.
- % of Hispanics in the Catchment Area is lower than Florida overall and higher than the U.S.
- % of individuals living below poverty level in the Catchment Area is similar to Florida overall and the U.S.
- % of people with HIV in the Catchment Area is similar to Florida overall and U.S.

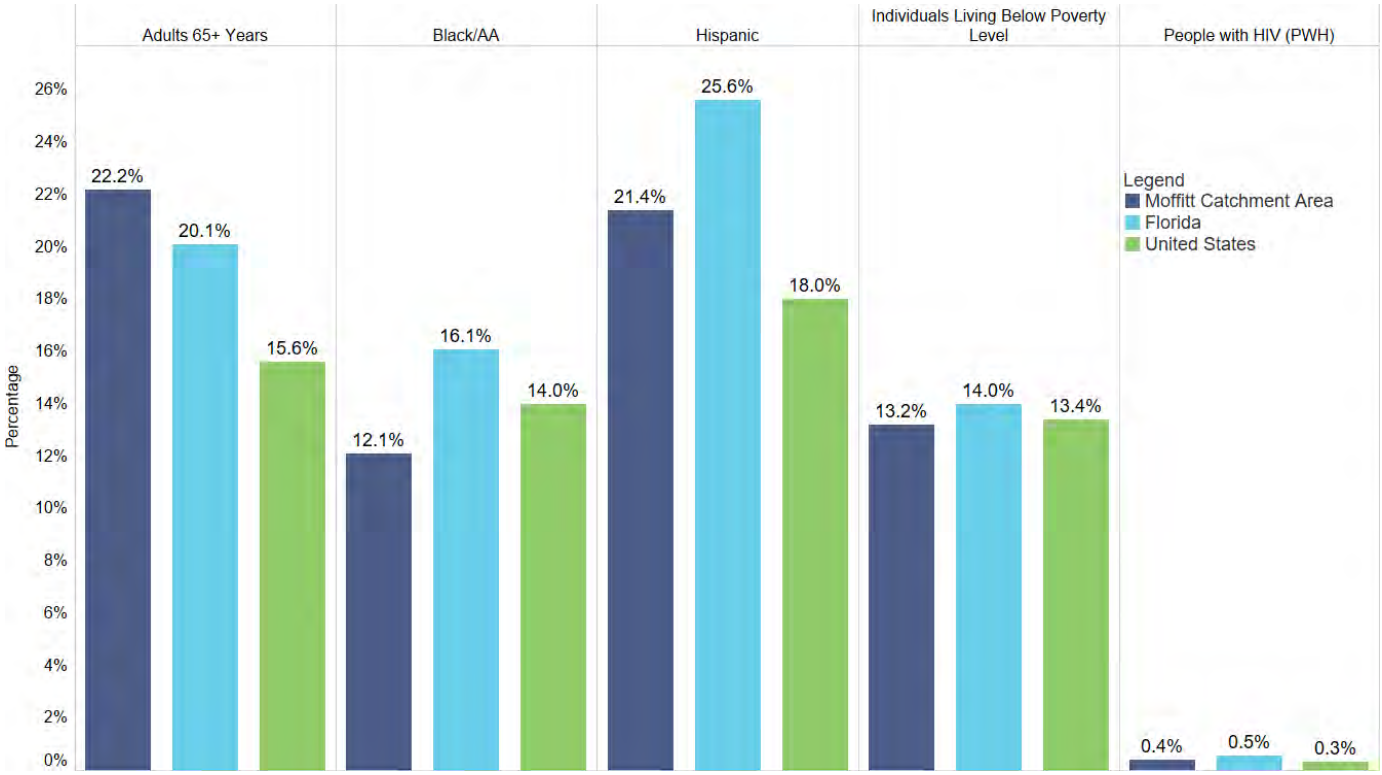


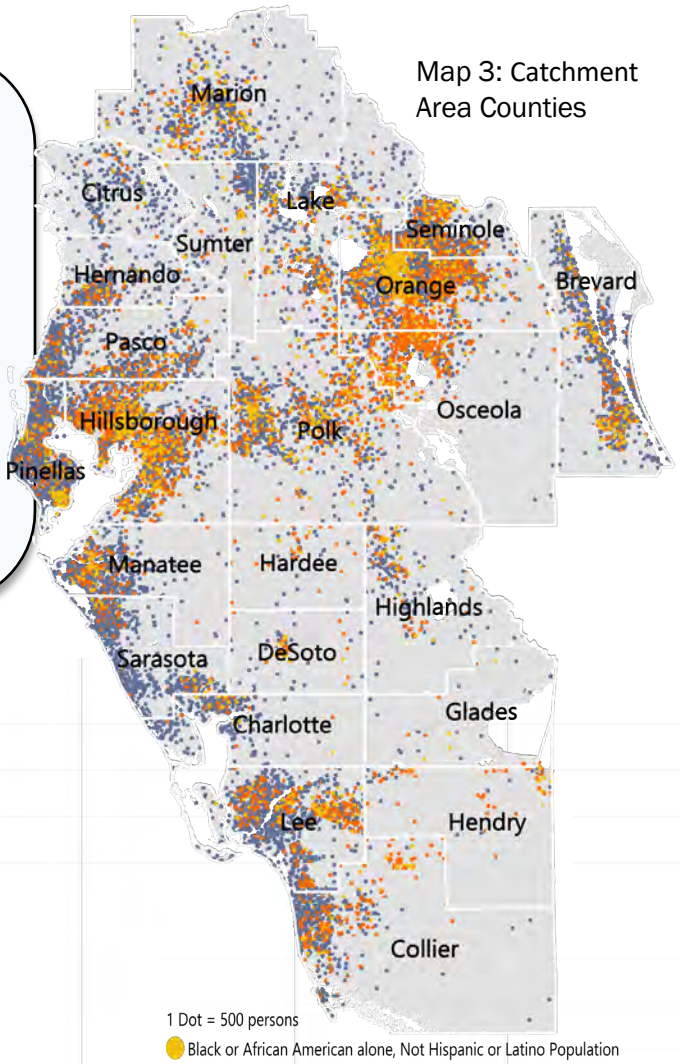
Figure 2: Priority Populations Distribution in Catchment Area, Florida Overall, and the U.S.

1. U.S. Census Bureau, ACS Demographic and Housing Estimates, 2020 5-Year Survey.
2. Florida Behavioral Risk Factor Surveillance System, Florida Health Charts HIV Cases in Florida, 2020.
3. Center for Disease Control and Prevention. *HIV Surveillance Report,* 2019, vol. 32.

1.4 Catchment Area: Race and Ethnic Minority Populations

Catchment Area Racial and Ethnic Distributions

- Counties with the highest % of the population that is Hispanic: Osceola (54.7%), Orange (32.1%), and DeSoto (31.5%)
- Counties with the highest % of the population that is African American: Orange (29.1%), Hillsborough (21.9%), and Osceola (19.6%)
- Counties with the highest % of the population that identifies with 2 or more races: Osceola (8.9%), Orange (7.5%), and Hillsborough (7.4%)



Map 3: Catchment Area Counties

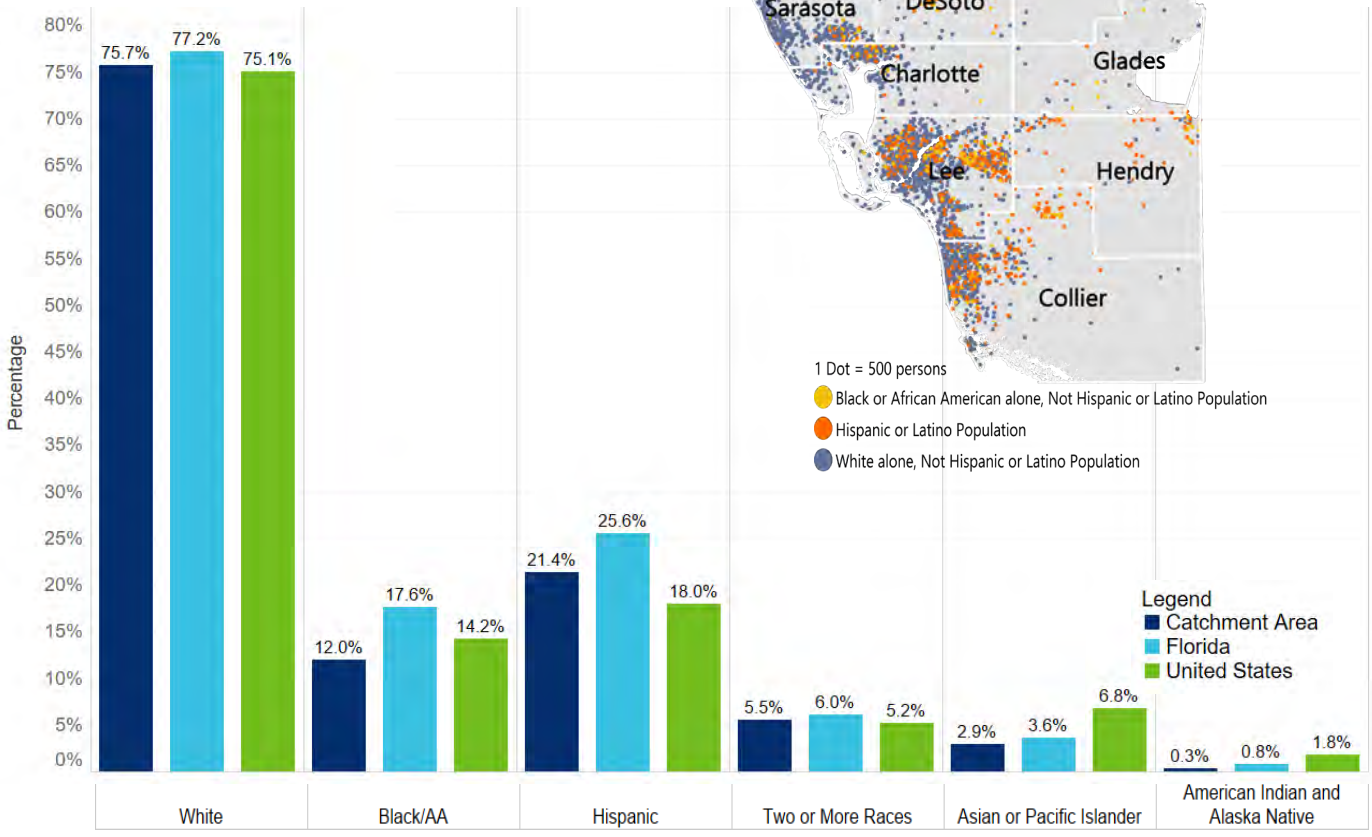
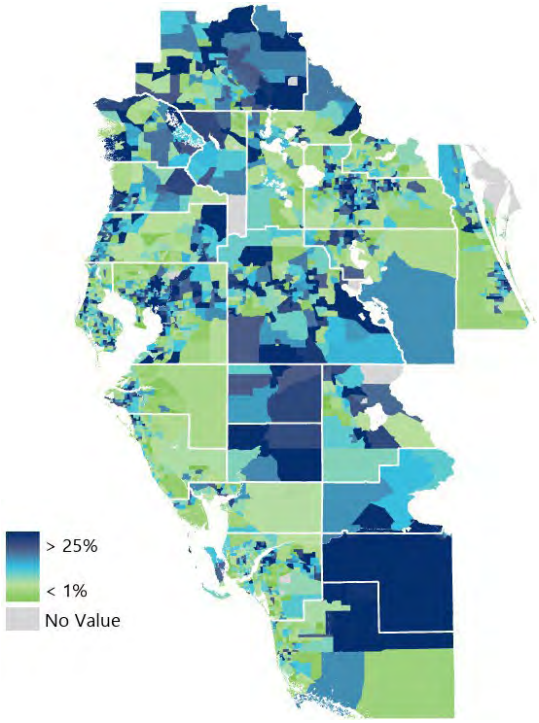


Figure 3: Race & Ethnicity Distribution in Catchment Area, Florida Overall, and the U.S.

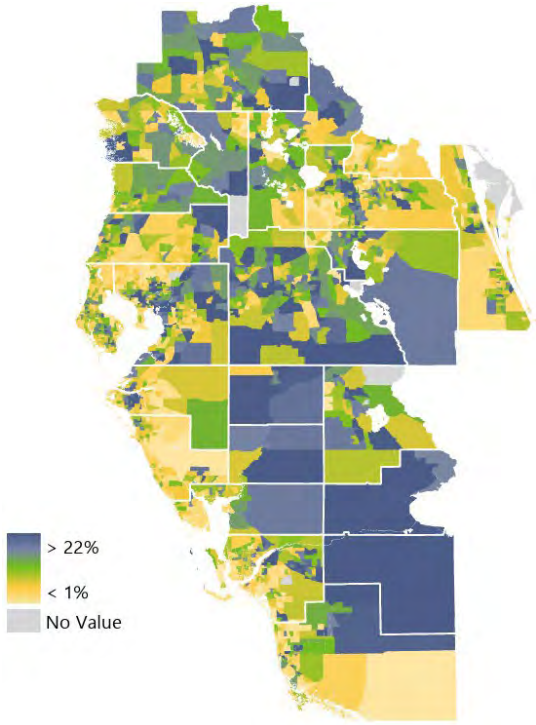
1. U.S. Census Bureau, ACS Demographic and Housing Estimates, 2020 5-Year Survey.

1.5 Catchment Area: Poverty Level and Education

Map 4: % Individuals Living Below Poverty



Map 5: % Age ≥ 25 with Less than High School Education



Catchment Area: 12.5%
Florida: 13.3%
U.S.: 12.8%

Catchment Area: 3.9%
Florida: 4.6%
U.S.: 4.9%

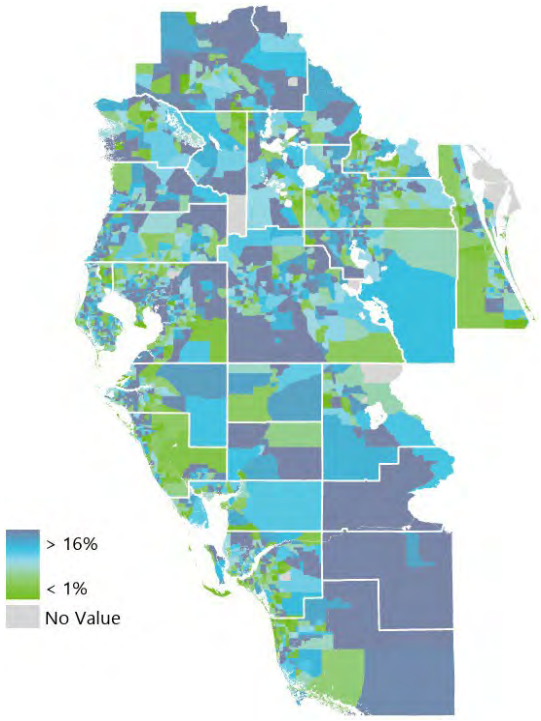
% of Population Whose Income in the Past 12 months was Below Poverty Level			% of Population 25 Years and Over Whose Highest Education Completed is Less Than High School		
County	**Percentage**	**Count**	**County**	**Percentage**	**Count**
Hendry	26.4%	10,958	Hendry	16.4%	4,361
DeSoto	24.6%	9,200	Glades	13.3%	1,411
Hardee	22.9%	9,049	DeSoto	12.6%	3,393
Highlands	15.8%	17,319	Hardee	12.3%	2,141
Glades	15.4%	2,127	Collier	6.3%	18,246
Marion	15.1%	54,249	Osceola	5.7%	13,613
Polk	14.8%	104,509	Polk	5.7%	28,167
Citrus	14.7%	21,713	Highlands	5.4%	4,366
Hernando	14.2%	27,018	Hillsborough	4.7%	46,840
Orange	13.8%	190,145	Lee	4.5%	25,568

Table 1: Top 10 Poverty Rates and Top 10 Populations Over 25 with Less than a 9th Grade Education in Catchment Area

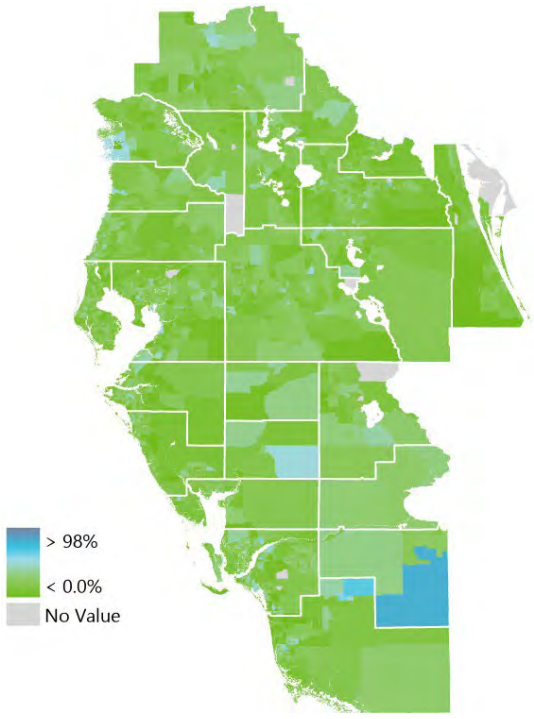
1. U.S. Census Bureau, American Community Survey (ACS) Demographic and Housing Estimates, 2020 5-Year Survey.
2. U.S. Census Bureau, American Community Survey (ACS) Educational Attainment, 2020 5-Year Survey.

1.6 Catchment Area: Uninsured Population

Map 6: % Total Population Uninsured



Map 7: % Age 35-64 Uninsured



Catchment Area: 16.0%
Florida: 12.7%
U.S.: 8.7%

Catchment Area: 15.9%
Florida: 16.6%
U.S.: 10.7%

Uninsured Population			Age 35-64 Uninsured Population		
County	**Percentage**	**Count**	**County**	**Percentage**	**Count**
Hendry	33.2%	13,588	Glades	28.2%	1,231
DeSoto	26.6%	9,464	Hendry	25.9%	3,890
Glades	25.9%	3,260	DeSoto	22.4%	2,793
Orange	18.1%	246,672	Collier	20.2%	26,384
Collier	17.8%	67,269	Highlands	19.9%	6,588
Lee	17.7%	132,988	Hardee	19.8%	1,636
Polk	17.6%	122,364	Lee	19.0%	51,529
Osceola	16.9%	61,340	Citrus	17.9%	9,226
Hernando	16.8%	31,760	Marion	17.8%	21,560
Hillsborough	16.8%	241,786	Hernando	17.7%	12,368

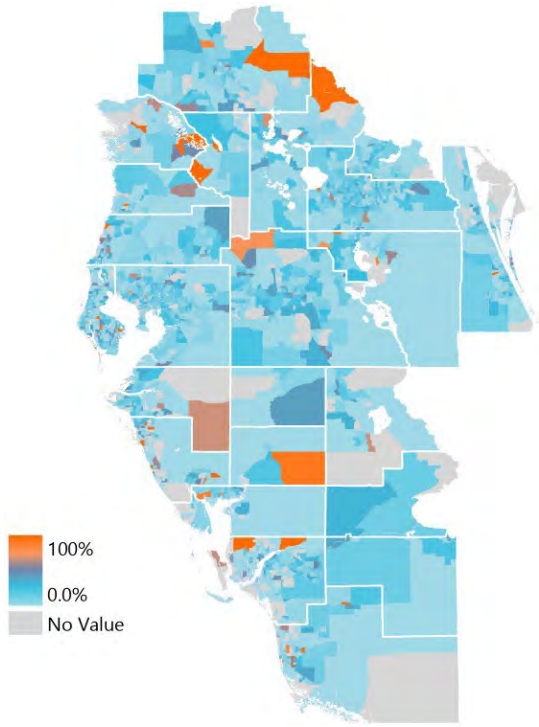
Table 2: Top 10 Uninsured Population and Top 10 Uninsured Population Ages 35-64 in the Catchment Area

Notes:
- Uninsured population is calculated by the amount uninsured divided by civilian noninstitutionalized population.

1. U.S. Census Bureau, Public Health Insurance Coverage by Type and Selected Characteristics, 2020 5-Year Survey.

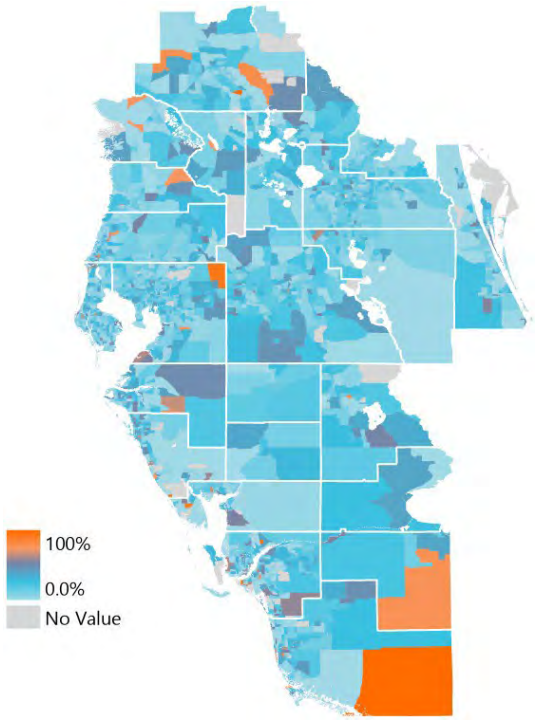
1.7 Catchment Area: Uninsured Population by Race and Ethnicity

Map 8: % Black/AA Population Uninsured



Catchment Area: 13.5%
Florida: 14.9%
U.S.: 9.9%

Map 9: % Hispanic Population Uninsured



Catchment Area: 19.1%
Florida: 18.6%
U.S.: 17.7%

Uninsured Black Population			Uninsured Hispanic Population		
County	**Percentage**	**Count**	**County**	**Percentage**	**Count**
Sarasota	21.4%	4,043	Hendry	29.5%	6,620
Collier	19.3%	4,896	Collier	28.2%	29,903
Hendry	19.1%	872	Lee	26.5%	43,715
DeSoto	16.9%	594	Glades	25.9%	647
Lee	15.8%	9,776	DeSoto	25.4%	2,913
Highlands	15.7%	1,537	Manatee	25.0%	16,002
Manatee	15.4%	5,019	Highlands	24.5%	5,195
Osceola	15.3%	5,984	Sarasota	23.5%	9,381
Charlotte	14.9%	1,396	Charlotte	22.1%	3,010
Polk	14.7%	15,477	Sumter	21.4%	1,145

Table 3: Top 10 Uninsured Counties in the Black and Hispanic Populations of the Catchment Area

1. U.S. Census Bureau, ACS Demographic and Housing Estimates, 2020 5-Year Survey.

2 Catchment Area Risk Factors, Prevention Behaviors, and Screening

Moffitt's Expansion to South Hillsborough Kick Off Event, 2023 – Sun City Center

Breast Cancer Awareness Walk, 2022, Plant City

Town 'n' Country Senior Center, 2022, Tampa

Men's Health Huddle w/ Tampa Bay Buccaneers, 2022, Tampa

2.1 Risk Factors: Obesity

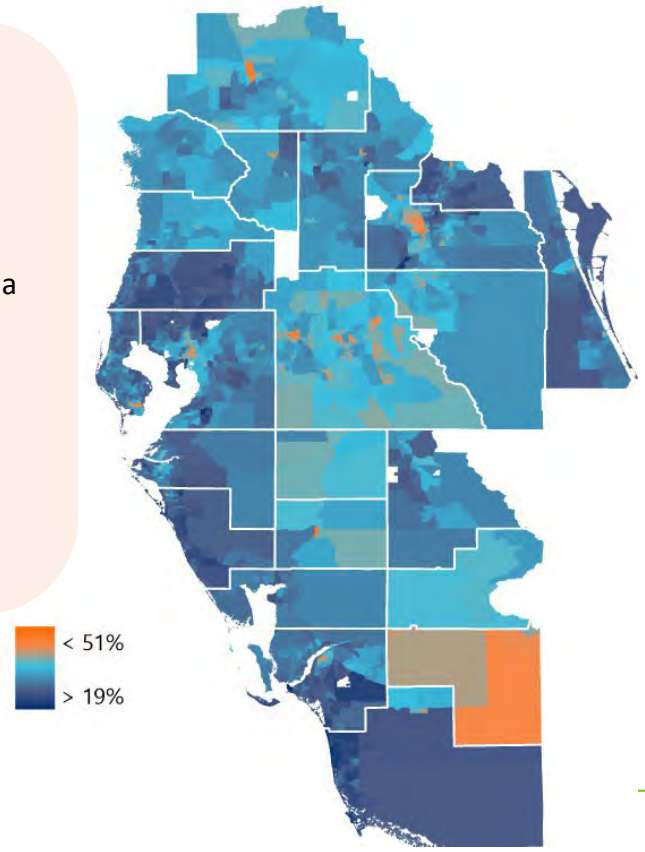
Map 10: Prevalence (%) of Obesity, Census Tract

Obesity and Cancer

Obesity is associated with risk for several cancers including:

- Breast
- Colorectal
- Endometria
- Gallbladder
- Kidney
- Liver
- Multiple Myeloma
- Ovarian
- Pancreatic
- Thyroid

Seventeen counties in the Catchment Area have a greater rate of obesity than Florida overall.



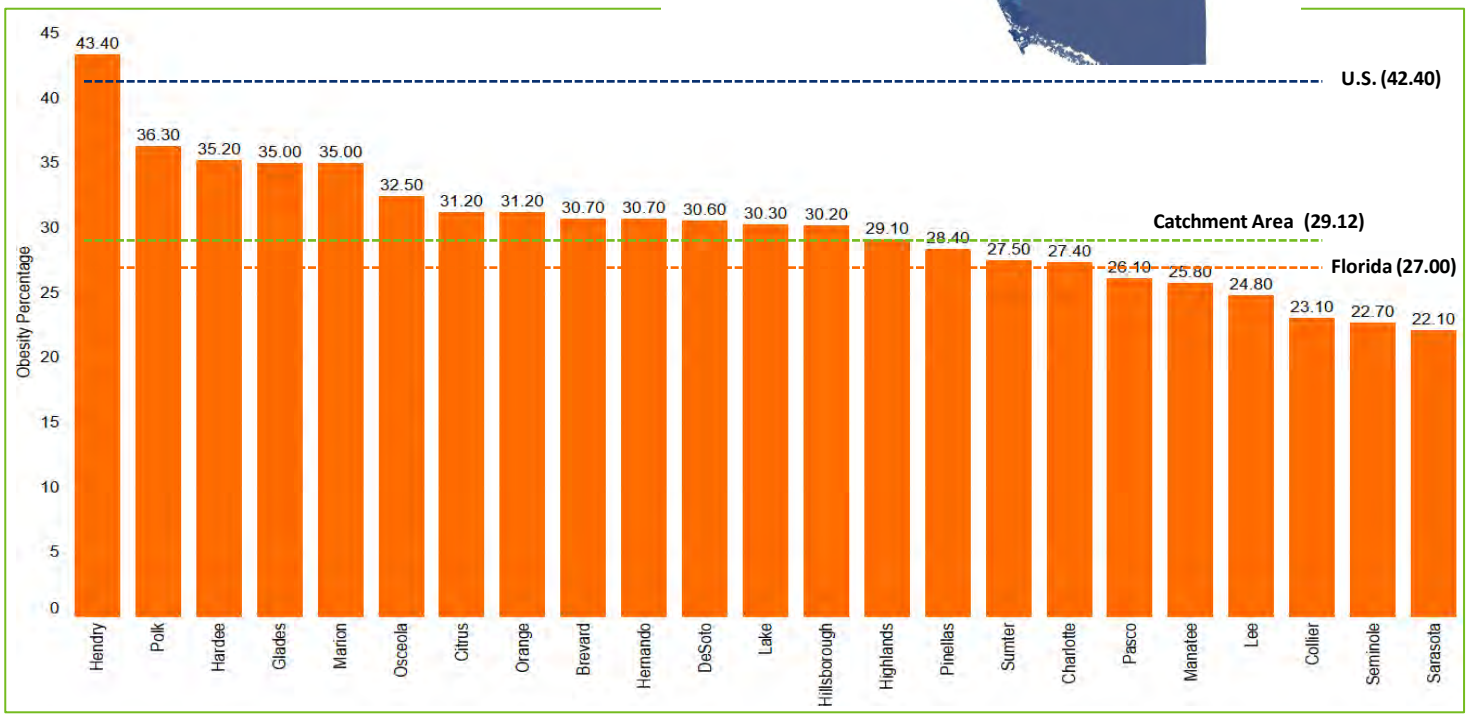


Figure 4: Obesity Rates per Catchment Area County

1. Florida Behavioral Risk Factor Surveillance System, Florida Health Charts Rate of Obesity, 2019.
2. Centers for Disease Control, Current Rate of Obesity Among Adults in the United States, 2020.
3. PLACES Local Data for Better Health, CDC model-based estimates, 2018.
4. https://www.cancer.gov/about-cancer/causes-prevention/risk/obesity/obesity-fact-sheet

2.2 Risk Factors: Physical Inactivity

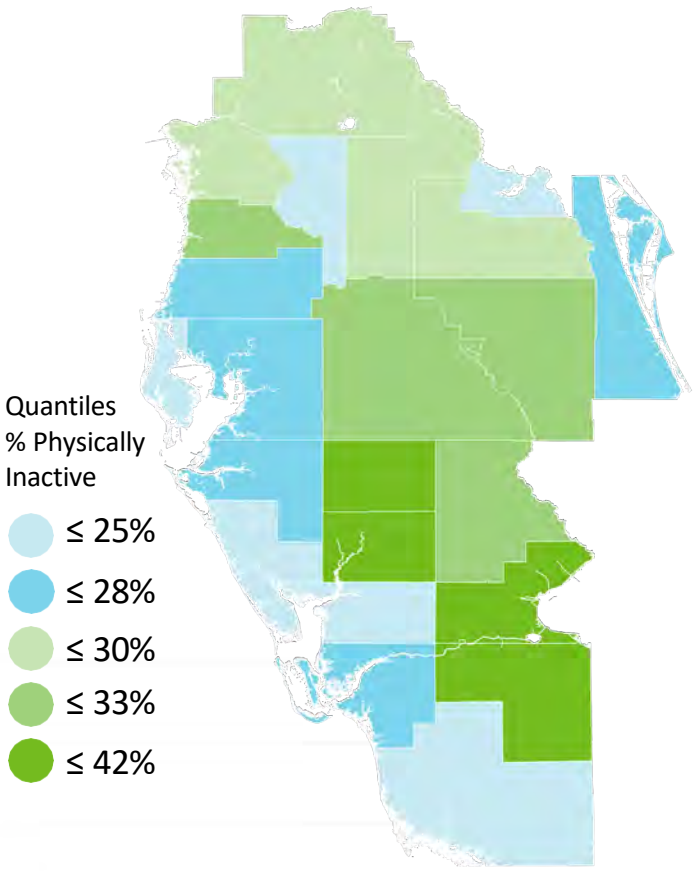
Physical Inactivity and Cancer

Higher physical activity is linked to lower risk of several types of cancer, including:

- Bladder
- Breast
- Colorectal
- Endometrial
- Esophageal
- Kidney
- Stomach

Twelve counties in the Catchment Area have a greater rate of physically inactive individuals than Florida overall.

Map 11: % Physically Inactive, County



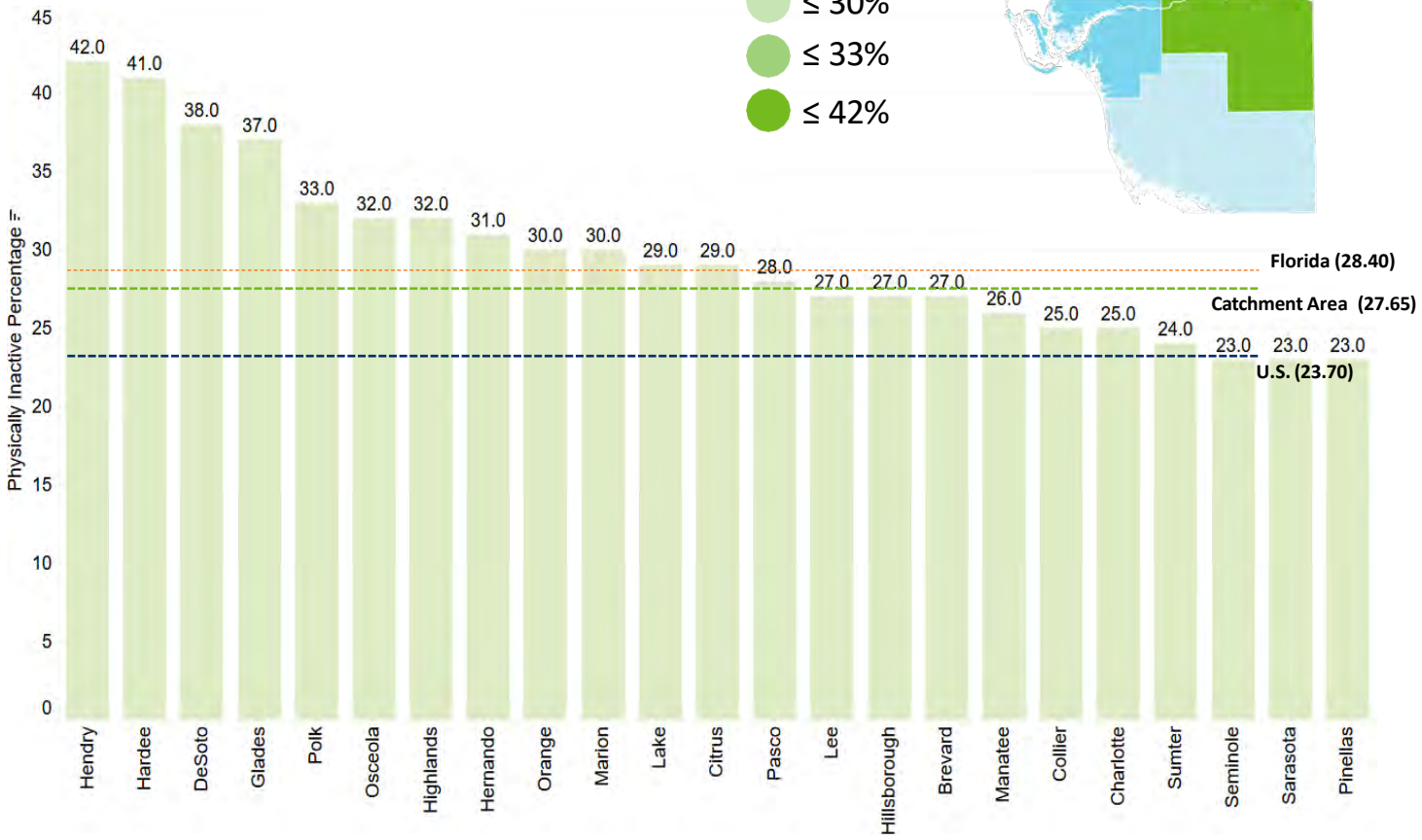


Figure 5: Physically Inactive Rates by Catchment Area County

1. County Health Rankings, Florida Summary Report, 2022..
2. America's Health Rankings, Physical Activity, 2021.
3. National Cancer Institute, Physical Activity and Cancer, 2020.
4. https://www.cancer.gov/about-cancer/causes-prevention/risk/obesity/physical-activity-fact-sheet

2.3 Risk Factors: Excessive Alcohol Consumption

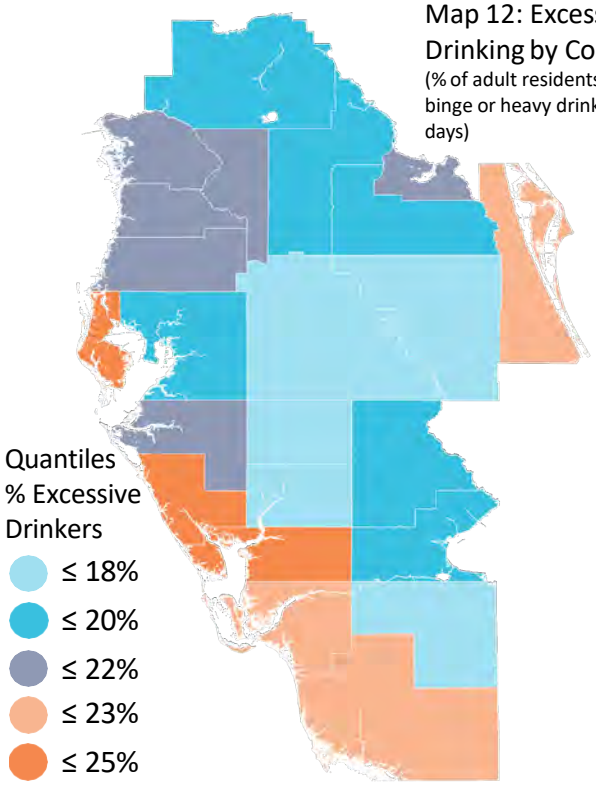
Alcohol and Cancer

Alcohol consumption is associated with risk for several cancers including:

- Breast
- Colorectal
- Esophageal
- Head and Neck
- Liver

Twelve counties in the Catchment Area have a greater rate of alcohol consumption than Florida overall.

Map 12: Excessive Drinking by County
(% of adult residents reporting binge or heavy drinking in past 30 days)



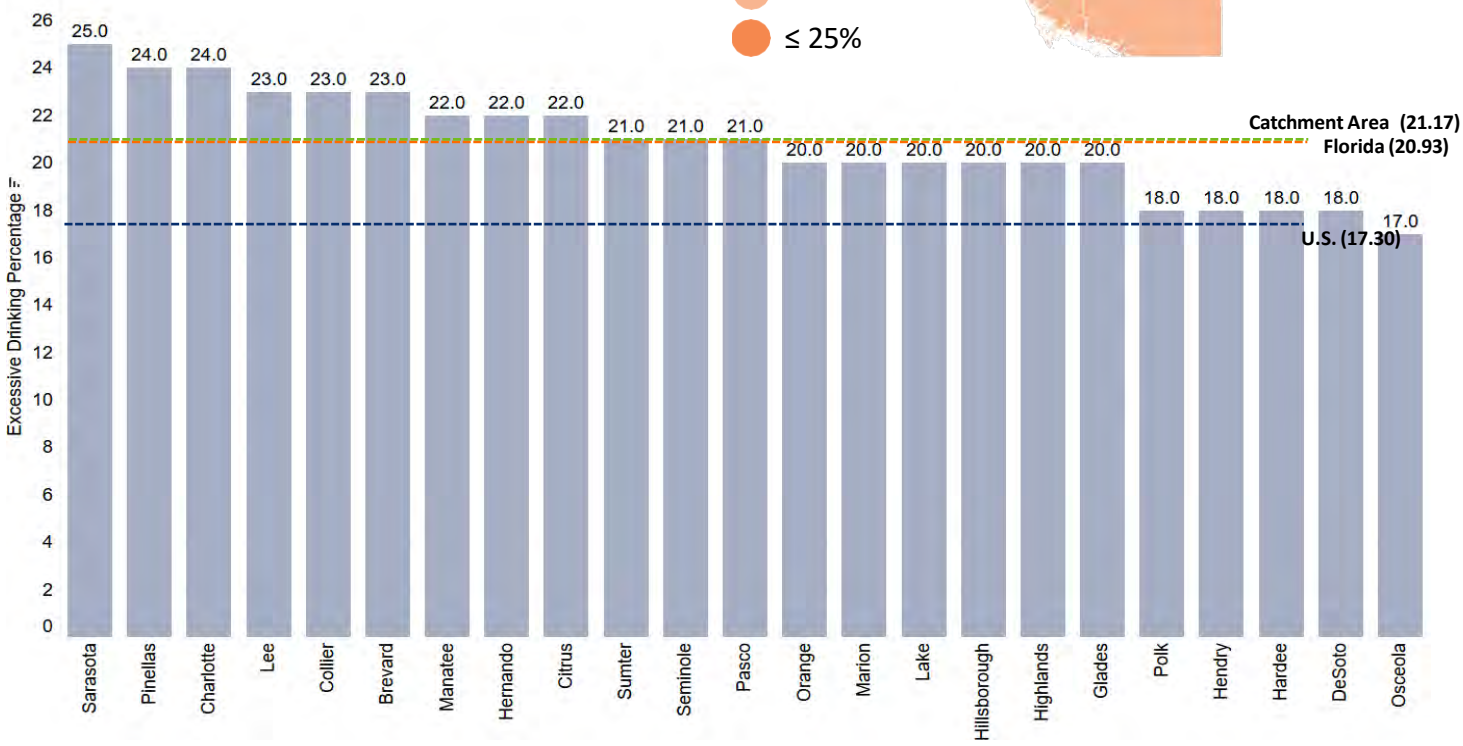


Figure 6: Excessive Drinking Rates by Catchment Area County

1. County Health Rankings, Florida Summary Report, 2022.
2. America's Health Rankings, Excessive Drinking, 2021.
3. Centers for Disease Control, Alcohol and Cancer, 2023.
4. https://www.cancer.gov/about-cancer/causes-prevention/risk/alcohol/alcohol-fact-sheet

2.4 Risk Factors: Cigarette Smoking

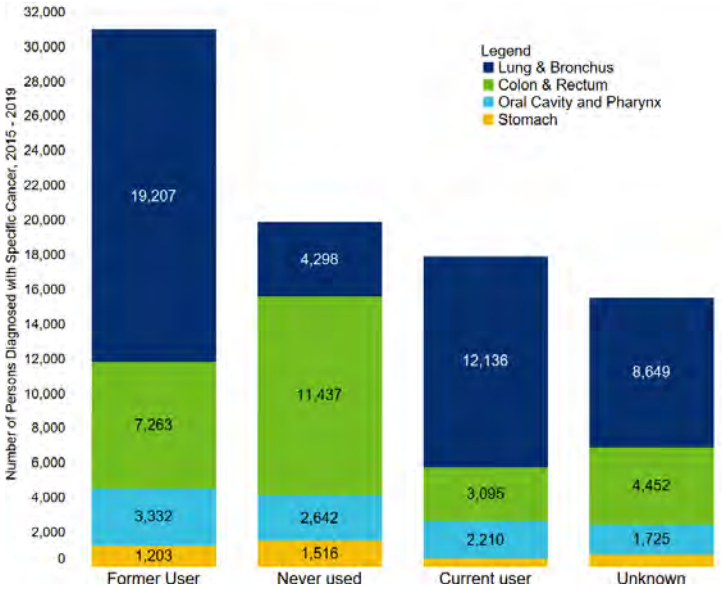
Smoking and Cancer

Cigarette smoking is associated with many cancers, including: .

- Bladder
- Cervix
- Colorectal
- Esophagus
- Kidney
- Larynx
- Leukemia
- Liver
- Lung and Bronchus
- Head and Neck
- Pancreas
- Stomach

Sixteen counties in the Catchment Area have a higher overall smoking rate than Florida overall

Figure 5: Self-Reported Cigarette Smoking 1 Year Prior to Diagnosis for Persons Diagnosed with Select Cancer Sites, 2015 – 2019



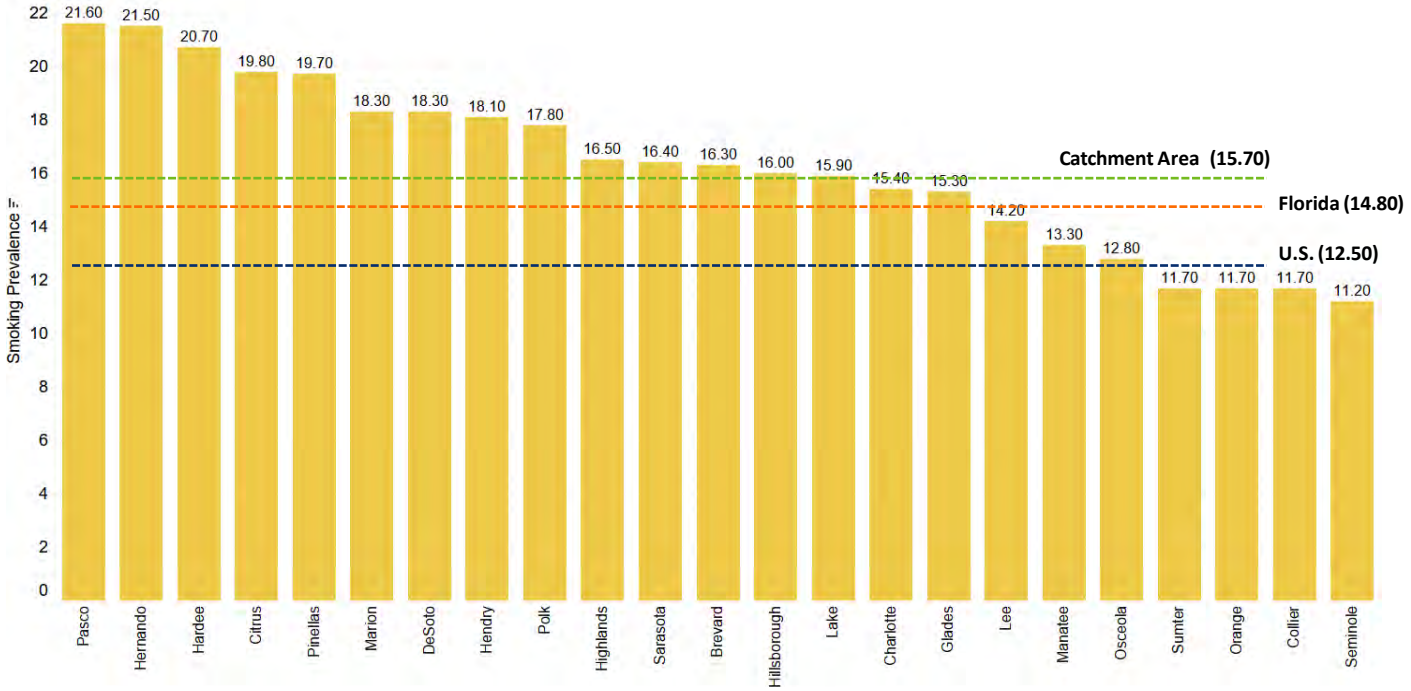
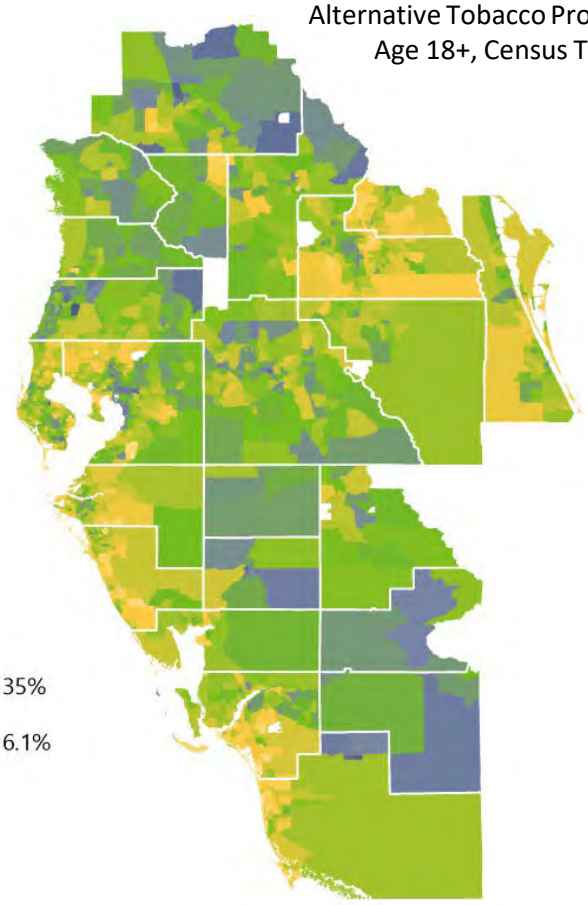


Figure 7: Smoking Rates per Catchment Area County

1. Florida Behavioral Risk Factor Surveillance System, Florida Health Charts Rate of Current Smokers, 2019.
2. Florida Cancer Data System (FCDS), Self-Reported Tobacco Use, 2015 – 2019.
3. Centers for Disease Control, Current Rate of Smoking Among Adults in the United States, 2020.
4. https://www.cdc.gov/tobacco/campaign/tips/diseases/cancer.html

2.5 Risk Factors: Alternative Tobacco Products

Map 13: Self-Reported Alternative Tobacco Product Use, Age 18+, Census Tract



Alternative Tobacco Products

Alternative Tobacco Products include:

- Electronic Cigarettes
- Chewing Tobacco, Snuff, Snus

Seven counties in the Catchment Area have a higher alternative tobacco usage percentage than the Florida benchmark.

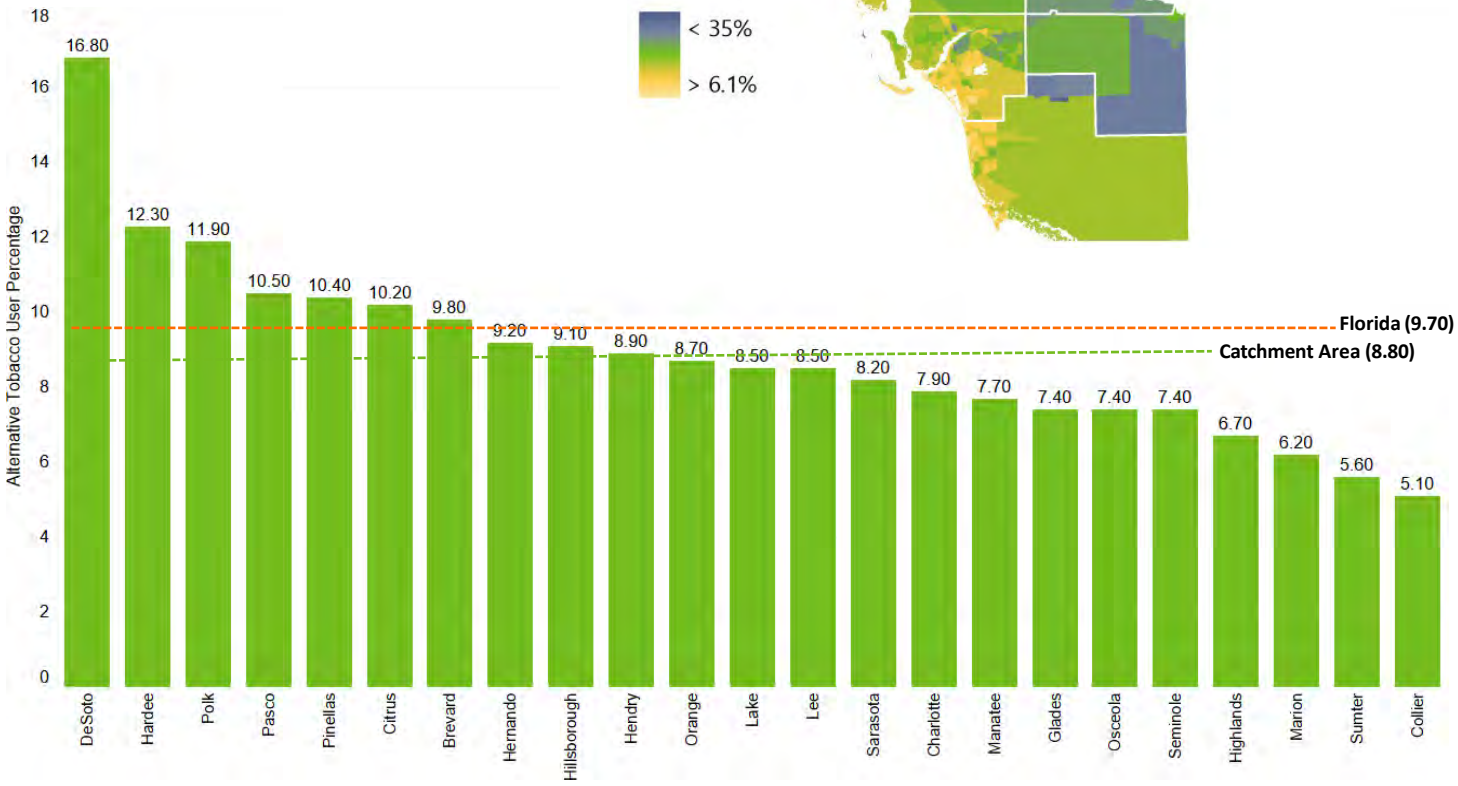


Figure 8: Alternative Tobacco Rates per Catchment Area County

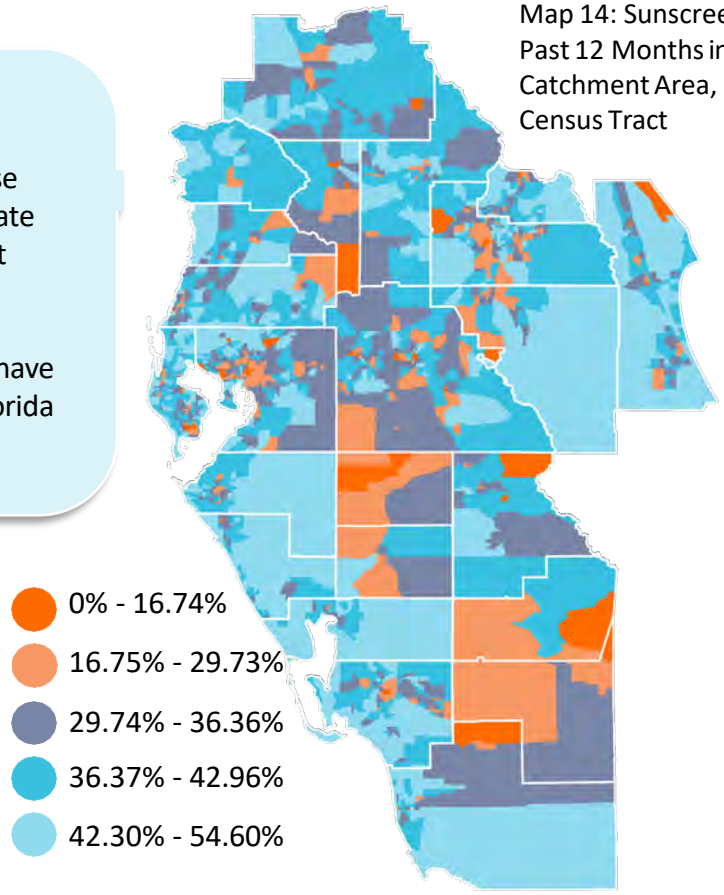
1. Florida Behavioral Risk Factor Surveillance System, Florida Health Charts Rate of Current Smokers, 2019.
2. Centers for Disease Control, Current Rate of Smoking Among Adults in the United States, 2020.
3. PLACES Local Data for Better Health, CDC model-based estimates, 2018.

2.6 Risk Factors and Prevention: Sun Protection

Sun Protection

- Exposure to the Sun is known to cause melanoma, which has an incidence rate of 38.3 per 100,000 in the Catchment Area.
- *Ten* counties in the Catchment Area have lower use of sun protection than Florida overall.

Map 14: Sunscreen Use in Past 12 Months in Catchment Area, 2022, Census Tract



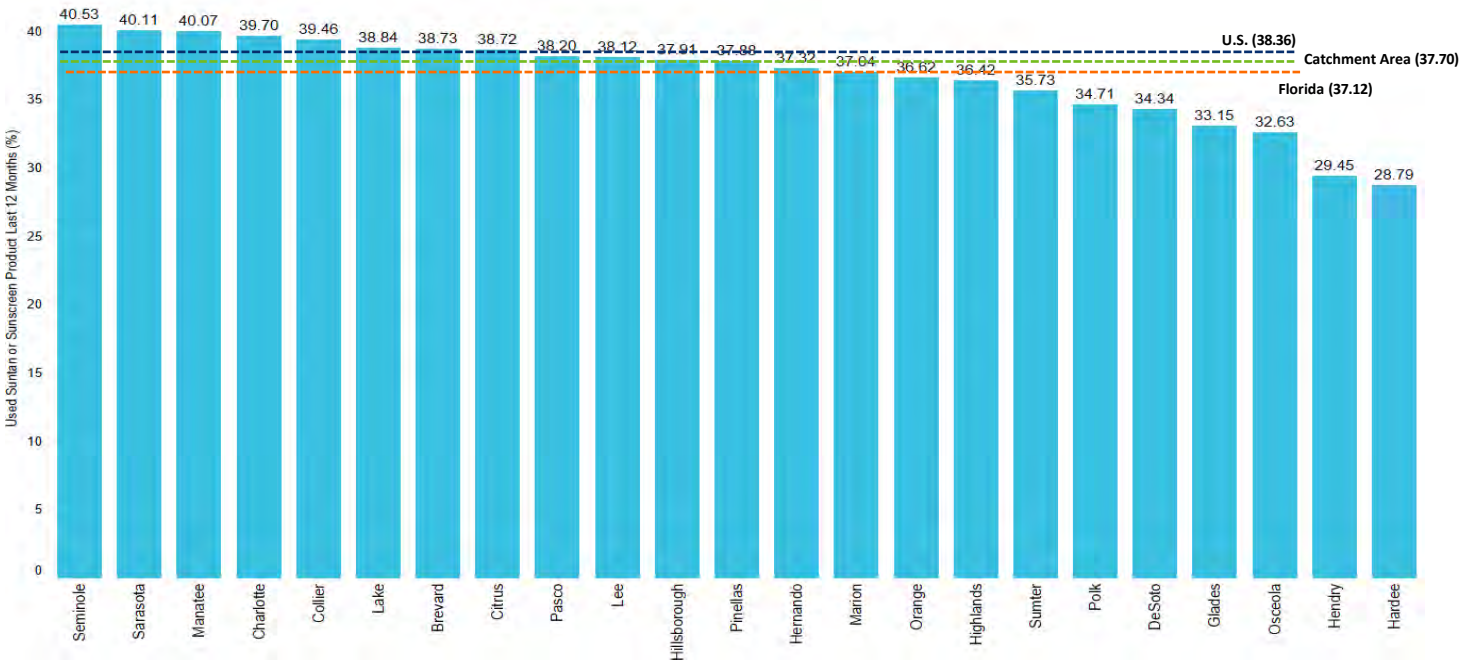


Figure 9: Used Sun Protection in the Past 12 Months per Catchment Area County

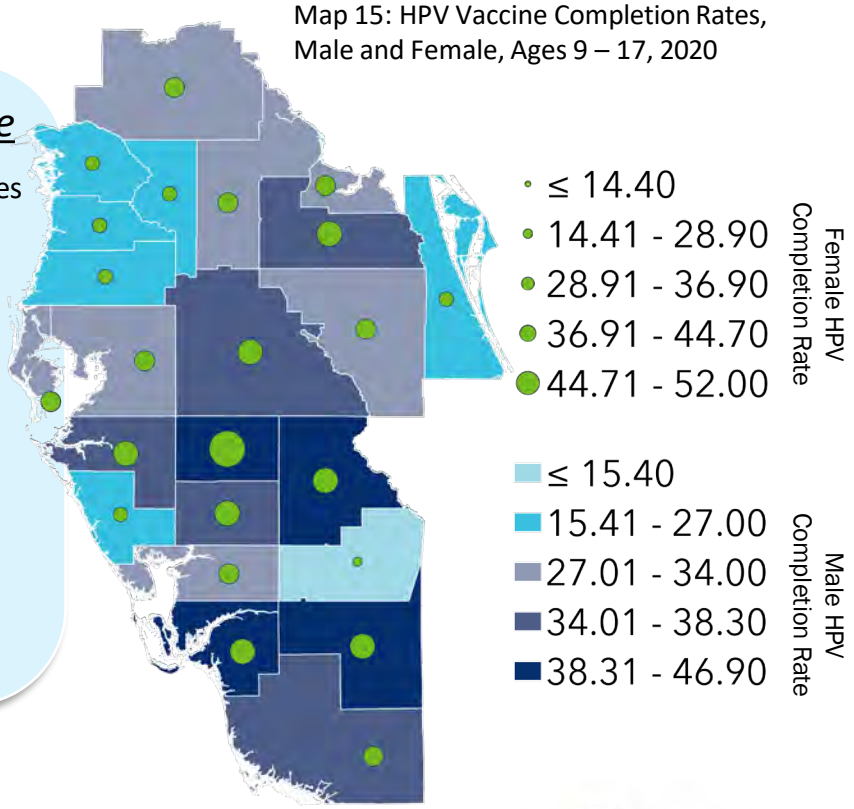
1. ESRI, GFK MRI Simmons 2022, accessed through ArcGIS Business Analyst.

2.7 Risk Factors and Prevention:
Human Papillomavirus (HPV) Vaccination

HPV Vaccination Importance

- HPV causes up to six different types of cancer in women and men: cervical, vaginal, vulvar, penile, anal, and oropharyngeal.
- HPV vaccination for adolescent boys and girls is an important approach to prevent HPV-related cancers.
- Florida does not meet state or national goals for 80% of females and males 13 – 15 years of age to be vaccinated against HPV.

Map 15: HPV Vaccine Completion Rates, Male and Female, Ages 9 – 17, 2020



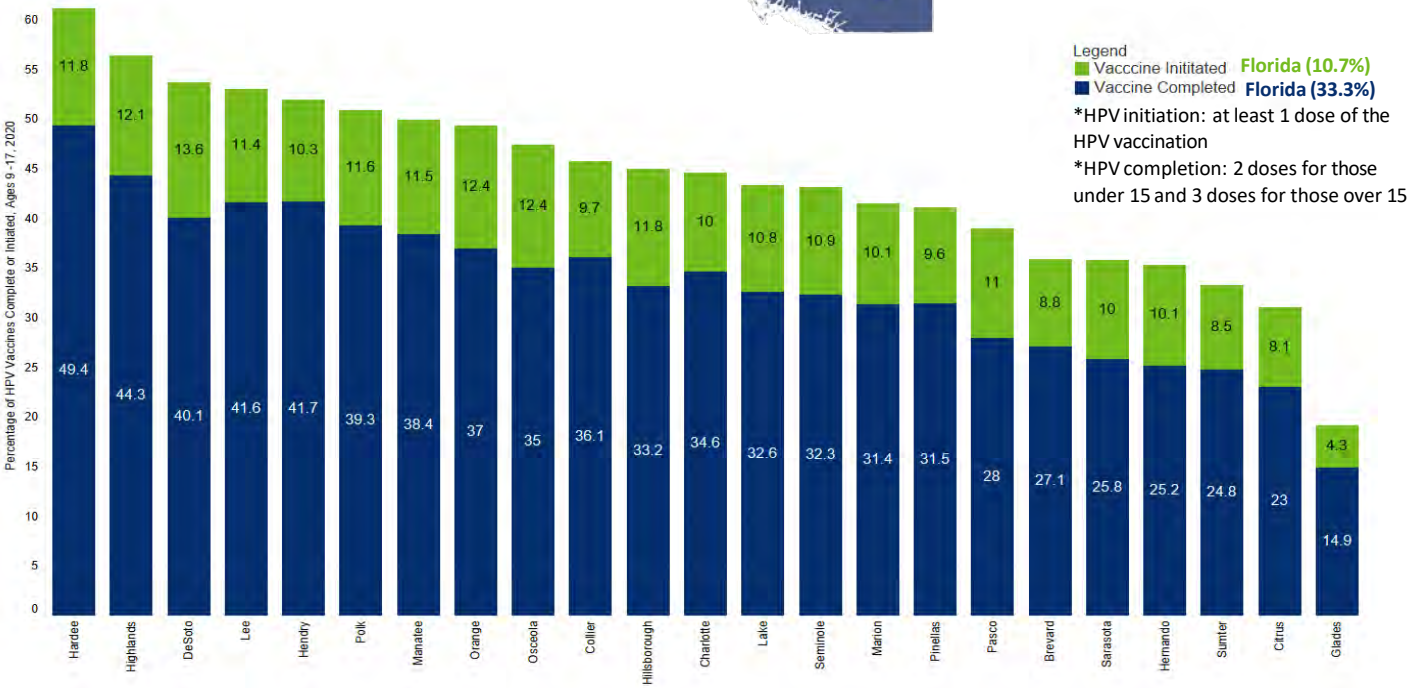


Figure 10: HPV Vaccine Complete or Initiated, Ages 9 – 17 Rate, 2020

1. Florida Behavioral Risk Factor Surveillance System, Florida Health Charts, HPV Vaccination Completions/Initiations.
2. CDC, Cancers Associated with Human Papillomavirus (HPV), 2021.

2.8 Risk Factors: HPV Vaccination by Race/Ethnicity & Geography

HPV Vaccination by Race/Ethnicity

Hispanic adolescents have the highest HPV vaccine completion and initiation rates compared to Non-Hispanic Black and Non-Hispanic White populations.

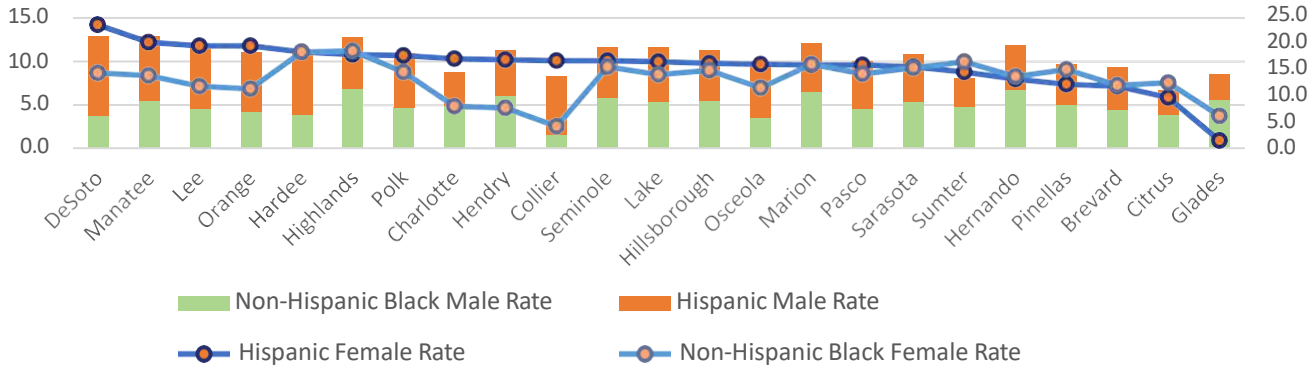


Figure 11: HPV Vaccination Initiation, Male and Female Hispanic, and Non-Hispanic Black, Ages 9 -17

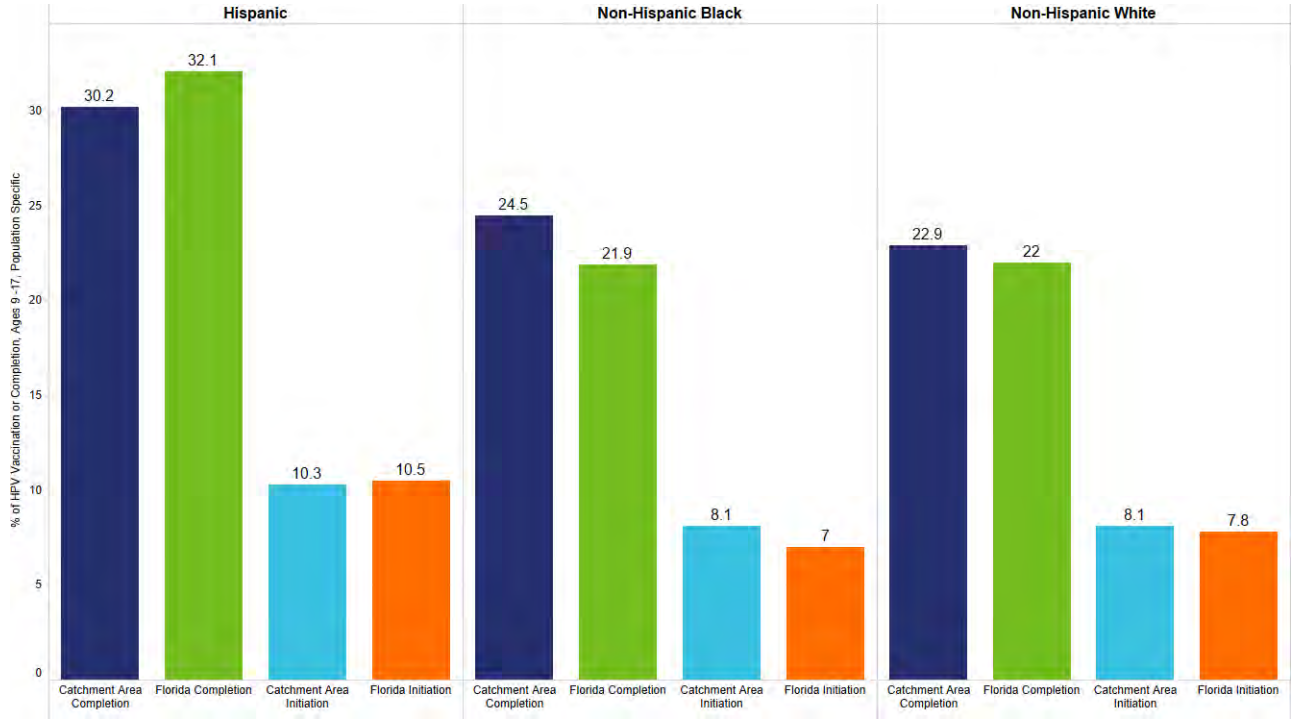


Figure 12: HPV Vaccination Completion and Initiation in Catchment Area Populations, Ages 9 -17

1. Florida Behavioral Risk Factor Surveillance System, Florida Health Charts Rate of HPV Vaccinations by Race/Ethnicity Ages 9 - 17, 2020.

2.9 HPV Vaccination and Cervical Cancer

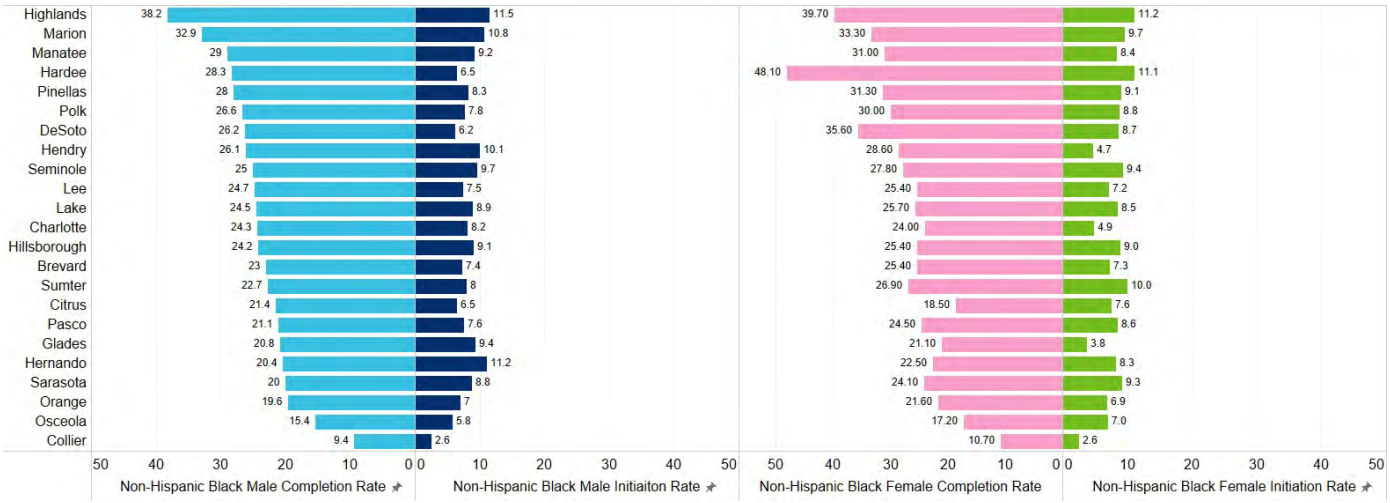


Figure 13: HPV Vaccine Initiation and Completion Rates (%) among Non-Hispanic Black Males and Females, Ages 9 -17

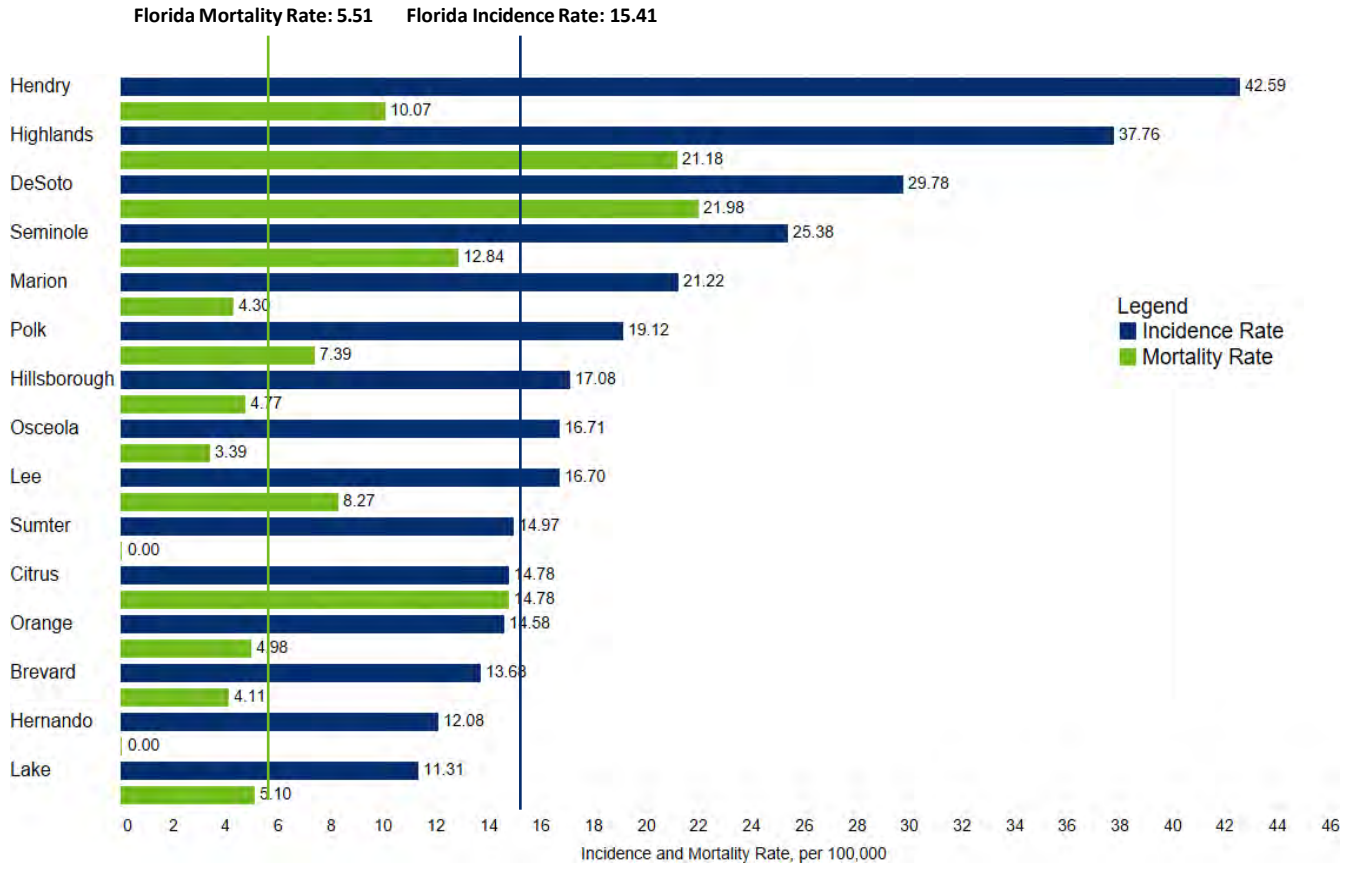


Figure 14: Top 15 Cervix Uteri Rates for Non-Hispanic Black Females, Catchment Area

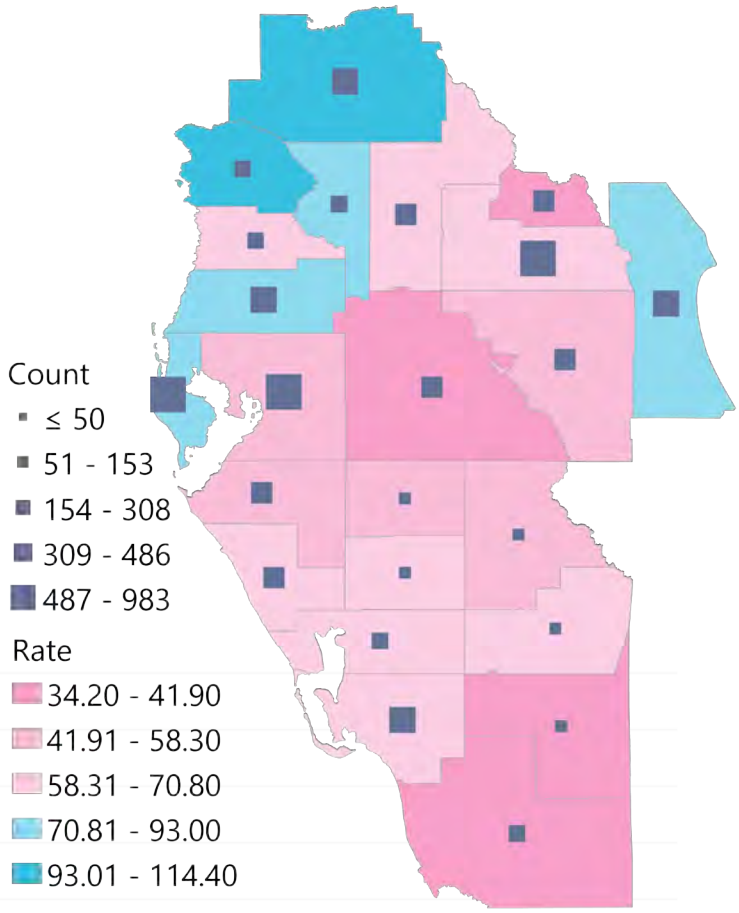
1. Florida Behavioral Risk Factor Surveillance System, Florida Health Charts Rate of HPV Vaccinations by Race/Ethnicity Ages 9 - 17, 2020.
2. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20.

2.10 Risk Factors and Screening: Hepatitis C and Liver Cancer

Hepatitis C and Cancer

- Hepatitis C is linked to nearly half of all cases of liver cancer.
- *Thirteen* counties in the Catchment Area have a higher infection rate of Hepatitis C than the average infection rate in Florida (63 per 100,000).
- Moffitt's Catchment Area and Florida have over 1.5x the Hepatitis C infection rate compared to the U.S.

Map 16: Chronic Hepatitis C, (Including Perinatal), Rate Per 100,000 Population



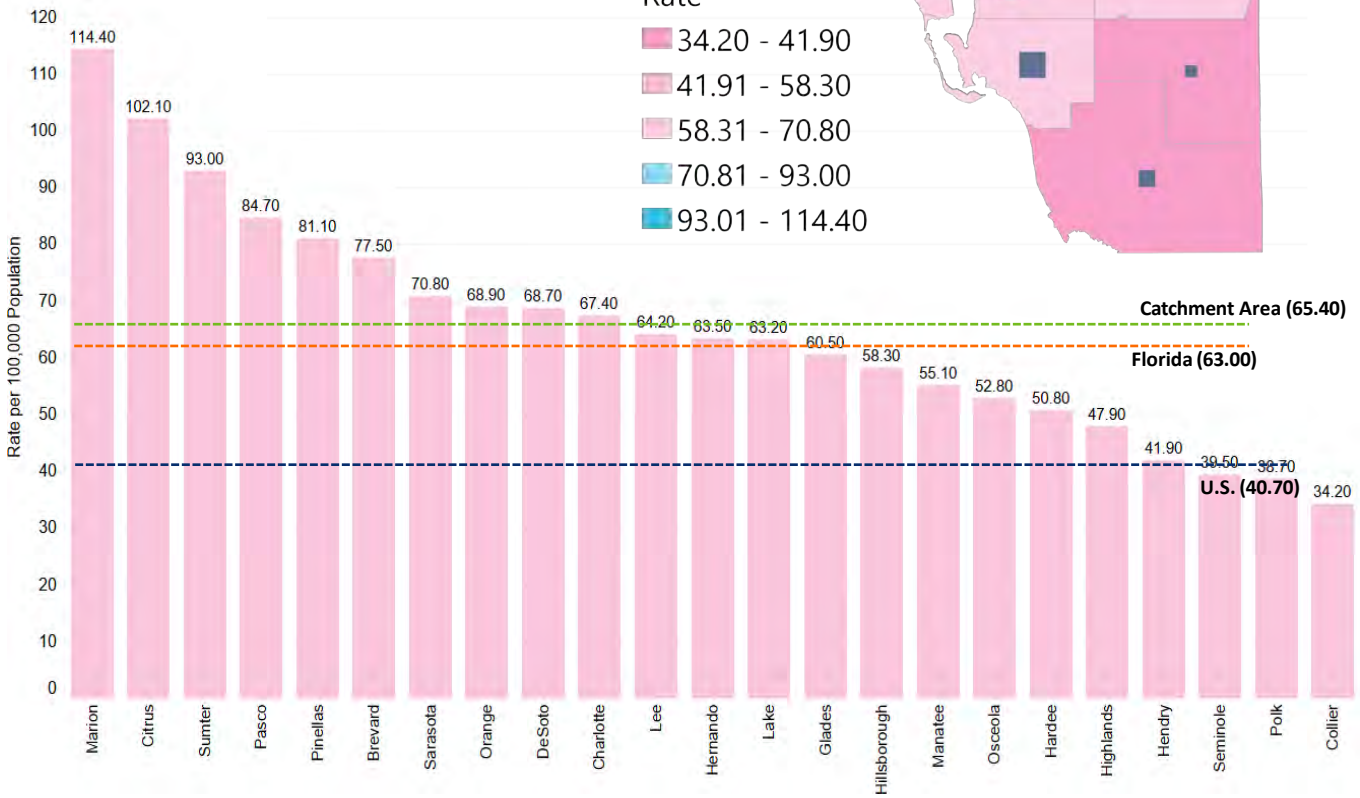


Figure 15: Chronic Hepatitis C per 100,000 Population in Each Catchment Area County

1. Florida Behavioral Risk Factor Surveillance System, Florida Health Charts Rate of Chronic Hepatitis C per 100,000, 2020.
2. The University of Texas MD Anderson Cancer Center, Hepatitis C and Cancer: What to Know, 2018.
3. Center for Disease Control (CDC), Hepatitis C Surveillance, 2020.

2.11 Risk Factors and Screening: New HIV Diagnosis

HIV Diagnoses in 2020

- Three counties in the Catchment Area had a higher overall rate of HIV diagnoses (per 100,00 persons/year) than Florida overall (16.2): Orange (26.2), Osceola (17.3), and Hillsborough (17.0).
- The Non-Hispanic Black population has the highest rate of HIV diagnosis per 100,000 individuals per year compared to other groups in our Catchment Area; this is similar to rates observed in Florida and the U.S.
- In 2020, the rate of HIV diagnoses in Florida (16.2 per 100,000) was the lowest since 1984.

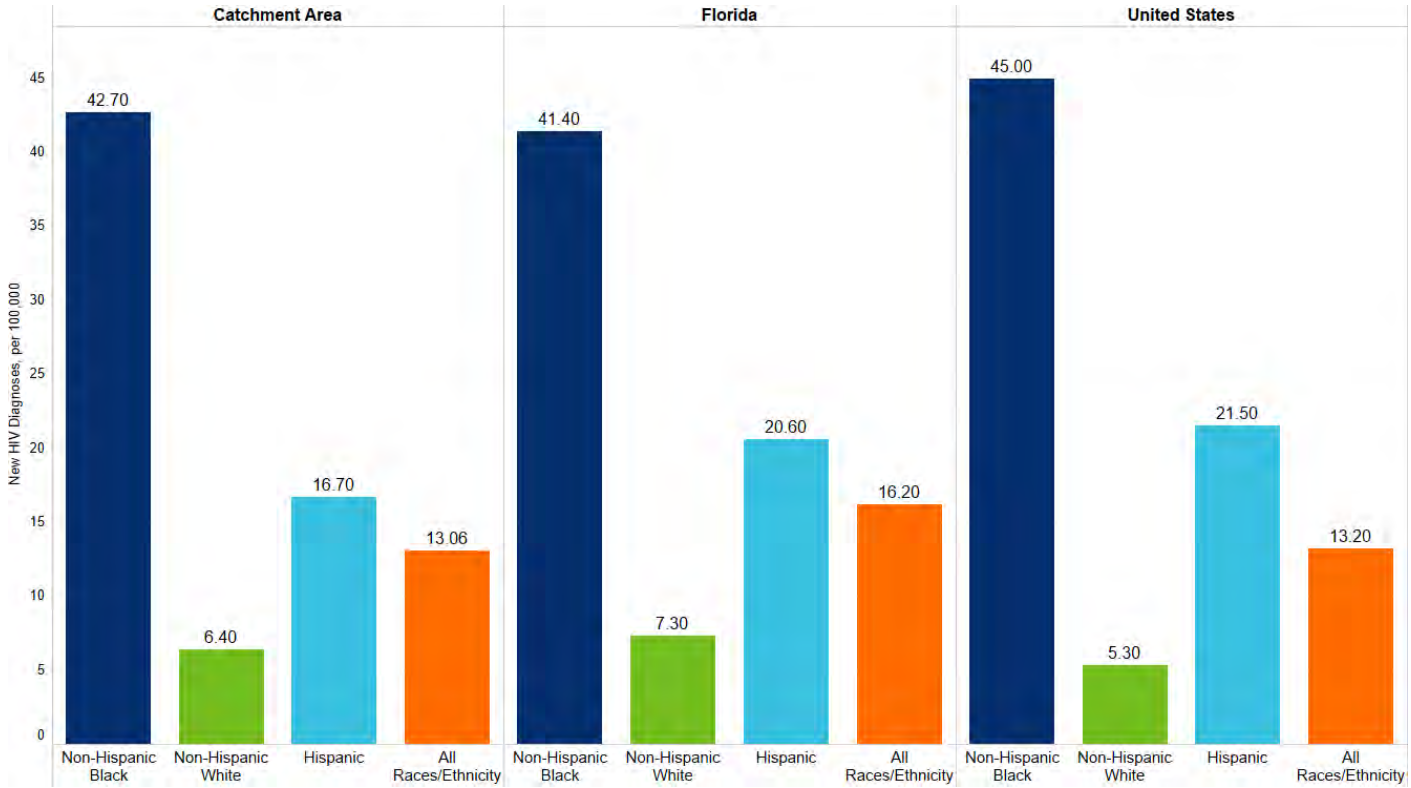


Figure 16: HIV Incidence – New Diagnoses of HIV by Race/Ethnicity, 2020

1. Florida Behavioral Risk Factor Surveillance System, Florida Health Charts HIV Cases in Florida, 2020.
2. Center for Disease Control and Prevention. *HIV Surveillance Report,* 2019, vol. 32.

2.12 Risk Factors and Screening: People with HIV (PWH)

People with HIV (PWH) in 2020

- PWH are more likely to be diagnosed with certain types of cancers than people who are not infected. Some of these cancers include Kaposi Sarcoma, Non-Hodgkin Lymphoma, and Cervical Cancer.
- Two counties in the Catchment Area had a higher overall rate of PWH than Florida overall (549.9 per 100,000 persons/year): Glades (687.8) and Orange (654.4).
- The Non-Hispanic Black population has the highest number of HIV positive individuals (1264.3 per 100,000) in the Catchment Area, Florida, and the U.S.

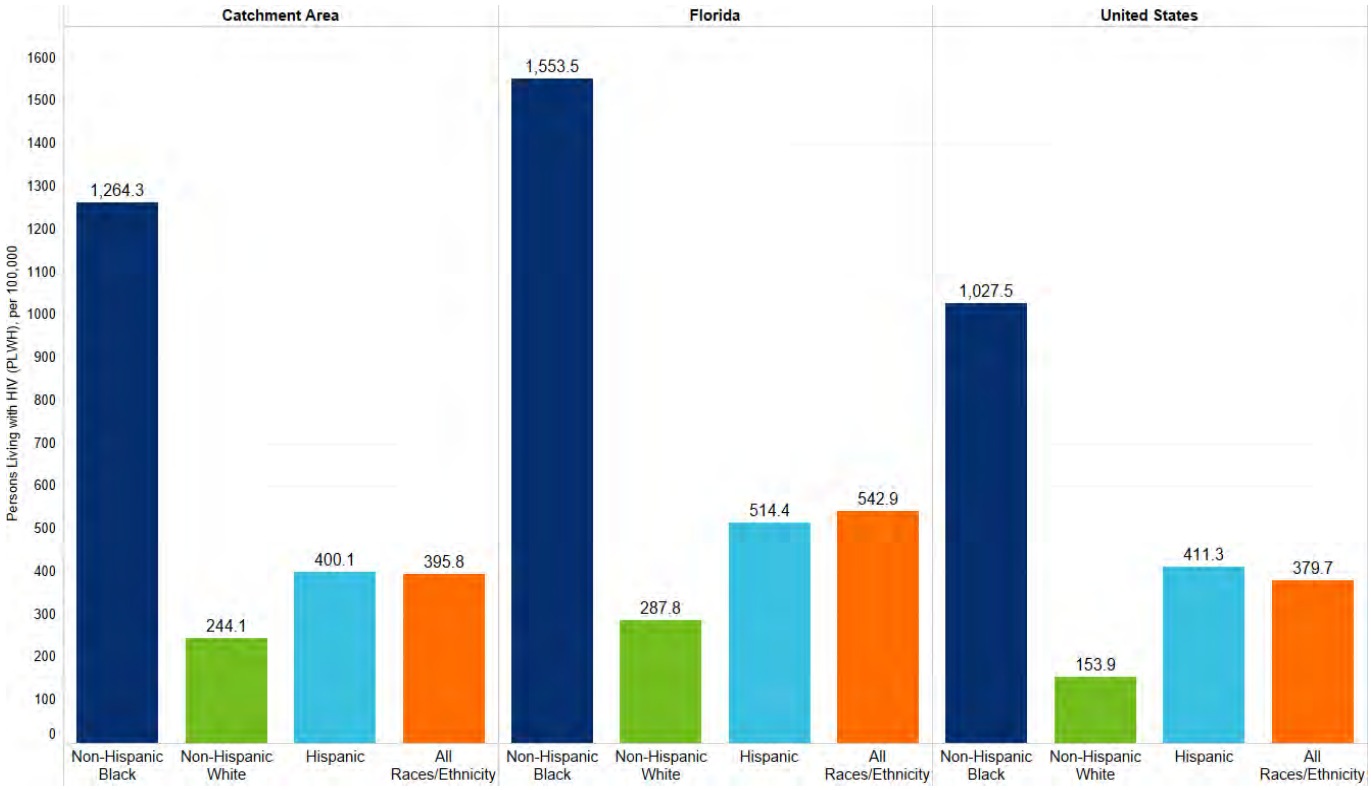


Figure 17: HIV Prevalence – People with HIV by Race/Ethnicity, 2020

1. Florida Behavioral Risk Factor Surveillance System, Florida Health Charts HIV Cases in Florida, 2020.
2. Center for Disease Control and Prevention. *HIV Surveillance Report,* 2019, vol. 32.
3. The American Cancer Society, HIV and Cancer, 2022.

2.13 Cancer Screening

Cancer Screening Rates Quick Facts

- Cancer screening rates are lower in people of color.
- 1 in 3 breast cancer cases diagnosed at later stages.
- Women who make less than $25k annually are less likely to be screened compared to those who make over $50k per year.
- 30% of Floridians did not meet colorectal cancer screening guidelines in 2018.
- Most colorectal cases are diagnosed at a late stage.
- Men are more likely to develop colorectal cancer than females.
- 20% of women in Florida are not in compliance with cervical screening guidelines.
- At least half of cervical cancer cases are diagnosed at a late stage.

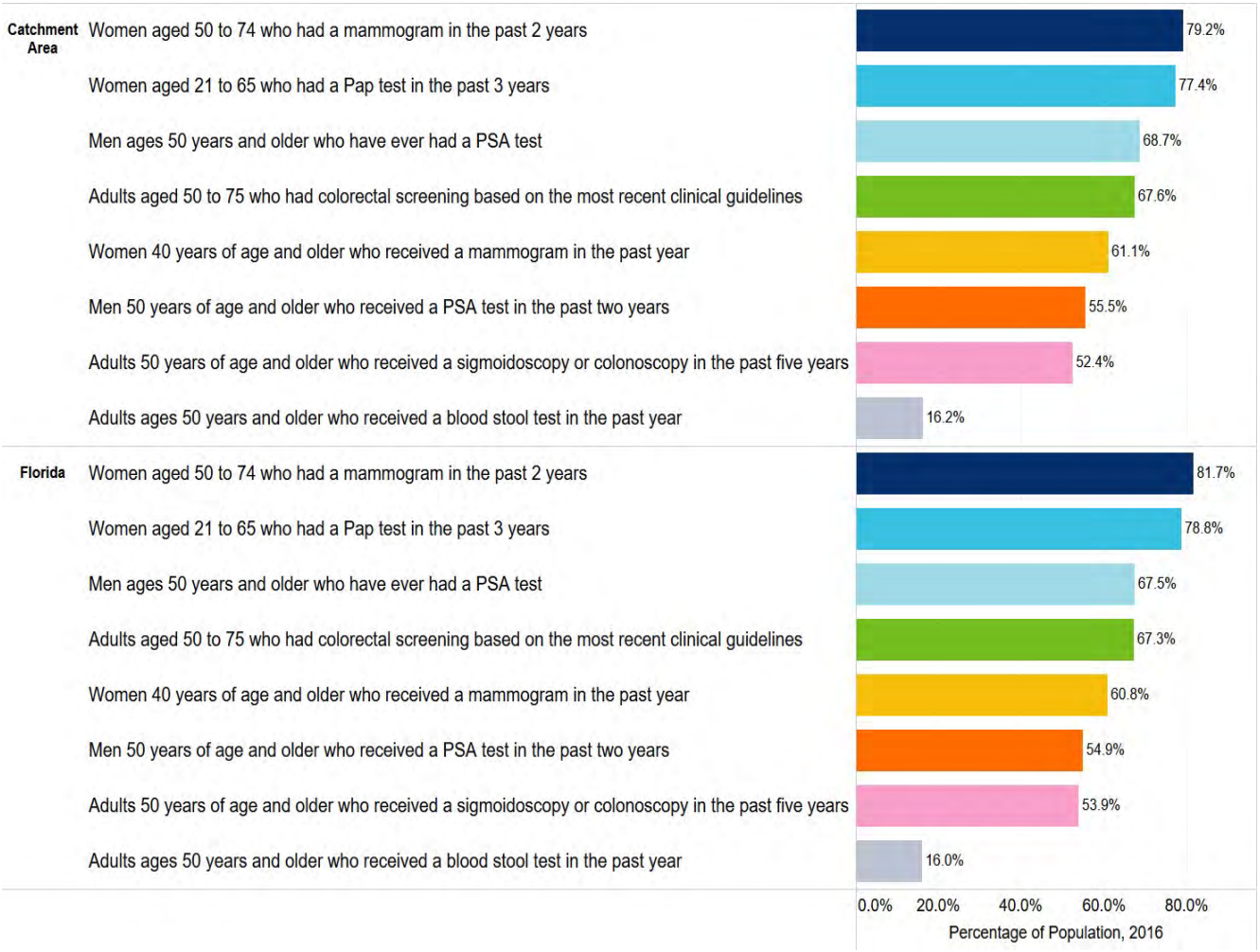


Figure 18: Cancer Screening Rates for Catchment Area vs. Florida

1. Florida Cancer Data System (FCDS), Cancer Screening Dashboards, 2016.
2. Florida Behavioral Risk Factor Surveillance System, Florida Health Charts Cancer Screening Rates, 2016.

2.14 Cancer Screening and Staging: Colorectal and Prostate Cancer

Colorectal Cancer

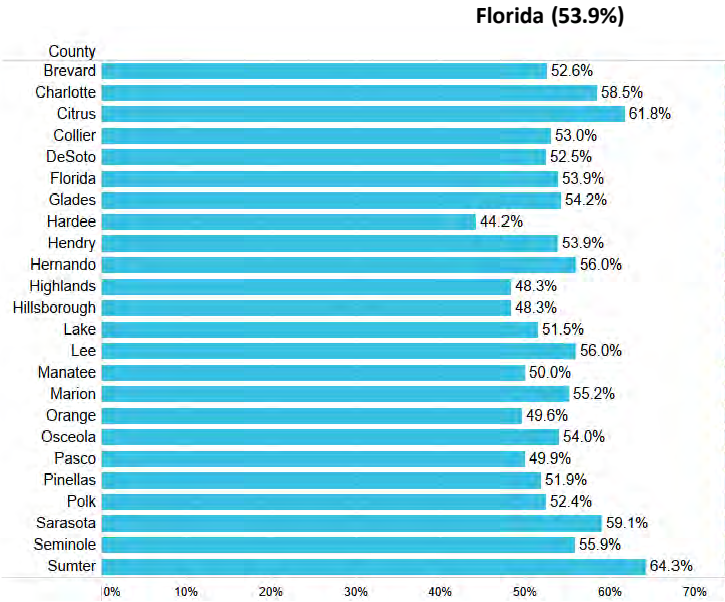


Figure 19: Percent of Adults ≥ 50 who have Received a Sigmoidoscopy or Colonoscopy in the Past Five Years, 2016

Prostate Cancer

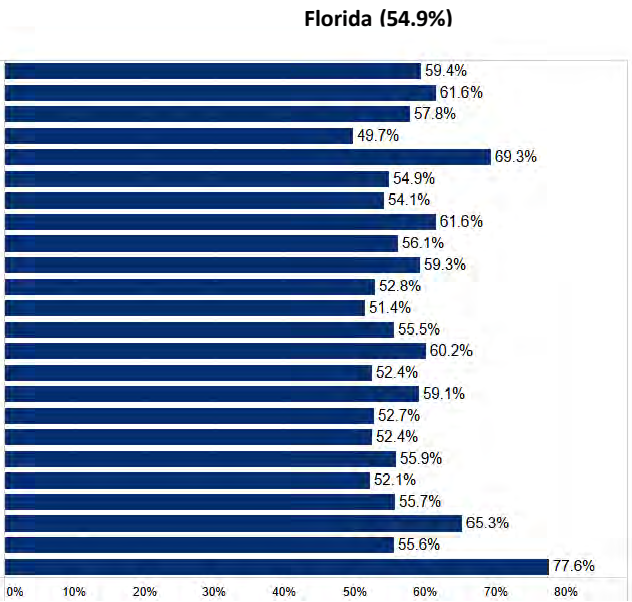


Figure 20: Percent of Men ≥ 50 who have Received a PSA Test in the Past Two Years, 2016

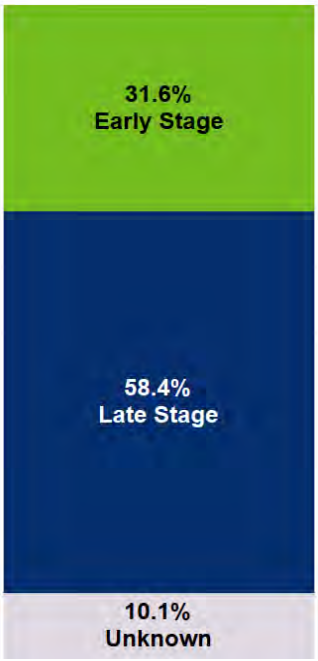


Figure 21: Statewide Colorectal Cancer Stage at Diagnosis

Figure 22: Statewide Prostate Cancer Stage at Diagnosis

* Early stage is a term used to describe cancer that is early in its growth and may not have spread to other parts of the body. What is called early stage may differ between cancer types.
*Late stage is a term used to describe cancer that is far along in its growth and has spread to the lymph nodes or other places in the body.

1. Florida Behavioral Risk Factor Surveillance System, Florida Health Charts Cancer Screening Rates, 2016.
2. Florida Cancer Data System, 2015-2019.
3. National Cancer Institute (NCI), NCI Dictionary.

2.15 Cancer Screening and Staging: Breast and Cervical Cancer

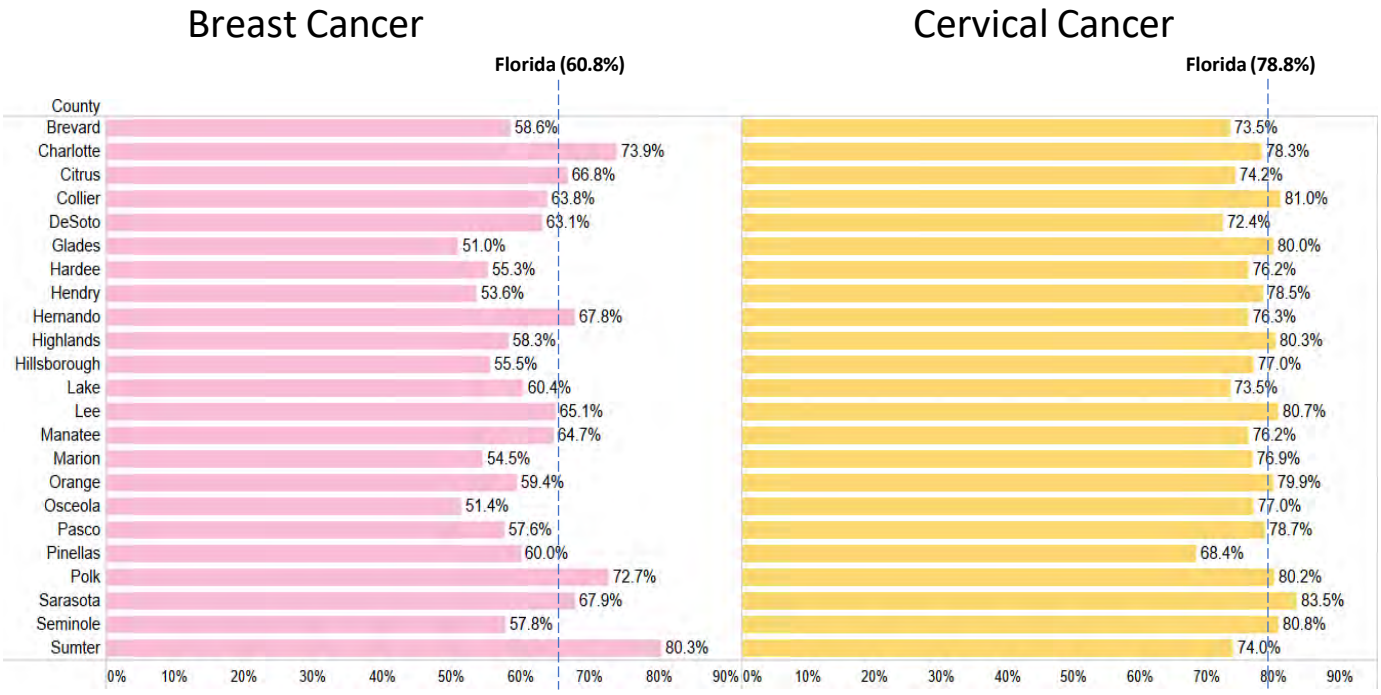


Figure 23: Women ≥ 40 who Received a Mammogram in the past year, 2016

Figure 24: Women aged 21 to 65 who had a Pap Test in the past 3 years, 2016

Figure 25: Statewide Breast Cancer Stage at Diagnosis

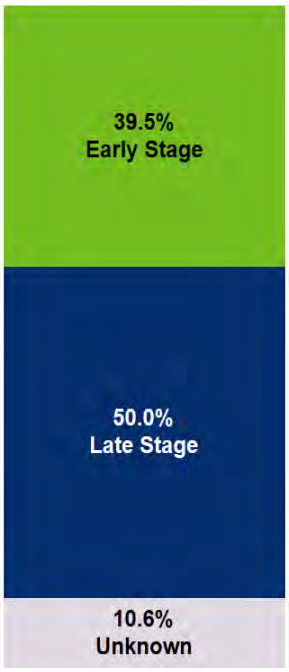


Figure 26: Statewide Cervical Cancer Stage at Diagnosis

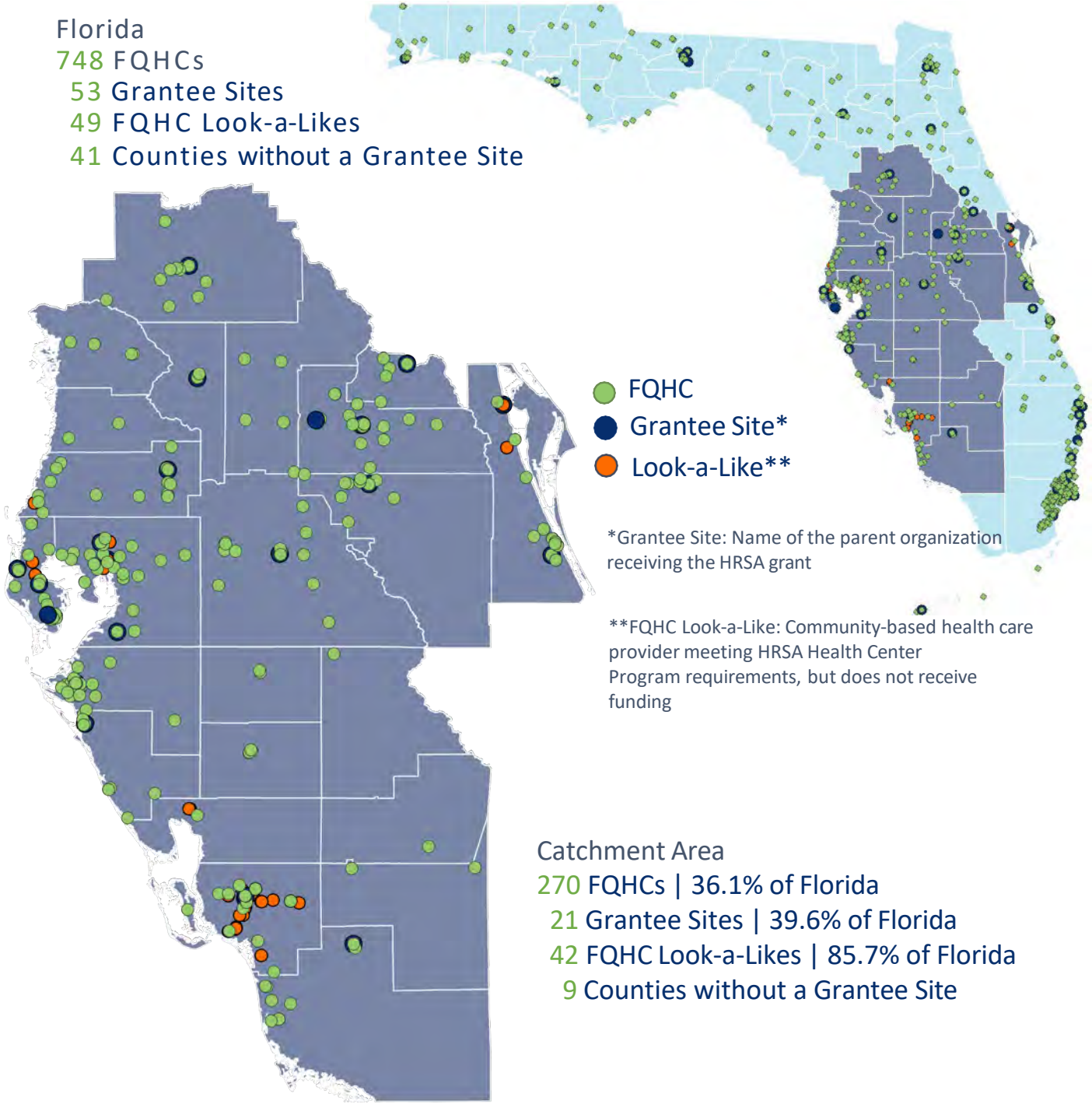
* Early stage is a term used to describe cancer that is early in its growth and may not have spread to other parts of the body. What is called early stage may differ between cancer types.
*Late stage is a term used to describe cancer that is far along in its growth and has spread to the lymph nodes or other places in the body.

1. Florida Behavioral Risk Factor Surveillance System, Florida Health Charts Cancer Screening Rates, 2016.
2. Florida Cancer Data System, 2015-2019.
3. National Cancer Institute, NCI Dictionary, 2022.

2.16 Federally Qualified Health Centers (FQHCs)

FQHCs are federally funded nonprofit health centers or clinics that serve medically underserved areas and populations. FQHCs provide primary care services regardless of a patient's ability to pay.

Florida
748 FQHCs
53 Grantee Sites
49 FQHC Look-a-Likes
41 Counties without a Grantee Site



*Grantee Site: Name of the parent organization receiving the HRSA grant

**FQHC Look-a-Like: Community-based health care provider meeting HRSA Health Center Program requirements, but does not receive funding

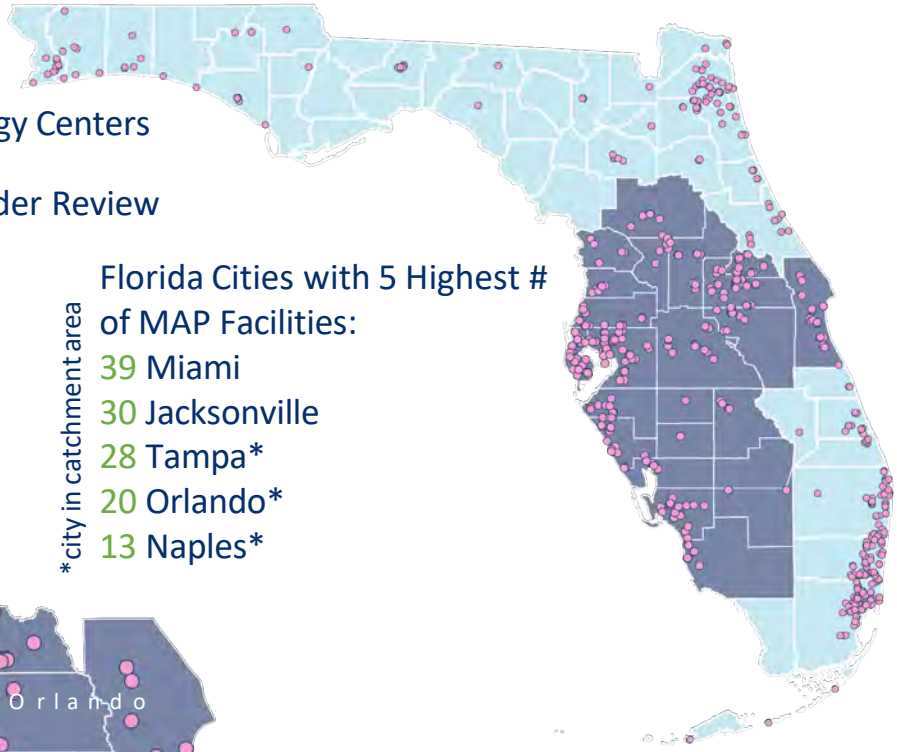
Catchment Area
270 FQHCs | 36.1% of Florida
21 Grantee Sites | 39.6% of Florida
42 FQHC Look-a-Likes | 85.7% of Florida
9 Counties without a Grantee Site

1. Health Resources and Services Administration (HRSA), 2022, FQHCs and LALs by State: https://data.hrsa.gov/data/reports/datagrid?gridName=FQHCs.

2.17 Mammography-Capable Radiology Centers

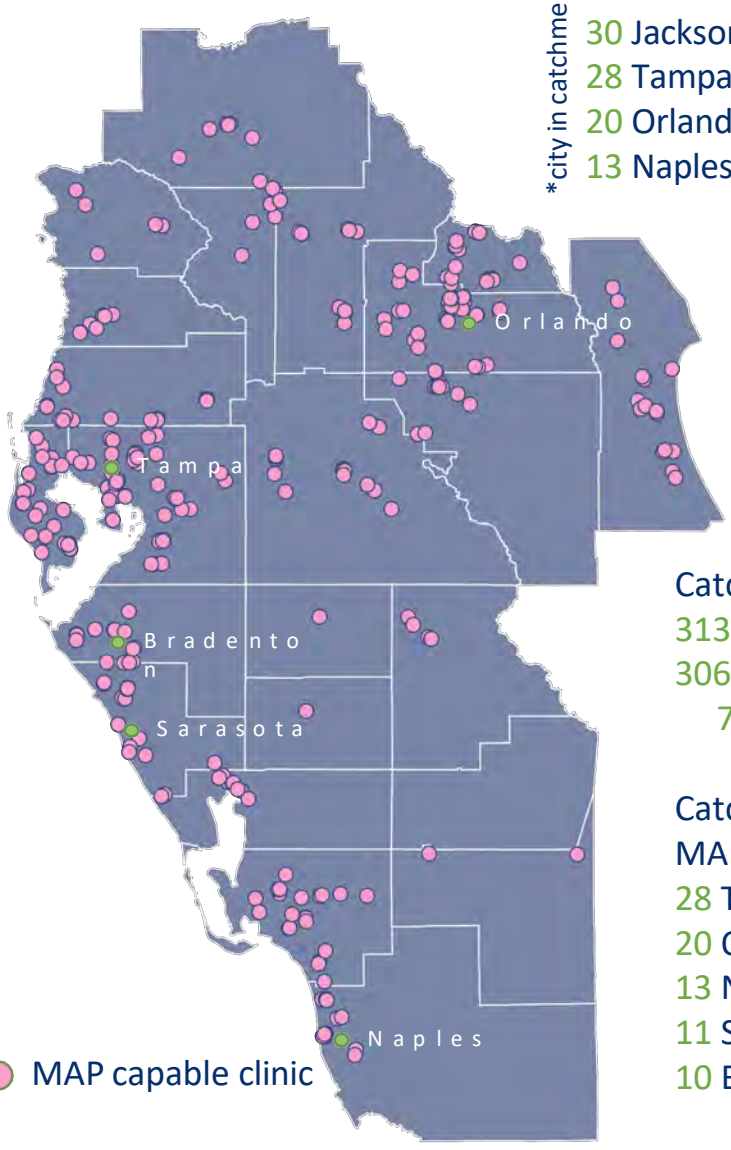
Large spatial gaps exist in the location of radiology facilities that can provide mammography (MAP) screening

Florida:
368 MAP-capable Radiology Centers
353 Accredited Centers
15 with Accreditation under Review



Florida Cities with 5 Highest # of MAP Facilities:
39 Miami
30 Jacksonville
28 Tampa*
20 Orlando*
13 Naples*

*city in catchment area



Catchment Area:
313 MAP-capable Radiology Centers
306 Accredited Centers
7 with Accreditation under Review

Catchment Area Cities with 5 Highest # of MAP Facilities:
28 Tampa
20 Orlando
13 Naples
11 Sarasota
10 Bradenton

1. American College of Radiology, 2022, Accredited Facility Search Tool: https://www.acraccreditation.org/accredited-facility-search.

3 Catchment Area Cancer Incidence[1], Mortality[2], and Disparities[3]

Head and Neck Cancer Screening Event, 2019, Tampa

Men's Health Huddle 2022 w/ Tampa Bay Buccaneers, Tampa

Community Health Worker Training, 2021, Monterey, California

Men's Health Huddle 2022 w/ Tampa Bay Buccaneers, Tampa

[1]Incidence: number of new cancers of a specific site/type occurring in a specified population during a year; usually expressed as number of cases per 100,000

[2]Mortality: number of deaths of a specific site/type occurring in a specified population during a year; usually expressed as number of cases per 100,000

[3]Disparity: adverse differences between certain population groups in cancer measures (e.g., incidence, mortality, stage of diagnosis, quality of life)

3.1 Age-Adjusted Cancer Incidence Rates per Catchment Area County

- *Twelve* counties in the Catchment Area have a higher cancer incidence rate than Florida.
- *Five* counties in the Catchment Area have a higher cancer incidence rate than the U.S.
- *50%* of all cancer cases (n = 308,102) in Florida were diagnosed in the Catchment Area between 2015 – 2019.

Age-Adjusted Incidence
Incidence Rate per 100,000 per year

Catchment Area: 593.3

Florida: 583.2

U.S.: 637.0

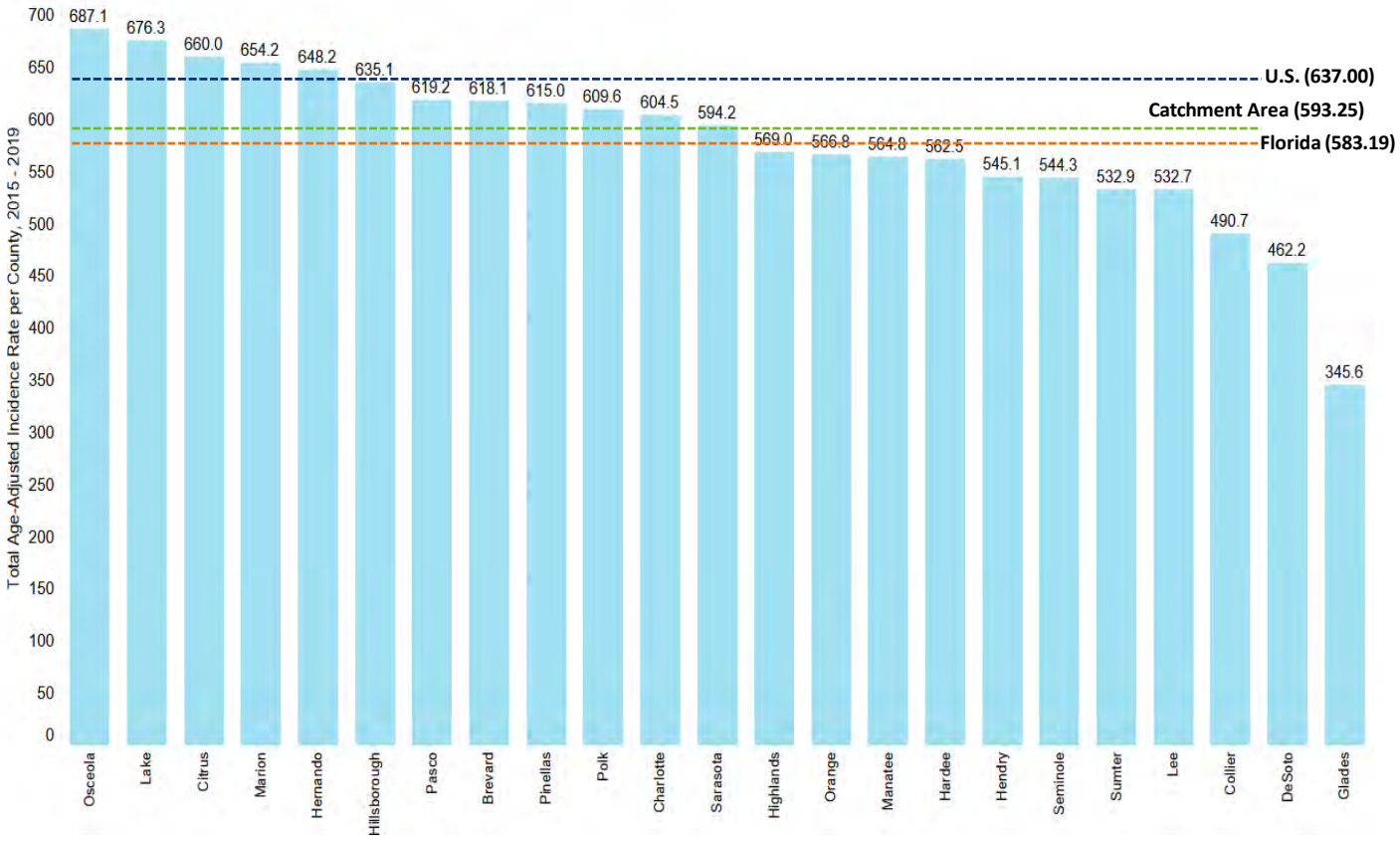


Figure 27: Top Age Adjusted Incident Cancers per Catchment Area County

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20.
2. CDC Wonder, Cancer Incidence Statistics 2014 – 2018, Ages ≥ 20.

3.2 Age-Adjusted Cancer Mortality Rates per Catchment Area County

- *Fifteen* counties in the Catchment Area have a higher cancer incidence rate than the Florida.
- *Five* counties in the Catchment Area have a higher cancer incidence rate than the U.S.
- *50%* of all cancer deaths (n = 111,360) in Florida came from the Catchment Area from 2015 – 2019.

Age-Adjusted Mortality
Mortality Rate per 100,000

Catchment Area: 200.0

Florida: 201.1

U.S.: 217.2

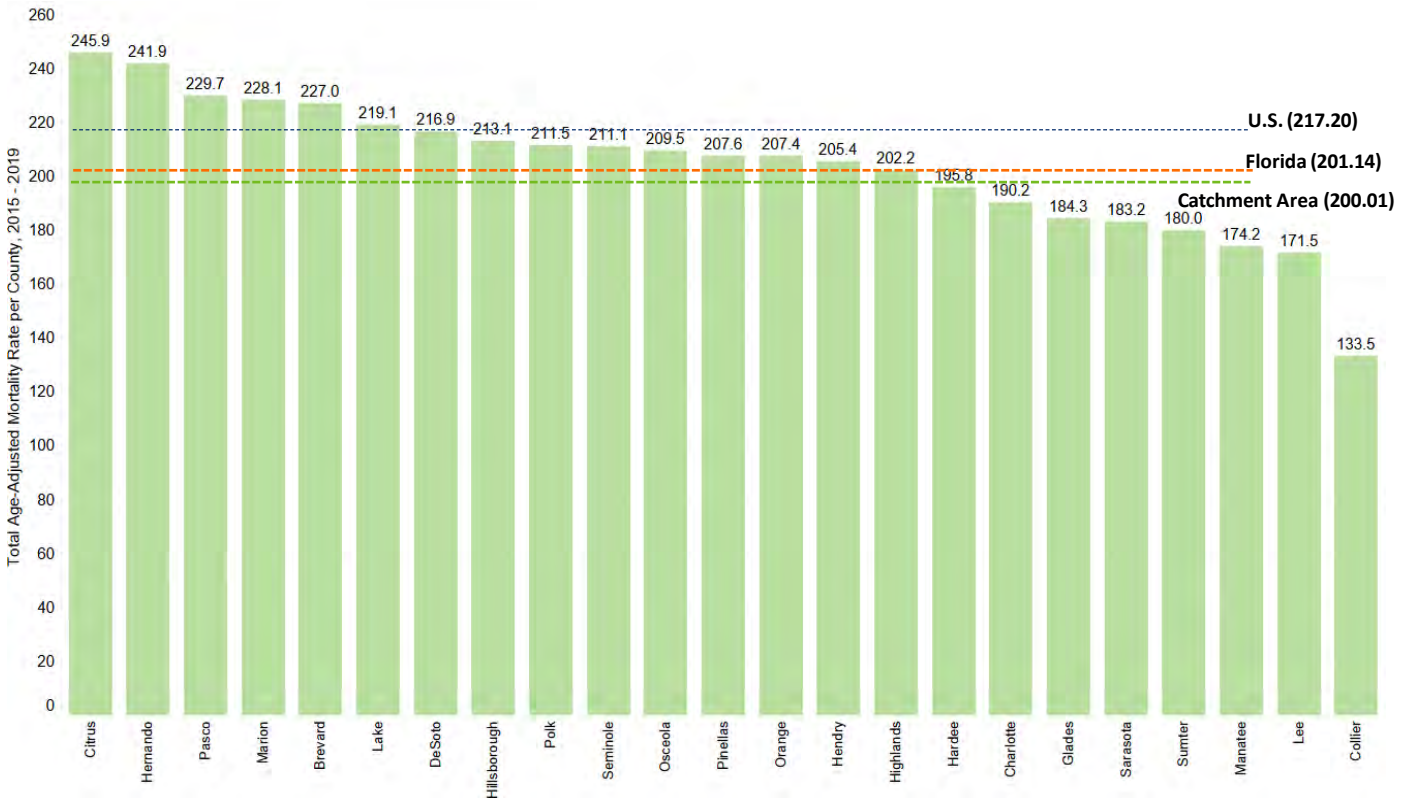


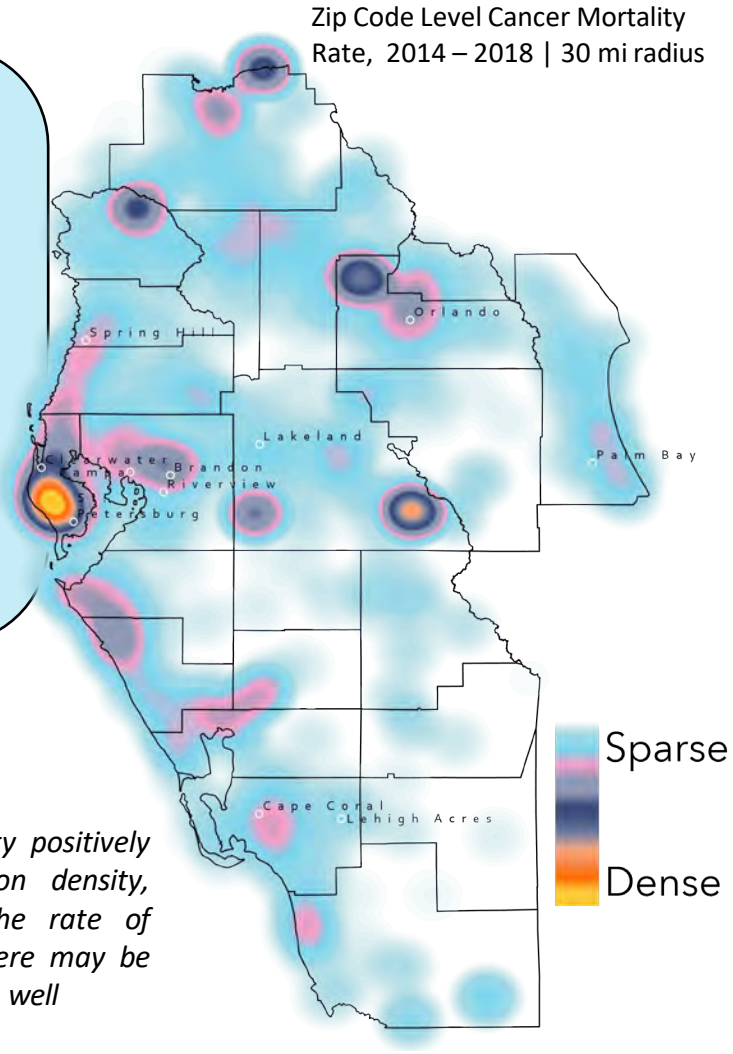
Figure 28: Top Age Adjusted Cancer Mortality rates per Catchment Area County

1. Florida Bureau of Vital Statistics, Cancer Mortality Data Set, Ages ≥ 20.
2. CDC Wonder, Cancer Mortality Statistics 2014 – 2018, Ages ≥ 20.

3.3 Cancer Mortality Heat Map by Zip Code

High cancer mortality observed in:

- Central, southern Pinellas County near Seminole and Bay Pines
- East-Central Hillsborough County, near Mango and Brandon
- Southeastern and southwestern Polk County, near Indian Lake Estates and Bradley Junction
- Northwestern Orange County, near Apopka and Zellwood
- Northern Citrus County, near Citrus Springs and Pine Ridge



Zip code level incidence of cancer mortality positively correlated with zip code level population density, meaning population density influences the rate of cancer mortality within a zip code, but there may be other factors influencing the mortality rate as well

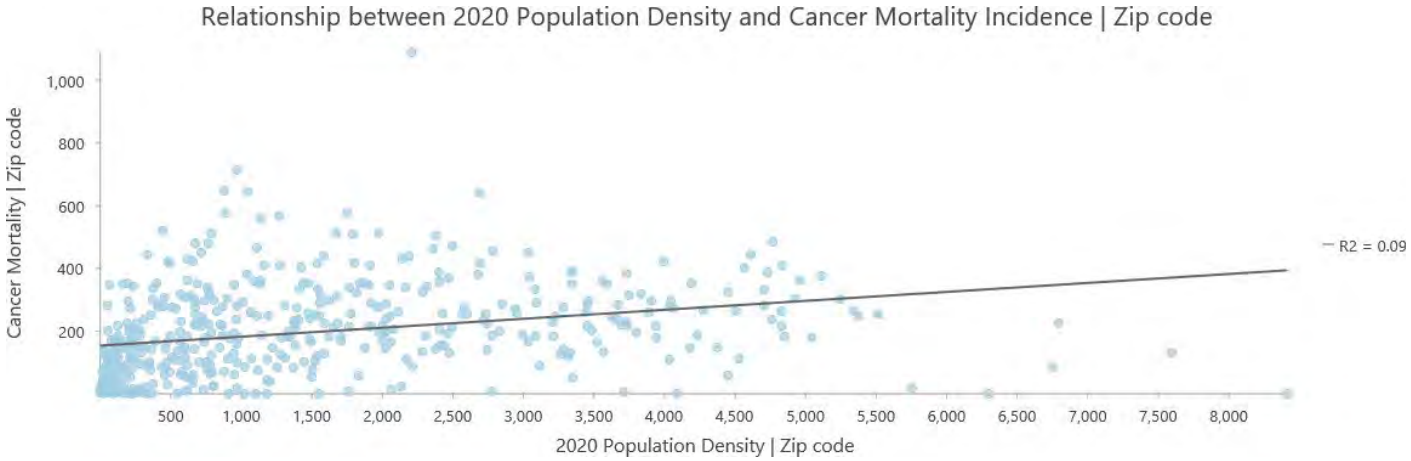


Figure 29: Relationship between Population Density and Cancer Mortality Incidence

1. U.S. Census 2020 PL94.171 Redistricting Estimates.
2. CDC Wonder, Cancer Mortality Statistics 2014 – 2018, Ages ≥ 20.

3.4 Common Cancers: Top Incidence and Mortality by Site

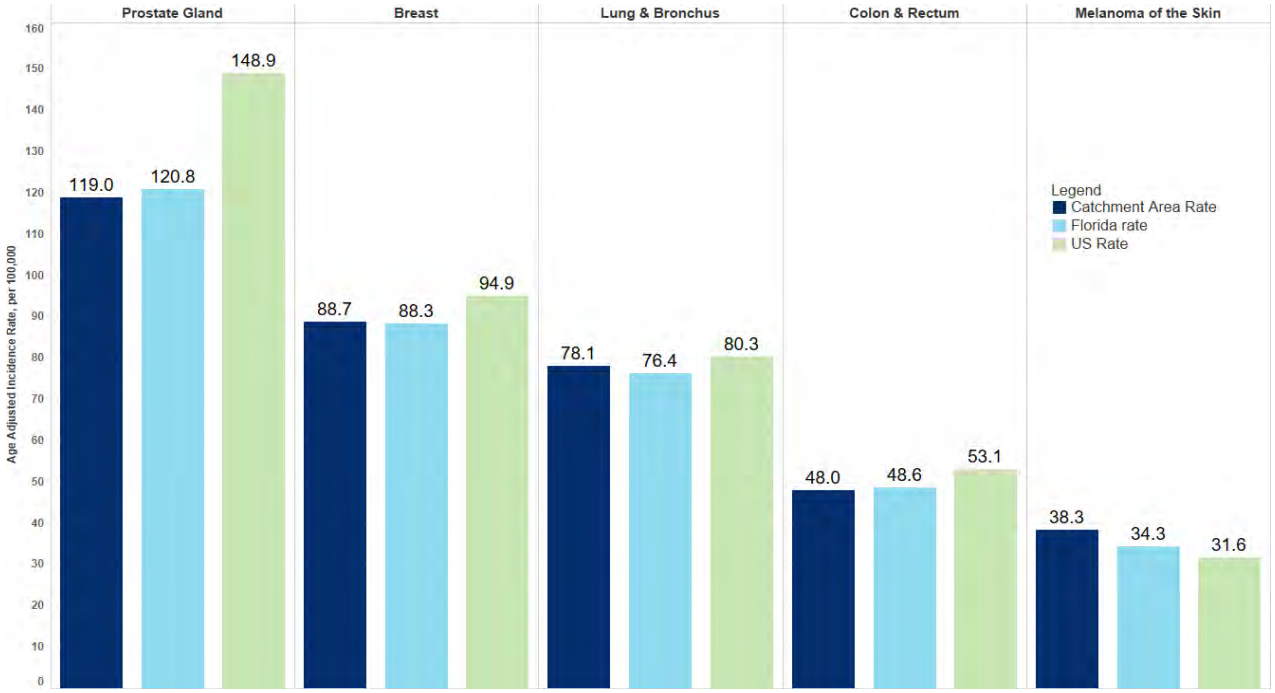


Figure 30: Top 5 Age-Adjusted Incident Cancers for Total Catchment Area Population

***Bolded text** shows which cancer site rates are 10% higher for the Catchment Area compared to Florida **or** the U.S.

	Incidence Rate			Mortality Rate		
FCDS Site Group	**Catchment Area**	**Florida**	**U.S.**	**Catchment Area**	**Florida**	**U.S.**
Breast	88.7	88.3	94.9	13.8	13.9	15.6
Cervix Uteri	**12.5**	12.5	10.8	**3.5**	3.5	3.1
Colon & Rectum	48.0	48.6	53.1	17.1	17.7	19.2
Corpus Uteri & Uterus, NOS	36.3	35.2	38.3	5.8	6.2	6.9
Kidney & Renal Pelvis	20.5	20.2	23.7	4.3	4.3	5.1
Leukemia	19.0	18.6	18	7.7	7.8	8.6
Lung & Bronchus	78.1	76.4	80.3	50.3	48.7	54
Melanoma of the Skin	**38.3**	34.3	31.6	3.3	3.0	3.2
Non-Hodgkin Lymphoma	27.1	26.9	26.3	6.4	6.6	7.5
Oral Cavity and Pharynx	**19.0**	18.4	16.6	3.8	3.6	3.5
Ovary	15.1	14.6	14.8	8.3	8.3	9.4
Pancreas	17.3	17.7	18.3	13.8	14.2	15.5
Prostate Gland	119.0	120.8	148.9	20.2	22.2	26.7
Thyroid Gland	15.1	16.9	19.3	**0.8**	0.6	0.7
Urinary Bladder	25.7	24.8	27.6	5.7	5.8	6
All Sites Combined	593.3	583.2	649.8	200.0	201.1	217.2

Table 4: Top 15 Age-Adjusted Incident Cancers in Catchment Area with Corresponding Mortality Rates

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20. (Urinary Bladder Consists of Invasive and InSitu Cases)
2. Florida Bureau of Vital Statistics, 2015 – 2019 Mortality Dataset.
3. CDC Wonder, Cancer Incidence and Mortality Statistics 2014 – 2018, Ages ≥ 20.

3.5 Black/AA Population: Top Incidence and Mortality by Site

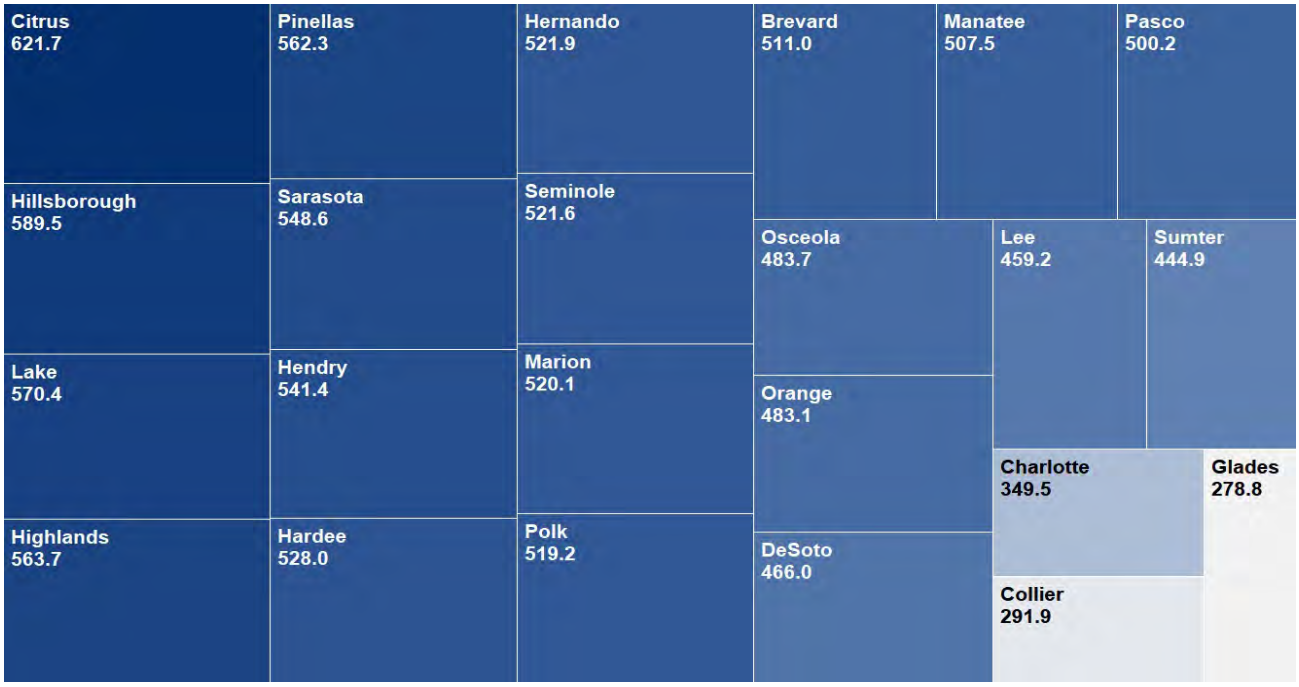


Figure 31: Overall Black/AA Age-Adjusted Incidence Rate per 100,000 per year for all Catchment Area Counties

*Bolded text shows which cancer site rates are 10% higher in the Catchment Area compared to the NHW population

	Incidence Rate		Mortality Rate	
FCDS Site Group	**Black/AA**	**White**	**Black/AA**	**White**
Breast	78.6	92.1	**18.7**	13.8
Cervix Uteri	**14.6**	13.0	**5.2**	3.5
Colon & Rectum	49.4	48.8	**21.2**	17.4
Corpus Uteri & Uterus, NOS	39.8	36.7	**11.4**	5.3
Kidney & Renal Pelvis	18.6	21.4	3.5	4.4
Leukemia	13.2	19.6	7.2	7.8
Lung & Bronchus	60.3	84.8	40.6	55.3
Multiple Myeloma	**18.6**	8.8	**8.2**	3.5
Non-Hodgkin Lymphoma	18.9	27.4	5.0	6.5
Oral Cavity and Pharynx	10.5	21.4	3.0	4.3
Liver, Intrahepatic Bile Duct	11.4	10.5	**10.3**	8.1
Pancreas	**20.4**	17.2	**16.2**	13.8
Prostate Gland	**172.5**	109.9	**42.0**	18.7
Stomach	**11.8**	6.3	**6.4**	2.5
Urinary Bladder	12.6	14.8	4.1	6.2
All Invasive Sites Combined	515.7	619.4	208.8	207.9

Table 5: Top 15 Incidence Rates and Corresponding Mortality Rates for the Black Population

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20. (Urinary Bladder Consists of Invasive and InSitu Cases)
2. Florida Bureau of Vital Statistics, 2015 – 2019 Mortality Dataset.
3. CDC Wonder, Cancer Incidence and Mortality Statistics 2014 – 2018, Ages ≥ 20.

3.5 Black/AA Population: Top Incidence and Mortality by Site

Top 5 Cancers in the Black/AA Community
Catchment Area, Incidence Rate per 100,000 Persons/Year

- Prostate Gland: 172.5
- Breast: 78.6
- Lung & Bronchus: 60.3
- Colon & Rectum: 49.4
- Corpus Uteri, Uterus NOS: 39.8

The Black/AA community comprised ***7.3%*** of all cancer cases in the Catchment Area from 2015 – 2019.

In the Catchment Area from 2015 – 2019, the *Top Five Cancer Sites* in the Black/AA Community:

- Account for over ***12,500*** cancer cases
- ***56%*** of all cases in the Black/AA Community

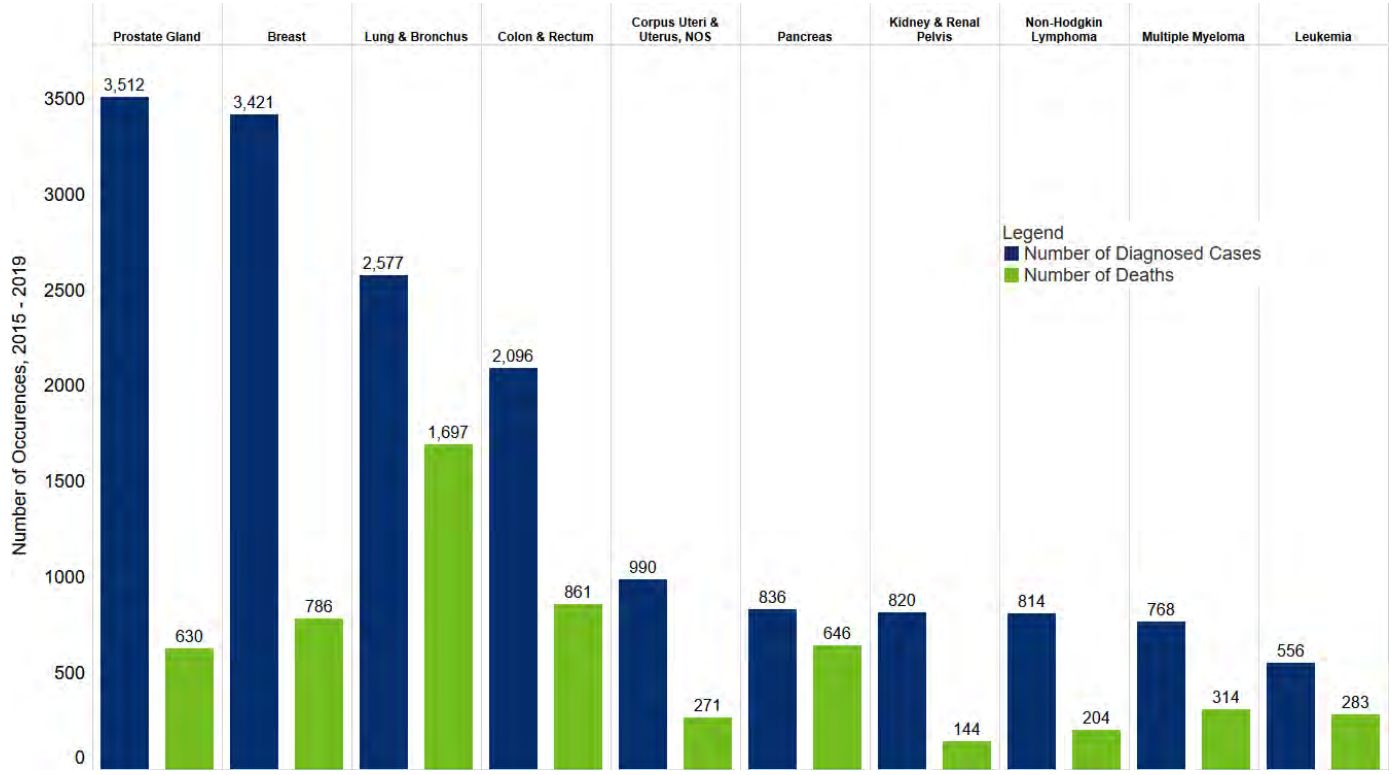


Figure 32: Top 10 Incidence Counts vs. Death Counts for the Catchment Area Black/AA Population

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20. (Urinary Bladder Consists of Invasive and InSitu Cases)
2. Florida Bureau of Vital Statistics, 2015 – 2019 Mortality Dataset.

3.6 Hispanic Population: Top Incidence and Mortality by Site

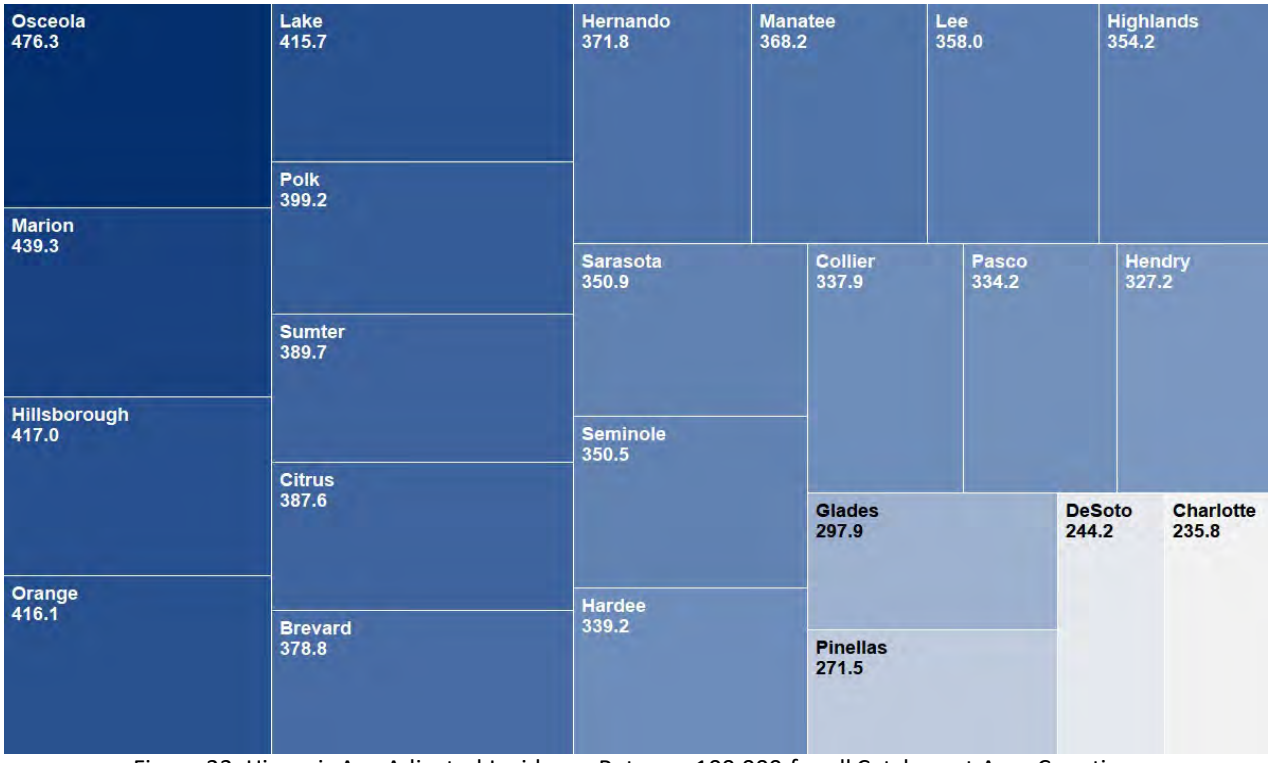


Figure 33: Hispanic Age-Adjusted Incidence Rate per 100,000 for all Catchment Area Counties

*__Bolded text__ shows which cancer site rates are 10% higher in the Catchment Area compared to the NHW population

	Incidence Rate		Mortality Rate	
FCDS Site Group	**Hispanic**	**White**	**Hispanic**	**White**
Breast	61.9	92.1	10.8	13.8
Cervix Uteri	10.8	13.0	3.7	3.5
Colon & Rectum	37.5	48.8	14.5	17.4
Corpus Uteri & Uterus, NOS	30.5	36.7	5.6	5.3
Kidney & Renal Pelvis	16.2	21.4	3.8	4.4
Leukemia	13.0	19.6	6.3	7.8
Liver, Intrahepatic Bile Duct	**13.1**	10.5	**10.5**	8.1
Lung & Bronchus	37.6	84.8	25.2	55.3
Non-Hodgkin Lymphoma	20.8	27.4	6.1	6.5
Oral Cavity and Pharynx	9.4	21.4	2.1	4.3
Ovary	11.0	16.0	6.4	8.8
Pancreas	14.1	17.2	12.4	13.8
Prostate Gland	91.2	109.9	**22.8**	18.7
Thyroid Gland	12.5	16.7	**0.9**	0.8
Urinary Bladder	12.8	14.8	3.2	6.2
All Invasive Sites Combined	390.6	619.4	151.9	207.9

Table 6: Top 15 Incidence Rates and Corresponding Mortality Rates for the Hispanic Population

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20. (Urinary Bladder Consists of Invasive and InSitu Cases)
2. Florida Bureau of Vital Statistics, 2015 – 2019 Mortality Dataset.
3. CDC Wonder, Cancer Incidence and Mortality Statistics 2014 – 2018, Ages ≥ 20.

3.6 Hispanic Population: Top Incidence and Mortality by Site

Top 5 Cancers in the Hispanic Community
Catchment Area, Incidence Rate per 100,000 Persons/Year

- Prostate Gland: 91.2
- Breast: 61.9
- Lung & Bronchus: 37.6
- Colon & Rectum: 37.5
- Corpus Uteri, Uterus NOS: 30.5

The Catchment Area population of Hispanic origin accounted for ***24,311*** cancer cases from 2015 – 2019.

Nearly ***8%*** of all cancer cases in the Catchment Area were diagnosed in someone of Hispanic origin.

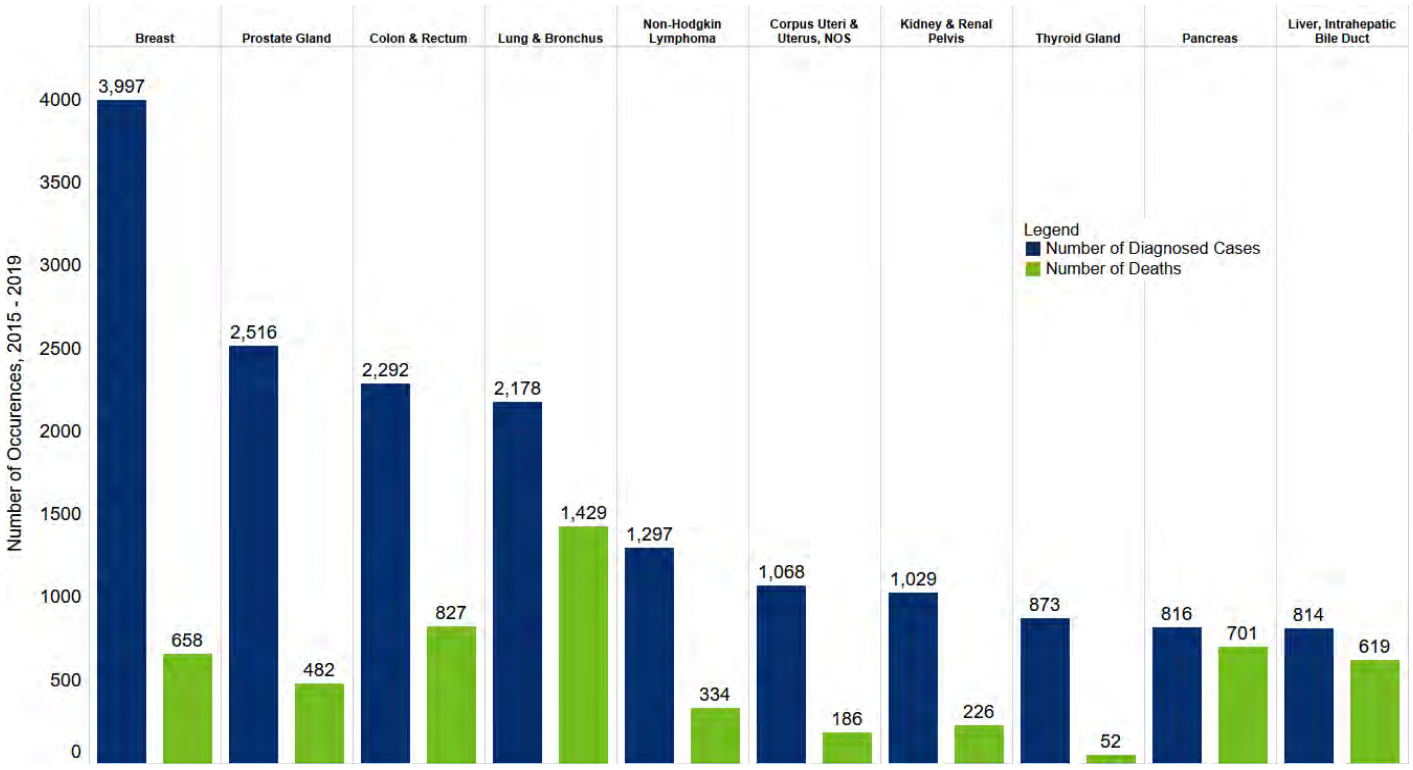


Figure 34: Top 10 Incidence Counts vs. Death Counts for the Catchment Area Hispanic Population

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20. (Urinary Bladder Consists of Invasive and InSitu Cases)
2. Florida Bureau of Vital Statistics, 2015 – 2019 Mortality Dataset.

3.7 Elderly (65+) Population: Top Incidence and Mortality by Site

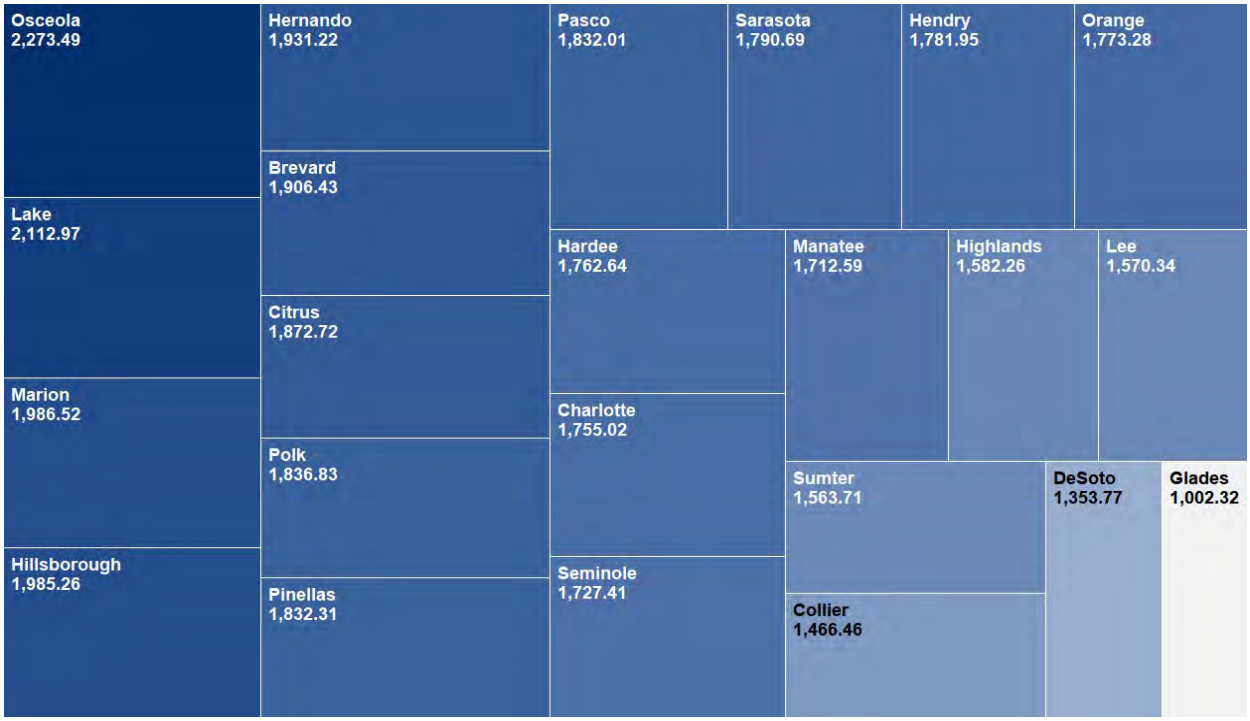


Figure 35: Elderly (65+) Age-Adjusted Incidence Rate per 100,000 for all Catchment Area Counties

*__Bolded text__ shows which cancer site rates are 10% higher for the Catchment Area compared to the Florida **or** the U.S.

	Incidence Rate			Mortality Rate		
FCDS Site Group	**Catchment Area**	**Florida**	**U.S.**	**Catchment Area**	**Florida**	**U.S.**
Breast	212.7	213.7	240.2	41.9	43.5	53.6
Colon & Rectum	140.9	146.4	169.0	61.0	64.1	74.4
Corpus Uteri & Uterus, NOS	83.9	85.4	93.5	20.9	22.6	26.3
Kidney & Renal Pelvis	57.2	57.2	67.1	16.7	17.0	20.6
Leukemia	63.5	61.9	62.4	32.0	33.0	37.6
Liver, Intrahepatic Bile Duct	33.0	33.5	30.2	28.9	30.3	33.4
Lung & Bronchus	302.1	301.0	327.1	203.9	201.2	232.1
Melanoma of the Skin	**116.3**	106.9	90.8	11.4	10.9	11.8
Multiple Myeloma	35.9	35.7	36.2	16.0	17.4	20.8
Non-Hodgkin Lymphoma	86.6	85.4	88.6	27.8	28.4	33.9
Oral Cavity & Pharynx	45.8	46.2	43.9	12.3	11.9	12.4
Ovary	36.8	36.1	37.2	28.7	29.2	34.6
Pancreas	65.3	67.9	71.4	56.3	58.7	65.3
Prostate Gland	432.5	441.1	544.7	103.4	113.3	139.1
Urinary Bladder	109.6	107.5	119.3	27.1	27.9	29.6
All Invasive Sites Combined	1800.3	1793.2	1975.9	773.00	790.0	888.9

Table 7: Top 15 Incidence Rates and Corresponding Mortality Rates for the Elderly Population

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 65. (Urinary Bladder Consists of Invasive and InSitu Cases)
2. Florida Bureau of Vital Statistics, 2015 – 2019 Mortality Dataset.
3. CDC Wonder, Cancer Incidence and Mortality Statistics 2014 – 2018, Ages ≥ 20.

3.7 Elderly (65+) Population: Top Incidence and Mortality by Site

Top 5 Cancers in the Elderly (65+) Population

Catchment Area, Incidence Rate per 100,000 Persons/Year

- Prostate Gland: 432.5
- Lung & Bronchus: 302.1
- Breast: 212.7
- Colon & Rectum: 140.9
- Melanoma of the Skin: 116.3

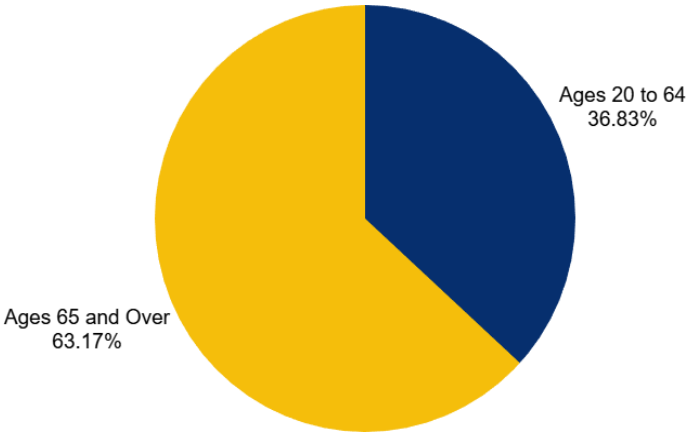


Figure 36: Percent of Elderly Cancer Contribution to the Catchment Area, 2015 – 2019 (n = 308,102)

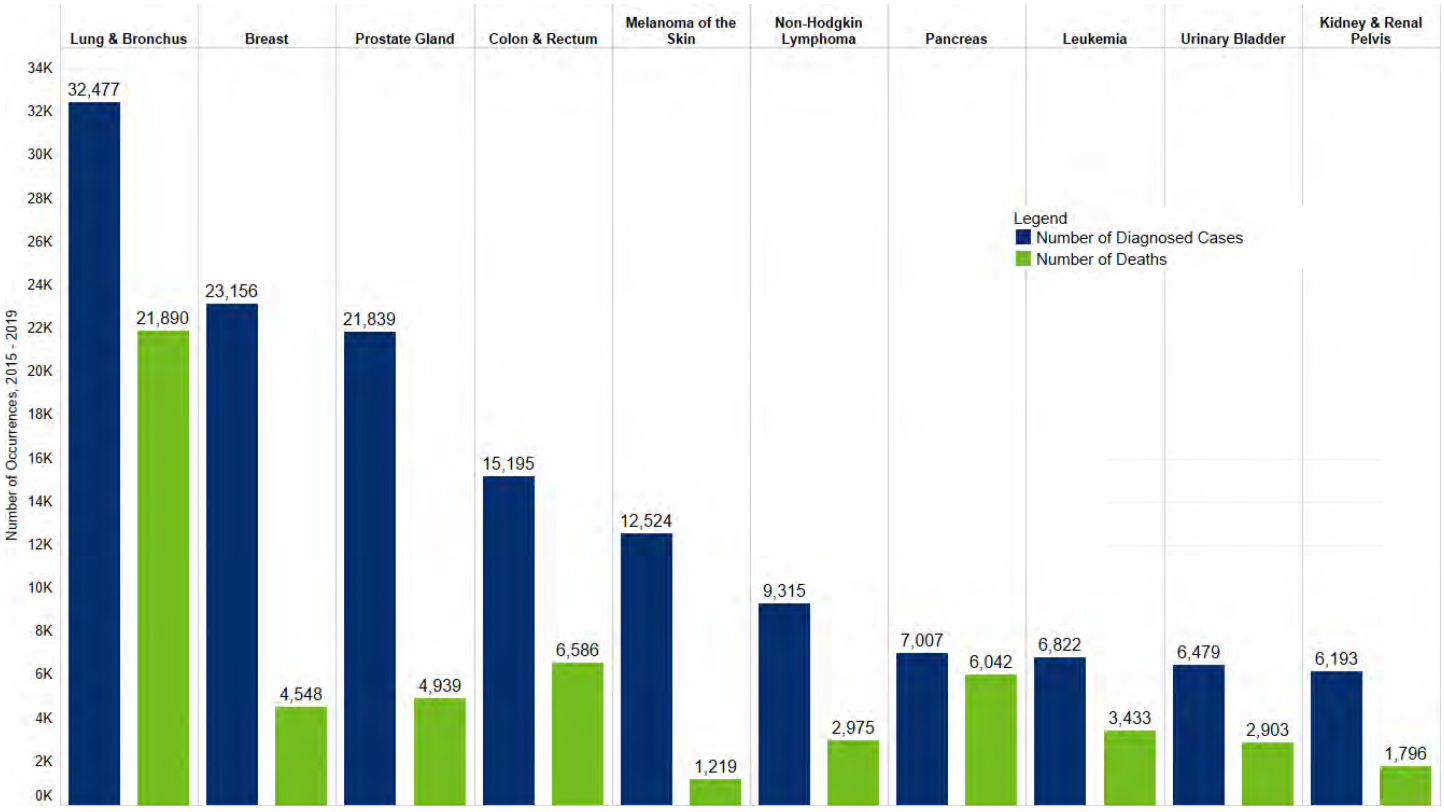


Figure 37: Top 10 Incidence Counts vs. Death Counts for the Catchment Area Elderly Population

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Ages ≥ 65. (Urinary Bladder Consists of Invasive and InSitu Cases)
2. Florida Bureau of Vital Statistics, 2015 – 2019 Mortality Dataset.

3.8 Female Population: Top Incidence and Mortality by Site

Figure 38: Female Age-Adjusted Incidence Rate per 100,000 for all Catchment Area Counties

*__Bolded text__ shows which cancer site rates are 10% higher for the Catchment Area compared to the Florida **or** the U.S.

	Incidence Rate			Mortality Rate		
FCDS Site Group	**Catchment Area**	**Florida**	**USA**	**Catchment Area**	**Florida**	**USA**
Breast (Female Only)	167.1	165.9	177.8	25.6	25.6	28.2
Cervix Uteri	**12.5**	12.5	10.8	3.5	3.5	3.1
Colon & Rectum	42.3	42.7	46.6	14.4	14.9	16.1
Corpus Uteri & Uterus, NOS	36.3	35.2	38.3	5.8	6.2	6.9
Kidney & Renal Pelvis	14.1	13.8	16.3	2.5	2.4	3.2
Leukemia	15.0	14.7	13.8	5.6	5.8	6.4
Lung & Bronchus	71.2	68.1	71.2	42.5	40.4	44.9
Melanoma of the Skin	**28.6**	25.1	25.1	**2.0**	1.8	2.0
Multiple Myeloma	8.3	8.3	7.9	3.1	3.2	3.6
Non-Hodgkin Lymphoma	23.2	22.7	21.9	3.0	3.2	3.6
Oral Cavity & Pharynx	9.4	9.1	9.0	4.9	5.1	5.8
Ovary	15.1	14.6	14.8	**2.1**	1.8	1.9
Pancreas	15.0	14.7	16.1	8.3	8.3	9.4
Thyroid Gland	21.9	24.9	28.3	0.7	0.8	0.7
Urinary Bladder	11.1	10.7	11.9	2.8	2.9	3.0
All Invasive Sites Combined	572.5	560.9	585.4	170.7	171.8	186.5

Table 8: Top 15 Incidence Rates and Corresponding Mortality Rates in the Female Population

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20. (Urinary Bladder Consists of Invasive and InSitu Cases)
2. Florida Bureau of Vital Statistics, 2015 – 2019 Mortality Dataset.
3. CDC Wonder, Cancer Incidence and Mortality Statistics 2014 – 2018, Ages ≥ 20.

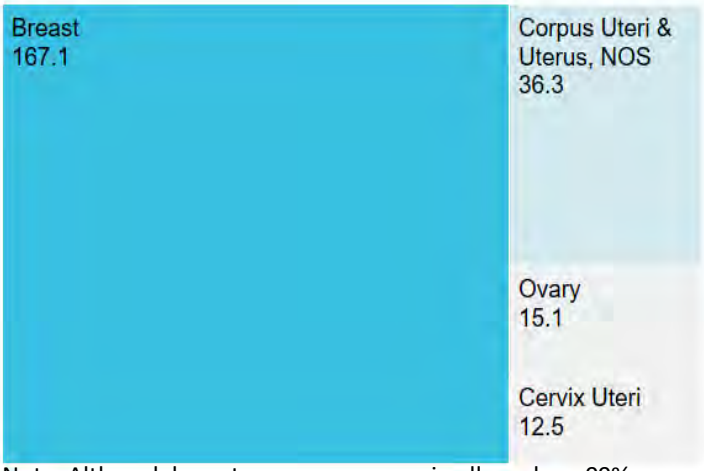
3.8 Female Population: Top Incidence and Mortality by Site

Top 5 Cancers in the Female Population

Catchment Area, Incidence Rate per 100,000 Persons/Year

- Breast: 167.1
- Lung & Bronchus: 71.1
- Colon & Rectum: 42.3
- Corpus Uteri & Uteri, NOS: 36.3
- Melanoma of the Skin: 28.6

Figure 39: Female-Specific Cancer Incidence in the Catchment Area



Note: Although breast cancer can occur in all genders, 99% of breast cancer diagnoses in the Catchment Area occur among females

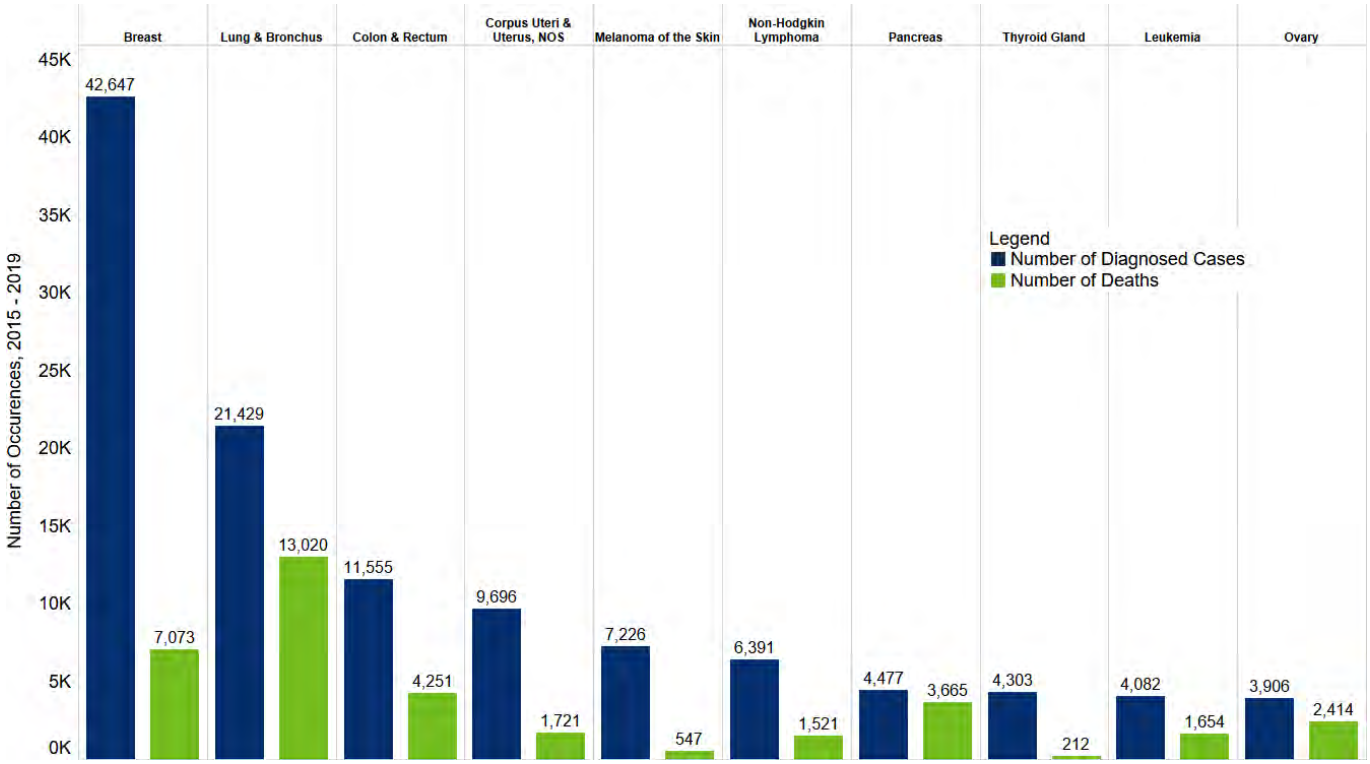


Figure 40: Top 10 Incidence Counts vs. Death Counts for the Catchment Area Female Population

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20.
2. Florida Bureau of Vital Statistics, 2015 – 2019 Mortality Dataset.

3.9 Rural Population: Top Incidence and Mortality by Site

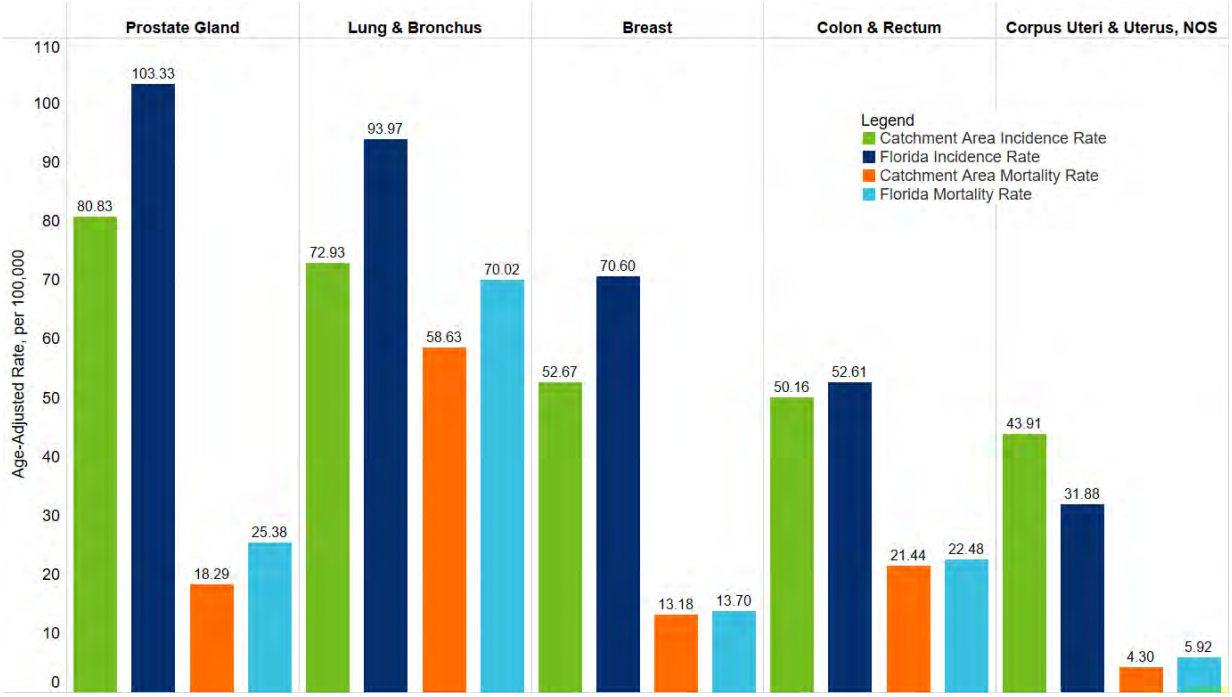


Figure 41: Top 5 Incidence Rates and Corresponding Mortality Rates in the Rural Population

*__Bolded text__ shows which cancer site rates are 10% higher for the Catchment Area compared to Florida

	Incidence Rate		Mortality Rate	
FCDS Site Group	**Catchment Area**	**Florida**	**Catchment Area**	**Florida**
Breast	52.7	70.6	13.2	13.7
Cervix Uteri	10.9	13.2	**5.1**	4.6
Colon & Rectum	50.2	52.6	21.4	22.5
Corpus Uteri & Uterus, NOS	**43.9**	31.9	4.3	5.9
Kidney & Renal Pelvis	17.9	19.6	4.0	5.2
Leukemia	11.9	17.1	6.0	8.6
Lung & Bronchus	72.9	94.0	58.6	70.0
Melanoma of the Skin	27.9	27.3	2.8	4.2
Non-Hodgkin Lymphoma	18.0	20.3	5.1	6.4
Oral Cavity & Pharynx	19.3	23.1	3.7	5.9
Ovary	13.8	13.7	6.5	8.2
Pancreas	13.5	17.6	10.6	15.5
Prostate Gland	80.8	103.3	18.3	25.4
Thyroid Gland	11.7	11.6	5.9	6.5
Urinary Bladder	10.6	12.5	4.3	6.7
All Invasive Sites Combined	486.4	559.2	173.3	210.3

Table 9: Top 15 Incidence Rates and Corresponding Mortality Rates in the Rural Population

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20. (Urinary Bladder Consists of Invasive and InSitu Cases)
2. Florida Bureau of Vital Statistics, 2015 – 2019 Mortality Dataset.

3.9 Rural Population: Top Incidence and Mortality by Site

Top 5 Cancers in the Rural Population

Catchment Area, Incidence Rate per 100,000 Persons/Year

- Prostate Gland: 80.8
- Lung & Bronchus: 72.9
- Breast: 52.7
- Colon & Rectum: 50.2
- Corpus Uteri & Uterus, NOS: 43.9

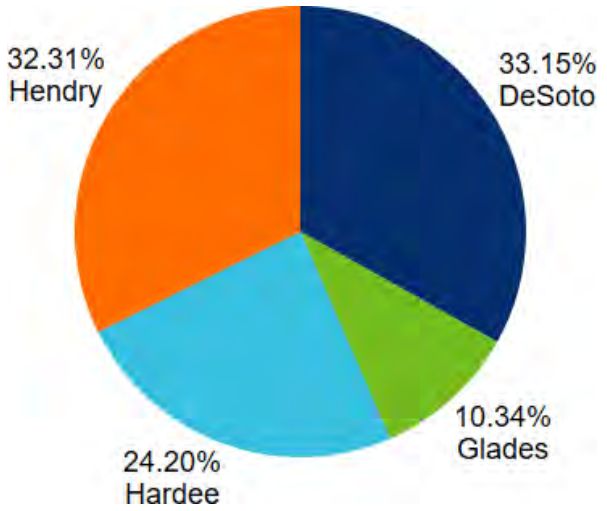


Figure 42: Percentage of Total Cancer Cases in Rural Counties of the Catchment Area (n = 2,612).

Note: Rural county cancer cases make up 0.85% of all Catchment Area cancer cases

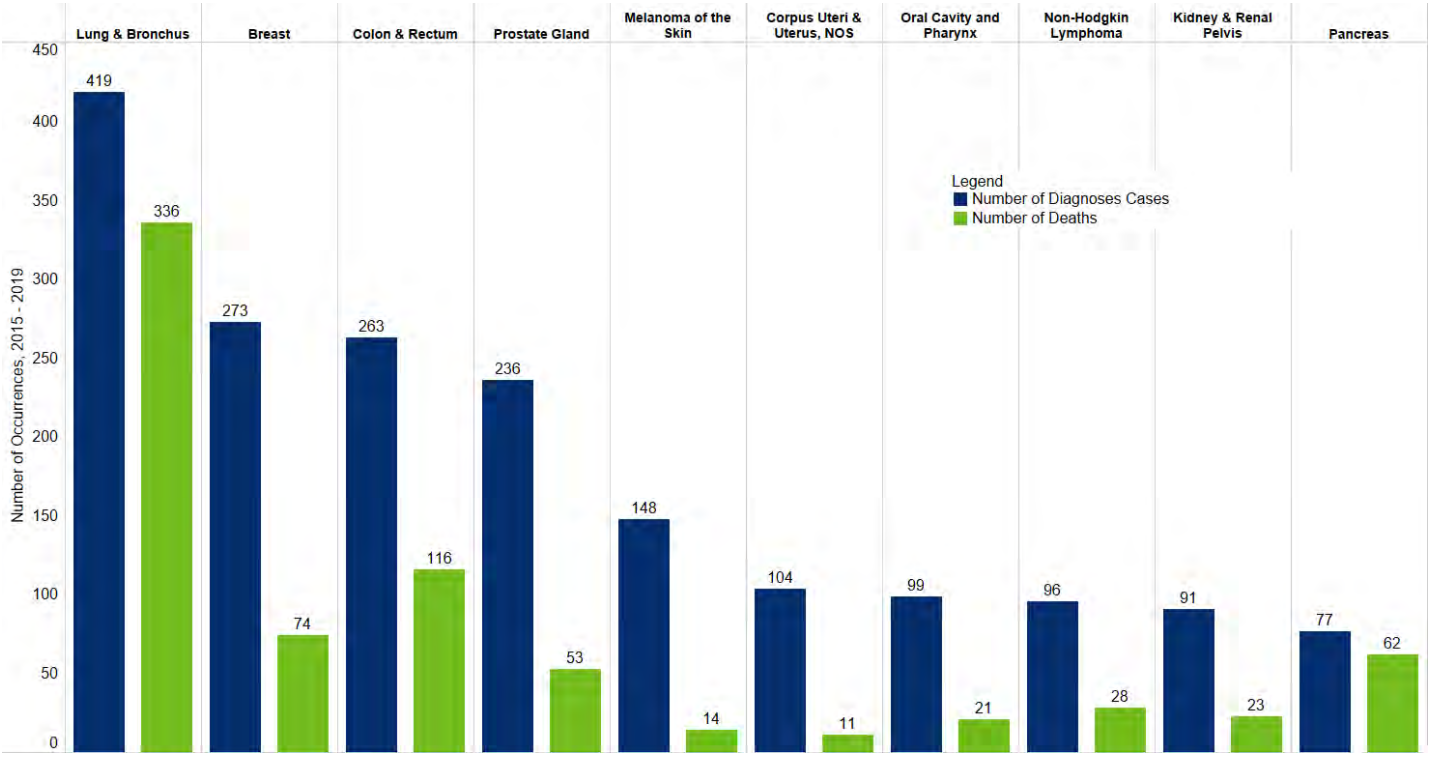


Figure 43: Top 10 Incidence Counts vs. Death Counts for the Catchment Area Rural Population

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20. (Urinary Bladder Consists of Invasive and InSitu Cases)
2. Florida Bureau of Vital Statistics, 2015 – 2019 Mortality Dataset.

3.10 Cancer Incidence Disparities Among the Catchment Area Population

Chart Explanation and Findings

- The figure below shows the respective age-adjusted incidence rate, from 2015 – 2019, for the top 15 cancer sites for the Catchment Area. Each cancer site is broken down by race and ethnicity to show similarities/difference between the rates for each group.
- Disparities include prostate cancer incidence among Black/AA men compared to White men.
- The Black/AA population has the highest incidence rates of prostate, colon & rectum, corpus uteri & uterus NOS, cervix uteri, and pancreas cancer.

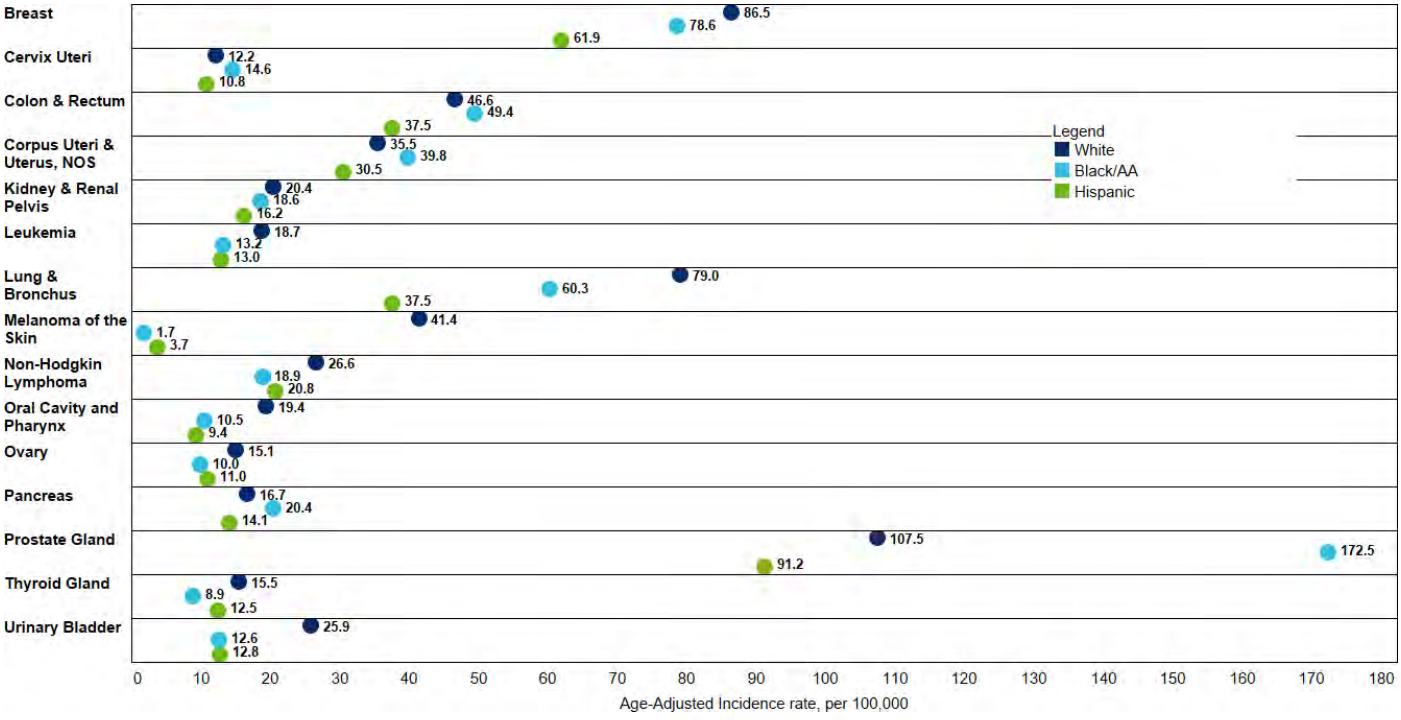


Figure 44: Top 15 Catchment Area Cancers and Incidence Rates by Race/Ethnicity

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20. (Urinary Bladder Consists of Invasive and InSitu Cases)

3.11 Cancer Mortality Disparities Among the Catchment Area Population

Chart Explanation and Findings

- The figure below shows the respective age-adjusted mortality rate, from 2015 – 2019, for the top 15 cancer mortality sites of the Catchment Area. Each cancer site is broken down by race and ethnicity to show similarities/differences between the rates for each group.
- Disparities include prostate, breast, colon & rectum cancers among the Black/AA population.
- Although the White population has a higher incidence, the mortality rate for breast cancer is higher in the Black/AA populations.

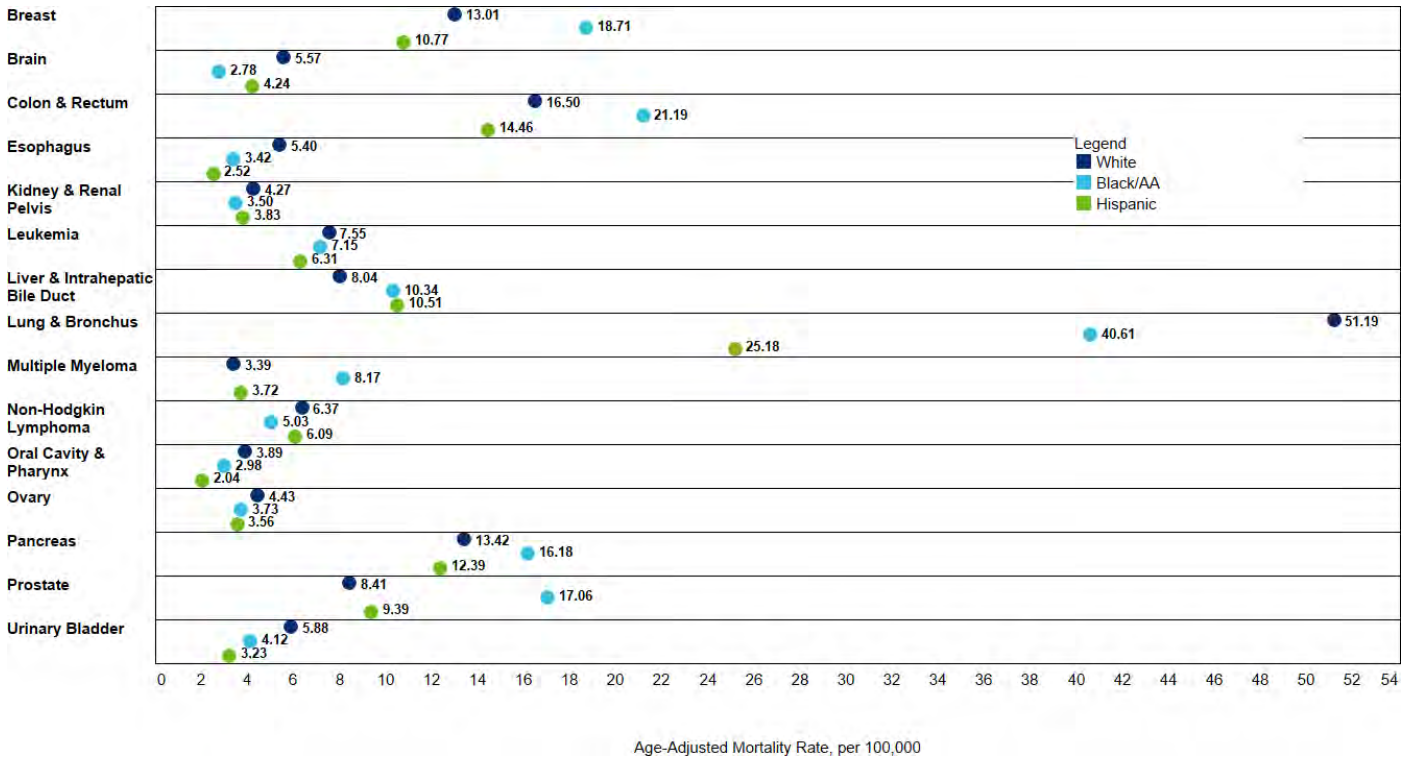


Figure 45: Top 15 Catchment Area Mortality Cancers by Race/Ethnicity

1. Florida Bureau of Vital Statistics, 2015 – 2019 Mortality Dataset.

3.12 Prostate Cancer Disparities Among the Catchment Area Population

Prostate Cancer Disparities in the Catchment Area Population

- The graph below shows the county differences in prostate cancer incidence rates between Black/AA and White communities.
- *Twenty-one* counties in the Catchment Area have a higher prostate cancer incidence rate for Black/AA men compared to White men.
- *Six* of those 21 counties have a higher overall Black/AA population than the Catchment Area threshold (12.1%), these counties include: Orange, Hillsborough, Polk, Glades, Marion, and Desoto.

* Denotes counties with a higher percent Black/AA population than the Catchment Area threshold (12.1%).

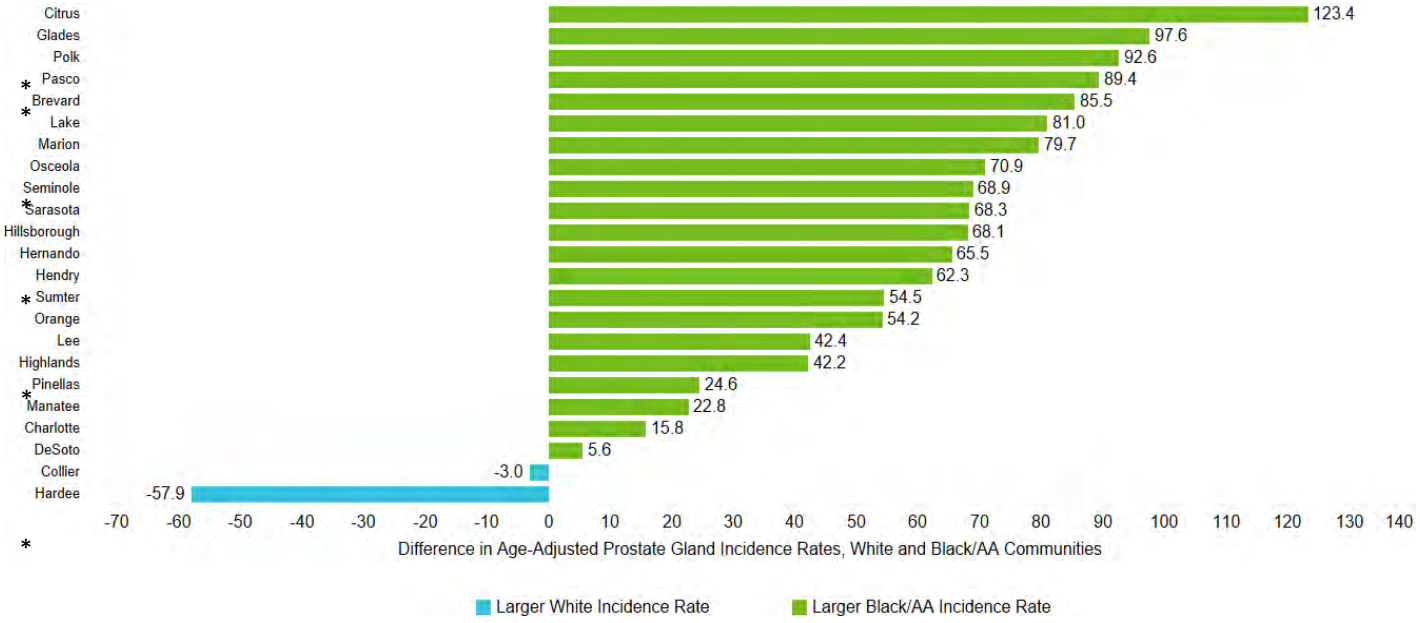


Figure 46: Difference in Prostate Cancer Incidence Between White and Black/AA Communities

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20. (Urinary Bladder Consists of Invasive and InSitu Cases)
2. CDC Wonder, Cancer Incidence and Mortality Statistics 2014 – 2018, Ages ≥ 20.

3.13 Lung Cancer Disparities Among the Catchment Area Population

Lung Cancer Disparities in the Catchment Area Population

- The graph below shows the county differences in Lung cancer incidence rates between Black/AA and White communities.
- *Twenty* counties in the Catchment Area have the highest lung cancer incidence rates in White communities.

* Denotes counties with a lower White population percentage than the Catchment Area threshold (75.7%).

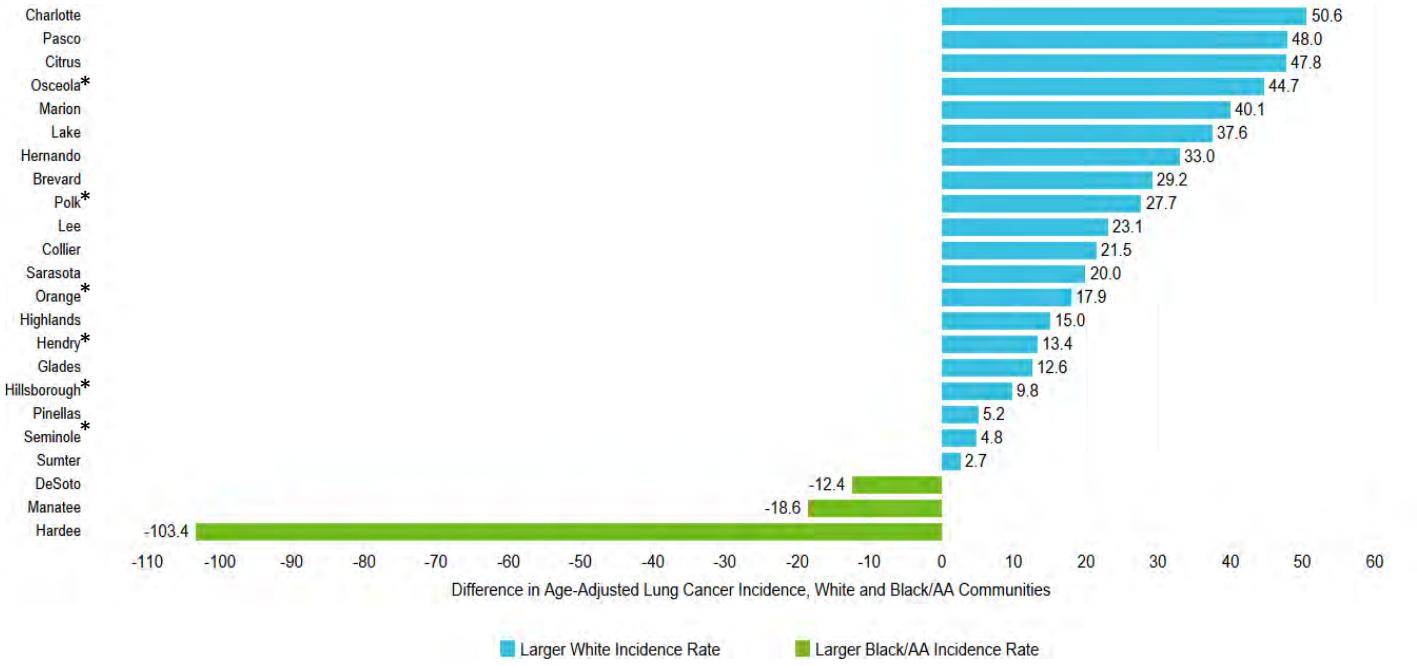


Figure 47: Difference in Lung Cancer Incidence Between White and Black/AA Communities

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 20. (Urinary Bladder Consists of Invasive and InSitu Cases)
2. CDC Wonder, Cancer Incidence and Mortality Statistics 2014 – 2018, Ages ≥ 20.

4 Catchment Area Needs and Priorities

Beth-El Health Fair, 2022, Wimauma

Ladies Night, 2021 (virtual event): Watch parties in Lutz, Riverview, Brandon

La Ciudad se Viste de Rosa / The City Dresses in Pink, 2022, Tampa

HPV Summit, 2020, Tampa

4.1 2022 Community Health Needs Assessment (CHNA) Process and Priorities

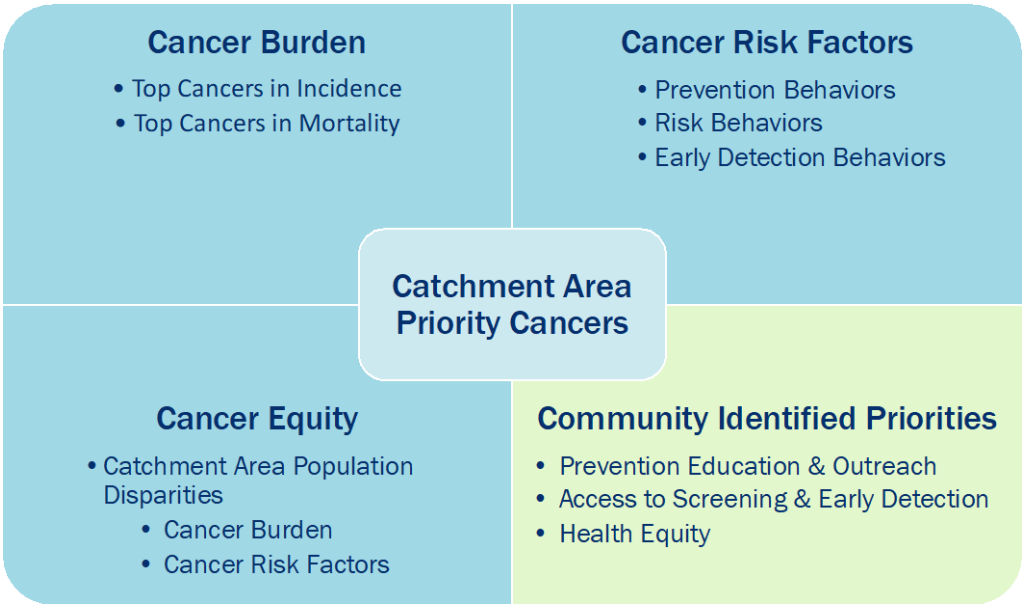
- Moffitt conducts a CHNA to identify health needs specific to Moffitt's 23-county Catchment Area
- The 2022 CHNA included analysis of:
  - community surveys (n = 1,864)
  - interviews with 64 key community stakeholders
  - existing data on population, cancer burden, and risk factors
- Health needs were reviewed and ranked by importance and feasibility by Moffitt's Community Advisory Boards: Patient and Family Advisory Council (PFAC) and Tampa Bay Community Cancer Network (TBCCN)
- 3 prioritized health needs for the Cancer Center over the next three years

(1) Prevention, Education, and Outreach

(2) Access to Screening and Early Detection

(3) Health Equity

- Community priorities are the cornerstone for determining Catchment Area priority cancers.



1. Florida Cancer Data System, 2015-2019.
2. 2022 Community Health Needs Assessment, Moffitt Cancer Center: https://moffitt.org/publications/community-benefit/.
3. 2023-2025 Implementation Strategy, Moffitt Cancer Center: https://moffitt.org/publications/community-benefit/.

4.2 Catchment Area (CA) Priority Cancers: Cancers with Greatest Impact on Catchment Area Population

Prostate

- CA Burden: leading cancer incidence, 2nd leading cause of mortality in men (p. 38)
- CA Disparity: Higher* incidence and mortality (p. 39) in Black men (vs. NHW men, pg. 49, pg. 50)
- Screening: PSA testing (p. 29), genetic testing

Breast

- CA Burden: leading cancer incidence, 2nd leading cause of cancer mortality in women (p. 45)
- CA Disparity: higher* mortality in Black women (vs. NHW women, p. 50)
- Screening: mammography (p. 29), genetic testing
- Prevention: obesity (p. 17), physical activity (p. 18), alcohol (p.19)

Lung

- CA Burden: 3rd leading cancer incidence, leading cause of mortality (p. 38)
- Screening: low-dose CT screening
- Prevention: smoking (p. 20)

Colorectal (CRC)

- CA Burden: 4th leading cancer incidence, 3rd leading cause of mortality (p. 38)
- CA Disparity: higher* incidence (p.49) and mortality (p. 50) in Black community (vs. NHW)
- Screening: genetic testing, FIT and stool-based DNA testing, colonoscopy (p. 29)
- Prevention: obesity (p. 17), physical activity (p. 18), alcohol (p. 19), smoking (p. 20)

Melanoma

- CA Burden: 5th leading cancer incidence, 14th leading cause of mortality (p. 38)
- CA Disparity: higher* incidence in Catchment Area (vs. state and U.S., p. 38)
- Screening: skin self-exam, clinical skin exam
- Prevention: sun protection (p. 22)

HPV-Related Cancers: Cervix, Oral Cavity & Pharynx (aka Head & Neck)

- CA Burden: 2 of top 20 incident cancers (p. 38)
- CA Disparity: higher* incidence of cervix and head & neck cancers in Catchment Area (vs. U.S. p. 38), higher incidence & mortality of cervix cancer in Black women (vs. NHW women, p. 49)
- Screening: pap testing (cervix, p. 29), HPV DNA testing (cervix)
- Prevention: HPV vaccination (p. 23), smoking (p. 20), alcohol (head & neck, p. 19)

Higher* Incidence and/or Mortality in CA Black Population (vs. NHW)

- Incidence & Mortality: cervix, multiple myeloma, pancreas, prostate, stomach (vs. NHW, p. 39)
- Mortality: breast, colorectal, uterine, liver (vs. NHW, p. 39)
- Screening: genetic testing (pancreas, uterine), mammography (p. 29), PSA testing (p. 29), pap test (p. 29), stool-based test (p. 29), colonoscopy (p. 29)
- Prevention: smoking (CRC, lung, stomach, colorectal, liver, cervix, p. 20), obesity (uterine, MM, pancreas, stomach, liver, breast, colorectal, p. 17), physical activity (colorectal, stomach, breast, p. 18), alcohol (liver, breast, colorectal, p. 19)

Higher* Incidence and/or Mortality in CA Hispanic Population (vs. NHW)

- Incidence & Mortality: liver (p. 41)
- Mortality: prostate, thyroid (p. 41)
- Screening: PSA testing (p. 29), genetic testing (prostate, thyroid)
- Prevention: smoking (liver, p. 20), HCV screening & treatment, (liver, p. 26), alcohol (liver, p. 19)

*higher=≥10% higher than comparison group

Appendix

Contained in the Appendix

Glossary (A.1)	Glossary of terms used throughout the catchment area profile.
Data Table (A.2)	An example of a data table COEE can create that shows cancer burden by county, gender, and race/ethnicity. Data available for request.
Non-Traditional Data (A.3)	An example of data that healthcare research does not traditionally use to characterize a population. Examples on this page and the geographic comparisons give researchers and community members ideas for types of data they can use to inform their research and outreach initiatives. Data are available for request.
Geographic Comparisons (A.4)	This page shows an example of how COEE can generate data and infographics to compare data across different geographic regions. Data and infographics are available for request.
Other Data Available for Request (A.5)	List of types of data available for request from COEE, in addition to the data included in this profile.

A.1 Appendix: Glossary

Term	Definition
Alternative Tobacco Products	A product that does not consist of or contain tobacco, that provides nicotine into the body by means of chewing, absorbing, dissolving, inhaling, etc. Common products include electronic cigarettes and snus.
Catchment Area	The community served by Moffitt Cancer Center where the majority of our patients reside. This is the area Moffitt is responsible for assessing and responding to needs through research, outreach, education, and care. The Catchment Area includes 23 counties: Brevard, Charlotte, Citrus, Collier, DeSoto, Glades, Hardee, Hendry, Hernando, Highlands, Hillsborough, Lake, Lee, Manatee, Marion, Orange, Osceola, Pasco, Pinellas, Polk, Sarasota, Seminole, and Sumter.
Cancer Control Collaborative Region	Regional groups of cancer stakeholders who meet routinely to implement cancer control efforts to address the priority strategies of the state's cancer plan (Florida Department of Health, 2022).
Core Based Statistical Area (CBSA)	Collective term that refers to Micropolitan and Metropolitan Statistical Areas; defined in terms of whole counties or county equivalents, including the six New England states (U.S. Census, 2022).
[Cancer] Disparity	Adverse differences in cancer measures such as the number of new cases, the number of deaths, cancer–related health complications, survivorship, and quality of life after cancer treatment, screening rates, and stage at diagnosis that exist among certain population groups (NCI, 2015).
Federally Qualified Health Center (FQHC)	Safety net providers that deliver outpatient clinical services. FQHCs can include community health centers, migrant health centers, health care for the homeless, public housing primary care, programs and facilities operated by a tribal organization, and health center program "look-a-likes". FQHCs are paid based on the FQHC Prospective Payment System. For more information, visit: https://www.fqhc.org/what-is-an-fqhc.
FQHC "Look-a-Like"	An FQHC Look-Alike is an organization that meets all the eligibility requirements of an FQHC that receives a PHS Section 330 grant, but it does not receive grant funding. They do receive benefits such as reimbursement through PPS, or Alternative Payment Methodology, eligible for prescription and non-prescription medications, and automatic designation as a Health Professional Shortage Area (FQHC.org, 2022).
Geographically-referenced	Having a defined geographic scale, such as county, zip code, census track, or latitude/longitude. Can be represented as a point, line, or polygon.
[Cancer] Incidence Rate	The number of new cancers of a specific site/type occurring in a specified population during a year; usually expressed as number of cases per 100,000.
Metropolitan Statistical Areas	Have at least one urbanized area populated with 50,000 or more, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties (U.S. Census, 2022).
Micropolitan Statistical Area	Have at least one urban cluster populated with at least 10,000 but less than 50,000 people, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties (U.S. Census, 2022).
[Cancer] Mortality Rate	The number of deaths of a specific site/type occurring in a specified population during a year; usually expressed as number of cases per 100,000.
Non-traditional Data	Data used to describe a population that are outside of the typical metrics used in healthcare (age, sex/gender, race, ethnicity, language, and income). Examples include consumer spending on health insurance, internet connectivity, and sunscreen use.
[Cancer] Prevalence	The proportion of the population who have been diagnosed with a specific cancer in a given time period, regardless of when they first developed the cancer.
Rural	Rural populations include all people, housing, and territories that are not within an urban area. Urban areas consist of 50,000 people or more and urban clusters consist of 2,500 – 49,999 people. Rural (non-metropolitan counties with less than 50,000 people); USDA Rural-Urban Continuum Codes, 2020, https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/.

Data Source: Esri 2022; Consumer Expenditure Surveys (CEX), 2022, Bureau of Labor Statistics.

A.2 Example: Data Tables

	Colon & Rectum Incidence Rates per 100,000, Ages 45+					
	Male			Female		
	White	Black/AA	Hispanic	White	Black/AA	Hispanic
Brevard	98.6	93.8	89.9	78.0	77.3	59.5
Charlotte	92.5	94.3	16.6	70.3	79.0	6.1
Citrus	101.1	46.2	86.2	**87.1**	12.5	28.9
Collier	70.7	60.5	95.2	50.1	48.6	29.6
DeSoto	119.5	**146.3**	26.2	73.3	**91.2**	**147.9**
Glades	69.5	0.0	0.00	32.7	70.9	52.3
Hardee	119.3	40.8	**128.2**	**122.9**	51.2	**149.6**
Hendry	105.0	114.5	78.8	73.4	50.9	19.7
Hernando	**112.0**	63.2	97.3	73.7	83.0	43.7
Highlands	83.6	**150.0**	44.1	69.0	63.2	51.8
Hillsborough	118.0	**128.1**	97.5	**86.2**	**101.6**	60.5
Lake	110.5	84.5	74.4	**86.7**	87.9	55.9
Lee	85.0	75.1	73.8	62.9	65.8	38.1
Manatee	88.0	**128.6**	87.8	64.0	**113.1**	46.3
Marion	108.7	83.7	85.7	**86.1**	**94.1**	51.6
Orange	110.2	102.7	98.7	**85.3**	77.0	71.3
Osceola	**125.4**	104.3	85.8	**95.7**	**96.5**	**74.9**
Pasco	105.5	85.8	78.3	**84.0**	58.8	54.3
Pinellas	100.1	**131.0**	51.8	75.1	67.7	42.4
Polk	108.3	110.9	93.6	**85.7**	76.0	59.0
Sarasota	85.9	93.2	105.4	62.1	99.5	38.0
Seminole	94.1	124.2	79.6	70.2	81.7	53.1
Sumter	71.9	79.4	45.1	59.6	**91.9**	53.1
Florida	100.7	113.9	96.9	76.2	80.7	66.5
USA	112.0	134.8	107.0	84.2	98.2	74.1

Indicates 10% Above Florida Rate

Indicates 10% Above U.S. Rate

The above table shows the incidence rate, per 100,000, by Catchment Area county and sex for Colon & Rectum cancer among the White, Black/AA, and Hispanic populations who are 45 or older.

1. Florida Cancer Data System (FCDS) 2015 – 2019 Cancer Incidence Rates, Invasive Cases Only, Ages ≥ 45.
2. CDC Wonder, Cancer Incidence Statistics 2014 – 2018, Ages ≥ 20.

A.3

Example: Non-Traditional Data

ESRI (Environmental Systems Research Institute, Inc.):
A Global leader in Geographic Information System Software

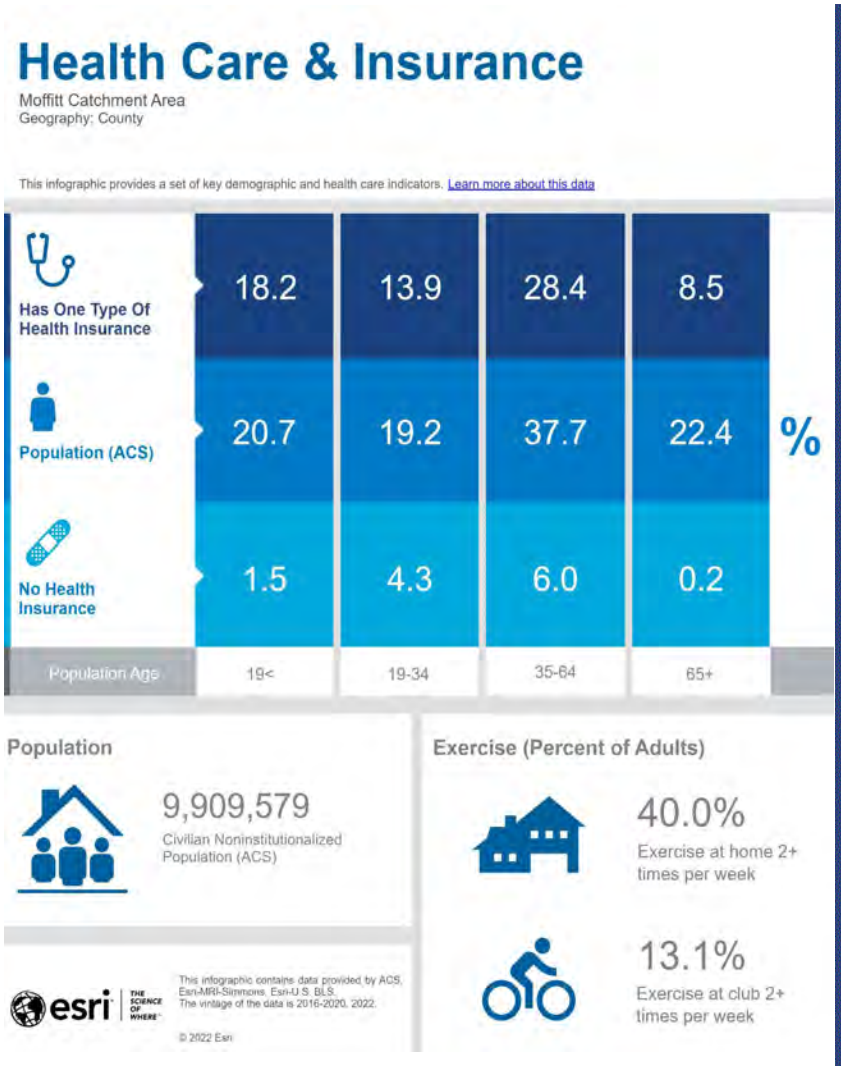
Consumer Spending Example: Health Care & Insurance

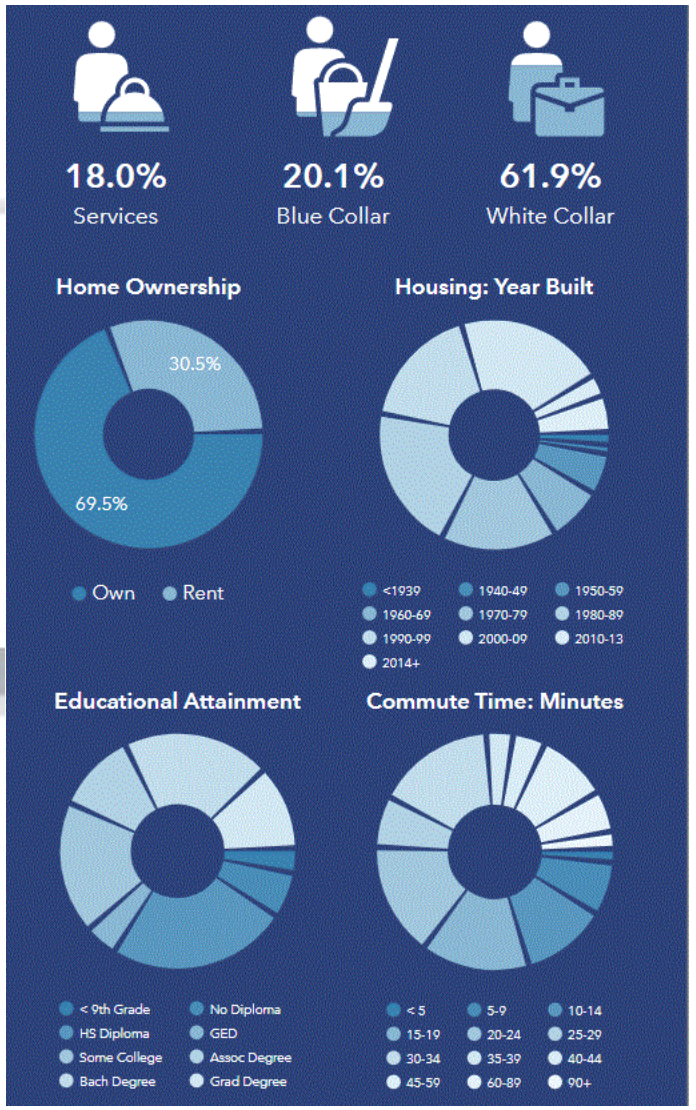
Used in market research to understand trends in spending on different products and services

Use custom geographies to observe local trends
- 1 mile from Moffitt Wesley Chapel
- Zip codes representing East Tampa
- Within 20 min driving distance from MCC

Current-year and five-year consumer spending forecast data available

Request pre-curated, interactive infographics, or tabular data in *pdf* or *excel* format





Data Source: ESRI 2022; Consumer Expenditure Surveys (CEX), 2022, Bureau of Labor Statistics.

A.4 Example: Geographic Comparisons

Using data sources from ESRI, U.S. Census, American Community Survey, Data Axle, SafeGraph, and Kalibrate:

Compare data trends between existing and custom geographies

Inform grant applications with trending current data and projections for the future

Identify populations within the Catchment Area that would most benefit from clinical trials

Request pre-curated, interactive infographics, or tabular data in *pdf* or *excel* format

Moffitt Catchment Area (**Benchmark**)	Hillsborough County	East Tampa (6 Zip Codes)
		
10,552,671 Population 4,264,626 Households 2.43 Avg Size Household	1,505,203 ↓ 9,047,468 Population 577,518 ↓ 3,687,108 Households 2.55 ↑ 0.12 Avg Size Household	243,779 ↓ 10,308,892 Population 94,976 ↓ 4,169,650 Households 2.48 ↑ 0.05 Avg Size Household
44.2 Median Age $65,144 Median Household Income $273,668 Median Home Value	37.6 ↓ 6.6 Median Age $67,624 ↑ $2,480 Median Household Income $280,477 ↑ $6,809 Median Home Value	33.8 ↓ 10.4 Median Age $44,258 ↓ $20,886 Median Household Income $222,796 ↓ $50,872 Median Home Value
96 Wealth Index 109 Housing Affordability 72 Diversity Index	93 ↓ 3 Wealth Index 109 ↑ 0 Housing Affordability 81 ↑ 9 Diversity Index	47 ↓ 49 Wealth Index 96 ↓ 13 Housing Affordability 84 ↑ 12 Diversity Index
AT RISK POPULATION 1,040,080 Households With Disability 2,528,456 Population 65+ 203,339 Households Without Vehicle	AT RISK POPULATION 124,612 ↓ 915,468 Households With Disability 240,206 ↓ 2,288,250 Population 65+ 33,535 ↓ 169,804 Households Without Vehicle	AT RISK POPULATION 24,236 ↓ 1,015,844 Households With Disability 35,446 ↓ 2,493,010 Population 65+ 12,260 ↓ 191,079 Households Without Vehicle
POVERTY AND LANGUAGE 12% Households Below the Poverty Level 455,273 Households Below the Poverty Level 30,210 Pop 65+ Speak Spanish & No English	POVERTY AND LANGUAGE 13% ↑ 1% Households Below the Poverty Level 72,309 ↓ 382,984 Households Below the Poverty Level 6,980 ↓ 23,230 Pop 65+ Speak Spanish & No English	POVERTY AND LANGUAGE 23% ↑ 11% Households Below the Poverty Level 21,771 ↓ 433,502 Households Below the Poverty Level 720 ↓ 29,490 Pop 65+ Speak Spanish & No English
POPULATION AND BUSINESSES 10,494,946 Daytime Population 444,857 Total Businesses 4,242,735 Total Employees	POPULATION AND BUSINESSES 1,567,764 ↓ 8,927,182 Daytime Population 64,285 ↓ 380,572 Total Businesses 662,588 ↓ 3,580,147 Total Employees	POPULATION AND BUSINESSES 268,697 ↓ 10,226,249 Daytime Population 9,932 ↓ 434,925 Total Businesses 108,965 ↓ 4,133,770 Total Employees

Data Source: Esri, ACS, Esri-Data Axle, Esri forecasts for 2022, 2027, 2016 – 2020.

A.5 Other Data Available Upon Request

In addition to the data contained in the Catchment Area Profile, COEE can also provide the following data upon request:

Cancer Incidence and Mortality

- Ranking and number of new cases for additional sites by county
- Incidence and mortality by year or grouped 5 year
- Incidence and mortality by race/ethnicity, age, zip code (suppressed incidence for low frequency areas)
- Cancer stage at diagnosis

Additional Indicators, Screening, Risk Factors, Data Available at Different Geographic Scales

The following are sources of secondary data COEE has access to and can provide upon request

- Centers for Medicare and Medicaid Services
  - Medicare/Medicaid beneficiaries' expense on chronic disease – national, county

- U.S. Census *(Census Survey Explorer can be used to search census surveys & explore what is available)*
  - County Business Patterns
  - Small Area Income and Poverty Estimates, 2020 (SAIPE) – state, county, other
  - Small Area Health Insurance Estimates, 2020 (SAHIE) – state, county
  - Citizen Voting Age by Race and Ethnicity (2013 – 2017)
  - Offer and Take-up of Employer-Sponsored Insurance (Current Population Survey Annual Social and Economic Supplement, CPS ASEC)
  - Job-to-Job Flows (J2J) – national, state, metro area
  - Puerto Rico Community Survey (La Encuesta sobre la Comunidad de Puerto Rico)

- **Esri (Environmental Systems Research Institute, Inc.)** *Pages 58 – 59 show examples of available Esri graphics*
  - Geographic Availability of Data – Esri makes their data available at multiple spatial scales and at times available in custom geographics like city, voting district, and school district
  - Demographic Projections – Esri provides forecasts of population demographics using American Community Survey data and the same methodology as the U.S. Census Bureau
  - Market Potential - details about products and services consumers want and the civic attitudes they have; based on survey data from MRI-Simmons, provides the expected number of consumers and a Market Potential Index (MPI) for thousands of items
  - Tapestry Segmentation - detailed description of America's neighborhoods — U.S. residential areas are divided into distinct segments based on their socioeconomic and demographic composition. Neighborhoods with the most similar characteristics are grouped together, and neighborhoods showing divergent characteristics are separated

2022 Community Health Needs Assessment

- Primary data: Community Survey (n => 1,800); Key Informant Interviews (n = 64)
- Secondary data: any data listed in the CHNA publication is available for request

Contact Us

Point of contact for additional information

Please contact the Office of Community Outreach, Engagement, and Equity (COEE) at COEE-office@moffitt.org to request additional information not included in the profile, or to provide feedback, suggestions or highlight opportunities for collaboration.

If you would like assistance identifying community organizations in the Catchment Area to collaborate with on research, please contact our SCORE team (Support for Community Organization Research engagement) at COEE-SCORE@moffitt.org

Interested in some of the data in this profile? Feel free to send us a data request via email at: COEE-office@moffitt.org