# NCH HEALTHCARE SYSTEM COMMUNITY NEEDS ASSESSMENT 

September 9, 2022

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## OVERVIEW OF THE NCH HEALTHCARE SYSTEM

## Introduction to NCH Healthcare System:

The NCH Healthcare System is a not-for profit 501(c) (3) community health care system with multiple facilities throughout Collier County and the surrounding areas. NCH has evolved over the last 66 years becoming one of the most progressive healthcare systems in the country embracing new technology and evidence-based medicine. NCH offers advanced comprehensive care while adopting new effective ideas in medicine and healing.

Founded by local residents, NCH opened March 7, 1956 with 50 beds and now offers a wide range of services and physicians in multiple locations throughout Southwest Florida.

The NCH Healthcare System is an alliance of more than 950 physicians and medical facilities in dozens of locations throughout southwest Florida. The NCH Baker Downtown Hospital has 391 beds and the NCH North Naples Hospital provides 322 beds. NCH inpatient services include: medical, surgical, cardiac, stroke, orthopedic, obstetric, pediatric, rehabilitative, psychiatric, oncology, emergency treatment, and diagnostics. Outpatient services include: freestanding emergency departments, rehabilitation, home care, urgent care, wound healing, wellness, nutrition, and more. The NCH Physician Group is the largest physician group in Collier County with approximately 430,000 total patient visits. NCH is a member of the Mayo Clinic Care Network and sponsors the Blue Zone Project for Southwest Florida. NCH's mission is to help everyone live a longer, happier, and healthier life.

Home to the first Open Heart Surgery Program in Collier County, NCH has been a pioneer in the cardiac arena for almost two decades. Today, the NCH Heart Institute, with a team of 25 dedicated physicians and additional staff members, specializes in the expert management of cardiovascular and peripheral vascular disease in three centralized convenient locations on the Baker Hospital Downtown campus in Southwest Florida.

NCH has come a long way since its beginnings. It has been nationally recognized for quality and is an important player in a competitive healthcare market. Relationships with quality healthcare organizations outside of NCH also serve to strengthen our capabilities. NCH is the first hospital in Florida and the first in the Southeastern US to become a member of the Mayo Clinic Care Network. As a result of this new membership, which began in 2012, our patients now have the added advantage of access to Mayo's highly regarded expertise.

Here is a snapshot of today's NCH Healthcare System with 2021 statistics:

- We treat more than 43,280 patients every year.
- One in nine patients comes from outside our immediate area - attracted by our reputation for quality.
- We deliver around 3,500 babies each year.
- We do 13,800 surgeries a year including over 450 open-heart cases.
- We have over 91,800 emergency room visits every year.
- Our medical staff encompasses more than 950 physicians; each equipped with the most advanced state-of-the-art medical technology and committed to providing the most competent care for our patients.
- NCH is the largest non-governmental entity in Collier County.

Behind these statistics is a caring cadre of over 4,800 staff members, a 12-member Board of Trustees of local leaders, and over 300 motivated community volunteers, all dedicated to improving the quality of life for our patients, their families and friends.

## OUR COMMUNITY

The NCH Healthcare System's primary service area is Collier County and secondary service area includes Estero and Bonita Springs located in southern Lee County. Approximately 11\% of our discharges historically are from outside the primary and secondary service areas due to the huge influx of part time residents and tourists from January through April. Collier County enjoys a reputation as one of the most desirable places to visit and live in the United States. Collier County's population nearly doubles from January through April due to the influx of seasonal residents and tourists.

For 2021, the total population of Collier County was 394,549 . By 2026 it is projected to increase to 428,667 ( $8.6 \%$ ). The southern portions of Lee County, including specifically the communities of Bonita Springs (Zip codes 34133, 34134, 34135 and 34136) and Village of Estero (Zip codes 33928 and 33929), represent NCH's secondary service area. For 2021, the total population of the Bonita Springs and Village of Estero communities was 97,274 . By 2026 the total population is projected to increase to 106,512 (9.5\%). The tables on the following pages show the estimated population of NCH's primary and secondary service areas.

The table below breaks down the population of Collier County by age for the years 2021 and projections for 2026:

| Age Group | Age Distribution |  |  |  | USA |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2021 | \% of Total | 2026 | \% of Total | \% Chano | Chane |
| Age 0.4 | 18,137 | 4.60\% | 19,603 | 4.6\% | 8.6\% | 4.0\% |
| Age 5-9 | 19,189 | 4.6\%\% | 20.404 | 4.8\% | 63\% | 1396- |
| Age 10-14 | 19,889 | 5.04\% | 21,391 | 5.0\% | 7.6\% | 1.7\%- |
| Age 18-19 | 10,630 | 4.72\% | 20,132 | 4.7\% | 80\% | 27\% |
| Age 20.24 | 17.878 | 4.53\% | 17.940 | 4.2\% | 0.3\% | -1.6\% |
| Agt $25-29$ | 20,559 | 521\% | 19.470 | 4.5\% | .5.3\% | -6.4\% |
| Age 30.34 | 20,450 | 5.10\% | 22,045 | 5.1\% | 7.0\% | 5.1\% |
| A80 $35 \cdot 39$ | 20,601 | 52\%\% | 22,902 | 53\% | 112\% | 78. |
| Age 00.44 | 19,126 | 485\% | 22,527 | 53\% | 178\% | 97 |
| Age 45-49 | 19,299 | $48 \%$ | 20.693 | 48\% | 72\% | 38\% |
| Age 50.54 | 21,373 | 5.42\% | 0,723 | 48\% | 30\% | 3.4 |
| Age 56.59 | 25.820 | 655\% | 24,518 | 57\% | 50\% | 74 |
| Age 80.64 | 29.118 | 738\% | 30,939 | 7.2\% | 6.3\% | 1.4\% |
| Age 65-69 | 31.946 | 8.10\% | 36,751 | 8.6\% | 15.0\% | 9.38 |
| Age 70.74 | 32.712 | 829\% | 35,150 | 82\% | 75\% | 10.89 |
| Age 75-79 | 25,818 | 654\% | 31888 | 74\% | 235\% | 30.7 |
| Age 80-84 | 17,695 | 449\% | 22.065 | 51\% | 247\% | 46 |
| Age 85+ | 16.300 | 413\% | 19.445 | 4.5\% | 193\% | 90\% |
| Total | 94.549 | 100.00\% | 428.687 | 100,0\% | 8.6\% | 3.6 |

The table below illustrates the most recent breakdown of Collier County by race and ethnicity for 2021:

|  | Race / Ethnicity Distribution |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Race / Ethnicity | $\mathbf{2 0 2 1} \%$ | of Total | 2026\% of Total\% Change |  |  |
| American Indian/Alaska Nati' | 1,343 | $0.3 \%$ | 1,457 | $0.3 \%$ | $8.5 \%$ |
| Asian | 6,184 | $1.6 \%$ | 7,991 | $1.9 \%$ | $29.2 \%$ |
| Black/African American | 28,124 | $7.1 \%$ | 32,390 | $7.6 \%$ | $15.2 \%$ |
| Other Race | 27,886 | $7.1 \%$ | 31,571 | $7.4 \%$ | $13.2 \%$ |
| Pacific Islander | 172 | $0.0 \%$ | 192 | $0.0 \%$ | $11.6 \%$ |
| Population of 2 or More Raci | 8,817 | $2.2 \%$ | 9,939 | $2.3 \%$ | $12.7 \%$ |
| White | 322,023 | $81.6 \%$ | 345,127 | $80.5 \%$ | $7.2 \%$ |
| Total | 394,549 | $\mathbf{1 0 0 . 0} \%$ | $\mathbf{4 2 8 , 6 6 7}$ | $\mathbf{1 0 0 . 0 \%}$ | $\mathbf{8 . 6 \%}$ |
| Hispanic | 116,461 | $29.5 \%$ | 135,591 | $31.6 \%$ | $16.4 \%$ |

Collier County is one of the most affluent counties in the country populated, which also has several lowincome areas. With the average household income at $\$ 111,418$, over $33.6 \%$ of the population reports an average household income below $\$ 50,000$.

The table below illustrates average household income estimates as of December 31, 2021:

| \# of Households |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Household Income | 2021 | \% of Total | 2026 | \% of Total | Change |
| < \$15,000 | 13,833 | 8.4\% | 12,175 | 6.8\% | -12.0\% |
| \$15,000-\$24,999 | 9,474 | 5.8\% | 8,278 | 4.6\% | -12.6\% |
| \$25,000-\$34,999 | 14,265 | 8.7\% | 13,212 | 7.4\% | -7.4\% |
| \$35,000-\$49,999 | 17,609 | 10.7\% | 17,328 | 9.7\% | -1.6\% |
| \$50,000-\$99,999 | 47,116 | 28.6\% | 50,962 | 28.4\% | 8.2\% |
| Over \$100,000 | 62,357 | 37.9\% | 77,385 | 43.1\% | 24.1\% |
| Total | 164,654 | 100.0\% | 179,340 | 100.0\% | 8.9\% |

We also are the dominant healthcare provider in both our primary and secondary service areas. As of September 31, 2021 NCH had 62.1\% market share in our primary service area and $43.7 \%$ in our secondary service area. The map to the right illustrates the percentage breakdown of discharges by zip code for fiscal year ended September 31, 2021 in our
 primary service area:

NCH's primary competitors are Lee Memorial Health System and Community Health Systems.

Lee Health System. Lee Health System ("LHS") is a four-hospital healthcare system in Lee County, Florida. LHS owns or operates Lee Hospital - Health Park Campus, Lee Memorial Hospital - Downtown Campus, Gulf Coast Medical Center, and Cape Coral Hospital. LHS is a special purpose unit of local government and is governed by a Board whose members are elected at large on a nonpartisan basis by a vote of the electorate of Lee County. Each of LHS' hospitals are located outside of NCH's primary and secondary service areas.

Community Health Systems. Community Health Systems, Inc. ("CHS") is a publicly-traded, for-profit operator of hospitals located primarily in the southeastern United States. CHS owns and operates two hospitals in Collier County doing business under the name Physicians Regional. Both hospitals are approximately 100 beds and located in NCH's primary service area.

The following table shows staffed beds information and the inpatient market share (based upon discharges) for NCH and other hospital systems with which NCH competes with in NCH's primary service area:

|  | Staffed | Inpatient Discharges (Primary Service Area) ${ }^{(1)}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Beds | Fiscal Year Ended September 30, 2018, 2019, 2020 and 2021 |  |  |  |
| Hospitals |  | $\underline{2018}$ | $\underline{2019}$ | $\underline{2020}$ | $\underline{2021}$ |
| NCH |  |  |  |  |  |
| NCH Baker Hospital | 391 | 13,012 | 13,199 | 11,835 | 12,537 |
| NCH North Naples Hospital | 322 | 12,275 | 12,125 | 11,249 | 11,829 |
| NCH TOTAL | 713 | 25,287 | 25,324 | 23,084 | 24,366 |
| CHS |  |  |  |  |  |
| Physicians Regional - Pine Ridge | 101 | 4,798 | 5,918 | 6,225 | 7,535 |
| Physicians Regional - Collier | 100 | 3,077 | 3,962 | 4,244 | 5,267 |
| CHS TOTAL | 201 | 7,875 | 9,880 | 10,469 | 12,802 |
| Lee Health System |  |  |  |  |  |
| Health Park | 395 | 874 | 935 | 945 | 921 |
| Downtown | 355 | 541 | 694 | 580 | 464 |
| Gulf Coast | 356 | 450 | 417 | 426 | 627 |
| Cape Coral | 291 | 36 | 44 | 37 | 58 |
| LHS TOTAL | 1,397 | 1,901 | 2,090 | 1,988 | 2,070 |
| TOTAL |  | 35,063 | 37,294 | 35,541 | 39,238 |
| NCH Market Share |  | 72.1\% | 67.9\% | 65.0\% | 62.1\% |

(1) Data derived from Florida Agency for Healthcare Administration report on discharges, based upon the zip code patient provided for billing purposes. Patients with zip codes from Collier County.

The following table shows staffed beds information and the inpatient market share (based upon discharges) for NCH and other hospital systems with which NCH competes with in NCH's secondary services area:

|  | Staffed Beds | $\frac{\text { Inpatient Discharges (Primary Service Area) }{ }^{(\mathbf{1})}}{\text { Fiscal Year Ended September 30, 2018, 2019, } 2020 \text { and } 2021}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hospitals |  | $\underline{2018}$ | $\underline{2019}$ | $\underline{2020}$ | $\underline{2021}$ |
| NCH |  |  |  |  |  |
| NCH Baker Hospital | 391 | 1,263 | 1,496 | 1,438 | 1,483 |
| NCH North Naples Hospital | 322 | 2,849 | 2,781 | 2,267 | 2,375 |
| NCH TOTAL | 713 | 4,112 | 4,277 | 3,705 | 3,858 |
| CHS |  |  |  |  |  |
| Physicians Regional - Pine Ridge | 101 | 796 | 715 | 712 | 765 |
| Physicians Regional - Collier | 100 | 151 | 142 | $\underline{115}$ | 88 |
| CHS TOTAL | 201 | 947 | 857 | 827 | 853 |
| Lee Health System |  |  |  |  |  |
| Health Park | 395 | 975 | 1,080 | 1,162 | 1,217 |
| Downtown | 355 | 350 | 1,095 | 1,515 | 1,391 |
| Gulf Coast | 356 | 1,502 | 1,280 | 1,187 | 1,457 |
| Cape Coral | 291 | 32 | 106 | 49 | $\underline{50}$ |
| LHS TOTAL | 1,397 | 2,859 | 3,561 | 3,913 | 4,115 |
| TOTAL |  | 7,918 | 8,695 | 8,445 | 8,826 |
| NCH Market Share |  | 51.9\% | 49.2\% | 43.9\% | 43.7\% |

(1) Data derived from Florida Agency for Healthcare Administration report on discharges, based upon zip code of patient for billing purposes. Patient from zip codes 34133 Bonita Springs, 34134 Bonita Springs, 34135 Bonita Springs, 34136 Bonita Springs, 33928 Estero, 33929 Estero.

## APPROACH/METHODOLOGY

## Historical Community Needs Assessment:

Our leadership team is actively involved and participates in many community related organizations and groups that are continually assessing unmet needs within Collier County. We have historically worked with our Board of Trustees, Collier Country Children's Alliance, United Way, Collier County Public Schools, the Immokalee Foundation, Blue Zones Initiative, Children's Medical Services, and other agencies throughout our community in assessing and collaborating in efforts to improve the health of our community. NCH provides many health-enhancing educational programs and resources in promoting health to the community.

The current programs and resources provided to the community for 2021 include the following:

- Health Seminars

Free health seminars were provided to the public at the NCH Telford Education Center, von Arx Diabetes Center, Simulation Center and at various community outreach facilities.

Value of these seminars: $\$ 120,032$

- Community Health Fairs \& Testing

Complimentary or reduced-price testing and screening tests such as cholesterol testing along with educational booths at community health fairs are provided by various NCH service lines. At the Marco Island Healthcare Center complimentary blood pressure checks were performed.

Value of these community fairs and testing: \$2,954

- Community COVID-19 Education

NCH participated in a COVID-19 vaccine campaign educating the Community on the importance and health benefits of getting vaccinated.

Value of these community services and education: \$82,354

- Registered Nurses (RN's)

NCH Nurses get involved in educating our patients and easing their mind about their upcoming care. Preoperative seminars are held for those interested in learning more about elective orthopedic procedures. Many of our RN leadership participate in community boards such as the Naples Alliance for Children and Drug Free Collier.

Value of these nursing services: $\$ 38,344$

## - Support of the Neighborhood Health Clinic

The vision of a retiring NCH medical staff member and his wife came to fruition in our community several years ago. Together, they helped rally the community to establish a clinic to provide care to the "working poor" of Collier County. NCH helped the Neighborhood Health Clinic get on its feet by first providing clinic space and laboratory services at no charge, and then providing expertise in the areas of information technology, biomedical technology, pharmacy and many other areas. When the Neighborhood Health Clinic has a patient with clinical needs beyond what they can offer, NCH has provided services to these patients.

Value of these consulting and patient services: \$925,137

- St. Matthew's House

NCH has partnered with physicians in this community initiative to provide inpatient and outpatient services at no cost to patients who reside at St. Matthew's House.

Value of the services provided: $\$ 1,438,411$

- P.L.A.N. - Physician Led Access Network of Collier County

NCH has partnered with physicians in this community initiative to provide medical services to the poor by providing both inpatient and outpatient care.

Value of the services provided: \$2,101,504

- Heart Programs

A healthy heart is a focus for NCH. The annual Heart Walk is an exciting event in which teams and individuals are sponsored to walk through Old Naples to support the cause of fighting heart disease. NCH has been a major supporter of the American Heart Association for many years. Value of this support: \$41,121

- Cancer Survival

Another important initiative for NCH is assisting the patient in their cancer survival. NCH is a proud sponsor of Garden of Hope \& Courage.

Support of cancer awareness is valued at: \$68,331

- Support of Patient Families

A medical event can affect the entire family. For families of brain injury and stroke patients, our team provides monthly guidance through support groups free of charge. We support infants and children through support for the March of Dimes, and assist patients who can't afford expenses
such as transportation, personal items and home care.
Value of these support services: \$277,656

- Dr. John Briggs Wellness Center

A number of fitness services are provided through the Dr. John Briggs Wellness Center at a discount or free of charge. When a financial need exists, community members are provided complimentary memberships.

Value of the Dr. John Briggs Wellness Center services provided: \$19,206

- Sharing Our Space

When space is available, NCH provides space at no cost to needy, not-for-profit organizations. The Telford Education Center is available to not-for-profit healthcare related groups such as "Mended Hearts", "Bosom Buddies" and those that provide support for stoke patients. Residents of Marco benefited with the use of our facility for community education and the hospice support group.
Value of this space: $\$ 3,240$

## - Clinical Schools

The clinical nursing schools of FGCU and Florida SouthWestern State College along with others are provided clinical education at the NCH campuses. NCH works with universities on providing pharmacy and laboratory preceptorships to students.

NCH also provides on-site classroom space for clinical education. Nursing and radiology scholarships are generously funded at both Florida SouthWestern State College, FGCU and other Florida universities.

Value of these support services: \$110,955

## - Project SEARCH

Working with our partners at Collier County Public Schools, NCH offers young adults with developmental disabilities to learn job skills. The program has been very successful for both the young adults and those that work with them!

Value of Project SEARCH: Priceless

- Sharing our expertise

Members of NCH management serve on community boards in various capacities. We also provide expertise to other community issues such as workforce housing and workforce development.

Value of these consulting services: \$104,578

- Caring for the Spirit

NCH has always provided exemplary pastoral care services. A formally accredited program is now in place to educate members of the ministry in the spiritual treatment of the sick in our Clinical Pastoral Education (CPE) program.

Value of this CPE program: \$63,000

- Judith and Marvin Herb Family Simulation Center

The Herb Simulation Center provides standardized and customized scenarios to improve patient safety and outcomes, prepping the next generation of physicians, medical residents, nurses, therapists, EMS and other clinical staff which will collectively enhance individual and community health. With the Herb Simulation Center, teams are able to collaborate to practice safe, highquality care. Supervised instructions are provided in situations so medical professionals can master their skills without putting patients at risk.

Value of Herb Simulation Center: \$52,616

- Our Employees Give

The spirit of caring goes beyond our doors. Not only do many NCH employees give to our needy coworker program "Partners in Caring", but NCH employees annually hold a Christmas toy drive in which hundreds of toys are distributed to needy children. In late summer a school supply drive is conducted to assist children in starting the school year off right. NCH employees are also pacesetters for the United Way in their annual giving campaign.

Value of these caring services: \$unknown

- Blue Zone Project

The NCH Healthcare System's mission and focus on population health provides an excellent foundation for the introduction of the Blue Zone Project of Southwest Florida. NCH is sponsoring this eight year project initiative with ShareCare which supports the vision to make our community an even healthier, happier and more vibrant place to live.

The NCH Healthcare System and ShareCare have a commitment to improve the well-being of Southwest Florida, thereby lowering healthcare costs, increasing productivity and improving the economy and quality of life for all residents.

The current efforts have been underway for over eight years with policy leaders, schools, worksites, healthcare, and civic organizations and, combined with the commitments of early adopters, demonstrate a community primed for transformation and improved well-being. Community stakeholders from Southwest Florida demonstrate tremendous support and
collaborative spirit in support of the Blue Zone Project.
The Blue Zone Initiative is focusing efforts on becoming a catalyst for change including:
> Improving well-being as measured by the Gallop-Well-Being Index beyond best comparable results in Florida and the region
> Generating significant medical cost savings and productivity improvement over the project term
> Lowering the obesity rate
> Lowering smoking rates
> Increasing vegetable consumption
> Boosting economic vitality
> Increasing daily physical activity levels
> Positioning Southwest Florida as a nationwide innovator and leader in preventative health

The Blue Zones Project of Southwest Florida sponsored by NCH is a comprehensive well-being improvement initiative designed to help people live longer and better by building strong social networks and encouraging sustainable changes throughout the community that lead to healthier choices. The benefits include lower healthcare costs, improved productivity and a higher quality of life.

Value of Blue Zone initiative: \$2,880,000

## Assessing Community Health Needs

Between February 2021 and January 2022, NCH Healthcare System, in collaboration with the Florida Department of Health in Collier County (DOH-Collier), solicited community input regarding health and quality of life issues for those residing in Collier County. Covid-19 restricted the amount of in person activities, however, twelve virtual focus group sessions were held with public health leaders and a community health survey was completed by 1,261 community members. The community health survey has been consistent from 2012, 2016 and 2019 allowing us to track performance over time. We can assess if previous improvement initiatives have been successful and what to focus on for 2022. NCH also partnered with the Florida Department of Health, along with the Health Planning Council of Southwest Florida, Inc. on behalf of Collier County residents and health care providers to conduct the Collier County Local Public Health Assessment (ATTACHMENTS A \& D). Using this information and other data collection
and analysis (ATTACHMENT E \& F), NCH developed their fourth Community Health Needs Assessment (CHNA).

The CHNA identified problem areas that needed to be addressed. These included access to affordable housing, primary care resources, access to affordable healthy food, access to long term care needs, drug and alcohol abuse, sufficient job employment, economic opportunities, safe roadways for bicyclist and pedestrians, communicable disease, obesity, chronic disease, mental health, dental health, access to care, disabilities and reducing unintentional injuries.

Upon review of the findings of the CHNA in 2019, the NCH Leadership Team, with the approval of its Board of Trustees came up with an Implementation strategy to focus on four key areas which included mental health, access to care, chronic disease and health of the older population (ATTACHMENT C).

Below is a summary of activities and initiatives that NCH achieved in the past three years in these specific key areas:

## Community Benefit \#1: Mental Health

NCH participates in the CMS Inpatient Psychiatric Facility Quality Reporting (IPFQR) program which gives consumers care quality information to help them make more informed decisions about their healthcare options. This includes providing consumers with data about quality measures that aim to assess and foster improvement in the quality of care provided to patients with mental illness. IPFQR Program encourages facilities and clinicians to improve the quality of inpatient care. NCH has committed to using the best practices at our facilities such as using zero hours of physical restraints and zero hours of seclusion use. In addition, NCH improved to $100 \%$ for patients who are discharged on multiple antipsychotic medication with appropriate justification. NCH has provides interventions for alcohol and other drug disorders and also provides treatment at discharge. In addition, NCH provides treatment for tobacco during hospital stay and offers patients continue treatment at discharge. In 2019, NCH introduced the option for bedside medication delivery for our behavior health patients through a program called "Meds to Beds" in partnership with Walgreens.

In 2022, NCH closed it's inpatient psychiatric unit and launched a partnership with the David Lawrence Center to provide resources to cover the most at risk patients including a specialist program partnership. Pediatric psychiatric counselor and patient navigator positions were created to care for our pediatric population. NCH launched a process for case management referral of inpatients to local mental health
and substance abuse facilities and established relationship with Hazelden Betty Ford with an Emergency department protocol for triaging patients in need of substance abuse rehabilitation.

## Community Benefit \#2: Access to Care

One of the three NCH strategic priorities is access and allowing our patients to flow through the system in a coordinated and convenient way. To improve access, NCH completed an EMR migration from Cerner to EPIC in one of the largest investments to date. NCH also invest in virtual care, also known as telehealth, to safely connect our patients with health professionals to deliver care when and where it is needed. It complements the face-to-face care that our patients are used to and became a vital part of delivering healthcare during the Covid-19 pandemic.

In addition, NCH has purchased properties in the growing Northeast Naples communities, built an Urgent Care in Southeast Naples, and built a new and improve emergency department at the downtown Baker hospital. At the North Naples Hospital we established an Obstetrics emergency department (OBED) to support access to obstetric emergency care as the only birthing hospital in Collier County. NCH Healthcare System has developed a joint venture with ProScan Imaging that combines ProScan's best-in-class national reputation with NCH's infrastructure and recent investment in its imaging technology increase access to imaging.

## Community Benefit \#3: Chronic Disease

The NCH Healthcare System has created a clinical trial program to increase research and clinical trials related to chronic diseases. The foundation for a Neuro ICU has started development with planned opening in Fall 2023. Similarly, a recent NCH Health System and Encompass Health partnership has expanded access for rehabilitation services for chronic disease. NCH Healthcare System is a proud thrombectomy capable stroke center, certified by the Joint Commission, proven to have the tools and the expertise to perform mechanical thrombectomy, a minimally invasive surgical procedure to remove a blood clot from an artery. This also means NCH must have neurointensive care and 24/7 on-site critical care coverage.

NCH Healthcare System continues to grow the NCH Heart Institute (NHI), growing from 16 physicians in 2019 to over 25 cardiologists, electrophysiologist, cardiothoracic surgeons and cardiac anesthesiologists in 2022. In conjunction with this expansion, NCH has added two cardiac catheterization laboratories at the North Naples Hospital campus to support the North Naples population growth. For oncology patients, NCH added an outpatient infusion center and inpatient oncology services with breast health
navigator and launched a bariatric program, a weight and wellness program and additional weight loss procedures.

## Community Benefit \#4: Health of the Older Adults

The NCH Healthcare System's mission and focus on population health provides an excellent foundation for the introduction of the Blue Zone Project of Southwest Florida. NCH is sponsoring this eight year project initiative with ShareCare which supports the vision to make our community an even healthier, happier and more vibrant place to live. Because of this sponsorship, Southwest Florida and our subgeographies are now officially Blue Zones Certified Communities for the People, Places and Policy engagement and infrastructure well-being nudges which are helping to make healthy choices easier. Now that we are certified, we can restructure the project from one that originally focused heavily of creating a tipping point by engaging a set number of individuals, schools, worksites, HOAs, FBOs, restaurants, and markets, as well as helping our local planners and elected officials implement policies that support health, to one that focuses on mutually identified priorities.

The geriatric imperative is a movement to promote health by preventing and treating diseases and disabilities in older adults. The baby boomer generation has come of age and resulted in 10,000 Americans becoming eligible for Medicare each and every day.

Although the average Medicare percent for hospitals in the United States rests at 41\%, a few hospitals in the country are managing an increased demand and NCH is in this category. Sixty-one percent of the population served at NCH are Medicare patients, and this is projected to increase significantly in the coming years.

The Brookdale Geriatric Center was launched in 2015 and offers specialized geriatric services for the region inclusive of educational outreach for the elderly and their caregivers. Development strategies include initiatives for advancing professional practice and specialization, recruitment of geriatric specialists—including physicians and nurse practitioners, programming related to geriatric assessment, research and technology applications, patient and family education and support, as well as linkages with community-based providers. NCH Healthcare System aligns with leading entities within the fields of geriatric and palliative care, including NICHE (Nurses Improving Care for Hospital Elders) and the Center for Advancing Palliative Care. Through these associations staff will have access to resources to advance specialized education offerings, program development and program evaluation initiatives.

A central theme of this initiative is to improve access to specialized resources and services. In 2012, the Leadership Coalition on Aging-Collier County commissioned Florida Gulf Coast University to conduct a study on the service needs and gaps relative to seniors within the Naples area, including healthcare. The Brookdale Geriatric Center represents a network of resources both within the hospital system and within the community at large. The motto for the program is "Age Well." By contacting NCH's access healthline, callers will be connected to a geriatric nurse navigator for help related to community-based resources, or in accessing healthcare services. Additionally, plans include the development of an Acute Care for Elders (ACE) program to spread principles of geriatric-specific care throughout the healthcare system via nursing rounds. Through this consultation, patients with geriatric-specific needs can access geriatric specialists. Implementation of Dementia program to care for this patient population

## Other Available Data

NCH reviews nationally publicized data that assesses specific unmet needs related to minorities, seniors, women, and children based on income, education, and culture. NCH also reviews Patient Satisfaction Reports and utilizes input from our discharge planning and case management on community needs. In addition, our Foundation works closely with other community not for profit foundations assessing unmet needs for under privileged groups and individuals in our community. (ATTACHMENT E) contains the various chapters develop by the Collier County Health Department which NCH was involved in data gathering and review of this information which is contained in this report.

## FINDINGS

A major component of NCH's assessment of the CHNA is based on the Collier County Community Health Assessment completed March 2022 (ATTACHMENT E). The executive summary is as follows:

## Ch. 1 Populations

## Population Growth, Age Distribution, and Gender

According to the data displayed on the Collier County Census from 1999 to 2019, there has been an exponential increase in population (39\%), a number that is projected to continue growing at a decreased rate of $1.4 \%$ per year. This pattern reflects the increase in median age of Collier County, which has risen from about 45.2 in 2009 to 50.8 in 2019. This age is significantly higher than other Florida counties and may account for Collier's unique pattern of slowed growth. On average, the female population has lower mortality rates and tend to constitute much of the skewed elderly population. On the community level, trends of growth are evident in all 12 areas, but are most prevalent in North Naples, Urban Estates, and Rural Estates. These three communities range from 58,000 to about 63,000 residents and are projected to grow exponentially into 2045.

## Race and Ethnicity

In terms of race and ethnicity, Collier County has seen an increase in overall diversification in the past 20 years. The Black population increased by 47 percent with a current population of 27,997. The Hispanic population, while constituting less than 24 percent of Collier's population in 2004, increased to about 28 percent in 2019 and is projected to grow another $15.2 \%$ into 2025. Between 2010 and 2019, the recorded foreign-born residents increased by $71 \%$ and currently account for 26 percent of the total population. Out of this 26 percent of residents, about 54,000 individuals are naturalized US citizens. Though the predominant language in Collier County is English, the percentage of residents that cannot communicate with the language is $14.9 \%$, a higher value than the state average of $11.9 \%$. Though this number has decreased from its peak of $16.5 \%$ in 2011 , Collier still holds a much higher ratio of nonEnglish residents compared to other Florida counties.

## Seasonal Population in Collier County

In 2020 alone, the projected number of seasonal tourists was 459,799 with the majority of individuals aged 65 and older. The overall tourist population has risen about $5.8 \%$ since information was collected
in 2000. Future estimates predict that peak season tourism rates will rise another 77\% into 2040 and increase at a constant rate.

## Ch. 2 Social Determinants of Health

## Income

Income has long been correlated with an individual's average level of health. Access to insurance, healthcare, housing, and healthy foods all require a certain financial level to obtain. Since 2009, the median household income in Collier County has risen from about $\$ 58,000$ to a recorded $\$ 69,653$ in 2019. Today, Collier's median income level is significantly higher than the State of Florida by $\$ 14,000$. Median earnings have risen regardless of educational attainment, though individuals with a graduate degree made an average of $\$ 42,000$ more than their counterparts. In terms of income distribution, most Collier residents earned between \$25,000 and \$49,999 in 2019, remaining on par with state and national averages.

## Education

In the last 10 years, the percentage of Collier residents over the age of 25 that had not graduated high school declined by 3.4\%, a slightly larger number than the state average. Individuals who identify as White have the highest percentage of graduate degrees (90.6\%), while those who identify as Asian make up the majority of bachelor's or post-graduate degree recipients (39.9\%).

## Workforce

The current unemployment rate in Collier County (6.9\%) is much higher than the Florida average (3.3\%) and relates to many indirect health consequences. For example, lack of employment has been linked to increasing morbidity and suicide rates, while also increasing the number of unhealthy behaviors like alcoholism, tobacco addiction, and minimal exercise. Following the COVID-19 pandemic in 2020, data was recorded on the local and regional workforce. The results showed that a high percentage of Collier workers commute from northern counties like Lee and Hendry County. Due to the high cost of living in Collier, the majority of its workforce is outsourced.

## Seasonal Economy

Unemployment rates in Collier are consistently higher in winter months and lower in summer months, correlating with the tourism industry and seasonal residents assumptively.

## Poverty and Food Assistance

Compared to both state and federal averages, Collier County has a significantly lower percentage of people living in poverty. In the last ten years, poverty rates in Collier have decreased at a rate of $3.7 \%$, which placed the current poverty population at $9.4 \%$. When compared to the state, however, Collier County has a higher percentage of children living in poverty. This shows that young families are financially struggling the most. Currently, Hispanic children make up the highest percentile of impoverished youth in Collier, with Black children in a close second, though their numbers have dramatically declined since 2009. The US Dept. of Agriculture released statistics on the percentage of households receiving food stamps from 2009 to 2019. Both Florida and Collier percentages have about doubled since 2009, though Collier still falls 6 points behind the state average. The WIC (Women Infants and Children Nutritional Program) records declining percentages of eligible and eligible served since 2009.

## Affordable Housing/Housing Burden

Collier County has consistently had a higher percentage of homeowners compared to the state, though $33 \%$ of those homes are vacant, possibly due to the seasonal population. Since 2014, the median housing value in Collier has increased by about $\$ 102,000$. A rent cost report in 2019 recorded Collier County as having a higher median rent than both the state and the nation. A choropleth map relating to housing burden in Collier records both Ave Maria and Immokalee as having the highest percentages (24.25\%-30.85\%) of both renters and homeowners who experience housing burden (calculated as those who pay more than $30 \%$ of their income for housing).

## Homelessness

From 2009 to 2020, the homeless estimate in Collier County has increased by 274 individuals. Of the current 603 homeless in Collier, 252 have been recorded as living in an emergency shelter and 128 were under the age of 18 . About 155 individuals were reported to experience chronic substance abuse.

## Disabilities

$11.5 \%$ of the general public in Collier County have a disability; a lower number than the state by $2 \%$. Collier has, however, had comparatively lower percentages of individuals with an independent living disability, or a disability that allows them to make personal decisions and live alone.

## Ch. 3 Settings and Systems

## Access to Healthcare

The overall level of physical, social, and mental health status is impacted by the degree of access to health services. This degree of access is often higher when more individuals have health insurance coverage. A Collier County study conducted in 2019 determined that individuals aged 18-39 had the largest percentage of self-paid bills. The 45-64 age group had the largest percentage of individuals using private health insurance as the payer source. Collier has more licensed providers than the state average in every category except for licensed pediatricians. The state, however, has higher averages of nursing home beds (per 100,000 residents) and employees working in the health department than Collier.

## Health Insurance Coverage

Though state and federal averages have shown a decline in the medically insured population, Collier County has consistently had higher rates of uninsured individuals that are under the age of 65 (21.3\% in 2019). Compared to females, males make up a slightly higher percentage of those who are uninsured. In terms of ethnicity, Collier has higher rates of uninsured White residents, Asian residents, and Hispanic residents when compared to the state (Black residents are below average by 4.6\%). For both the county and state, reports show that increased educational attainment correlates to a decrease in the percentage of uninsured residents. Additionally, about $36 \%$ of the uninsured population received an annual income of less than $\$ 50,000$.

## School-aged Children

Since educational attainment has a significant impact on the uninsured population, it is important to review the current data taken throughout the Collier County public school system. Since the 2010-2011 school year, Collier has consistently had a higher high school graduation rate than the state average, the current rate in Collier being 92.2\%.

## Access to Healthy Food

The average meal cost in Collier County $(\$ 3.60)$ is about 31 cents more than the state average. Since Collier's overall cost of living is also higher than state averages, food insecurity can be an issue for county residents. In the years following 2017, child and adult food insecurity rates have slightly declined. It is the projected rates due to COVID-19 impact, however, that make a difference. In the estimate for 2020 alone, the overall food insecurity rate in Collier County increased by almost 3\% and the rate for children is projected to increase another 5\%.

## Parks and Trails

When compared to the state, Collier County has about half the percent of the population that lives near a park or off-street trail system.

## Transportation

A higher percentage of Collier County workers carpool to work and work at home when compared to the Florida average. Collier County workers on average have a lower commute time than the state. More than 95\% of Collier households have at least one vehicle available to them.

## Complete Streets

Complete streets are designed and operated to enable safe use and support mobility for all users. The US Dept. Of Transportation scored complete street statistics on a scale of 1 to 100 . Categories like mode shares, proximity to roadways, and traffic fatalities were all considered. Collier County scored higher than the state in every category except for road traffic fatalities, which was about 39 county fatalities to 1 state fatality (per 100,000 residents).

## Crime and Motor Vehicle Crashes

Collier County has less cases of crime and domestic abuse when compared to the State of Florida. However, Collier has a significantly higher rate of alcohol confirmed motor vehicle traffic crashes, injuries, and fatalities. The three most common crimes in Collier County are larceny, domestic violence, and aggravated assault.

## Ch. 4 Health Conditions

## Life Expectancy

Over the last twenty years, Collier County has consistently had a higher life expectancy than the State of Florida and each of the 67 counties within it. The current life expectancy in Collier is 85.4 years. Females live longer than men on average with about a 6-year difference in life expectancy. According to ethnicity, there doesn't seem to be a significant outlier in terms of mortality.

## Years of Potential Life Lost (YPLL)

YPLL is defined as the years of potential life lost (up to age 75) due to a premature death. When compared to life expectancy, the YPLL measure emphasizes the processes of premature death in
geographical areas. Currently, the top three causes of death that had the highest YPLL in Collier County are unintentional injury, cancer, and heart disease. The COVID-19 pandemic greatly impacted this measure and is now ranked fifth in local premature mortalities (behind suicide).

## Leading Causes of Death

Today, cancer and heart disease are the two most common causes of death in Collier County. Combined, they are responsible for $41.2 \%$ of all deaths. COVID-19 is now the fourth leading cause of death in Collier (7.9\% of deaths) following strokes (12.61\% of deaths). Collier's first case of COVID-19 was recorded in March of 2020 but had a significant impact on other health conditions and behaviors.

## Cancer

When compared to Florida, Collier has consistently had lower incidences of cancer. However, as of the most recent study in 2018, Collier was experiencing the highest rate of cancer-related deaths in the last decade. The most common types of cancer in Collier County are breast and prostate cancer. However, lung and colorectal were the deadliest for those diagnosed with those cancers. In 2018, Collier saw the highest rate of breast cancer diagnoses (115.9 per 100,000) in the last 13 years. Those who identified as Hispanic had a higher percentage of both breast cancer related diagnoses and deaths than any other ethnicity. In 2008, Collier had the all-time highest rate of prostate cancer diagnoses (172.5 per 100,000). Compared to the state, Collier averages higher in cases of prostate cancer, though breast cancer rates remain comparatively lower. In 2020, those who identified as Black were the majority of prostate cancer patients.

## Heart Disease

Over the past 10 years, the Collier's overall death rate from heart disease significantly decreased and remains much lower than the state average. Males die at a much higher rate (about double) from heart disease when compared to females. The current ratio according to sex is 108.3 males to 54.7 females.

## Stroke

2020 was the deadliest year for stroke deaths in Collier County history ( 48.4 per 100,000). There has been a significant increase in stroke deaths since 2013, and Collier surpassed the state in stroke deaths starting in 2018. There are no significant outliers in ethnicity when it comes to stroke related incidents, though females in general seem to have a higher rate of stokes than males.

## Tuberculosis

There has been a significant decline in Collier's TB deaths since its peak in 2010 (10 per 100,000). Today, the number stands at about 3.8 deaths per 100,000 residents. Compared with the state, however, Collier County has consistently had higher incidences of TB deaths with an exception for the year 2016.

## Sexually Transmitted Infections/Diseases

Chlamydia is the most common sexually transmitted infection in Collier County. However, the current rate $(317.7$ per 100,000$)$ is significantly lower than the State of Florida's average ( 504.2 per 100,000). Since 2010, chlamydia cases in Collier have slightly increased with a peak in 2018. In terms of gender, females have a higher rate of getting diagnosed with chlamydia than males (presently 388.9 females to 207.1 males). About 72\% of reported female chlamydia cases come from the $15-24$ age group. For males, $65 \%$ of chlamydia cases come from the $20-29$ age group. Females who identified as Black have the highest rate of chlamydia than any other race regardless of gender. Though gonorrhea and syphilis have both been reported in Collier, the county averages are much lower than the state. Again, individuals that identified as Black report more cases of gonorrhea and syphilis than any other ethnicity.

## HIV Infection

Collier County has consistently had lower HIV/AIDS cases than the state and has seen a steady decline in infection rates since 2009. Male-to-male sexual contact was the mode of exposure for 61.3\% Collier's HIV cases, with most cases reported in the 30-39 age group. Individuals who identified as Hispanic males made up 34\% of all HIV diagnoses in the last three years.

## Older Population Health

As of 2020, the top three causes of senior deaths in Collier were cancer, heart disease, and stroke. COVID-19 had a significant impact on these statistics and is currently ranked fifth on the list. Alzheimer's disease, responsible for $3.9 \%$ of senior deaths, is typically diagnosed after the age of 65 . Collier's current rate of Alzheimer's is higher than the state and has been since 2017. The current death rate from Alzheimer's disease has about halved in Collier County since its peak in 2010. Hispanic are reported as having a higher death rate from Alzheimer's than any other ethnicity in Collier County.

## CONCLUSION

Community health is a complex equation with multiple variables that are interrelated and involve agencies and organizations from nearly every sector. The community health priorities described in the Community Health Assessment (CHA) are an example of such complexity. Mental health issues relate to drug and alcohol use. Drug and alcohol use increases individuals' risk factors for chronic diseases. Having access to quality health care services might result in treatment for mental illness or reveal the early symptoms of a chronic illness and motivate a behavior change that prevents it. All these issues affect older adults in similar ways because young adults become older adults. Preparing for the health services needs of older adults is especially poignant at this time because that sector of the population is expected to grow exponentially over the next decade.

## RESPONSE TO FINDINGS

Upon review of the findings of the (CHNA) and based on the mission, vision and core values of the NCH Healthcare System has determine to focus on four priorities which include:

- Access to Care
- $\quad$ Chronic Disease (Heart \& Stroke)
- Health of Older Adults
- Pediatrics and Women's Health


## Unaddressed Identified Needs

Although several community needs were identified, NCH must focus our existing clinical strengths and infrastructure where we can maximize our resources to benefit the greatest number of people in the community. NCH will continue to re-evaluate the unaddressed identified needs and pursue action when and where resources allow.

## Community Benefit Plan

NCH is committed to promoting existing and potential new programs to the community in response to the (CHNA). This report, the 2022 Implementation Strategy (ATTACHMENT B) and all other attachments will be presented for approval at the September 14, 2019 Marco Island Board of Trustees meeting and the September 27, 2022 NCH Board of Trustees Meeting.

## APPENDIX

## ATTACHMENT A:

## Leadership Focus Group Attendees and Community Health Survey

- Florida Department of Children and Families
- Council for Homelessness
- Hunger \& Homeless Coalition of Collier County
- The United Way
- Florida Department of Health "Women, Infants and Children Nutrition Program (WIC)
- Healthy Collier Coalition
- Leadership Coalition on Aging (LCA)
- St. Mathew's House
- David Lawrence Center (DLC)
- The School Health Advisory Committee (SHAC)
- The Greater Naples Chamber of Commerce
- Everglades City Protocol for Assessing Community Excellence in Environmental Health Committee (PACE-EH)
- Blue Zones Project Worksites
- Panira Health Clinic
- Avow Hospice
- National Alliance on Mental
- Illness (NAMI)
- Golden Gate Senior Center
- Naples Senior Center
- Community Health Survey (1,261 surveys were collected from the community)


## ATTACHMENT B:

## 2022 Implementation Plan to Address Significant Needs

| Community Benefit Category | Name of Program | Description of Program | Method of Evaluation |
| :---: | :---: | :---: | :---: |
| Access to Care | Upgrade telephonic services | Improve customer services for our patients through upgrading and outsourcing our telephonic services. | Service Volumes |
|  | Access clinic | Create an Access Clinic for quick access for low acuity medical care. | Service Volumes |
|  | Further develop virtual care through EPIC's MyChart | Enable patients to communicate with doctors, schedule appointments, see medications, test results, upcoming appointments, medical bills, price estimates, and more all in one place. | MyChart <br> Enrollment Rate |
|  | Expand access to healthcare in the rapidly growing northeast Naples | Strategically focus service offerings per location and distribution of services with focus on Northeast growth and create access for Medicaid dominant communities. | Service <br> Volumes for targeted zip codes |
| Chronic Disease (Heart \& Stroke) | Address the patient demand shift from inpatient to outpatient care | Concentrate core service offerings to backfill inpatient volume that has shifted to outpatient and prioritize areas of focus to keep patients local. | Service <br> Volumes <br> Distribution <br> Inpatient vs <br> Outpatient |
|  | Add cardiology services on Marco Island | Expand cardiology services to serve the needs of the Marco Island community. | Service <br> Volumes |
|  | Improve patient outcomes through education | Utilize a cardio thoracic navigator for pre-surgery education, post-surgery education and community education. | Service Volumes |
|  | Clinical Trials program to offer state-of-the-art care for chronic disease patients | Expand clinical trials and promote medical education as part of advanced capabilities. | Number of Clinical Trials \& Patients Enrolled |
| Health of Older Adults | Provide access to geriatric medicine | Expand geriatric medicine to multiple NCH Physician practices. | Service Volumes |
|  | Achieve geriatric emergency department accreditation (GEDA) | Geriatric emergency department accreditation (GEDA) was developed by leaders in emergency medicine to ensure that our older patients receive well-coordinated, quality care at the appropriate level at every ED encounter. | Become <br> Accredited |
| Pediatrics' and Women's Health | Evaluate upgrading from NICU Level II to NICU Level III | Optimize policies, nursing/staff ratios, education, ancillary services including dedicated respiratory therapists. | Service Volumes |
|  | Enhance Care Through Obstetric Emergency Department (OBED) | Implement Obstetric Hospitalists 24/7 coverage for Labor \& Delivery to increase patient safety by reducing nurse only deliveries. | Service Volumes |
|  | Increase Maternal Fetal Medicine services | As the only birthing hospital in Collier County, ensure optimal care for high-risk pregnancies by adding services such as antepartum, expanding clinic days and pursuing 24/7 MD MFM coverage. | Service Volumes |

## ATTACHMENT C:

2019 Implementation Plan to Address Significant Needs

| Community Benefit Category | Name of Program | Description of Program | Method of Evaluation |
| :---: | :---: | :---: | :---: |
| MENTAL HEALTH | Research collaborative relationships with other community mental health providers | To more effectively treat the increasing mental health needs in our community, select partners to align to NCH values that are committed to improve the mental health of our community | Service volumes |
|  | Implement a Moods Disorders Program which will include clinical assessments and treatment to treat severe depression | Treatment modalities include cognitive behavioral therapy, medication management, Trans Magnetic Simulation Program (TMS and Electro Convulsive Therapy Program (ECT) | Service volumes |
|  | Develop Behavioral Health Navigation Model | Program to specialize in improving the access to the appropriate resources for behavioral health and addictions care for within our community | Service volumes |
| ACCESS TO CARE | Expand primary care physicians in growth areas within our service area | Recruit and establish primary care practices in the southeast and northern sections of Collier County and south Lee County | Service volumes |
|  | Expand oncology services to better serve patients in our community | Research partnership opportunities with other providers in our service area that provide oncology services | Service volumes |
|  | Further develop virtual care strategy to include telemedicine services | In addition to telemedicine develop virtual care network for engagement of high-risk patients and other underserved needs of the population | Service volumes |
| CHRONIC DISEASE | Further develop NCH Heart institute programs and services to combat cardiovascular disease | Continue to bring to the community best practice therapies and emerging technologies to ensure patients are able to receive cardiovascular care close to home | Implement Program |
|  | Expand existing Blue Zone Project into a Comprehensive Population health and management program throughout | Continue partner efforts of community awareness of health lifestyle with NCH population health efforts leading to prevention and disease awareness and management health choice the easy choice | Implement Program |
|  | Further develop neuroscience programs and services within our service area | Develop and implement Nero Spine Center as well as obtaining thrombectomy ready capable center | Implement Program |
| HEALTH OF OLDER ADULTS | Further develop access to Fellowship Trained Geriatric Physicians within the community. | Partner with other organizations that could benefit from working with NCH Geriatric physicians improve quality of life and aging in place of individuals in our community | Service volumes |



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## Introduction

## Assessment Description and MAPP Process

During the months of February 2021 through January 2022, the Florida Department of Health in Collier County (DOH-Collier), in partnership with NCH Healthcare System, obtained community input regarding health and quality of life issues for those residing in Collier County via completion of a community health survey and twelve focus group sessions. COVID-19 limited the amount of focus groups that could be held along with the number of participants that could attend. To combat that issue, virtual focus groups were held, and DOH-Collier community partners were utilized to share links to the Community Health Survey. With the collaboration of the local public health system, 1,261 surveys were collected from the community. By utilizing the same survey that was developed in 2012, 2016, and 2019, comparisons can be drawn to identify performance over time and to assess if improvement efforts had a measurable effect that would be demonstrated in the 2022 results.

The Community Themes and Strengths Assessment is one of the four Mobilizing for Action through Planning and Partnerships (MAPP) assessments (Figure 1), conducted as part of creating and implementing a Community Health Improvement Plan (CHIP). The MAPP model was developed by the National Association of City County Health Officials (NACCHO) for a planned approach to improve health and quality of life.


Residents in Collier County were asked to respond to geographic, demographic, and health related questions. They were also asked to respond to questions regarding the environment and the overall quality of life. The surveys were available in the three main languages spoken in Collier County: English, Spanish, and Creole. The surveys used a Likert scale ranging from 1 to 5 , where a statement that scored a 5 meant the respondent strongly agreed with that statement. A score of 1 meant the respondent strongly disagreed with that statement. The final survey question asked respondents to rank ten health related factors in priority order to develop "Priority Health Rankings". The Priority Health Rankings were used to assist in identifying topics of concern requiring additional discussion and community input.

## Survey Data

## Community Health Survey Participation and Demographics

In 2022, Community Health Survey participation increased by 235.61\% from 2019. Participation from women continues to outnumber men, although the male participation rate did increase by approximately $35.42 \%$ in 2022. To reflect the composition of the county, deliberate efforts were made to solicit input from older adults including Community Health Survey Collection in communities catering to retired residents in East and North Naples, as well as hosting focus group discussions with Naples Senior Center clients, and veterans. Thus, participation for those over age 65 increased 129.52\% in 2022.

The following charts are shown to display the Community Health Survey participation by gender (Figure 2), and age (Figure 3). Participation by race and zip code are displayed in(Figure 4), and (Figure 5).

Community Health Survey Participation by Gender:
Figure 2.


Community Health Survey Participation by Age:
Figure 3.


## Survey Data

## Community Health Survey Participation and Demographics

Community Health Survey Participation by Race:
Figure 4.

Answered: 1,217 Skipped: 44


Community Health Survey Participation by Zip Code:
There were 24 zip codes covered in the Community Health Survey collection. The top 5 zip codes surveyed were: 34120-Golden Gate Estates(11.59\%), 34112-East Naples(11.51\%), 34119-North Naples East of I-75 (8.98\%), 34116-Golden Gate City (7.69\%), 34110-North Naples West of I-75 (6.69\%).

Figure 5.

$$
\begin{gathered}
34105_{33288} 341144_{3393} 341422_{34134} 34104_{34103} 34116_{34102} \\
3411234145341203413534119_{33967} 341100_{33974} \\
34109_{34139} 34113_{33666} 3411734108
\end{gathered}
$$



## Survey Data

## Community Health Survey Priority Rankings

Between February 2021 and January 2022, data was obtained via in-person and electronic surveys of community members in the county. Displayed below (Figure 6), are the identified priority areas for 2022. The 2019 results are included to compare the shift in priorities in the county over the past three years.

Figure 6.


## 2022 Top Five Priority Rankings

1. Mental Health
2. Access to Care
3. Chronic Disease (heart disease, diabetes, cancer)
4. Health of Older Adults
5. Alcohol and Drug Use

## 2019 Top Five Priority Rankings

1. Mental Health
2. Chronic Disease (heart disease, diabetes, cancer)
3. Access to Care
4. Alcohol and Drug Use
5. Health of Older Adults

## Survey Data

## Community Health Survey Collection

Community Health Surveys were collected through focus groups, online survey links and in-person survey collection efforts. 12 focus groups and 16 survey links were sent out to community organizations for a total of 1,261 surveys collected. This could not be done successfully without the collaborative efforts of community partners and DOH-Collier Staff. Communities throughout Collier County were represented and included East Naples, North Naples, Everglades City, Golden Gate City, Golden Gate Estates, Immokalee, the City of Naples, Marco Island, and Ave Maria.

COVID-19 limited the amount of focus groups that could be held, therefore other methods needed to become the primary source for survey collection. During the mass COVID-19 vaccination events held at North Collier Regional Park, DOHCollier staff handed out paper surveys or flyers with a QR code to the online survey, to individuals that received a COVID-19 vaccine (figure 7). DOH-Collier staff also handed out paper surveys to clients in several programs such as the Women, Infants, and Children (WIC), the STD Clinic, the Dental Clinic, and clients that visited the DOH -Collier Immokalee location for services (figure 8). Panira Health Clinic assisted in survey collection by instructing patients to fill out paper surveys upon signing-in for their appointments (figure 9).


Survey links were sent to community partners in the Healthy Collier Coalition, which is a large network of partners that was formed from the Collier County Community Health Improvement Plan (CHIP). Collier County Public Schools also received a survey link, who then distributed the link to their parents.

Press releases, social media posts, and the DOH-Collier website were also used as outlets to ensure the survey was accessible to the community.

## Focus Groups

## Focus Group Organizational Process

Community health focus group sessions were conducted in Collier County that included healthcare and public health professionals, community members, and Collier County community leaders. Between July and October 2021, 6 in-person and 5 virtual focus group sessions were held.

Focus group locations were chosen to ensure the broadest coverage of the entire county and included diverse demographic and socioeconomic characteristics. Individual participants were acquired through the media, community partnerships, word of mouth, and invitational flyers in the three primary languages spoken in Collier County.


Many focus groups were scheduled during existing community partner committee meetings. These partnerships included the Leadership Coalition on Aging (LCA), St. Mathew's House, David Lawrence Center (DLC), The School Health Advisory Committee (SHAC), The Greater Naples Chamber of Commerce, Everglades City Protocol for Assessing Community Excellence in Environmental Health Committee (PACE-EH), and the Blue Zones Project Worksites.

Local community organizations and partners also assisted with the focus group process by holding focus groups in their facilities open to the public and/or their clients. These organizations included Panira Health Clinic, Avow Hospice, National Alliance on Mental Illness (NAMI), Golden Gate Senior Center, and Naples Senior Center.


## Focus Groups

## Focus Group Methods

For each focus group, participants were given a brief description of the Community Themes and Strengths Assessment by DOH-Collier staff. Following the introduction, they were prompted to fill out the Community Health Survey, which included demographic information to track the populations surveyed. Focus group participants were also asked to prioritize ten different healthcare related areas(Figure 10). The ten public health categories were ranked by their order of importance for Collier County as perceived by the attendees. Subsequently, the
 totals for the ten categories were obtained by summing up the priority cumulative ranking for all participants. A rank of one means that the issue is most important and a rank of ten means the issue is of least importance to the participant. This method allows for comparisons of the results between focus groups. The 2022 survey results were compiled and compared to those obtained in 2019. Upon collection of the survey, a facilitator from DOH -Collier would discuss the top past priorities for 2019 and and ask the focus group attendees if they thought the priorities from 2019 are still relevant or if they think the community priorities have changed over the last three years. This process would lead into a further discussion on what the shifts in priorities were, insight regarding health and quality of life priorities for the community, current public health issues Collier County is facing, and areas for improvement. The open discussion gave participants the opportunity to voice their opinions, concerns, and ideas. A recorder from DOH -Collier was also present to accurately log all comments made. Spanish and Creole translators were provided during the meetings if needed. Participants discussed many health topics and focused on identifying root causes to problems where possible.

Please rank the following in order of importance for Collier County.
11 A rank of 1 means that the issue is most important and a rank of 10 means the issue is of least importance. Please place a number in the appropriate rank box.

| Rank the most imporant | Communicable Diseases |
| :---: | :---: |
|  | Chronic Disease (heart disease, diabetes, cancer) |
|  | Obesity |
|  | Mental Health |
|  | Alcohol and Drug Use |
|  | Dental Health |
|  | Health of Oider Adults |
|  | Access to Care |
|  | Disabilities (physical, sensory, intellectual) |
| Rank the least important | Unintentional Injuries |

## Survey Results

## Survey Responses

The chart below (Figure 11), displays the 2022 public health leadership and community health survey results.

Figure 11.
\% of Respondents that Agree:

| Community Health Survey Questions | 2022 DOH-Collier and Community Partners $\mathrm{n}=573$ | 2022 Community $n=687$ | 2019 DOH-Collier and Community Partners $\mathrm{n}=158$ | 2019 Community $n=325$ |
| :---: | :---: | :---: | :---: | :---: |
| I am satisfied with the quality of life in our community | 90.70\% | 88.30\% | 96.18\% | 94.10\% |
| I am satisfied with the healthcare system in the community | 76.90\% | 75.70\% | 84\% | 84.50\% |
| There are adequate resources for primary care in the county | 76.71\% | 78.61\% | 85.40\% | 86.00\% |
| There are adequate resources for specialty medical care | 76\% | 77.11\% | 85.15\% | 82.1\% |
| There are enough dental services available for children and adults | 78.69\% | 73.40\% | 75.17\% | 65.71\% |
| There are adequate resources to address drug and alcohol abuse in Collier County | 62.74\% | 71.90\% | 34.01\% | 49.50\% |
| This community is a good place to grow old | 85.11\% | 81.80\% | 90.70\% | 85.30\% |
| This community is a safe place to live | 94.31\% | 92\% | 97.43\% | 85.10\% |
| Residents have access to affordable, healthy foods in their neighborhoods | 76.36\% | 76.80\% | 74.84\% | 80.70\% |
| Collier roadways are safe for drivers, bicyclists, and pedestrians | 57.24\% | 68\% | 60.20\% | 70.60\% |

The 2022 Community Health Survey showed significant shifts in responses from the community and local public health system in 2019. There were several areas that trended upward such as whether or not Collier County has enough dental services available for children and adults, or has adequate resources to address drug and alcohol abuse. Numerous areas saw a downward trend in results over the years. For example, the percentage of respondents that agreed with being satisfied with the healthcare system in the community, and having adequate resources for primary and specialty care decreased across both groups in 2022.

Sample sizes for both groups in 2022 were exceedingly larger than the groups surveyed in 2019, and should be taken into account when comparing survey results.

## Survey Results

## Survey Responses

There were numerous thoughts and impressions provided about the local public health system and contributing factors that affect the public's health in Collier County. Several unifying themes, both positive and negative, emerged from the focus group discussions and have been displayed below.
The three highest scoring survey responses for each group are displayed below in green(Figure 12):

Figure 12.
\% of Respondents that Agree:

| Community Health Survey Questions | 2022 <br> DOH-Collier and Community Partners $\mathrm{n}=573$ | 2022 Community n=687 | 2022 <br> All Groups $n=1,261$ |
| :---: | :---: | :---: | :---: |
| I am satisfied with the quality of life in our community | 90.70\% | 88.30\% | 89.30\% |
| I am satisfied with the healthcare system in the community | 76.90\% | 75.70\% | 76.20\% |
| There are adequate resources for primary care in the county | 76.71\% | 78.61\% | 77.70\% |
| There are adequate resources for specialty medical care | 76\% | 77.11\% | 76.53\% |
| There are enough dental services available for children and adults | 78.69\% | 73.40\% | 75.73\% |
| There are adequate resources to address drug and alcohol abuse in Collier County | 62.74\% | 71.90\% | 67.64\% |
| This community is a good place to grow old | 85.11\% | 81.80\% | 83.31\% |
| This community is a safe place to live | 94.31\% | 92\% | 93\% |
| Residents have access to affordable, healthy foods in their neighborhoods | 76.36\% | 76.80\% | 76.60\% |
| Collier roadways are safe for drivers, bicyclists, and pedestrians | 57.24\% | 68\% | 62.84\% |

Feedback from community focus group attendees and survey participants provided an exceptionally high level of satisfaction in a several distinct public health topics. Each group expressed that they were pleased with the overall quality of life in Collier County. They agreed that Collier County was a safe place to live and grow old. Residents conveyed that Collier County has an abundance of services to offer, and efforts to increase knowledge and awareness of those services should be continued.

## Survey Results

## Survey Responses

The three lowest scoring survey responses for each group are displayed below in red(Figure 13):

Figure 13 .
\% of Respondents that Agree:

| Community Health Survey Questions | 2022 <br> DOH-Collier and Community Partners $\mathrm{n}=573$ | 2022 Community $n=687$ | 2022 All Groups $\mathrm{n}=1, \mathbf{2 6 1}$ |
| :---: | :---: | :---: | :---: |
| I am satisfied with the quality of life in our community | 90.70\% | 88.30\% | 89.30\% |
| I am satisfied with the healthcare system in the community | 76.90\% | 75.70\% | 76.20\% |
| There are adequate resources for primary care in the county | 76.71\% | 78.61\% | 77.70\% |
| There are adequate resources for specialty medical care | 76\% | 77.11\% | 76.53\% |
| There are enough dental services available for children and adults | 78.69\% | 73.40\% | 75.73\% |
| There are adequate resources to address drug and alcohol abuse in Collier County | 62.74\% | 71.90\% | 67.64\% |
| This community is a good place to grow old | 85.11\% | 81.80\% | 83.31\% |
| This community is a safe place to live | 94.31\% | 92\% | 93\% |
| Residents have access to affordable, health foods in their neighborhoods | 76.36\% | 76.80\% | 76.60\% |
| Collier roadways are safe for drivers, bicyclists, and pedestrians | 57.24\% | 68\% | 62.84\% |

Each group that participated in the Community Health Survey identified similar opportunities for improvement in Collier County such as needing more adequate resources for drug and alcohol abuse, safer roadways for drivers, bicyclists, and pedestrians, and the need for more specialty care and dental services for children as well as adults.

## Barriers and Solutions to Community Priorities

Specific challenging areas that arose during multiple focus group discussions, along with comments left by residents and public health professionals through the online survey are depicted in the following charts(Figures 14-18). Participants felt that the following issues are barriers or proposed solutions to each of the priority areas.

During the focus groups, participants were asked, what are a few major factors driving up the rates of poor mental health and substance abuse in Collier County?

Figure 14.

## Mental Health and Substance Abuse

The population is growing, services and haven't kept up

Stressing about contracting COVID-19

Need more options for mental health care and services

The community (and even individuals with mental health conditions) neglecting the need for mental health and substance abuse treatments

Many insurance plans and/or employers do not fully support mental healthcare

Loss of jobs/business closures

Lack of awareness and a prior mentality/stigma towards individuals with mental health conditions

Large number of people relapsed due to the COVID-19 crisis

Lack of preventative services
Psychiatric reimbursement from insurance is low, so providers may not accept insurance

Homelessness is on the rise, which adds to health, substance abuse, mental health issues

Many mental health providers do not accept insurance

Isolation from loved ones due to COVID-19

Cost of living in Collier County a stressor

Mental healthcare should be viewed the same as physical healthcare and accommodations should be made for people to treat their mental health issues
Many residents lack information and education about mental providers available in Collier County
The public needs more education about prevention Increase availability of psychiatry residency programs- possibly develop program, government funding

Not enough mental health providers

Drug trafficking
Medications are being pushed instead of considering holistic approaches

Increase in pediatric substance abuse

Lack of providers accepting new patients

Not enough mental health beds in the county

Lack of funding and resources for those needing mental health services

Mental health issues are still not viewed as a true illness. Need to create more awareness of the commonality of mental illness, how to recognize it, and how and where to treat it
Allow and extend telehealth psychiatry (In home effort and comforts)

Lack of trust in mental health providers

Tourist destination, big party and drinking culture takes a toll on individuals and causes drug and alcohol problems (Key's Disease)

Political climate has added stress and anxiety
Family relations
There are many cases of dementia in Collier County-lack of acknowledgement

Physicians and other healthcare providers need help with the PTSD they acquired from the pandemic

## Barriers and Solutions to Community Priorities

Focus group participants were asked, what are current barriers to accessing care, and what would make seeking healthcare more accessible for all, including the uninsured, underinsured, isolated populations, and individuals hesitant to seek care?

Figure 15.

## Access to Care

## Need lower cost of insurance

Better communication methods to improve healthcare provider-patient relationships

More healthcare providers willing to take a sliding scale fee

Education and awareness to the younger population to illicit behavior change

Insurance premiums are high, even in low deductible plans
Getting underinsured patients' referrals to local clinics

More funding from state to support providers and individuals

More accessibility and awareness to the Collier Cares app

Creating free clinics in Immokalee will provide better service, improve accessibility, and reduce load on more distant healthcare systems/hospitals

Lack of access to healthy affordable foods in some communities

Lack of mental health and services for high functioning autistic community, where they can thrive after high school

More providers that accept
Medicaid
Outreach efforts in community spaces such as barbershops, Faith-based, workplaces

Need more healthcare
providers and health facilities

More information and awareness on programs and services available - people do not know what resources and services are out there

Lack of services for individuals with disabilities

Increase awareness of Paratransit service

Reaching people earlier for prevention methods instead of urgent/crisis treatment

Educating the public to feel empowered to take control of their health and wellness

Dr. offices are not open during hours that are accessible for all, some do not have sick leave so they cannot leave during work hours, but that is when doctors' offices are open

More cancer care for the younger population (under 65)

We need more hospitals and healthcare staff for the patients. Healthcare staff is over worked

Low transparency on health costs

Having a centralized location where people can call where their language is spoken

More dental and vision health screenings for low income

Collier County needs to improve the availability and access to its transportation system(route, scheduling, etc.)

More specialized treatment vs all-inclusive clinics

Expand Medicaid

It is difficult to access specialized care at night and on the weekends

Education and awareness to the younger population to illicit behavior change

Have more healthcare providers that speak the languages of the communities in need within their facilities, so that they know when they go into the offices someone will be able to speak their language, many do not go to the dr. if they feel that they won't be understood

More access to all forms of birth control

Implement healthcare education programs to develop future healthcare workforce

## Community Challenges

## Barriers and Solutions to Community Priorities

With over $30 \%$ of the population in Collier County over the age of 65 , prioritizing the health of older adults is essential. Focus group participants were asked what they thought were the biggest issues facing the older adult population in Collier County?

Figure 16.

## Health of Older Adults

Isolation, no access to
socialization/interaction leads to mental decline

Technology is a barrier to accessing care, making appointments, getting vaccines, navigating online patient portals. Many have to rely on adult children, grandchildren, other resources

Accessing transportation to healthcare providers is difficult

Create a loneliness hotline just like the suicide hotline

COVID-19 shutdown many activities

Affordable housing, especially to those with disabilities

Affordability: cost of living in Collier County is too high

Some older adults go months without physical touch from another person

Widows are lonely, there are not enough activities for widows specifically. Meeting up with old friends who are still married does not help

Lack of funds to pay for care, too expensive

Lack of facilities that accept lower income residents

Loneliness, hard to meet others

Need more resources and care for veterans

Quality of affordable long-term care facilities in Collier County needs improvement

Technology was a barrier to interactions during COVID-19 (ZOOM, Facetime)

Food insecurity; fixed incomes; forced to choose between rent and food. Some lack transportation and unable to get to food pantries or access free food supply

When families and spouses pass away, social circle gets smaller

Healthcare providers that do not accept Medicaid

Not enough dental providers

Lack of support system

Rent has increased but many are on a fixed income and cannot afford the increases

During season, there is a large influx in population, providers and hospitals are overwhelmed and crowed. Makes making appointments and scheduling surgeries very difficult

## Community Challenges

## Barriers and Solutions to Community Priorities

To gain a deeper understanding of areas that need a health equity focus in the community, participants were asked what are a few health disparities they are currently seeing in Collier County? What are the causes?

Figure 17

## Health Equity

Education levels affect nutrition, access to care, income level. Low education levels lead to low paying jobs, etc...

Growing homeless population, especially in camps in East Naples near Justin's Place

Uninsured and underinsured clients

Many residents work two or three jobs to make ends meet

Lack of transportation, not easily accessible for people with disabilities

Lack of access to care due to high costs, low income

Location of primary care facilities become sparser as you go eastward in the county. Places like Everglades, Goodland, and Immokalee have fewer available options for healthcare creating a disparity for people living in those areas

Medical literacy in the Hispanic and Haitian communities

Built environment struggles in some areas of the county: lack of bike lanes, sidewalks, access to healthy foods

Strict working schedules and not enough providers create limited options, especially if you do not have sick leave

Lack of healthcare providers

Resort town and wealthy population increases everyday costs for everyone else

Healthcare options are limited for the low-income population

People do not know what resources are available to them

Health professionals need more education on what the exact needs of the community are, and also how particular communities accept communication and treatment. Certain cultural groups will not just walk into Dr.'s offices seeking care, nor are they completely accepting of what they hear via the news or radio telling them what they need or should do

Prioritize LGBTQ+ health

Language barriers between patients and staff at health facilities lead to healthcare disparities (ex. Kanjobal, Mam, Chu, and Quiche speaking population of migrant workers in Immokalee)

Assisted Living Facilities having trouble finding places to transfer people with medical needs

Lack of affordable housing

Lack of coordination and care between community partners

Specific populations with increased rates of mental health conditions/addiction

Naples location: pay doesn't equal living cost

Have staff in healthcare positions trained on cultural competency, staff will then know what is acceptable or frowned upon in certain cultures, so that individuals are not insulted by staff

Need paid post-partum leave from work

# Community Challenges 

## Barriers and Solutions to Community Priorities

During the focus groups, participants were asked how can the local public health system improve upon disseminating health education and prevention strategies to the public regarding emerging public health threats such as COVID-19.

Figure 18.

## Emerging Public Health Threat Response

> PSAs in all commonly spoken languages in Collier County

Make YouTube channel and create health messaging and send links out to the public

Health education in HOA meetings

```
Looking at disparities and inequities in minority communities, and causes
```

More partnerships within the community

Positive messaging/exposure to uplift the community

## Repetition. Community

 resources must be visible and repeated so that people remember it when they need itSpeaking with a united voice. Have the entire local public health system (health department, hospitals, healthcare groups, county, state, and federal levels) work together as a joint information system to standardize and disseminate information to the public. It would further get the right information out on social media

Focus on clearing up confusing information and misinformation

Utilize farmers markets, food
banks to get information out

Get health education materials into churches

Clearer messaging around COVID-19 testing/vaccination site locations and hours

More communication with existing partners

Reaching people where they are- clerical/ faith-based

More accessible information about health education. Find ways to make health education more pervasive in our daily lives

Better promotion of the database with all facilities and services available in the county for COVID-19 resources, testing, vaccinations

Have one organization send out email blasts

De-politicize health

PSAs for health information on news stations

More media presence and advertising of programs and services

Promotion through Spanish media and newspapers

More outreach to older adult population

More PSA announcements and articles though news outlets

Develop a way that anyone who is registered to vote can opt in to get monthly information on health, government issues/updates, etc. through email

## Community Challenges

## Conclusion

As more in-depth evaluation continues, potential solutions will be identified and incorporated into strategic planning efforts going forward. The Community Themes and Strengths Assessment (Figure 19), the Community Health Status Assessment (Figure 20), the Forces of Change Assessment (Figure 21), and the Local Public Health System Assessment(Figure 22), are the building blocks of Collier County's Community Health Assessment(CHA) (Figure 23), which is the primary driver of the Community Health Improvement Plan(CHIP) (Figure 24). The four MAPP Assessments, CHA, and CHIP are available on the DOH-Collier website under the Public Health Information section.

The focus group and survey process continues to be a valuable process for establishing and reinforcing communication and various linkages within the community. With a heightened focus on becoming a more age-friendly community, continuing to excel in our other strengths, while also focusing on our areas for improvement, Collier County will continue the pursuit of its shared vision to be the healthiest county in the nation to live, learn, work, and play. If viewing this report as a PDF, click on the images below to access the links to each Collier County MAPP Assessment, CHA, and CHIP.


## Assessment Promotion

## Community Survey Flyer

Figure 25., is a flyer that was distributed around the county to local partners, and the community during COVID-19 vaccine events to prompt individuals to take the community health survey. On the flyer, was a working QR code, and link to the online survey. The flyer was also posted on the DOH-Collier website, and placed around DOH-Collier's Naples and Immokalee locations.

Figure 25.


## Assessment Promotion

## Community Focus Group Flyers

Figures 26-29., are flyers that were used to promote upcoming public focus groups that were being held around the county.

Figure 26.


Comparte tus opiniones sobre la salud de nuestra comunidad

Lunes 16 de Agosto
11:00 a.m. - 11:45 a.m (Sesión en Español)
Golden Gate Senior center


- ABIERTO AL PUBLICO *


Nos quistaria invianta s parififal en um



Figure 27.
Share Your Thoughts about the Health of Our Community


Share Your Thoughts about the Health of Our Community

Tuesday, August 17th
10:00 a.m. - 11:00 a.m.
11:00 a.m. - 12:00 p.m.
goiden cafi Libraty


- OPEN TO THE PUBLIC



## Assessment Promotion

## Press Releases

Displayed in Figure 30., is the press release shared with local media outlets to promote the community health survey to the public.

Figure 30.

## August 17, 2021

DOH-COLLIER IS COLLECTING COMMUNITY FEEDBACK
Community Health Survey Responses Requested


## Contact:

Breanna Johnson
CollierPIO@flhealth.gov
239-252-8228

Naples, Fla. - The Florida Department of Health in Collier County (DOH-Collier) is requesting the assistance of community residents in determining the county's most important health concerns. As part of the ongoing Community Health Assessment (CHA), DOH-Collier is surveying residents throughout Collier County to assess the health needs of our community. To complete the survey go to the following link https://www.surveymonkey.com/r/healthycollier.

The Collier County CHA will identify priority issues related to the health and wellbeing of our community. The goal of the CHA is to develop strategies to address the community's health needs and identified issues. Feedback from the surveys will be included in the assessment.

\#\#\#

## About the Florida Department of Health

The Department, nationally accredited by the Public Health Accreditation Board, works to protect, promote and improve the health of all people in Florida through integrated state, county and community efforts.

Follow us on Facebook, Instagram and Twitter at @HealthyFla. For more information about the Florida Department of Health please visit www. FloridaHealth.gov.

## Assessment Promotion

## Press Releases

Displayed in Figure 31., is the press release shared with local media outlets to promote the Community Health Focus Groups being held to the public.

Figure 31 .

July 30, 2021
THE FLORIDA DEPARTMENT OF HEALTH IN COLLIER COUNTY REQUESTS COMMUNITY FEEDBACK
Focus Groups Scheduled for Community Health Assessment


Collier County

Contact:
Breanna Johnson
Breanna.Johnson@flhealth.gov
239-252-8228
Naples, Fla. - The Florida Department of Health in Collier County (DOH-Collier) is requesting the assistance of community residents in determining the County's most important health concerns. As part of the ongoing Community Health Assessment (CHA), DOH-Collier will be hosting community focus groups throughout the county to assess the health needs of our community. The focus groups are open to the public. If your organization or group would like to schedule a focus group, please email Julissa.Moreland@flhealth.gov.

The following locations have been scheduled:
Tuesday August 3, 2021 | Headquarters Library
10:00AM-11:00AM | 2385 Orange Blossom Drive, Naples, FL 34109
Tuesday August 10, 2021 | South Regional Library
2:00PM-3:00PM | 8065 Lely Cultural Parkway, Naples, FL 34113
Tuesday August 17, 2021 | Golden Gate Library
10:00AM-11:00AM | 11:00AM-12PM | 2432 Luceme Road, Naples, FL 34116
The Collier County CHA will identify priority issues related to the health and wellbeing of our community. The goal of the CHA is to develop strategies to address the community's health needs and identified issues. Feedback from the focus groups will be included in the assessment.

## \#\#\#

## About the Florida Department of Health

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## Community Health Survey

Figures 32－34．，are the community health surveys used during in－person focus groups to gather the community and local partner＇s insight on what the residents of Collier County feel is important．

## Community Health Survey－English

Figure 32.

## Collier County Community Health Survey 2022

Home Ziip code $\qquad$ Gandar $\qquad$ Age $\qquad$ Raca $\qquad$ 1624

The fallowing questions ask you to rele how true ycu perceive the statement to be $A$ sorre of $\overline{\text { a }}$ means that you think the statement e mposty true and evident within ouf community as opposed to at score of 1 which indicates ohat you see valy Istle evidence of trith in tris statemint，please rate the following

|  | Additional Focus Group Questions | Likert Scale Response日 11 to 5 ，with 5 bena mosi costire！ |
| :---: | :---: | :---: |
| I | 1 am sabsied with the quaity of fife in out community（Consider your sense of satety，well－ being，participation in community life and associations，ete．） | ロ5ロ4ロ3ロ2ロ1 |
| 2 | I am sabsied with the heashcare system in the community．（Consider access，cost， availibility quality，options in health care，etc．） | ロ5ロ4ロ3ロ2ロ1 |
| 3 | There are acequate resources for primary cale in the county． | 口5ロ4ロ3ロ2ロ1 |
| 4 | There are acequate resources for specially medical care | 口5ロ4ロ3ロ2ロ1 |
| 5 | There are erough denial senvoes avsilable for chiloren and aduts：／Consider afforaability as well as access．） | 口5ロ4ロ3ロ2ロ1 |
| 6 | Thers are adaquate resources to aidress drug and alcohol abuse in Collier County |  |
| 7 | This commanity is a good place to grow old．（Consider elderfriendly housing，transporiation to medical services，long term care nesds，chunches，shopping；elder day care，social support for the eldery liwing alone，meals on wheels，interesting activities，stc，） | ロ5 ロ4 ロ3 ロ2口1 |
| 8 | This commanity is a safe place to live（Consider fimely poices，jife and rescue services in throughout the County，residemis＇perceptions of safety in the home，the workplace，schools playgrourds；paiks，and malls．Neighbors krow and trust one another，and look out for ore another） | ロ5ロ4ロ3ロ2ロ1 |
| 9 | Residents have acress to afiondeble，heathy foods in theit neighborkooris． | ロ5 ロ4 ロ3口2ロ1 |
| 10 | Collier madways are safe for divers，bicyolista，and pedestrians． | ロ5ロ4ロ3ロ2ロ1 |

Please rark bre folliwing in order of imponance for Colliar County，
11 A rank of 1 meanz that the issue is most inportant and a fank of 10 means the issue is of least imporance Please place a number in the appropriate rank box

| Fandine mastimporant | Commuricable Diseases |
| :---: | :---: |
|  | Chronic Disease（hear disease diatetes，cancar） |
|  | Obesity |
|  | Ventai Heath |
|  | Aicohol and Drug Use |
|  | Dental Hestin |
|  | Hesilih of Older Adults |
|  | Acgess to Care |
|  | Disaoilities（physical，sensory，intaletual： |
| Fankere iesstimponart | Unmfertional Iniunies |

f2．is thene arover heally issue trat you would rank in high imporance？


## Community Health Survey

## Community Health Survey－Spanish

Figure 33.

## Cuestionario sobre la Salud en el Condado de Collier 2022

Código postal del hogar $\qquad$ Sexo $\qquad$ Edad $\qquad$ Raza／Etnicidad $\qquad$ HOALTH
HEALH
Las siguientes preguntas se le pide que evalue，como usted percibe las declaraciones．Una puntuación de 5 significa que cree que la declaración es verdadera y evidente dentro de nuestra comunidad en comparación con una puntuación de 1 indica que es de muy poca evidencia de la verdad，por favor，calificue los siguientes：

|  | Additional Focus Group Questions | Escala Likert Respuestas （1 to 5 ，with 5 being most positive） |
| :---: | :---: | :---: |
| 1 | Estas satisfecho con la calidad de vida en nuestra comunidad．（Tenga en cuenta su sentido de seguridad，el bienestar，la participacion en la vida comunitaria y asociaciones，etc．） |  |
| 2 | Estas satisfecho con el sistema de salud en la comunidad．（Considere el acceso， costo，disponibiwidad，calidad，opciones en el cuidado de salud，etc．．） |  |
| 3 | Hay recursos suficientes para la atención primaria en el condado． | 口5 ロ4 ロ3口2 ロ1 |
| 4 | Hay recursos sufficientes para el cuidado médico de la especialidad． |  |
| 5 | Se dispone de suficientes servicios dentales para niños y adultos．（Considere si es asequible，y si tiene accesol． | ロ5 ロ4 ロ3 ロ2 ロ1 |
| 6 | Hay recursos adecuados para abordar el abuso de drogas y alcohol en el condado de Collier． | $\square 5 \square 4 \square 3 \square 2 \square 1$ |
| 7 | Esta comunidad es un buen lugar para envejecer．（Considere viviendas para personas mayores，transporte a servicios médicos，necesidades de cuidado a largo plazo， iglesias，compras；cuidado de ancianos，apoyo social para personas mayores que viven solas，comidas sobre ruedas，actividades interesantes，etc．） | ㅁ 5 ロ4 ロ 3 ロ2 ロ1 |
| 8 | Esta comunidad es un lugar seguro para wivir．（Tenga en cuenta las percepciones de los residentes de la seguridad en el hogar，hugar de trabajo，escuelas，parques infantiles，parques y centros comerciales．Vecinos se conocen y confian el uno al otro y cuidan uno al otro，a tiempo los servicios de policia，bomberos y rescate en todo el condado） | $\square 5 \square 4 \square 3 \square 2 \square 1$ |
| 9 | Los residentes fienen acceso a alimentos sanos，asequibles en sus barrios |  |
| 10 | Carreteras de Collier son seguros para los conductores，ciclistas y peatones． | $\square 5 \square 4 \square 3 \square 2 \square 1$ |

Por favor，clasificar las siguientes en orden de importancia para el Condado de Collier．
11 Un rango de 1 significa que el tema es más importante y un rango de 10 significa que el tema es de importancia menor Favor de escribir el número en la caja de rango．
Rango de mas importancia

Rango de meno importancia
$\square$

## Community Health Survey

## Community Health Survey－Creole

Figure 34.

## Ankèt sou Lasante nan Collier County 2022

## Kòd Postal

$\qquad$ Sèks $\qquad$ Laj $\qquad$ Ras／Etnisite： $\qquad$ HEALTH Keksyon sa yo ke nou pral poze－w la mande－w nan kin nivo fraz sa yo vrè．Si ou mete 5，sa vie di a klè ke ou panse ke fraz sa yo vre epi ou ka wé bagay sa yo a klè nan kominote－w la；tandiske si ou mete 1 sa endike ke pa gen anpil prèv ke bagay sa so vrè nan kominote ya．Tanpri bay yon pwen pou chak bagay sa yo：

|  | Lòt Keksyon Adisyonèl pou Fokis Gwoup la | Repons selon Likert Scale〈 105.0 k 5 ki ve ditré pozion） |
| :---: | :---: | :---: |
| 1 | Mwen satisfè ak kalite lavi nan kominote ya．（Konsidere ke ou gen sekirite，byennèt， patisipasyon nan lavi kominote ya ak fè pati asosyasyon，etc．） |  |
| 2 | Mwen satisfè ak sistèm sante nan kominote ya．（konsidere aksè a la sante，pri laswenyaj，kantite disponib，kalite，chwa kote pou mwen pran swen，etc．） | $\square 5 \square 4 \square 3 \square 2 \square 1$ |
| 3 | Genyen resous sante ki apwopriye ak bezwen sante nan komin nan（county）． |  |
| 4 | Genyen resous apwopriye pou swen medikal espesyal． |  |
| 5 | Genyen ase sèvis pou dan ki disponib poutimoun ak granmoun yo．（Konsidere pri sévi dantè epi aksè ak sévis yo） |  |
| 6 | Gen resous adekwa pou adrese abi dwóg ak alkol nan Collier County． | $\square 5 \square 4 \square 3 \square 2 \square 1$ |
| 7 | Kominote sa a se yon bon kote pou granmoun．（Konsidere lojman amikal pou moun ki aje，transpó pou sèvis mecikal，bezwen swen alontém，legliz，makèt swen pou granmoun aje，sipò sosyal pou granmoun aje k ap viv pou kont li，manje sou wou， akfivite enteresan，elatriye．） | ロ 5 － 4 ロ ${ }^{\text {a }}$ 2 1 |
| 8 | Kominote ya se yon kote an sekirite pou moun viv．（Konsidere kijan moun nan zón nan santi yo lè yo lakay yo，nan travay，lekd̆，nan espas rekreyasyon yo，nan pak，nan magazen yo．Vwazen yo fè konfyans youn ak lott，epi youn veye pou lott） | ロ5 ロ4 ロ3 ロ2 ロ1 |
| 9 | Moun ki ap viv nan Collier genyen aksé ak manje ki bon mache ak ansante nan vwazinaj kote ke yo rete． |  |
| 10 | Wout nan Collier County an sekirite pou moun kap monte bisiklèt epi ki ap mache a pye． |  |

Tanpri souple mete bagay sa yon an lòd selon enpótans yo pou Collier County．
11 Si ou mete 1 sa vie di ke se pwoblèm ki pi enpótan，epi si ou mete 10 sa vle di ke se pwoblèm ki mwens enpótan． Tanpri souple mete chak nimewo nan bwat ke ou panse ki apwopriye．
$\left.\begin{array}{rr}\text { Ranje yo swivan sak pi } \\ \text { Enpotan }\end{array}\right)$
A．Maladi ki ka Retransmèt
B．Maladi Kwonik（maladi Kè，dyabèt／sik，Kansè）
C．Obêz（wò gwo）
D．Maladi Mantal
E．Izaj Dwóg ak Alkd
F．Swen Dantè
G．Swen Ti Granmoun
H．Aksè a Laswenyaj
I．Andikape（fizik，mental／sans yo，entèlektyél）
J．Aksidan ki pa Entansyonél

12 Ėske gen yon lobt pwoblèm sante ke ou ta klase nan gwo enpótans？






Healthcare System

## Comprehensive Report

Prepared by Health Planning Council of Southwest Florida, Inc. on behalf of Collier County Residents and Health Care

Providers

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## Population

Demography is the study of human population. In public health the population is monitored and analyzed, since its size, distribution, structure, age composition, and growth are associated with mortality and morbidity levels, life expectancy, risk factors, and access to care. These demographic analyses of the community are an epidemiological tool which assists the County, State, and the Country in the assessment of the health status at all levels. The population levels are utilized in all aspects of public health measurements, including crude numbers, rates, ratios, proportions, incidence and prevalence levels, and life expectancy.

Population trends allow for health care professionals and analysts to strategically plan for levels of utilizations of health services within communities and other geographical areas as well as assess current un-met and future health needs in specific sub-groups and vulnerable populations.

All population characteristics are associated with known levels of quality of life, which in turn result in statistically predictable health status outcomes within a particular community. Since public health is population based, the coupling of demography with epidemiology results in a community health status assessment that will assist us to improve the health of Collier County through integrated community efforts by following the data and analyses as they uncover familiar and emerging trends at the local level.

## Population Growth, Age Distribution, and Gender

Between 2000 and 2020, the resident population of Collier County grew at a swift pace. In terms of actual numbers, Collier County's population increased by 131,907 from 254,571 in 2000 to a total of 386,748 by 2020.

Exhibit P1: Resident Population in Collier County, 2000-2020


Source: Florida Legislature's Office of Economic and Demographic Research (EDR)

The resident population of Collier County is projected to increase by 141,256 by 2045, resulting in a significantly slower rate of growth of 1.4 percent per year for the period 2020 to 2045, (Exhibit P3). All communities in Collier County are expected to see exponential growth over the next 20 years. It is projected that the three biggest communities, by population, will be North Naples, Urban Estates, and Rural Estates. (Exhibit P4)

Exhibit P2: Collier County Population Rate of Growth, 2000, 2010, 2019

|  | $1990-2000$ | $2000-2010$ | $2010-2019$ |
| :--- | :---: | :---: | :---: |
| Percent Change | $64.5 \%$ | $19.2 \%$ | $17.3 \%$ |
| Population | 2000 Census $-254,571$ | $2010-322,052$ | $2019-377,700$ |

Source: Florida Legislature, Office of Economic and Demographic Research

Exhibit P3: Estimated Population in Collier County, 2020-2045


Source: Florida Legislature, Office of Economic and Demographic Research

Exhibit P4: Permanent Population Estimates and Projections by Collier County Communities, 2010, 2020, 2030

| Collier Community | 2010 | 2020 | 2030 |
| :--- | :---: | :---: | :---: |
| North Naples | 55,105 | 59,638 | 63,395 |
| South Naples | 28,859 | 35,311 | 38,355 |
| Central Naples | 18,856 | 19,763 | 20,313 |
| East Naples | 22,322 | 24,022 | 26,017 |
| Golden Gate | 44,963 | 45,823 | 46,425 |
| Urban Estates | 38,744 | 49,159 | 58,893 |
| Rural Estates | 34,760 | 43,457 | 58,229 |
| Marco | 1,221 | 2,532 | 3,968 |
| Royal Fakapalm | 12,001 | 21,208 | 31,732 |
| Corkscrew | 4,962 | 17,035 | 27,576 |
| Immokalee | 24,303 | 25,934 | 27,800 |
| Big Cypress | 233 | 246 | 254 |

Source: Collier County Comprehensive Planning Section, June 14, 2018

In Collier County, as in all counties in the United States, mortality rates are higher for males than for females at all ages. This variance in death rates results in life expectancy at birth being on average 5 years greater for females than for males. This ultimately results in a greater female population beginning around 45-49 years of age and increasing over males for every age group thereafter.

As can be visualized in these graphical presentations of the age and gender distribution, between 2000 and 2020, while the total population of Collier County increased by 51 percent for the 20-year period, dramatic shifts in the age distribution occurred reflecting the ongoing demographic transition in the State of Florida and the United States.

This demographic change produced by the "baby boomer" cohort is a consequence of this generation entering and spanning middle age to their retirement years. This highly visible demographic shift will have a significant impact on healthcare access and provision and socio-economic dynamics for Collier County and Florida during the 21st century.

Exhibits P5, P6, and P7 display the population by age and gender for 2000, 2010, and 2020 for Collier County.

Exhibit P5: Population by Age Distribution and Gender, Collier County, 2000


Source: Florida Legislature Office of Economic and Demographic Research

Exhibit P6: Population by Age Distribution and Gender, Collier County, 2010


Source: Florida Legislature Office of Economic and Demographic Research

Exhibit P7: Population by Age Distribution and Gender, Collier County, 2020


Source: Florida Legislature Office of Economic and Demographic Research

The median age increased in Collier County by 5.6 years between 2009 and 2019 ( 45.2 to 50.8). This is a direct consequence of the aging of Collier's population as visually described by the population charts above (Exhibits P5, P6, and P7).

Exhibit P8: Collier County Median Age, 2009, 2014, 2019


Source: US Bureau of the Census, American Community Survey, Table B01002

## Race and Ethnicity

Between 2000 and 2020 the Black population in Collier County increased by 101 percent from 14,024 to 28,263 respectively.

Exhibit P9: Collier County Population by Race, 2000, 2010, 2020

|  | 2000 | Percent | 2010 | Percent | 2020 | Percent |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| White | 237,489 | $93.3 \%$ | 291,322 | $90.5 \%$ | 345,306 | $89.4 \%$ |
| Black | 14,024 | $5.5 \%$ | 21,762 | $6.8 \%$ | 28,263 | $7.3 \%$ |
| Other | 3,058 | $1.2 \%$ | 8,968 | $2.8 \%$ | 12,909 | $3.3 \%$ |

Source: Florida Legislature Office of Economic and Demographic Research

It should be noted that in the State of Florida race and ethnicity are tracked separately. While Hispanics constituted less than 24 percent of the population in Collier in 2005, by 2020 the proportion increased to about 28 percent. This upward trend is expected to increase at an annual rate of approximately 15.2 percent between 2020 and 2025, when the Hispanic population in Collier County is projected to surpass 120,000 (Exhibits P10 and P11).

Exhibit P10: Collier County Population by Ethnicity


Source: Florida Legislature Office of Economic and Demographic Research

Exhibit P11: Population Projection by Ethnicity in Collier County, 2021-2025


Source: Florida Legislature Office of Economic and Demographic Research

The vast majority of people in Collier County who identify as Hispanic or Latino are of Mexican origin (34 percent). The next most common origins are Cuba ( 27 percent), South America (18 percent), and Central America (10 percent).

Exhibit P12: Hispanic or Latino Origin, Collier County, 2019



Source: US Bureau of the Census, American Community Survey, Table B03001
Between 2010 and 2019 the number of foreign-born residents increased by 41.3 percent to account for about 26 percent of the total Collier County population in 2019. During the same period the US born population in Collier County decreased from 76 percent of the total county population in 2010 to just below 72 percent of the total number of residents in 2019, a decrease of 4 percent. When analyzing the data by region of the world, approximately 76 percent of the foreign-born residential population of Collier County in 2019 originated from Latin America. (Exhibit P13 and P14)

Exhibit P13: Collier County Population by Place of Birth

| Place of Birth | 2010 | Percent | 2019 | Percent |
| :--- | :---: | :---: | :---: | :---: |
| Born in Florida | 72,196 | $22.4 \%$ | 87,604 | $22.8 \%$ |
| Born in Other State in the United States | 172,569 | $53.5 \%$ | 188,647 | $49.0 \%$ |
| Born Outside of United States* | 5,529 | $1.7 \%$ | 7,157 | $1.9 \%$ |
| Foreign Born+ | 72,178 | $22.4 \%$ | 101,494 | $26.4 \%$ |

Source: US Census of the Bureau, American Community Survey, Table B05002
*Persons born outside of the United States are residents or citizens born abroad.

+ Foreign born refer to persons who were not US citizens or residents when born outside of the country

Exhibit P14: Collier County Foreign Born Population by Birthplace, 2019


Source: US Census of the Bureau, American Community Survey, Table B05002

The demographic transitions are having an impact on socio-cultural influences throughout the county within households as well as in the educational system. Collier County consistently has a higher percentage of population that speak English less than very well when compared to Florida (2019, 14.9\% vs. $11.9 \%$ ). In 2019, of households that speak languages other than English 73 percent spoke Spanish (Exhibit P16).

Exhibit P15: Population 5+ that Speak English Less Than Very Well, Collier County and Florida, 2009-2019


Source: US Bureau of the Census, American Community Survey, Table B06007

Exhibit P16: Collier County Population by Language Spoken at Home (Other than English), 2010, 2019


Source: US Census of the Bureau, American Community Survey, Table S1601
*Population 5 years and over

## Seasonal Population in Collier County

Collier County, like many Florida counties, draws a relatively large number of seasonal residents and visitors, especially during peak season. The largest proportion of seasonal residents tend to be 65 years and older. In 2020 the number of projected seasonal population in Collier Country was 459,799, an increase from the previous year.

Exhibit P17: Collier County Peak Season Population, Estimates and Projections, 2000, 2010, and 2020

| Geographical Area | 2000 | Percent | 2010 | Percent | 2020 | Percent |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Greater Collier <br> County | 265,366 | $85.7 \%$ | 343,593 | $88.7 \%$ | 420,945 | $91.5 \%$ |
| Countywide Total | 309,511 |  | 387,183 |  | 459,799 |  |

Source: Collier County Comprehensive Planning Section, June 14, 2018
Between 2020 and 2040, the peak season population for Collier County is expected to grow by 30 percent from 459,799 to 597,256. As evidenced in Exhibit P16, the peak season and the resident population in Collier County have been growing and are projected to continue to increase at a constant and parallel rate between 2020 and 2040.

Exhibit P18: Collier County Resident and Peak Season Population, Estimates and Projections, 2020-2040


Source: Collier County Comprehensive Planning Section, June 14, 2018

## Social Determinants of Health

The relationship between socio-economic levels, living standards, health status, the quality of life, and life expectancy have been well documented, studied, and proven scientifically for centuries. The wellestablished statistical association existing between income level and educational attainment, which consequently leads to healthier communities and populations, is an accepted basic construct for improving public health in the United States.

Increased socio-economic status allows individuals to obtain health insurance and pay for medical services, afford livable and safe housing, and nutritional food. A decline in levels of income has detrimental health effects and consequences for the entire population. Children living in poverty are subject to greater health and developmental risks than adults. Infants and children in poverty have higher rates of morbidity and mortality and face a greater likelihood of unintentional injuries. Children in poverty also are more likely to lack access to healthcare and less likely to reach a desirable level of educational attainment. Collier County is one of the more affluent communities in the State of Florida, yet examination of socio-economic and other trends of well-being show that we are not immune to challenges related to socio-economic status in some areas of the country.

Here are some ways different types of social determinants can relate to health in Collier County.


Source: Health Planning Council of Southwest Florida

## Income

Income and financial resources have been correlated with levels of health as a means for individuals to obtain health insurance, pay for health care, afford healthy foods, obtain adequate housing, and access basic necessities such as clothes and transportation. Statistically, this is true until a certain family and individual income level is reached. Both Collier County and Florida have seen a continuous increase in median household incomes since 2013. The median household income in Collier County is significantly higher when compared to the Florida average ( $\$ 69,653$ vs $\$ 55,600$ ).

Exhibit S1: Median Household Income, Collier County and Florida, 2009-2019


Source: US Bureau of the Census, American Community Survey, Table B1901

Exhibit S2 provides the distribution of household income for Collier County and Florida for the periods 2010, 2015, and 2019. Exhibits S3 and S4 look at income distribution by gender and educational attainment.

In 2019, 4.1 percent of Collier County households had a combined income of less than \$14,999; this compares to 5.3 percent across Florida and 4.4 percent in the United States. 9.6 percent of Collier County households had an income of $\$ 100,000$ or greater during 2019; this is a higher proportion than the State of Florida average of eight percent, but one percent less than the United States. Most Collier County residents earned between $\$ 25,000$ and $\$ 49,999$, which is on par with the State of Florida and the United States.

Exhibit S2: Earnings in the Past 12 Months Collier County, Florida, and United States

|  | 2010 |  |  |  | 2015 |  |  | 2019 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income Distribution | Collier | Florida | US | Collier | Florida | US | Collier | Florida | US |
| $\$ 1$ to \$9,999 or less | $2.4 \%$ | $2.5 \%$ | $2.2 \%$ | $2.9 \%$ | $1.8 \%$ | $1.8 \%$ | $1.4 \%$ | $1.7 \%$ | $1.7 \%$ |
| $\$ 10,000$ to \$14,999 | $8.4 \%$ | $5.5 \%$ | $4.5 \%$ | $5.7 \%$ | $4.5 \%$ | $3.7 \%$ | $2.7 \%$ | $3.6 \%$ | $2.7 \%$ |
| $\$ 15,000$ to \$24,999 | $23.3 \%$ | $19.0 \%$ | $15.5 \%$ | $18.1 \%$ | $18.2 \%$ | $14.2 \%$ | $14.5 \%$ | $15.1 \%$ | $10.8 \%$ |
| $\$ 25,000$ to \$34,999 | $20.1 \%$ | $19.4 \%$ | $17.1 \%$ | $17.5 \%$ | $19.3 \%$ | $16.1 \%$ | $20.4 \%$ | $19.0 \%$ | $15.2 \%$ |
| $\$ 35,000$ to \$49,999 | $17.0 \%$ | $21.0 \%$ | $20.8 \%$ | $18.4 \%$ | $21.1 \%$ | $20.0 \%$ | $23.9 \%$ | $20.8 \%$ | $19.7 \%$ |
| $\$ 50,000$ to \$64,999 | $8.9 \%$ | $13.1 \%$ | $14.7 \%$ | $12.7 \%$ | $13.2 \%$ | $14.9 \%$ | $11.8 \%$ | $13.8 \%$ | $15.5 \%$ |
| $\$ 65,000$ to \$74,999 | $3.9 \%$ | $4.7 \%$ | $5.9 \%$ | $4.5 \%$ | $5.0 \%$ | $6.3 \%$ | $5.5 \%$ | $5.7 \%$ | $6.9 \%$ |
| $\$ 75,000$ to \$99,999 | $6.4 \%$ | $6.8 \%$ | $8.8 \%$ | $7.7 \%$ | $7.2 \%$ | $9.8 \%$ | $6.5 \%$ | $8.4 \%$ | $11.0 \%$ |
| $\$ 100,000$ or more | $9.6 \%$ | $8.0 \%$ | $10.5 \%$ | $12.5 \%$ | $9.8 \%$ | $13.3 \%$ | $13.4 \%$ | $11.9 \%$ | $16.5 \%$ |

Source: US Bureau of the Census, American Community Survey, Table S2001

Median or average incomes only tell part of the story of disparate income levels within a county. A quintile equates to one-fifth of the households in Collier County; thus, in this chart 20\% of the population have a household income of $\$ 31,453$ or less, while $20 \%$ of the population has a household income above $\$ 151,893$. The top 5 percent of households in Collier County have an income of more than $\$ 250,000$ (the highest threshold broken out by US Bureau of the Census).

Exhibit S3: Household Income Quintile Upper Limits, Collier County and Florida, 2019

|  | Collier County | Florida |
| :--- | :---: | :---: |
| Lowest Quintile | $\$ 31,453$ | $\$ 25,868$ |
| Second Quintile | $\$ 57,781$ | $\$ 47,112$ |
| Third Quintile | $\$ 94,413$ | $\$ 73,205$ |
| Fourth Quintile | $\$ 151,893$ | $\$ 117,017$ |
| Lower Limit of Top 5 Percent | $\$ 250,000+$ | $\$ 226,319$ |

Source: US Bureau of the Census, American Community Survey, Table B19080

In Collier County a higher percentage of men than women earn between \$25,000 and \$65,000. A higher percentage of women were earning \$65,000 to \$99,999 when compared to men in 2019.

Exhibit S4: Earnings in the Past 12 Months by Gender, Collier County, 2019


Source: US Bureau of the Census, American Community Survey, Table S2001

Individuals in Collier County who have a graduate or professional degree on average earn \$42,000 more annually than individuals with less than a high school education. The median income has continued to rise from 2010 and 2019, regardless of educational attainment.

Exhibit S5: Median Earnings by Educational Attainment, Collier County, 2010, 2015, 2019


Source: US Bureau of the Census, American Community Survey, Table S2001

## Education

The relationship between health outcomes and educational attainment is well known in the United States and globally. The reasons for this are multi-faceted, including that a higher level of education usually results in higher incomes. Educational level is linked to access to healthcare as health insurance is usually linked to jobs requiring a specific level of educational attainment. The labor market and its distribution also contribute to health outcomes. Unemployment rates in the United States are higher for individuals without a high school diploma compared to those who are college graduates.

Exhibit S5 shows the educational attainment in the population 25 years of age and over for Collier County and Florida for 2010, 2014, and 2019. Between 2010 and 2019, the percent of the population in Collier County over the age of 25 who did not graduate high school or beyond declined from 14.4 percent to 11.0 percent, in Florida the percent decreased from 14.5 to 11.6 percent. During the same 9 year period, the percentage of individuals with graduate degrees increased by over 2 percentage points in both Collier County and in Florida.

Exhibit S6: Educational Attainment of the Population 25 Years and Over, Collier County and Florida, 2010, 2014, and 2019

|  | Collier County |  |  | Florida |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | 2014 | 2019 | 2010 | 2014 | 2019 |  |
| Less than $9^{\text {th }}$ grade | $6.5 \%$ | $8.1 \%$ | $5.7 \%$ | $5.7 \%$ | $5.2 \%$ | $4.6 \%$ |  |
| $9^{\text {th }}$ to $12^{\text {th }}$, no diploma | $7.8 \%$ | $7.1 \%$ | $5.3 \%$ | $8.8 \%$ | $7.6 \%$ | $7.0 \%$ |  |
| High school graduate and/or GED | $27.4 \%$ | $25.3 \%$ | $27.1 \%$ | $29.9 \%$ | $29.6 \%$ | $28.4 \%$ |  |
| Some college, no degree | $20.7 \%$ | $18.2 \%$ | $17.3 \%$ | $21.2 \%$ | $20.7 \%$ | $19.4 \%$ |  |
| Associate degree | $6.6 \%$ | $6.5 \%$ | $8.7 \%$ | $8.6 \%$ | $9.7 \%$ | $9.9 \%$ |  |
| Bachelor's degree | $19.1 \%$ | $21.2 \%$ | $20.8 \%$ | $16.6 \%$ | $17.4 \%$ | $19.3 \%$ |  |
| Graduate or professional degree | $12.0 \%$ | $13.6 \%$ | $14.9 \%$ | $9.2 \%$ | $9.8 \%$ | $11.4 \%$ |  |

Source: US Bureau of the Census, American Community Survey, Table DP02

Those who identified as Asian have a higher percentage with a bachelor's degree or higher when compared to other races/ethnicities. Individuals that identified as white had a higher percentage of those with a high school diploma or higher.

Exhibit S7: Educational Attainment by Race and Ethnicity, Collier County and Florida, 2019


Source: US Bureau of the Census, American Community Survey, Table S1501

## Workforce

There is an established causal relationship between unemployment and health. Unemployment is associated with a decline in health status and quality of life. Lack of employment is linked to various physical health outcomes including morbidity, mortality, and suicide. Unemployment is correlated with numerous unhealthy behaviors including tobacco and alcohol consumption, poor diet, and lack of exercise. All these behaviors are risk factors for the development of disease and potential mortality.

In 2020, the unemployment rate for Collier County was higher than the average rate for Florida. The workforce, along with the economy, was severely impacted by the COVID-19 pandemic. There was an unusually high rate of unemployment that was seen throughout the United States. The second highest employment category in Collier County is leisure and hospitality, as shown in Exhibit S9; this industry was affected severely during the COVID-19 pandemic. A lower percentage of Collier County residents work outside the county when compared to the Florida average. Collier has a significantly higher per capita personal income when compared the state of Florida ( $\$ 99,382$ vs $\$ 52,426$ ), but this is due to the unusually large percentage of people with an annual wage of $\$ 100,000$ and more (Exhibit S 2 ). The workers $16+$ years old working outside the county is much lower because Collier County has a high percentage of workers who commute from Lee and Hendry Counties. Low-wage workers cannot afford to live in Collier County; therefore, the per capita income in Collier County is higher than the Florida average because higher wage workers live here.

Exhibit S8: Workforce Data, Collier County and Florida, 2020

|  | Collier County | Florida |
| :--- | :---: | :---: |
| Labor force as a \% of population age 18+ | $56.4 \%$ | $58.8 \%$ |
| Unemployment rate (\%) | $6.9 \%$ | $3.3 \%$ |
| Average annual wage, all industries | $\$ 54,829$ | $\$ 55,845$ |
| Per capita personal income* | $\$ 99,382$ | $\$ 52,426$ |
| Workers 16+ working outside county of residence | $8.1 \%$ | $18.2 \%$ |

Source: The Florida Legislature, Office of Economic and Demographic Research
*2019

Exhibit S8 shows the unemployment rates for Collier County and the State of Florida for the period 2001 to 2021. In Collier County the unemployment rate ranges from a low of 2.2 in 2006 to a high of 11.6 in 2010. During this same period the state rate ranged from a low of 3.7 in 2006 to a high of 11.4 in 2010. As can be seen in the graph, the unemployment rates for Collier County have been highly correlated with those of the State of Florida over the two decades. Beginning in 2006 the rates for Collier County and the State rose sharply, hovering around 11 in 2010 and has continued to decrease until 2020.

Exhibit S9: Unemployment Rate, Collier County and Florida, 2001-2021*


Source: US Department of Labor, Bureau of Labor Statistics
*Data reflects the rate for January of each year

The top three employment categories in Collier County for 2020 are trade, transportation \& utilities, leisure and hospitality, and education \& health services. Trade, transportation \& utilities, and education
\& health services are in the top three for both Collier County and Florida. The average annual wages for the top employment categories are as follows: trade - $\$ 48,629$, leisure - $\$ 33,379$, and education $\$ 62,558$.

Exhibit S10: Average Annual Employment by Category, Collier and Florida, Preliminary 2020


Source: Source: US Department of Labor, Bureau of Labor Statistics

## Seasonal Economy

Collier County employment follows a consistent seasonal pattern with many more people employed in the winter months than in the summer months. The typical pattern of employment in Collier County is that the highest employment occurs in December and the lowest employment in August. The average difference in the number of people employed between December and August across the past ten years is 7.29 percent. This pattern is consistent throughout the years of 2011 through 2021. There were two incidences that caused a drop in employment numbers. In 2017, Hurricane Irma disrupted employment in Collier County. In 2020, there was a clear decrease in employment numbers, which was due to the COVID-19 pandemic.

Exhibit S11: Collier County Labor Force by Month, January 2011 to August 2021


Source: United State Department of Labor, U.S. Bureau of Labor Statistics

## Poverty and Food Assistance

When compared to Florida and the United States, Collier County consistently has a lower percentage of people living in poverty. In 2019, 9.4 percent of Collier County residents were living in poverty.

Exhibit S12: Percent of All Ages in Poverty, Collier County, Florida, and United States

|  | Collier County | Florida | United States |
| :--- | :---: | :---: | :---: |
| 2019 | $9.4 \%$ | $12.7 \%$ | $12.3 \%$ |
| 2014 | $14.3 \%$ | $16.6 \%$ | $15.5 \%$ |
| 2009 | $12.6 \%$ | $15.0 \%$ | $14.3 \%$ |

Source: U.S. Census, Small Area Income and Poverty Estimates

When compared to the Florida and United States average, Collier County has a lower percentage of people living in poverty but has higher percentages of children living in poverty. This shows that young families are struggling the most. Between 2009 and 2019 Collier County had a slightly higher percentage of individuals under 18 living in poverty when compared to Florida, except for 2016 and 2019. In 2019, Collier County had 19.5 percent of children living in poverty.

Exhibit S13: Individuals Under 18 Below Poverty Level, Percentage of Population Under 18, Collier County and Florida, 2009-2019


Source: US Bureau of the Census, American Community Survey, Table DP03

There are significant disparities seen in the percentage of children living in poverty between various racial/ethnic groups. Race and ethnicity are tracked separately in Florida. Children that identify as Black saw the largest decrease in poverty. In 2009, 49.8 percent of Black children were living in poverty and in 2019, 20.3 percent were living in poverty.

Exhibit S14: Percentage of Children Living in Poverty by Race, Collier County, 2019


Source: County Health Rankings \& Roadmaps 2021, Small Area Income and Poverty Estimates, American Community Survey five-year estimates

Hispanic children had a higher percentage, with 28 percent of children living in poverty when compared to the other races/ethnicities.

Exhibit S15: Percentage of Children Living in Poverty by Ethnicity, Collier County, 2019


Source: County Health Rankings \& Roadmaps 2021, Small Area Income and Poverty Estimates, American Community Survey five-year estimates

The Supplemental Nutrition Assistance Program (SNAP) of the U.S. Department of Agriculture provides benefits that are used to purchase food at grocery stores, convenience stores and some farmer's market and co-op food programs. Current requirements for eligibility are a household monthly net income of less than 100 percent of the federal poverty guideline. Collier County consistently has had a lower percentage of households receiving assistance when compared to Florida. In 2019, Florida had almost double the percentage of households receiving assistance than Collier County (14.1\% vs. 7.9\%).

Exhibit S16: Households Receiving Cash Public Assistance or Food Stamps, Percentage of Households


Source: US Bureau of the Census, American Community Survey, Table B19058

The Women, Infants, and Children Nutrition Program (WIC) of the U.S. Department of Agriculture provides food and nutritional assistance to pregnant and new mothers and children less than 5 years of age. Exhibits S15 and S16 provides information about WIC in Collier County and Florida. Between 2015 and 2020, the number of WIC eligibles in Collier County decreased from 3,357.8 to 2,499.5.

Exhibit S17: WIC Eligibles, Rate per 100,000 Population, Collier County, Florida, 2010-2020


Source: Florida Department of Health, WIC \& Nutrition Services, FLWiSE

When compared to Florida, Collier County served a lower percentage of those eligible for WIC since 2011. WIC eligibles include pregnant and post-partum women and children ages $0-4$. Knowing the proportion of those in need who are served supports promoting healthful diets and healthy weight to optimize health status and quality of life. The percent of WIC eligibles served is the number served divided by the number in need, expressed as a percentage. Both Collier County and the State of Florida experienced a decrease in service between 2014 and 2019.

Exhibit S18: WIC Eligibles Served, Percentage of WIC Eligibles, Collier County and Florida


Source: Florida Department of Health, WIC \& Nutrition Services, FLWiSE

## ALICE

The United Way has developed a methodology called ALICE (Asset Limited, Income Constrained, Employed) to better approximate the number of people living in poverty in the United States. They believe that despite the Federal Poverty Level's benefit of providing a nationally recognized income threshold for determining who is poor, its shortcomings are well documented. The measure is not based on the current cost of basic household necessities, and except for Alaska and Hawaii, it is not adjusted to reflect cost of living differences across the United States. Thus, the ALICE research team of the United Way, developed new measures to identify and assess financial hardship at a local level and to enhance existing local, state, and national poverty measures.

The first method is the Household Survival Budget. This is an estimate of the total cost of household essentials: housing, childcare, food, transportation, technology, and health care, plus taxes and a 10 percent miscellaneous contingency fund. It does not include any savings, leaving households without a cushion for unexpected expenses and unable to invest in the future.

For the average family of four, two adults and two children, the annual household survival budget in Collier County is $\$ 65,568$. For an adult to make this much a year the hourly wage would need to be $\$ 32.78$. A single adult's household survival budget's annual total is $\$ 26,496$ with an hourly wage of
$\$ 13.25$. Currently the Florida minimum wage is set at $\$ 8.65$, this is $\$ 4.60$ less than what is needed for a single adult to survive.

Exhibit S19: ALICE Household Survival Budget, Collier County, 2018

|  | Single <br> Adult | One <br> Adult, <br> One Child | One Adult, <br> One in <br> Childcare | Two <br> Adults | Two <br> Adult, <br> Two <br> Children | Adults, <br> Two in <br> Childcare | Single <br> Senior | Two <br> Seniors |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Housing | $\$ 778$ | $\$ 996$ | $\$ 996$ | $\$ 996$ | $\$ 1,220$ | $\$ 1,220$ | $\$ 778$ | $\$ 996$ |
| Child Care | $\$ 0$ | $\$ 211$ | $\$ 578$ | $\$ 0$ | $\$ 422$ | $\$ 1,141$ | $\$ 0$ | $\$ 0$ |
| Food | $\$ 316$ | $\$ 545$ | $\$ 456$ | $\$ 656$ | $\$ 1,095$ | $\$ 956$ | $\$ 269$ | $\$ 559$ |
| Transportation | $\$ 375$ | $\$ 532$ | $\$ 532$ | $\$ 546$ | $\$ 843$ | $\$ 843$ | $\$ 329$ | $\$ 455$ |
| Health Care | $\$ 200$ | $\$ 507$ | $\$ 507$ | $\$ 507$ | $\$ 803$ | $\$ 803$ | $\$ 459$ | $\$ 919$ |
| Technology | $\$ 55$ | $\$ 55$ | $\$ 55$ | $\$ 75$ | $\$ 75$ | $\$ 75$ | $\$ 55$ | $\$ 75$ |
| Miscellaneous | $\$ 201$ | $\$ 318$ | $\$ 353$ | $\$ 323$ | $\$ 497$ | $\$ 570$ | $\$ 217$ | $\$ 345$ |
| Taxes | $\$ 283$ | $\$ 334$ | $\$ 406$ | $\$ 448$ | $\$ 509$ | $\$ 659$ | $\$ 283$ | $\$ 448$ |
| Monthly Total | $\$ 2,208$ | $\$ 3,498$ | $\$ 3,883$ | $\$ 3,551$ | $\$ 5,464$ | $\$ 6,267$ | $\$ 2,390$ | $\$ 3,797$ |
| Annual Total | $\$ 26,496$ | $\$ 41,976$ | $\$ 46,596$ | $\$ 42,612$ | $\$ 65,568$ | $\$ 75,204$ | $\$ 28,680$ | $\$ 45,564$ |
| Hourly Wage | $\$ 13.25$ | $\$ 20.99$ | $\$ 23.30$ | $\$ 21.31$ | $\$ 32.78$ | $\$ 37.60$ | $\$ 14.34$ | $\$ 22.78$ |

Source: United Way ALICE, 2018
The second measure created is the ALICE Threshold. The ALICE Threshold represents the minimum income level necessary based on the Household Survival Budget. ALICE households have incomes above the Federal Poverty Level (FPL), but struggle to afford basic household necessities. Children add significant expense to a family budget, so it is not surprising that many families with children live below the ALICE Threshold. About 59 percent of single male-headed households fall within the ALICE threshold. In single female-headed households, 87 percent live below the ALICE threshold.

Exhibit S20: Families with Children, Collier County, 2018


Source: ALICE Threshold, 2007-2018; American Community Survey, 2007-2018
Those under 25 years of age are the most likely to fall into the ALICE threshold making them likely to struggle to afford basic necessities; 61.3 percent of those under 25 fit into this criterion. Those 65 and older are the next most likely to struggle financially with 32 percent below ALICE threshold.

Exhibit S21: Households by Age, Collier County, 2018


Source: ALICE Threshold, 2007-2018; American Community Survey, 2007-2018

American Indian/Alaskan Native and Black households are the most likely to be struggling financially; they had the highest percentage of households calculated to be within the ALICE threshold ( $72.4 \%$ \& 54.8\%).

Exhibit S22: Households by Race/Ethnicity, Collier County, 2018


Source: ALICE Threshold,2018; American Community Survey, 2018
*AI/AN - American Indian/Alaska Native

## Affordable Housing/Housing Burden

Collier County has a higher percentage of homeowners compared to the state ( $73.3 \%$ vs. $65.4 \%$ ). Thirtythree percent of homes in Collier County are vacant, this may be due to seasonal population. The median value of housing is significantly higher than the state average ( $\$ 360,800$ vs. $\$ 215,300$ ).

Exhibit S23: Housing Occupancy, Collier County, Florida, 2015-2019

|  | Collier County | Florida |
| :--- | :---: | :---: |
| Occupied Housing Units (\%) | $66.7 \%$ | $81.9 \%$ |
| Owner-Occupied (\%) | $73.3 \%$ | $65.4 \%$ |
| Renter-Occupied (\%) | $26.7 \%$ | $34.6 \%$ |
| Household Size Owner-Occupied Unit (people) | 2.45 | 2.63 |
| Household Size Renter-Occupied Unit (people) | 2.91 | 2.67 |
| Vacant Housing (\%) | $33.3 \%$ | $18.1 \%$ |
| Homeowner Vacancy (\%) | $3.3 \%$ | $2.3 \%$ |
| Rental Vacancy (\%) | $8.8 \%$ | $8.4 \%$ |
| Occupying Mobile Home (\%) | $5.2 \%$ | $8.9 \%$ |
| Occupying Boat, RV, Van, etc. (\%) | $0.1 \%$ | $0.1 \%$ |
| Median Value of Owner-Occupied Units (dollars) | $\$ 360,800$ | $\$ 215,300$ |

Source: US Bureau of the Census, DP04 Selected Housing Characteristics

Since 2014, the median housing values have increased from $\$ 258,400$ to $\$ 360,800$ in Collier County. The houses in Collier County have consistently had a higher median housing value than the Florida average.

Exhibit S24: Median Owner-Occupied Housing Unit Value, Collier County, Florida, 2009-2019


Source: US Census of the Bureau, American Community Survey, Table DP04
Rental costs can be a barrier for people who want to live in a particular area. Collier County has a higher median gross rent when compared to Florida and the United States in 2019.

Exhibit S25: Median Cost Gross Rent, Collier County, Florida, United States, 2019


Source: US Census of the Bureau, American Community Survey, Table DP04

Housing cost burdened households, as defined by the U.S. Department of Housing and Urban Development, "are those who pay more than 30 percent of their income for housing". Housing includes a mortgage/rent, utilities, and basic necessities to live. Since 2012 the percentage of owner-occupied households who are considered housing burdened declined, 37.9 percent to 25.3 percent.

Exhibit S26: Owner-Occupied Households with Monthly Housing Costs of 30\% or More of Household Income, Percentage of Owner-Occupied Households, Collier County and Florida, 2010-2019


Source: US Census of the Bureau, American Community Survey, Table DP04

Below is a Census Tract map of Collier County showing the percent of homeowners who are housing burdened. The areas in dark blue represent the highest percentage, about 31 percent or greater, of household's experiencing housing cost burden.

Exhibit S27: Estimated Percent of All Homeowners who are Burdened by Housing Costs, Between 20152019, Collier County


Source: US Census of the Bureau, 5 -year American Community Survey via PolicyMap

Exhibit S27 shows the percentage of households who rent and are considered to have a housing cost burden in Collier County and Florida. Consistently, a lower percentage of renters in Collier County are housing cost burdened than average in Florida. When comparing housing cost burden between those who own a house versus those renting in Collier County, renters have a considerably higher percentage of being considered housing cost burdened (in 2019, $56 \%$ vs $25.3 \%$ ).

Exhibit S28: Renter-Occupied Housing Units with Gross Rent Costing 30\% of More of Household Income, Percentage of Renter-Occupied Households, Collier County and Florida, 2012-2019


Source: US Census of the Bureau, American Community Survey, Table DP04

Below is a Census Tract map of Collier County showing percent of renters who are housing burden. The areas in dark blue represent the highest percentage, about 56 percent or greater, of household's experiencing housing cost burden.

Exhibit S29: Estimated Percent of all Renters who are Cost Burdened, Between 2015-2019, Collier County


Source: US Census of the Bureau, 5 -year American Community Survey via PolicyMap

## Homelessness

The annual Point-in Time (PIT) count is a count of sheltered and unsheltered people experiencing homelessness on a single day in January (United States Department of Housing and Urban Development). The PIT is conducted via survey through local efforts to estimate the number of homeless individuals located in the community. The Hunger \& Homeless Coalition conducts the PIT annually in Collier County. In 2020, it was estimated that 603 people in Collier County were considered homeless.

Exhibit S30: Homeless Estimate, Collier County, 2009-2020


Source: Florida Department of Children and Families, Office of Homelessness, Council of Homelessness Annual Report, Point-inTime Count of Homeless People

Of the 603 homeless individuals, 252 identified that they were living in emergency shelter. The top two subpopulations of those who were homeless were those who suffered from chronic substance abuse and those with a serious mental illness. There were 128 young people under the age of 18 who identified as homeless during the PIT.

Exhibit S31: Homeless Snapshot, Collier County, 2020

|  | Totals |
| :--- | :--- |
| Homeless Status | 603 |
| Literally Homeless | 252 |
| Emergency Shelter | 183 |
| Transitional Housing | 168 |
| Unsheltered | 29 |
| Subpopulations | 47 |
| Veterans | 80 |
| Seniors (over 62) | 127 |
| Chronically Homeless | 155 |
| Serious Mental Illness | 2 |
| Chronic Substance Abuse | 95 |
| HIV/AIDS |  |
| Victims of Domestic Violence | 128 |
| Children \& Youth | 121 |
| Under age 18 | 7 |
| Children in Families | 1,039 |
| Unaccompanied Youth | 325 |
| Homeless Students |  |
| Homeless Children |  |
| Unaccompanied (age 16 or older) |  |

Source: Hunger \& Homeless Coalition of Collier County, Homeless Point-in-Time County, 2020

## Disabilities

In Collier County, 11.5 percent of the population has a disability; this is lower than the Florida average of 13.4 percent. The percent of Collier County adults 65 years and over with a disability is also lower than the Florida average ( $24.8 \%$ vs $32.8 \%$ ).

Exhibit S32: Disability Status, Collier County, Florida, 2015-2019

|  | Collier County | Florida |
| :--- | :---: | :---: |
| Civilian noninstitutionalized population with a disability (\%) | $11.5 \%$ | $13.4 \%$ |
| Under 18 years with a disability (\%) | $3.1 \%$ | $4.4 \%$ |
| 18 to 64 years with a disability (\%) | $6.2 \%$ | $10.0 \%$ |
| 65 years and over with a disability (\%) | $24.8 \%$ | $32.8 \%$ |

Source: US Census Bureau, Table DP02, Selected Social Characteristics in the United States
According to the University of Kansas Research \& Training Center of Independent Living, someone with an independent living disability is someone with a disability that can make decisions that affect their own lives. The percentage of adults in Collier County with an independent living disability is considerably lower than the state average ( $1.9 \%$ vs. $3.6 \%$ ) and decreased since 2012.

Exhibit S33: Population Ages 18-64 with an Independent Living Disability, Percent of Population 18-64, Collier County, Florida, 3-Year Rolling


Source: US Bureau of the Census, American Community Survey, Table B18107

## Settings and Systems

## Access to Health Care

Access to health care and health services implies the timely availability and use of personal health services to achieve the best health status outcomes. In order for the population of a community to gain access to health services the following are requisites:
a) Obtaining entry into the healthcare system.
b) Locating and accessing a facility where the needed healthcare services are provided.
c) Accessing a health care provider with whom the patient can communicate with confidence.

Lack of access to health care or failure to access health care services has a direct impact and effect on the health status of a community, county, and state.

The overall level of physical, social, and mental health status is impacted by the degree of access to health services. The prevention of a disease by early detection and treatment of health conditions is achieved through access to healthcare. Access to health services increases the quality of life by reducing preventable mortality (Years of Potential Life Lost) while simultaneously increasing life expectancy.

Health insurance coverage assists patients in gaining access to the healthcare system. Lack of health insurance is highly correlated with failure to receive medical care, with early and premature death, and with overall poor health status.

As the United States does not have a universal healthcare model, private health insurance coverage is an integral mainstay for access to healthcare for the core working population 18-64 years of age and vital to the personal well-being and health of individuals in Collier County and Florida.

The following exhibit shows select payor sources for hospital emergency department visits for all Collier County residents discharged from any Florida hospital by age groups. For those 17 years of age and under, Medicaid was the leading payor source paying for 61 percent of visits. Children under the age of 18 can access Medicaid if they meet income eligibility requirements.

For those 18 to 39 years of age, the leading payor source was private insurance. Out of all the age groups, this one has the highest percentage of those who self-paid. This population tends to have a higher proportion of those who do not have health insurance. Those 45 to 64 years of age had the highest percentage of visits paid using private health insurance as the payor source. The highest percentage of Medicare users were those 65 years and over. According to the U.S. Department of Health and Human Services, Medicare is available for anyone 65 and older, younger people with disabilities, and individuals with a diagnosis of end stage renal disease.

Exhibit SS1: Payor Source for Hospital Emergency Department Visits by Age Groups, Collier County
Residents Discharged from any Florida Hospital, 2019

|  | Medicaid |  | Medicare |  | No Charge/Charity |  | Other |  | Private, Includes <br> HMO |  | Self-Pay |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| $0-17$ <br> Years | 11,802 | $61 \%$ | 1 | $0 \%$ | 154 | $1 \%$ | 2,771 | $14 \%$ | 3,090 | $16 \%$ | 1,403 | $7 \%$ |
| $18-39$ <br> Years | 4,374 | $22 \%$ | 376 | $2 \%$ | 1,207 | $6 \%$ | 2,354 | $12 \%$ | 6,785 | $33 \%$ | 5,232 | $26 \%$ |
| $40-64$ <br> Years | 3,065 | $14 \%$ | 2,287 | $11 \%$ | 1,058 | $5 \%$ | 2,317 | $11 \%$ | 9,801 | $45 \%$ | 3,180 | $15 \%$ |
| $65+$ <br> Years | 1,991 | $8 \%$ | 21,310 | $82 \%$ | 35 | $0 \%$ | 1,199 | $5 \%$ | 1,087 | $4 \%$ | 294 | $1 \%$ |

Source: Broward Regional Health Planning Council, Hospital Inpatient \& Emergency Department Analytical System
Collier County has more licensed providers than the state average in every category except for licensed pediatricians. The county has significantly fewer nursing home beds per 100,000 residents when compared to the State of Florida ( 230.8 vs. 386.5 ). Collier County has a smaller number of full-time employees working at the county health department per 100,000 residents compared to the state average.

Exhibit SS2: Health Resource Availability, Collier County and Florida, Fiscal Year 2020-2021

|  | Collier County |  |  | Florida |
| :--- | :---: | :---: | :---: | :---: |
| Providers* | Number | Rate per <br> $\mathbf{1 0 0 , 0 0 0}$ | Quartile** | Rate per <br> $\mathbf{1 0 0 , 0 0 0}$ |
| Total Licensed Dentists | 287 | 74.3 | 4 | 56.7 |
| Total Licensed Physicians | 1,322 | 342.1 | 4 | 314.0 |
| Total Licensed Family Practice Physicians | 75 | 19.4 | 3 | 19.2 |
| Total Licensed Internists | 215 | 55.6 | 4 | 47.3 |
| Total Licensed OB/GYN | 46 | 11.9 | $\mathrm{n} / \mathrm{a}$ | 9.2 |
| Total Licensed Pediatricians | 61 | 15.8 | $\mathrm{n} / \mathrm{a}$ | 21.9 |
| Facilities Total Hospital Beds*** | 1,059 | 274.0 | 3 | 307.6 |
| Total Acute Care Beds** | 826 | 213.7 | 3 | 248.9 |
| Total Specialty Beds** | 233 | 60.3 | $\mathrm{n} / \mathrm{a}$ | 58.6 |
| Total Nursing Home Beds** | 892 | 230.8 | 1 | 386.5 |
| County Health Department*** |  |  |  |  |
| County Health Department Full-Time Employees | 150 | 6.2 | 1 | 40.9 |
| County Health Department Expenditures | $11,199,875$ | $\$ 29.00$ | 1 | $\$ 33.40$ |

Source: Florida Department of Health, Division of Medical Quality Assurance; Florida Agency for Health Care (AHCA); Florida Department of Health, Division of Public Health Statistics and Performance Management
*Number of licensed providers does not necessarily equal the number of practicing providers. These numbers may include providers who work in another county, only work part-time, or retired.
${ }^{* *}$ County compared to other Florida counties. The lowest quartile equals the lowest number. For resource availability the lowest number is generally considered the worst ranking. Quartile information is provided when at least 51 counties rates greater than zero.
*** Data is from year 2020

From 2011 to 2020, there was an overall decrease of nursing home beds in Collier County, with a small increase from 2018 to 2019. Over the past decade Collier County had significantly less nursing home beds than the State of Florida.

Exhibit SS3: Total Nursing Home Beds, Rate per 100,000 Population, Collier County and Florida, 20112020


Source: Florida Agency of Health Care Administration (AHCA)

## Health Insurance Coverage

Between 2013 and 2016, Collier County, Florida, and the United States started to see a decline in the percentage of the population who were uninsured. Collier County consistently had a higher percentage of people under the age of 65 who are uninsured. It is estimated that in 201921.3 percent of Collier County residents under the age of 65 were without insurance. The following exhibits break out the population who are uninsured by age, sex, race and ethnicity, educational attainment, and income.

Exhibit SS4: Percentage of the Population Under 65 Years of Age who are Uninsured, 2010-2019, Collier County, Florida, and United States


Source: U.S. Census Bureau, Small Area Health Insurance Estimates

In 2019, for the population less than 18 years of age in Collier County 7.7 percent are uninsured compared with 7.6 percent in Florida. Of the core working population 19-64 years of age, in Collier County 23.4 percent were without health insurance compared with 19.5 percent in the State of Florida, a difference of 3.9 percent. For the population 65 years of age and older in Collier County only 0.8 percent were without health insurance while in Florida only 1.1 percent lacked insurance. This very low proportion of the uninsured, is due to the "Medicare effect", currently those 65 years of age and above are eligible for Medicare.

Exhibit SS5: Percentage Uninsured by Age, 2019, Collier County and Florida


[^0]Compared to females, males in Collier County and in Florida have a slightly higher percentage of those who are uninsured. For both males and females there is only a 0.1 percent difference between Collier County and Florida. Please note that this data includes both those who are over and under the age of 65.

Exhibit SS6: Percentage Uninsured by Sex, 2019


Source: US Bureau of the Census, American Community Survey, Table S2701

For whites, Asians, and Hispanic/Latinos, the percentage of uninsured in Collier County is greater than the average for the State of Florida. 4.6 percent fewer of those who identify as Black or African American in Collier County are uninsured than the average for the State of Florida. Hispanic or Latinos had the highest percentage of those who are uninsured when compared to other races and ethnicities.

Exhibit SS7: Percentage Uninsured by Race or Ethnicity, 2019


Source: US Bureau of the Census, American Community Survey, Table S2701

As expected for both Collier County and Florida, as the educational level increases, the percentage of the individuals in that group who are uninsured decreases. In Collier County, 30.1 percent of those with less than a high school diploma were uninsured compared to only 4.3 percent of those who have a bachelor's degree or higher. The proportion of the population in Collier County uninsured with less than a high school education was 30.1 percent in 2019, while in Florida it was 25.1 percent. Compared to the other educational levels, those with a bachelor's degree or higher was the only level to have a smaller percentage of uninsured individuals when compared to the state average.

Exhibit SS8: Percentage of Population 26 Years and Older Uninsured by Educational Attainment, 2019


Source: US Bureau of the Census, American Community Survey, Table S2701

About 36 percent of the uninsured population in Collier County make less than $\$ 50,000$. The percentage of those without insurance decreases for those making over \$75,000 and even more for those making over $\$ 100,000$. When comparing Collier County and the State of Florida those making under $\$ 25,000$, $\$ 25,000$ to $\$ 49,999$, and $\$ 100,000$ and over had similar proportions of those who are uninsured.

Exhibit SS9: Percentage Uninsured by Income, 2019


Source: US Bureau of the Census, American Community Survey, Table S2701

## School-aged Children

The Star Early Literacy assessment is administered to kindergarten students during the first 30 days of the school year. This assessment indicates whether a student is "ready for kindergarten". In 2020, 50 percent of kindergarten students were deemed school ready when they entered kindergarten, this is slightly less than the percentage across the State of Florida (57\%). The percentage varies significantly by school with the highest scoring school in Collier County having 81 percent of children deemed ready and the lowest scoring school having 18 percent deemed ready.

Exhibit SS10: Florida Kindergarten Readiness Screener (FLKRS), Collier County Elementary Schools, Fall 2020

|  | Number of Test <br> Takers | Number "Ready <br> for <br> Kindergarten"* | Percentage <br> "Ready for <br> Kindergarten"* |
| :--- | :---: | :---: | :---: |
| Florida | $\mathbf{1 3 3 , 6 3 2}$ | $\mathbf{7 6 , 0 9 8}$ | $\mathbf{5 7 \%}$ |
| Collier County | $\mathbf{2 , 5 6 8}$ | $\mathbf{1 , 2 7 3}$ | $\mathbf{5 0 \%}$ |
| eCollier Academy | 27 | $\mathbf{2 2}$ | $81 \%$ |
| Veterans Memorial Elementary School | 90 | 70 | $78 \%$ |
| Mason Classical Academy | 80 | 59 | $74 \%$ |
| Lake Park Elementary School | 67 | 47 | $70 \%$ |
| Sea Gate Elementary School | 98 | 67 | $68 \%$ |
| Pelican Marsh Elementary School | 78 | 53 | $68 \%$ |
| Corkscrew Elementary School | 79 | 53 | $67 \%$ |
| Vineyards Elementary School | 124 | 83 | $67 \%$ |
| Osceola Elementary School | 87 | 56 | $64 \%$ |


|  | Number of Test <br> Takers | Number "Ready <br> for <br> Kindergarten"* | Percentage <br> "Ready for <br> Kindergarten"* |
| :--- | :---: | :---: | :---: |
| Laurel Oak Elementary School | 140 | 88 | $63 \%$ |
| Sabal Palm Elementary School | 47 | 29 | $62 \%$ |
| Collier Charter Academy | 100 | 57 | $57 \%$ |
| Lavern Gaynor Elementary School | 20 | 11 | $55 \%$ |
| Big Cypress Elementary School | 101 | 54 | $53 \%$ |
| Tommie Barfield Elementary School | 64 | 33 | $52 \%$ |
| Naples Park Elementary School | 49 | 24 | $49 \%$ |
| Calusa Park Elementary School | 92 | 45 | $49 \%$ |
| Estates Elementary School | 96 | 46 | $48 \%$ |
| Herbert Cambridge Elementary School | 31 | 14 | $45 \%$ |
| Lake Trafford Elementary School | 86 | 38 | $44 \%$ |
| Mike Davis Elementary School | 60 | 26 | $43 \%$ |
| Gulf Coast Charter Academy South | 60 | 26 | $43 \%$ |
| Lely Elementary School | 58 | 25 | $43 \%$ |
| Poinciana Elementary School | 56 | 24 | $43 \%$ |
| Shadowlawn Elementary School | 53 | 22 | $42 \%$ |
| Parkside Elementary School | 68 | 28 | $41 \%$ |
| Highlands Elementary School | 68 | 22 | $32 \%$ |
| Palmetto Elementary School | 67 | 21 | $31 \%$ |
| Eden Park Elementary School | 96 | 30 | $31 \%$ |
| Golden Gate Elementary School | 50 | 14 | $28 \%$ |
| Village Oaks Elementary School | 53 | 14 | $26 \%$ |
| Golden Terrace Elementary School | 53 | 14 | $26 \%$ |
| Avalon Elementary School | 49 | 11 | $22 \%$ |
| Pinecrest Elementary School | 104 | 23 | $22 \%$ |
| Immokalee Community School | 34 | 7 | $21 \%$ |
| Manatee Elementary School | 76 | 14 | $18 \%$ |
|  |  |  |  |

Source: Florida Department of Education
*Scoring 500+ on Star Early Literacy Assessment

There was an increase in the percentage of Collier County Grade 3 students passing the English Language Arts portion of the Florida Standards Assessment (FSA) over the past four years. For the past two years reported, Collier County has had higher rates of students passing the assessment when compared to the State of Florida. Students must achieve a passing level of 3 or above on the Florida Standards English Language Arts Assessment to pass. Due to the COVID-19 pandemic, the Florida Standards Assessments were canceled for the 2019-2020 school year. These assessments are usually completed during the spring.

Exhibit SS11: Grade 3 Students with Passing Grade on Florida Standards Assessment English Language Arts, Collier County, Florida, 2016-2019


Source: Florida Department of Education, Florida Standards Assessment - Spring

Since the 2010-2011 school year, Collier County has consistently had a higher high school graduation rate when compared to the state average. The rate increased both in Collier County and across the State of Florida. Collier County's highest graduation rate was in 2019-2020 at 92.2 percent.

Exhibit SS12: High School Graduation Rate, Percent of Student Cohort Since 9th Grade, Collier County and Florida, 2009-2020 School Years


Source: Florida Department of Education, Education Information and Accountability Services (EIAS)

## Food Insecurity

Exhibit SS13 looks at overall food insecurity, while exhibit SS14 focuses strictly on child food insecurity.
In 2019, 37,520 people in Collier County were food insecure. In 2019, it was estimated that 31 percent of food insecure people were above SNAP and other nutrition program thresholds of 200 percent poverty, while 69 percent are below. The average meal cost in Collier County is $\$ 3.60$, this is 32 cents higher than the Florida average, $\$ 3.28$. The annual food budget shortfall for the county was $\$ 23,108,000$; this is the total annualized additional dollar amount that food insecure individuals report needing, on average, to purchase just enough food to meet their food needs.

Exhibits SS13 and SS14 show the food insecurity rate over time including the projected increase during COVID-19. In response to the COVID-19 pandemic, Feeding America conducted a study to provide projected impacts the pandemic had on local food insecurity for both 2020 and 2021. According to Feeding America, prior to the COVID-19 pandemic the United States saw its lowest rate of food insecurity in over 20 years. It was projected that in 2020, 12.9 percent of people in Collier County would be food insecure.

The past three years, 2017-2019, the percentage of those who are food insecure has remained around 10 percent. When compared to the state, Collier County has consistently had a slightly lower food insecurity rate (2019, 10.1\% Collier County vs. 12.0\% Florida).

Exhibit SS13: Food Insecurity Rate in Collier County and Florida, 2017-2019


Source: Feeding America, Map the Meal Gap

The number of children who are food insecure had been decreasing since 2017. In 2019, it was estimated that 22 percent of food insecure children were likely ineligible for federal nutrition programs (incomes above $185 \%$ poverty), while 78 percent were eligible (incomes at or below $185 \%$ of poverty).

There was a decrease of almost 5 percent among children who were food insecure between 2017 and 2019. When compared to the state, Collier County has consistently had a slightly lower child food insecurity rate (2019, 14.7\% Collier County vs. 17.1\% Florida).

Among children, the projected rate was higher with 19.6 percent of children projected to be food insecure. This is a 27 percent increase in overall food insecurity in Collier County. The 2021 projection of food insecurity in Collier County was 11.4 percent overall, while 16.7 percent of children would be food insecure. This further shows the devastating economic impacts caused by the COVID-19 pandemic.

Exhibit SS14: Child Food Insecurity Rate in Collier County and Florida, 2017-2019


Source: Feeding America, Map the Meal Gap

To address these challenges, partners in Collier County participate in the Southwest Florida Food Policy Council to create affordable, reliable, and sustainable healthy food access for individuals in need. The Board of County Commissioners February 2021 proclamation recognized the Council's work to make fresh foods locally available, promote the efficient use of land and the preservation and conservation of agriculture, support reduction in food transportation, and provide educational resources for the community.

## Conservation Lands, Parks, and Trails

Collier County has a rare characteristic in that nearly 80 percent of the land area is protected from development. It is the largest county in Florida by land area, and the fact that most of it is in conservation affects health outcomes by maintaining excellent water and air quality and providing access to recreation and environmental education opportunities for residents. It also limits urban/sub-urban development to specific areas of the county, which focuses planning for and locating health care facilities and public health services on those areas.

The protected lands in Collier County include parks, beaches, trails, preserves, wildlife refuges, wetlands, forests, and more. These lands are managed by a variety of different jurisdictions including Collier County, local municipalities, the State of Florida, and Federal entities like the National Park Service and National Oceanic and Atmospheric Administration (NOAA).

Exhibit SS15: Federal and State Owned Park Land, Collier County, 2021


Source: Collier County Annual Update \& Inventory Report/Capital Improvement Element Schedule Update on Public Facilities 2021 (AUIR/CIE)

State and federal conservation lands account for 67 percent of the county's total area, while the remaining protected areas are parks, trails, beaches, and preserves managed by local jurisdictions.

Exhibit SS16: Collier County Park Land Inventory, 2021

| Jurisdiction | Community <br> Park Acres | Neighborhood <br> Park Acres | Regional <br> Park Acres | Conservation <br> Preserve Acres | Total Acres per <br> Jurisdiction |
| :--- | ---: | :--- | :--- | :--- | :--- |
| Collier County | 594.99 | 32.85 | $1,561.68$ | $4,309.28$ | $6,498.8$ |
| Naples | 32.71 | 9.00 | 39.59 | 0.00 | 86.30 |
| Marco Island | 1.90 | 0.00 | 0.00 | 0.00 | 41.97 |
| Everglades City | 669.57 | 48.85 | $1,601.27$ | $4,309.28$ | 1.90 |
| Total Acres per <br> Category |  | 0.00 | $6,628.97$ |  |  |

Source: Collier County Annual Update \& Inventory Report/Capital Improvement Element Schedule Update on Public Facilities 2021 (AUIR/CIE)

The locally managed lands include various types of parks such as regional parks, community parks, neighborhood parks, aquatic parks, boat parks, and skate \& BMX parks. Bicycle and pedestrian facilities are also an important part of a healthy built environment. Collier County has 200 miles of these facilities, which are part of the main transportation infrastructure. Local sidewalks and shared use paths add another 600 additional miles to the inventory. But there are only five miles of off-street trails in the county.

Exhibit SS17: Collier County Existing Bicycle and Pedestrian Facilities, 2020

| Type of Bicycle/Pedestrian Facility | Miles* |
| :--- | :---: |
| Centerline miles of bicycle lanes | 133 |
| Centerline miles of connector sidewalks on arterial roadways | 83 |
| Linear miles of shared use paths adjacent to roadways | 4 |

Source: Collier Metropolitan Planning Organization Bicycle and Pedestrian Master Plan 2019, Baseline Conditions 2020
*Data based on the Transportation System Performance Report Road Network - Arterials and Collectors, does not include local roads.

Exhibit SS18: Existing Bicycle and Pedestrian Facilities Inventory, Collier County, 2018


Source: Collier Metropolitan Planning Organization Bicycle and Pedestrian Master Plan 2019

Despite the vast amount of conservation land resources available for recreational activities, most of them are not located near population centers and are only accessible by car. Similarly, the bicycle and pedestrian facilities are mostly on-street. Therefore, when compared to the Florida average, Collier Country has a smaller percentage of the population that live near a park or off-street trail system.

Exhibit SS19: Proximity to Park and Trails, Collier County and Florida, 2019

|  | Collier | Florida |
| :--- | :---: | :---: |
| Percent of the population living within a ten-minute walk (1/2 mile) of a park | $20.34 \%$ | $40.05 \%$ |
| Percent of the population living within a ten-minute walk (1/2 mile) of an off- <br> street trail system | $11.30 \%$ | $18.23 \%$ |

Source: Florida Environmental Public Health Tracking

## Transportation

According to the Centers for Disease Control and Prevention (CDC), high commute times can be linked to negative health outcomes such as obesity, high blood pressure, heart disease, and poor mental health. A higher percentage of Collier County workers carpool to work and work at home when compared to the Florida average. Collier County workers on average have a lower travel time than the Florida average.

Exhibit SS20: Commuting to Work, Workers 16 years and over, Collier County and Florida, 2015-2019

|  | Collier | Florida |
| :--- | :---: | :---: |
| Car, truck, or van - drove alone (\%) | $75.1 \%$ | $79.1 \%$ |
| Car, truck, or van - carpooled (\%) | $12.4 \%$ | $9.2 \%$ |
| Public transportation, excluding taxicab (\%) | $1.6 \%$ | $1.8 \%$ |
| Walked (\%) | $1.3 \%$ | $1.4 \%$ |
| Other means (\%) | $2.3 \%$ | $2.3 \%$ |
| Worked at home (\%) | $7.3 \%$ | $6.2 \%$ |
| Mean travel to work (minutes) | 24.7 minutes | 27.8 minutes |

Source: U.S. Census Bureau DP03 Selected Economic Characteristics
More than 95 percent of households in Collier County have at least one vehicle available. About 14 percent of households have three or more vehicles.

Exhibit SS21: Cars per Household, Collier County and Florida, 2015-2019

|  | Collier | Florida |
| :--- | :---: | :---: |
| Households with no vehicles available (\%) | $4.8 \%$ | $6.3 \%$ |
| Households with 1 vehicle available (\%) | $40.3 \%$ | $39.7 \%$ |
| Households with 2 vehicles available (\%) | $40.6 \%$ | $38.4 \%$ |
| Households with 3 or more vehicles available (\%) | $14.3 \%$ | $15.6 \%$ |

Source: U.S. Census Bureau DP04 Selected Housing Characteristics

## Complete Streets

According to the U.S. Department of Transportation, complete streets are designed and operated to enable safe use and support mobility for all users. Some of the aspects of complete streets include:

- Sidewalks
- Bicycle Lanes
- Bus Lanes
- Public Transportation Stops
- Crossing Opportunities
- Median Islands
- Accessible Pedestrian Signals
- Curb Extensions
- Modified Vehicle Travel Lanes
- Streetscape
- Landscape Treatments

As a part of a review of Complete Streets, the U.S. Department of Transportation scored metropolitan statistical areas on a number of data categories. The table below show scores for each data category. These scores are on a scale of 0 to 100 , where a higher value is better.

The State of Florida currently has a complete streets policy in place, but as of the time of review, the Naples-Immokalee-Marco Island metropolitan statistical area (msa), Collier County area, did not have a complete streets policy. Collier County passed a Complete Streets resolution in January 2019, and the City of Naples passed a resolution in 2015. In March 2019, the Board of County Commissioners approved the Collier Metropolitan Planning Organization Bicycle Pedestrian Master Plan. It unifies planning efforts and influences facility improvement priorities at the county level for the bicycle and pedestrian network throughout Collier County.

The Naples-Immokalee-Marco Island msa scored better than the State of Florida in every category, except for auto-related road traffic fatalities, where the msa and Florida have the same score. Collier County performed particularly well with a perfect score, of 100, for proximity to major roadways. The biggest area for improvement, according to the scores, are road traffic facilities by bicycle and commute mode share - walk.

Exhibit SS22: Scores, Naples-Immokalee-Marco Island Metropolitan Statistical Area and Florida, 2015

|  | Naples-Immokalee- <br> Marco Island msa | Florida |
| :--- | :---: | :---: |
| Commute Mode Share - Auto | 80 | 40 |
| Commute Mode Share - Transit | 68 | 48 |
| Commute Mode Share - Bicycle | 74 | 64 |
| Commute Mode Share - Walk | 15 | 10 |
| Proximity to Major Roadways | 100 | 48 |

Source: U.S. Department of Transportation, Transportation and Health Indicators

## Crime

Collier County has a lower-than-average rate for all crimes and domestic violence when compared to the State of Florida as a whole. The three most common categories of crimes in Collier County are larceny, domestic violence, and aggravated assault.

Exhibit SS23: Crime in Collier County, 3-Year Rate per 100,000, 2017-2019

|  | Collier | Florida | Quartile |
| ---: | :---: | :---: | :---: |
| Aggravated Assault | 182.9 | 268.9 | 1 |
| Burglary | 155.5 | 356.4 | 1 |
| Total Domestic Violence Offenses | 451.3 | 505.2 | 2 |
| Forcible Sex Offenses | 49.0 | 54.4 | 2 |
| Homicide | 2.6 | 6.6 | 1 |
| Larceny | 944.7 | $1,792.4$ | 2 |
| Motor Vehicle Theft | 71.2 | 195.9 | 1 |
| Murder | 2.3 | 5.2 | 1 |
| Robbery | 40.1 | 82.3 | 3 |

Source: Florida Department of Law Enforcement; Florida Department of Health, Bureau of Vital Statistics
*County compared to other Florida Counties. The lowest quarter equals the lowest number

## County Health Rankings \& Roadmaps

The County Health Rankings \& Roadmaps is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute that looks at the health of all states and counties in the United States. This program provides data, evidence, and examples to aid communities to build awareness of the various factors that impact the overall health of the community. The County Health Rankings are based on a variety of factors that affect the health of the county's residents such as unemployment, levels of physical inactivity, and rates of smoking, obesity, and children living in poverty. Below is a look at the Collier County's County Health Rankings over the past seven years.

There are two main rankings used to compare all the counties in a state to each other, Health Outcomes Overall rank and Health Factors Overall rank. The Health Outcomes rank includes the health indicators length of life and quality of life. The Health Factors rank includes the health indicators health behaviors, clinical care, social \& economic factors, and physical environment. To note, some of the health indicators that County Health Rankings used have changed over the years. If that indicator is no longer used the word removed will be used to indicate this. Blanks in the chart indicates that this was a health indicator that was added later, hence no data was available for that specific year. The definition for the health indicators may change per year so the latest definition was used.

Exhibit CH1: County Health Rankings, Collier County, 2015-2021

|  | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Health Outcomes |  |  |  |  |  |  |  |
| Health Outcomes Overall Rank | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Length of Life |  |  |  |  |  |  |  |
| Premature Death <br> Years of potential life lost before age 75 per 100,000 population (age-adjusted) | 5,500 | 5,200 | 5,300 | 5,100 | 5,100 | 5,400 | 5,488 |
| Quality of Life |  |  |  |  |  |  |  |
| Poor or Fair Health <br> Percent of adults reporting fair or poor health (age-adjusted) | 18\% | 18\% | 16\% | 16\% | 15\% | 16\% | 17\% |
| Poor Physical Health Days Average number of physically unhealthy days reported in past 30 days (age-adjusted) | 3.4 | 3.6 | 3.5 | 3.5 | 3.6 | 3.5 | 3.4 |
| Poor Mental Health Days Average number of mentally unhealthy days reported in past 30 days (age-adjusted) | 4.1 | 3.9 | 3.5 | 3.5 | 4 | 3.7 | 3.6 |
| Low Birthweight <br> Percent of live births with low birth weight (<2500 grams) | 7\% | 7\% | 7\% | 7\% | 7\% | 7\% | 7.1\% |


|  | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Health Factors |  |  |  |  |  |  |  |
| Health Outcomes Overall Rank | 6 | 6 | 3 | 3 | 5 | 5 | 6 |
| Health Behaviors |  |  |  |  |  |  |  |
| Adult Smoking <br> Percent of adults that report smoking >=100 <br> Cigarettes and currently smoking | 16\% | 14\% | 11\% | 11\% | 13\% | 14\% | 15\% |
| Adult Obesity <br> Percent of adults that report a BMI >=30 | 22\% | 21\% | 21\% | 20\% | 20\% | 19\% | 20\% |
| Food Environment Index Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best) | 7.9 | 8 | 8 | 7.9 | 7.6 | 7.5 | 7.4 |
| Physical Inactivity <br> Percent of adults aged 20 and over reporting no leisure physical activity time | 23\% | 23\% | 21\% | 19\% | 19\% | 18\% | 17\% |
| Access to Exercise Opportunities Percentage of population with adequate access to locations for physical activity | 91\% | 91\% | 87\% | 88\% | 91\% | 91\% | 91\% |
| Excessive Drinking <br> Percentage of adults reporting binge or heavy drinking | 22\% | 18\% | 15\% | 15\% | 18\% | 18\% | 18\% |
| Alcohol-Impaired Driving Deaths Percentage of adults reporting binge or heavy drinking | 21\% | 24\% | 20\% | 22\% | 25\% | 25\% | 26\% |
| Sexually Transmitted Infections Number of newly diagnosed chlamydia cases per 100,000 population | 347 | 289.9 | 301.1 | 256 | 240.3 | 241.3 | 241 |
| Teen Births <br> Number of births per 1,000 female population ages 15-19 | 19 | 20 | 22 | 24 | 30 | 34 | 39 |
| Clinical Care |  |  |  |  |  |  |  |
| Uninsured <br> Percentage of population under 65 without health insurance | 23\% | 23\% | 22\% | 23\% | 26\% | 30\% | 28\% |
| Primary Care Physicians Ratio of population to primary care physicians | 1,310:1 | 1,340:1 | 1,380:1 | 1,410:1 | 1,460:1 | 1,430:1 | 1,439:1 |
| Dentists <br> Ratio of population to dentists | 1,520:1 | 1,560:1 | 1,520:1 | 1,530:1 | 1,530:1 | 1,510:1 | 1,572:1 |
| Mental Health Providers Ratio of population to mental health providers | 980:1 | 1,000:1 | 1,050:1 | 1,080:1 | 1,140:1 | 980:1 | 1,026:1 |
| Preventable Hospital Stays Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees | 3,172 | 3,493 | 3,159 | 32 | 34 | 38 | 42 |


|  | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diabetic Monitoring <br> Percentage of diabetic Medicare enrollees age 65-75 that receive HbA1c monitoring | Removed | Removed | Removed | 87\% | 87\% | 87\% | 86\% |
| Mammography Screening <br> Percentage of female Medicare enrollees ages 6574 that received an annual mammography screening | 52\% | 51\% | 52\% | 76\% | 76\% | 76\% | 76.1\% |
| Flu Vaccinations <br> Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccination | 55\% | 50\% | 50\% |  |  |  |  |
| Social \& Economic Factors |  |  |  |  |  |  |  |
| High School Graduation <br> Percentage of adults ages 25 and over with a high school diploma or equivalent | 87\% | 89\% | 89\% | 84\% | 84\% | 81\% | 78\% |
| Some College <br> Percentage of adults 25-44 with some postsecondary education | 51\% | 50\% | 50\% | 50\% | 50\% | 50\% | 48.5\% |
| Unemployment <br> Percentage of population ages 16 and older unemployed but seeking work | 3.10\% | 3.40\% | 4.10\% | 4.80\% | 5.20\% | 5.9\% | 6.9\% |
| Children in Poverty <br> Percentage of people under 18 in poverty | 14\% | 19\% | 22\% | 18\% | 23\% | 26\% | 24\% |
| Income Inequality <br> Ratio of household income at the $80^{\text {th }}$ percentile to income at the $20^{\text {th }}$ percentile | 4.8 | 4.6 | 4.5 | 4.6 | 4.5 | 4.4 | 4.4 |
| Children in Single-Parent Households Percentage of children that live in a household headed by a single parent | 23\% | 36\% | 36\% | 35\% | 35\% | 35\% | 35\% |
| Social Associations <br> Number of membership associations per 10,000 population | 7.4 | 7.1 | 7.6 | 7.6 | 7.3 | 7.4 | 7.3 |
| Violent Crimes <br> Number of reported violent crime offenses per 100,000 population | 261 | 261 | 261 | 247 | 247 | 294 | 294 |
| Injury Deaths <br> Number of deaths due to injury per 100,000 population | 80 | 78 | 77 | 74 | 73 | 75 | 75 |
| Physical Environment |  |  |  |  |  |  |  |
| Air Pollution - Particulate Matter <br> Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) | 7.2 | 7.7 | 7.7 | 6.8 | 6.8 | 10.6 | 10.6 |


|  | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Drinking Water Violations <br> Indicator of the presence of health-related <br> drinking water violations. 'Yes' indicates the <br> presence of a violation. 'No' indicated no <br> violation. |  |  |  |  |  |  |

Source: County Health Rankings \& Roadmaps, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation

## Health Conditions

## Life Expectancy

Life expectancy of a population at birth or at a given age is the average number of years lived beyond that age by all those who have reached that age. This concept can also be interpreted as the average number of years of life remaining at a specific age assuming current mortality rates in the community. The level of life expectancy at birth and other ages is an indicator of mortality and other health conditions and by proxy and scientific inference of the quality of life of a county, state, and nation.

Over the 14-year period, Collier County continued to exceed the Florida average for life expectancy. In 2018-2020 there was a 6-year difference between Collier County and Florida. Collier County also had the highest life expectancy out of all 67 counties in Florida. Collier County's life expectancy has continued to increase over time.

Exhibit HC1: Life Expectancy Over Time, Collier County and Florida, 3-year Estimates, 2006-2020


Source: Death data are from Florida Bureau of Vital Statistics. Population data are from Umass Donahue Institute and the Florida Legislature Office of Economic and Demographic Research

Females in Collier County consistently had a higher life expectancy compared to males. In 2006-2008 there was a 6.1-year life expectancy difference between males and females; this is the largest gap. When compared the Florida average in 2018-2020, males in Collier County are expected to live 6.4 years longer (82.9 Collier vs. 76.5 Florida) and females are expected to live 5.7 years longer ( 88.0 Collier vs. 82.3 Florida).

Exhibit HC2: Life Expectancy by Sex, Collier County, 3-year estimates, 2006-2020


Source: Death data are from Florida Bureau of Vital Statistics. Population data are from Umass Donahue Institute and the Florida Legislature Office of Economic and Demographic Research

Those who identify as Black in Collier County had a higher life expectancy over the 14-year period, except in 2009-2011, when compared to other races. In 2018-2020, Black residents had a 9.4 -year life expectancy difference when compared to the State average (86.1 Collier vs. 76.7 Florida). The data related to the Black population includes larger variation in part because the numbers are small, in fact they could not be reliably computed for 2015-2017.

Exhibit HC3: Life Expectancy by Race, Collier County, 3-year estimates, 2006-2020


Source: Death data are from Florida Bureau of Vital Statistics. Population data are from Umass Donahue Institute and the Florida Legislature Office of Economic and Demographic Research
*Black population data was not sufficient for computing a valid estimate of life expectancy. Life Expectancy is computed when there are at least 50 deaths, a population of at least 5,000 and a standard error less than or equal to 2 .

In 2009-2014 and 2018-2020 those who identify as Hispanic had the highest life expectancy when compared to those who identify as Non-Hispanic. In 2018-2020, when compared to the State average Hispanic residents had a 2.6-year life expectancy difference (85.6 Collier vs. 83.0 Florida).

Exhibit HC4: Life Expectancy by Ethnicity, Collier County, 3-year estimates, 2006-2020


Source: Death data are from Florida Bureau of Vital Statistics. Population data are from Umass Donahue Institute and the Florida Legislature Office of Economic and Demographic Research

## Years of Potential Life Lost

The indicator Years of Potential Life Lost (YPLL) is defined as the years of potential life lost due to a premature death. It is a measure of the relative impact of multiple diseases and conditions in a county, state, or country and illustrates the lost years of life of a population compared to living a full life to the age of 75 .

Compared to mortality rates, Years of Potential Life Lost places an emphasis on the processes or catalysts underlying premature mortality in a geographical area. YPLL supplements the mortality rate of a population by placing priority on and quantifying deaths in a county and state which are considered preventable. YPLL in public health may be interpreted as a measure of preventable mortality for causes that are particularly associated with lifestyle choices and behavioral risks. The level of YPLL within a geographical area is correlated with the education and income level of the population as well as the public health prevention and planning strategies and priorities of a community.

The top three causes of death that had the highest YPLL among people in Collier County are unintentional injury, cancer, and heart disease. These top three were consistent for the selected years in the table below. There was a significant increase in the YPLL from unintentional injuries, suicide, and diabetes between 2015 and 2020. The COVID-19 pandemic had a significant impact in Collier County; it was the cause of death that led to the fifth highest number of YPLL in 2020.

Exhibit HC5: Years of Potential Life Lost Under 75 Years of Age per 100,000 Population, Top Ten Cause of Death, Collier County, 2020, 2015, 2010

| Cause of Death | 2020 | 2015 | 2010 |
| :--- | :---: | :---: | :---: |
| Unintentional Injury | $1,365.5$ | $1,047.9$ | $1,006.3$ |
| Cancer | $1,240.0$ | $1,275.1$ | $1,220.7$ |
| Heart Disease | 648.7 | 642.7 | 538.9 |
| Suicide | 460.8 | 305.5 | 354.5 |
| COVID-19 | 394.3 |  |  |
| Diabetes | 253.2 | 102.7 | 93.8 |
| Stroke | 186.7 | 118.2 | 98.0 |
| Chronic Lower Respiratory Disease | 93.0 | 118.2 | 143.7 |
| Homicide | 76.2 | 60.6 | 181.2 |
| Congenital Malformations | 66.2 | 172.1 | 215.3 |

Source: Florida Department of Health, Bureau of Vital Statistics

The top three causes of death that had the highest YPLL among Non-Hispanic white people in Collier County were unintentional injury, cancer, and heart disease. These top three were consistent for the selected years in the table below. The COVID-19 pandemic had a significant impact in Collier County with the $7^{\text {th }}$ highest YPLL in 2020 among the Non-Hispanic, white population.

Exhibit HC6: Years of Potential Life Lost Under 75 Years of Age per 100,000 Population, Top Ten Cause of Death, Non-Hispanic White, Collier County, 2020, 2015, 2010

| Cause of Death | 2020 | 2015 | 2010 |
| :--- | :---: | :---: | :---: |
| Unintentional Injury | $1,712.5$ | $1,049.2$ | $1,147.8$ |
| Cancer | $1,577.4$ | $1,523.2$ | $1,537.8$ |
| Heart Disease | 849.6 | 686.9 | 726.4 |
| Suicide | 516.2 | 351.6 | 504.2 |
| Chronic Liver Disease and Cirrhosis | 292.4 | 433.3 | 332.3 |
| Stroke | 222.1 | 111.0 | 99.4 |
| COVID-19 | 221.0 |  |  |
| Chronic Lower Respiratory Disease | 156.7 | 163.0 | 193.6 |
| Diabetes | 149.5 | 73.3 | 108.5 |
| Influenza and Pneumonia | 63.1 | 40.6 | 83.7 |

Source: Florida Department of Health, Bureau of Vital Statistics
The top three causes of death with the highest YPLL among Non-Hispanic Black population in Collier County were inconsistent in the selected years in the table below. In 2020, cancer, heart disease, and COVID-19 were the top three causes of death with the highest YPLL. The COVID-19 pandemic had a significant impact on the Black population in Collier County. In 2015, cancer, unintentional injury, and heart disease were the top three causes of death with the highest YPLL. In 2010, perinatal period conditions, unintentional injury, and cancer were the top three causes of death with the highest YPLL. In the table below there are data points that are 0.0 , which means that either there weren't any deaths for that particular year/cause of death or if there were deaths, they occurred to those above the age of 75 .

Exhibit HC7: Years of Potential Life Lost Under 75 Years of Age per 100,000 Population, Top Ten Cause of Death, Non-Hispanic Black, Collier County, 2020, 2015, 2010

| Cause of Death | 2020 | 2015 | 2010 |
| :--- | :---: | :---: | :---: |
| Cancer | $1,155.2$ | $1,623.3$ | 985.8 |
| Heart Disease | $1,122.3$ | $1,325.7$ | 434.2 |
| COVID-19 | 460.4 |  |  |
| Suicide | 312.4 | 58.6 | 0.0 |
| Perinatal Period Conditions | 306.3 | 671.9 | $1,902.6$ |
| Unintentional Injury | 304.2 | $1,515.1$ | $1,537.4$ |
| HIV/AIDS | 275.4 | 0.0 | 158.3 |
| Stroke | 271.3 | 315.6 | 245.2 |
| Diabetes | 230.2 | 72.1 | 0.0 |
| Homicide | 217.9 | 211.9 | 490.3 |

Source: Florida Department of Health, Bureau of Vital Statistics

The top three causes of death with the highest YPLL among Hispanic people in Collier County were inconsistent in the selected years in the table below. In 2020, the top three causes of death with the highest YPLL were unintentional injury, cancer, and COVID-19. The COVID-19 pandemic had a significant impact on the Hispanic population in Collier County. In 2015, cancer, unintentional injury, and heart disease were the top three causes of death with the highest YPLL. In 2010, cancer, congenital malformations, and unintentional injury were the top three causes of health with the highest YPLL in Collier County.

Exhibit HC8: Years of Potential Life Lost Under 75 Years of Age per 100,000 Population, Top Ten Cause of Death, Hispanic, Collier County, 2020, 2015, 2010

| Cause of Death | 2020 | 2015 | 2010 |
| :--- | :---: | :---: | :---: |
| Unintentional Injury | 939.5 | 734.7 | 353.3 |
| Cancer | 661.5 | 749.2 | 608.4 |
| COVID-19 | 648.3 |  |  |
| Suicide | 380.7 | 301.0 | 146.0 |
| Chronic Liver Disease and Cirrhosis | 237.5 | 109.3 | 100.6 |
| Heart Disease | 199.8 | 440.4 | 203.6 |
| Diabetes | 128.2 | 149.4 | 92.0 |
| Stroke | 115.9 | 93.6 | 58.9 |
| Congenital Malformations | 99.4 | 234.1 | 372.3 |
| Nutritional Deficiencies | 61.3 | 0.0 | 0.0 |

Source: Florida Department of Health, Bureau of Vital Statistics

## Leading Causes of Death

The following table gives detailed information on the leading causes of death for residents of Collier County. The Deaths column is a simple count of the number of people who died by the listed cause during 2019. Percent of Total Deaths lets you know what percent of the people died from that cause. Cancer and heart disease are the two most common causes of death in Collier County. Combined, they are responsible for 41.2 percent of all deaths.

Crude Rate per 100,000 gives a sense of how likely a person is to die of that cause in any given year. For example, out of every 100,000 people in Collier County, 131 of them died of a stroke in 2020. Using the rate per 100,000 allows comparison between areas with different populations such as comparing a small county to a large county or a county to the state.

The next column lists the Age-Adjusted Death Rate per 100,000. Age-adjusting a rate is a way to make fairer comparisons between groups with different age distributions. For example, a county having a higher percentage of elderly people may have a higher rate of death or hospitalization than a county with a younger population merely because the elderly is more likely to die or be hospitalized. The same distortion can happen when we compare races, genders, or time periods. Age adjustment can make the different groups more comparable.

The last column is Years of Potential Life Lost. This is an estimate of the number of years a person would have lived had they not died prematurely. In this case that number is given for all people who died under the age of 75 . When the numbers are particularly low, such as they are for Alzheimer's disease, it is generally because that cause of death largely impacts the elderly. Conversely, a particularly high number, such as for unintentional injuries, suggests that the average age of the victims was young.

Cancer, heart disease, and stroke are the top three leading causes of death in 2020 for Collier County. Since 2007, cancer and heart disease were the top two causes of death in Collier County. Unintentional injury, which includes accidental drug overdoses, and cancer had the highest years of potential life lost in Collier County, which means many people younger than 75 died from these causes in 2019. COVID-19 was the fourth highest cause of death in 2020 in Collier County. The first case of COVID-19 was in March 2020 but had a significant impact on the community and other health conditions and behaviors. Unintentional injuries and suicides are discussed in further detail in the health behaviors section.

Exhibit HC9: Leading Causes of Death, Collier County, 2020

| Cause of Death | Deaths | Percent of Total Deaths | Crude Rate per 100,000 | Age-Adjusted Death Rate per 100,000 | $\begin{aligned} & \text { YPLL <75 per } \\ & 100,000 \\ & \text { Under } 75 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cancer | 894 | 22.15\% | 231.3 | 104.3 | 1,240.0 |
| Heart Disease | 767 | 19.00\% | 198.5 | 80.3 | 648.7 |
| Stroke | 509 | 12.61\% | 131.7 | 48.4 | 186.7 |
| COVID-19 | 319 | 7.90\% | 82.5 | 36.3 | 394.3 |
| Unintentional Injury | 244 | 6.05\% | 63.1 | 52.2 | 1,365.5 |
| Chronic Lower Respiratory Disease | 148 | 3.67\% | 38.3 | 14.8 | 93.0 |
| Alzheimer's Disease | 114 | 2.82\% | 29.5 | 10.1 | 7.8 |
| Diabetes | 95 | 2.35\% | 24.6 | 11.3 | 153.6 |
| Chronic Liver Disease and Cirrhosis | 76 | 1.88\% | 19.7 | 13.1 | 253.2 |
| Parkinson's Disease | 66 | 1.64\% | 17.1 | 6.2 | 18.7 |
| Suicide | 60 | 1.49\% | 15.5 | 15.8 | 460.8 |
| Hypertension | 49 | 1.21\% | 12.7 | 5.1 | 39.3 |
| Nephritis, Nephrotic Syndrome, \& Nephrosis | 48 | 1.19\% | 12.4 | 5.1 | 40.6 |


| Cause of Death | Deaths | Percent of <br> Total Deaths | Crude Rate <br> per 100,000 | Age-Adjusted <br> Death Rate <br> per 100,000 | YPLL < 75 per <br> 100,000 <br> Under 75 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Influenza and Pneumonia | 39 | $0.97 \%$ | 10.1 | 4.6 | 54.0 |
| Septicemia | 29 | $0.72 \%$ | 7.5 | 2.9 | 27.2 |
| Benign Neoplasm | 16 | $0.40 \%$ | 4.1 | 1.4 | 2.8 |
| Aortic Aneurysm \& Dissection | 14 | $0.35 \%$ | 3.6 | 1.7 | 18.1 |
| Nutritional Deficiencies | 13 | $0.32 \%$ | 3.4 | 1.5 | 20.6 |
| Pneumonitis | 12 | $0.30 \%$ | 3.1 | 1.2 | 5.9 |
| Cholelithiasis \& Other Gallbladder <br> Disorders | 9 | $0.22 \%$ | 2.3 | 0.8 | 0.0 |
| Congenital Malformation | 8 | $0.20 \%$ | 2.1 | 1.9 | 66.2 |
| Homicide | 7 | 0.17 | 1.8 | 2.1 | 76.2 |
| Atherosclerosis | 6 | 0.15 | 1.6 | 0.5 | 1.2 |
| Viral Hepatitis | 5 | 0.12 | 1.3 | 0.6 | 14.7 |
| Anemias | 4 | 0.10 | 1.0 | 0.7 | 18.4 |
| HIV/AIDS | 3 | 0.07 | 0.8 | 1.0 | 25.3 |
| Perinatal Period Conditions | 2 | 0.05 | 0.5 | 0.9 | 46.5 |
| Peptic Ulcer | 2 | 0.05 | 0.5 | 0.2 | 1.2 |
| Medical \& Surgical Care Complications | 1 | 0.02 | 0.3 | 0.1 | 0.0 |

Source: Florida Department of Health, Bureau of Vital Statistics

## Cancer

From 2008 to 2012, Collier County experienced a decrease in new cases of cancer. Since 2012, there's been an increase in new cases of cancer with a decrease in 2015 and 2017. Collier County experienced its highest rate of new cases in 2018 ( 435.4 per 100,000; 2,921 people). When compared to the Florida average, Collier County has continuously experienced lower incidences of cancer.

Exhibit HC10: Cancer Incidence, Age-Adjusted Rate per 100,000, Collier County and Florida, 2008-2018


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

Since 2012, in Collier County the overall cancer death rate has decreased. Even though more people have been diagnosed with cancer, fewer people are dying from cancer. Collier County's cancer death rate is significantly lower than the Florida average.

Exhibit HC11: Cancer Deaths, Age-Adjusted Rate per 100,000, Collier County and Florida, 2010-2020


Source: Florida Department of Health, Bureau of Vital Statistics

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The age-adjusted death rate from cancer is the lowest among the Black population in Collier County. The Non-Hispanic population had the highest cancer death rate when compared to other races and ethnicities.

Exhibit HC12: Cancer Deaths by Race, 3 Year Age-Adjusted Rate per 100,000, Collier County, 2018-2020


Source: Florida Department of Health, Bureau of Vital Statistics

The Non-Hispanic population had the highest cancer death rate when compared to other races and ethnicities.

Exhibit HC13: Cancer Deaths by Ethnicity, 3 Year Age-Adjusted Rate per 100,000, Collier County, 20182020


Source: Florida Department of Health, Bureau of Vital Statistics

Males, in Collier County, consistently had a higher cancer death rate when compared to females. Since 2018 the overall cancer deaths among females have decreased.

Exhibit HC14: Cancer Deaths by Sex, Age-Adjusted Rate per 100,000, Collier County, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

The most common types of cancer in Collier County were breast and prostate cancer. However, lung and colorectal were the deadliest for those diagnosed with those cancers.

Exhibit HC15: Common Types of Cancer, 3-year Average Incidence Rate, 3-year Age-Adjusted Death Rate, Collier County, 2016-2018, 2018-2020

|  | Average Incidence Rate, <br> $2016-2018$ | Year Age-Adjusted Death <br> Rate, 2018-2020 |
| :--- | :---: | :---: |
| Breast Cancer | 101.4 | 8.4 |
| Prostate Cancer | 84.0 | 4.9 |
| Lung Cancer | 35.2 | 20.5 |
| Melanoma, Skin Cancer | 35.0 | 2.5 |
| Colorectal Cancer | 24.6 | 8.5 |
| Oral Cancer | 11.0 | 1.8 |
| Cervical Cancer | 7.7 | 1.3 |

Source: University of Miami (FL) Medical School, Florida Cancer Data System; Florida Department of Health, Bureau of Vital Statistics

## Breast Cancer

In 2018, Collier County saw its highest breast cancer rate of new breast cancer diagnoses, 115.9 per 100,000, over the past 13 years. Collier County's breast cancer incidence rate was consistently lower than the Florida average.

Exhibit HC16: Age-Adjusted Female Breast Cancer Incidence, Rate per 100,000 Female Population, Collier County and Florida, 2005-2018


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

The Black population had the lowest incidence of being diagnosed with breast cancer in 2018 when compared to the white population in Collier County.

Exhibit HC17: Age-Adjusted Female Breast Cancer Incidence by Race, Rate per 100,000 Female Population, Collier County, 2018


Source: University of Miami (FL) Medical School, Florida Cancer Data System The Non-Hispanic population in Collier County had the highest incidence of breast cancer diagnosis when compared to Hispanics.

Exhibit HC18: Age-Adjusted Female Breast Cancer Incidence by Ethnicity, Rate per 100,000 Female Population, Collier County, 2018


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

2020 was Collier County's deadliest year for breast cancer; the death rate was 10.6 per 100,000. From 2013 to 2017 there was a significant increase in death from breast cancer. In 2020, Collier County's breast cancer death rate was higher than the Florida average for the first time ever ( 10.6 per 100,000 vs. 9.8 per 100,000).

Exhibit HC19: Age-Adjusted Deaths from Female Breast Cancer, Rate per 100,000 Female Population, Collier County and Florida, 2010-2020


Source: Florida Department of Health, Bureau of Vital Statistics

Even though the Black death rate is high, the number of Blacks dying of breast cancer (3 in 2020) is smaller when compared to the other races.

Exhibit HC20: Age-Adjusted Deaths from Female Breast Cancer by Race, Rate per 100,000 Female Population, Collier County, 2020


Source: Florida Department of Health, Bureau of Vital Statistics

In 2020, those who identify as Hispanic had the highest rate of deaths from breast cancer compared to the other races and ethnicities.

Exhibit HC21: Age-Adjusted Deaths from Female Breast Cancer by Ethnicity, Rate per 100,000 Female Population, Collier County, 2020


[^1]
## Prostate Cancer

Prostate cancer is the second most common type of cancer in Collier County. In 2008, Collier County saw its highest rate of new prostate cancer diagnoses, 172.5 per 100,000. From 2008 to 2012, the incidence rate drastically decreased. Since 2012 the rate of new prostate cancer diagnosis has increased overall. Collier County experienced higher rates of prostate cancer diagnoses than the State of Florida in 2005 to 2009 and again in 2014 and 2016.

Exhibit HC22: Age-Adjusted Prostate Cancer Incidence, Rate per 100,000 Male Population, Collier County and Florida, 2005-2018


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

White people had the highest rate of new prostate cancer diagnosis, and Blacks had the lowest in Collier County.

Exhibit HC23: Age-Adjusted Prostate Cancer Incidence by Race, Rate per 100,000 Male Population, Collier County, 2018


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

Non-Hispanics had the highest rate of new prostate cancer diagnosis, and Hispanics had the lowest in Collier County.

Exhibit HC24: Age-Adjusted Prostate Cancer Incidence by Ethnicity, Rate per 100,000 Male Population, Collier County, 2018


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

2015 was the deadliest year for those with prostate cancer in Collier County. From 2015 until 2020 there was a steady decline in deaths, with a small uptick in prostate cancer deaths in 2019. When compared to the Florida average, Collier County's prostate cancer death rate was significantly lower, except in 2015, (2019, Collier County 5.7 per 100,000 vs. Florida 7.2 per 100,000).

Exhibit HC25: Age-Adjusted Prostate Cancer Death, Rate per 100,000 Male Population, Collier County and Florida, 2009-2019


Source: Florida Department of Health, Bureau of Vital Statistics

In 2020, Black people had the highest death rate from prostate cancer. Even though the Black death rate is high, the number of Black people dying of prostate cancer is smaller (2 people in 2020) when compared to the other races.

Exhibit HC26: Age-Adjusted Deaths from Prostate Cancer by Race, Rate per 100,000 Male Population, Collier County, 2020


Source: Florida Department of Health, Bureau of Vital Statistics

Non-Hispanics had the highest rate of new prostate cancer diagnosis, and Hispanics had the lowest in Collier County.

Exhibit HC27: Age-Adjusted Deaths from Prostate Cancer by Ethnicity, Rate per 100,000 Male Population, Collier County, 2020


Source: Florida Department of Health, Bureau of Vital Statistics

## Heart Disease

Over the past 10 years the overall death rate from heart disease has significantly decreased, except for an increase in 2015. Collier County's heart disease death rate was significantly less than the Florida average from 2010-2020.

Exhibit HC28: Age-Adjusted Deaths from Heart Disease, Rate per 100,000 Population, Collier County and Florida, 2010-2020


Source: Florida Department of Health, Bureau of Vital Statistics

In 2020, Black people had the highest rate of death from heart disease. Even though the Black death rate is high, the number of Black people dying of heart disease is smaller when compared to the other races/ethnicities.

Exhibit HC29: Age-Adjusted Death from Heart Disease by Race, Rate per 100,000 Population, Collier County, 2020


Source: Florida Department of Health, Bureau of Vital Statistics

Hispanics in Collier County have a higher death rate from heart disease than Non-Hispanics.

Exhibit HC30: Age-Adjusted Death from Heart Disease by Ethnicity, Rate per 100,000 Population, Collier County, 2020


Source: Florida Department of Health, Bureau of Vital Statistics

Males die at a higher rate from heart disease compared to females. From 2016 to 2020, the heart disease death rate for both males and females in Collier County declined.

Exhibit HC31: Age-Adjusted Death from Heart Disease by Sex, Rate per 100,000 Population, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

## Stroke

The deadliest year for stroke deaths in Collier County was 2020; this was the highest it's ever been (48.4 per 100,000). Since 2013 there was a significant increase in stroke deaths in the county. Collier County surpassed the State in stroke deaths in 2018.

Exhibit HC32: Age-Adjusted Deaths from Stroke, Rate per 100,000 Population, Collier County and Florida, 2010-2020


Source: Florida Department of Health, Bureau of Vital Statistics

Blacks have a higher death rate from strokes when compared to other races in Collier County.

Exhibit HC33: Age-Adjusted Deaths from Stroke by Race, Rate per 100,000 Population, Collier County, 2020


Source: Florida Department of Health, Bureau of Vital Statistics

In Collier County, those who identify as Hispanic had a higher death rate from strokes than nonHispanics.

Exhibit HC34: Age-Adjusted Deaths from Stroke by Ethnicity, Rate per 100,000 Population, Collier County, 2020


Source: Florida Department of Health, Bureau of Vital Statistics

Both males and females had an increase in deaths from a stroke from 2016 to 2020, except in 2020 there was a small decrease in female deaths from stroke in Collier County. Females in Collier County were dying at a higher rate than males from stroke from 2016 to 2019. There was a significant increase in the death rate in males from 2019 to 2020.

Exhibit HC35: Age-Adjusted Deaths from Stroke by Sex, Rate per 100,000 Population, Collier County, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

## Tuberculosis

According to the Centers for Disease Control and Prevention, Tuberculosis (TB) is caused by a bacterium called Mycobacterium Tuberculosis. TB is an infectious disease that attacks the lungs, but can attack any part of the body. TB is an airborne infectious disease, which means the disease spreads in the air when a person infected with TB coughs, speaks, or sings.

In the past 10 years, 2010 had the highest rate of Tuberculosis cases in Collier County. From 2010 to 2016 there was a significant decrease in TB cases in Collier County and there was an increase in cases from 2016 to 2019. When compared to the State of Florida, Collier County has higher rate of TB cases except in 2016.

Exhibit HC36: Tuberculosis Cases, Rate per 100,000 Population, Collier County and Florida, 2010-2020


Source: Florida Department of Health, Division of Disease Control and Health Protection, Tuberculosis Section

## Sexually Transmitted Infections/Diseases (STIs/STDs)

Chlamydia is the most common sexually transmitted infection (STI) in Collier County. When compared to the Florida average, Collier County's STI rates are considerably lower for chlamydia, gonorrhea, and syphilis.

Exhibit HC37: Sexually Transmitted Infections, Collier County and Florida, 2017-2019

|  | \# Of Cases Annual <br> Average | County 3-Year Rate <br> per 100,000 | State 3-Year Rate per <br> 100,000 |
| :--- | :---: | :---: | :---: |
| Chlamydia | $1,168.67$ | 317.7 | 504.2 |
| Gonorrhea | 177.33 | 48.2 | 161.7 |
| Syphilis | 59.33 | 16.1 | 50.8 |

Source: Florida Department of Health, Bureau of Communicable Diseases

Chlamydia infection is the most frequently reported notifiable disease in the United States, Florida, and Collier County. It is the most prevalent of all STIs in the country and in Collier County.

Chlamydia infections in women are usually asymptomatic and can result in pelvic inflammatory disease (PID) which is a major cause of infertility, ectopic pregnancy, and chronic pelvic pain. As is the case with other inflammatory STIs, chlamydia infections can facilitate the transmission of human immunodeficiency virus (HIV). Pregnant women infected with chlamydia can also pass the infection to their infants during delivery, potentially resulting in neonatal ophthalmia and pneumonia. Due to the burden of disease and the risks associated with infections, CDC recommends that all sexually active women younger than 25 years of age receive an annual chlamydia screening.

Since 2010 the cases of chlamydia in Collier County have been slightly increasing, with a decrease in 2019. In 2018, Collier County had its highest rate of chlamydia cases, 352.4 per 100,000. Collier County consistently has lower rates of chlamydia when compared to the State.

Exhibit HC38: Chlamydia Cases, Rate per 100,000 Population, Collier County and Florida, 2009-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

In Collier County females have a higher rate of getting diagnosed with chlamydia than males. 2018 had the highest rates of chlamydia cases in Collier County.

Exhibit HC39: Chlamydia Cases by Sex, Rate per 100,000 Population, Collier County, 2015-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

Those under the age of 30 had the highest number of chlamydia cases in Collier County, when compared to other age groups. Collier County residents aged 35-39 had the lowest number of chlamydia cases.

Exhibit HC40: Reported Chlamydia Cases by Select Age Group, 3-Year Rolling, Collier County, 2017-2019

| Age Group | Total | Percent |
| :---: | :---: | :---: |
| $15-19$ | 938 | $28.5 \%$ |
| $20-24$ | 1,271 | $38.6 \%$ |
| $25-29$ | 633 | $19.2 \%$ |
| $30-34$ | 273 | $8.3 \%$ |
| $35-39$ | 176 | $5.3 \%$ |

Source: Florida Department of Health, Bureau of Communicable Diseases
Females, regardless of age, had a higher number of chlamydia cases when compared to males in Collier County. For females, about 72 percent of the cases came from the 15-24 age group. Regarding the males in Collier County, 65 percent of the chlamydia cases were from the 20-29 age group. This shows a need for increased sexual education and outreach for these age groups.

Exhibit HC41: Reported Chlamydia Cases by Select Age and Sex Group, 3-Year Rolling, Collier County, 2017-2019

| Age Group | Male | Percent | Female | Percent |
| :---: | :---: | :---: | :---: | :---: |
| $15-19$ | 196 | $18.1 \%$ | 742 | $33.6 \%$ |
| $20-24$ | 430 | $39.7 \%$ | 841 | $38.1 \%$ |
| $25-29$ | 275 | $25.4 \%$ | 358 | $16.2 \%$ |
| $30-34$ | 114 | $10.5 \%$ | 159 | $7.2 \%$ |
| $35-39$ | 67 | $6.2 \%$ | 109 | $4.9 \%$ |

Source: Florida Department of Health, Bureau of Communicable Diseases

Black females had the highest rates of chlamydia when compared to white males/females in Collier County.

Exhibit HC42: Chlamydia Cases by Race and Sex, Rate per 100,000 Population, 3-Year Rolling, Collier County, 2017-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

In Collier County, Hispanic females had the highest rates of chlamydia when compared to Non-Hispanic males/females.

Exhibit HC43: Chlamydia Cases by Ethnicity and Sex, Rate per 100,000 Population, 3-Year Rolling, Collier County, 2017-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

Gonorrhea is caused by Neisseria gonorrhea, a bacterium that can grow and multiply easily in warm, moist areas of the reproductive tract including the cervix, uterus, and fallopian tubes in women, and in the urethra in women and men. Gonorrhea can also grow in the mouth, throat, eyes, and anus.

Since 2014, the rate of gonorrhea cases in Collier County increased, with a decrease in 2019. In 2018 Collier County had its highest rate of gonorrhea cases, 56.9 per 100,000, in the past 10 years. When compared to the State, Collier County consistently had significantly lower rates of gonorrhea cases.

Exhibit HC44: Gonorrhea Cases, Rate per 100,000 Population, Collier County and Florida, 2009-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

Males in Collier County had a higher rate of gonorrhea diagnoses when compared to females from 20152019. 2018 had its highest rates of gonorrhea cases in Collier County for both males and females.

Exhibit HC45: Gonorrhea Cases by Sex, Rate per 100,000 Population, Collier County, 2015-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

The 20-24 age group had the highest number of reported cases of gonorrhea when compared the other age-groups. The 25-29 had the second highest number of reported cases of gonorrhea. Those in their 20s make up about 58 percent of the gonorrhea cases in Collier County.

Exhibit HC46: Reported Gonorrhea Cases by Select Age Group, 3-Year Rolling, Collier County, 2017-2019

| Age Group | Total | Percent |
| :---: | :---: | :---: |
| $15-19$ | 102 | $22.6 \%$ |
| $20-24$ | 152 | $33.6 \%$ |
| $25-29$ | 109 | $24.1 \%$ |
| $30-34$ | 52 | $11.5 \%$ |
| $35-39$ | 37 | $8.2 \%$ |

Source: Florida Department of Health, Bureau of Communicable Diseases

Males had a higher number of the reported cases of gonorrhea in all age groups except for the 15-19 age group, where females had 18 more cases, in Collier County. Those who are 35-39 years of age had the lowest number of reported cases of gonorrhea in Collier County.

Exhibit HC47: Reported Gonorrhea Cases by Select Age and Sex Group, 3-Year Rolling, Collier County 2017-2019

| Age Group | Male | Percent | Female | Percent |
| :--- | :---: | :---: | :---: | :---: |
| $15-19$ | 42 | $16.2 \%$ | 60 | $31.3 \%$ |
| $20-24$ | 82 | $31.5 \%$ | 70 | $36.5 \%$ |
| $25-29$ | 69 | $26.5 \%$ | 40 | $20.8 \%$ |
| $30-34$ | 38 | $14.6 \%$ | 14 | $7.3 \%$ |
| $35-39$ | 29 | $11.2 \%$ | 8 | $4.2 \%$ |

Source: Florida Department of Health, Bureau of Communicable Diseases

Black males and Black females disproportionately had a higher rate of being diagnosed with gonorrhea when compared to the other races/sexes. White females had the lowest rates of being diagnosed with gonorrhea in Collier County.

Exhibit HC48: Gonorrhea Cases by Race and Sex, Rate per 100,000 Population, 3-Year Rolling, Collier County, 2017-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

Non-Hispanic males followed closely by Hispanic males had the highest rates of being diagnosed with gonorrhea in Collier County. Non-Hispanic females had the lowest gonorrhea diagnosis rate.

Exhibit HC49: Gonorrhea Cases by Ethnicity and Sex, Rate per 100,000 Population, 3-Year Rolling, Collier County, 2017-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

Syphilis is a genital ulcerative disease that causes significant complications if left untreated and facilitates the transmission of HIV infection. Syphilis is divided into four stages, primary, secondary, latent, and tertiary. Each stage has its own signs and symptoms. Untreated early syphilis in pregnant women results in perinatal mortality in as much as 40 percent of cases and pregnancy may lead to infection of the fetus in 80 percent of cases. Syphilis is passed from person to person through direct contact with syphilis sore. Sores occur on the external genitalia, vagina, and anus or in the rectum. These sores can also occur on the lips and in the mouth. Even after completing syphilis treatment, reinfection is possible.

Since 2011, the rate of total syphilis cases in Collier County have continued to increase, from 4.9 per 100,000 to 18.8 per 100,000. Collier County's rate of total syphilis cases is consistently lower than the State's average.

Exhibit HC50: Total Syphilis Cases, Rate per 100,000 Population, Collier County and Florida, 2009-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

Congenital syphilis is a severe, often life-threatening, infection seen in infants. This occurs when a pregnant mother who has syphilis spreads the infectious disease to her unborn infant. Infectious syphilis includes the primary stage and secondary syphilis. At primary stage of infection, the person would usually have one or more ulcerative lesions. Secondary stage of a syphilis infection, a person would usually have skin rashes commonly found on the palms of the hands and bottom of the feet and mucous membrane lesions on the mouth, vagina, or anus. Early syphilis is categorized as when the initial infection occurred within the previous 12 months. This includes both primary and secondary stage syphilis with or without symptoms.

Majority of the cases of syphilis in Collier County from 2009 to 2019 were categorized as early syphilis. There were only two years out of the 10 when a baby was born with congenital syphilis, 2017 and 2018.

Exhibit HC51: Reported Syphilis Cases by Type, Collier County, 2009-2019

|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Congenital Syphilis* |  |  |  |  |  |  |  |  | 1 | 2 |  |
| Infectious Syphilis | 8 | 4 | 3 | 9 | 12 | 18 | 17 | 15 | 19 | 14 | 28 |
| Early Syphilis | 10 | 9 | 9 | 12 | 18 | 31 | 29 | 34 | 35 | 31 | 48 |
| Total Syphilis | $\mathbf{2 7}$ | $\mathbf{2 8}$ | $\mathbf{1 6}$ | $\mathbf{2 5}$ | $\mathbf{4 4}$ | $\mathbf{4 6}$ | $\mathbf{5 4}$ | $\mathbf{5 5}$ | $\mathbf{5 1}$ | $\mathbf{5 6}$ | $\mathbf{7 1}$ |

Source: Florida Department of Health, Bureau of Communicable Diseases
*Blanks indicate no data was given that year

The 45-54 age group had the highest number of total syphilis cases when compared to other age groups. The second highest age group was 25-29 with 32 cases of syphilis.

Exhibit HC52: Total Syphilis Cases by Select Age Group, 3-Year Rolling, Collier County, 2017-2019

| Age Group | Total | Percent |
| :--- | :---: | :---: |
| $15-19$ | 4 | $2.3 \%$ |
| $20-24$ | 14 | $8.0 \%$ |
| $25-29$ | 32 | $18.3 \%$ |
| $30-34$ | 18 | $10.3 \%$ |
| $35-39$ | 29 | $16.6 \%$ |
| $40-44$ | 14 | $8.0 \%$ |
| $45-54$ | 42 | $24.0 \%$ |
| $55-64$ | 18 | $10.3 \%$ |
| 65 and over | 4 | $2.3 \%$ |

Source: Florida Department of Health, Bureau of Communicable Diseases

For males in Collier County, the 45-54 age group had the highest number of cases of syphilis when compared to the other age groups. Among females in Collier County, the 25-29 and 45-54 age groups had the highest number of syphilis cases. The age groups 15-19 and 65 and over had the lowest number of syphilis diagnoses for both males and females.

Exhibit HC53: Total Syphilis Cases by Select Age Groups and Sex, 3-Year Rolling, Collier County, 2017-
2019

| Age Group | Male | Percent | Female | Percent |
| :--- | :---: | :---: | :---: | :---: |
| $15-19$ | 2 | $1.5 \%$ | 2 | $5.3 \%$ |
| $20-24$ | 10 | $7.3 \%$ | 4 | $10.5 \%$ |
| $25-29$ | 24 | $17.5 \%$ | 8 | $21.1 \%$ |
| $30-34$ | 17 | $12.4 \%$ | 1 | $2.6 \%$ |
| $35-39$ | 24 | $17.5 \%$ | 5 | $13.2 \%$ |
| $40-44$ | 11 | $8.0 \%$ | 3 | $7.9 \%$ |
| $45-54$ | 34 | $24.8 \%$ | 8 | $21.1 \%$ |
| $55-64$ | 13 | $9.5 \%$ | 5 | $13.2 \%$ |
| 65 and over | 2 | $1.5 \%$ | 2 | $5.3 \%$ |

Source: Florida Department of Health, Bureau of Communicable Diseases

Black males and Black females in Collier County were diagnosed with syphilis at a higher rate than white males and white females.

Exhibit HC54: Total Syphilis Cases by Race and Sex, Rate per 100,000 Population, 3-Year Rolling, Collier County, 2017-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

Hispanic males were disproportionally diagnosed with syphilis at a higher rate than Hispanic females and Non-Hispanic males/females in Collier County. Non-Hispanic females in Collier County had the lowest syphilis diagnosis rate.

Exhibit HC55: Total Syphilis Cases by Ethnicity and Sex, Rate per 100,000 Population, 3-Year Rolling, Collier County, 2017-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

## HIV Infection

Over thirty years have passed since June 5, 1981, when the Centers for Disease Control (CDC) published its first report of cases of Pneumocystis carinii pneumonia (PCP) being diagnosed among previously healthy, young, gay men in Los Angeles. This is the syndrome that would later become known as AIDS. The CDC published its first surveillance case definition for AIDS in September of 1982. Soon after this disease was recognized as a distinct syndrome, Florida began to collect voluntary AIDS surveillance reports. In 1983, the State of Florida Health Officer designated AIDS as a reportable disease, and a formal AIDS surveillance program was instituted in the state. Mandatory reporting of AIDS was incorporated into the Florida Statutes (s.384, F.S.) in 1986, and the Florida Administrative Code (64D, F.A.C.) directed that all AIDS cases, as defined by the CDC, be reported to the local county health department by physicians who diagnose or treat AIDS. In 1993, the CDC published its first major revision of the AIDS case definition. This change added three new AIDS-indicator diseases and allowed for HIV positive individuals with severely depressed immune systems (those with an absolute CD4 count <200, or <14 percent) to meet the AIDS case definition. This case definition revision went into effect retroactively and resulted in a substantial increase in the number of reported AIDS cases in Florida. The State of Florida passed legislation that became effective July 1, 1997, which authorized the reporting of newly diagnosed cases of HIV infection by name (i.e., individuals who tested HIV+, but did not meet the AIDS case definition). This legislation, however, did not allow for the retroactive reporting of previously diagnosed HIV+ individuals. The first case of AIDS in Collier County was reported in 1982.

Starting in 2009, the rates of HIV diagnoses began to decline in Collier County until 2014 when it started to drastically increase. From 2016 to 2019, the HIV diagnoses rate started to decline again. When compared to the state, Collier County's HIV Diagnoses rate has remained lower than the State from 2009 to 2019.

Exhibit HC56: HIV Diagnoses, Rate per 100,000 Population, Collier County and Florida, 2009-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

Male-to-male sexual contact was the mode of exposure with the highest number of reported cases of HIV in Collier County. Male-to-male sexual contact/inject drug use had the lowest number of reported HIV cases.

Exhibit HC57: Reported Cases of HIV Diagnoses, Collier County, 2017-2019

| Mode of Exposure | Number of Reported Cases | Percent of Total |
| :--- | :---: | :---: |
| Male-to-Male Sexual Contact (MMSC) | 76 | $61.3 \%$ |
| Injection Drug Use (IDU) | 4 | $3.2 \%$ |
| MMSC/IDU | 3 | $2.4 \%$ |
| Heterosexual Contact | 41 | $33.1 \%$ |

Source: Florida Department of Health, Bureau of Communicable Diseases

In Collier County the 30-39 age-group had the highest number of reported HIV cases, accounting for almost 40 percent of the total reported cases, when compared to the other age-groups. There were only two reported cases of HIV for children under the age of 19 in Collier County.

Exhibit HC58: Reported Cases of HIV Diagnoses by Age, 3-Year Rolling, Collier County, 2017-2019

| Age (in years) at Initial Florida <br> Report | Number of Reported Cases | Percent of Total |
| :--- | :---: | :---: |
| $0-12$ | 0 | $0.0 \%$ |
| $13-19$ | 2 | $1.9 \%$ |
| $20-24$ | 10 | $9.4 \%$ |
| $25-29$ | 23 | $21.7 \%$ |
| $30-39$ | 40 | $37.7 \%$ |
| $50-59$ | 22 | $20.8 \%$ |
| 60 and over | 9 | $8.5 \%$ |

Source: Florida Department of Health, Bureau of Communicable Diseases

When compared to females more males were being diagnosed with HIV. From 2014 to 2019 in Collier County, 2016 had the highest number of male and female HIV diagnoses.

Exhibit HC59: HIV Diagnoses by Sex, Count, Collier County, 2014-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

In 2019, Black females in Collier County had the highest number of HIV diagnosis, this makes 37 percent of the diagnosis.

Exhibit HC60: HIV Diagnoses by Race and Sex, Count, 3-Year Rolling, Collier County, 2017-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

Hispanic males were disproportionally diagnosed with HIV at a higher number than Hispanic females and Non-Hispanic males/females in Collier County, making 50 percent of the diagnosis for 2017-2019. Non-Hispanic females in Collier County had the lowest HIV diagnosis number.

Exhibit HC61: HIV Diagnoses by Ethnicity and Sex, Count, 3-Year Rolling, Collier County, 2017-2019


Source: Florida Department of Health, Bureau of Communicable Diseases

## Older Population Health

For both 2020 and 2019, most of the ten leading causes of death for seniors' years 65 and over are the same except for the number of COVID-19 deaths in 2020 and the unknown cancer types in 2010. The COVID-19 pandemic had a significant impact on the health in Collier County, it was the fifth leading cause of death for seniors. In 2020 the top three leading causes of death for seniors was cancer, heart disease, and cerebrovascular diseases. In 2010 the top three leading causes of death were heart disease, cancer, and chronic lower respiratory disease.

Exhibit HC62: The 10 Leading Causes of Death, 65 Years and Over, Collier County, 2010 and 2020

| 2020 |  |  |
| :--- | :---: | :---: |
| Leading Cause of Death | Number <br> of <br> Deaths | Percentage <br> Distribution |
| Cancer | 755 | $24.2 \%$ |
| Heart Disease | 690 | $22.2 \%$ |
| Cerebrovascular Diseases <br> (Stroke) | 486 | $15.6 \%$ |
| COVID-19 | 269 | $8.6 \%$ |

Source: Florida Department of Health, Bureau of Community Health assessment, Division of Public Health Statistics and Performance Management; FLHealthCHARTS - Death County Query System
*Other Causes of Death includes: Certain Other Intestinal Infections, Other \& Unspecified Infectious/Parasitic Disease \& Sequelae, Other Arteries, Arterioles, Capillaries Dis, Other Circulatory System Disorders, Unspec Acute Lower Respiratory Infection, Other Respiratory System Dis, Symptoms, Signs, Abnormal Clinical/Lab Findings, Firearms Discharge, Other \& Unspecified Event \& Sequelae, All Other Diseases (Residual)

Alzheimer's disease is the most common cause of dementia and can account for up to 80 percent of all cases of the condition. First identified over 100 years ago, research on its symptoms, causes, risk factors and treatment did not gain significant momentum until the last 30 years. Alzheimer's disease is usually diagnosed by a primary care physician utilizing the patient's medical and family history as well as any psychiatric and cognitive and behavioral history. Neurological, physical and cognitive examinations and tests are also conducted as part of the diagnosis process. The definitive cause of Alzheimer's remains unknown at this time, although it is widely accepted that as in other chronic diseases, multiple factors are involved in the development of the disease.

Advanced age is the predominant risk factor and correlate for the development of Alzheimer's disease; however, the disease is not a normal part of the aging process. The majority of persons with Alzheimer's disease are diagnosed at age 65 and above. The prevalence of the disease increases exponentially as age increases beyond 65 years. The number of residents of Collier County diagnosed with Alzheimer's disease as well as other dementias will increase every year as the percentage of the population 65 years and over continues to grow. This number will intensify greatly through 2030 and 2040 as the "Baby Boomer" cohort matures. In Collier County, Alzheimer's disease was the sixth leading cause of death in the population 65 years of age and older in 2010 and in 2020 it was the eighth leading cause of death.

It is hard to know the actual number of people living with Alzheimer's disease, but below is an estimate of people in Collier County with Alzheimer's disease. It is predicated in 2020 that 14 percent of the population 65 years and over in Collier County may be living with Alzheimer's disease, which is higher than the Florida average. Starting in 2017 the Collier County average surpassed the Florida average.

Exhibit HC63: Probable Alzheimer's Disease Cases (65+), Percentage of Population age 65+, Collier County and Florida, 2012-2020


Source: Estimated proportions of persons 65-74, 75-84, and 85+ with Alzheimer's Disease are provided by the Department of Elder Affairs. The proportions are multiplied by population estimates for the same groups from FLHealthCHARTS.com.

Over the past 10 years the overall death rate from Alzheimer's disease has drastically declined from 24.1 per 100,000 to 10.1 per 100,000 in Collier County. 2013 was the deadliest year for Alzheimer's disease deaths in Collier County. From 2010 to 2014 and in 2016 to 2017 Collier County had a higher Alzheimer's disease death rate than Florida.

Exhibit HC64: Age-Adjusted Deaths from Alzheimer's Disease, Rate per 100,000 Population, Collier County and Florida, 2010-2020


Source: Florida Department of Health, Bureau of Vital Statistics

In Collier County white people have the highest Alzheimer's disease death rate when compared to Black people in the past five years. In 2018 and 2020 there were zero Black Collier County residents who died from Alzheimer's disease.

Exhibit HC65: Age-Adjusted Deaths from Alzheimer's Disease by Race, Rate per 100,000 Population, Collier County and Florida, 2015-2020


Source: Florida Department of Health, Bureau of Vital Statistics

In Collier County, Hispanics have a higher Alzheimer's disease death rate when compared to NonHispanics in the past five years, except for 2018.

Exhibit HC66: Age-Adjusted Deaths from Alzheimer's Disease by Ethnicity, Rate per 100,000 Population, Collier County and Florida, 2015-2020


Source: Florida Department of Health, Bureau of Vital Statistics

Females in Collier County consistently had a higher Alzheimer's disease death rate when compared to males from 2015 to 2020.

Exhibit HC67: Age-Adjusted Deaths from Alzheimer's Disease by Sex, Rate per 100,000 Population, Collier County and Florida, 2015-2020


Source: Florida Department of Health, Bureau of Vital Statistics

## Health Behaviors

One of the correlates of higher levels of life expectancy and quality of life has historically been level of educational attainment due to its direct overall association with income level. As can be seen in this chapter on health behaviors, whether its diet related, tobacco, or alcohol use oriented, healthy habits are highly associated with education and income. Gender also plays a significant role. Females are more likely to choose a healthy lifestyle and its concomitant habits than males, and a married individual is less likely to engage in unhealthy habits than an unmarried person.

It is estimated in the United States that the two most prevalent unhealthy behaviors or lifestyle related habits (tobacco use and overweight and obesity) account for almost 35 percent of all preventable and premature deaths annually. This holds true for Collier County and Florida as well.

Although data for Collier County on select health behaviors in this section are available only from the Florida Department of Health's Behavioral Risk Factor Surveillance System (BRFSS) randomly selected scientific sample survey for select year intervals 2013, 2016, and 2019, these results are statistically valid and are representative of the community and population of Collier County.

The Florida BRFSS survey is carried out to compile and maintain a statewide level health behavioral assessment on an annual basis, while the geographical county BRFSS surveys are initiated every 3 years. These are the indicators that guide the County Health Departments in the assessment of their progress towards healthy behaviors within the communities.

## Obesity and Overweight

The level of obesity and overweight in a population is predominantly a result of consuming too many calories while participating in too little physical activity.

An increase in the prevalence of obesity and overweight is related to a higher incidence of numerous chronic diseases including stroke, hypertension, cancer, cardiovascular disease, and diabetes. This same type of statistical association exists between level of physical activity and chronic health conditions. Premature mortality as measured by Years of Potential Life Lost is also statistically correlated with decreased physical activity, obesity and overweight.

The percentage of adults considered to be overweight in Collier County has continued to increase over the past six years. In 2019, about 41 percent of adults in Collier County were considered overweight. Collier County had a higher percentage of adults who were overweight in 2016 and 2019 when compared to the State of Florida.

Exhibit HB1: Percent of Adults Who are Overweight in Collier County and Florida, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

When compared to the State of Florida in 2016 and 2019 the Non-Hispanic Black population in Collier County had a significant higher percentage of adults who were overweight. In 2019, all races/ethnicities in Collier County had a higher percentage of adults who were overweight when compared to Florida.

Exhibit HB2: Percent of Adults Who are Overweight, by Race/Ethnicity in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic |
| $2013^{*}$ | $36.3 \%$ |  | $23.8 \%$ | $35.8 \%$ | $36.9 \%$ | $38.6 \%$ |
| 2016 | $36.2 \%$ | $43.4 \%$ | $38.3 \%$ | $35.3 \%$ | $32.7 \%$ | $40.4 \%$ |
| 2019 | $39.0 \%$ | $51.5 \%$ | $41.2 \%$ | $37.8 \%$ | $35.1 \%$ | $39.1 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Non-Hispanic Black, no data was collected for this group

In the selected years in the table below, Collier County Non-Hispanic Blacks had a higher percentage of adults who were overweight when compared to other races/ethnicities. There was an overall increase, among all races/ethnicities, in the percentage of adults who are overweight in Collier County from 2013 to 2019.

Exhibit HB3: Percent of Adults Who are Overweight, by Race/Ethnicity in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Non-Hispanic Black, no data was collected for this group

From 2013 to 2019, Collier County men had a higher percentage of men who were overweight when compared to the State. The women in Collier County had a lower percentage of women who were overweight in 2013 and 2016 when compared to the State average, but in 2019 Collier County and Florida women had the same percentage.

Exhibit HB4: Percent of Adults Who are Overweight, by Sex in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women |
| 2013 | $44.8 \%$ | $20.7 \%$ | $42.9 \%$ | $30.0 \%$ |
| 2016 | $44.1 \%$ | $29.2 \%$ | $41.4 \%$ | $30.1 \%$ |
| 2019 | $48.8 \%$ | $32.5 \%$ | $42.6 \%$ | $32.5 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

There was an increase in the percentage of women in Collier County who were overweight over the past six years. When compared to women, men in Collier County significantly had a higher percentage of being overweight.

Exhibit HB5: Percent of Adults Who are Overweight, by Sex in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2019, the 45 to 64 and 65 and older age groups in Collier County had a higher percentage of adults who are overweight then the Florida average. For the 18 to 44 age group Collier County had a slightly smaller percentage when compared to the State.

Exhibit HB6: Percent Adults Who are Overweight, By Age Group in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $18-44$ | $45-64$ | 65 and Older | $18-44$ | $45-64$ | 65 and Older |
| 2013 | $32.1 \%$ | $28.4 \%$ | $38.1 \%$ | $31.5 \%$ | $39.4 \%$ | $40.6 \%$ |
| 2016 | $31.8 \%$ | $41.1 \%$ | $39.4 \%$ | $32.2 \%$ | $37.2 \%$ | $39.7 \%$ |
| 2019 | $33.6 \%$ | $45.6 \%$ | $41.7 \%$ | $35.5 \%$ | $39.2 \%$ | $39.2 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

The 45 to 64 age group in Collier County consistently had the highest percentage of overweight adults when compared to the other age groups in 2019. Between 2013 and 2016, there was a 45 percent difference in the percentage of overweight adults in the 45 to 64 age group.

Exhibit HB7: Percent Adults Who are Overweight, By Age Group in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

For both Collier County and Florida those who are married/coupled have a higher percentage of being overweight when compared to those who are not married/coupled in 2019.

Exhibit HB8: Percent Adults Who are Overweight, By Marital Status in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Married/Coupled | Not <br> Married/Coupled | Married/Coupled | Not <br> Married/Coupled |
| 2013 | $37.5 \%$ | $26.0 \%$ | $39.5 \%$ | $32.9 \%$ |
| 2016 | $34.9 \%$ | $39.8 \%$ | $38.4 \%$ | $32.7 \%$ |
| 2019 | $41.9 \%$ | $39.3 \%$ | $40.2 \%$ | $34.7 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2013 and 2019, those who were married/coupled had a higher percentage of those who are overweight when compared to those who are not married/coupled. Not married/coupled adults in Collier County saw its highest percentage of those who were overweight in 2016.

Exhibit HB9: Percent Adults Who are Overweight, By Marital Status in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2019, adults in Collier County who had a high school/GED level of education had a higher percentage of adults who were overweight. Florida adults with more than a high school level of education had a higher percentage of adults who were overweight.

Exhibit HB10: Percent Adults Who are Overweight, By Education Level in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less Than <br> High School | High <br> School/GED | More Than <br> High School | Less Than <br> High School | High <br> School/GED | More Than <br> High School |
| $2013^{*}$ |  | $29.7 \%$ | $35.1 \%$ | $38.4 \%$ | $35.4 \%$ | $36.5 \%$ |
| 2016 | $34.7 \%$ | $35.7 \%$ | $38.4 \%$ | $34.8 \%$ | $34.4 \%$ | $36.8 \%$ |
| 2019 | $37.7 \%$ | $52.2 \%$ | $36.0 \%$ | $36.7 \%$ | $37.1 \%$ | $38.2 \%$ |

[^2]Slightly over 50 percent of adults in Collier County with a high school/GED level of education were overweight, this is significantly higher than those with less/more than high school education in 2019. In 2013 and 2016 those with more than a high school level of education had a higher percentage of adults who were overweight.

Exhibit HB11: Percent Adults Who are Overweight, By Education Level in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 less than high school, no data was collected for this group

In 2019 adults in Collier County who made $\$ 25,000$ to $\$ 49,999$ annually had a higher percentage of adults who were overweight, for Florida adults who made $\$ 50,000$ or more annually had a higher percentage of adults who were overweight. Both in Collier County and Florida those making less than $\$ 25,000$ a year had the smaller percentage of adults who were overweight.

Exhibit HB12: Percent Adults Who are Overweight, By Annual Income in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<\$ 25,000$ | $\$ 25,000-$ <br> $\$ 49,999$ | $\$ 50,000$ or <br> More | $<\$ 25,000$ | $\$ 25,000-$ <br> $\$ 49,999$ | $\$ 50,000$ or <br> More |
| 2013 | $33.1 \%$ | $24.2 \%$ | $36.6 \%$ | $34.8 \%$ | $37.1 \%$ | $37.8 \%$ |
| 2016 | $34.3 \%$ | $40.9 \%$ | $41.1 \%$ | $32.2 \%$ | $36.6 \%$ | $38.7 \%$ |
| 2019 | $34.7 \%$ | $41.7 \%$ | $40.9 \%$ | $34.7 \%$ | $35.3 \%$ | $42.4 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2016 and 2019 adults in Collier County making less than \$25,000 a year had a smaller percentage of adults who were overweight. The $\$ 25,000$ to $\$ 49,999$ annual income group had an increase in the percentage of adults who were overweight.

Exhibit HB13: Percent Adults Who are Overweight, By Annual Income Level in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

From 2013 to 2019, the percentage of adults who were obese increased over the past six years in Collier County. Collier County consistently had a smaller percentage of adults who were obese when compared to the Florida average.

Exhibit HB14: Percent of Adults Who are Obese in Collier County and Florida, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2019, the Non-Hispanic Black population of adults in both Collier County and Florida had the highest percentage of adults who were obese when compared to other races/ethnicities, while the NonHispanic white population had the smallest percentage.

Exhibit HB15: Percent of Adults Who are Obese, by Race/Ethnicity in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic |
| $2013^{*}$ | $16.0 \%$ |  | $34.8 \%$ | $25.1 \%$ | $34.2 \%$ | $26.4 \%$ |
| 2016 | $18.2 \%$ | $26.8 \%$ | $26.9 \%$ | $26.6 \%$ | $34.0 \%$ | $27.3 \%$ |
| 2019 | $20.0 \%$ | $33.1 \%$ | $32.0 \%$ | $25.4 \%$ | $35.0 \%$ | $28.2 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Non-Hispanic Black, no data was collected for this group

The Non-Hispanic white population of adults in Collier County consistently had a smaller percentage of adults who were obese; this population also saw an increase in the percentage of obese adults as well. In 2013 and 2016 Hispanics had the largest percentage of adults in Collier County who were obese and in 2019 Non-Hispanic Blacks had the largest percentage.

Exhibit HB16: Percent of Adults Who are Obese, by Race/Ethnicity in Collier County, 2013, 2016, and
2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Non-Hispanic Black, no data was collected for this group

Women in Collier County consistently had a smaller percentage of obesity than the Florida average for women in 2019.

Exhibit HB17: Percent of Adults Who are Obese, by Sex in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women |
| 2013 | $23.1 \%$ | $18.4 \%$ | $27.5 \%$ | $22.3 \%$ |
| 2016 | $22.4 \%$ | $19.9 \%$ | $28.3 \%$ | $26.6 \%$ |
| 2019 | $26.2 \%$ | $19.9 \%$ | $26.9 \%$ | $27.2 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In Collier County, there was a higher percentage of men than women over the past six years who were obese. In 2019, 26 percent of Collier County adult males were considered obese.

Exhibit HB18: Percent of Adults Who are Obese, by Sex in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2019 the age group that had the largest percentage of adults who were obese in Collier County was those 18 to 44 and in Florida it was those 45 to 64 . The age group that had the smallest percentage in Collier County were those 65 and older, in Florida it was the 18 to 44 age group.

Exhibit HB19: Percent Adults Who are Obese, By Age Group in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $18-44$ | $45-64$ | 65 and Older | $18-44$ | $45-64$ | 65 and Older |
| 2013 | $19.5 \%$ | $21.7 \%$ | $21.4 \%$ | $24.2 \%$ | $30.3 \%$ | $24.8 \%$ |
| 2016 | $23.2 \%$ | $24.5 \%$ | $14.3 \%$ | $24.7 \%$ | $32.1 \%$ | $25.8 \%$ |
| 2019 | $33.1 \%$ | $20.4 \%$ | $18.6 \%$ | $22.1 \%$ | $32.6 \%$ | $27.6 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2013 and 2016, the 45 to 64 age group had the highest percentage of adults who were obese, but in 2019 the 18 to 44 age group dramatically increased the percentage of obese adults.

Exhibit HB2O: Percent Adults Who are Obese, By Age Group in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

From 2013 to 2016, married/coupled adults in both Collier County and Florida had a higher percentage of being obese when compared to adults who were not married/coupled. In 2019, adults who were married/coupled had a higher percentage of being obese, but adults in Florida who were not married/coupled had the higher percentage.

Exhibit HB21: Percent Adults Who are Obese, By Marital Status in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Married/Coupled | Not <br> Married/Coupled | Married/Coupled | Not <br> Married/Coupled |
| 2013 | $21.7 \%$ | $19.8 \%$ | $27.9 \%$ | $24.7 \%$ |
| 2016 | $22.9 \%$ | $19.5 \%$ | $28.7 \%$ | $26.0 \%$ |
| 2019 | $24.6 \%$ | $20.9 \%$ | $26.6 \%$ | $27.5 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

From 2013 to 2019, the percentage of adults who were obese in Collier County increased amongst those who were married/coupled. When compared to not married/coupled adults in Collier County married/coupled adults had a higher percentage of being obese.

Exhibit HB22: Percent Adults Who are Obese, By Marital Status in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In Collier County, adults with less than a high school education had the highest percentage of adults who were obese, in Florida adults with a high school/GED level education had the highest percentage.

Exhibit HB23: Percent Adults Who are Obese, By Education Level in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less Than <br> High School | High <br> School/GED | More Than <br> High School | Less Than <br> High School | High <br> School/GED | More Than <br> High School |
| $2013^{*}$ |  | $27.6 \%$ | $15.3 \%$ | $29.4 \%$ | $28.4 \%$ | $24.5 \%$ |
| 2016 | $35.2 \%$ | $25.1 \%$ | $16.0 \%$ | $32.4 \%$ | $29.7 \%$ | $25.2 \%$ |
| 2019 | $30.1 \%$ | $19.6 \%$ | $23.7 \%$ | $28.9 \%$ | $30.3 \%$ | $25.1 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 less than high school, no data was collected for this group

In 2019, those adults with less than a high school education had a higher percentage of being obese in Collier County. From 2013 to 2019 there was a decrease in the percentage of adults who were obese with less than high school and high school/GED education level. There was an increase in the obesity percentage among those adults with more than a high school level education.

Exhibit HB24: Percent Adults Who are Obese, By Education Level in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 less than high school, no data was collected for this group

In both Collier County and Florida, from 2013 to 2019, adults making $\$ 50,000$ or more annually had a smaller percentage of being obese when compared to adults making less than $\$ 25,000$ and $\$ 25,000$ to $\$ 49,999$ a year.

Exhibit HB25: Percent Adults Who are Obese, By Annual Income in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<\$ 25,000$ | $\$ 25,000-$ <br> $\$ 49,999$ | $\$ 50,000$ or <br> More | $<\$ 25,000$ | $\$ 25,000-$ <br> $\$ 49,999$ | $\$ 50,000$ or <br> More |
| 2013 | $27.8 \%$ | $28.1 \%$ | $17.5 \%$ | $29.9 \%$ | $27.7 \%$ | $24.6 \%$ |
| 2016 | $29.0 \%$ | $22.6 \%$ | $16.6 \%$ | $31.6 \%$ | $27.6 \%$ | $26.2 \%$ |
| 2019 | $26.5 \%$ | $26.5 \%$ | $21.0 \%$ | $30.3 \%$ | $29.8 \%$ | $25.0 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2013, adults making \$25,000 to \$49,999 a year had a higher percentage of obese adults and in 2016 adults making less than $\$ 25,000$ a year had a higher percentage of obese adults.

Exhibit HB26: Percent Adults Who are Obese, By Annual Income in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

## Tobacco Use

The percentage of the adult population who are current smokers in a community measures the extent of the health risk within that population related to tobacco use and its detrimental effects.

The relationship between the use of tobacco and unfavorable health outcomes and conditions is well documented and scientifically well proven. Cigarette smoking is the leading cause of preventable mortality in the United States and Florida. Smoking has been scientifically associated as a cause in a myriad of illness including numerous cancers, heart diseases and stroke, respiratory diseases, and unfavorable maternal outcomes.

Smoking cessation initiatives and programs are cost-effective public health strategies. Discontinuing tobacco use leads to immediate health benefits at any age and ultimately resulting in an increase in life expectancy.

When compared to Florida, Collier County has had a smaller percentage of adults who are current smokers over the past six years. In 2016, Collier County had its smallest percentage of current adult smokers from 2013 to 2019.

Exhibit HB27: Percent of Adults Who are Current Smokers in Collier County and Florida, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2019, the Non-Hispanic Black population had the smallest percentage of adults who are current smokers in both Collier County and Florida. In 2013, the Hispanic population in Collier County had the highest percentage of adults who currently smoke out of all races/ethnicities in both Collier County and the State of Florida.

Exhibit HB28: Percent of Adults Who are Current Smokers, by Race/Ethnicity in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic |
| $2013^{*}$ | $11.4 \%$ |  | $21.7 \%$ | $18.6 \%$ | $14.4 \%$ | $13.9 \%$ |
| 2016 | $10.1 \%$ | $8.0 \%$ | $8.2 \%$ | $17.8 \%$ | $12.4 \%$ | $11.7 \%$ |
| 2019 | $12.9 \%$ | $6.3 \%$ | $8.5 \%$ | $16.4 \%$ | $12.4 \%$ | $12.6 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Non-Hispanic Black, no data was collected for this group

When compared to other races/ethnicities, Non-Hispanic Blacks had the smallest percentage of adults who are current smokers in Collier County. From 2013 to 2016, there was a drastic decrease in the
percentage of Hispanic adult smokers, going from 21.7 percent to 8.2 percent. In 2019, the Non-Hispanic white population had the largest percentage of adults who are current smokers in Collier County.

Exhibit HB29: Percent of Adults Who are Current Smokers, by Race/Ethnicity in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Non-Hispanic Black, no data was collected for this group

In both Collier County and Florida, men had a higher percentage of adults who are current smokers when compared to women. Compared to the Florida average from 2013 to 2019 Collier County women had a smaller percentage of current smokers to women in Florida.

Exhibit HB30: Percent of Adults Who are Current Smokers, by Sex in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women |
| 2013 | $19.4 \%$ | $8.7 \%$ | $19.5 \%$ | $14.4 \%$ |
| 2016 | $12.2 \%$ | $6.1 \%$ | $17.8 \%$ | $13.3 \%$ |
| 2019 | $12.2 \%$ | $11.2 \%$ | $15.7 \%$ | $13.9 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

While there is a higher percentage of men than women who were current smokers, the percentage of male current smokers decreased over time. In 2019, Collier County saw its highest percentage of adult women who were current smokers, 11.2 percent.

Exhibit HB31: Percent of Adults Who are Current Smokers, by Sex in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In both Collier County and Florida, individuals between the ages of 45 and 64 are most likely to be current smokers. In both Collier County and Florida, there were small increases in the percentage of adults who were current smokers across all age groups between 2016 and 2019.

Exhibit HB32: Percent Adults Who are Current Smokers, By Age Group in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $18-44$ | $45-64$ | 65 and Older | $18-44$ | $45-64$ | 65 and Older |
| 2013 | $17.9 \%$ | $22.4 \%$ | $2.4 \%$ | $19.2 \%$ | $19.8 \%$ | $8.7 \%$ |
| 2016 | $10.1 \%$ | $11.5 \%$ | $4.8 \%$ | $17.0 \%$ | $19.0 \%$ | $8.4 \%$ |
| 2019 | $13.1 \%$ | $13.5 \%$ | $8.8 \%$ | $15.0 \%$ | $19.6 \%$ | $9.3 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In Collier County, individuals over the age of 65 are the least likely to report that they are current smokers. Adults in Collier County between the ages of 45 and 65 have the highest percentage of current smokers.

Exhibit HB33: Percent Adults Who are Current Smokers, By Age Group in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In both Collier County and in Florida, adults who are not married/coupled are more likely to be current smokers than those who are married/coupled.

Exhibit HB34: Percent Adults Who are Current Smokers, By Marital Status in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Married/Coupled | Not <br> Married/Coupled | Married/Coupled | Not <br> Married/Coupled |
| 2013 | $7.2 \%$ | $23.9 \%$ | $13.6 \%$ | $20.8 \%$ |
| 2016 | $8.0 \%$ | $10.6 \%$ | $11.6 \%$ | $19.9 \%$ |
| 2019 | $8.3 \%$ | $16.4 \%$ | $11.3 \%$ | $18.9 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

Between 2013 and 2019 in Collier County, adults who are not married/coupled have consistently had a higher percentage of current smokers. There was a decline in current smokers in this group between 2013 and 2016. Although the percentage increased in 2019, it remains below the 2013 percentage.

Exhibit HB35: Percent Adults Who are Current Smokers, By Marital Status in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In both Collier County and Florida, adults who have high levels of education have a lower percentage of current smokers. In 2019, adults with less than a high school education or a high school education in Collier County were twice as likely to be current smokers than adults who have more than a high school education.

Exhibit HB36: Percent Adults Who are Current Smokers, By Education Level in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | FloridaLess Than <br> High School |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| High <br> School/GED | More Than <br> High School | Less Than <br> High School | High <br> School/GED | More Than <br> High School |  |  |
| 2013 | $32.9 \%$ | $15.3 \%$ | $7.6 \%$ | $24.8 \%$ | $19.8 \%$ | $13.1 \%$ |
| 2016 | $6.8 \%$ | $13.9 \%$ | $7.6 \%$ | $25.5 \%$ | $18.7 \%$ | $11.5 \%$ |
| 2019 | $15.0 \%$ | $18.8 \%$ | $7.8 \%$ | $23.6 \%$ | $20.0 \%$ | $10.2 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In Collier County, the percentage of adults who stated that they were current smokers varied between 2013 and 2019. However, in each year, the adults with more than a high school education had the lowest percentage of current smokers.

Exhibit HB37: Percent Adults Who are Current Smokers, By Education Level in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In both Collier County and in Florida, adults who have higher incomes consistently report lower percentages of being current smokers than adults with lower incomes. In 2019, more than four times as many adults in Collier County with incomes below $\$ 25,000$ reported being current smokers than those with incomes of \$50,000 or more.

Exhibit HB38: Percent Adults Who are Current Smokers, By Annual Income in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<\$ 25,000$ | $\$ 25,000-$ <br> $\$ 49,999$ | $\$ 50,000$ or <br> More | $<\$ 25,000$ | $\$ 25,000-$ <br> $\$ 49,999$ | $\$ 50,000$ or <br> More |
| 2013 | $26.4 \%$ | $18.1 \%$ | $7.5 \%$ | $22.3 \%$ | $17.7 \%$ | $11.8 \%$ |
| 2016 | $13.5 \%$ | $9.5 \%$ | $7.7 \%$ | $23.5 \%$ | $16.5 \%$ | $10.3 \%$ |
| 2019 | $20.3 \%$ | $14.0 \%$ | $4.9 \%$ | $23.4 \%$ | $17.9 \%$ | $9.9 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In Collier County, the percentage of adults who are current smokers rose slightly in 2019 from 2016, but the percentage remains below the one from 2013. People at lower incomes are consistently more likely to report that they are current smokers than those with higher incomes.

Exhibit HB39: Percent Adults Who are Current Smokers, By Annual Income in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2019, more adults in Collier County reported that they were former smokers than across Florida (29.7\% Collier vs. 26.3\% Florida).

Exhibit HB40: Percent of Adults Who are Former Smokers in Collier County and Florida, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In both Collier County and Florida, Non-Hispanic white adults have the highest percentage of former smokers and Non-Hispanic Black adults have the lowest percentage of former smokers.

Exhibit HB41: Percent of Adults Who are Former Smokers, by Race/Ethnicity in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic |
| $2013^{*}$ | $43.8 \%$ |  | $20.5 \%$ | $35.6 \%$ | $14.0 \%$ | $19.3 \%$ |
| 2016 | $35.5 \%$ | $7.2 \%$ | $14.3 \%$ | $33.7 \%$ | $11.5 \%$ | $19.7 \%$ |
| 2019 | $39.7 \%$ | $8.4 \%$ | $9.0 \%$ | $33.9 \%$ | $14.2 \%$ | $17.0 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Non-Hispanic Black, no data was collected for this group

As with current smokers, the percentage of former smokers for Collier County decreased from 2013 to 2016 and then increased in 2019, but both 2016 and 2019 percentages were still lower than 2013. NonHispanic white adults are significantly more likely than the other race/ethnicity groups to state that they were former smokers.

Exhibit HB42: Percent of Adults Who are Former Smokers, by Race/Ethnicity in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Non-Hispanic Black, no data was collected for this group

In both Collier County and Florida, a higher percentage of men than women are former smokers. In 2019, the percentage of former smokers among men were similar in Collier County and Florida. The percentage of former smokers among women is higher in Collier County than Florida ( $29.6 \%$ Collier vs. 23.3\% Florida).

Exhibit HB43: Percent of Adults Who are Former Smokers, by Sex in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women |
| 2013 | $44.8 \%$ | $28.2 \%$ | $31.6 \%$ | $24.9 \%$ |
| 2016 | $28.9 \%$ | $22.1 \%$ | $30.9 \%$ | $22.4 \%$ |
| 2019 | $29.8 \%$ | $29.6 \%$ | $29.5 \%$ | $23.3 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

The percentage of adult men in Collier County who reported being former smokers decreased significantly between 2013 and 2016; it rose slightly in 2019 but remained significantly below the percentage from 2013. The percentage of women in Collier County who reported being former smokers is higher in 2019 than in either 2013 or 2016.

Exhibit HB44: Percent of Adults Who are Former Smokers, by Sex in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In both Collier County and Florida, the percentage of adults who are former smokers increases with age; those who are over 65 are significantly more likely to be former smokers than those who are 45-65 or 18-44. In 2019, Collier Country had lower percentages of former smokers than Florida among adults ages $18-44$ and $45-64$ and higher percentages of former smokers than Florida among those aged 65 and older.

Exhibit HB45: Percent Adults Who are Former Smokers, By Age Group in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  |  | 3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $18-44$ | $45-64$ | 65 and Older | $18-44$ | $45-64$ | 65 and Older |
| 2013 | $19.1 \%$ | $35.7 \%$ | $52.6 \%$ | $15.6 \%$ | $30.3 \%$ | $47.4 \%$ |
| 2016 | $12.0 \%$ | $26.0 \%$ | $45.5 \%$ | $15.3 \%$ | $27.1 \%$ | $44.2 \%$ |
| 2019 | $10.4 \%$ | $24.1 \%$ | $48.7 \%$ | $14.4 \%$ | $27.7 \%$ | $42.8 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

Across time in Collier County, the lowest percentages of former smokers are found among those 18-44 and the highest percentages of former smokers are in those aged 65 and older.

Exhibit HB46: Percent Adults Who are Former Smokers, By Age Group in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In both Collier County and Florida, a higher percentage of adults who are married/coupled than those who are not married/coupled are former smokers. In 2019, more adults who are married/coupled in Collier County than in Florida reported being former smokers (35.5\% Collier vs. 29.6\% Florida).

Exhibit HB47: Percent Adults Who are Former Smokers, By Marital Status in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Married/Coupled | Not <br> Married/Coupled | Married/Coupled | Not <br> Married/Coupled |
| 2013 | $43.0 \%$ | $27.4 \%$ | $32.0 \%$ | $23.7 \%$ |
| 2016 | $28.2 \%$ | $22.2 \%$ | $30.7 \%$ | $21.7 \%$ |
| 2019 | $35.5 \%$ | $21.8 \%$ | $29.6 \%$ | $22.4 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In Collier County, a higher percentage of adults who were married/coupled or not married/coupled stated that they were former smokers in 2013 than in 2016 or 2019. Consistently a higher percentage of adults who are married/coupled in Collier County, than those who are not married/coupled state that they are former smokers.

Exhibit HB48: Percent Adults Who are Former Smokers, By Marital Status in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In Collier County, adults with higher levels of education reported being former smokers at higher percentages than those with lower levels of education in 2013-2019. In Florida, the percentages were more similar among the various educational levels and did not show as clear of a pattern.

Exhibit HB49: Percent Adults Who are Former Smokers, By Education Level in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less Than <br> High School | High <br> School/GED | More Than <br> High School | Less Than <br> High School | High <br> School/GED | More Than <br> High School |
| 2013 | $14.1 \%$ | $38.3 \%$ | $42.2 \%$ | $25.7 \%$ | $27.7 \%$ | $29.1 \%$ |
| 2016 | $11.9 \%$ | $27.9 \%$ | $28.9 \%$ | $22.9 \%$ | $25.9 \%$ | $27.8 \%$ |
| 2019 | $13.0 \%$ | $25.6 \%$ | $35.4 \%$ | $24.2 \%$ | $27.8 \%$ | $26.1 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2013-2019, the highest percentages of former smokers in Collier County were among adults with more than a high school education and the lowest percentages of former smokers were among those with less than a high school education.

Exhibit HB50: Percent Adults Who are Former Smokers, By Education Level in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In Collier County, adults with higher levels of annual income reported being former smokers at higher percentages than those with lower levels of annual income in 2013-2019. In Florida, the percentages were more similar among the various income levels and did not show as clear of a pattern.

Exhibit HB51: Percent Adults Who are Former Smokers, By Annual Income in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<\$ 25,000$ | $\$ 25,000-$ <br> $\$ 49,999$ | $\$ 50,000$ or <br> More | $<\$ 25,000$ | $\$ 25,000-$ <br> $\$ 49,999$ | $\$ 50,000$ or <br> More |
| 2013 | $22.9 \%$ | $30.7 \%$ | $45.0 \%$ | $23.9 \%$ | $31.9 \%$ | $30.0 \%$ |
| 2016 | $18.6 \%$ | $23.6 \%$ | $36.3 \%$ | $23.2 \%$ | $27.1 \%$ | $30.0 \%$ |
| 2019 | $20.4 \%$ | $24.1 \%$ | $35.7 \%$ | $24.1 \%$ | $29.0 \%$ | $27.8 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2013-2019, the highest percentages of former smokers in Collier County were among adults with an income of $\$ 50,000$ or more and the lowest percentages of former smokers were among those with an income of less than \$25,000.

Exhibit HB52: Percent Adults Who are Former Smokers, By Annual Income in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

The usage of e-cigarettes was not tracked as a part of the BRFSS in 2013, so data is only available for 2016 and 2019. In both Collier County and Florida, the percentage of adults currently using e-cigarettes increased between 2016 and 2019. In 2019, the percentage of adults using e-cigarettes in Collier County was lower than in Florida (3.4\% Collier vs. 7.5\% Florida).

Exhibit HB53: Percent of Adults who Currently use E-Cigarettes in Collier County and Florida, 2016, 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In Collier County in 2019, a higher percentage of Non-Hispanic Black adults used e-cigarettes than the other race/ethnicity groups; however, the percentage for each group is under five percent. In Florida, Non-Hispanic white adults report using e-cigarette at a higher percentage than the other race/ethnicity groups.

Exhibit HB54: Percent of Adults who Currently use E-Cigarettes, by Race/Ethnicity in Collier County and Florida, 2016, 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic |
| 2016 | $3.4 \%$ | $0.0 \%$ | $1.5 \%$ | $5.7 \%$ | $2.8 \%$ | $3.4 \%$ |
| 2019 | $3.3 \%$ | $4.4 \%$ | $2.4 \%$ | $8.6 \%$ | $4.0 \%$ | $6.3 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

The largest increase in e-cigarette usage between 2016 and 2019 in Collier County was among NonHispanic Black individuals; the percentage increased from 0.0 percent in 2016 to 4.4 percent in 2019.

Exhibit HB55: Percent of Adults who Currently use E-Cigarettes, by Race/Ethnicity in Collier County, 2016, 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In both Collier County and in Florida, a higher percentage of men than women reported that they currently use e-cigarettes. Both the men and women in Collier County current use e-cigarettes at a lower percentage than the Florida average.

Exhibit HB56: Percent of Adults who Currently use E-Cigarettes, by Sex in Collier County and Florida, 2016, 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women |
| 2016 | $3.3 \%$ | $1.5 \%$ | $5.6 \%$ | $3.9 \%$ |
| 2019 | $3.8 \%$ | $3.0 \%$ | $8.4 \%$ | $6.7 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

A higher percentage of men than women in Collier County currently use e-cigarettes; however, the women showed a higher percentage increase between 2016 and 2019.

Exhibit HB57: Percent of Adults who Currently use E-Cigarettes, by Sex in Collier County, 2016, 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In both Collier County and Florida, adults between the ages of 18 and 44 use e-cigarette at higher rates than older adults. Only 0.1 percent of adults over the age of 65 in Collier County reported using ecigarettes in 2019.

Exhibit HB58: Percent of Adults who Currently use E-Cigarettes, by Age Group in Collier County and Florida, 2016, 2019

|  | Collier County |  |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $18-44$ | $45-64$ | 65 and Older | $18-44$ | $45-64$ | 65 and Older |  |
| 2016 | $3.4 \%$ | $3.0 \%$ | $0.3 \%$ | $7.0 \%$ | $4.3 \%$ | $1.4 \%$ |  |
| 2019 | $7.0 \%$ | $4.0 \%$ | $0.1 \%$ | $13.2 \%$ | $5.9 \%$ | $1.7 \%$ |  |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

A higher percentage of adults in Collier County between the ages of 18 and 44 use e-cigarettes than older adults in the county; that age group also showed the highest percentage increase in usage between 2016 and 2019.

Exhibit HB59: Percent of Adults who Currently use E-Cigarettes, by Age Group in Collier County, 2016, 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In both Collier County and Florida, a higher percentage of adults who are not married/coupled use ecigarettes than those who are married/coupled.

Exhibit HB60: Percent of Adults who Currently use E-Cigarettes, by Marital Status in Collier County and Florida, 2016, 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Married/Coupled | Not <br> Married/Coupled | Married/Coupled | Not <br> Married/Coupled |
| 2016 | $1.6 \%$ | $3.7 \%$ | $3.3 \%$ | $6.4 \%$ |
| 2019 | $2.5 \%$ | $4.4 \%$ | $6.1 \%$ | $9.1 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In Collier County, there was an increase in the percent of adults who use e-cigarettes between 2016 and 2019 among those who are married/coupled or not married/coupled.

Exhibit HB61: Percent of Adults who Currently use E-Cigarettes, by Marital Status in Collier County, 2016, 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In both Collier County and Florida, in 2019, there was very little variation in the percent of adults who currently use e-cigarettes when broken down by education level.

Exhibit HB62: Percent of Adults who Currently use E-Cigarettes, by Education Level in Collier County and Florida, 2016, 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less Than <br> High School | High <br> School/GED | More Than <br> High School | Less Than <br> High School | High <br> School/GED | More Than <br> High School |
| 2016 | $0.9 \%$ | $2.6 \%$ | $2.9 \%$ | $4.6 \%$ | $6.1 \%$ | $4.0 \%$ |
| 2019 | $3.9 \%$ | $3.3 \%$ | $3.2 \%$ | $7.0 \%$ | $7.5 \%$ | $7.6 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2019, adults in Collier County who had less than a high school education were slightly more likely to use e-cigarettes than those with a high school education and those with more than a high school education, although the differences were less than one percent. A higher percentage of adults at all educational levels used e-cigarettes in 2019 than 2016.

Exhibit HB63: Percent of Adults who Currently use E-Cigarettes, by Education Level in Collier County, 2016, 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In Collier County, a higher percentage of adults with an annual income of less than \$25,000 currently use e-cigarettes than those with higher incomes. In Florida for 2019, the trend was the opposite; the highest percentage of current users of e-cigarettes are among those with incomes of $\$ 50,000$ or more.

Exhibit HB64: Percent of Adults who Currently use E-Cigarettes, by Annual Income in Collier County and Florida, 2016, 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<\$ 25,000$ | $\$ 25,000-$ <br> $\$ 49,999$ | $\$ 50,000$ or <br> More | $<\$ 25,000$ | $\$ 25,000-$ <br> $\$ 49,999$ | $\$ 50,000$ or <br> More |
| 2016 | $4.3 \%$ | $1.8 \%$ | $2.7 \%$ | $6.1 \%$ | $5.3 \%$ | $4.7 \%$ |
| 2019 | $4.1 \%$ | $3.1 \%$ | $2.9 \%$ | $5.9 \%$ | $8.5 \%$ | $8.6 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In Collier County, the percentage of adults who currently use e-cigarettes is below five percent for adults at all income levels. In 2019, adults in Collier County with lower income levels were slightly more likely to use e-cigarettes than those at higher income levels.

Exhibit HB65: Percent of Adults who Currently use E-Cigarettes, by Annual Income in Collier County, 2016, 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

## Alcohol Use

Excessive alcohol consumption is a risk factor for numerous adverse health conditions and outcomes. Consumption of alcohol in excessive quantities can lead to alcohol poisoning, hypertension, heart disease, fetal alcohol syndrome, as well as violence and sexually transmitted diseases.

A strong association exists between alcohol consumption and alcohol-impaired driving. Data indicates that binge and heavy drinkers consistently account for most instances of alcohol-impaired driving. Alcohol-related motor vehicle collisions constitute a significant portion, if not a majority of the alcohol related deaths, depending upon the age-group.

In 2019, a slightly higher percentage of adults in Collier County than Florida reported engaging in heavy or binge drinking ( $18.4 \%$ Collier vs. $18.0 \%$ Florida). In both Collier County and Florida, the percentage of adults who engage in heavy or binge drinking was slightly higher in 2019 than it had been in 2013 or 2016.

Exhibit HB66: Percent of Adults Who Engage in Heavy or Binge Drinking in Collier County and Florida, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In both Collier County and Florida, the race/ethnic group with the lowest percentage of adults who engage in heavy or binge drinking is the Non-Hispanic Black population and the race/ethnic group with the highest percentage of adults who engage in heavy or binge drinking is the Non-Hispanic white population.

Exhibit HB67: Percent of Adults Who Engage in Heavy or Binge Drinking, by Race/Ethnicity in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic |
| $2013^{*}$ | $15.4 \%$ |  | $27.2 \%$ | $17.6 \%$ | $14.0 \%$ | $19.6 \%$ |
| 2016 | $20.6 \%$ | $3.8 \%$ | $12.4 \%$ | $19.6 \%$ | $12.3 \%$ | $16.1 \%$ |
| 2019 | $20.2 \%$ | $8.3 \%$ | $16.1 \%$ | $19.8 \%$ | $14.3 \%$ | $17.1 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Non-Hispanic Black, no data was collected for this group

In Collier County, the race/ethnic group with the lowest percentage of adults who engage in heavy or binge drinking is the Non-Hispanic Black population and the race/ethnic group with the highest percentage of adults who engage in heavy or binge drinking is the Non-Hispanic white population. However, between 2016 and 2019, the percentage of Non-Hispanic Black and Hispanic adults who engage in heavy or binge drinking increased while the percentage among Non-Hispanic white adults decreased slightly.

Exhibit HB68: Percent of Adults Who Engage in Heavy or Binge Drinking, by Race/Ethnicity in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Non-Hispanic Black, no data was collected for this group

In both Collier County and Florida, a higher percentage of men than women engage in heavy or binge drinking.

Exhibit HB69: Percent of Adults Who Engage in Heavy or Binge Drinking, by Sex in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women |
| 2013 | $22.0 \%$ | $14.5 \%$ | $23.4 \%$ | $12.2 \%$ |
| 2016 | $18.9 \%$ | $14.0 \%$ | $21.7 \%$ | $13.7 \%$ |
| 2019 | $22.1 \%$ | $15.0 \%$ | $21.2 \%$ | $15.1 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

Over the past six years men had a higher percentage of those who engage in heavy or binge drinking when compared to women. In 2016, both men and women had the lowest percentage of adults who engage in heavy or binge drinking in Collier County.

Exhibit HB70: Percent of Adults Who Engage in Heavy or Binge Drinking, by Sex in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In the 18 to 44 year age group, Collier County had a smaller percentage of adults who engaged in heavy or binge drinking when compared to the Florida average, but those who were 65 and older in Collier County had a higher percentage than the Florida average.

Exhibit HB71: Percent Adults Who Engage in Heavy or Binge Drinking, By Age Group in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $18-44$ | $45-64$ | 65 and Older | $18-44$ | $45-64$ | 65 and Older |
| 2013 | $24.1 \%$ | $22.0 \%$ | $9.8 \%$ | $24.2 \%$ | $16.9 \%$ | $7.2 \%$ |
| 2016 | $16.2 \%$ | $17.9 \%$ | $14.7 \%$ | $23.1 \%$ | $17.2 \%$ | $8.7 \%$ |
| 2019 | $24.2 \%$ | $15.3 \%$ | $16.0 \%$ | $24.5 \%$ | $17.9 \%$ | $9.1 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

Those who were in the 18 to 44 year age group in Collier County had the highest percentage of adults who engaged in heavy or binge drinking in 2013 and 2019.

Exhibit HB72: Percent Adults Who Engage in Heavy or Binge Drinking, By Age Group in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2013 and 2019 adults who were not married/coupled had a higher percentage of engaging in heavy or binge drinking in both Collier County and Florida when compared to adults who are married/coupled.

Exhibit HB73: Percent Adults Who Engage in Heavy or Binge Drinking, By Marital Status in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Married/Coupled | Not <br> Married/Coupled | Married/Coupled | Not <br> Married/Coupled |
| 2013 | $14.6 \%$ | $23.6 \%$ | $14.9 \%$ | $20.9 \%$ |
| 2016 | $16.8 \%$ | $15.4 \%$ | $16.6 \%$ | $18.8 \%$ |
| 2019 | $17.7 \%$ | $19.3 \%$ | $16.3 \%$ | $20.2 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

From 2013 to 2019, there was an increase in the percentage of married/coupled adults who engaged in heavy or binge drinking in Collier County. 2019 was the highest year for adults who were married/coupled that engaged in heavy or binge drinking.

Exhibit HB74: Percent Adults Who Engage in Heavy or Binge Drinking, By Marital Status in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2019, adults in Collier County with a high school education engaged in heavy or binge drinking more than the Florida average, while a lower percentage of those with less than a high school education engaged in heavy or binge drinking than the Florida average.

Exhibit HB75: Percent Adults Who Engage in Heavy or Binge Drinking, By Education Level in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less Than <br> High School | High <br> School/GED | More Than <br> High School | Less Than <br> High School | High <br> School/GED | More Than <br> High School |
| $2013^{*}$ |  | $20.0 \%$ | $15.5 \%$ | $18.6 \%$ | $16.3 \%$ | $18.0 \%$ |
| 2016 | $11.2 \%$ | $16.7 \%$ | $18.2 \%$ | $14.7 \%$ | $16.5 \%$ | $18.8 \%$ |
| 2019 | $8.8 \%$ | $19.9 \%$ | $19.9 \%$ | $12.4 \%$ | $17.3 \%$ | $19.6 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Less than high school, no data was collected for this group

There was an increase in adults in Collier County that had more than a high school education that engaged in heavy or binge drinking from 2013 to 2019. From 2016 to 2019, there was a decrease in heavy or binge drinking among adults with less than a high school education. In 2019, both adults with a high school/GED and more than a high school education level had the same percentage (19.9\%) of adults who engaged in heavy or binge drinking. Overall, those with less than a high school education had the lowest percentage who engage in heavy or binge drinking.

Exhibit HB76: Percent Adults Who Engage in Heavy or Binge Drinking, By Education Level in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Less than high school, no data was collected for this group

In 2016 and 2019, Collier County had a lower percentage of adults who made \$25,000 to \$49,999 annually who engaged in heavy or binge drinking than the Florida average. For those at higher and lower annual incomes in 2019, the percentage in Collier County was higher than the Florida average.

Exhibit HB77: Percent Adults Who Engage in Heavy or Binge Drinking, By Annual Income in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<\$ 25,000$ | $\$ 25,000-$ <br> $\$ 49,999$ | $\$ 50,000$ or <br> More | $<\$ 25,000$ | $\$ 25,000-$ <br> $\$ 49,999$ | $\$ 50,000$ or <br> More |
| 2013 | $24.0 \%$ | $14.4 \%$ | $17.2 \%$ | $16.3 \%$ | $17.9 \%$ | $20.3 \%$ |
| 2016 | $11.8 \%$ | $17.7 \%$ | $22.0 \%$ | $15.1 \%$ | $17.7 \%$ | $23.1 \%$ |
| 2019 | $18.2 \%$ | $11.6 \%$ | $21.6 \%$ | $15.7 \%$ | $18.1 \%$ | $22.4 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

Collier County adults who made $\$ 50,000$ or more a year in 2016 and 2019 had a higher percentage of engaging in heavy or binge drinking when compared to the other income brackets.

Exhibit HB78: Percent Adults Who Engage in Heavy or Binge Drinking, By Annual Income in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

## Florida Youth Substance Abuse Survey (FYSAS)

Florida Youth Substance Abuse Survey (FYSAS) is a collaborative effort between the Florida Department of Health, Department of Education, Children and Families, Juvenile Justice, and the Governor's Office of Drug Control. It is based on the "Communities That Care" survey, which measures the prevalence and frequency of drug use, the prevalence and frequency of other antisocial behaviors, and the degree to which risk and protective factors exist that can predict alcohol, tobacco, and other drug use, delinquency, gang involvement, and other problem behaviors in adolescents.

The FYSAS was administered to students in grades 6 through 12 in spring of 2020 (prior to schools transferring to at home learning due to the COVID-19 pandemic). In Collier County, 1,196 students completed the survey ( 644 middle school students, 552 high school students).

The percentage of both middle and high school students in Collier County who reported consuming alcohol in the past 30 days has decreased significantly over the past 10 years ( $29.2 \% 2010$ to $14.5 \%$ 2020). Collier County high school students saw a continuous decrease in its students' consuming alcohol from 2010 to 2020.

Exhibit HB79: Past 30-Day Alcohol Use, Collier County 2010-2020, Florida Statewide 2020


Source: Florida Youth Substance Abuse Survey (2020), Florida Department of Children and Families

Among both high school and middle school students in Collier County the percentage who reported cigarette use in the past 30 days has significantly decreased in the past decade ( $8.3 \% 2010$ to $0.9 \%$ 2020). In 2016 and 2020, there were less than 0.3 percent of middle school students in Collier County who reported cigarette use in the past 30 days.

Exhibit HB80: Past 30-Day Cigarette Use, Collier County 2010-2020, Florida Statewide 2020


Source: Florida Youth Substance Abuse Survey (2020), Florida Department of Children and Families

From 2012 to 2018, the percentage of middle and high school students in Collier County who reported using marijuana or hashish decreased; however, there was a small increase from 2018 to 2020.

Exhibit HB81: Past 30-Day Marijuana or Hashish Use, Collier County 2010-2020, Florida Statewide 2020


Source: Florida Youth Substance Abuse Survey (2020), Florida Department of Children and Families

Starting in 2016, the FYSAS started tracking electronic vaporizer (vaping/e-cigarette) use among middle school and high school students. From 2016 to 2018, there was a significant increase in middle and high school students who used a vape/e-cigarette in the past 30 days.

Exhibit HB82: Past 30-Day E-Cigarette Use, Collier County 2010-2020, Florida Statewide 2016, 2018


Source: Florida Youth Substance Abuse Survey (2020), Florida Department of Children and Families

In 2020, the vaping category was broken into two, vaping nicotine and vaping marijuana. It is likely that there is overlap between nicotine and marijuana users. In 2020, Collier County students reported using nicotine e-cigarettes less than the Florida average, but had a slightly higher use of vaping marijuana.

Exhibit HB83: Past 30-Day Vaping Use, Collier County 2010-2020, Florida Statewide 2020


Source: Florida Youth Substance Abuse Survey (2020), Florida Department of Children and Families

## Injury Mortality

Injuries affect the entire population regardless of gender, ethnicity, race, or socioeconomic status. Injuries remain a leading cause of death for residents of all ages in Collier County as well as Florida. While injuries impose a heavy burden on all communities in terms of mortality and morbidity their impact also creates a large economic burden on society as a whole.

The risk of mortality due to an injury will vary by age, gender, and the external cause of the injury. Males have significantly higher death rates from injuries than those for females at any age group while the elderly have the highest injury fatality rates.

All these causes of injuries are theoretically preventable; therefore, granting the opportunity and challenge to be able to reduce Years of Potential Life Lost (YPLL) and increase life expectancy at various ages.

More people in Collier County died from unintentional injuries than any other fatal injuries in 2020. The 85 and older age group had the highest number of unintentional injury fatalities followed by the 25 to 34 age group.

Exhibit HB84: Total Fatal Injuries by Intent and Age Group, Collier County and Florida, 2020

| Intent | <4 | 5-9 | $\begin{aligned} & 10- \\ & 14 \end{aligned}$ | $\begin{aligned} & 15- \\ & 19 \end{aligned}$ | $\begin{aligned} & 20- \\ & 24 \end{aligned}$ | $\begin{aligned} & 25- \\ & 34 \end{aligned}$ | $\begin{aligned} & 35- \\ & 44 \end{aligned}$ | $\begin{gathered} 45- \\ 54 \end{gathered}$ | $\begin{aligned} & 55- \\ & 64 \end{aligned}$ | $\begin{aligned} & 65- \\ & 74 \end{aligned}$ | $\begin{aligned} & 75- \\ & 84 \end{aligned}$ | 85+ | County <br> Age <br> Adj <br> Rate | Florida <br> Age <br> Adj <br> Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Homicide | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 1 | 0 | 0 | 2.1 | 7.7 |
| Suicide | 0 | 0 | 1 | 4 | 2 | 8 | 7 | 14 | 6 | 5 | 7 | 6 | 15.76 | 13.1 |
| Undetermined | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.37 | 0.64 |
| Unintentional | 0 | 1 | 1 | 0 | 9 | 37 | 27 | 25 | 23 | 16 | 33 | 72 | 52.21 | 67.38 |

Source: Florida Department of Health, Bureau of Vital Statistics; Profile of Fatal Injuries
Rates are per 100,000.

The top three fatal injury mechanisms for Collier County in 2020 were falls, poisoning, and firearms. Poisoning does include drug overdoses. Poisoning has a significantly higher age-adjusted rate of fatal injuries than falls because it impacts younger people more than falls.

Exhibit HB85: Total Fatal Injuries by Mechanism, Collier County and Florida, 2020

| Mechanism | All Ages, <br> Counts | County Age Adj <br> Rate | Florida Age Adj <br> Rate |
| :--- | :---: | :---: | :---: |
| Fall | 96 | 8.71 | 11.11 |
| Poisoning | 90 | 29.8 | 35.96 |
| Firearm | 39 | 10.64 | 13.72 |
| Suffocation | 24 | 5.61 | 5.14 |
| Drowning, Submersion (includes water transport) | 12 | 2.98 | 2.38 |
| Motor Vehicle Traffic - Occupant | 12 | 4.12 | 7.56 |
| Motor Vehicle Traffic - Motorcyclist | 9 | 2.41 | 2.77 |
| Transport, Other | 7 | 1.67 | 0.57 |
| Motor Vehicle Traffic - Other, Unspecified | 6 | 1.91 | 1.39 |
| Unspecified | 5 | 0.45 | 1.47 |
| Motor Vehicle Traffic - Pedalcyclist | 2 | 0.37 | 0.62 |
| Cut, Pierce | 2 | 0.6 | 0.85 |
| Motor Vehicle Traffic - Pedestrian | 2 | 0.19 | 2.92 |
| Other Specified \& NEC | 1 | 0.25 | 0.55 |
| Fire, Flame | 1 | 0.38 | 0.5 |
| Natural, Environmental | 1 | 0.17 | 0.23 |
| Pedalcyclist, Other | 0.17 | 0.15 |  |

Source: Florida Department of Health, Bureau of Vital Statistics; Profile of Fatal Injuries
Rates are per 100,000
Unspecified refers to injuries for which the underlying or precipitating cause is not adequately documented (i.e., on the death certificate)

In Collier County drug poisonings were responsible for fatal injuries at a higher age-adjusted rate than the other causes, while non-drug poisoning was responsible for fewer deaths. From 2018 to 2020 there was a drastic increase in drug poisoning deaths in Collier County (19.3 2018 to 29.5 2020). Starting in 2017 there was a decrease in the rate of deaths from falls. There was an increase in deaths from firearms in Collier County from 2018 to 2020.

Exhibit HB86: Leading Cause of Fatal Injury by Mechanism, Age-adjusted Death Rate, Rate per 100,00 Population, Collier County, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics; Leading Causes of Fatal Injury Profile
*Motor Vehicle Traffic

## Unintentional Injury

Unintentional injury are injuries that were not intended to harm oneself or intentionally cause harm to another person. From 2014 to 2017 there was a decrease in deaths from unintentional injuries, but overall, there was an increase in the death rate from unintentional injuries over the past 10 years. In 2013 Collier County's unintentional injury death rate was slightly higher than the Florida average. The unintentional injury death rate in 2020 in Collier County was significantly less than the State of Florida (52.2 Collier vs. 67.4 Florida).

Exhibit HB87: Age-adjusted Deaths from Unintentional Injury, Rate per 100,000 Population, Collier County and Florida, 2011-2020


Source: Florida Department of Health, Bureau of Vital Statistics

From 2016 to 2020, males had a higher death rate than females from unintentional injuries. There was a decrease in deaths from unintentional injuries over the past five years among Collier County females.

Exhibit HB88: Age-adjust Deaths from Unintentional Injury by Sex, Rate per 100,000 Population, Collier County, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics
White residents had the highest unintentional injury death rate every year in the table below, except in 2018 when the Black population had the highest death rate in Collier County. There was a decrease in unintentional injury deaths in Collier County among the Black population from 2018 to 2020.

Exhibit HB89: Age-adjust Deaths from Unintentional Injury by Race, Rate per 100,000 Population, Collier County, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

Non-Hispanic residents in Collier County consistently experienced a higher rate of death from unintentional injuries when compared to Hispanic residents. In 2020, Non-Hispanics experienced its highest rate of deaths from unintentional injuries over the past five years.

Exhibit HB90: Age-adjust Deaths from Unintentional Injury by Ethnicity, Rate per 100,000 Population, Collier County, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics
Falls, poisoning, and motor vehicle traffic - occupant were the top three leading causes of unintentional injury deaths in Collier County in 2020. Unintentional fatal injuries from poisoning do include overdose deaths, which has a higher impact among those under the age of 40 .

Exhibit HB91: Unintentional Fatal Injuries by Mechanism, Collier County and Florida, 2020

| Mechanism | All Ages, <br> Counts | County Age Adj <br> Rate | Florida Age Adj <br> Rate |
| :--- | :---: | :---: | :---: |
| Fall | 95 | 8.63 | 10.81 |
| Poisoning | 87 | 28.94 | 33.89 |
| Motor Vehicle Traffic - Occupant | 12 | 4.12 | 7.56 |
| Drowning, Submersion (includes water transport) | 11 | 2.61 | 2.18 |
| Motor Vehicle Traffic - Motorcyclist | 9 | 2.41 | 2.77 |
| Suffocation | 7 | 1.14 | 1.65 |
| Motor Vehicle Traffic - Other, Unspecified | 6 | 1.91 | 1.39 |
| Transport, Other | 6 | 1.23 | 0.51 |
| Motor Vehicle Traffic - Pedalcyclist | 3 | 0.37 | 0.62 |
| Unspecified | 3 | 0.25 | 0.93 |
| Motor Vehicle Traffic - Pedestrian | 2 | 0.19 | 2.92 |
| Natural, Environmental | 1 | 0.17 | 0.23 |
| Other \& Unspecified | 1 | 0.08 | 0.27 |
| Pedalcyclist, Other | 1 | 0.17 | 0.15 |

Source: Florida Department of Health, Bureau of Vital Statistics; Profile of Fatal Injuries
Rates are per 100,000
Unspecified refers to injuries for which the underlying or precipitating cause is not adequately documented (i.e., on the death certificate)

Drug poisonings were responsible for the largest percentage of fatal unintentional injuries in Collier County from 2016 to 2020. Over the past five years the death rate for drug poisonings has increased significantly in Collier County. The death rate from unintentional fall injuries decreased from 2017 to 2020.

Exhibit HB92: Leading Causes of Fatal Unintentional Injury, Age-adjusted Death Rate, Rate per 100,000 Population, Collier County, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics; Leading Causes of Fatal Injury Profile
*Motor Vehicle Traffic

## Falls

As discussed earlier in the section on injury mortality, deaths from falls in Collier County pose several challenges. There are several factors that increases someone's risk for falling: lower body weakness, Vitamin D deficiency, poor footwear, and various home hazards such as throw rugs. The mortality rate is significantly higher in the 75 years of age and over age group, while this at-risk cohort is growing faster than the younger population due to the aging of the baby-boomer cohort.

There was a significant decline in the age adjusted death rate from falls in Collier County between 2017 and 2020. The rate in Collier County fell below the Florida average in 2020 after being higher than the average from 2011 through 2019.

Exhibit HB93: Age-adjusted Total Deaths from Unintentional Falls, Rate per 100,000 Population, Collier County and Florida, 2011-2020


Source: Florida Department of Health, Bureau of Vital Statistics

In Collier County, males have a higher age-adjusted death rate from unintentional falls than women. However, the rate for males is decreasing at a higher rate than the rate for women.

Exhibit HB94: Age-Adjusted Total Deaths from Unintentional Falls by Sex, Rate per 100,000 Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

In Collier County, the age-adjusted death rate from unintentional falls is higher among the white population than the Black population in most years. There is not a consistent pattern seen in the difference in the rates for the Hispanic vs. Non-Hispanic populations.

Exhibit HB95: Age-Adjusted Total Deaths from Unintentional Falls by Race, Rate per 100,000 Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

There is not a consistent pattern seen in the difference in the rates for the Hispanic vs. Non-Hispanic populations. In 2019, Hispanic residents saw its lowest rate of deaths from unintentional falls.

Exhibit HB96: Age-Adjusted Total Deaths from Unintentional Falls by Race, Rate per 100,000 Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

The total number of deaths from unintentional falls by adults 65 and over in Collier varies from year to year. In 2020, the number was the lowest that is has been since prior to 2011. It should be noted however, that adults over 65 was also the population hit hardest by the COVID-19 pandemic in 2020.

Exhibit HB97: Total Deaths from Unintentional Falls by Adults 65 and Over, Collier County, 2011-2020


Source: Florida Department of Health, Bureau of Vital Statistics

## Unintentional Poisoning

Unintentional poisoning is defined as poisoning by external causes such as drugs, medications, and/or biological substances. Unintentional poisoning occurs when the person who is consuming the substances takes too much, and they did not mean to cause themselves harm.

The age-adjusted death rate from unintentional poisoning is lower in Collier County than the Florida rate. However, the rate in Collier County, like the rate statewide, has increased dramatically since 2012. In Collier County, the rate in 2020 was more than triple the rate in 2012.

Exhibit HB98: Age-Adjusted Deaths from Unintentional Poisoning, Rate per 100,000 Population, Collier County and Florida, 2011-2020


Source: Florida Department of Health, Bureau of Vital Statistics

In Collier County, the age-adjusted death rate from unintentional poisoning is significantly higher among men than women ( 44.8 men vs. 12.5 women in 2020). The rate among men has also been growing much more quickly than among women; the rate among men increased by over 80 percent between 2016 and 2020.

Exhibit HB99: Age-Adjusted Deaths from Unintentional Poisoning by Sex, Rate per 100,000 Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

In Collier County, the age-adjusted death rate from unintentional poisoning is significantly higher among the white population than the Black population ( 31.6 white vs. 12.6 Black in 2020).

Exhibit HB100: Age-Adjusted Deaths from Unintentional Poisoning by Race, Rate per 100,000
Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

In Collier County, the age-adjusted death rate from unintentional poisoning is significantly higher among the Non-Hispanic population than among the Hispanic population (41.1 Non-Hispanic vs. 11.1 Hispanic in 2020).

Exhibit HB101: Age-Adjusted Deaths from Unintentional Poisoning by Ethnicity, Rate per 100,000 Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

## Motor Vehicle Crashes

Collier County consistently has had a lower rate of motor vehicles crashes compared to the Florida average. 2011 had the lowest rate of motor vehicle crashes, 555.2 per 100,000; that rate greatly increased to the highest rate of motor vehicle crashes in 2016, 1,498.8 per 100,000.

Exhibit HB102: Total Motor Vehicle Traffic Crashes, Rate per 100,000, Collier County and Florida, 20102019


Source: Florida Department of Highway Safety and Motor Vehicles

When compared to Florida, Collier County has a slightly higher rate of alcohol-confirmed motor vehicle traffic crashes, injuries, and fatalities.

Exhibit HB103: Alcohol Confirmed Motor Vehicle Traffic, 3-year Rate per 100,000, Collier County and Florida, 2017-2019

|  | Collier | Florida | Quartile* |
| ---: | :---: | :---: | :---: |
| Motor Vehicle Traffic Crashes | 25.2 | 24.2 | 2 |
| Motor Vehicle Traffic Injuries | 16.4 | 14.5 | 2 |
| Motor Vehicle Traffic Crash Fatalities | 2.2 | 1.8 | 2 |

Source: Florida Department of Highway Safety and Motor Vehicles
*County compared to other Florida Counties. The lowest quarter equals the lowest number

Collier County has had a lower rate of age-adjusted deaths from motor vehicle crashes than the Florida rate for the past ten years except for in 2012. In Collier County the rate for 2020 was the lowest rate during that ten-year period.

Exhibit HB104: Age-adjusted Deaths from Motor Vehicle Crashes, Rate per 100,000 Population, Collier County and Florida, 2011-2020


Source: Florida Department of Health, Bureau of Vital Statistics

In Collier County, men have a higher rate of age-adjusted deaths from motor vehicle crashes than women.

Exhibit HB105: Age-Adjusted Deaths from Motor Vehicle Crashes by Sex, Rate per 100,000 Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

In Collier County, the age-adjusted death rate from motor vehicle crashes do not show a consistent pattern when viewed by race. In 2018, Black Collier County residents experienced the highest rate of deaths from motor vehicle crashes.

Exhibit HB106: Age-Adjusted Deaths from Motor Vehicle Crashes by Race, Rate per 100,000 Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

In Collier County, the age-adjusted death rate from motor vehicle crashes do not show a consistent pattern when viewed by ethnicity. In 2019, Hispanic Collier County residents experienced the highest rate of deaths from motor vehicle crashes.

Exhibit HB107: Age-Adjusted Deaths from Motor Vehicle Crashes by Ethnicity, Rate per 100,000 Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

## Drownings

Age-adjusted unintentional drowning deaths in Collier County has not been higher than 3.5 per 100,000 in the past five years. The rate is generally similar to the overall state rate, although it is sometimes higher and sometimes lower.

Exhibit HB108: Age-adjusted Unintentional Drowning Deaths, Rate per 100,000 Population, Collier County and Florida, 2011-2020


Source: Florida Department of Health, Bureau of Vital Statistics

The age-adjusted death rate from drowning in Collier County was higher among males than females each year between 2016 and 2020; however, the rates among each has not been above 3.3 per 100,000.

Exhibit HB109: Age-Adjusted Unintentional Drowning Deaths by Sex, Rate per 100,000 Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

There is not a clear pattern to be seen when viewing age-adjusted death rates in Collier Country due to unintentional drowning deaths by race.

Exhibit HB110: Age-Adjusted Unintentional Drowning Deaths by Race, Rate per 100,000 Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

The Hispanic population in Collier County experience a higher rate of unintentional drowning deaths, when compared to the Non-Hispanic population, every year except for 2018.

Exhibit HB111: Age-Adjusted Unintentional Drowning Deaths by Ethnicity, Rate per 100,000 Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

## Maternal and Infant Health

Healthy pregnancy and the resulting birth of a healthy baby in a positive environment leads to an increase in the quality of life for the mother, the child, and the community.

Maternal related health outcomes are influenced by the health status and health behaviors of the woman bearing the child as well as numerous other factors such as ethnicity, race, age, education, and income. The healthier the pregnancy the lower the probability of delivering an infant with disorders or complications potentially resulting in unfavorable maternal outcomes or infant mortality.

Infant mortality refers to deaths that occur during the first year of life from a live birth through age one. The rate is measured as the number of infant deaths per 1,000 live births within the same specified calendar year.

In public health, birthweight of a newborn is considered a vital indicator in the monitoring and evaluation of the health situation of a community, county, and state. For public health assessment purposes birthweight is dichotomized into: 1) Low birthweight (less than 2,500 grams or $5 \mathrm{lb} ., 8 \mathrm{oz}$.) and 2) Very low birthweight (less than 1,500 grams or $3 \mathrm{lb} ., 4 \mathrm{oz}$.).

Considered as a community predictor indicator of levels of infant morbidity and premature mortality, low birthweight is more widely used in geographical health analyses since it is a more common event and therefore lends itself to population-based assessments.

Infants born with very low birthweight have a 24 percent chance of dying during their first year of life. Mortality among low birthweight babies between 1,500 and 2,499 grams or $3 \mathrm{lb} ., 4 \mathrm{oz}$. to $5 \mathrm{lb} ., 8 \mathrm{oz}$. is significantly lower, at approximately one percent, which is still a much higher rate than infants born above 2,500 grams, about 0.25 percent.

Risk factors among pregnant women for low birthweight outcomes include maternal smoking, low maternal weight gain or low pre-pregnancy weight, multiple births, and violence and abuse during pregnancy.

Lower birthweight increases the newborn's likelihood of having a school-age learning disability and impaired development. Infants born weighing less than 2,500 grams are more likely than heavier infants to experience delayed motor skills.

Teenage pregnancy is correlated with low levels of prenatal care and pre-term delivery. Pregnant teenagers have a higher likelihood of receiving no prenatal care or limited care as well as achieving poor maternal weight levels. Births to teenage mothers are much more likely to result in low birthweight deliveries when compared to older mothers in population-based assessments.

Access to prenatal care beginning with the 1st trimester and continuing throughout the pregnancy is an essential component for a healthy baby and a successful maternal experience. A pregnant women's nutritional status and lifestyle behaviors such as tobacco and alcohol use are all highly correlated with being able to give birth to a healthy and adequate weight infant.

When compared to other Florida counties for the years 2018-2020, Collier County is not in the lowest quartile for any indicators related to maternal and infant health. The trends for Collier County are all
positive, steady, or inconsistent except for births with adequate prenatal care (Kotelchuck index) [\%]; for that measure, Collier is also below the State average (68.4\% Collier vs. 69.2\% Florida).

Exhibit HB112: Maternal \& Infant Health Indicators, 3-year Figures, Collier County and Florida, 20182020

|  | County | State | Trend | Quartile* |
| :---: | :---: | :---: | :---: | :---: |
| Birth Family Characteristics |  |  |  |  |
| Total Births (Count, 3-year annual avg.) | 3,160 | 217,054.3 |  | 1 |
| Births to Mothers ages 15-44, per 1,000 | 29.0 | 27.6 |  | 3 |
| Births to Unwed Mothers ages 15-44 (\%) | 44.2\% | 46.7\% |  | 1 |
| Births to Mothers ages 15-19, per 1,000 | 17.9 | 16.0 | Steady | 2 |
| Births to Mothers 19 and Over Without High School Education (\%) | 14.0\% | 9.9\% | Positive | 3 |
| Infant Deaths |  |  |  |  |
| Infant Deaths (0-364 days) per 1,000 Live Births | 3.4 | 6.0 | Positive | 1 |
| Neonatal Deaths (0-27 days) per 1,000 Live Births | 2.5 | 4.0 | Positive | 1 |
| Post-Neonatal Deaths (28-364 days) per 1,000 Live Births | 0.8 | 1.9 | Inconsistent | 1 |
|  | County | State | Trend | Quartile* |
| Low Birth Weight |  |  |  |  |
| Births <1500 Grams (Very Low Birth Weight) \% | 1.2\% | 1.6\% | Inconsistent | 1 |
| Births < 2500 Grams (Low Birth Weight) \% | 7.1\% | 8.7\% | Steady | 1 |
| Prenatal Care |  |  |  |  |
| Births with $1^{\text {st }}$ Trimester Prenatal Care (\%) | 74.0\% | 76.1\% | Positive | 2 |
| Births with Late or No Prenatal Care (\%) | 7.3\% | 7.2\% | Inconsistent | 2 |
| Births with adequate prenatal care (Kotelchuck index) [\%] | 68.4\% | 69.2\% | Negative | 3 |

Source: Florida Department of Health, Bureau of Vital Statistics
*County compared to other Florida counties. 1 is the best to 4 as the lowest.

Between 2015-2017 and 2018-2020, Collier County has seen an increase in the rate of women between the ages of 15-34 with sexually transmitted diseases and the percent of births to mothers who were overweight at the time pregnancy occurred. There was also an increase in the percent of mothers in Collier County who initiate breastfeeding.

Exhibit HB113: Reported Pre-conception, Pregnancy, and Mother's Health and Behaviors, 3-Year Figures, Collier County and Florida, 2015-2017, 2018-2020

|  | $2015-2017$ |  | $2018-2020$ |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Collier | Florida | Collier | Florida |
| Women 15-34 with sexually transmitted diseases, per <br> 100,000 females 15-34 years of age | $1,966.0$ | $2,818.4$ | $2,222.8$ | $2,958.9$ |
| Births to underweight mothers at time pregnancy occurred, <br> percent of births | $3.2 \%$ | $4.1 \%$ | $2.5 \%$ | $3.6 \%$ |
| Births to overweight mothers at time of pregnancy <br> occurred, percent of births | $28.5 \%$ | $26.3 \%$ | $31.0 \%$ | $27.5 \%$ |
| Births with inter-pregnancy interval <18 months, percent of <br> births | $30.3 \%$ | $34.7 \%$ | $31.5 \%$ | $35.0 \%$ |
| Repeat births to mothers ages 15-19 years of age, percent <br> of births 15-19 years | $15.6 \%$ | $15.7 \%$ | $11.2 \%$ | $14.2 \%$ |
| Births to mothers >35 years of age, per 1,000 females >35 <br> years of age | 4.3 | 4.9 | 4.2 | 5.1 |
| Births to uninsured women ("self-pay" check on birth <br> certificate), percent of births | $17.5 \%$ | $6.3 \%$ | $14.1 \%$ | $5.8 \%$ |
| Births covered by Medicaid, percent of births | $42.6 \%$ | $48.8 \%$ | $42.1 \%$ | $47.3 \%$ |
| C-section births, percent of births | $39.6 \%$ | $37.3 \%$ | $35.1 \%$ | $36.4 \%$ |
| Mothers who initiate breastfeeding, percent | $78.4 \%$ | $85.7 \%$ | $79.2 \%$ | $85.9 \%$ |

Source: Florida Department of Health, Bureau of Vital Statistics; Florida Department of Health, Bureau of Communicable Diseases

The birth rate in Collier County was lower than the Florida average every year during the period of 2011 through 2020. Both the rate in Collier County and the rate in Florida have been declining across this period

Exhibit HB114: Total Resident Live Births, Rate per 1,000, Collier County and Florida, 2011-2020


Source: Florida Department of Health, Bureau of Vital Statistics

Between 2016 and 2020, the birth rate in Collier County was higher among the Black population than among the white population.

Exhibit HB115: Total Resident Live Births by Race, Collier County, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

Between 2016 and 2020, the birth rate in Collier County was higher among the Hispanic population than among the Non-Hispanic population.

Exhibit HB116: Total Resident Live Births by Ethnicity, Collier County, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

Teenage pregnancy has been a priority area within public health for many decades. A birth to a teenager is at higher risk of a low birthweight baby, preterm birth, and infant death compared with babies born to older mothers.

While teenage birth rates have been in a long-term decline in the United States since the 1960s, the teen birth rate remains one of the highest among all industrialized countries. The rate of births to mothers aged 15-19 significantly declined in both Collier County and Florida between 2011 and 2019. However, there was an increase in Collier County in 2020 while the Florida rate continued to decline.

Exhibit HB117: Births by Mothers' Age, Age 15-19, Rate per 1,000 Total Population, Collier County and Florida, 2011-2020


Source: Florida Department of Health, Bureau of Vital Statistics

In Collier County, between 2016 and 2020, the rate of births to mothers between the ages of 15 and 19 was higher among the white population than the Black population.

Exhibit HB118: Births by Mothers' Age, Age 15-19 by Race, Rate per 1,000 Total Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

In Collier County, between 2016 and 2020, the rate of births to mothers between the ages of 15 and 19 was significantly higher among the Hispanic population than the Non-Hispanic population.

Exhibit HB119: Births by Mothers' Age, Age 15-19 by Ethnicity, Rate per 1,000 Total Population, Collier County and Florida, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

Maternal death is a relatively rare event in the United States. According to the Centers for Disease Control and Prevention (CDC) approximately 700 women die each year because of their pregnancy, complications during delivery, or after delivery. While numerous factors influence the health outcome of a pregnancy, it is very crucial that women of reproductive age adopt and maintain healthy lifestyles before and during their pregnancy as well as receive routine prenatal care and attention throughout gestation. Collier County did not have any maternal deaths in 2020.

Exhibit HB120: Maternal Deaths, Rate per 100,000 Live Births, Collier County and Florida, 2011-2020


Source: Florida Department of Health, Bureau of Vital Statistics

The infant mortality rate, the number of deaths occurring in the first year of life out of every 1,000 live births, has been used for over a century as a gauge of the overall health status of the nation, state, and county, and is frequently used for state to state and county comparisons by various public health agencies and medical and health oriented academic and service institutions. As of 2019, the infant mortality rate of the United States was 5.6 (Centers for Disease Control and Prevention).

The infant mortality rate varies geographically by state and is associated and affected by a myriad of factors which include: the education, income and age of the mother, the mother's health status during pregnancy and her access to healthcare. Southern states have the highest infant mortality rates while states in New England and the Pacific Northwest have the lowest. Research has determined that the higher rates in the southern states are likely to be explained by the higher incidence of low birthweight outcomes and short gestational age births in these states. The ethnic and racial composition of the population within a state or county directly affects the level of the overall infant mortality rate due to the fact that certain racial and ethnic groups are associated with higher levels of infant deaths. The level of infant mortality rate is influenced by and correlated with the mother's health and lifestyle behaviors, such as smoking, drinking, diet, substance abuse, physical activity, and her access to and use of prenatal care.

As discussed in the section covering mortality, life expectancy at birth is heavily weighted by infant mortality. Assuming actuarial methods used in the calculation of life expectancy, the lower the infant mortality rate, the higher the average number of years a person can expect to live when born.

The infant mortality rate in Collier County fell significantly between 2017 and 2020; it is lower than the rate for Florida (1.6 Collier vs. 5.8 Florida in 2020).

Exhibit HB121: Infant Mortality (0-364 days from birth), Rate per 1,000 Live Births, Collier County and Florida, 2011-2020


Source: Florida Department of Health, Bureau of Vital Statistics

For the years 2016-2020, the infant mortality rate in 2020 was the lowest seen for white and Black populations in Collier County. The infant mortality rates for 2016-2020 are higher among the Black population than the white population.

Exhibit HB122: Infant Mortality (0-364 days from birth) by Race, Rate per 1,000 Live Births, Collier County and Florida, 2011-2020


Source: Florida Department of Health, Bureau of Vital Statistics

For the years 2016-2020, the infant mortality rate in 2020 was the lowest seen for Hispanic and NonHispanic populations in Collier County. The infant mortality rates for 2016-2020 are higher among the Non-Hispanic population than among the Hispanic population.

Exhibit HB123: Infant Mortality (0-364 days from birth) by Ethnicity, Rate per 1,000 Live Births, Collier County and Florida, 2011-2020


Source: Florida Department of Health, Bureau of Vital Statistics

## Oral Health

Oral health is central to a person's overall health, well-being, and quality of life. In the United States, significant improvement in oral health over the past 50 years is a public health success story. Most of this improvement is due to effective treatment and prevention efforts. This also includes community water fluoridation, which now benefits almost 70 percent of people in the United States who get water through public water systems. Despite major improvements, some challenges persist. A person's ability to access oral health care is influenced by factors such as income and education level. In general, people with lower levels of income and education are more likely to have poor oral health.

Dental conditions include teeth malformations, gingivitis, and caries. From 2016 to 2020, there was a decrease in preventable emergency room visits from dental conditions in Collier County (443.2 2016, 241.5 2020). Collier County in the past decade consistently had fewer people visit the emergency room for dental conditions than the Florida average.

Exhibit HB124: Preventable ER Visits Under 65 from Dental Conditions, Rate per 100,000 Population Under 65, Collier County and Florida, 2011-2020


Source: Florida Agency for Health Care Administration (AHCA)

The Centers for Disease Control and Prevention (CDC) recognized community water fluoridation as one of 10 great public health achievements of $20^{\text {th }}$ century. Community water fluoridation is the adjustment of existing fluoride level in the drinking water to a level (0.7-1.2 parts per million) recommended by the U.S. Public Health Service. The American Dental Association endorses community water fluoridation as a safe and effective way of preventing tooth decay.

Collier County consistently has a higher percentage of its population receiving fluoridated water when compared to the Florida average.

Exhibit HB125: Population Receiving Fluoridated Water, Percentage of Population Served by Community Water System, Collier County and Florida, 2015-2019


Source: Florida Department of Health, Public Health Dental Program (PHDP)

## Mental Health

Mental illnesses are defined as those health conditions that change a person's behavior, feelings or thinking and cause the person distress and difficulty in performing daily life functions. Mental health affects how a person feels, thinks, and deals with daily stresses of life. Mental Health is important at every stage of life and includes social, emotional, and psychological well-being. Like other diseases, mental illness can range from mild to severe. People with mild mental illness may not display any visible signs and despite effective treatments, there can be long delays between the first onset of symptoms and when the person seeks treatment. There are also racial and ethnic disparities in access to mental health services.

From 2013 to 2019 when compared to the Florida average, Collier County had a smaller percentage of adults who experienced poor mental health on 14 or more of the past 30 days.

Exhibit HB126: Percent of Adults Who had Poor Mental Health on 14 or More of the Past 30 Days in Collier County and Florida, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

Regardless of race/ethnicity, Collier County had a smaller percentage of adults experiencing poor mental health on 14 or more of the past 30 days compared to the Florida average.

Exhibit HB127: Percent of Adults Who had Poor Mental Health on 14 or More of the Past 30 Days, by Race/Ethnicity in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic | Non-Hispanic <br> White | Non-Hispanic <br> Black | Hispanic |
| $2013^{*}$ | $6.8 \%$ |  | $6.1 \%$ | $11.9 \%$ | 14.75 | $13.1 \%$ |
| 2016 | $9.4 \%$ | $9.0 \%$ | $8.6 \%$ | $12.2 \%$ | $10.8 \%$ | $9.9 \%$ |
| 2019 | $6.9 \%$ | $5.7 \%$ | $7.0 \%$ | $15.0 \%$ | $12.3 \%$ | $12.5 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Non-Hispanic Black, no data was collected for this group

From 2016 to 2019, there was a decrease in the percentage of Collier County adults in each of the racial/ethnic groups who experienced poor mental health on 14 or more of the past 30 days.

Exhibit HB128: Percent of Adults Who had Poor Mental Health on 14 or More of the Past 30 Days, by
Race/Ethnicity in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

* Collier County 2013 Non-Hispanic Black, no data was collected for this group

In Collier County and Florida, a higher percentage of women experienced poor mental health on 14 or more of the past 30 days than men over the past six years.

Exhibit HB129: Percent of Adults Who had Poor Mental Health on 14 or More of the Past 30 Days by Sex in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women |
| 2013 | $4.1 \%$ | $10.3 \%$ | $10.9 \%$ | $14.4 \%$ |
| 2016 | $7.0 \%$ | $11.0 \%$ | $9.5 \%$ | $13.2 \%$ |
| 2019 | $5.8 \%$ | $8.3 \%$ | $11.4 \%$ | $16.1 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

From 2013 to 2020, a higher percentage of women in Collier County experienced more poor mental health on 14 or more of the past 30 days than men.

Exhibit HB130: Percent of Adults Who had Poor Mental Health on 14 or More of the Past 30 Days, by Sex in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In Collier County and Florida, a smaller percentage of those aged 65 and older experienced poor mental health days when compared to those 18 to 44 and 45 to 64 from 2013 to 2020.

Exhibit HB131: Percent Adults Who had Poor Mental Health on 14 or More of the Past 30 Days, By Age Group in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $18-44$ | $45-64$ | 65 and Older | $18-44$ | $45-64$ | 65 and Older |
| 2013 | $8.4 \%$ | $9.0 \%$ | $5.0 \%$ | $12.6 \%$ | $16.0 \%$ | $8.4 \%$ |
| 2016 | $10.6 \%$ | $9.6 \%$ | $5.9 \%$ | $12.5 \%$ | $13.0 \%$ | $7.3 \%$ |
| 2019 | $8.4 \%$ | $9.9 \%$ | $3.2 \%$ | $15.6 \%$ | $15.0 \%$ | $9.7 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

When compared to the other age groups, a smaller percentage of those 65 and older experienced poor mental health on 14 or more of the past 30 days in Collier County; in 2019 the highest percentage who cited experiencing poor mental health on 14 or more days in the past month were between the ages of 45 and 64.

Exhibit HB132: Percent Adults Who had Poor Mental Health on 14 or More of the Past 30 Days, By Age Group in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

A smaller percentage of adults in Collier County and Florida who were married/coupled experienced poor mental health on 14 or more of the past 30 days than adults who were not married/coupled.

Exhibit HB133: Percent Adults Who had Poor Mental Health on 14 or More of the Past 30 Days, By Marital Status in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Married/Coupled | Not <br> Married/Coupled | Married/Coupled | Not <br> Married/Coupled |
| 2013 | $4.6 \%$ | $10.1 \%$ | $10.5 \%$ | $15.4 \%$ |
| 2016 | $6.8 \%$ | $12.3 \%$ | $8.7 \%$ | $14.5 \%$ |
| 2019 | $6.8 \%$ | $7.5 \%$ | $10.7 \%$ | $17.4 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

A higher percentage of adults in Collier County who are not married/coupled experienced having poor mental health on 14 or more of the past 30 days than those who are married/coupled from 2013 to 2019.

Exhibit HB134: Percent Adults Who had Poor Mental Health on 14 or More of the Past 30 Days, By Marital Status in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2019, a lower percentage of adults with more than a high school education in both Collier County and Florida had poor mental health on 14 or more of the past 30 days when compared to those with less than a high school education and a high school/GED education.

Exhibit HB135: Percent Adults Who had Poor Mental health on 14 or More of the Past 30 Days, By Education Level in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less Than <br> High School | High <br> School/GED | More Than <br> High School | Less Than <br> High School | High <br> School/GED | More Than <br> High School |
| 2013 | $3.7 \%$ | $9.1 \%$ | $7.7 \%$ | $19.7 \%$ | $13.5 \%$ | $10.4 \%$ |
| 2016 | $6.8 \%$ | $15.5 \%$ | $6.8 \%$ | $15.3 \%$ | $12.1 \%$ | $10.1 \%$ |
| 2019 | $11.1 \%$ | $7.7 \%$ | $5.8 \%$ | $19.5 \%$ | $14.2 \%$ | $12.5 \%$ |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

From 2013 to 2019, adults in Collier County with less than a high school education saw an increase in the percentage of those who had poor mental health on 14 or more of the past 30 days, while adults who had more than a high school education had a decrease. In 2016, adults with a high school/GED education in Collier County had a significantly higher percentage, when compared to the other education levels, of having poor mental health on 14 or more of the past 30 days.

Exhibit HB136: Percent Adults Who had Poor Mental Health on 14 or More of the Past 30 Days, By Education Level in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

In 2013 and 2019, a higher percentage of adults in Collier County and Florida who made $\$ 25,000$ or less annually experienced having poor mental health on 14 or more of the past 30 days then those earning $\$ 25,000-\$ 49,999$ and $\$ 50,000$ or more a year.

Exhibit HB137: Percent Adults Who had Poor Mental Health on 14 or More of the Past 30 Days, By Annual Income in Collier County and Florida, 2013, 2016, and 2019

|  | Collier County |  |  | Florida |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <\$25,000 | $\begin{gathered} \$ 25,000- \\ \$ 49,999 \end{gathered}$ | $\$ 50,000 \text { or }$ <br> More | <\$25,000 | $\begin{aligned} & \mathbf{\$ 2 5 , 0 0 0 -} \\ & \$ 49,999 \end{aligned}$ | $\$ 50,000 \text { or }$ <br> More |
| 2013 | 11.4\% | 8.6\% | 4.7\% | 20.1\% | 13.0\% | 6.7\% |
| 2016 | 10.0\% | 12.1\% | 6.2\% | 17.8\% | 11.9\% | 7.6\% |
| 2019 | 12.6\% | 8.2\% | 3.9\% | 20.9\% | 13.4\% | 9.3\% |

Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

From 2013 to 2019, there was a decrease in the percentage of adults who made $\$ 50,000$ or more annually who had poor mental health on 14 or more of the past 30 days. Also, a smaller percentage of Collier County adults who make $\$ 50,000$ or more experienced poor mental health days when compared to those who make $\$ 25,000$ or less and $\$ 25,000$ to $\$ 49,999$ a year.

Exhibit HB138: Percent Adults Who had Poor Mental Health on 14 or More of the Past 30 Days, By Annual Income in Collier County, 2013, 2016, and 2019


Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

The Florida Mental Health Act of 1971 (commonly known as the "Baker Act") is a statue allowing for involuntary examination of an individual. It was originally enacted, at least in part, because of widespread instances of elder abuse in which one or more family members would have another family member committed to gain control over their estate prior to their death. Once committed, it was difficult for patients to obtain representation, and they became warehoused until their death. The Baker Act allows for involuntary examination (what some call emergency or involuntary commitment). It can be initiated by judges, law enforcement officials, physicians, or mental health professionals. There must be evidence that the person has a mental illness (as defined in the Baker Act) 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 occur in over 100 facilities statewide.

There are many possible outcomes following examination of the patient. This includes the release of the individual to the community (or other community placement), a petition for involuntary inpatient placement (what some call civil commitment), involuntary outpatient placement (what some call outpatient commitment or assisted treatment orders), or voluntary treatment (if the person is competent to consent to voluntary treatment and consents to voluntary treatment).

According to the Florida Baker Act Annual Report Fiscal Year 2018/2019, Collier County residents who received an involuntary examination were either seen at the David Lawrence Mental Health Center (62.8\%) and/or Park Royal Hospital (19.9\%).

From 2009 to 2019, there was a significant increase in involuntary examinations in Collier County. Even though there was an increase in Baker Acts among Collier County residents the county remains significantly lower than the Florida average ( 625 Collier vs. 1,007 Florida, 2020).

Exhibit HB139: Involuntary Examinations*: Residents of Collier County and Florida of All Ages, Rate per 100,000, by Fiscal Year, 2009-2019


Source: 2018/2019 Florida Mental Health Act (The Baker Act) Reports, Baker Act Center
*Involuntary examination forms for people who never reach a receiving facility are not received by the Baker Act Reporting Center, so are not included in the data

Between 2009 and 2019, there was an increase of 500 children who received involuntary examinations per year in Collier County (175 2009 vs. 680 2020). In the 2018 - 2019 fiscal year, 29 percent of the involuntary examinations were children, while 7 percent were older adults (65 or older).

Exhibit HB140: Involuntary Examinations*: Residents of Collier County for Ten Years, 2009-2019

| Fiscal Year | All Ages |  | Children \% (<18) |  |  | Older Adults \% (65+) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Exams | Rate per 100,000 | Exams |  | Rate per100,00 | Exams |  | $\begin{aligned} & \text { Rate per } \\ & 100,000 \end{aligned}$ |
|  |  |  | \# | \% |  | \# | \% |  |
| 2018-2019 | 2,295 | 625 | 680 | 29.63\% | 1,445.06 | 180 | 7.84\% | 155.60 |
| 2017-2018 | 1,861 | 521 | 436 | 23.43\% | 895.91 | 140 | 7.52\% | 138.68 |
| 2016-2017 | 1,864 | 532 | 428 | 22.96\% | 890.57 | 143 | 7.67\% | 145.78 |
| 2015-2016 | 1,853 | 539 | 459 | 24.77\% | 966.46 | 154 | 8.31\% | 161.02 |
| 2014-2015 | 1,585 | 471 | 392 | 24.73\% | 827.51 | 136 | 8.58\% | 146.63 |
| 2013-2014 | 1,546 | 463 | 318 | 20.57\% | 672.61 | 117 | 7.57\% | 130.31 |
| 2012-2013 | 1,310 | 397 | 265 | 20.23\% | 567.61 | 100 | 7.635 | 112.97 |
| 2011-2012 | 1,111 | 343 | 185 | 16.65\% | 402.02 | 81 | 7.29\% | 94.02 |
| 2010-2011 | 1,008 | 314 | 170 | 16.87\% | 371.09 | 62 | 6.15\% | 72.98 |
| 2009-2010 | 884 | 265 | 175 | 19.80\% | 363.66 | 59 | 6.67\% | 73.65 |

Source: 2018/2019 Florida Mental Health Act (The Baker Act) Reports, Baker Act Center
*Involuntary examination forms for people who never reach a receiving facility are not received by the Baker Act Reporting Center, so are not included in the data

During the 2018-2019 fiscal year, 60.3 percent of involuntary examinations were initiated by law enforcement, 39.4 percent were initiated by those with a professional certificate, and 0.4 percent were initiated through a ex parte order. Physicians had a larger percentage, almost 40 percent, of initiating a Baker Act when compared to other professionals.

Exhibit HB141: Fiscal Year 2018/2019 Involuntary Examinations* for Collier County Residents by Initiation Type

| Professional Certificate Type | Percentage of Initiation |
| :--- | :---: |
| Physician (Not a psychiatrist) | $39.65 \%$ |
| Licensed Mental Health Counselor | $20.38 \%$ |
| Licensed Clinical Social Worker | $14.62 \%$ |
| Physician (Psychiatrist) | $9.19 \%$ |
| Psychiatric Nurse | $5.76 \%$ |
| Physician Assistant | $5.09 \%$ |
| Clinical Psychologist | $1.66 \%$ |
| Not Reported | $1.33 \%$ |
| Multiple Professional Types Reported | $0.44 \%$ |
| Licensed Marriage and Family Therapist | $0.00 \%$ |

Source: 2018/2019 Florida Mental Health Act (The Baker Act) Reports, Baker Act Center
*Involuntary examination forms for people who never reach a receiving facility are not received by the Baker Act Reporting Center, so are not included in the data

In Collier County in 2020, many of the hospitalizations for mental and behavioral health disorders were for drug and alcohol-induced mental disorders, while eating disorders had the smallest percentage. When compared to the Florida average, Collier County experienced a significantly higher rate of hospitalizations for drug and alcohol-induced mental disorders in 2020 (372.9 Collier vs. 166.9 Florida) and a significantly lower rate for mood and depressive disorders (233.1 Collier vs. 430.3 Florida) and for schizophrenic disorders (80.5 Collier vs, 235.7 Florida). It should be noted that the availability of services can have a large impact on the number of hospitalizations.

Exhibit HB142: Hospitalizations for Mental and Behavioral Health Disorders, All Ages, Rate per 100,000 Population, Collier County and Florida, 2020


Source: Florida Agency for Health Care Administration

Suicide is a significant preventable public health problem in the United States. Several risk factors including history of depression or other mental illnesses, family history of suicide, and previous suicide attempts can increase the likelihood of someone attempting or dying from suicide.

Over the past decade there was a significant increase in suicide deaths in Collier County ( 9.82011 vs. 15.8 2020). 2014 saw the lowest rate of suicide deaths, 9.6 per 100,000, while 2020 had the highest suicide death rate. Collier County had a higher suicide death rate than Florida in 2012, 2017, and 2020.

Exhibit HB143: Age-adjusted Suicide Deaths, Rate per 100,000 Population, Collier County and Florida, 2011-2020


Source: Florida Department of Health, Bureau of Vital Statistics

Since 2017, the largest number of suicide deaths in Collier County have been among those aged 45-65.

Exhibit HB144: Number of Suicide Deaths by Age, Collier County, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

When compared to females, males have had a significantly higher rate of suicide deaths in Collier County. There was an overall increase over the past five years in the rate of female suicide deaths.

Exhibit HB145: Age-adjusted Suicide Deaths by Sex, Rate per 100,000 Population, Collier County, 20162020


Source: Florida Department of Health, Bureau of Vital Statistics

Between 2016 and 2020 in Collier County, white people had a higher suicide death rate when compared to Black people.

Exhibit HB146: Age-adjusted Suicide Deaths by Race, Rate per 100,000 Population, Collier County, 20162020


Source: Florida Department of Health, Bureau of Vital Statistics

Between 2016 and 2020 in Collier County, Non-Hispanic people had a higher suicide death rate when compared to Hispanic people.

Exhibit HB147: Age-adjusted Suicide Deaths by Ethnicity, Rate per 100,000 Population, Collier County, 2016-2020


Source: Florida Department of Health, Bureau of Vital Statistics

## ATTACHMENT F:

## Collier County, Florida

Community Health Assessment 2020 Update

August 2020

Shared vision for a healthy community:
The healthiest county in the nation to live, learn, work, and play.


Revised: August 31, 2020

## APPENDICES

## Appendix E: Community Health Assessment Update 2020

The purpose of the annual update is to show how additional data is used to provide a deeper understanding of the community health issue and population groups that were identified in the original Community Health Assessment (CHA).

The community health improvement process involves an ongoing collaborative communitywide effort to identify, analyze, and address health problems. This cannot be accomplished without a cohesive local public health system working together on corresponding initiatives. The Healthy Collier Coalition is comprised of an executive committee and 4 health priority workgroups. The Coalition has made engaging existing community partners and developing new partners in the community a priority in the health improvement process.

Following the release of the Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP), four workgroups were formed to focus on the identified priority health areas. The committees are composed of various community partners representing diverse sectors including local hospitals and healthcare organizations, local government, community-based organizations, faith-based organizations, social service organizations, and educational institutions. While each workgroup is composed of partners across multiple organizations, a facilitator from The Florida Department of Health in Collier County (DOHCollier), ensures that workgroups stay on track and that information is documented and available to inform workgroup members and the public.

As our workgroups moved from the planning to implementation phases, data was reviewed at the county level to identify specific areas within Collier County experiencing poor health outcomes regarding the specific health priority. A comprehensive review of both primary and secondary data sources was conducted to obtain the most reliable and current information. Primary data was also compiled and analyzed to inform health improvement efforts through community engagement surveys, and focus groups. The secondary data sources that were used during this process include, but are not limited to, the Florida Department of Health Florida Charts (FLCHARTS), AARP Livability Index, Behavior Risk Factor Survey and Surveillance (BRFSS), and the Centers for Disease Control and Prevention (CDC).

The following portion of this report is comprised of data that was compiled and reviewed after the initial release of the CHA to inform the selection of sectors for targeted health improvement efforts. The data reviewed was for various indicators related to health and well-being, including the social determinants of health, behavioral risk factors, environmental factors, policies, and unique characteristics of the community. Data is monitored and updated on a regular basis and used to inform improvement efforts.

## Mental Health and Substance Abuse

Mental health is essential to a person's overall health and well-being, healthy interpersonal relationships, and the ability to live a full and productive life. Poor mental health, and substance abuse significantly contributes to physical, social, and public health issues for individuals, families, and communities. The ability to access mental health and substance abuse care can have a large impact on reducing poor mental heath, suicide, and drug overdose.

The Mental Health and Substance Abuse workgroup has chosen to focus on the goal of improving the identification and treatment of mental health and substance use disorders in Collier County. To do so, the workgroup will concentrate on increasing the number of primary care provider offices and urgent care facilities in Collier County that are using the collaboration/integration care model, and increase the number of individuals trained in youth and adult Mental Health First Aid.

The following are population health indicators from the most recent years that the Mental Health and Substance Abuse workgroup will be working to improve and reduce rates of occurrence in.

Suicide death rate per 100,000 population (2019)
crude rate, single year

All drug non-fatal overdose emergency department visits (2018)

Hospitalizations for mental disorders, rate per 100,000 population (2018) crude rate, single year



Collier County ranked second healthiest county in Florida in the 2019 County Health Rankings and Roadmaps released by the University of Wisconsin and the Robert Wood Johnson Foundation. These ranking exist as a snapshot of the health of counties across Florida. St. Johns County, Martin County, and Seminole County ranked first, third, and fourth, respectively. Therefore, the mentioned counties were chosen to compare mental health and drug use in Collier County and Florida.

## Mental Health

In 2013 and 2016, Collier County was below Florida and peer counties for adults who have ever been told they have depressive disorder (Figure 1). Collier County experienced a 15 percent decrease from 2013 to 2016. In 2013, St. Johns County had the highest percentage of adults who have ever been told they have depressive disorder, followed by Seminole County and Martin County. In 2016, Martin County had the highest percentage of adults who have ever been told they have depressive disorder. St. Johns County and Seminole County had the same percentage that year.

Figure 1. Adults Who Have Ever Been Told They Have Depressive Disorder, 2013 and 2016


In 2013 and 2016, Collier County was below the state's percentage of adults who had poor mental health on 14 or more of the past 30 days (Figure 5). When compared to peer counties, Collier County was below St. Johns and Seminole County's percentages in 2013; however, was higher than both counties in 2016.

Figure 5. Adults Who Had Poor Mental Health on 14 or More of the Past 30 Days, 2013 and 2016


Data Source: Plorida Behavioral Risk Factor Surveillance System
Collier County had an average of 2.8 unhealthy mental days in the past 30 days in 2016 and 2.7 unhealthy mental days in the past 30 days in 2013, demonstrating a 3.6 percent increase from 2013 to 2016 (Figure 10). Collier County is below the state's average. Overall, Collier County had fewer unhealthy mental days in the past 30 days in 2016 when compared to Martin County and Seminole County; however, Collier County was above St. Johns average in 2016 by 14.3 percent.

Figure 10. Average Number of Unhealthy Mental Days in the Past 30 Days, 2013 and 2016


Collier County was below Florida's rate of age-adjusted hospitalizations for mental disorders from 2014-2018 (Figure 14). In 2018, Collier County had a lower rate of hospitalizations for mental disorders than other peer counties (Figure 15). Collier County non-Hispanics had a higher rate of hospitalizations for mental disorders than Hispanics in 2018, which is a similar trend for peer counties and Florida (Figure 16). In 2018, Whites in Collier County had a higher rate of hospitalization for mental disorders than Blacks (Figure 17).


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

Figure 15. Rate of Age-Adjusted Hospitalizations for Mental Disorders per 100,000, 2018


St. Johns
582.9 Miniminim
649.6 Sininimimi

Figure 16. Rate of Age-Adjusted Hospitilization for Mental Disorders per 100,000, by Ethnicity, 2018


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

Figure 17. Rate of Age-Adjusted Hospitilization for Mental Disorders per 100,000, by Race, 2018


Data Source: Flonda Agency for Health Care Administration (AHCA)

## Substance Abuse

In 2018, 57 deaths or 19.3 deaths per 100,000 population were due to drug poisonings. These deaths include accidental exposure, assaults, suicides, and any type of exposure to drugs, and includes different types of drugs, medications, and biological substances. Of all these drug poisoning deaths, 3 deaths or 0.8 per 100,000 population were caused by self-inflicted harm or suicide. The crude rate of suicides by drug poisoning in Collier County decreased 78 percent from 2009 to 2018. In the past six years, Collier County suicide rates have been lower than Florida and peer counties. In fact, Collier County has only been above Florida and peer counties for two years, 2009 and 2012 in the past ten years (Figure 18).

Figure 18. Suicides by Drug Poisoning, 2009-2018


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

The following graph shows drug overdose death rates in our state, county, and peer counties. Unfortunately, most data found for drug overdose mortality or incidence cannot be broken down by race, ethnicity, age, and/or other demographic or social indicators. In 2017, 51 deaths were attributed to drug overdoses in Collier County, 38 deaths of the 51 were opioid-related. Figure 19 shows a steady and, at times, drastic increasing trend in most select counties. The exception to the previous statement is Collier County with a minimal increase from 2016 to 2017, and St. Johns County with a slight decline.

Figure 19. Drug Overdose Age-Adjusted Death Rate, by Location, 2015-2017


Data Source: Florida Drug-Reiated Outcomes Surveilance and Tracking syatem (FROST)

Figure 22 displays the crude rates of suspected non-fatal drug overdose in Florida and other selected counties for the years of 2015 to 2018. Counts of suspected non-fatal drug overdoses comes from the number of patients with an identified non-fatal drug overdose during an emergency medical service transport. Collier County has the lowest crude rates of suspected non-fatal drug overdoses compared to the State and the other selected counties; whereas Martin County showed greater rates compared to all locations, especially in 2016. Florida, Collier County, and St. Johns County have increasing trends of non-fatal overdose rates compared to Martin County and Seminole County, which have decreasing rates from 2015 to 2018. The suspected non-fatal opioid-involved overdose crude rates in the State, Collier, and select counties from 2015 to 2018 can be observed in figure 23. As evident in the graph, Collier County and St. Johns County had the lowest rates; however, Collier County showed a consistently increasing trend for the four-year period. Florida experienced a 26 percent decrease from 2017 to 2018.

Figure 22. Suspected Non-fatal All Drug Overdose, by
Location, 2015-2018


Data Source: Fionda Prehospital EMS Tracking and Reporting Syatem (EMSTARS)

Figure 23. Suspected Non-fatal Opioid-involved Overdose, by Location, 2015-2018


Data Source: Florida Prehospital EMS Tracking and Reporting System (EMSTARS)

## Health of Older Adults

Within 10 years, all of the nation's 74 million baby boomers will be 65 or older. Here in Collier County there are more than 129,000 residents over the age of 60 . It is predicted that in 10 years the population of those over 60 will increase by 30,000 , and in the next decade you can add an additional 30,000 bringing the 60 and up population to just under 200,000 residents in 2040.

Lack of affordable long-term care facilities, ageism, isolation, and obesity, are issues older adults are currently facing and with an increase in population those issues will be exacerbated. Therefore it is extremely important to develop and implement strategies to improve upon the community goal of healthy aging.

The focus for the Health of Older Adult workgroup is to apply for Collier County to become a member of the AARP Age-Friendly network. Once apart of the network the workgroup will be working on an extensive checklist to accomplish initiatives spanning across the 8 Domains of a Livable Community. Those domains are community support and health system, housing, transportation, communication and information, respect and social inclusion, civic participation and employment, social participation, and outdoor spaces and buildings (Figure A). Community partners are committed to active aging by optimizing opportunities for health, participation, and security in order to enhance quality of life as people age.

On June 14, 2020, The Board of County Commissioners of Collier County passed Resolution 2020-117, to support membership into the World Health Organization and the AARP Network of Age-Friendly Cities and Communities Initiative. The Board of County Commissioners of Collier County will work with community partners to help ensure everyone has the ability to live a long, healthy and full life.

Figure A. 8 Domains of a Livable Community


## AARP Older Adult Survey

DOH-Collier worked with students from Florida Gulf Coast University's Nursing Program to conduct focus groups with older adults in the community. The focus groups are one of the requirements needed to apply to the AARP Age-Friendly Initiative. Primary data was collected via the AARP Age-Friendly Community Survey, and it gave the participants the opportunity to explain the various positive and negative ways the community is impacting their health. In March 2020, focus groups were held at Naples Senior Center and Golden Gate Senior Center and twenty-two survey responses were collected. COVID-19 has restricted the continuation of focus groups and limited participant turnout. The Health of Older Adult Workgroup will plan ways to continue to collect responses from the older adult population to gain a more accurate representation of the community.

Below are charts representing the highest and lowest scoring answers in the AARP Age-Friendly Community Survey.

Highest Scoring Answers
Participants scored each question from not important to extremely important on how important each topic was to themselves:
1-Not Important 2 -Somewhat Important 3 -Very Important 4 -Extremely Important
A sense that older adults are welcomed and valued in all settings
$\begin{array}{lll}\text { Answered: } 20 \text { Skipped: } 2 & 3.4\end{array}$

Quality healthcare and community based wellness and supportive services
Answered: 20 Skipped: 2
Reliable accessible and safe transportation options
Answered: 19 Skipped: 3
3.7

Lowest Scoring Answers
Participants scored each question from not important to extremely important on how important each topic was to themselves:
1-Not Important 2-Somewhat Important 3-Very Important 4-Extremely Important

A wide range of employment and entrepreneurship opportunities 2.2 Answered: 19 Skipped: 3

Opportunities to get involved in your local government and advocate for issues you care about Answered: 19 Skipped:3

## AARP Older Adult Survey

Below are charts representing the lowest and highest scoring answers in the AARP Age Friendly Community Survey. Participants had the option to answer "not sure", therefore, those responses were removed from the score.

Highest Scoring Answers
Participants scored each question from poor to good as to how they currently rate each topic in their community:


Lowest Scoring Answers
Participants rated each question from poor to good as to how they currently rate each topic in their community: 1-Poor 2-Fair 3-Good

Opportunities to get involved in your local government and advocate for issues you care about Answered: 15 Answered Not Sure: $3 \quad$ Skipped: 4

A wide range of employment and entrepreneurship opportunities
Answered: 17 Answered Not Sure: $1 \quad$ Skipped: 4

Housing that is affordable, accessible, and adapted to your needs 2.4 Answered: 16 Answered Not Sure: $3 \quad$ Skipped: 3


## AARP Livability Index

The AARP Livability Index rates the overall livability of a selected neighborhood, city, county, or state on a scale from 0 to 100. It is based on the average score of seven livability categories-housing, neighborhood, transportation, environment, health, engagement, and opportunity-which also range from 0 to 100. In 2018, Collier County scored a 51 on the AARP Total Livability Index, and a 58 on the AARP Livability Index Health Category. The goal of the workgroup is to improve both scores over the next five years of the Age-Friendly cycle.


AARP Total Livability Index


## COVID-19

DOH-Collier is the lead agency regarding the COVID-19 response. Highlighted below are some key response activites to date.

## DOH-Collier COVID-19 Response and Case Monitoring

Operating a local phone bank available 9am - 5pm, 7 days a week

Providing drive up COVID-19 testing, by appointment only

Planning and staffing COVID-19 testing events in the community

Conducting surveillance, investigations, and contact tracing

Monitoring long-term care facilities

Operating ESF-8 Health and Medical desk, 7 days a week

Monitoring hospital bed and ventilator status

Participating in Collier County stakeholder calls

Leading and coordinating the Collier County COVID-19 media response

Delivering public health COVID-19 messaging

Educating businesses and residents in the community

Hiring extra staff for COVID-19 response

## COVID-19

## Immokalee Promatora Model

DOH-Collier collaborated with Partners in Health to develop a promatora COVID-19 curriculum to provide COVID-19 health outreach education in residential communities. Using the promotora model, DOH-Collier is leveraging the skills of caring neighbors-turned-staff to deliver accessible health messaging to slow the spread of COVID-19. Learning about COVID-19 and how to prevent the spread of the virus from familiar faces at home, in a preferred language, is one of the many ways DOH-Collier is working to promote health education, and stop the spread of COVID-19 in our community.

In the chart below shows the cumulative Immokalee Promatora outreach efforts as of August 13, 2020.

| Cumulative Promatora Data |  | Total (\#) (\%), <br> when <br> applicable |
| :--- | :--- | :--- |
| Community Health Promoter Campaign |  |  |

## COVID-19

## Community Health Business Education

A team of DOH-Collier Health Educators are providing COVID-19 education to businesses throughout the most impacted communities. As of July 31, 2020, the team visited 415 businesses, distributed 2,110 educational materials, and distributed 633 packs of masks to businesses.

| Immokalee | Totals |
| :--- | :--- |
| Businesses Visited | $\mathbf{1 8 6}$ |
| Educational Materials | $\mathbf{9 5 7}$ |
| Mask Packs (5 masks in a pack) | $\mathbf{3 5 5}$ |
| Data Surrec covid-19 business Outreach Exel Workook |  |



Data Source: COVID-19 Business Outreach Excel Workbook


| Other Areas in Collier County | Totals |
| :--- | :--- |
| Businesses Visited | $\mathbf{3 3}$ |
| Educational Materials | $\mathbf{1 5 7}$ |
| Mask Packs Given (5 masks in a pack) | $\mathbf{4 8}$ |

Data Source: COVID-19 Business Outreach Excel Workbook

| All of Collier County | Totals |
| :--- | :--- |
| Businesses Visited | $\mathbf{4 1 5}$ |
| Educational Materials | $\mathbf{2 1 1 0}$ |
| Mask Packs Civen (5 masks in a pack) | $\mathbf{6 3 3}$ |

## COVID-19

## DOH-Collier COVID-19 Testing

DOH-Collier has planned and staffed community testing locations and events throughout the county. DOH-Collier has several permanent testing locations such as the DOH-Collier Naples and Immokalee locations, and Sun-N-Fun Lagoon. Past testing events have been at Golden Gate Community Center, Fellowship Church in Immokalee, North Collier Regional Park, and South Regional Library.

The chart below includes persons with laboratory results that the Florida Department of Health in Collier County collected electronically or by mail/fax for Collier County residents as of August 30, 2020 verified as of August 31, 2020 at 09:25 am.

COVID-19: All Collier Residents with Test Results Reported

| Awaiting <br> Testing | Inconclusive | Negative | Positive | Percent <br> Positive | Total <br> Tested |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | 74 | 58,348 | 11,505 | $16 \%$ | 69,927 |



Shared vision for a healthy community:
The healthiest county in the nation to live, learn, work, and play.



[^0]:    Source: US Bureau of the Census, American Community Survey, Table S2701

[^1]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^2]:    Source: Florida Behavioral Risk Factor Surveillance System telephone survey conducted by the Centers for Disease Control and Prevention (CDC) and Florida Department of Health, Division of Community Health Promotion

    * Collier Country 2013 less than high school, no data was collected for this group

