# 2020 COMMUNITY HEALTH NEEDS ASSESSMENT 

Lee County, Florida

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Lee Health \&
Florida Department of Health in Lee County

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## INTRODUCTION

## PROJECT OVERVIEW

## Project Goals

This Community Health Needs Assessment, a follow-up to similar studies conducted in 2007, 2011, 2014, and 2017, is a systematic, data-driven approach to determining the health status, behaviors, and needs of residents in Lee County, the service area of Lee Health and Florida Department of Health in Lee County. Subsequently, this information may be used to inform decisions and guide efforts to improve community health and wellness.

A Community Health Needs Assessment provides information so that communities may identify issues of greatest concern and decide to commit resources to those areas, thereby making the greatest possible impact on community health status. This Community Health Needs Assessment will serve as a tool toward reaching three basic goals:

- To improve residents' health status, increase their life spans, and elevate their overall quality of life. A healthy community is not only one where its residents suffer little from physical and mental illness, but also one where its residents enjoy a high quality of life.
- To reduce the health disparities among residents. By gathering demographic information along with health status and behavior data, it will be possible to identify population segments that are most atrisk for various diseases and injuries. Intervention plans aimed at targeting these individuals may then be developed to combat some of the socio-economic factors that historically have had a negative impact on residents' health.
- To increase accessibility to preventive services for all community residents. More accessible preventive services will prove beneficial in accomplishing the first goal (improving health status, increasing life spans, and elevating the quality of life), as well as lowering the costs associated with caring for late-stage diseases resulting from a lack of preventive care.

This assessment was conducted on behalf of Lee Health and Florida Department of Health in Lee County by PRC, a nationally recognized health care consulting firm with extensive experience conducting Community Health Needs Assessments in hundreds of communities across the United States since 1994.

## Methodology

This assessment incorporates data from multiple sources, including primary research (through the PRC Community Health Survey and PRC Online Key Informant Survey), as well as secondary research (vital statistics and other existing health-related data). It also allows for trending and comparison to benchmark data at the state and national levels.

## PRC Community Health Survey

## Survey Instrument

The survey instrument used for this study is based largely on the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS), as well as various other public health surveys and customized questions addressing gaps in indicator data relative to health promotion and disease prevention objectives and other recognized health issues. The final survey instrument was developed by Lee Health, Florida Department of Health in Lee County, and PRC and is similar to the previous surveys used in the region, allowing for data trending.

## Community Defined for This Assessment

Lee Health's enabling legislation provides for the establishment of a public health system with a declared public purpose and a publicly elected board of directors who are elected by the residents of Lee County. The study area for the survey effort is made up of four market areas (illustrated in the following map) comprising Lee County in southwest Florida, residents of which make up $90 \%$ of Lee Health's patient population, and which is also the service area of Florida Department of Health in Lee County. Additionally, Lee Health serves all residents and visitors in the five-county region with expanded services such as our children's hospital and trauma center.


## Sample Approach \& Design

A precise and carefully executed methodology is critical in asserting the validity of the results gathered in the PRC Community Health Survey. Thus, to ensure the best representation of the population surveyed a mixed-mode methodology was implemented. This included surveys conducted via telephone (landline and cell phone), as well as through online questionnaires.

The sample design used for this effort consisted of a stratified random sample of 1,007 individuals age 18 and older in Lee County, including: 244 in Market Area 1; 247 in Market Area 2; 268 in Market Area 3; and 248 in Market Area 4. Once the interviews were completed, these were weighted in proportion to the actual population distribution so as to appropriately represent Lee County as a whole. All administration of the surveys, data collection, and data analysis was conducted by PRC.

For statistical purposes, the maximum rate of error associated with a sample size of 1,007 respondents is $\pm 3.1 \%$ at the 95 percent confidence level.

## Expected Error Ranges for a Sample of 1,007 Respondents at the 95 Percent Level of Confidence



Note: - The "response rate" (the percentage of a population giving a particular response) determines the error rate associated with that response. A "95 percent level of confidence" indicates that responses would fall within the expected error range on 95 out of 100 trials.
Examples: - If $10 \%$ of the sample of 1,007 respondents answered a certain question with a "yes," it can be asserted that between $8.1 \%$ and $11.9 \%$ ( $10 \% \pm 1.9 \%$ ) of the total population would offer this response.

- If $50 \%$ of respondents said "yes," one could be certain with a 95 percent level of confidence that between $46.9 \%$ and $53.1 \%(50 \% \pm 3.1 \%$ ) of the total population would respond "yes" if asked this question.


## Sample Characteristics

To accurately represent the population studied, PRC strives to minimize bias through application of a proven telephone methodology and random-selection techniques. While this random sampling of the population produces a highly representative sample, it is a common and preferred practice to "weight" the raw data to improve this representativeness even further. This is accomplished by adjusting the results of a random sample to match the geographic distribution and demographic characteristics of the population surveyed (poststratification), so as to eliminate any naturally occurring bias. Specifically, once the raw data are gathered, respondents are examined by key demographic characteristics (namely sex, age, race, ethnicity, and poverty status), and a statistical application package applies weighting variables that produce a sample which more closely matches the population for these characteristics. Thus, while the integrity of each individual's responses is maintained, one respondent's responses may contribute to the whole the same weight as, for example, 1.1 respondents. Another respondent, whose demographic characteristics may have been slightly oversampled, may contribute the same weight as 0.9 respondents.

The following chart outlines the characteristics of the Lee County sample for key demographic variables, compared to actual population characteristics revealed in census data. [Note that the sample consisted solely of area residents age 18 and older; data on children were given by proxy by the person most responsible for that child's health care needs, and these children are not represented demographically in this chart.]

# Population \& Survey Sample Characteristics (Lee County, 2020) 



Further note that the poverty descriptions and segmentation used in this report are based on administrative poverty thresholds determined by the US Department of Health \& Human Services. These guidelines define poverty status by household income level and number of persons in the household (e.g., the 2019 guidelines place the poverty threshold for a family of four at \$25,750 annual household income or lower). In sample segmentation: "low income" refers to community members living in a household with defined poverty status or living just above the poverty level, earning up to twice (<200\% of) the poverty threshold; "mid/high income" refers to those households living on incomes which are twice or more ( $\geq 200 \%$ of) the federal poverty level.

The sample design and the quality control procedures used in the data collection ensure that the sample is representative. Thus, the findings may be generalized to the total population of community members in the defined area with a high degree of confidence.

## Online Key Informant Survey

To solicit input from key informants, those individuals who have a broad interest in the health of the community, an Online Key Informant Survey also was implemented as part of this process. A list of recommended participants was provided by Lee Health; this list included names and contact information for physicians, public health representatives, other health professionals, social service providers, and a variety of other community leaders. Potential participants were chosen because of their ability to identify primary concerns of the populations with whom they work, as well as of the community overall.

Key informants were contacted by email, introducing the purpose of the survey and providing a link to take the survey online; reminder emails were sent as needed to increase participation. In all, 121 community stakeholders took part in the Online Key Informant Survey, as outlined below:

| ONLINE KEY INFORMANT SURVEY PARTICIPATION |  |
| :--- | :---: |
| KEY INFORMANT TYPE | NUMBER PARTICIPATING |
| Physicians | 15 |
| Public Health Representatives | 15 |
| Other Health Providers | 13 |
| Social Services Providers | 36 |
| Other Community Leaders | 42 |

Final participation included representatives of the organizations outlined below.

- Abuse Counseling \& Treatment, Inc.
- Accent Business Products
- Adult \& Children’s Surgery Center of SWFL
- Agape Home, Inc.
- American Heart Association
- American Lung Association
- Amigos Center
- Beacon Health Options
- Benchmark Investments, LLC
- Big Brothers Big Sisters of the Sun Coast
- BJM Consulting, Inc.
- Blessings In A Backpack, Lee County
- Bonita Springs Area Chamber of Commerce
- Boys \& Girls Clubs of Lee County
- Cafe of Life, Inc.
- CASL, Inc.
- Catholic Charities of Lee, Hendry \& Glades Counties
- Centerstone
- Century Link
- Chamber of Commerce of Greater Lehigh Acres
- Child Care of Southwest Florida, Inc.
- Children's Network of SWFL
- Chris-Tel Construction
- City of Fort Myers
- Community Cooperative
- David Lawrence Center
- District Eight Health Planning Council
- Early Headstart
- Early Learning Coalition of Southwest FL
- Edison National Bank
- Family Health Centers of SW Florida
- Family Health Centers of SW Florida, Inc.
- First Step of Sarasota, Inc.
- FISH of Sanibel-Captiva, Inc.
- Florida Department of Health-Lee County
- Florida Gulf Coast University
- Florida Power \& Light
- Florida Radiology Consultants
- Florida Southwestern State College
- Galloway Captiva Triathlon
- Gastroenterology Associates of SW FL
- Golisano Children's Hospital
- Good Wheels, Inc.
- Goodwill Industries of Southwest Florida
- Guardian ad Litem Foundation
- Harry Chapin Food Bank
- Healthy Start of Southwest Florida
- Hodges University
- IMPACT for Developmental Education, Inc.
- Injury Prevention Council
- Interfaith Charities of South Lee
- Internal Medicine, Lipid and Wellness
- Island Vacations of Sanibel and Captiva
- Kirkwood Electric
- LCH Board of Directors
- Lee Community Healthcare
- Lee County
- Lee County Government
- Lee County Schools
- Lee Economic Development Office
- Lee Health
- Lee Health; Community Health Improvement (CHI) Committee
- Lee Health Foundation
- Lee Physician Group
- Lifeline Family Center, Inc.
= March of Dimes
- Markham Norton Mosteller Wright \& Co. PA
- McGregor Clinic
- McGriff Insurance Services
- Millennium Physician Group
- Minnesota Twins Baseball
- NAMI Lee County
- Neurotherapy Center
- Nova Southeastern University, Fort Myers Campus
- Our Mother's Home of Southwest Florida
- Park Royal Hospital
- Pavich Realty
- Physicians Primary Care FP
- Physicians Primary Care Ob-Gyn
- PricewaterhouseCoopers LLP
- Private Practice, Community Health Improvement (CHI) Committee
- Quality Life Center
- SalusCare, Inc.
- Salvation Army
- Shell Point Retirement Community
- Southwest Florida Community Foundation
- Spiro \& Associates
- Stillwell Enterprises
- Studio+
- The Foundation for Lee County Public Schools
- The Lee Country Coalition for a DrugFree Southwest Florida
- The Sanibel Captiva Trust Company
- Valerie's House
- Village of Estero

Through this process, input was gathered from several individuals whose organizations work with lowincome, minority, or other medically underserved populations.

In the online survey, key informants were asked to rate the degree to which various health issues are a problem in their own community. Follow-up questions asked them to describe why they identify problem areas as such and how these might better be addressed. Results of their ratings, as well as their verbatim comments, are included throughout this report as they relate to the various other data presented.

NOTE: These findings represent qualitative rather than quantitative data. The Online Key Informant Survey was designed to gather input regarding participants' opinions and perceptions of the health needs of the residents in the area. Thus, these findings are not necessarily based on fact.

## Public Health, Vital Statistics \& Other Data

A variety of existing (secondary) data sources was consulted to complement the research quality of this Community Health Needs Assessment. Data for Lee County were obtained from the following sources (specific citations are included with the graphs throughout this report):

- Center for Applied Research and Engagement Systems (CARES) Engagement Network, University of Missouri Extension
- Centers for Disease Control \& Prevention, Office of Infectious Disease, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
- Centers for Disease Control \& Prevention, Office of Public Health Science Services, Center for Surveillance, Epidemiology and Laboratory Services, Division of Health Informatics and Surveillance (DHIS)
- Centers for Disease Control \& Prevention, Office of Public Health Science Services, National Center for Health Statistics
- ESRI ArcGIS Map Gallery
- National Cancer Institute, State Cancer Profiles
- OpenStreetMap (OSM)
- US Census Bureau, American Community Survey
- US Census Bureau, County Business Patterns
- US Census Bureau, Decennial Census
- US Department of Agriculture, Economic Research Service
- US Department of Health \& Human Services
- US Department of Health \& Human Services, Health Resources and Services Administration (HRSA)
- US Department of Justice, Federal Bureau of Investigation
- US Department of Labor, Bureau of Labor Statistics


## Benchmark Data

## Trending

Similar surveys were administered in Lee County in 2007, 2011, 2014, and 2017 by PRC on behalf of Lee Health. Trending data, as revealed by comparison to prior survey results, are provided throughout this report whenever available. Historical data for secondary data indicators are also included for the purposes of trending.

## Florida Risk Factor Data

Statewide risk factor data are provided where available as an additional benchmark against which to compare local survey findings; these data represent the most recent BRFSS (Behavioral Risk Factor Surveillance System) Prevalence and Trends Data published online by the Centers for Disease Control and Prevention. State-level vital statistics are also provided for comparison of secondary data indicators.

## Nationwide Risk Factor Data

Nationwide risk factor data, which are also provided in comparison charts, are taken from the 2017 PRC National Health Survey; the methodological approach for the national study is similar to that employed in this assessment, and these data may be generalized to the US population with a high degree of confidence. National-level vital statistics are also provided for comparison of secondary data indicators.

## Healthy People 2020

Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. For three decades, Healthy People has established benchmarks and monitored progress over time in order to:


- Empower individuals toward making informed health decisions.
- Measure the impact of prevention activities.

Healthy People strives to:

- Identify nationwide health improvement priorities.
- Increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress.
- Provide measurable objectives and goals that are applicable at the national, State, and local levels.
- Engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge.
- Identify critical research, evaluation, and data collection needs.


## Determining Significance

Differences noted in this report represent those determined to be significant. For survey-derived indicators (which are subject to sampling error), statistical significance is determined based on confidence intervals (at the 95 percent confidence level), using question-specific samples and response rates. For the purpose of this report, "significance" of secondary data indicators (which do not carry sampling error but might be subject to reporting error) is determined by a $15 \%$ variation from the comparative measure.

## Information Gaps

While this assessment is quite comprehensive, it cannot measure all possible aspects of health in the community, nor can it adequately represent all possible populations of interest. It must be recognized that these information gaps might in some ways limit the ability to assess all of the community's health needs.

For example, certain population groups - such as the homeless, institutionalized persons, or those who only speak a language other than English or Spanish - are not represented in the survey data. Other population groups - for example, pregnant women, lesbian/gay/bisexual/ transgender residents, undocumented residents, and members of certain racial/ethnic or immigrant groups - might not be identifiable or might not be represented in numbers sufficient for independent analyses.

In terms of content, this assessment was designed to provide a comprehensive and broad picture of the health of the overall community. However, there are certainly medical conditions that are not specifically addressed.

## Public Comment

Lee Health made its prior Community Health Needs Assessment (CHNA) report publicly available through its website; through that mechanism, the hospital requested from the public written comments and feedback regarding the CHNA and implementation strategy. At the time of this writing, Lee Health had not received any written comments. However, through population surveys and key informant feedback for this assessment, input from the broader community was considered and taken into account when identifying and prioritizing the significant health needs of the community. Lee Health will continue to use its website as a tool to solicit public comments and ensure that these comments are considered in the development of future CHNAs.

## IRS FORM 990, SCHEDULE H COMPLIANCE

For nonprofit hospitals, a Community Health Needs Assessment (CHNA) also serves to satisfy certain requirements of tax reporting, pursuant to provisions of the Patient Protection \& Affordable Care Act of 2010. To understand which elements of this report relate to those requested as part of hospitals' reporting on IRS Schedule H (Form 990), the following table cross-references related sections.

## IRS FORM 990, SCHEDULE H (2019)

Part V Section B Line 3a
A definition of the community served by the hospital facility ..... 7
Part V Section B Line 3b
Demographics of the community ..... 38
Part V Section B Line 3c
Existing health care facilities and resources within the community that ..... 200are available to respond to the health needs of the communityPart V Section B Line 3d7How data was obtained
Part V Section B Line 3e16
The significant health needs of the community

Addressed Throughout

## Part V Section B Line 3g

The process for identifying and prioritizing community health
needs and services to meet the community health needs

## Part V Section B Line 3h

The process for consulting with persons10 representing the community's interests

Part V Section B Line 3i

$$
\begin{aligned}
& \text { The impact of any actions taken to address the significant health } \\
& \text { needs identified in the hospital facility's prior CHNA(s) }
\end{aligned}
$$

## SUMMARY OF FINDINGS

## Significant Health Needs of the Community

The following "Areas of Opportunity" represent the significant health needs of the community, based on the information gathered through this Community Health Needs Assessment. From these data, opportunities for health improvement exist in the area with regard to the following health issues (see also the summary tables presented in the following section).

The Areas of Opportunity were determined after consideration of various criteria, including: standing in comparison with benchmark data (particularly national data); identified trends; the preponderance of significant findings within topic areas; the magnitude of the issue in terms of the number of persons affected; and the potential health impact of a given issue. These also take into account those issues of greatest concern to the community stakeholders (key informants) giving input to this process.

## AREAS OF OPPORTUNITY IDENTIFIED THROUGH THIS ASSESSMENT

| ACCESS TO HEALTH |
| :--- |
| CARE SERVICES |
| CANCER |
| DIABETES |
| HEART DISEASE |
| \& STROKE |
| INFANT HEALTH |
| \& FAMILY PLANNING |
| INJURY \& VIOLENCE |
| INENTAL HEALTH |
| M |

- Lack of Health Insurance
- Barriers to Access
- Appointment Availability
- Finding a Physician
- Language/Culture
- Specific Source of Ongoing Medical Care
- Emergency Room Utilization
- Ratings of Local Health Care
- Leading Cause of Death
- Cancer Prevalence
- Diabetes Deaths
- Blood Sugar Testing [Non-Diabetics]
- Leading Cause of Death
- Heart Disease Prevalence
- Stroke Prevalence
- High Blood Pressure Prevalence
- High Blood Cholesterol Prevalence
- Prenatal Care
- Unintentional Injury Deaths
- Including Motor Vehicle Crash, Falls [Age 65+] Deaths
- Distracted Driving
- "Fair/Poor" Mental Health
- Diagnosed Depression
- Symptoms of Chronic Depression
- Stress
- Mental Health Provider Ratio
- Key Informants: Mental health ranked as a top concern.


## AREAS OF OPPORTUNITY (continued)

## NUTRITION, PHYSICAL ACTIVITY \& WEIGHT

## ORAL HEALTH

POTENTIALLY DISABLING CONDITIONS

## RESPIRATORY DISEASE

TOBACCO USE

- Fruit/Vegetable Consumption
- Low Food Access
- Obesity [Adults]
- Meeting Physical Activity Guidelines
- Access to Recreation/Fitness Facilities
- Key Informants: Nutrition, physical activity \& weight ranked as a top concern.
- Dental Insurance Coverage
- Alzheimer's Disease Deaths
- Caregiving
- Key Informants: Dementia/Alzheimer's disease ranked as a top concern.
- Asthma Prevalence [Adults]
- Chronic Obstructive Pulmonary Disease (COPD) Prevalence
- Excessive Drinking
- Unintentional Drug-Related Deaths
- Illicit Drug Use
- Opioid Use
- Marijuana Use
- Key Informants: Substance abuse ranked as a top concern.
- Use of Vaping Products


## Community Feedback on Prioritization of Health Needs

On September 22, 2020, Lee Health hosted an online meeting with 70 community stakeholders (representing a cross-section of community-based agencies and organizations) to evaluate, discuss and prioritize health issues for community, based on findings of this Community Health Needs Assessment (CHNA). PRC began the virtual meeting with a presentation of key findings from the CHNA, highlighting the significant health issues identified from the research (see Areas of Opportunity above). Following the data review, PRC answered any questions. Finally, participants were provided an overview of the prioritization exercise that followed.

In order to assign priority to the identified health needs (i.e., Areas of Opportunity), web-based feedback software was used in which each participant was able to register his/her ratings using an online platform. The participants were asked to evaluate each health issue along two criteria:

- SCOPE \& SEVERITY $~$ The first rating was to gauge the magnitude of the problem in consideration of the following:
- How many people are affected?
- How does the local community data compare to state or national levels, or Healthy People 2020 targets?
- To what degree does each health issue lead to death or disability, impair quality of life, or impact other health issues?

Ratings were entered on a scale of 1 (not very prevalent at all, with only minimal health consequences) to 10 (extremely prevalent, with very serious health consequences).

- ABILITY TO IMPACT - A second rating was designed to measure the perceived likelihood of the hospital having a positive impact on each health issue, given available resources, competencies, spheres of influence, etc. Ratings were entered on a scale of 1 (no ability to impact) to 10 (great ability to impact).

A separate online meeting was held on September 24, 2020, for members of the Lee Health Board of Directors Community Health Improvement Committee. Committee members were also provided a review the same data as provided the community stakeholder group, then the six voting members also participated in a similar prioritization exercise.

Across both sessions, individuals' ratings for each criteria were averaged for each tested health issue, and then these composite criteria scores were averaged to produce an overall score. This process yielded the following prioritized list of community health needs:

1. Mental Health
2. Substance Abuse
3. Nutrition, Physical Activity \& Weight
4. Diabetes
5. Heart Disease \& Stroke
6. Access to Health Care Services
7. Infant Health \& Family Planning
8. Tobacco Use
9. Cancer
10. Injury
11. Respiratory Disease
12. Potentially Disabling Conditions
13. Oral Health

## Hospital Implementation Strategy

Lee Health will use the information from this Community Health Needs Assessment to develop an Implementation Strategy to address the significant health needs in the community. While the hospital will likely not implement strategies for all of the health issues listed above, the results of this prioritization exercise will be used to inform the development of the hospital's action plan to guide community health improvement efforts in the coming years.

Note: An evaluation of the hospital's past activities to address the needs identified in prior CHNAs can be found as an appendix to this report.

## TREND

SUMMARY
(Current vs. Baseline Data)

SURVEY DATA
INDICATORS:
Trends for survey-derived indicators represent significant changes since 2007 or the earliest available findings. Note that survey data reflect the ZIP Code-defined Lee County.

OTHER (SECONDARY) DATA INDICATORS:
Trends for other indicators (e.g., public health data) represent point-to-point changes between the most current reporting period and the earliest presented in this report (typically representing the span of roughly a decade)

## Summary Tables:

## Comparisons With Benchmark Data

The following tables provide an overview of indicators in Lee County, including comparisons among the four market areas, as well as trend data. These data are grouped by health topic.

## Reading the Summary Tables

- In the following tables, Lee County results are shown in the larger, gray column.
- The columns to the left of the Lee County column provide comparisons among the four market areas, identifying differences for each as "better than" ("), "worse than" (*), or "similar to" ( $\S$ ) the combined opposing areas.

The columns to the right of the Lee County column provide trending, as well as comparisons between local data and any available state and national findings, and Healthy People 2020 objectives. Again, symbols indicate whether Lee County compares favorably (*), unfavorably (*), or comparably (\%) to these external data.

Note that blank table cells signify that data are not available or are not reliable for that area and/or for that indicator.

Tip: Indicator labels beginning with a "\%" symbol are taken from the PRC Community Health Survey; the remaining indicators are taken from secondary data sources.

DISPARITY AMONG MARKET AREAS

| SOCIAL DETERMINANTS | Market <br> Area 1 | Market <br> Area 2 | Market <br> Area 3 | Market <br> Area 4 |
| :--- | :---: | :---: | :---: | :---: |
| Linguistically Isolated Population（Percent） |  |  |  |  |
| Population in Poverty（Percent） |  |  |  |  |
| Population Below 200\％FPL（Percent） |  |  |  |  |
| Children in Poverty（Percent） |  |  |  |  |
| No High School Diploma（Age 25＋，Percent） |  |  |  |  |
| \％Food Insecure |  |  |  |  |


| Lee County | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| 5.3 | $\begin{aligned} & { }^{2, w^{\prime}} \\ & 6.4 \\ & 6.4 \end{aligned}$ | $\begin{aligned} & \text { 等 } \\ & 44 \end{aligned}$ |  |  |
| 14.0 | $\begin{aligned} & \sqrt{3} \\ & 14.8 \end{aligned}$ | $\begin{aligned} & \sqrt{3} \\ & 14.1 \end{aligned}$ |  |  |
| 23.4 | $\begin{aligned} & \overbrace{3} \\ & 21.3 \end{aligned}$ | $\begin{gathered} \text { 䉑: } \\ 19.5 \end{gathered}$ |  |  |
| 12.0 | $\begin{gathered} 12.1 \\ \overbrace{3} \end{gathered}$ | $\begin{aligned} & \sqrt{3} \\ & 12.3 \end{aligned}$ |  |  |
| 25.2 |  | 34.1 |  | $\underbrace{\approx}_{23.3}$ |
|  | 黄 better | $\underset{\text { similar }}{\sqrt[3]{2}}$ | $\begin{gathered} \text { 繋 } \\ \text { worse } \end{gathered}$ |  |

DISPARITY AMONG MARKET AREAS

| OVERALL HEALTH |  |  |  |  | Lee County | NCHM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Market <br> Area 1 | Market <br> Area 2 | Market <br> Area 3 | Market <br> Area 4 |  | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| \％＂Fair／Poor＂Overall Health | $\begin{gathered} \sqrt{3} \\ 17.6 \end{gathered}$ |  | $\begin{aligned} & \sqrt{3} \\ & 14.9 \end{aligned}$ | $\overbrace{3}$ | 15.2 | $20.8$ | $\begin{gathered} \underbrace{3}_{3} \\ 12.6 \end{gathered}$ |  | $\underbrace{\sqrt{3}}_{17.9}$ |
|  |  | 16.4 |  | 12.7 |  |  |  |  |  |
|  | Note：In the section above，each market area is compared against all other areas combined．Throughout these tables，a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results． |  |  |  |  | $\begin{aligned} & \\ & \text { better } \end{aligned}$ | similar |  |  |
|  | DISPARITY AMONG MARKET AREAS |  |  |  | Lee County | LEE COUNTY vs． BENCHMARKS |  |  |  |
| ACCESS TO HEALTH CARE | Market <br> Area 1 | Market Area 2 | Market <br> Area 3 | Market Area 4 |  | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| \％［Age 18－64］Lack Health Insurance | $\overbrace{}^{3}$ | $\overbrace{}^{3}$ | $\overbrace{}^{3}$ | $\overbrace{}^{3}$ | 18.5 | $\overbrace{}^{3}$ | 镣 | 縣 |  |
|  | 16.8 | 21.6 | 17.8 | 18.6 |  | 20.9 | 8.7 | 0.0 | 24.1 |
| \％Difficulty Accessing Healthcare in Past Year （Composite） | $\underbrace{3}$ | $\underbrace{3}$ | $\sqrt{3}^{3}$ | 潫 | 43.7 |  | $\begin{aligned} & \text { 等: } \\ & 35.0 \end{aligned}$ |  | 䓡 |
|  | $42.5$ | 47.4 | 48.5 | $38.3$ |  |  |  |  | 37.9 |
| \％Lack or Type of Insurance Prevented Care | ${ }_{3}$ | ${ }^{3}$ | 䓡 | ${ }^{3}$ | 15.6 |  | $\begin{aligned} & \sqrt{3} \\ & 12.9 \end{aligned}$ |  | ${ }^{3}$ |
|  | 12.2 | 13.8 | 19.9 | 16.0 |  |  |  |  | 15.4 |
| \％Cost Prevented Physician Visit in Past Year | $\overbrace{3}$ | ${ }^{3}$ | 㘈 | ${ }^{3}$ | 14.8 | ${ }^{3}$ |  |  | ${ }^{3}$ |
|  | 14.5 | 13.5 | 19.7 | 11.9 |  | 16.2 |  |  | 14.1 |
| \％Cost Prevented Getting Prescription in Past Year | ${ }^{3}$ | $\overbrace{3}$ | ${ }^{3}$ | 学整 | 14.3 |  | $12.8$ |  |  |
|  | 15.8 | 15.3 | 16.1 | 11.0 |  |  |  |  |  |
| \％Difficulty Getting Appointment in Past Year | $\underbrace{3}$ | ${ }^{3}$ | 䓡 | 8 | 21.7 |  | 䓡 |  | 䓡 |
|  | 20.0 | 20.8 | 26.9 | 19.4 |  |  | 14.5 |  | 16.0 |
| \％Inconvenient Hrs Prevented Dr Visit in Past Year | ${ }^{3}$ | $\overbrace{}^{3}$ | ${ }^{3}$ | ${ }^{3}$ | 12.3 |  | ${ }^{3}$ |  | ${ }^{3}$ |
|  | 9.9 | 14.9 | 13.0 | 12.0 |  |  | 12.5 |  | 12.4 |
| \％Difficulty Finding Physician in Past Year | $\sqrt{3}$ |  | 蜍 | ${ }^{3}$ | 13.6 |  | 蛈 |  | 䓡 |
|  | 11.4 | 9.5 | 17.7 | 15.0 |  |  | 9.4 |  | 9.3 |

DISPARITY AMONG MARKET AREAS

| ACCESS TO HEALTH CARE（continued） | Market <br> Area 1 | Market Area 2 | Market Area 3 | Market Area 4 |
| :---: | :---: | :---: | :---: | :---: |
| \％Transportation Hindered Dr Visit in Past Year | $\sqrt{3}$ | 䓡 | ${ }^{3}$ | 淮年 |
|  | 6.9 | 11.4 | 10.1 | 3.5 |
| \％Language／Culture Prevented Care in Past Year | 棠栄 | ${ }^{3}$ | 䓡： | 监 |
|  | 0.5 | 4.0 | 7.8 | 1.3 |
| \％Low Health Literacy | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ |
|  | 21.7 | 24.4 | 24.2 | 23.9 |
| \％Skipped Prescription Doses to Save Costs | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ |
|  | 11.7 | 15.0 | 17.0 | 13.1 |
| \％Difficulty Getting Child＇s Healthcare in Past Year |  |  |  |  |
| Primary Care Doctors per 100，000 |  |  |  |  |
| \％Have a Specific Source of Ongoing Care | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ |
|  | 70.9 | 66.6 | 63.6 | 71.6 |
| \％Outmigration for Medical Care | ${ }^{3}$ | ${ }^{3}$ | $\sqrt{3}$ | ${ }^{3}$ |
|  | 12.4 | 9.6 | 13.9 | 15.5 |
| \％Have Had Routine Checkup in Past Year | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ |
|  | 75.6 | 74.3 | 72.8 | 73.9 |
| \％Child Has Had Checkup in Past Year |  |  |  |  |
| \％Two or More ER Visits in Past Year | ${ }^{3}$ |  | 镣 | ${ }^{3}$ |
|  | 10.8 | 7.3 | 17.7 | 10.0 |


| Lee County | LEE COUNTY vs． BENCHMARKS |  |  | TREND |
| :---: | :---: | :---: | :---: | :---: |
|  | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ |  |
| 7.6 |  | ${ }^{3}$ |  | ${ }^{3}$ |
|  |  | 8.9 |  | 5.6 |
| 3.2 |  | 3 |  | 紫 |
|  |  | 2.8 |  | 0.6 |
| 23.5 |  | 浸 |  | ${ }^{3}$ |
|  |  | 27.7 |  | 24.1 |
| 14.1 |  | 8 |  | \％ |
|  |  | 12.7 |  | 16.3 |
| 10.7 |  | 8 |  | $\overbrace{}^{3}$ |
|  |  | 8.0 |  | 12.9 |
| 64.8 | 浸 | 第 |  |  |
|  | 36.3 | 38.3 |  |  |
| 68.5 |  | 絽 | 絽 | 䍃 |
|  |  | 74.2 | 95.0 | 76.5 |
| 13.1 |  |  |  | \％ |
|  |  |  |  | 14.5 |
| 74.2 |  | 8 |  | \％ |
|  | 80.4 | 70.5 |  | 75.7 |
| 83.1 |  | 8 |  | 8 |
|  |  | 77.4 |  | 86.7 |
| 11.5 |  | 3 |  | 动 |
|  |  | 10.1 |  | 7.4 |

DISPARITY AMONG MARKET AREAS

|  | dispart anow market rieas |  |  |  |  | BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCESS TO HEALTH CARE（continued） | Market <br> Area 1 | Market Area 2 | Market <br> Area 3 | Market <br> Area 4 | County | vs．FL | vs．US | HP202 | TREND |
| \％Rate Local Healthcare＂Fair／Poor＂ | $\begin{aligned} & \sqrt[3]{3} \\ & 8.0 \end{aligned}$ | $\begin{aligned} & \sqrt{3} \\ & 9.6 \end{aligned}$ | $\begin{gathered} \text { 䌞 } \\ 16.6 \end{gathered}$ | $\begin{aligned} & \mathfrak{B} \\ & 8.5 \end{aligned}$ | 10.7 |  | $\begin{aligned} & \text { 䨁 } \end{aligned}$ |  | $\begin{aligned} & \text { 雏 } \\ & 17.4 \end{aligned}$ |
| \％Aware of Healthy Lee Community Initiatives | ${ }_{19.0}^{E}$ | $\begin{aligned} & \mathfrak{B} \\ & 13.6 \end{aligned}$ | $\begin{gathered} \hat{B} \\ 18.9 \end{gathered}$ | $\begin{aligned} & \sqrt[3]{3} \\ & 15.7 \end{aligned}$ | 16.9 |  |  |  | $\begin{aligned} & \text { 渻 } \\ & 10.9 \end{aligned}$ |
| \％Have Heard of＂Choose，Commit，Change！＂ | $\begin{aligned} & { }^{2},{ }^{\prime}{ }^{\prime} \\ & 16.1 \end{aligned}$ | $\begin{aligned} & \mathfrak{B} \\ & 9.6 \end{aligned}$ | $\begin{aligned} & \underbrace{}_{3} \\ & 15.0 \end{aligned}$ | $\begin{aligned} & \text { 筧. } \\ & 8.2 \end{aligned}$ | 12.2 |  |  |  | $\begin{aligned} & y^{2}{ }^{\prime \prime} \\ & 8.8 \end{aligned}$ |
|  |  |  |  | ainst all other e too small to too small to <br> AS |  | 帚 <br> better | $\begin{gathered} \tilde{B} \\ \text { similar } \\ \text { ECOUNT } \\ \text { ENCHMA } \end{gathered}$ | worse <br> vs． <br> S |  |
| CANCER | Market Area 1 | Market Area 2 | Market Area 3 | Market Area 4 | County | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| Cancer（Age－Adjusted Death Rate） |  |  |  |  | 128.2 | $$ |  | $\begin{aligned} & \text { 浸采 } \\ & 161.4 \end{aligned}$ | $\begin{gathered} 3 \\ 145.8 \end{gathered}$ |
| Lung Cancer（Age－Adjusted Death Rate） |  |  |  |  | 31.9 | $\begin{gathered} 35.6 \\ 3 \end{gathered}$ | $\begin{gathered} \approx \approx 6 \\ 36.6 \end{gathered}$ | $\begin{aligned} & \text { 㴆年 } \\ & 45.5 \end{aligned}$ |  |
| Prostate Cancer（Age－Adjusted Death Rate） |  |  |  |  | 12.8 | $16.5$ | $\begin{aligned} & \text { 滈等 } \\ & 18.9 \end{aligned}$ | $\begin{aligned} & \text { 滴 } \\ & 21.8 \end{aligned}$ |  |
| Female Breast Cancer（Age－Adjusted Death Rate） |  |  |  |  | 16.9 | $$ | $\begin{gathered} y_{3}{ }^{\prime} \\ 19.9 \end{gathered}$ |  |  |
| Colorectal Cancer（Age－Adjusted Death Rate） |  |  |  |  | 10.7 |  | $\begin{aligned} & \text { 繁 } \\ & 13.7 \end{aligned}$ | $\begin{aligned} & \text { 鮓 } \\ & 14.5 \end{aligned}$ |  |
| Cancer Incidence Rate（All Sites） |  |  |  |  | 415.8 | $\begin{gathered} \sqrt[B]{8} \\ 451.9 \end{gathered}$ | $\begin{gathered} \varepsilon_{3} 88.0 \end{gathered}$ |  |  |

DISPARITY AMONG MARKET AREAS

| CANCER (continued) | Market <br> Area 1 | Market <br> Area 2 | Market <br> Area 3 |
| :--- | :---: | :---: | :---: |
| Prostate Cancer Incidence Rate | Market <br> Area 4 |  |  |
| Female Breast Cancer Incidence Rate |  |  |  |
| Lung Cancer Incidence Rate |  |  |  |
| Colorectal Cancer Incidence Rate |  |  |  |
| \% Cancer |  |  |  |
| \% [Women 50-74] Mammogram in Past 2 Years |  |  |  |
| \% [Women 21-65] Cervical Cancer Screening |  |  |  |


|  | LEE COUNTY vs. BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| County | vs. FL | vs. US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| 84.3 | $\overbrace{94.7}^{\overbrace{3}}$ | $\begin{gathered} v_{1 / 2}^{\prime} \\ 104.1 \end{gathered}$ |  |  |
| 111.1 | $\begin{gathered} \overbrace{3}^{3} \\ 117.5 \end{gathered}$ | $\overbrace{125.2}^{\sqrt{3}}$ |  |  |
| 54.5 | $\underbrace{\underbrace{3}_{3}}_{59.0}$ | $\begin{gathered} \sqrt{3} \\ 59.2 \end{gathered}$ |  |  |
| 29.9 | $36.6$ |  |  |  |
| 13.8 | $\begin{aligned} & \sqrt{3} \\ & 15.6 \end{aligned}$ | $\begin{gathered} \text { 紫: } \\ 10.0 \end{gathered}$ |  |  |
| 81.3 | $\begin{aligned} & \stackrel{\overbrace{3}^{3}}{81.4} \end{aligned}$ | $\begin{aligned} & \sqrt{3} \\ & 76.1 \end{aligned}$ | $\begin{gathered} 81.1 \\ 81 \end{gathered}$ | $\begin{aligned} & 80.1 \\ & 8 \\ & 8 \end{aligned}$ |
| 77.6 | $\begin{gathered} \overbrace{3} \\ 79.4 \end{gathered}$ | $\begin{aligned} & \overbrace{3} \\ & 73.8 \end{aligned}$ | $\begin{gathered} \text { 業: } \\ 93.0 \end{gathered}$ | $\begin{aligned} & \overbrace{3}^{\sqrt{3}} \\ & 81.9 \end{aligned}$ |
| 78.9 | $\begin{aligned} & \\ & 71.0 \end{aligned}$ | $\begin{gathered} \sqrt{3} \\ 77.4 \end{gathered}$ | $\begin{aligned} & \\ & 70.5 \\ & \end{aligned}$ | $\begin{gathered} \overbrace{3} \\ 78.0 \end{gathered}$ |
|  | better | $\underset{\text { similar }}{\mathscr{E}}$ |  |  |

DISPARITY AMONG MARKET AREAS

|  | DISPARITY AMONG MARKET AREAS |  |  |  | Lee County | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DIABETES | Market Area 1 | Market <br> Area 2 | Market Area 3 | Market <br> Area 4 |  | vs．FL | vs．US | $\begin{aligned} & \text { VS. } \\ & \text { HP2020 } \end{aligned}$ | TREND |
| Diabetes（Age－Adjusted Death Rate） |  |  |  |  | 17.5 | $\begin{gathered} \underbrace{3}_{3} \\ \hline 19.8 \end{gathered}$ | $\begin{aligned} & \text { 溢 } \\ & 21.3 \end{aligned}$ | $\begin{aligned} & \text { 㴆 } \\ & 20.5 \end{aligned}$ | $\begin{gathered} \text { 䇣. } \\ 14.0 \end{gathered}$ |
| \％Diabetes／High Blood Sugar | $\begin{aligned} & \sqrt[H]{3} 7 \\ & 10.7 \end{aligned}$ | $\begin{aligned} & \varepsilon_{3} \\ & 16.9 \end{aligned}$ | $\begin{gathered} \sqrt[0]{3} \\ 17.4 \end{gathered}$ | $\begin{gathered} \mathfrak{B} \\ 12.1 \end{gathered}$ | 14.0 | $\begin{gathered} \sqrt[\varepsilon]{3} \\ 12.6 \end{gathered}$ | $\begin{aligned} & \underbrace{}_{3} \\ & 13.8 \end{aligned}$ |  | $\begin{aligned} & \underbrace{}_{3} \\ & 12.5 \end{aligned}$ |
| \％Borderline／Pre－Diabetes | $\begin{aligned} & \text { 浸 } \\ & 6.3 \end{aligned}$ | $\begin{aligned} & \mathscr{B} \\ & 9.0 \end{aligned}$ | $\begin{aligned} & \mathfrak{B} \\ & 8.2 \end{aligned}$ | 等 $12.7$ | 9.2 |  | $\begin{aligned} & \xi \\ & 9.7 \end{aligned}$ |  | $\begin{aligned} & 8.7 \\ & 8 \end{aligned}$ |
| \％［Non－Diabetics］Blood Sugar Tested in Past 3 Years | $\begin{aligned} & \varepsilon_{54.7} \\ & \hline \end{aligned}$ | 60.9 | $\begin{aligned} & \text { 綝. } \\ & 42.6 \end{aligned}$ | $\begin{aligned} & 57.3 \\ & 57 \end{aligned}$ | 53.8 |  |  |  | $\begin{gathered} \text { 称 } \\ 60.9 \end{gathered}$ |
|  | Note：II the section above，each market area is compared against al other areas combined．Throughout these tables，a blank or empty cell indicates inadata are not availiable of this indicictor or that sample sizes are too small to provide meaningful results． |  |  |  |  | 骎 <br> better | $\begin{gathered} \varepsilon \\ \text { similar } \\ \text { ECOUNTT } \\ \text { ENCHMAR } \end{gathered}$ |  |  |
| HEART DISEASE \＆STROKE | Market Area 1 | Market Area 2 | Market <br> Area 3 | Market <br> Area 4 | County | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| Diseases of the Heart（Age－Adjusted Death Rate） |  |  |  |  | 113.9 | $145.0$ |  | $\begin{aligned} & 156.9 \\ & \hline \end{aligned}$ |  |
| Stroke（Age－Adjusted Death Rate） |  |  |  |  | 26.2 |  | 37.3 | $\begin{aligned} & \text { 溢 } \\ & 34.8 \end{aligned}$ | $\begin{aligned} & \approx 3 \\ & 23.2 \end{aligned}$ |
| \％Heart Disease（Heart Attack，Angina，Coronary Disease） | $\begin{aligned} & \mathscr{B} \\ & 7.6 \end{aligned}$ | $\begin{aligned} & \varepsilon_{1} .5 \\ & 11.5 \end{aligned}$ | $\begin{aligned} & \approx 3 \\ & 10.3 \end{aligned}$ | $\begin{aligned} & \sqrt{3} \\ & \hline \end{aligned}$ | 9.1 | $\begin{aligned} & \mathcal{E}^{2} \\ & 8.5 \end{aligned}$ | $\begin{aligned} & \text { 筫. } \\ & 6.1 \end{aligned}$ |  | $$ |
| \％Stroke | $\begin{aligned} & \mathscr{B} \\ & 4.5 \end{aligned}$ | $\begin{aligned} & \text { 䌞 } \\ & 11.1 \end{aligned}$ | $\begin{aligned} & \sqrt[3]{2} \\ & 8.2 \end{aligned}$ | $\begin{aligned} & \text { 渌 } \\ & 2.8 \end{aligned}$ | 6.2 | 螦 | $\begin{aligned} & \sqrt[3]{3} \\ & 4.3 \end{aligned}$ |  | $\begin{aligned} & \text { 鵤 } \\ & 3.9 \end{aligned}$ |
| \％Told Have High Blood Pressure | $\begin{aligned} & \sqrt[\xi]{3} \\ & 41.1 \end{aligned}$ | $\begin{gathered} \text { 纞 } \\ 49.0 \end{gathered}$ | $\begin{array}{r} \mathfrak{\varepsilon} \\ 43.6 \end{array}$ | $\begin{aligned} & \mathfrak{\xi} \\ & 38.8 \end{aligned}$ | 42.7 | $\begin{aligned} & \text { 答 } \\ & 35.4 \end{aligned}$ | $\begin{gathered} \text { 綝. } \\ 36.9 \end{gathered}$ | $\begin{gathered} \text { 㷶. } \\ 26.9 \end{gathered}$ | $\begin{array}{r} \text { 羬 } \\ 36.4 \end{array}$ |

DISPARITY AMONG MARKET AREAS

| HEART DISEASE \＆STROKE（continued） | Market Area 1 | Market Area 2 | Market Area 3 | Market Area 4 |
| :---: | :---: | :---: | :---: | :---: |
| \％Told Have High Cholesterol | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ |
|  | 40.7 | 43.2 | 36.9 | 41.1 |
| \％1＋Cardiovascular Risk Factor | ${ }^{3}$ | 等： | 器 | ${ }^{3}$ |
|  | 88.3 | 91.3 | 82.3 | 85.5 |

Note：In the section above，each market area is compared against al other
areas combined．Throughout these tables，a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results．

DISPARITY AMONG MARKET AREAS

| INFANT HEALTH \＆FAMILY PLANNING | Market <br> Area 1 | Market <br> Area 2 | Market <br> Area 3 |
| :--- | :---: | :---: | :---: | | Market |
| :---: |
| Area 4 |


|  | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| County | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| 40.4 |  | $\begin{gathered} \text { 䓡 } \\ 32.7 \end{gathered}$ | $\begin{aligned} & \text { 繁: } \\ & 13.5 \end{aligned}$ | $\begin{aligned} & \sqrt{3} \\ & 38.5 \end{aligned}$ |
| 86.6 |  | $\begin{aligned} & \sqrt{3} \\ & 84.6 \end{aligned}$ |  | $\begin{gathered} \sqrt{3} \\ 85.1 \end{gathered}$ |
|  | 橖 <br> better | similar |  |  |


| Lee County | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | vs．FL | vs．US | $\begin{aligned} & \text { vs. } \\ & \text { HP2020 } \end{aligned}$ | TREND |
| 31.7 | $\begin{gathered} \text { 䓡: } \\ 26.2 \end{gathered}$ | $\begin{gathered} \text { 蒸 } \\ 227 \end{gathered}$ |  | $\begin{aligned} & \sqrt{3} \\ & 34.5 \end{aligned}$ |
| 8.2 | $\begin{aligned} & \sqrt{3} \\ & 8.7 \end{aligned}$ | $\begin{aligned} & 8.2 \\ & 8.2 \end{aligned}$ | $\begin{aligned} & \sqrt{3} \\ & 7.8 \end{aligned}$ | $\begin{aligned} & \sqrt{3} \\ & 7.8 \end{aligned}$ |
| 5.8 | $\begin{aligned} & \sqrt[3]{3} \\ & 6.1 \end{aligned}$ | $\begin{aligned} & \sqrt{3} \\ & 5.7 \end{aligned}$ | $\overbrace{6.0}^{\overbrace{3}}$ | $\begin{aligned} & \sqrt{3} \\ & 5.4 \end{aligned}$ |
| 6.8 |  |  |  |  |
| 5.7 | $\begin{aligned} & \text { 等 } \\ & 4.8 \end{aligned}$ | $\begin{aligned} & \sqrt{3} \\ & 5.1 \end{aligned}$ |  |  |
|  | better | $\underset{\text { similar }}{2}$ | 䇣 <br> worse |  |

DISPARITY AMONG MARKET AREAS

| INJURY \＆VIOLENCE | Market Area 1 | Market Area 2 | Market Area 3 | Market Area 4 |
| :---: | :---: | :---: | :---: | :---: |
| Motor Vehicle Crashes（Age－Adjusted Death Rate） |  |  |  |  |
| \％Texting While Driving | ${ }^{3}$ | ${ }^{3}$ | 䓡 |  |
|  | 31.1 | 22.3 | 32.9 | 20.8 |
| \％［Child 0－17］＂Always＂Wears Seat Belt／Restraint |  |  |  |  |
| \％［Child 5－17］＂Always＂Wears Helmet on a Bike |  |  |  |  |
| ［65＋］Falls（Age－Adjusted Death Rate） |  |  |  |  |
| \％［Age 45＋］Fell in the Past Year | ${ }^{3}$ | 䓡 | ${ }^{3}$ | ${ }^{3}$ |
|  | 23.8 | 35.0 | 23.4 | 23.0 |
| Firearm－Related Deaths（Age－Adjusted Death Rate） |  |  |  |  |
| \％＂Always＂Use Sunscreen | ${ }^{3}$ |  | ${ }^{3}$ | ${ }^{3}$ |
|  | 18.4 | 10.3 | 17.2 | 18.5 |
| \％Have a Swimming Pool at Home／Apartment | ${ }^{3}$ | 澵年 |  | 镣 |
|  | 49.1 | 39.7 | 41.5 | 70.5 |
| \％［Those w／Pools］Pool Has Safety Features | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ |
|  | 83.0 | 86.7 | 83.5 | 85.8 |
| Unintentional Injury（Age－Adjusted Death Rate） |  |  |  |  |


|  | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| County | vs．FL | vs．US | $\begin{aligned} & \text { vs. } \\ & \text { HP2020 } \end{aligned}$ | TREND |
| 15.8 | $\begin{aligned} & \sqrt{3} \\ & 14.5 \end{aligned}$ | $\begin{gathered} \text { 纆 } \\ 11.5 \end{gathered}$ | $\begin{gathered} \text { 繁: } \\ 12.4 \end{gathered}$ |  |
| 26.8 |  |  |  | $\begin{gathered} \text { 䩞 } \\ 17.3 \end{gathered}$ |
| 87.2 |  | $\begin{aligned} & \sqrt{3} \\ & 85.6 \end{aligned}$ |  | $\underbrace{\overbrace{3}^{2}}_{93.2}$ |
| 42.6 |  | $\underbrace{\sqrt{3}}_{48}$ |  | $\underbrace{\approx}_{33.5}$ |
| 87.2 | $\begin{aligned} & \text { 繁: } \\ & 66.6 \end{aligned}$ | $\begin{gathered} \text { 繁 } \\ 63.4 \end{gathered}$ | $\begin{gathered} \\ 47.0 \end{gathered}$ |  |
| 25.8 |  | $\underbrace{\overbrace{3}^{3}}_{27.5}$ |  | $\underbrace{\underbrace{}_{3}}_{26.9}$ |
| 13.9 | $\begin{gathered} \sqrt[3]{3} \\ 12.6 \end{gathered}$ | $\underbrace{\overbrace{3}^{3}}_{11.9}$ |  |  |
| 16.5 |  |  |  | $\underbrace{\overbrace{3}}_{19.1}$ |
| 51.5 |  |  |  | $\begin{gathered} \text { 敢 } \\ 43.1 \end{gathered}$ |
| 84.8 |  |  |  | $\overbrace{80.2}^{\overbrace{3}}$ |
| 67.7 | $\begin{aligned} & \text { 繁 } \\ & 54.7 \end{aligned}$ | $\begin{gathered} \\ 48.3 \end{gathered}$ | $\begin{gathered} \text { 慜 } \\ 36.4 \end{gathered}$ | $\begin{gathered} \\ 48.9 \end{gathered}$ |

DISPARITY AMONG MARKET AREAS

| INJURY \＆VIOLENCE（continued） | Market <br> Area 1 | Market <br> Area 2 | Market <br> Area 3 | Market <br> Area 4 |
| :--- | :---: | :---: | :---: | :---: |
| Homicide（Age－Adjusted Death Rate） |  |  |  |  |
| Violent Crime Rate |  |  |  |  |
| \％Victim of Violent Crime in Past 5 Years |  |  |  |  |
| \％Victim of Intimate Partner Violence |  |  |  |  |

DISPARITY AMONG MARKET AREAS

| KIDNEY DISEASE | Market <br> Area 1 | Market <br> Area 2 | Market <br> Area 3 | Market <br> Area 4 |
| :--- | :---: | :---: | :---: | :---: |
| Kidney Disease（Age－Adjusted Death Rate） |  |  |  |  |
| \％Kidney Disease |  |  |  |  |


|  | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| County | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| 7.0 | $\underbrace{3}_{6}$ | $\begin{aligned} & \overbrace{3} \\ & 6.1 \end{aligned}$ | $\begin{aligned} & \text { 㭼: } \\ & 5.5 \end{aligned}$ | $\begin{aligned} & \overbrace{3}^{8} \\ & 7.5 \end{aligned}$ |
| 339.7 |  | $400.4$ |  |  |
| 3.4 |  |  |  | $\begin{aligned} & \sqrt{3} \\ & 2.8 \end{aligned}$ |
| 16.3 |  | $\begin{gathered} \sqrt{3} \\ 13.7 \end{gathered}$ |  | $\begin{aligned} & \sqrt[3]{3} \\ & 13.7 \end{aligned}$ |
|  | 浸等 <br> better | $\mathfrak{E}$ <br> similar | 敟 worse |  |


| Lee County | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | vs．FL | vs．US | $\begin{aligned} & \text { vs. } \\ & \text { HP2020 } \end{aligned}$ | TREND |
| 3.6 | 漞 | 棠 |  | 兴 |
|  | 10.0 | 13.0 |  | 7.8 |
| 4.6 | 8 | 8 |  | ${ }_{3}$ |
|  | 3.4 | 5.0 |  | 3.8 |
|  | $\begin{aligned} & \text { better } \\ & \text { beter } \end{aligned}$ | $\underset{\text { similar }}{๕}$ | 絡 <br> worse |  |

DISPARITY AMONG MARKET AREAS

| MENTAL HEALTH | Market <br> Area 1 | Market Area 2 | Market Area 3 | Market <br> Area 4 |
| :---: | :---: | :---: | :---: | :---: |
| \％＂Fair／Poor＂Mental Health | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ |
|  | 16.6 | 16.6 | 19.6 | 15.2 |
| \％Diagnosed Depression | 䓡 | ${ }^{3}$ | ${ }^{3}$ |  |
|  | 26.9 | 21.8 | 21.0 | 15.5 |
| \％Symptoms of Chronic Depression（2＋Years） | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ |
|  | 36.0 | 29.4 | 39.0 | 32.2 |
| \％Typical Day Is＂Extremely／Very＂Stressful | 遂集 | $\sqrt{3}$ | 鴙 | ${ }^{3}$ |
|  | 11.9 | 15.8 | 21.7 | 14.1 |
| Suicide（Age－Adjusted Death Rate） |  |  |  |  |
| Mental Health Providers per 100，000 |  |  |  |  |
| \％Taking Rx／Receiving Mental Health Trtmt |  |  | ${ }^{3}$ | 集 |
|  | 17.6 | 18.3 | 14.7 | 8.8 |
| \％［Those With Diagnosed Depression］Receiving Treatment |  |  |  |  |
| \％Member of HH Sought Mental Health Svcs | ${ }^{3}$ | 等 | ${ }^{3}$ | \％ |
|  | 16.4 | 8.9 | 15.9 | 11.6 |
| \％Member of HH Received Needed Mental Health Svcs |  |  |  |  |
| \％Member of HH Received Mental Health Svcs in Lee County |  |  |  |  |
|  | Note：In the areas combin data are not | above，each le for this indic provide $m$ | area is compa that sample si ful results． | minst all other indicates tha too small to |


| Lee County | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| 16.9 |  | $\begin{gathered} \text { 触: } \\ 13.4 \end{gathered}$ |  | $\begin{aligned} & \text { 㙰 } \\ & 9.2 \end{aligned}$ |
| 21.1 | $\begin{gathered} \text { 䵬: } \\ 15.6 \end{gathered}$ | $\begin{aligned} & \underbrace{}_{3} \\ & 20.6 \end{aligned}$ |  | $\begin{gathered} \text { 䇰 } \\ 17.4 \end{gathered}$ |
| 34.3 |  | $\begin{aligned} & \mathfrak{B} \\ & 30.3 \end{aligned}$ |  | $\begin{aligned} & \text { 答: } \\ & 25.2 \end{aligned}$ |
| 15.7 |  | $\begin{gathered} \underbrace{}_{1} .1 \end{gathered}$ |  | $\begin{gathered} \text { 蝺 } \\ 10.8 \end{gathered}$ |
| 14.8 | $\begin{gathered} 14.4 \end{gathered}$ | $\begin{gathered} \xi 3.9 \\ 13.9 \end{gathered}$ | $\begin{aligned} & \text { 䈢. } \\ & 10.2 \end{aligned}$ | ${ }_{16.8}^{\overbrace{3}}$ |
| 99.7 | $\begin{gathered} \text { 䵲 } \\ 150.1 \end{gathered}$ | $\begin{gathered} \text { 解 } \\ 202.8 \end{gathered}$ |  |  |
| 14.5 |  | $\begin{gathered} \sqrt[3]{3} 8 \\ \hline 168 \end{gathered}$ |  | $\underbrace{\varepsilon_{3}}_{15.5}$ |
| 91.0 |  | $\begin{gathered} \approx \\ 85.4 \end{gathered}$ |  |  |
| 13.4 |  |  |  | $\begin{aligned} & \text { 穌 }^{10.3} \end{aligned}$ |
| 81.8 |  |  |  | $\begin{gathered} \approx 5.0 \\ 85.0 \end{gathered}$ |
| 88.6 |  |  |  | $\underset{86.0}{ }$ |
|  | $\begin{aligned} & \text { 洸䍗 } \\ & \text { better } \end{aligned}$ | $\underset{\text { similar }}{\underset{B}{8}}$ |  |  |

DISPARITY AMONG MARKET AREAS

| NUTRITION，PHYSICAL ACTIVITY \＆WEIGHT | Market Area 1 | Market Area 2 | Market <br> Area 3 | Market Area 4 |
| :---: | :---: | :---: | :---: | :---: |
| Population With Low Food Access（Percent） |  |  |  |  |
| \％＂Very／Somewhat＂Difficult to Buy Fresh Produce | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ |
|  | 17.0 | 22.2 | 22.7 | 15.2 |
| \％5＋Servings of Fruits／Vegetables per Day | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ |
|  | 23.2 | 27.8 | 22.3 | 26.8 |
| \％7＋Sugar－Sweetened Drinks in Past Week | 䓡 | $\overbrace{3}$ | ${ }^{3}$ | 螈 |
|  | 32.7 | 24.9 | 26.2 | 21.8 |
| \％No Leisure－Time Physical Activity | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ |
|  | 25.5 | 27.7 | 21.4 | 21.2 |
| \％Meeting Physical Activity Guidelines | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | $\overbrace{3}$ |
|  | 24.6 | 20.4 | 21.9 | 23.0 |
| \％Child［Age 2－17］Physically Active 1＋Hours per Day |  |  |  |  |
| \％［Child Age 5－17］3＋Hours Daily Screen Time |  |  |  |  |
| Recreation／Fitness Facilities per 100，000 |  |  |  |  |
| \％Healthy Weight（BMI 18．5－24．9） | 䓡 | 䓡 |  |  |
|  | 27.9 | 21.2 | 43.7 | 40.7 |
| \％Overweight（BMI 25＋） | ${ }^{3}$ | 䓡 |  | 魦 |
|  | 68.0 | 77.2 | 54.6 | 57.1 |


|  | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| County | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| 38.2 |  |  |  |  |
| 18.9 |  | $\begin{gathered} 21.1 \end{gathered}$ |  | $21.1$ |
| 25.0 |  | $\begin{gathered} \text { 䋆然 } \\ 32.7 \end{gathered}$ |  | $\begin{gathered} \text { 蒸 } \\ 41.4 \end{gathered}$ |
| 26.5 |  | $\begin{gathered} \sqrt{3} \\ 29.0 \end{gathered}$ |  | $\begin{gathered} 23.4 \\ \overbrace{3} \end{gathered}$ |
| 23.6 | $\begin{aligned} & 26.8 \\ & 26 .{ }^{2} / \end{aligned}$ |  | $\begin{aligned} & 32.6 \\ & 32.6 \\ & \hline \end{aligned}$ | $\begin{aligned} & \overbrace{3} \\ & 26.7 \end{aligned}$ |
| 22.6 | $\begin{aligned} & \overbrace{3} \\ & 20.5 \end{aligned}$ | $\begin{aligned} & \overbrace{\overparen{B}}^{2} \\ & 21.4 \end{aligned}$ | $\begin{aligned} & \sqrt{8} \\ & 20.1 \end{aligned}$ | $\begin{gathered} \text { 篤: } \\ 26.8 \end{gathered}$ |
| 49.0 |  |  |  | $5$ |
| 36.9 |  |  |  | $\underbrace{\overbrace{3}}_{28.7}$ |
| 8.9 | $\begin{gathered} \text { 㸚缶 } \\ 11.1 \end{gathered}$ | $\begin{gathered} \text { 㸚。 } \\ 11.0 \end{gathered}$ |  |  |
| 34.1 | $\begin{gathered} \sqrt{3} \\ 32.2 \end{gathered}$ | $\begin{aligned} & \sqrt{3} \\ & 34.5 \end{aligned}$ | $\begin{gathered} \sqrt{3} \\ 33.9 \end{gathered}$ |  |
| 63.4 | $\begin{gathered} \overbrace{3} \\ 65.9 \end{gathered}$ | $\begin{aligned} & \sqrt{3} \\ & 61.0 \end{aligned}$ |  | $\overbrace{3}^{\sqrt{3}}$ |

DISPARITY AMONG MARKET AREAS

| NUTRITION，PHYSICAL ACTIVITY \＆WEIGHT（cont．） | Market Area 1 | Market Area 2 | Market Area 3 | Market <br> Area 4 |
| :---: | :---: | :---: | :---: | :---: |
| \％Obese（BMI 30＋） | ${ }^{2}$ |  | ${ }^{2}$ | ${ }^{3}$ |
|  | 28.6 | 37.9 | 26.4 | 26.7 |
| \％Children［Age 5－17］Healthy Weight |  |  |  |  |
| \％Children［Age 5－17］Overweight（85th Percentile） |  |  |  |  |
| \％Children［Age 5－17］Obese（95th Percentile） |  |  |  |  |
|  | Note：In the section above，each market area is compared against all other areas combined．Throughout these tables，a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results． |  |  |  |

DISPARITY AMONG MARKET AREAS

| ORAL HEALTH | Market Area 1 | Market <br> Area 2 | Market <br> Area 3 | Market Area 4 |
| :---: | :---: | :---: | :---: | :---: |
| \％Have Dental Insurance | $\overbrace{}^{3}$ |  | 当整 | $\overbrace{3}$ |
|  | 57.1 | 53.5 | 61.1 | 52.2 |
| \％［Age 18＋］Dental Visit in Past Year |  | 繁 | 繁 | 爰 |
|  | 61.0 | 54.1 | 53.6 | 73.9 |
| \％Child［Age 2－17］Dental Visit in Past Year |  |  |  |  |
|  | Note：In the section above，each market area is compared against all other areas combined．Throughout these tables，a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results． |  |  |  |


| Lee County | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | vs．FL | vs．US | $\begin{aligned} & \text { vs. } \\ & \text { HP2020 } \end{aligned}$ | TREND |
| 29.3 | $\begin{aligned} & \hat{G} \\ & 30.7 \end{aligned}$ | $\begin{aligned} & \xi 1.3 \\ & 31 \end{aligned}$ | $$ | $\begin{gathered} \text { 螦: } \\ 23.0 \end{gathered}$ |
| 61.8 |  | $\begin{aligned} & \text { 鯀 } \\ & 47.6 \end{aligned}$ |  |  |
| 24.2 |  | $\begin{aligned} & \mathfrak{B} \\ & 32.3 \end{aligned}$ |  | $\begin{aligned} & y^{\prime \prime},{ }^{\prime \prime} \\ & 46.3 \end{aligned}$ |
| 12.3 |  | $\begin{gathered} \sqrt[3]{2} .0 \\ 16.0 \end{gathered}$ | $\begin{gathered} \overbrace{3} \\ 14.5 \end{gathered}$ | $\begin{aligned} & \text { 滞 } \\ & 31.6 \end{aligned}$ |
|  | $\begin{gathered} \text { 滝 } \\ \text { better } \end{gathered}$ | $\underset{\text { similar }}{0}$ |  |  |


| Lee County | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| 55.9 |  | $\begin{aligned} & \text { 㘈 } \\ & 68.7 \end{aligned}$ |  | 50.0 |
| 61.5 | $\begin{gathered} \text { 繙. } \\ 65.7 \end{gathered}$ | $\begin{aligned} & \mathfrak{B} \\ & 62.0 \end{aligned}$ | $\begin{aligned} & \text { 浸等 } \\ & 49.0 \end{aligned}$ | $$ |
| 75.9 |  | $\begin{aligned} & \sqrt[3]{2} \\ & 72.1 \end{aligned}$ | $\begin{aligned} & \text { 稣 } \\ & 49.0 \end{aligned}$ | $\underset{68.0}{\underbrace{}_{0}}$ |
|  | $\begin{aligned} & \text { 漴 } \\ & \text { better } \end{aligned}$ | $\xi$ <br> similar |  |  |

DISPARITY AMONG MARKET AREAS

| POTENTIALLY DISABLING CONDITIONS | Market Area 1 | Market Area 2 | Market Area 3 | Market Area 4 |
| :---: | :---: | :---: | :---: | :---: |
| \％3＋Chronic Conditions | $\overbrace{}^{3}$ |  | ${ }^{3}$ | ${ }^{3}$ |
|  | 32.4 | 42.2 | 31.8 | 30.9 |
| \％Activity Limitations | 䓡 | ${ }^{3}$ | ${ }^{3}$ |  |
|  | 30.0 | 24.1 | 26.6 | 18.3 |
| Alzheimer＇s Disease（Age－Adjusted Death Rate） |  |  |  |  |
| \％［Age 45＋］Increasing Confusion／Memory Loss in Past Yr | § | 䓡 | ${ }^{3}$ | ${ }^{3}$ |
|  | 14.4 | 17.6 | 10.2 | 10.8 |
| \％Caregiver to a Friend／Family Member | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }_{3}$ |
|  | 29.3 | 27.8 | 27.6 | 33.2 |

Note：In the section above，each market area is compared against all other areas combined．Throughout these tables，a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results．

DISPARITY AMONG MARKET AREAS

| RESPIRATORY DISEASE | Market <br> Area 1 | Market <br> Area 2 | Market <br> Area 3 | Market <br> Area 4 |
| :--- | :---: | :---: | :---: | :---: |
| CLRD（Age－Adjusted Death Rate） |  |  |  |  |
| Pneumonia／Influenza（Age－Adjusted Death Rate） |  |  |  |  |
| \％［Age 65＋］Flu Vaccine in Past Year |  |  |  |  |
| \％［Adult］Asthma | 73.0 | 76.6 | 80.1 | 78.9 |


|  | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| County | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| 33.8 |  | $\begin{aligned} & \sqrt{3} \\ & 32.5 \end{aligned}$ |  |  |
| 24.6 | $\begin{gathered} \text { 煞: } \\ 20.7 \end{gathered}$ | $\begin{aligned} & \sqrt{3} \\ & 24.0 \end{aligned}$ |  | $\overbrace{21.3}^{\overbrace{3}}$ |
| 15.1 |  |  |  | $\begin{gathered} \text { 冓: } \\ 10.3 \end{gathered}$ |
| 13.0 |  | $\begin{gathered} \sqrt{3} \\ 11.2 \end{gathered}$ |  | $14.1$ |
| 29.7 |  | $\begin{gathered} \text { 篜: } \\ 22.6 \end{gathered}$ |  | $\begin{gathered} \text { 等: } \\ 24.1 \end{gathered}$ |
|  | 浸 <br> better | $\mathfrak{B}$ <br> similar | 蟹 worse |  |


|  | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| County | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| 31.6 | $\begin{aligned} & \text { 鯀 } \\ & 38.0 \end{aligned}$ | $\begin{aligned} & \text { 溢 } \\ & 40.4 \end{aligned}$ |  | $\begin{aligned} & \mathfrak{E} \\ & 34.3 \end{aligned}$ |
| 5.9 |  | $\begin{aligned} & \text { 鯀 } \\ & 14.2 \end{aligned}$ |  | $\begin{aligned} & \text { 蝩 } \\ & 6.8 \end{aligned}$ |
| 77.3 |  | $\begin{aligned} & \varepsilon_{3} \\ & 71.0 \end{aligned}$ | $\begin{aligned} & \text { 浸尓 } \\ & 70.0 \end{aligned}$ | $\begin{gathered} \mathfrak{E} \\ 71.8 \end{gathered}$ |
| 9.6 | $\begin{aligned} & \sqrt[3]{3} \\ & 8.7 \end{aligned}$ | $\begin{aligned} & \text { 溢 } \\ & 12.9 \end{aligned}$ |  | $\begin{aligned} & \text { 螎 } \\ & 6.1 \end{aligned}$ |

DISPARITY AMONG MARKET AREAS

| RESPIRATORY DISEASE（continued） | Market <br> Area 1 | Market <br> Area 2 | Market <br> Area 3 | Market <br> Area 4 |
| :--- | :---: | :---: | :---: | :---: |
| \％［Child 0－17］Ever Diagnosed With Asthma |  |  |  |  |
| \％COPD（Lung Disease） |  |  |  |  |

Note：In the section above，each market area is compared against all other
areas combined．Throughout these tables，a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results．

DISPARITY AMONG MARKET AREAS

| SEXUAL HEALTH | Market <br> Area 1 | Market <br> Area 2 | Market <br> Area 3 |
| :--- | :---: | :---: | :---: | | Market |
| :---: |
| Area 4 |


| Lee County | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| 10.2 |  | $\overbrace{14.6}^{\sqrt{3}}$ |  | $\begin{gathered} \sqrt{3} \\ 13.5 \end{gathered}$ |
| 9.2 | $\begin{aligned} & \sqrt{3} \\ & 8.3 \end{aligned}$ | $\begin{aligned} & \text { 繁 } \\ & 6.4 \end{aligned}$ |  | $\sqrt{3}_{10.5}^{\overbrace{3}}$ |
|  | better | similar | $\begin{gathered} \text { 碞 } \\ \text { worse } \end{gathered}$ |  |


| Lee County | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| 2.1 |  | $\begin{aligned} & \mathfrak{r}_{3}^{3} \\ & 2.1 \end{aligned}$ |  |  |
| 334.3 |  | $\overbrace{362.3}^{\overbrace{3}^{2}}$ |  |  |
| 374.1 | $467.4$ |  |  |  |
| 75.6 |  |  |  |  |
|  | 黄 better | $\mathfrak{\xi}$ <br> similar | $\begin{gathered} \text { 糍 } \\ \text { worse } \end{gathered}$ |  |

DISPARITY AMONG MARKET AREAS

| SUBSTANCE ABUSE | Market <br> Area 1 | Market Area 2 | Market Area 3 | Market <br> Area 4 |
| :---: | :---: | :---: | :---: | :---: |
| Cirrhosis／Liver Disease（Age－Adjusted Death Rate） |  |  |  |  |
| \％Excessive Drinker | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ |
|  | 26.8 | 25.8 | 32.7 | 26.4 |
| \％Drinking and Driving in Past Month | $\overbrace{3}$ | 学第 | 速 | ${ }^{3}$ |
|  | 2.3 | 0.1 | 0.0 | 1.8 |
| Unintentional Drug－Related Deaths（Age－Adjusted Death Rate） |  |  |  |  |
| \％Illicit Drug Use in Past Month | 8 | 8 | 黄栄 | ${ }^{3}$ |
|  | 9.2 | 6.1 | 2.9 | 6.1 |
| \％Used an Opioid Drug in Past Year | $\overbrace{}^{3}$ | 螘 | $\overbrace{3}$ | 集年 |
|  | 16.0 | 23.4 | 18.2 | 11.4 |
| \％Used Marijuana in the Past Month | ${ }^{3}$ | ${ }^{3}$ | 蟔 | 檪年 |
|  | 14.8 | 15.7 | 18.5 | 9.4 |
| \％Ever Sought Help for Alcohol or Drug Problem | $\overbrace{}^{3}$ | ${ }^{3}$ | 檪 | ${ }^{3}$ |
|  | 4.7 | 5.1 | 9.6 | 4.8 |
| \％Personally Impacted by Substance Abuse | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ | ${ }^{3}$ |
|  | 37.1 | 39.9 | 36.8 | 34.6 |
|  | Note：In the section above，each market area is compared against all other areas combined．Throughout these tables，a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results． |  |  |  |


| Lee County | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| 12.8 | $\begin{gathered} \underbrace{}_{116} \\ 11.6 \end{gathered}$ | $$ | $\begin{aligned} & \text { 綜. } \\ & 8.2 \end{aligned}$ | $\begin{gathered} E 3 \\ 11.7 \end{gathered}$ |
| 27.9 | $\begin{gathered} \text { 㭼 } \\ 18.2 \end{gathered}$ | $\begin{aligned} & \xi \\ & 27.2 \end{aligned}$ | $\underset{25.4}{\underset{B}{3}}$ | $\begin{gathered} \text { 䇣 } \\ 23.1 \end{gathered}$ |
| 1.2 | $\begin{aligned} & \text { 资等 } \\ & 3 \end{aligned}$ |  |  | $\begin{aligned} & \text { 滞 } \\ & 3.0 \end{aligned}$ |
| 31.4 |  | $\begin{aligned} & \text { 解 } \\ & 18.1 \end{aligned}$ |  | $\begin{gathered} \text { 綡 } \\ 14.9 \end{gathered}$ |
| 6.4 |  | $\begin{aligned} & \text { 䇣 } \\ & 2.0 \end{aligned}$ | $\begin{aligned} & \sqrt[3]{3} \\ & 7.1 \end{aligned}$ | $\begin{aligned} & \text { 筫: } \\ & 1.9 \end{aligned}$ |
| 16.7 |  | $\begin{gathered} \text { 笅 } \\ 12.9 \end{gathered}$ |  |  |
| 14.3 |  | $\begin{aligned} & \text { 犟 } \\ & 8.5 \end{aligned}$ |  | $\begin{aligned} & \text { 㯱 } \\ & 5.4 \end{aligned}$ |
| 6.0 |  | $\begin{aligned} & \sqrt[3]{2} \\ & 5.4 \end{aligned}$ |  | $\begin{aligned} & y_{3}{ }^{\prime \prime} \\ & 3.1 \end{aligned}$ |
| 36.9 |  | $\begin{aligned} & \mathfrak{B} \\ & 35.8 \end{aligned}$ |  | $\underbrace{}_{40.4}$ |
|  | $\begin{gathered} y_{3} \\ \text { better } \end{gathered}$ | $\varepsilon$ <br> similar | 雾 worse |  |

DISPARITY AMONG MARKET AREAS

| TOBACCO USE | Market Area 1 | Market Area 2 | Market Area 3 | Market Area 4 |
| :---: | :---: | :---: | :---: | :---: |
| \％Current Smoker | $\begin{gathered} \text { 簝 } \\ 19.7 \end{gathered}$ | $\begin{aligned} & \overbrace{3}^{3} \\ & 12.5 \end{aligned}$ | $\begin{aligned} & \text { 䖩: } \\ & 22.3 \end{aligned}$ | $\begin{aligned} & \text { 湴 } \\ & 7.1 \end{aligned}$ |
| \％Someone Smokes at Home | ${ }^{3}$ | ${ }^{3}$ | 䓡 | 集学 |
| \％［Household With Children］Someone Smokes in the Home | 14.0 | 11.7 | 16.0 | 3.0 |
| \％［Smokers］Have Quit Smoking 1＋Days in Past Year |  |  |  |  |
| \％Currently Use Vaping Products | ${ }^{3}$ | 集 | 等 | $\sqrt{3}$ |
|  | 6.9 | 6.1 | 15.3 | 8.7 |
| \％Smoke Cigars | 党栄 | $\sqrt{3}^{3}$ | 繁 | 䱐 |
|  | 3.2 | 4.9 | 11.4 | 3.2 |
| \％Use Smokeless Tobacco | ${ }^{3}$ |  | 等 | 浐钲 |
|  | 1.9 | 1.5 | 8.6 | 1.4 |
|  | Note：In the section above，each market area is compared against all other areas combined．Throughout these tables，a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results． |  |  |  |


|  | LEE COUNTY vs． BENCHMARKS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| County | vs．FL | vs．US | $\begin{gathered} \text { vs. } \\ \text { HP2020 } \end{gathered}$ | TREND |
| 15.2 | $\begin{aligned} & \overbrace{3}^{3} \\ & 14.5 \end{aligned}$ | $\overbrace{17}^{\sqrt{3}}$ | $\begin{aligned} & \text { 䇣: } \\ & 12.0 \end{aligned}$ | $\begin{aligned} & \sqrt{3} \\ & 15.6 \end{aligned}$ |
| 10.8 |  | $\begin{aligned} & { }^{2 / 3 / w_{k}} \\ & 14.6 \end{aligned}$ |  | $\begin{gathered} \sqrt{3} \\ 13.3 \end{gathered}$ |
| 14.0 |  | $\begin{aligned} & 17.4 \\ & \overbrace{3} \end{aligned}$ |  |  |
| 52.3 | $\begin{gathered} \overbrace{3} \\ 57.0 \end{gathered}$ | $\underbrace{2}_{4}$ | $\begin{aligned} & \text { 䇴: } \\ & 80.0 \end{aligned}$ | $\overbrace{3}^{2}$ |
| 9.3 | 䓡 <br> 4.3 | $\begin{aligned} & 8.9 \\ & 8 . \end{aligned}$ |  | $\begin{aligned} & \text { 䓡. } \\ & 6.3 \end{aligned}$ |
| 5.6 |  | $\begin{aligned} & \sqrt{3} \\ & 7.5 \end{aligned}$ | $\begin{aligned} & \text { 煞: } \\ & 0.3 \end{aligned}$ | $\begin{aligned} & \sqrt{3} \\ & 4.3 \end{aligned}$ |
| 3.3 | $\begin{aligned} & \overbrace{3}^{3} \\ & 2.9 \end{aligned}$ | $\begin{aligned} & \overbrace{3}^{3} \\ & 4.4 \end{aligned}$ | $\begin{aligned} & \text { 䉆. } \\ & 0.2 \end{aligned}$ | $\begin{aligned} & \sqrt{3} \\ & 2.3 \end{aligned}$ |
|  | better | $\begin{gathered} \tilde{0} \\ \text { similar } \end{gathered}$ |  |  |

## Summary of Key Informant Perceptions

In the Online Key Informant Survey, community stakeholders were asked to rate the degree to which each of 16 health issues is a problem in their own community, using a scale of "major problem," "moderate problem," "minor problem," or "no problem at all." The following chart summarizes their responses; these findings also are outlined throughout this report, along with the qualitative input describing reasons for their concerns. (Note that these ratings alone do not establish priorities for this assessment; rather, they are one of several data inputs considered for the prioritization process described earlier.)

Key Informants: Relative Position of Health Topics as Problems in the Community



## COMMUNITY DESCRIPTION

## POPULATION CHARACTERISTICS

## Total Population

Lee County, the focus of this Community Health Needs Assessment, encompasses 782 square miles and houses a total population of 718,679 residents, according to latest census estimates.

Total Population
(Estimated Population, 2014-2018)

|  | Total <br> Population | Total Land Area <br> (Square Miles) | Population Density <br> (Per Square Mile) |
| :--- | :---: | :---: | :---: |
| Lee County | 718,679 | 782.0 | 919.0 |
| Florida | $20,598,139$ | $53,638.9$ | 384.0 |
| United States | $322,903,030$ | $3,532,068.6$ | 91.4 |

Sources: - US Census Bureau American Community Survey 5-year estimates.

- Retrieved February 2020 from CARES Engagement Network at https://engagementnetwork.org.


## Population Change 2000-2010

A significant positive or negative shift in total population over time impacts health care providers and the utilization of community resources.

Between the 2000 and 2010 US Censuses, the population of Lee County increased by 177,865 persons, or 40.3\%.

BENCHMARK $>$ More than twice the state percentage and four times the US percentage.

Change in Total Population
(Percentage Change Between 2000 and 2010)


Sources: - US Census Bureau Decennial Census (2000-2010).
Notes: - A significant positive or negative shift in total population over time impacts healthcare providers and the utilization of community resources.

This map shows the areas of greatest increase or decrease in population between 2000 and 2010.


## Urban/Rural Population

Urban areas are identified using population density, count, and size thresholds. Urban areas also include territory with a high degree of impervious surface (development). Rural areas are all areas that are not urban.

## Lee County is predominantly urban, with $94.2 \%$ of the population living in areas designated as urban.

BENCHMARK $>$ Higher than the state and especially the US percentages.

# Urban and Rural Population <br> (2010) 



Note the following map, outlining the urban population in Lee County census tracts as of 2010.


## Age

It is important to understand the age distribution of the population, as different age groups have unique health needs that should be considered separately from others along the age spectrum.

In Lee County, $\mathbf{1 8 . 1 \%}$ of the population are children age $\mathbf{0 - 1 7}$; another $54.3 \%$ are age 18 to 64, while $27.6 \%$ are age 65 and older.

BENCHMARK $>$ The senior population in Lee County is proportionally much higher than state and US figures.

# Total Population by Age Groups, Percent (2014-2018) 

- Age 0-17 - Age 18-64 - Age 65+


Sources: - US Census Bureau American Community Survey 5 -year estimates.

- Retrieved February 2020 from CARES Engagement Network at https://engagementnetwork.org.


## Median Age

Lee County is considerably "older" than the state and the nation in that the median age is higher.

Median Age
(2014-2018)


Sources: - US Census Bureau American Community Survey 5-year estimates.

- Retrieved February 2020 from CARES Engagement Network at https://engagementnetwork.org.

The following map provides an illustration of the median age in Lee County, segmented by census tract.


## Race \& Ethnicity

## Race

In looking at race independent of ethnicity (Hispanic or Latino origin), 84.8\% of residents of Lee County are White and 8.6\% are Black.

BENCHMARK $>$ A less diverse population than found statewide and nationally.
Total Population by Race Alone, Percent
(2014-2018)

- White $\quad$ - Black $\quad$ - Some Other Race $\quad$ - Multiple Races
84.8\%


Lee County
75.4\%


FL


US

Sources: - US Census Bureau American Community Survey 5-year estimates.

- Retrieved February 2020 from CARES Engagement Network at https://engagementnetwork.org


## Ethnicity

## A total of $\mathbf{2 0 . 8 \%}$ of Lee County residents are Hispanic or Latino.

BENCHMARK $>$ A lower proportion than report statewide but higher than reported nationally.

Hispanic Population
(2014-2018)

## The Hispanic population

 increased by 71,267 persons, or $169.5 \%$, between 2000 and 2010.

Lee County


FL
17.8\%


US

Sources: - US Census Bureau American Community Survey 5-year estimates.

- Retrieved February 2020 from CARES Engagement Network at https://engagementnetwork.org.

Notes: - Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Hispanic, Latino, or Spanish may be of any race.

## Linguistic Isolation

A total of $5.3 \%$ of the county population age 5 and older live in a home in which no person age 14 or older is proficient in English (speaking only English or speaking English "very well").

BENCHMARK $>$ Higher than the US percentage but lower than the Florida percentage.

Linguistically Isolated Population
(2014-2018)


Sources: - US Census Bureau American Community Survey 5-year estimates.
Notes: - This indicator reports the percentage of the population age $5+$ who live in a home in which no person age $14+$ speaks only English, or in which no person age $14+$ speak a non-English language and speak English "very well."

Note the following map illustrating linguistic isolation throughout Lee County.


## SOCIAL DETERMINANTS OF HEALTH

## ABOUT SOCIAL DETERMINANTS

Health starts in our homes, schools, workplaces, neighborhoods, and communities. We know that taking care of ourselves by eating well and staying active, not smoking, getting the recommended immunizations and screening tests, and seeing a doctor when we are sick all influence our health. Our health is also determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships. The conditions in which we live explain in part why some Americans are healthier than others and why Americans more generally are not as healthy as they could be.

- Healthy People 2020 (www.healthypeople.gov)


## Poverty

The latest census estimate shows $14.0 \%$ of the Lee County total population living below the federal poverty level.

Among just children (ages 0 to 17), this percentage in Lee County is $23.4 \%$ (representing nearly 30,000 children).

BENCHMARK $>$ Worse than the national prevalence of children in poverty.

Population in Poverty
(Populations Living Below the Poverty Level; 2014-2018)


The following maps highlight concentrations of persons living below the federal poverty level.


Map Legend
Population Below the Poverty Level, Report Location, County
Children (Age 0-17), Percent by $\square$
Tract, ACS 2014-18
Over 30.0\%
22.6-30.0\%
15.1-22.5\%

Under 15.1\%
No Population Age 0-17
Reported
No Data or Data Suppressed

## Education

Among the Lee County population age 25 and older, an estimated $12.0 \%$ (over 64,500 people) do not have a high school education.

## Population With No High School Diploma

(Population Age 25+ Without a High School Diploma or Equivalent, 2014-2018)
64,525 individuals


Lee County


FL
12.3\%

US

Sources: - US Census Bureau American Community Survey 5-year estimates.


## Food Access

Low food access is defined as living more than $1 / 2$ mile from the nearest supermarket, supercenter, or large grocery store.

## Low Food Access

US Department of Agriculture data show that $38.2 \%$ of the Lee County population (representing over 236,210 residents) have low food access, meaning that they do not live near a supermarket or large grocery store.

BENCHMARK $>$ Worse than the Florida and US percentages.

## Population With Low Food Access

(Percent of Population That Is Far From a Supermarket or Large Grocery Store, 2015)


Surveyed adults were asked: "Now I am going to read two statements that people have made about their food situation. Please tell me whether each statement was "Often True," "Sometimes True," or "Never True" for you in the past 12 months:

- I worried about whether our food would run out before we got money to buy more.
- The food that we bought just did not last, and we did not have money to get more." Those answering "Often" or "Sometimes True" for either statement are considered to be food insecure.


## Food Insecurity

Overall, $\mathbf{2 5 . 2 \%}$ of community residents are determined to be "food insecure," having run out of food in the past year and/or been worried about running out of food.

DISPARITY $>$ Unfavorably high in Market Area 3. Higher among women, young adults, low-income residents, and communities of color.

## Food Insecurity



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 149]

- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

- Includes adults who A) ran out of food at least once in the past year and/or B) worried about running out of food in the past year.

Food Insecurity
(Lee County, 2020)


[^0]
## Health Literacy

Low health literacy is defined as those respondents who "Seldom/Never" find written or spoken health information easy to understand, and/or who "Always/Nearly Always" need help reading health information, and/or who are "Not At All Confident" in filling out health forms.

## Most surveyed adults in Lee County are found to have a moderate level of health literacy.

Level of Health Literacy
(Lee County, 2020)


$$
\begin{aligned}
& \text { - Low } \\
& \text { - Medium } \\
& \text { - High }
\end{aligned}
$$

Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 172]
Notes:

- Asked of all respondents.
- Respondents with low health literacy are those who "seldom/never" find written or spoken health information easy to understand, and/or who "always/nearly always" need help reading health information, and/or who are "not at all confident" in filling out health forms.


## A total of 23.5\% are determined to have low health literacy.

BENCHMARK $>$ Favorably lower than the US prevalence.
DISPARITY $>$ The prevalence is highest among young adults, low-income residents, and especially Hispanics.

## Low Health Literacy


#### Abstract

Lee County | 21.7\% | 24.4\% | 24.2\% | 23.9\% | 23.5\% | 27.7\% | 24.1\% | 23.5\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| Market Area 1 | Market Area 2 | Market Area 3 | Market Area 4 | Lee County | US | 2017 | 2020 |

Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 172] - 2020 PRC National Health Survey, PRC, Inc

Notes: - Asked of all respondents. - Respondents with low health literacy are those who "seldom/never" find written or spoken health information easy to understand, and/or who "always/nearly always" need help reading health information, and/or who are "not at all confident" in filling out health forms.


## Low Health Literacy

(Lee County, 2020)
 need help reading health information, and/or who are "not at all confident" in filling out health forms.


## HEALTH STATUS

## OVERALL HEALTH STATUS

The initial inquiry of the PRC Community Health Survey asked: Would you say that in general your health is: Excellent, Very Good, Good, Fair, or Poor?"

Most Lee County residents rate their overall health favorably (responding "excellent," "very good," or "good").

Self-Reported Health Status
(Lee County, 2020)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 5]
Notes:

- Asked of all respondents

However, $15.2 \%$ of Lee County adults believe that their overall health is "fair" or "poor." BENCHMARK $>$ Well below the statewide prevalence.

DISPARITY $>$ Unfavorably high among respondents in low-income households.

## Experience "Fair" or "Poor" Overall Health

## Experience "Fair" or "Poor" Overall Health

 (Lee County, 2020)

Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 5]
Notes: - Asked of all respondents.

## MENTAL HEALTH

## ABOUT MENTAL HEALTH \& MENTAL DISORDERS

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society. Mental disorders are health conditions that are characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning. Mental disorders contribute to a host of problems that may include disability, pain, or death. Mental illness is the term that refers collectively to all diagnosable mental disorders. Mental disorders are among the most common causes of disability. The resulting disease burden of mental illness is among the highest of all diseases.

Mental health and physical health are closely connected. Mental health plays a major role in people's ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery.

The existing model for understanding mental health and mental disorders emphasizes the interaction of social, environmental, and genetic factors throughout the lifespan. In behavioral health, researchers identify: risk factors, which predispose individuals to mental illness; and protective factors, which protect them from developing mental disorders. Researchers now know that the prevention of mental, emotional, and behavioral (MEB) disorders is inherently interdisciplinary and draws on a variety of different strategies.

- Healthy People 2020 (www.healthypeople.gov)


## Mental Health Status

"Now thinking about your mental health, which includes stress, depression, and problems with emotions, would you say that, in general, your mental health is: Excellent, Very Good, Good, Fair, or Poor?"


Most Lee County adults rate their overall mental health favorably ("excellent," "very good," or "good").

Self-Reported Mental Health Status
(Lee County, 2020)


Sources
Notes:

- 2020 PRC Community Health Survey, PRC, Inc. [Item 99]
- Asked of all respondents.

However, $16.9 \%$ believe that their overall mental health is "fair" or "poor."
BENCHMARK $>$ Worse than the US prevalence.
TREND $>$ Denotes a statistically significant increase from previous survey results.

## Experience "Fair" or "Poor" Mental Health



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 99]

- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents

## Depression

## Diagnosed Depression

A total of $\mathbf{2 1 . 1 \%}$ of Lee County adults have been diagnosed by a physician as having a depressive disorder (such as depression, major depression, dysthymia, or minor depression).

BENCHMARK $>$ Higher than the Florida prevalence.
TREND $>$ Denotes a statistically significant increase from baseline 2014 survey results.
DISPARITY $>$ Unfavorably high in Market Area 1.

Have Been Diagnosed With a Depressive Disorder


#### Abstract



\footnotetext{ Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 102] - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Florida data. - 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents. - Depressive disorders include depression, major depression, dysthymia, or minor depression. }


## Symptoms of Chronic Depression

A total of $34.3 \%$ of Lee County adults have had two or more years in their lives when they felt depressed or sad on most days, although they may have felt okay sometimes (symptoms of chronic depression).

TREND $>$ Marks a statistically significant increase since 2007.
DISPARITY $>$ The prevalence correlates with age and income and is higher among women and Hispanics in Lee County.

Have Experienced Symptoms of Chronic Depression


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 100]

- 2020 PRC National Health Survey, PRC, Inc

Notes: - Asked of all respondents.

- Chronic depression includes periods of two or more years during which the respondent felt depressed or sad on most days, even if (s)he felt okay sometimes.

Have Experienced Symptoms of Chronic Depression (Lee County, 2020)


## Stress

A majority of surveyed adults characterize most days as no more than "moderately" stressful.


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 101]
Notes: - Asked of all respondents.

In contrast, 15.7\% of Lee County adults feel that most days for them are "very" or "extremely" stressful.

TREND $>$ Marks a statistically significant increase from previous survey findings.
DISPARITY $>$ Unfavorably high in Market Area 3. The prevalence decreases with age and income level and is notably high in the Hispanic population.

## Perceive Most Days As "Extremely" or "Very" Stressful



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 101]

- 2020 PRC National Health Survey, PRC, Inc.

Notes: Asked of all respondents.

## Perceive Most Days as "Extremely" or "Very" Stressful (Lee County, 2020)



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 190]
Notes: - Asked of all respondents.

## Suicide

In Lee County, there were 14.8 suicides per 100,000 population (2016-2018 annual average age-adjusted rate).

BENCHMARK $>$ Fails to satisfy the Healthy People 2020 objective.

## Suicide: Age-Adjusted Mortality

(2016-2018 Annual Average Deaths per 100,000 Population)
Healthy People $2020=10.2$ or Lower


Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.
US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MHMD-1]

- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.


## Suicide: Age-Adjusted Mortality Trends <br> (Annual Average Deaths per 100,000 Population)

|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| _Lee County | 16.8 | 16.8 | 15.5 | 16.6 | 16.9 | 17 | 14.7 | 14.8 |
| FL | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.1 | 14.1 | 14.4 |
| _US | 12.4 | 12.7 | 12.5 | 12.7 | 13.0 | 13.3 | 13.6 | 13.9 |

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.
US Department of Heath and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MHMD-1]
Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.


## Mental Health Treatment

Here, "mental health providers" includes psychiatrists, psychologists, clinical social workers, and counsellors who specialize in mental health care. Note that this indicator only reflects providers practicing in Lee County and residents in Lee County; it does not account for the potential demand for services from outside the area, nor the potential availability of providers in surrounding areas.

## Mental Health Providers

In Lee County in 2017, there were 99.7 mental health providers for every 100,000 population.
BENCHMARK $>$ Well below the state and US proportions.

Access to Mental Health Providers
(Number of Mental Health Providers per 100,000 Population, 2017)


Sources: - University of Wisconsin Population Health Institute, County Health Rankings.
Notes: - This indicator reports the rate of the county population to the number of mental health providers including psychiatrists, psychologists, clinical social workers, and counsellors that specialize in mental health care.

## Currently Receiving Treatment

A total of $14.5 \%$ are currently taking medication or otherwise receiving treatment from a doctor or other health professional for some type of mental health condition or emotional problem.

DISPARITY $>$ Lowest in Market Area 4.

## Currently Receiving Mental Health Treatment

Among respondents ever diagnosed with a depressive disorder, $91.0 \%$ are currently receiving treatment.

| 17.6\% | 18.3\% | 14.7\% | 8.8\% | 14.5\% | 16.8\% | 15.5\% | 14.5\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| Market Area 1 | Market Area 2 | Market Area 3 | Market Area 4 | Lee County | US | 2017 | 2020 |

Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Items 103-104]

- 2020 PRC National Health Survey, PRC, Inc.
Notes: - Asked of all respondents.
- "Treatment" can include taking medications for mental health.


## Household Members Seeking Mental Health Services

A total of $13.4 \%$ of survey respondents indicate that they or a member of their household have sought professional help for a mental health problem in the past vear.

TREND $>$ Lower than found in 2017, but higher than prior findings.
DISPARITY $>$ Lowest in Market Area 2 (not shown).

- Among households seeking care, $81.8 \%$ say they were able to receive the services they needed; this prevalence is down from 2017 findings.
- Among those households receiving the care they needed, $88.6 \%$ received care in Lee County (no significant change from previous findings).


# Member of Household Sought Mental Health Services in the Past Year (Lee County) 

 - 2007 - $2011-2014-2017-2020$

Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltems 322-324]

- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

## Key Informant Input: Mental Health

Nearly three in four key informants taking part in an online survey characterized Mental Health as a "major problem" in the community.

Perceptions of Mental Health
as a Problem in the Community
(Key Informants, 2020)

- Major Problem = Moderate Problem - Minor Problem - No Problem At All

1.9\%

Sources: - PRC Online Key Informant Survey, PRC, Inc
Notes:

- Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

## Access to Care/Services

There are not enough mental health resources, providers in the Lee County community. - Public Health Representative
Lee County just finished a yearlong human service gaps study, and one of the major conclusions is there is a serious shortage of mental health treatment beds in Lee County. - Community Leader
Inpatient and psychiatric care limited. - Community Leader
Getting access to treatment. - Social Services Provider
Lack of treatment resources. The biggest providers tend to be the law enforcement and corrections institutions. Community Leader
Access to more intensive outpatient treatment and access case management. Provide more services to address depression and anxiety that affects a larger percentage of the population. More suicide prevention and crisis response. - Social Services Provider

Access to care and practitioners. Access to inpatient services, especially for pediatric mental health. Coverage of mental health services by insurers, especially lack of psychology services by Florida Medicaid. - Physician
Access to care, continuity of care, difference between youth and adult care. - Community Leader
Access to qualified mental health professionals. Stigma surrounding mental health issues. Lack of mental health professionals for a county the size of Lee. - Public Health Representative
Access to services. - Community Leader
Lee Health has a monopoly on health care. There is no competition among hospitals. - Public Health Representative
Mental health issues are still marginalized by the general public and are not recognized as a true health crisis. Very few preventative services available. - Social Services Provider
There is nowhere for them to go. It's too hard to get court appointed advocates so most wander on the streets until they get arrested and sent to jail. There should be special housing facilities for mentally afflicted people. Social Services Provider
Access to good quality and affordable services. Inpatient treatment facilities for low-income families. - Social Services Provider
Individuals who suffer from mental illness struggle to find affordable treatment. - Social Services Provider
Access to substance abuse and mental health services is getting worse every year. As our population in Florida grows, so does the number of people who need access to these services. However, with flat funding and inflation, the capacity for treatment is diminishing in a growing community. - Social Services Provider
Access to care, proper housing, and in-residence support. - Community Leader
Lack of service availability, lack of insurance coverage. - Public Health Representative
Lack of access to services, transportation, not enough providers that accept insurance. - Community Leader
The lack of availability of resources, facilities, and affordable care options. - Other Health Provider
Absence of resources for inpatient and outpatient treatment. Few psychiatrists and APN practitioners in the community. - Community Leader
Availability of services for adults but more importantly for children. - Community Leader
Limited resources, difficult to access, especially in crisis. Must have a payer source to access. - Other Health Provider
Poor access to inpatient and outpatient psychiatric and addiction care. - Physician

## Denial/Stigma

Getting them into care, the stigmas and myths that go along with mental health are huge barriers to care. Public Health Representative
I think one of the greatest challenges with mental health is that the person needing help will or cannot accept or admit the need. I think families and support systems struggle with how to help the person with the health issue. Community Leader
Community stigma, lack of capacity for treatment and diagnosis especially for children's mental health. Lack of understanding of mental health as a disease. - Social Services Provider
Stigma with seeking services and the ability for providers to recruit and retain staffing necessary to perform services. The ability for individuals to access care as well due to transportation. - Social Services Provider Stigma, lack of health insurance. - Public Health Representative
We still have a long way to go to destigmatize receiving mental health services and an even longer way to go to make quality mental health care available to lower income individuals and those without insurance. Also, the insurance companies play a shell game in showing availability where there really is none that is accepting of their coverage. - Other Health Provider
Stigma, very limited resources and funding. Florida has among the lowest levels of resources of any state in the nation. - Social Services Provider
Public perception (stigma) and acceptance of assistance. For many, they do not recognize that they have an issue; getting someone to accept assistance when they do not believe there is an issue is part of the problem. For some, it is access to services and funding/slots for permanent supportive housing. There are many in our community that are struggling however accessing services appears to be a challenge (transportation, etc.). Social Services Provider
Stigma of mental health, providers that accept most insurances, quality providers, more providers and cost. Social Services Provider

## Lack of Providers

Mental health services are needed from a comprehensive level, which includes local health care providers, law enforcement, and the educational system. - Community Leader
Access to professionals and medications. - Social Services Provider

I don't have specifics, but I am aware that it is a huge problem. Kids Minds Matter has done a great job of showing the need and being able to fundraise to help solve the need. - Community Leader
Money. You can't hire physicians, psychiatrists at government pay scales. We also need to review institutional options for the severely mentally ill, street psychiatric cases. This is a society question. - Physician

Lack of access due to insufficient number of skilled treatment and counseling providers. Lack of providers who are willing to accept insurance and/or the uninsured. In addition, there is a major void of beds available for mental patients. - Community Leader
Mental health providers are limited in this area. Insurance is an issue as are providers who work on a sliding scale. Location of providers is also a problem. - Social Services Provider

There are not enough providers. There are hardly any resources available for youth in general and services are nonexistent outside the public school district. - Public Health Representative
There are not enough treatment providers in Lee County. Even if there were, there is a stigma problem. Many people don't know what poor mental health looks like and how to identify it. If they could identify it, they don't want to get help. - Public Health Representative

## Affordable Care/Services

The lack of affordable services as well as the stigma related to mental health and substance use disorders in Lee County. - Public Health Representative
There is limited access to affordable mental health care in our community. - Social Services Provider
Finding high-quality, affordable care. - Social Services Provider
Affordable and timely access to care, funding to support community providers. - Social Services Provider Lack of affordable care and insurance not covering it. - Community Leader

Low income, inability to seek basic needs and treatment. Again: housing, finance, food, medications, necessities. Lack of continued support for benefit management and medication management. - Social Services Provider
We have so many young people that lack access to mental health as they experience poverty, violence, and isolation as children and teens. - Social Services Provider
Cost of psychiatric care, medications, and counseling. - Other Health Provider
Access to mental health counseling, rehab, facilities. Both in terms of cost and availability. - Community Leader

## Access to Care Uninsured/Underinsured

Minimal to no mental health services available to those without insurance. - Public Health Representative Insurance, ability to pay, expense of medications, housing, transportation, criminal justice involvement. - Social Services Provider
Access to and cost of care for uninsured patients. Coverage challenges for Medicaid patients. - Community Leader
Having a place that will accept them regardless of their ability to pay. Also, the fear of being isolated socially from the community due to anxiety or not knowing how they will react from one moment to the next. - Other Health Provider
There is a lack of mental health facilities throughout Lee County for uninsured and underinsured clients. If clients need these services, they go and pay out of pocket. - Public Health Representative

Lack of access to mental health providers for those without insurance. - Social Services Provider

## Contributing Factors

Housing, access to assisted living environments. They may present as though they are capable of maintaining independent living, but in reality, they soon become homeless. - Social Services Provider
Access to care that is covered by insurance and the need for it to be coordinated with their overall care. Physician
Childhood trauma occurring regularly in low-income communities. Lack of health insurance and cultural stigma to be assessed in the future. Commonly self-medication compounding the issue. - Public Health Representative A big challenge is addiction to nicotine, cigarette smoking, vaping, particularly for youth. The programs that are available are not effective. - Other Health Provider

Looking at child abuse from a public health issue perspective would be insightful. - Social Services Provider

## Lack of Mental Health Providers

Access to trained mental health specialist. - Other Health Provider
Limited number of therapists, psychologist and psychiatrists. - Physician
The lack of mental health providers in Lee County has long been identified as a gap of service. - Other Health
Provider
Very small population of professionals to provide service. - Community Leader
Lack of physicians and other mental health professionals. Lack of insurance coverage and funding for low income families. - Community Leader

## Awareness/Education

Too many people are given various medications for their mental disease and not enough education is given to help these patients with their problem. - Community Leader
The whole system is in disrepair. We need more awareness, less stigma, more prevention programs, insurance parity, navigators to help families, support groups, education classes, day treatment facilities, empathetic and informed medical people, less law enforcement driven practices, more help in the jail, better policies, etc. Community Leader
Misinformation and low income. - Physician

## Prevalence/Incidence

Prevalence is high. - Social Services Provider
The year-in and year-out of hurricanes, red tape, and now the Coronavirus have left the hospital industry economically devastated, which is having a behavioral health impact. - Community Leader
It is a disaster in Lee County. Public investment is one of the lowest in the country. - Community Leader

## Aging Population

Mental health is a growing concern for our elderly, who are living longer, suffering from chronic or terminal illness, and more seniors in isolation. Depression and suicides are increasing. Others with mental illness cannot afford the costs associated with treatment or the medications. - Social Services Provider

## Diagnosis/Treatment

Mental health is an illness that is not easily treatable. First the individual has to want to be helped. The lack of funds and help that is available is very limited. - Community Leader


## LEADING CAUSES OF DEATH

## Distribution of Deaths by Cause

Together, heart disease and cancers accounted for almost half of all deaths in Lee County in 2018.


Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.
Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Lung disease is CLRD, or chronic lower respiratory disease.


## Age-Adjusted Death Rates for Selected Causes

## AGE-ADJUSTED DEATH RATES

In order to compare mortality in the region with other localities (in this case, Florida and the United States), it is necessary to look at rates of death - these are figures which represent the number of deaths in relation to the population size (such as deaths per 100,000 population, as is used here).

Furthermore, in order to compare localities without undue bias toward younger or older populations, the common convention is to adjust the data to some common baseline age distribution. Use of these "age-adjusted" rates provides the most valuable means of gauging mortality against benchmark data, as well as Healthy People 2020 objectives.

For infant mortality data see Birth Outcomes \& Risks in the Births section of this report.

The following chart outlines 2016-2018 annual average age-adjusted death rates per 100,000 population for selected causes of death in Lee County.

Each of these is discussed in greater detail in subsequent sections of this report.

Age-Adjusted Death Rates for Selected Causes (2016-2018 Deaths per 100,000 Population)

|  | Lee County | Florida | US | HP2020 |
| :--- | :---: | :---: | :---: | :---: |
| Malignant Neoplasms (Cancers) | 128.2 | 144.8 | 152.5 | 161.4 |
| Diseases of the Heart | 113.9 | 145.0 | 164.7 | $156.9^{*}$ |
| Fall-Related Deaths (65+) | 87.2 | 66.6 | 63.4 | 47.0 |
| Unintentional Injuries | 67.7 | 54.7 | 48.3 | 36.4 |
| Chronic Lower Respiratory Disease (CLRD) | 31.6 | 38.0 | 40.4 | n/a |
| Drug-Induced | 31.4 | 21.8 | 18.1 | 11.3 |
| Cerebrovascular Disease (Stroke) | 26.2 | 38.6 | 37.3 | 34.8 |
| Diabetes Mellitus | 17.5 | 19.8 | 21.3 | $20.5^{*}$ |
| Motor Vehicle Deaths | 15.8 | 14.5 | 11.5 | 12.4 |
| Alzheimer's Disease | 15.1 | 20.5 | 30.6 | n/a |
| Intentional Self-Harm (Suicide) | 14.8 | 14.4 | 13.9 | 10.2 |
| Firearm-Related | 13.9 | 12.6 | 11.9 | 9.3 |
| Cirrhosis/Liver Disease | 12.8 | 11.6 | 10.9 | 8.2 |
| Homicide | 7.0 | 6.6 | 6.1 | 5.5 |
| Pneumonia/lnfluenza | 5.9 | 9.5 | 14.2 | n/a |
| Kidney Diseases | 3.6 | 10.0 | 13.0 | n/a |

[^1]
## CARDIOVASCULAR DISEASE

## ABOUT HEART DISEASE \& STROKE

Heart disease is the leading cause of death in the United States, with stroke following as the third leading cause. Together, heart disease and stroke are among the most widespread and costly health problems facing the nation today, accounting for more than $\$ 500$ billion in health care expenditures and related expenses in 2010 alone. Fortunately, they are also among the most preventable.

The leading modifiable (controllable) risk factors for heart disease and stroke are:

- High blood pressure
- High cholesterol
- Cigarette smoking
- Diabetes
- Poor diet and physical inactivity
- Overweight and obesity

The risk of Americans developing and dying from cardiovascular disease would be substantially reduced if major improvements were made across the US population in diet and physical activity, control of high blood pressure and cholesterol, smoking cessation, and appropriate aspirin use.

The burden of cardiovascular disease is disproportionately distributed across the population. There are significant disparities in the following based on gender, age, race/ethnicity, geographic area, and socioeconomic status:

- Prevalence of risk factors
- Access to treatment
- Appropriate and timely treatment
- Treatment outcomes
- Mortality

Disease does not occur in isolation, and cardiovascular disease is no exception. Cardiovascular health is significantly influenced by the physical, social, and political environment, including: maternal and child health; access to educational opportunities; availability of healthy foods, physical education, and extracurricular activities in schools; opportunities for physical activity, including access to safe and walkable communities; access to healthy foods; quality of working conditions and worksite health; availability of community support and resources; and access to affordable, quality health care.

- Healthy People 2020 (www.healthypeople.gov)


## Age-Adjusted Heart Disease \& Stroke Deaths

## Heart Disease Deaths

The greatest share of cardiovascular deaths is attributed to heart disease.

## Between 2016 and 2018, there was an annual average age-adjusted heart disease mortality rate of 113.9 deaths per 100,000 population in Lee County.

BENCHMARK $>$ Well below the state and US rates.
TREND $>$ Decreasing over time, echoing state and national trends.

Heart Disease: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population)

Healthy People $2020=156.9$ or Lower (Adjusted)


Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020 .
US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-2]

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-2]
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
- The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

Heart Disease: Age-Adjusted Mortality Trends
(Annual Average Deaths per 100,000 Population)
Healthy People $2020=156.9$ or Lower (Adjusted)


|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| —Lee County | 142.2 | 138.6 | 137.7 | 136.0 | 139.4 | 132.3 | 124.7 | 113.9 |
| —FL | 159.7 | 156.1 | 152.0 | 151.4 | 150.3 | 149.1 | 147.3 | 145.0 |
| —US | 195.1 | 190.7 | 171.1 | 168.9 | 168.4 | 167.0 | 166.3 | 164.7 |

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-2]

Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
- The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.


## Stroke Deaths

Between 2016 and 2018, there was an annual average age-adjusted stroke mortality rate of 26.2 deaths per 100,000 population in Lee County.

BENCHMARK $>$ Well below state and US death rates.

Stroke: Age-Adjusted Mortality
(2016-2018 Annual Average Deaths per 100,000 Population)
Healthy People $2020=34.8$ or Lower


Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-3]

Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Stroke: Age-Adjusted Mortality Trends<br>(Annual Average Deaths per 100,000 Population)

Healthy People $2020=34.8$ or Lower
$\qquad$

|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| _Lee County | 23.2 | 21.7 | 20.9 | 21.1 | 21.1 | 21.7 | 25.0 | 26.2 |
| FL | 32.5 | 31.7 | 30.9 | 31.4 | 33.6 | 35.8 | 37.8 | 38.6 |
| _US | 42.3 | 41.2 | 36.8 | 36.3 | 36.8 | 37.1 | 37.5 | 37.3 |

[^2]
## Prevalence of Heart Disease \& Stroke

## Prevalence of Heart Disease

A total of $9.1 \%$ of surveyed adults report that they suffer from or have been diagnosed with heart disease, such as coronary heart disease, angina, or heart attack.

BENCHMARK $>$ Worse than the US prevalence.
DISPARITY $>$ The prevalence increases with age among survey respondents.

Prevalence of Heart Disease

Lee County


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 128]

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Florida data
- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

- Includes diagnoses of heart attack, angina, or coronary heart disease.


## Prevalence of Stroke

A total of $6.2 \%$ of surveyed adults report that they suffer from or have been diagnosed with cerebrovascular disease (a stroke).

BENCHMARK $>$ Higher than the state prevalence.
TREND $>$ Marks a statistically significant increase since 2007.
DISPARITY $>$ Unfavorably high in Market Area 2.


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [tem 33]

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Florida data.
- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

## Cardiovascular Risk Factors

## ABOUT CARDIOVASCULAR RISK

Controlling risk factors for heart disease and stroke remains a challenge. High blood pressure and cholesterol are still major contributors to the national epidemic of cardiovascular disease. High blood pressure affects approximately 1 in 3 adults in the United States, and more than half of Americans with high blood pressure do not have it under control. High sodium intake is a known risk factor for high blood pressure and heart disease, yet about $90 \%$ of American adults exceed their recommendation for sodium intake.

Healthy People 2020 (www.healthypeople.gov)

## Blood Pressure \& Cholesterol

## A total of $42.7 \%$ of Lee County adults have been told at some point by a health professional that their blood pressure was high.

BENCHMARK $>$ Well above the state and US figures. Fails to satisfy the Healthy People 2020 objective.

TREND $>$ Marks a statistically significant increase from 2007 survey findings.
DISPARITY $>$ Unfavorably high in Market Area 2 (not shown).

A total of $40.4 \%$ of adults have been told by a health professional that their cholesterol level was high.

BENCHMARK $>$ Worse than the US prevalence. Fails to meet the Healthy People 2020 goal.

Prevalence of High Blood Pressure<br>Healthy People $2020=26.9 \%$ or Lower

Prevalence of High Blood Cholesterol<br>Healthy People $2020=13.5 \%$ or Lower



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 41, 44, 129, 130

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2017 Florida data.
- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objectives HDS-5.1, HDS-7]


## Prevalence of High Blood Pressure <br> (Lee County) Healthy People $2020=26.9 \%$ or Lower

| 2007 | 2011 | 2014 | 2017 | 2020 | 2007 | 2011 | 2014 | 2017 | 2020 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Sources: • 2020 PRC Community Health Survey, PRC, Inc. [ltems 129, 130]

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.heathypeople.gov [Objectives HDS-5.1, HDS-7]

Notes: - Asked of all respondents.

## Total Cardiovascular Risk

Total cardiovascular risk reflects the individual-level risk factors which put a person at increased risk for cardiovascular disease, including:

- High Blood Pressure
- High Blood Cholesterol
- Cigarette Smoking
- Physical Inactivity
- Overweight/Obesity

Modifying these behaviors and adhering to treatment for high blood pressure and cholesterol are critical both for preventing and for controlling cardiovascular disease.

A total of $86.6 \%$ of Lee County adults report one or more cardiovascular risk factors, such as being overweight, smoking cigarettes, being physically inactive, or having high blood pressure or cholesterol.

DISPARITY $>$ Highest in Market Area 2. The prevalence is notably high among adults age 40+ and people in non-Hispanic communities of color.

Present One or More Cardiovascular Risks or Behaviors


[^3]Present One or More Cardiovascular Risks or Behaviors (Lee County, 2020)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 131]
Notes: - Reflects all respondents.

- Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) high blood pressure; 4) high blood cholesterol; and/or 5) being overweight/obese.


## Key Informant Input: Heart Disease \& Stroke

The greatest share of key informants taking part in an online survey characterized Heart Disease \& Stroke as a "moderate problem" in the community.

Perceptions of Heart Disease and Stroke
as a Problem in the Community
(Key Informants, 2020)


Sources: - PRC Online Key Informant Survey, PRC, Inc.
Notes:
Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

## Prevalence/Incidence

From previous health assessments there is a significant number of community members who do not exercise regularly, significant obesity. Knowledge of nutritious foods for communities that are of a low socioeconomic status - also the ability for these communities to pay for health foods. - Social Services Provider
Prevalence is high. - Social Services Provider
Cardiovascular issues are prevalent in our community and the access to transplants is very low. We have to send people out of southwest Florida to be helped. I also think lifestyle and diet play a big role in the problem. Education needs to be a big part of the role in prevention. - Community Leader
Nothing sophisticated here. I'll bet the cardiac care units are full most of the time. - Community Leader
Again, the higher average age in the community reveal a larger number of heart related issues. - Community Leader
Leading cause of death. - Public Health Representative

## Aging Population

Again, the increase number of baby boomers that have high prevalence and incidence of high blood pressure and as a result, heart diseases. In addition, obesity is a public health issue affecting our populations. - Public Health Representative

Large amount of people over 65 in our area. - Community Leader
The community is an aging population with increasing numbers for heart disease and strokes. There are very limited resources on Sanibel-Captiva. Those needing assistance often have transportation issues. - Social Services Provider
Due to the population that resides here, ages 50 to 90 . Many are on limited income and lack the resources or assistance in learning what they are in order to educate themselves to be healthier or do better. - Community Leader

## Awareness/Education

Lack of knowledge that hypertension and high cholesterol are directly connected to heart disease and stroke. Also, lack of knowledge of the proper nutrition when a diagnosis is made. Because one cannot feel these health issues, they do not understand the devastation they can cause. - Other Health Provider

Misinformation, non-educated patients, noncompliance. - Physician
Educate the community about a healthy lifestyle. Inability to perform low-cost blood test and evaluation to all clients. - Public Health Representative
Lack of education on prevention and early detection and access to care. - Public Health Representative

Heart disease and stroke are major problems in Lee County because they are the result of not living a healthy lifestyle. Many people in Lee County are making poor lifestyle choices resulting in higher rates of heart and circulation problems. - Public Health Representative

Poor lifestyle choices. - Community Leader
Lifestyle and prevention. - Social Services Provider

## Contributing Factors

Lack of regular exercise, high fat diets. - Public Health Representative
Lack of primary care. - Community Leader
Lee County continues to struggle with obesity issues which is a major contributor to chronic disease such as heart disease and stroke. - Community Leader

## Access to Care/Services

Limited appointment times with primary care practices, challenging access to specialty care. Poor long-term care options. - Other Health Provider

There is a lack of access to stroke prevention, integrative and holistic approaches for stroke recovery. - Other Health Provider

## Access to Care for Uninsured/Underinsured

We have a number of uninsured adults below the poverty level that do not have access to care beyond the emergency room. - Social Services Provider
It can be a challenge to get the uninsured and/or Medicaid patients. - Community Leader

## CANCER

## ABOUT CANCER

Continued advances in cancer research, detection, and treatment have resulted in a decline in both incidence and death rates for all cancers. Among people who develop cancer, more than half will be alive in five years. Yet, cancer remains a leading cause of death in the United States, second only to heart disease.

Many cancers are preventable by reducing risk factors such as: use of tobacco products; physical inactivity and poor nutrition; obesity; and ultraviolet light exposure. Other cancers can be prevented by getting vaccinated against human papillomavirus and hepatitis B virus. In the past decade, overweight and obesity have emerged as new risk factors for developing certain cancers, including colorectal, breast, uterine corpus (endometrial), and kidney cancers. The impact of the current weight trends on cancer incidence will not be fully known for several decades. Continued focus on preventing weight gain will lead to lower rates of cancer and many chronic diseases.

Screening is effective in identifying some types of cancers (see US Preventive Services Task Force [USPSTF] recommendations), including:

- Breast cancer (using mammography)
- Cervical cancer (using Pap tests)
- Colorectal cancer (using fecal occult blood testing, sigmoidoscopy, or colonoscopy)
- Healthy People 2020 (www.healthypeople.gov)


## Age-Adjusted Cancer Deaths

## All Cancer Deaths

Between 2016 and 2018, there was an annual average age-adjusted cancer mortality rate of 128.2 deaths per 100,000 population in Lee County.

BENCHMARK $>$ Below the US rate and satisfying the Healthy People 2020 goal.

Cancer: Age-Adjusted Mortality
(2016-2018 Annual Average Deaths per 100,000 Population)
Healthy People $2020=161.4$ or Lower


Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-1]

Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Cancer: Age-Adjusted Mortality Trends
(Annual Average Deaths per 100,000 Population)
Healthy People $2020=161.4$ or Lower

|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lee County | 145.8 | 143.7 | 142.5 | 140.5 | 139.5 | 135.4 | 131.2 | 128.2 |
| FL | 164.5 | 161.9 | 158.6 | 155.9 | 153.1 | 150.1 | 147.8 | 144.8 |
| US | 176.8 | 173.3 | 165.1 | 162.5 | 161.0 | 158.5 | 155.6 | 152.5 |

[^4]
## Cancer Deaths by Site

Lung cancer is by far the leading cause of cancer deaths in Lee County.
BENCHMARK
LUNG CANCER $>$ Satisfies the Healthy People 2020 objective.
FEMALE BREAST CANCER $>$ Lower than the national rate. Satisfies the Healthy People 2020 objective.

PROSTATE CANCER $>$ Lower than both state and national rates. Satisfies the Healthy People 2020 objective.

COLORECTAL CANCER $>$ Lower than both state and national rates. Satisfies the Healthy People 2020 objective.

| Age-Adjusted Cancer Death Rates by Site <br> (2016-2018 Annual Average Deaths per 100,000 Population) |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Lee County | Florida | US | HP2020 |
| ALL CANCERS | 128.2 | 144.8 | 152.5 | 161.4 |
| Lung Cancer | 31.9 | 35.6 | 36.6 | 45.5 |
| Female Breast Cancer | 16.9 | 18.5 | 19.9 | 20.7 |
| Prostate Cancer | 12.8 | 16.5 | 18.9 | 21.8 |
| Colorectal Cancer | 10.7 | 13.1 | 13.7 | 14.5 |

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov


## Cancer Incidence

"Incidence rate" or "case rate" is the number of newly diagnosed cases in a given population in a given year, regardless of outcome. These rates are also age-adjusted. It is usually expressed as cases per 100,000 population per year.

The highest cancer incidence rates are for breast cancer in women and prostate cancer in men.

BENCHMARK
PROSTATE CANCER $>$ Lower than the national rate.
COLORECTAL CANCER $>$ Lower than both the state and national rates.

## Cancer Incidence Rates by Site

(Annual Average Age-Adjusted Incidence per 100,000 Population, 2012-2016)


## Prevalence of Cancer

A total of $13.8 \%$ of surveyed Lee County adults report having ever been diagnosed with cancer. The most common types include skin, breast, prostate, and lung cancers.

BENCHMARK $>$ Worse than the US prevalence.
DISPARITY $>$ Favorably lower in Market Area 3. The prevalence of cancer in Lee County increases with age and is much higher among Whites.

Prevalence of Cancer


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltems 307-308]

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Florida data
- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Reflects all respondents.

## Prevalence of Cancer

(Lee County, 2020)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 307]
Notes

- Reflects all respondents.


## ABOUT CANCER RISK

Reducing the nation's cancer burden requires reducing the prevalence of behavioral and environmental factors that increase cancer risk.

- All cancers caused by cigarette smoking could be prevented. At least one-third of cancer deaths that occur in the United States are due to cigarette smoking.
- According to the American Cancer Society, about one-third of cancer deaths that occur in the United States each year are due to nutrition and physical activity factors, including obesity.
- National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention


## RELATED ISSUE

See also Nutrition Physical Activity, Weight Status, and Tobacco Use in the Modifiable Health Risks section of this report.

## Cancer Screenings

The American Cancer Society recommends that both men and women get a cancer-related checkup during a regular doctor's checkup. It should include examination for cancers of the thyroid, testicles, ovaries, lymph nodes, oral cavity, and skin, as well as health counseling about tobacco, sun exposure, diet and nutrition, risk factors, sexual practices, and environmental and occupational exposures.
Screening levels in the community were measured in the PRC Community Health Survey relative to three cancer sites: female breast cancer (mammography); cervical cancer (Pap smear/HPV testing); and colorectal cancer (colonoscopy/sigmoidoscopy and fecal occult blood testing).

## FEMALE BREAST CANCER

The US Preventive Services Task Force (USPSTF) recommends biennial screening mammography for women aged 50 to 74 years.

## CERVICAL CANCER

The US Preventive Services Task Force (USPSTF) recommends screening for cervical cancer every 3 years with cervical cytology alone in women aged 21 to 29 years. For women aged 30 to 65 years, the USPSTF recommends screening every 3 years with cervical cytology alone, every 5 years with high-risk human papillomavirus (hrHPV) testing alone, or every 5 years with hrHPV testing in combination with cytology (cotesting). The USPSTF recommends against screening for cervical cancer in women who have had a hysterectomy with removal of the cervix and do not have a history of a high-grade precancerous lesion (i.e., cervical intraepithelial neoplasia [CIN] grade 2 or 3 ) or cervical cancer.

## COLORECTAL CANCER

The US Preventive Services Task Force (USPSTF) recommends screening for colorectal cancer starting at age 50 years and continuing until age 75 years.

- US Preventive Services Task Force, Agency for Healthcare Research and Quality, US Department of Health \& Human Services

Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

[^5]Among women age 50-74, 81.3\% have had a mammogram within the past 2 years.
DISPARITY $\downarrow$ Lowest in Market Area 2 (not shown).

## Among Lee County women age 21 to $65,77.6 \%$ have had appropriate cervical cancer screening.

BENCHMARK $>$ Fails to satisfy the Healthy People 2020 objective.

## Among all adults age 50-75, 78.9\% have had appropriate colorectal cancer screening.

BENCHMARK $>$ Well above the state prevalence. Satisfies the Healthy People 2020 objective.

## Cancer Screenings

"Appropriate colorectal cancer screening" includes a fecal occult blood test within the past year and/or a lower endoscopy (sigmoidoscopy or colonoscopy) within the past 10 years.

Breast Cancer Screening (Women Age 50-74)
Healthy People $2020=81.1 \%$ or Higher


Cervical Cancer Screening
(Women Age 21-65)
Healthy People $2020=93.0 \%$ or Higher


Colorectal Cancer Screening
(All Adults Age 50-75)
Healthy People $2020=70.5 \%$ or Higher


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Items 133, 334, 137]

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Florida data.
- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objectives C-15, C-16, C-17]

Notes: - Each indicator is shown among the gender and/or age group specified

## Cancer Screenings: Lee County Trends

| Breast Cancer Screening |
| :--- |
| (Women Age 50-74) |

Healthy People $2020=81.1 \%$ or Higher
$\mathbf{8 0 . 1 \%} \quad \mathbf{8 1 . 4 \%} \quad \mathbf{7 8 . 5 \%} \quad \mathbf{8 1 . 7 \%} \quad \mathbf{8 1 . 3 \%}$

Colorectal Cancer Screening (All Adults Age 50-75)
Healthy People $2020=70.5 \%$ or Higher
$78.0 \% \quad 78.2 \% \quad 78.9 \%$

| 2007 | 2011 | 2014 | 2017 | 2020 | 2007 | 2011 | 2014 | 2017 | 2020 | 2014 | 2017 | 2020 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Sources: • 2020 PRC Community Heath Survey, PRC, Inc. [ltems 133, 134, 137]

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objectives C-15, C-16, C-17]

Notes: - Each indicator is shown among the gender and/or age group specified.

## Key Informant Input: Cancer

## Over half of key informants taking part in an online survey characterized Cancer as a "moderate problem" in the community.

# Perceptions of Cancer <br> as a Problem in the Community <br> (Key Informants, 2020) 

- Major Problem = Moderate Problem " Minor Problem " No Problem At All


Sources: - PRC Online Key Informant Survey, PRC, Inc.
Notes: - Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

## Prevalence/Incidence

I have known many people who have cancer and/or have died from the disease. There are facilities specializing in cancer treatment. - Social Services Provider
It touches just about everyone's life in some way or another. High quality care in this community is limited. Most people I know go to other cities and large cancer centers to receive care. - Social Services Provider
I see it every day and it does not discriminate in age, ethnicity, and so on. - Community Leader
Cancers are on the rise throughout the community without boundaries of age, gender, ethnicity, and economics. Availability of good care is inadequate and expensive. - Social Services Provider
While the age-adjusted death rate of all cancers has declined, the number of people that die from cancer has been increasing steadily. The only reason the rate has declined is due the growth in the population increasing the denominator thus decreasing the rate. - Public Health Representative
This is one of the leading causes of death among the population. - Public Health Representative
It is a major problem nationwide. - Other Health Provider
Many people are diagnosed with cancer on a daily basis. - Community Leader
I think cancer is a major problem in most communities. It is probably accurate to say that cancer touches every family in our community. - Community Leader

## Contributing Factors

Lack of funding and health care coverage means inadequate care and prescription coverage if on Medicaid or uninsured. - Community Leader
Consolidated practices limit patient choice, pharma links to practices also limit treatment choices. - Other Health Provider
Late diagnosis because people can't access care or preventive care. - Public Health Representative
No insurance, misinformation, low education. - Physician
Smoking, obesity, lack of movement. - Social Services Provider

## Aging Population

Simply due to the age factor in our community and the greater likelihood of the older population being affected. Community Leader
Due to the high percentage of senior citizens. - Community Leader

## RESPIRATORY DISEASE

## ABOUT ASTHMA \& COPD

Asthma and chronic obstructive pulmonary disease (COPD) are significant public health burdens. Specific methods of detection, intervention, and treatment exist that may reduce this burden and promote health.

Asthma is a chronic inflammatory disorder of the airways characterized by episodes of reversible breathing problems due to airway narrowing and obstruction. These episodes can range in severity from mild to life threatening. Symptoms of asthma include wheezing, coughing, chest tightness, and shortness of breath. Daily preventive treatment can prevent symptoms and attacks and enable individuals who have asthma to lead active lives.

COPD is a preventable and treatable disease characterized by airflow limitation that is not fully reversible. The airflow limitation is usually progressive and associated with an abnormal inflammatory response of the lung to noxious particles or gases (typically from exposure to cigarette smoke). Treatment can lessen symptoms and improve quality of life for those with COPD.

The burden of respiratory diseases affects individuals and their families, schools, workplaces, neighborhoods, cities, and states. Because of the cost to the health care system, the burden of respiratory diseases also falls on society; it is paid for with higher health insurance rates, lost productivity, and tax dollars. Annual health care expenditures for asthma alone are estimated at $\$ 20.7$ billion.

Asthma. The prevalence of asthma has increased since 1980. However, deaths from asthma have decreased since the mid-1990s. The causes of asthma are an active area of research and involve both genetic and environmental factors.

Risk factors for asthma currently being investigated include:

- Having a parent with asthma
- Sensitization to irritants and allergens
- Respiratory infections in childhood
- Overweight

Asthma affects people of every race, sex, and age. However, significant disparities in asthma morbidity and mortality exist, in particular for low-income and minority populations. Populations with higher rates of asthma include: children; women (among adults) and boys (among children); African Americans; Puerto Ricans; people living in the Northeast United States; people living below the Federal poverty level; and employees with certain exposures in the workplace.

While there is not a cure for asthma yet, there are diagnoses and treatment guidelines that are aimed at ensuring that all people with asthma live full and active lives.

- Healthy People 2020 (www.healthypeople.gov)


## Age-Adjusted Respiratory Disease Deaths

## Chronic Lower Respiratory Disease Deaths (CLRD)

Note: Chronic lower respiratory disease (CLRD) includes lung diseases such as emphysema, chronic bronchitis, and asthma.

Between 2016 and 2018, there was an annual average age-adjusted lung disease mortality rate of 31.6 deaths per 100,000 population in Lee County.

BENCHMARK $>$ Well below state and US rates.

CLRD: Age-Adjusted Mortality
(2016-2018 Annual Average Deaths per 100,000 Population)


Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.
Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
- CLRD is chronic lower respiratory disease.

CLRD: Age-Adjusted Mortality Trends
(Annual Average Deaths per 100,000 Population)

|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| _Lee County | 34.3 | 32.7 | 32.7 | 32.8 | 32.5 | 31.1 | 32.3 | 31.6 |
| FL | 39.6 | 39.0 | 38.9 | 38.8 | 38.8 | 38.1 | 38.5 | 38.0 |
| US | 46.8 | 46.6 | 42.2 | 41.6 | 41.4 | 40.9 | 41.0 | 40.4 |

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.
Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
- CLRD is chronic lower respiratory disease


## Pneumonia/Influenza Deaths

Between 2016 and 2018, Lee County reported an annual average age-adjusted pneumonia influenza mortality rate of 5.9 deaths per 100,000 population.

BENCHMARK $>$ Well below the Florida and US rates.
TREND $>$ Slight increases in recent years.

Pneumonia/Influenza: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population)


Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020
Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Pneumonia/Influenza: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)


[^6]Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.


## Influenza \& Pneumonia Vaccination

## ABOUT INFLUENZA \& PNEUMONIA

Acute respiratory infections, including pneumonia and influenza, are the 8th leading cause of death in the nation, accounting for 56,000 deaths annually. Pneumonia mortality in children fell by $97 \%$ in the last century, but respiratory infectious diseases continue to be leading causes of pediatric hospitalization and outpatient visits in the US. On average, influenza leads to more than 200,000 hospitalizations and 36,000 deaths each year. The 2009 H1N1 influenza pandemic caused an estimated 270,000 hospitalizations and 12,270 deaths (1,270 of which were of people younger than age 18) between April 2009 and March 2010.

- Healthy People 2020 (www.healthypeople.gov)

Among Lee County adults age 65 and older, $77.3 \%$ received a flu vaccination within the past year.

BENCHMARK $>$ Much higher than the state prevalence. Satisfies the Healthy People 2020 objective.

# Older Adults: Had a Flu Vaccination in the Past Year <br> (Lee County Adults Age 65+) 

Healthy People $2020=70.0 \%$ or Higher


[^7]
## Prevalence of Respiratory Disease

Survey respondents were asked to indicate whether they suffer from or have been diagnosed with various respiratory conditions, including asthma and COPD.

## Asthma

## Adults

## A total of $9.6 \%$ of Lee County adults currently suffer from asthma.

BENCHMARK $>$ Below the national percentage.
TREND $>$ Remains significantly above baseline 2007 survey findings.
DISPARITY $>$ Unfavorably high in Market Area 3. More than twice as high among women as men.

Prevalence of Asthma


Prevalence of Asthma
(Lee County, 2020)

| $5.9 \%$ | $13.1 \%$ | $12.1 \%$ | $9.4 \%$ | $7.9 \%$ | $10.5 \%$ | $9.5 \%$ | $10.6 \%$ | $6.8 \%$ | $8.7 \%$ | $9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Men | Women | 18 to 39 | 40 to 64 | $65+$ | Low <br> Income | Mid/High <br> Income | White | Hispanic | Other | Lee County |

Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 138]
Notes: - Asked of all respondents.

- Includes those who have ever been diagnosed with asthma and report that they still have asthma


## Children

Among Lee County children under age $18,10.2 \%$ have ever been diagnosed with asthma.
TREND $>$ Well below 2017 findings, although similar to prior years' data.
DISPARITY $>$ Differences by child demographics are not statistically significant.

Childhood Asthma: Ever Diagnosed
(Parents of Children Age 0-17)


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 139]

- 2020 PRC National Health Survey, PRC, Inc

Notes: - Asked of all respondents with children 0 to 17 in the household.

- Includes children who have ever been diagnosed with asthma and are reported to still have asthma.


## Chronic Obstructive Pulmonary Disease (COPD)

Note: COPD includes lung diseases such as emphysema and chronic bronchitis.

A total of $9.2 \%$ of Lee County adults suffer from chronic obstructive pulmonary disease (COPD, including emphysema and bronchitis).

```
BENCHMARK \(>\) Worse than the US prevalence.
```


## Prevalence of <br> Chronic Obstructive Pulmonary Disease (COPD)

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Florida data.
- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

- Includes those having ever suffered from or been diagnosed with COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema.


## Key Informant Input: Respiratory Disease

The greatest share of key informants taking part in an online survey characterized Respiratory Disease as a "moderate problem" in the community.

## Perceptions of Respiratory Diseases <br> as a Problem in the Community <br> (Key Informants, 2020)

- Major Problem = Moderate Problem - Minor Problem . No Problem At All


Sources: - PRC Online Key Informant Survey, PRC, Inc.
Notes: - Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

## Access to Care/Services

Specialty care difficult to access. - Other Health Provider
Lack of care. People don't have a primary care doctor so they wait until they get really sick and go to the emergency room. - Public Health Representative
Not enough providers and long waits for appointments. - Physician
Our present pulmonary groups are very difficult to refer to. Additionally, as many of these specialists rotate in the hospitals and Intensive Care Unit's the outpatient side of care suffers. Costs to patients due to LPG ownership and facility fees are a problem. - Physician

## Prevalence/Incidence

The flu season in our area. Currently there are many getting infected with the Coronavirus. - Public Health Representative
Asthma, COPD, and lung cancer are all much more prevenient than people realize. There are good resources, but the need is great and vaping will likely increase the numbers for our younger generation if current use trends continue. - Other Health Provider

## Awareness/Education

Misinformation. - Physician

## INJURY \& VIOLENCE

## ABOUT INJURY \& VIOLENCE

Injuries and violence are widespread in society. Both unintentional injuries and those caused by acts of violence are among the top 15 killers for Americans of all ages. Many people accept them as "accidents," "acts of fate," or as "part of life." However, most events resulting in injury, disability, or death are predictable and preventable.

Injuries are the leading cause of death for Americans ages 1 to 44, and a leading cause of disability for all ages, regardless of sex, race/ethnicity, or socioeconomic status. More than 180,000 people die from injuries each year, and approximately 1 in 10 sustains a nonfatal injury serious enough to be treated in a hospital emergency department.

Beyond their immediate health consequences, injuries and violence have a significant impact on the well-being of Americans by contributing to:

- Premature death
- Disability
- Poor mental health
- High medical costs
- Lost productivity

The effects of injuries and violence extend beyond the injured person or victim of violence to family members, friends, coworkers, employers, and communities.

Numerous factors can affect the risk of unintentional injury and violence, including individual behaviors, physical environment, access to health services (ranging from pre-hospital and acute care to rehabilitation), and social environment (from parental monitoring and supervision of youth to peer group associations, neighborhoods, and communities).

Interventions addressing these social and physical factors have the potential to prevent unintentional injuries and violence. Efforts to prevent unintentional injury may focus on:

- Modifications of the environment
- Improvements in product safety
- Legislation and enforcement
- Education and behavior change
- Technology and engineering

Efforts to prevent violence may focus on:

- Changing social norms about the acceptability of violence
- Improving problem-solving skills (for example, parenting, conflict resolution, coping)
- Changing policies to address the social and economic conditions that often give rise to violence
- Healthy People 2020 (www.healthypeople.gov)


## Unintentional Injury

## Age-Adjusted Unintentional Injury Deaths

Between 2016 and 2018, there was an annual average age-adjusted unintentional injury mortality rate of 67.7 deaths per 100,000 population in Lee County.

BENCHMARK $>$ Worse than the state and US rates. Fails to satisfy the Healthy People 2020 objective.

TREND $>$ Increasing in recent years, echoing state and national trends.

Unintentional Injuries: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population)

Healthy People $2020=36.4$ or Lower


Lee County


FL
48.3


US

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-11]

Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.


## Unintentional Injuries: Age-Adjusted Mortality Trends <br> (Annual Average Deaths per 100,000 Population)

Healthy People $2020=36.4$ or Lower


|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lee County | 48.9 | 46.0 | 42.6 | 41.5 | 45.4 | 51.6 | 62.3 | 67.7 |
| FL | 42.8 | 41.7 | 40.3 | 40.1 | 42.2 | 47.5 | 52.4 | 54.7 |
| CUS | 43.7 | 44.3 | 39.3 | 39.8 | 41.0 | 43.7 | 46.7 | 48.3 |

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-11]

Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

RELATED ISSUE:

For more information about unintentional drugrelated deaths, see also Substance Abuse in the Modifiable Health Risks section of this report.

## Leading Causes of Unintentional Injury Deaths

Poisoning (including unintentional drug overdose), falls, and motor vehicle accidents accounted for most unintentional injury deaths in Lee County between 2016 and 2018.

Leading Causes of Unintentional Injury Deaths (Lee County, 2016-2018)


Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.
Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

## Motor Vehicle Safety

## Distracted Driving

Most survey respondents (73.2\%) report that they did not text while driving at any time in the past month.

- On the other hand, $26.8 \%$ texted while driving at least once in the past month (including 10.7\% who texted 6+ times in the past month while operating a vehicle).

Frequency of Texting While Driving in the Past Month (Lee County, 2020)


[^8]TREND $>$ Marks a statistically significant increase from baseline 2011 survey results.
DISPARITY $>$ Highest in Market Area 3. The prevalence correlates dramatically with age and is especially high among Hispanics as well.

## Texted While Driving in the Past Month

Lee County


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 312] Notes: - Asked of all respondents.

## Texted While Driving in the Past Month (Lee County, 2020)



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 312]
Notes: - Asked of all respondents

## Children's Seat Belt Usage

A total of $87.2 \%$ of Lee County parents report that their child (age 0 to 17) "always" wears a seat belt (or appropriate car seat for younger children) when riding in a vehicle.


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 331]

- 2017 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents with children 0 to 17 in the household.

## Bicycle Safety

A total of $42.6 \%$ of county children age 5 to 17 are reported to "always" wear a helmet when riding a bicycle.

# Child "Always" Wears a Helmet When Riding a Bicycle (Parents of Children Age 5-17) 

Lee County


Notes: - Asked of all respondents with children 5 to 17 in the household.

- *2007 data reflect children age 5 to 16.


## Sun Safety

A total of $16.5 \%$ of county residents "always" wear sunscreen or sunblock when outside on a sunny day for more than one hour.

DISPARITY $>$ Lowest in Market Area 2. Lower among men, adults under 65, low-income residents, and communities of color.

> Always Wear Sunscreen When Outside on a Sunny Summer Day for More Than 1 Hour


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [tem 309] Notes: - Asked of all respondents.

## Always Wear Sunscreen When Outside on a Sunny Summer Day for More Than 1 Hour (Lee County, 2020)



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 309]
Notes: - Asked of all respondents.

## Water Safety

Just over one-half (51.5\%) of Lee County residents have a swimming pool available to them, whether in a backyard or apartment/condo complex.

TREND $>$ Though decreasing in recent years, the percentage remains well above findings prior to 2014.

DISPARITY $>$ Highest in Market Area 4.

Have a Swimming Pool at Home or Apartment


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [tem 310]
Notes: - Asked of all respondents.

In this case, safety features include: a fence or wall on all four sides of the pool, separating it from the house; a safety pool cover; or alarms/ locks on any doors or windows that allow access to the pool.

Among residents with pools in their backyard or apartment/condo complex, 84.8\% indicate that the pool has safety features in place.

Have Safety Features for the Pool
(Among Lee County Adults w/Home or Apartment Pools)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 311]
Notes: - Asked of all respondents who have a pool at their home or apartment.

## Falls

Among surveyed Lee County adults age 45 and older, most have not fallen in the past year.

## ABOUT FALLS

Falls are the leading cause of fatal and nonfatal injuries for persons aged $\geq 65$ years $\qquad$ Even when those injuries are minor, they can seriously affect older adults' quality of life by inducing a fear of falling, which can lead to self-imposed activity restrictions, social isolation, and depression.

Modifiable fall risk factors include muscle weakness, gait and balance problems, poor vision, use of psychoactive medications, and home hazards. Falls among older adults can be reduced through evidence-based fall-prevention programs that address these modifiable risk factors. Most effective interventions focus on exercise, alone or as part of a multifaceted approach that includes medication management, vision correction, and home modifications.

- Division of Unintentional Injury Prevention, National Center for Injury Prevention and Control, CDC

Number of Falls in Past 12 Months (Adults Age 45 and Older; Lee County, 2020)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 107]
Notes:

- Asked of all respondents age $45+$.

However, $\mathbf{2 5 . 8} \%$ have experienced a fall at least once in the past year.
DISPARITY $>$ Unfavorably high in Market Area 2.

# Fell One or More Times in the Past Year (Adults Age 45 and Older) 

Lee County

RELATED ISSUE: See also Mental Health Suicide in the General Health Status section of this report.


## Intentional Injury (Violence)

## Age-Adjusted Homicide Deaths

In Lee County, there were 7.0 homicides per 100,000 population (2016-2018 annual average age-adjusted rate).

BENCHMARK $>$ Fails to satisfy the Healthy People 2020 objective.

Homicide: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population)

Healthy People $2020=5.5$ or Lower


Lee County
6.6


FL
6.1


US

[^9]Homicide: Age-Adjusted Mortality Trends
(Annual Average Deaths per 100,000 Population)
Healthy People $2020=5.5$ or Lower

|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| —Lee County | 7.5 | 7.8 | 7.6 | 7.2 | 6.2 | 7.1 | 7.0 | 7.0 |
| FL | 6.3 | 6.3 | 6.3 | 6.3 | 6.2 | 6.4 | 6.5 | 6.6 |
| US | 5.4 | 5.3 | 5.3 | 5.2 | 5.3 | 5.7 | 6.0 | 6.1 |

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020
US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-29]
Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Violent crime is composed of four offenses (FBI Index offenses): murder and non-negligent manslaughter; forcible rape robbery; and aggravated assault.

Note that the quality of crime data can vary widely from location to location, depending on the consistency and completeness of reporting among various jurisdictions.

## Violent Crime

## Violent Crime Rates

Between 2015 and 2017, there were a reported 339.7 violent crimes per 100,000 population in Lee County.

DISPARITY $>$ Well below state and US violent crime rates.

Violent Crime
(Rate per 100,000 Population, 2015-2017)


#### Abstract



Sources: - Federal Bureau of Investigation, FBI Uniform Crime Reports. - Retrieved February 2020 from CARES Engagement Network at https://engagementnetwork.org.

Notes: - This indicator reports the rate of violent crime offenses reported by the sheriff's office or county police department per 100,000 residents. Violent crime includes homicide, rape, robbery, and aggravated assault. This indicator is relevant because it assesses community safety, Participation by law enforcement agencies in the UCR program is voluntary. Sub-state data do not necessarily represent an exhaustive list of crimes due to gaps in reporting. Also, some institutions of higher education have their own police departments, which handle offenses occurring within campus grounds; these offenses reporting. Also, some institution of higher education have their own the violent crime statistics but can be obtained from the Uniform Crime Reports Universities and Colleges data tables.


## Community Violence

A total of $3.4 \%$ of surveyed Lee County adults acknowledge being the victim of a violent crime in the area in the past five years.

BENCHMARK $>$ Lower than the national percentage.
DISPARITY $>$ Decreasing with age and higher among low-income and Hispanic residents.

## Victim of a Violent Crime in the Past Five Years



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 46]

- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

# Victim of a Violent Crime in the Past Five Years (Lee County, 2020) 



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 46]
Notes Asked of all respondents

Respondents were read: "By an intimate partner, I mean any current or former spouse, boyfriend, or girlfriend. Someone you were dating, or romantically or sexually intimate with would also be considered an intimate partner."

## Family Violence

A total of $16.3 \%$ of Lee County adults acknowledge that they have ever been hit, slapped, pushed, kicked, or otherwise hurt by an intimate partner.

```
DISPARITY > Highest in Market Area 2.
```

Have Ever Been Hit, Slapped, Pushed, Kicked, or Hurt in Any Way by an Intimate Partner

Lee County


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 47]

- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

## Key Informant Input: Injury \& Violence

The largest share of key informants taking part in an online survey characterized Injury \& Violence as a "moderate problem" in the community.

## Perceptions of Injury and Violence as a Problem in the Community <br> (Key Informants, 2020)

- Major Problem - Moderate Problem . Minor Problem . No Problem At All
19.0\%


Sources: - PRC Online Key Informant Survey, PRC, Inc Notes: - Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

## Prevalence/Incidence

People seem to not be community-minded anymore. All out for self and will do anything to get what they want and protect what they have, even if it means hurting someone else. - Public Health Representative
Again, there are several segments in our community that experience high rates of violence. - Social Services Provider

One of the leading counties in unintentional injuries. - Public Health Representative
This is a major problem in all communities, and the opioid epidemic is one of the major stimulants. - Public Health Representative

Lee County is known as a very violent area. Places such as Pine Manor-Dunbar area and Lehigh Acres have a lot of police reports on violence and crime. - Public Health Representative
The trauma center sees a large number of patients every year. - Other Health Provider
Violence is a health issue to each of us living in Lee County and has no special group to attack. Violence is attached to drugs and lack of control of the youth. Felons do not have an opportunity for jobs and a decent living area, which drives them back to crime. - Other Health Provider

Increasing violent crime. - Other Health Provider
Numerous incidents reported in media and schools. - Community Leader

## Contributing Factors

We are a growing population, which continues to have mental health and substance abuse issues due to the inadequate number of treatment centers and lack of access to trained professionals. - Community Leader Low income. - Physician

## Domestic/Family Violence

Personal violence within the family is a large problem. Not just from spouses, but also to and from children within the residence. - Community Leader
Large number of families with domestic violence incidents. - Social Services Provider

## Gun Violence

Guns and anger, resulting in hate crimes and violence. - Community Leader
Daily reports of shootings in the county. - Social Services Provider

## Built Environment

Lack of sidewalks and bike trails causing pedestrian and cyclist death and injury, gun violence. - Community Leader

## DIABETES

## ABOUT DIABETES

Diabetes mellitus occurs when the body cannot produce or respond appropriately to insulin. Insulin is a hormone that the body needs to absorb and use glucose (sugar) as fuel for the body's cells. Without a properly functioning insulin signaling system, blood glucose levels become elevated and other metabolic abnormalities occur, leading to the development of serious, disabling complications. Many forms of diabetes exist; the three common types are Type 1, Type 2, and gestational diabetes. Effective therapy can prevent or delay diabetic complications.

Diabetes mellitus:

- Lowers life expectancy by up to 15 years.
- Increases the risk of heart disease by 2 to 4 times.
- Is the leading cause of kidney failure, lower limb amputations, and adult-onset blindness.

The rate of diabetes mellitus continues to increase both in the United States and throughout the world. Due to the steady rise in the number of persons with diabetes mellitus, and possibly earlier onset of type 2 diabetes mellitus, there is growing concern about the possibility that the increase in the number of persons with diabetes mellitus and the complexity of their care might overwhelm existing health care systems.

People from minority populations are more frequently affected by type 2 diabetes. Minority groups constitute $25 \%$ of all adult patients with diabetes in the US and represent the majority of children and adolescents with type 2 diabetes.

Lifestyle change has been proven effective in preventing or delaying the onset of type 2 diabetes in high-risk individuals.

- Healthy People 2020 (www.healthypeople.gov)


## Age-Adjusted Diabetes Deaths

Between 2016 and 2018, there was an annual average age-adjusted diabetes mortality rate of 17.5 deaths per 100,000 population in Lee County.

BENCHMARK $>$ Lower than the US death rate. Satisfies the Healthy People 2020 objective.
TREND $>$ Marks a sharply increasing trend in recent years.

# Diabetes: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population) <br> Healthy People $2020=20.5$ or Lower (Adjusted) 



Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective D-3]
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10)

Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

- The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

Diabetes: Age-Adjusted Mortality Trends
(Annual Average Deaths per 100,000 Population)
Healthy People $2020=20.5$ or Lower (Adjusted)


|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lee County | 14.0 | 12.3 | 13.5 | 15.1 | 15.8 | 16.5 | 16.7 | 17.5 |
| FL | 19.9 | 19.7 | 19.4 | 19.2 | 19.0 | 19.1 | 19.4 | 19.8 |
| US | 22.2 | 22.2 | 21.3 | 21.1 | 21.1 | 21.1 | 21.3 | 21.3 |

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and nformatics. Data extracted February 2020
US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective D-3]
Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
- The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths


## Prevalence of Diabetes

A total of $14.0 \%$ of Lee County adults report having been diagnosed with diabetes.
DISPARITY $>$ The prevalence increases with age and is higher among non-Hispanic residents.

## Prevalence of Diabetes




Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 140]

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Florida data.
- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

Prevalence of Diabetes
(Lee County, 2020)


[^10]
## Key Informant Input: Diabetes

## A high percentage of key informants taking part in an online survey characterized Diabetes as a "moderate problem" in the community.

# Perceptions of Diabetes as a Problem in the Community (Key Informants, 2020) 

- Major Problem - Moderate Problem - Minor Problem - No Problem At All


Sources: - PRC Online Key Informant Survey, PRC, Inc.
Notes: - Asked of all respondents

Among those rating this issue as a "major problem," reasons related to the following:

## Awareness/Education

To know their condition and how to treat, especially in the African American community. - Community Leader Not enough free education on how to take care of themselves. - Community Leader
Misinformation, non-educated patients. - Physician
People do not understand the impact of this diagnosis and the outcomes that come with along with it. - Other Health Provider
Education of healthy eating and options, financial ability to buy healthy food, and access to healthy foods in local community. - Social Services Provider

Appropriate education and support for dietary changes that can reverse their disease. Need for weight loss. Medication challenges. - Physician
Lack of information about prevention, eating habits, need for exercise. - Social Services Provider
Education, awareness, and resources for treatment and medication. - Community Leader

## Affordable Medications/Supplies

Getting insulin and insulin supplies when nonresident. - Other Health Provider
The access to medicines for diabetes. Also, prevention education that targets diverse cultures. Lack of health education materials that target Spanish and Haitian populations. - Public Health Representative
The cost of insulin for those dependent on it, lack of affordable nutritional counseling. - Public Health Representative
Lack of health insurance or funds to pay for insulin. - Public Health Representative
Cost of diabetes medications is unaffordable for many patients. Some patients ration their medications due to cost. They also are unable to afford testing supplies. Some patients with diabetes are unable to afford specialist care such as nephrology. - Physician

## Access to Affordable Healthy Food

Access to healthy food, information on nutrition, and inactivity. - Physician
Access to nutritional foods. - Social Services Provider
Being able to afford to purchase healthier foods. - Public Health Representative
Access to heathy foods and losing weight. Many diabetics rely on foods provided by food banks, which are often high in carbohydrates and short on vegetables and lean meats. - Public Health Representative

## Nutrition

Lack of proper nutrition, access to healthy food, food deserts, and transportation for medical care. - Community Leader
Getting access to nutritional therapy. - Public Health Representative
Eating habits. - Community Leader

Poor eating choices are the major contributor to this condition. - Community Leader

## Prevalence/Incidence

Perhaps counter-intuitively, the sheer prevalence is itself a contributor to the issue as people do not feel alone. Food choices in much of the region contribute and many options for eating out often don't offer the best choices. In addition, the perception is that the disease is very manageable with medication and doesn't necessarily cause any other issues. In short, it may not be taken as seriously as it should be. - Community Leader It is a major problem nationwide. - Other Health Provider

Adherence to regular exercise program, weight control. - Community Leader
Major lifestyle and dietary problems. Solution is prevention. - Social Services Provider

## Disease Management

It seems like most large employers in Lee County provide incentives for diabetic employees to take their medication and live healthier lifestyles. Some are more successful than others, but it is always a challenge. Community Leader

## Access to Care/Services

Access to care, patient compliance, the cost of insulin, lack of insurance, diagnosis and regular monitoring. Community Leader

Co-Occurrences
People who have co-occurring diseases such as heart disease, obesity, and diabetes. Lack of education and resources. - Community Leader

## Impact on Quality of Life

Lifelong complications and how they affect comorbidities and their quality of life. Medication regimes and diet must be forever. - Other Health Provider

## KIDNEY DISEASE


#### Abstract

ABOUT KIDNEY DISEASE Chronic kidney disease and end-stage renal disease are significant public health problems in the United States and a major source of suffering and poor quality of life for those afflicted. They are responsible for premature death and exact a high economic price from both the private and public sectors. Nearly $25 \%$ of the Medicare budget is used to treat people with chronic kidney disease and end-stage renal disease.

Genetic determinants have a large influence on the development and progression of chronic kidney disease. It is not possible to alter a person's biology and genetic determinants; however, environmental influences and individual behaviors also have a significant influence on the development and progression of chronic kidney disease. As a result, some populations are disproportionately affected. Successful behavior modification is expected to have a positive influence on the disease.

Diabetes is the most common cause of kidney failure. The results of the Diabetes Prevention Program (DPP) funded by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) show that moderate exercise, a healthier diet, and weight reduction can prevent development of type 2 diabetes in persons at risk. - Healthy People 2020 (www.healthypeople.gov)


## Age-Adjusted Kidney Disease Deaths

Between 2016 and 2018, there was an annual average age-adjusted kidney disease mortality rate of 3.6 deaths per 100,000 population in Lee County.

BENCHMARK $>$ Well below state and national rates.
TREND $>$ Decreasing over time, echoing state and national trends.

Kidney Disease: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population)


Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.
Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Kidney Disease: Age-Adjusted Mortality Trends
(Annual Average Deaths per 100,000 Population)


|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| _Lee County | 7.8 | 7.8 | 7.2 | 5.8 | 5.0 | 4.1 | 3.7 | 3.6 |
| FL | 12.2 | 11.6 | 11.0 | 10.8 | 10.8 | 10.5 | 10.4 | 10.0 |
| _US | 16.2 | 15.5 | 13.3 | 13.2 | 13.3 | 13.2 | 13.2 | 13.0 |

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.
Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.


## Prevalence of Kidney Disease

A total of $4.6 \%$ of Lee County adults report having been diagnosed with kidney disease.
DISPARITY $>$ The prevalence of kidney disease is higher among men, seniors, and Whites.

## Prevalence of Kidney Disease



## Prevalence of Kidney Disease

(Lee County, 2020)

| 6.8\% | 2.6\% | 2.2\% | 3.7\% | 7.8\% | 3.9\% | 4.8\% | 5.5\% | 1.1\% | 3.6\% | 4.6\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Men | Women | 18 to 39 | 40 to 64 | $65+$ | Low Income | Mid/High Income | White | Hispanic | Other | Lee County |
| Sources: Notes: | 202 PRC Co sked of all re | unity Health ondents. | vey, PRC, Inc. | 30] |  |  |  |  |  |  |

## Key Informant Input: Kidney Disease

Key informants taking part in an online survey generally characterized Kidney Disease as a "minor problem" in the community.

> Perceptions of Kidney Disease as a Problem in the Community (Key Informants, 2020)


Among those rating this issue as a "major problem," reasons related to the following:

## Access to Care/Services

No transplant center. - Community Leader
Not enough follow-up to get this problem taken care of early before there are serious problems with kidney disease. - Community Leader
I am more familiar with the issue as it relates to disaster planning. I know most providers locally are already stretched thin and during disasters, the ability of current providers to see all their patients in a reasonable time period is almost impossible. - Public Health Representative

## Prevalence/Incidence

We have high rates of diabetes which also leads to kidney disease in adults who have already formed bad habits. The habits are hard to break so they suffer with the consequences and many don't have or know how to access care. - Public Health Representative
Kidney disease is increasing, and the community has no on-island facilities to assist and transportation to offisland sites and physicians is a problem. - Social Services Provider
Access to Care for Uninsured/Underinsured
Access to and cost of care for uninsured patients. Coverage challenges for Medicaid patients. - Community Leader

## POTENTIALLY DISABLING CONDITIONS

## Multiple Chronic Conditions

For the purposes of this assessment, chronic conditions include:

- Asthma
- Cancer
- Diabetes
- Diagnosed depression
- Heart attack/angina
- High blood cholesterol
- High blood pressure
- Kidney disease
- Lung disease
- Obesity
- Stroke

Multiple chronic conditions are concurrent conditions.

Among Lee County survey respondents, most report currently having at least one chronic health condition.

## Number of Current Chronic Conditions <br> (Lee County, 2020)



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 143]
Notes: - Asked of all respondents.

- In this case, chronic conditions include lung disease, arthritis, sciatica, cancer, osteoporosis, kidney disease, heart attack, angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, and/or diagnosed depression.

In fact, $\mathbf{3 3 . 8 \%}$ of Lee County adults report having three or more chronic conditions.
DISPARITY $>$ Unfavorably high in Market Area 2. The prevalence increases with age and is higher among low-income residents, non-Hispanic residents.

Currently Have Three or More Chronic Conditions


## Currently Have Three or More Chronic Conditions

 (Lee County, 2020)

Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 143]
Notes: - Asked of all respondents.

- In this case, chronic conditions include lung disease, cancer, kidney disease, heart attack, angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, and/or diagnosed depression


## Activity Limitations

## ABOUT DISABILITY \& HEALTH

An individual can get a disabling impairment or chronic condition at any point in life. Compared with people without disabilities, people with disabilities are more likely to:

- Experience difficulties or delays in getting the health care they need.
- Not have had an annual dental visit.
- Not have had a mammogram in past 2 years.
- Not have had a Pap test within the past 3 years.
- Not engage in fitness activities.
- Use tobacco.
- Be overweight or obese.
- Have high blood pressure.
- Experience symptoms of psychological distress.
- Receive less social-emotional support.
- Have lower employment rates.

There are many social and physical factors that influence the health of people with disabilities. The following three areas for public health action have been identified, using the International Classification of Functioning, Disability, and Health (ICF) and the three World Health Organization (WHO) principles of action for addressing health determinants.

- Improve the conditions of daily life by: encouraging communities to be accessible so all can live in, move through, and interact with their environment; encouraging community living; and removing barriers in the environment using both physical universal design concepts and operational policy shifts.
- Address the inequitable distribution of resources among people with disabilities and those without disabilities by increasing: appropriate health care for people with disabilities; education and work opportunities; social participation; and access to needed technologies and assistive supports.
- Expand the knowledge base and raise awareness about determinants of health for people with disabilities by increasing: the inclusion of people with disabilities in public health data collection efforts across the lifespan; the inclusion of people with disabilities in health promotion activities; and the expansion of disability and health training opportunities for public health and health care professionals.
- Healthy People 2020 (www.healthypeople.gov)

A total of $24.6 \%$ of Lee County adults are limited in some way in some activities due to a
physical, mental, or emotional problem.
BENCHMARK $>$ Worse than the Florida prevalence.
DISPARITY $>$ Highest in Market Area 1. Higher among women, low-income residents, and Whites.

## Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Items 109-110]

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2015 Florida data.
- 2020 PRC National Health Survey, PRC, Inc

Notes: - Asked of all respondents.

## Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem

(Lee County, 2020)


## Key Informant Input: Disability \& Chronic Pain

Key informants taking part in an online survey most often characterized Disability \& Chronic Pain as a "moderate problem" in the community.

Perceptions of Disability \& Chronic Pain as a Problem in the Community
(Key Informants, 2020)


[^11]Among those rating this issue as a "major problem," reasons related to the following:

## Aging Population

Sanibel and Captiva have an aging population which will increase over the next several years. There are no onisland facilities other than physical therapy and a few doctors to assist. - Social Services Provider
The year-round population skews older as does the seasonal population. As people age, there is a greater probability of physical issues that lead to chronic pain-spinal degeneration/surgery, major joint degeneration/surgery/replacement, arthritis, cancer, etc. Among younger workers, a high number are engaged in fields that are tough on the body or have high accident rates-construction, landscaping, first response teams, etc. - Community Leader
Aging population. - Community Leader
We have increase number of baby boomers in Lee County. In addition, there is a problem of multi-morbidity among our clients. - Public Health Representative

## Access to Care/Services

Access to care is limited. - Physician
Not being able to access care for these issues forces people to not be able to work or care for themselves and or their families. - Public Health Representative
Clients do not have enough resources to be successful. Housing, funding, transportation, lack of insurance. Social Services Provider
Looking at the number of doctor's offices makes me believe many people are going to the doctor for something other than yearly exams. - Other Health Provider

## Contributing Factors

These effect a person's quality of life, which in turn affects their mental and physical wellbeing. - Other Health Provider
Limited number of pain management specialists. Many patients now have difficulty getting into physical therapy in their neighborhoods and have to travel far distances for them to facilities which are covered by their insurance.

- Physician

Obesity and lack of physical activity; it becomes a downward spiral. - Physician

## Alcohol/Drug Use

Large population of adults addicted to pain medication leading to other illegal drug use. - Social Services Provider
The rise of opioid addiction. - Community Leader
People are being given too many pain killers and the reason for the pain is not identified. - Community Leader

## Access to Care for Uninsured/Underinsured

Lack of insurance, lack of Medicaid expansion. We have disabled (physically and mentally), without the ability to pay for much needed services. - Social Services Provider
The price of prescriptions is $100 \%$ the reason we have an opioid addiction issue. people can't afford pain medications. It's cheaper to buy heroin. - Social Services Provider

## Comorbidities

This is often a secondary medical issue but one that I hear of routinely. Many in our older community have agerelated health issues including arthritis, knee, hip, shoulder joint issues, and back problems that lead to debilitating pain problems. - Community Leader

## Awareness/Education

Non-educated patients. - Physician

## Alzheimer's Disease

## ABOUT DEMENTIA

Dementia is the loss of cognitive functioning-thinking, remembering, and reasoning-to such an extent that it interferes with a person's daily life. Dementia is not a disease itself but rather a set of symptoms. Memory loss is a common symptom of dementia, although memory loss by itself does not mean a person has dementia. Alzheimer's disease is the most common cause of dementia, accounting for the majority of all diagnosed cases.

Alzheimer's disease is the 6th leading cause of death among adults age 18 years and older. Estimates vary, but experts suggest that up to 5.1 million Americans age 65 years and older have Alzheimer's disease. These numbers are predicted to more than double by 2050 unless more effective ways to treat and prevent Alzheimer's disease are found.

- Healthy People 2020 (www.healthypeople.gov)


## Age-Adjusted Alzheimer's Disease Deaths

Between 2016 and 2018, there was an annual average age-adjusted Alzheimer's disease mortality rate of 15.1 deaths per 100,000 population in Lee County.

BENCHMARK $>$ Well below the state and especially the US rate.
TREND $>$ The death rate has increased over time in Lee County.

> Alzheimer's Disease: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population)


# Alzheimer's Disease: Age-Adjusted Mortality Trends <br> (Annual Average Deaths per 100,000 Population) 

|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LLee County | 10.3 | 9.3 | 10.2 | 11.2 | 12.1 | 12.8 | 13.9 | 15.1 |
| FL | 17.2 | 16.4 | 16.0 | 17.0 | 19.2 | 20.7 | 21.3 | 20.5 |
| US | 26.2 | 26.0 | 23.9 | 24.1 | 26.1 | 28.4 | 30.2 | 30.6 |

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020
Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10)

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.


## Progressive Confusion/Memory Loss

A total of $13.0 \%$ of adults age 45 and older report experiencing confusion or memory loss in the past year that is happening more often or getting worse.

DISPARITY $>$ Unfavorably high in Market Area 2. Higher among residents in low-income households.

# Experienced Increasing Confusion/Memory Loss in Past Year (Adults Age 45 and Older) 



[^12]
# Experienced Increasing Confusion/Memory Loss in Past Year (Adults Age 45 and Older; Lee County, 2020) 



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 325]
Notes: - Asked of those respondents age 45 and older.

## Key Informant Input: Dementia/Alzheimer’s Disease

## Key informants taking part in an online survey are most likely to consider

 Dementia/Alzheimer's Disease as a "moderate problem" in the community.> Perceptions of Dementia/Alzheimer's Disease as a Problem in the Community
> (Key Informants, 2020)
> - Major Problem = Moderate Problem - Minor Problem = No Problem At All


Among those rating this issue as a "major problem," reasons related to the following:

## Aging Population

We know that Alzheimer's and dementia is more prevalent as the population ages. And as these numbers continue to climb there will be a greater burden of disease in this population. These patients are difficult to keep in the home for caregivers, and treatments are limited. There are not a large number of facilities and such a need to respite and day care for these patients. - Other Health Provider
Large number of elderly population. - Community Leader
Our county has a high rate of older adults. Some services are available in the county to help those who have Dementia, Alzheimer's disease but as the population continues to age the rates will likely increase and the services might not. - Public Health Representative

Southwest Florida is experiencing a high growth rate and also an aging population. There are few services which offer experienced caregivers, facilities, day care for those affected. - Social Services Provider
We have an older population during snow-bird season. - Other Health Provider
There is a much older generation in Lee County and many assisted living and nursing homes, more than most communities, I think. - Community Leader
Aging population, with longer life expectancy. - Community Leader
A very large portion of our community population is older than 50 . It seems that daily I hear of another family who has a parent in the early stages of dementia. - Community Leader
Elderly population without sufficient facilities that are affordable to care for them. - Social Services Provider

Aging population. - Community Leader
We have a larger-than-average elderly population, and the disease is expected to get worse over the next 20 years. - Social Services Provider
We have an aging population and a large number of individuals that are affected by this. - Social Services Provider
Large elderly population often without family supporters or friends. Isolated. - Community Leader
Growing, aging population, lack of transportation to services, lack of insurance coverage, lack of caregiver support systems. - Community Leader

## Access to Care/Services

Demand for services far exceeds supply. Increased need for services predicted as demographic population in Lee county grows annually. - Public Health Representative
One center spread very thin. - Other Health Provider
Very few rehab, long-term facilities that can accommodate dementia patients. - Other Health Provider Low income of patient, noninsured. - Physician
Helping families keep loved ones to age in place, give caregivers support, finding monies for care. - Public Health Representative
While there are providers in the community, they are limited and constantly near capacity. This makes it challenging to find appropriate beds for patients with dementia and Alzheimer's that either don't have robust funding or present a treatment challenge. - Other Health Provider
Low-income seniors don't have ability to pay for care. - Other Health Provider
Lack of resources for these types of issues. - Public Health Representative
Access is a problem, as well as follow-up sites. - Physician

## Prevalence/Incidence

Widespread, underserved. - Social Services Provider
There is a larger group of people with Alzheimer's disease in southwest Florida. - Community Leader
So many suffer and it's so often not diagnosed, especially in the impoverished populations and when they are diagnosed, they don't have the funding to get help. - Social Services Provider
Our skilled facilities are full of patients with Alzheimer's. - Community Leader
The incidence/prevalence is rising for this disease process and we have a large elderly population. - Physician
Articles about the increasing frequency of the condition. - Social Services Provider

## Awareness/Education

There seems to be a lack of knowledge in how a family should be with dementia and Alzheimer's. There is also very little way to stop or prevent it. - Community Leader

## Caregiving

A total of $\mathbf{2 9 . 7 \%}$ of Lee County adults currently provide care or assistance to a friend or family member who has a health problem, long-term illness, or disability.

BENCHMARK $>$ Above the national prevalence.
TREND $>$ Marks a statistically significant increase from 2017 survey results.

> Act as Caregiver to a Friend or Relative with a Health Problem, Long-Term Illness, or Disability


Notes: - Asked of all respondents.

BIRTHS

## PRENATAL CARE


#### Abstract

ABOUT INFANT \& CHILD HEALTH Improving the well-being of mothers, infants, and children is an important public health goal for the US. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system. The risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality preconception (before pregnancy) and inter-conception (between pregnancies) care. Moreover, healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential. Many factors can affect pregnancy and childbirth, including pre-conception health status, age, access to appropriate health care, and poverty.

Infant and child health are similarly influenced by socio-demographic factors, such as family income, but are also linked to the physical and mental health of parents and caregivers. There are racial and ethnic disparities in mortality and morbidity for mothers and children, particularly for African Americans. These differences are likely the result of many factors, including social determinants (such as racial and ethnic disparities in infant mortality; family income; educational attainment among household members; and health insurance coverage) and physical determinants (i.e., the health, nutrition, and behaviors of the mother during pregnancy and early childhood).


- Healthy People 2020 (www.healthypeople.gov)

Early and continuous prenatal care is the best assurance of infant health.

Between 2016 and 2018, 31.7\% of all Lee County births did not receive prenatal care in the first trimester of pregnancy.

BENCHMARK $>$ Worse than Florida and US percentages.

# Lack of Prenatal Care in the First Trimester <br> (Percentage of Live Births, 2016-2018) 

Healthy People $2020=22.1 \%$ or Lower


[^13]
## Lack of Prenatal Care in the First Trimester <br> (Percentage of Live Births)

Healthy People $2020=22.1 \%$ or Lower

|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lee County | $34.5 \%$ | $36.9 \%$ | $38.3 \%$ | $38.3 \%$ | $35.9 \%$ | $32.9 \%$ | $31.8 \%$ | $31.7 \%$ |
| FL | $27.3 \%$ | $26.8 \%$ | $26.6 \%$ | $26.0 \%$ | $25.2 \%$ | $24.6 \%$ | $25.2 \%$ | $26.2 \%$ |

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics Data extracted February 2020
US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-10.1]
Note: - This indicator reports the percentage of women who do not obtain prenatal care during their first trimester of pregnancy. This indicator is relevant because engaging in prenatal care decreases the likelihood of maternal and infant health risks. This indicator can also highlight a lack of access to preventive care, a lack of health, knowledge insufficient provider outreach, and/or social barriers preventing utilization of services.

## BIRTH OUTCOMES \& RISKS

## Low-Weight Births

## A total of $8.2 \%$ of 2016-2018 Lee County births were low-weight.

Low birthweight babies, those who weigh less than 2,500 grams ( 5 pounds, 8 ounces) at birth, are much more prone to illness and neonatal death than are babies of normal birthweight.

Largely a result of receiving poor or inadequate prenatal care many low-weight births and the consequent health problems are preventable.

## Low-Weight Births

(Percent of Live Births, 2016-2018)
Healthy People $2020=7.8 \%$ or Lower


Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted February 2020

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-8.1]

Note: - This indicator reports the percentage of total births that are low birth weight (Under 2500 g ). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

## Low-Weight Births

(Percent of Live Births)
Healthy People $2020=7.8 \%$ or Lower

|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| —Lee County | $7.8 \%$ | $8.1 \%$ | $8.5 \%$ | $8.5 \%$ | $8.2 \%$ | $8.0 \%$ | $8.0 \%$ | $8.2 \%$ |
| FL | $8.7 \%$ | $8.7 \%$ | $8.6 \%$ | $8.6 \%$ | $8.6 \%$ | $8.7 \%$ | $8.7 \%$ | $8.7 \%$ |
| LUS | $8.1 \%$ | $8.1 \%$ | $8.0 \%$ | $8.0 \%$ | $8.0 \%$ | $8.1 \%$ | $8.2 \%$ | $8.2 \%$ |

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics Data extracted February 2020.
US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-8.1]
Note: - This indicator reports the percentage of total births that are low birth weight (Under 2500 g ). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

## Infant Mortality

Infant mortality rates reflect deaths of children less than one year old per 1,000 live births.

Between 2016 and 2018, there was an annual average of 5.8 infant deaths per 1,000 live births.

## (Annual Average Infant Deaths per 1,000 Live Births, 2016-2018)

Healthy People $2020=6.0$ or Lower


Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted February 2020.
US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-1.3]
Notes: - Infant deaths include deaths of children under 1 year old.

- This indicator is relevant because high rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health.

Infant Mortality Trends
(Annual Average Infant Deaths per 1,000 Live Births)
Healthy People $2020=6.0$ or Lower

|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| —Lee County | 5.4 | 5.7 | 6.2 | 5.8 | 5.8 | 5.9 | 5.9 | 5.8 |
| —FL | 6.8 | 6.4 | 6.2 | 6.1 | 6.2 | 6.2 | 6.2 | 6.1 |
| US | 6.3 | 6.1 | 6.0 | 5.9 | 5.9 | 5.9 | 5.8 | 5.7 |

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted February 2020.

- Centers for Disease Control and Prevention, National Center for Health Statistics.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-1.3]

Notes: - Rates are three-year averages of deaths of children under 1 year old per 1,000 live births.


## Childhood Vaccinations

While most surveyed respondents indicate that they would want their (hypothetical) newborn to receive all recommended vaccinations, a total of $6.8 \%$ would not.

TREND $>$ Marks a statistically significant decrease from 2017 survey results.

## Would Not Want My Newborn to Receive All Recommended Vaccinations

(Lee County, 2020)

Primary reasons: unnecessary (31.2\%), safety of ingredients (17.7\%), don't believe in them (14.3\%), not enough information about them (9.0\%), and cost ( $6.2 \%$ ).

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $7.5 \%$ | $7.7 \%$ | $6.5 \%$ | $5.8 \%$ | $6.8 \%$ |  |
| Market | Market | Market | Market | Lee County |  |
| Area 1 | Area 2 | Area 3 | Area 4 |  |  |

Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 332-333]
Notes: - Asked of all respondents who are aware of the initiatives and/or have heard the "Choose, Commit, Change!" messaging.


## FAMILY PLANNING

## Births to Adolescent Mothers

## ABOUT ADOLESCENT BIRTHS

The negative outcomes associated with unintended pregnancies are compounded for adolescents. Teen mothers:

- Are less likely to graduate from high school or attain a GED by the time they reach age 30.
- Earn an average of approximately $\$ 3,500$ less per year, when compared with those who delay childbearing.
- Receive nearly twice as much Federal aid for nearly twice as long.

Similarly, early fatherhood is associated with lower educational attainment and lower income. Children of teen parents are more likely to have lower cognitive attainment and exhibit more behavior problems. Sons of teen mothers are more likely to be incarcerated, and daughters are more likely to become adolescent mothers.

- Healthy People 2020 (www.healthypeople.gov)

Between 2016 and 2018, 5.7\% of all births in Lee County were to adolescents age 15 to 19.
BENCHMARK $>$ Worse than the state percentage.
TREND $>$ Decreasing over time, echoing state and US trends.

# Percentage of Births to Adolescents Age 15 to 19 (2016-2018) 

| $5.7 \%$ | $4.8 \%$ | $5.1 \%$ |
| :---: | :---: | :---: | :---: |
| Lee County | FL | US |

[^14]Adolescent Birth Trends
(Percentage of Births to Adolescents Age 15-19)


|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| _Lee County | $9.3 \%$ | $8.7 \%$ | $8.1 \%$ | $7.5 \%$ | $6.8 \%$ | $6.5 \%$ | $6.0 \%$ | $5.7 \%$ |
| —FL | $9.1 \%$ | $8.2 \%$ | $7.4 \%$ | $6.7 \%$ | $5.9 \%$ | $5.4 \%$ | $5.1 \%$ | $4.8 \%$ |
| US | $9.3 \%$ | $8.5 \%$ | $7.8 \%$ | $7.1 \%$ | $6.4 \%$ | $5.8 \%$ | $5.4 \%$ | $5.1 \%$ |

Sources: - Centers for Disease Control and Prevention, National Vital Statistics System. Accessed using CDC WONDER.

- Retrieved from CARES Engagement Network at https://engagementnetwork.org.

Notes: - This indicator reports the rate of total births to women under the age of $15-19$ per 1,000 female population age 15-19. This indicator is relevant because in many cases, teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate the prevalence of unsafe sex practices.

## Key Informant Input: Infant Health \& Family Planning

Key informants taking part in an online survey largely characterized Infant Health \& Family Planning as a "moderate problem" in the community.

## Perceptions of Infant Health \& Family Planning <br> as a Problem in the Community <br> (Key Informants, 2020)



Sources:

- PRC Online Key Informant Survey, PRC, Inc.

Notes:

- Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

## Contributing Factors

The large number of children born with neonatal abstinence syndrome. - Social Services Provider Increases in infant mortality. - Public Health Representative
This is a major problem for low-income families. There needs to be more information and support to ensure healthy babies as well as access to family planning information. - Social Services Provider
One in ten babies is born prematurely and we have hot spots in the community where the rate is much higher. We need more resources to help with education and prenatal care to help ensure more moms are healthy and deliver full term. - Community Leader
I believe in prevention and early intervention. Decreasing the number of unwanted pregnancies is a start and then providing the best care to all infants is helpful too. Mental health and substance abuse contribute to unwanted pregnancies and child neglect, trauma, negative living environments, etc. - Community Leader

## Awareness/Education

Not enough education in this area. - Community Leader
Lack of education and information of where to obtain services. Health Centers that provide services can't hire and retain high quality staff because the pay is weak. - Public Health Representative
Lack of knowledge, limited resources, transportation issues, myths regarding FP. - Public Health Representative
Education. In the impoverished areas there just needs to be more emphasis on education and advocacy around the options for infant and child health. Be it vaccines, healthy eating, or other problems that are rarely diagnosed in impoverished children like Crohns, celiac, and other intestinal problems that can often be controlled with healthy eating - Social Services Provider

## Access to Care/Services

Limited resources, poor referral for this service. - Other Health Provider
Family planning resources are continually stretched and as far as I know, the health department is one of the only resources that can supply free or minimal cost contraceptives. This resource is no way adequate to severe the population of Lee County and many lower income women have pregnancies they cannot afford, which leads to many children being born into poverty and not always eligible for Medicaid coverage. - Public Health Representative
High populations of undocumented residents who do not have access to care. - Social Services Provider No insurance and copay. - Physician
Prenatal and neonatal care for those with limited money. - Social Services Provider

## Cultural/Personal Beliefs

Family planning is often problematic due to cultural and religious beliefs. There is lack of access to affordable, reliable family planning. Education of the target population can be problematic. - Social Services Provider


# MODIFIABLE HEALTH RISKS 

## NUTRITION

## ABOUT HEALTHFUL DIET \& HEALTHY WEIGHT

Strong science exists supporting the health benefits of eating a healthful diet and maintaining a healthy body weight. Efforts to change diet and weight should address individual behaviors, as well as the policies and environments that support these behaviors in settings such as schools, worksites, health care organizations, and communities.

The goal of promoting healthful diets and healthy weight encompasses increasing household food security and eliminating hunger.

Americans with a healthful diet:

- Consume a variety of nutrient-dense foods within and across the food groups, especially whole grains, fruits, vegetables, low-fat or fat-free milk or milk products, and lean meats and other protein sources.
- Limit the intake of saturated and trans fats, cholesterol, added sugars, sodium (salt), and alcohol.
- Limit caloric intake to meet caloric needs.

Diet and body weight are related to health status. Good nutrition is important to the growth and development of children. A healthful diet also helps Americans reduce their risks for many health conditions, including: overweight and obesity; malnutrition; iron-deficiency anemia; heart disease; high blood pressure; dyslipidemia (poor lipid profiles); type 2 diabetes; osteoporosis; oral disease; constipation; diverticular disease; and some cancers.

Diet reflects the variety of foods and beverages consumed over time and in settings such as worksites, schools, restaurants, and the home. Interventions to support a healthier diet can help ensure that:

- Individuals have the knowledge and skills to make healthier choices.
- Healthier options are available and affordable.

Social Determinants of Diet. Demographic characteristics of those with a more healthful diet vary with the nutrient or food studied. However, most Americans need to improve some aspect of their diet.

Social factors thought to influence diet include:

- Knowledge and attitudes
- Skills
- Social support
- Societal and cultural norms
- Food and agricultural policies
- Food assistance programs
- Economic price systems

Physical Determinants of Diet. Access to and availability of healthier foods can help people follow healthful diets. For example, better access to retail venues that sell healthier options may have a positive impact on a person's diet; these venues may be less available in low-income or rural neighborhoods.

The places where people eat appear to influence their diet. For example, foods eaten away from home often have more calories and are of lower nutritional quality than foods prepared at home.

Marketing also influences people's—particularly children's—food choices.

- Healthy People 2020 (www.healthypeople.gov)


## Daily Recommendation of Fruits/Vegetables

To measure fruit and vegetable consumption, survey respondents were asked multiple questions, specifically about the foods and drinks they consumed on the day prior to the interview.

RELATED ISSUE: See also Food Access in the Social Determinants of Health section of this report.

A total of $\mathbf{2 5 . 0 \%}$ of Lee County adults report eating five or more servings of fruits and/or vegetables per day.

BENCHMARK $>$ Below the US prevalence.
TREND $>$ Denotes a statistically significant decrease since 2007.
DISPARITY $>$ The prevalence is higher among young adults and Hispanics.

## Consume Five or More Servings of Fruits/Vegetables Per Day

Lee County


Sources: - 2020 PRC Community Heath Survey, PRC, Inc. [tem 148]

- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

- For this issue, respondents were asked to recall their food intake on the previous day.


## Consume Five or More Servings of Fruits/Vegetables Per Day (Lee County, 2020)



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 148]
Notes: - Asked of all respondents.

- For this issue, respondents were asked to recall their food intake on the previous day.


## Difficulty Accessing Fresh Produce

Respondents were asked: "How difficult is it for you to buy fresh produce like fruits and vegetables at a price you can afford? Would you say: Very Difficult, Somewhat Difficult, Not Too Difficult, or Not At All Difficult?"

Most Lee County adults report little or no difficulty buying fresh produce at a price they can afford.

Level of Difficulty Finding Fresh Produce at an Affordable Price (Lee County, 2020)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 86]
Notes: - Asked of all respondents.

However, $18.9 \%$ of Lee County adults find it "very" or "somewhat" difficult to access affordable fresh fruits and vegetables.

DISPARITY $>$ The prevalence is notably high among women, young adults, those in low-income households (especially), and Hispanics.

Find It "Very" or "Somewhat" Difficult to Buy Affordable Fresh Produce


## Find It "Very" or "Somewhat" Difficult to Buy Affordable Fresh Produce <br> (Lee County, 2020)



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 189] Notes: - Asked of all respondents.

## Sugar-Sweetened Beverages

A total of $\mathbf{2 6 . 5 \%}$ of Lee County adults report drinking an average of at least one sugarsweetened beverage per day in the past week.

DISPARITY $>$ Unfavorably high in Market Area 1. The prevalence decreases with age and is higher among men and low-income residents.

## Had Seven or More <br> Sugar-Sweetened Beverages in the Past Week



[^15]Notes: - Asked of all respondents.

## Had Seven or More <br> Sugar-Sweetened Beverages in the Past Week (Lee County, 2020)



## PHYSICAL ACTIVITY

## ABOUT PHYSICAL ACTIVITY

Regular physical activity can improve the health and quality of life of Americans of all ages, regardless of the presence of a chronic disease or disability. Among adults, physical activity can lower the risk of: early death; coronary heart disease; stroke; high blood pressure; type 2 diabetes; breast and colon cancer; falls; and depression. Among children and adolescents, physical activity can: improve bone health; improve cardiorespiratory and muscular fitness; decrease levels of body fat; and reduce symptoms of depression. For people who are inactive, even small increases in physical activity are associated with health benefits.

Personal, social, economic, and environmental factors all play a role in physical activity levels among youth, adults, and older adults. Understanding the barriers to and facilitators of physical activity is important to ensure the effectiveness of interventions and other actions to improve levels of physical activity.

Factors positively associated with adult physical activity include: postsecondary education; higher income; enjoyment of exercise; expectation of benefits; belief in ability to exercise (self-efficacy); history of activity in adulthood; social support from peers, family, or spouse; access to and satisfaction with facilities; enjoyable scenery; and safe neighborhoods.

Factors negatively associated with adult physical activity include: advancing age; low income; lack of time; low motivation; rural residency; perception of great effort needed for exercise; overweight or obesity; perception of poor health; and being disabled. Older adults may have additional factors that keep them from being physically active, including lack of social support, lack of transportation to facilities, fear of injury, and cost of programs.

Among children ages 4 to 12 , the following factors have a positive association with physical activity: gender (boys); belief in ability to be active (self-efficacy); and parental support.

Among adolescents ages 13 to 18, the following factors have a positive association with physical activity: parental education; gender (boys); personal goals; physical education/school sports; belief in ability to be active (self-efficacy); and support of friends and family.

Environmental influences positively associated with physical activity among children and adolescents include:

- Presence of sidewalks
- Having a destination/walking to a particular place
- Access to public transportation
- Low traffic density
- Access to neighborhood or school play area and/or recreational equipment

People with disabilities may be less likely to participate in physical activity due to physical, emotional, and psychological barriers. Barriers may include the inaccessibility of facilities and the lack of staff trained in working with people with disabilities.

[^16]-

## Leisure-Time Physical Activity

Leisure-time physical activity includes any physical activities or exercises (such as running, calisthenics, golf, gardening, walking etc.) which take place outside of one's line of work.

A total of $\mathbf{2 3 . 6 \%}$ of Lee County adults report no leisure-time physical activity in the past month.

Healthy People $2020=32.6 \%$ or Lower


BENCHMARK $>$ Better than the Florida and US percentages.

\author{

# No Leisure-Time Physical Activity in the Past Month 

}

Lee County

- Asked of all rent of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-1] Notes: - Asked of all respondents.


## Activity Levels

## Adults

## ADULTS: RECOMMENDED LEVELS OF PHYSICAL ACTIVITY

Adults should do 2 hours and 30 minutes a week of moderate-intensity (such as walking), or 1 hour and 15 minutes ( 75 minutes) a week of vigorous-intensity aerobic physical activity (such as jogging), or an equivalent combination of moderate- and vigorous-intensity aerobic physical activity. The guidelines also recommend that adults do muscle-strengthening activities, such as push-ups, situps, or activities using resistance bands or weights. These activities should involve all major muscle groups and be done on two or more days per week.

The report finds that nationwide nearly 50 percent of adults are getting the recommended amounts of aerobic activity and about 30 percent are engaging in the recommended muscle-strengthening activity.

- 2013 Physical Activity Guidelines for Americans, US Department of Health and Human Services. www.cdc.gov/physicalactivity
- Learn more about CDC's efforts to promote walking by visiting http://www.cdc.gov/vitalsigns/walking.
"Meeting physical activity recommendations" includes adequate levels of both aerobic and strengthening activities:
Aerobic activity is one of the following: at least 150 minutes per week of light to moderate activity, 75 minutes per week of vigorous activity, or an equivalent combination of both.

Strengthening activity is at least 2 sessions per week of exercise designed to strengthen muscles.

A total of $\mathbf{2 2 . 6 \%}$ of Lee County adults regularly participate in adequate levels of both aerobic and strengthening activities (meeting physical activity recommendations).

TREND $>$ Marks a statistically significant decrease from 2007 survey findings.
DISPARITY $>$ Lower among women, seniors, and especially low-income residents.

Meets Physical Activity Recommendations
Healthy People 2020 = 20.1\% or Higher

Lee County


[^17] least twice per week.

## Meets Physical Activity Recommendations

(Lee County, 2020)
Healthy People $2020=20.1 \%$ or Higher


## Children

## CHILDREN: RECOMMENDED LEVELS OF PHYSICAL ACTIVITY

Children and adolescents should do 60 minutes (1 hour) or more of physical activity each day.

- 2013 Physical Activity Guidelines for Americans, US Department of Health and Human Services. www.cdc.gov/physicalactivity

Among Lee County children age 2 to 17, 49.0\% are reported to have had 60 minutes of physical activity on each of the seven days preceding the interview (1+ hours per day).

BENCHMARK $>$ More favorable than the national prevalence.
DISPARITY $>$ The prevalence is much higher among young children (under 11) than those age 11 through 17.

Child Is Physically Active for One or More Hours per Day (Parents of Children Age 2-17)


## Total Screen Time

A total of $36.9 \%$ of county children age 5 to 17 spend three or more hours on screen time for entertainment (whether television or computer, internet, video games, etc.) per day.

TREND $>$ Appears to be increasing, although the change is not yet statistically significant.
DISPARITY $>$ The prevalence is especially high among boys and older children (age 11 to 17).

# Children's Total Screen Time Per Day [TV, Computer, Video Games, Etc. for Entertainment] <br> (Lee County Children Age 5-17; 2020) 



[^18]
# 3+ Hours of Total Screen Time Per Day <br> [TV, Computer, Video Games, Etc. for Entertainment] <br> (Lee County Children Age 5-17; 2020) 

Lee County


## Access to Physical Activity

Here, recreation/fitness facilities include establishments engaged in operating facilities which offer "exercise and other active physical fitness conditioning or recreational sports activities."

Examples include athletic clubs, gymnasiums, dance centers, tennis clubs, and swimming pools.

In 2016, there were 8.9 recreation/fitness facilities for every $\mathbf{1 0 0 , 0 0 0}$ population in Lee County.
BENCHMARK $>$ Lower than the Florida and US ratios.

Population With Recreation \& Fitness Facility Access
(Number of Recreation \& Fitness Facilities per 100,000 Population, 2016)


Sources: - US Census Bureau, County Business Patterns. Additional data analysis by CARES.
Notes: Recreation and fitness facilities are defined by North American Industry Classification System (NAICS) Code 713940, which include Establishments engaged in operating facilities which offer "exercise and other active physical fitness conditioning or recreational sports activities." Examples include athletic clubs, operating facilities which offer "exercise and other active physical fitness conditioning or recreational sports activities." Examples include athletic clubs,
gymnasiums, dance centers, tennis clubs, and swimming pools. This indicator is relevant because access to recreation and fitness facilities encourages physical gymnasiums, dance centers, tennis activity and other healthy behaviors.

## WEIGHT STATUS

## ABOUT OVERWEIGHT \& OBESITY

Because weight is influenced by energy (calories) consumed and expended, interventions to improve weight can support changes in diet or physical activity. They can help change individuals' knowledge and skills, reduce exposure to foods low in nutritional value and high in calories, or increase opportunities for physical activity. Interventions can help prevent unhealthy weight gain or facilitate weight loss among obese people. They can be delivered in multiple settings, including health care settings, worksites, or schools.

The social and physical factors affecting diet and physical activity (see Physical Activity topic area) may also have an impact on weight. Obesity is a problem throughout the population. However, among adults, the prevalence is highest for middle-aged people and for non-Hispanic black and Mexican American women. Among children and adolescents, the prevalence of obesity is highest among older and Mexican American children and non-Hispanic black girls. The association of income with obesity varies by age, gender, and race/ethnicity.

- Healthy People 2020 (www.healthypeople.gov)

Body Mass Index (BMI), which describes relative weight for height, is significantly correlated with total body fat content. The BMI should be used to assess overweight and obesity and to monitor changes in body weight. In addition, measurements of body weight alone can be used to determine efficacy of weight loss therapy. BMI is calculated as weight (kg)/height squared $\left(\mathrm{m}^{2}\right)$. To estimate BMI using pounds and inches, use: [weight (pounds)/height squared (inches ${ }^{2}$ )] $\times 703$.

In this report, overweight is defined as a BMI of 25.0 to $29.9 \mathrm{~kg} / \mathrm{m}^{2}$ and obesity as a $\mathrm{BMI} \geq 30 \mathrm{~kg} / \mathrm{m}^{2}$. The rationale behind these definitions is based on epidemiological data that show increases in mortality with BMIs above $25 \mathrm{~kg} / \mathrm{m}^{2}$. The increase in mortality, however, tends to be modest until a BMI of $30 \mathrm{~kg} / \mathrm{m}^{2}$ is reached. For persons with a BMI $\geq 30 \mathrm{~kg} / \mathrm{m}^{2}$, mortality rates from all causes, and especially from cardiovascular disease, are generally increased by 50 to 100 percent above that of persons with BMIs in the range of 20 to $25 \mathrm{~kg} / \mathrm{m}^{2}$.

- Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.


## Adult Weight Status

CLASSIFICATION OF OVERWEIGHT AND OBESITY BY BMI BMI (kg/m²)

## Underweight

Normal
Overweight
$<18.5$
$18.5-24.9$
$25.0-29.9$
$\geq 30.0$

Source: Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.

## Overweight Status

Here, "overweight" includes those respondents with a BMI value $\geq 25$.
"Obese" (also included in overweight prevalence discussed previously) includes respondents with a BMI value $\geq 30$.

Nearly two in three Lee County adults (63.4\%) are overweight.
DISPARITY $>$ Highest in Market Area 2.

Prevalence of Total Overweight (Overweight and Obese)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [lems 155, 191]

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control
and Prevention (CDC): 2018 Florida data.
Notes: - Based on reported heights and weights, asked of all respondents.
- The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender. The definition for obesity is a BMI greater than or equal to 30.0

The overweight prevalence above includes $29.3 \%$ of Lee County adults who are obese.
TREND $>$ Marks a statistically significant increase from 2007 survey findings.
DISPARITY > Highest in Market Area 2. Especially high among low-income residents.

## Prevalence of Obesity <br> Healthy People $2020=30.5 \%$ or Lower



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 154]
Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention CDC): 2018 Florida data.

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-9]

- The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0 , regardless of gender


## Prevalence of Obesity

(Lee County, 2020)
Healthy People $2020=30.5 \%$ or Lower


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 154]

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-9]

Notes: - Based on reported heights and weights, asked of all respondents

- The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0 regardless of gender.

The correlation between overweight and various health issues cannot be disputed.

## Relationship of Overweight With Other Health Issues

Overweight and obese adults are more likely to report a number of adverse health conditions, as outlined in the following chart.

Relationship of Overweight With Other Health Issues (Lee County, 2020)<br>- Among Healthy Weight - Among Overweight/Not Obese - Among Obese



[^19]
## Children's Weight Status

## ABOUT WEIGHT STATUS IN CHILDREN \& TEENS

In children and teens, body mass index (BMI) is used to assess weight status - underweight, healthy weight, overweight, or obese. After BMI is calculated for children and teens, the BMI number is plotted on the CDC BMI-for-age growth charts (for either girls or boys) to obtain a percentile ranking. Percentiles are the most commonly used indicator to assess the size and growth patterns of individual children in the United States. The percentile indicates the relative position of the child's BMI number among children of the same sex and age.

BMI-for-age weight status categories and the corresponding percentiles are shown below:

- Underweight $<5^{\text {th }}$ percentile
- Healthy Weight $\geq 5^{\text {th }}$ and $<85^{\text {th }}$ percentile
- Overweight $\quad \geq 85^{\text {th }}$ and $<95^{\text {th }}$ percentile
- Obese $\quad \geq 95^{\text {th }}$ percentile
- Centers for Disease Control and Prevention

Based on the heights/weights reported by surveyed parents, $24.2 \%$ of Lee County children age 5 to 17 are overweight or obese ( $\geq 85$ th percentile).

TREND $>$ Decreasing significantly from 2007 survey results.

Prevalence of Overweight in Children
(Parents of Children Age 5-17)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 192

- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents with children age 5-17 at home.

- Overweight among children is determined by children's Body Mass Index status at or above the $85^{\text {th }}$ percentile of US growth charts by gender and age.

The childhood overweight prevalence above includes 12.3\% of area children age 5 to 17 who are obese ( $\geq 95$ th percentile).

TREND $>$ Denotes a statistically significant decrease since 2007.
DISPARITY $>$ The prevalence is much higher among Lee County girls than boys.

## Prevalence of Obesity in Children

(Children Age 5-17 Who Are Obese; BMI in the 95 ${ }^{\text {th }}$ Percentile or Higher)
Healthy People $2020=14.5 \%$ or Lower

Lee County


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 158]

- 2020 PRC National Health Survey, PRC, Inc
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-10.4]

Notes: - Asked of all respondents with children age 5-17 at home

- Obesity among children is determined by children's Body Mass Index status equal to or above the $95^{\text {th }}$ percentile of US growth charts by gender and age.


## Key Informant Input:

## Nutrition, Physical Activity \& Weight

Key informants taking part in an online survey most often characterized Nutrition, Physical Activity \& Weight as a "moderate problem" in the community.

## Perceptions of Nutrition, Physical Activity, and Weight as a Problem in the Community <br> (Key Informants, 2020)



Among those rating this issue as a "major problem," reasons related to the following:

## Access to Affordable Healthy Food

Eating heathy is often cost prohibitive. Understanding what is healthy/unhealthy. Restrictive access to exercise locations that are accessible to the whole public. Some people may not put their health as a personal priority. Public Health Representative
Access and cost of healthy eating. Education on healthy food options. - Social Services Provider
Grocery stores in this area are limited and offer poor quality at high prices. The farmer's markets are even worse, with much of the produce coming from overseas and the same available in grocery stores, not what I expected in a local farmer's market. There are no complete streets or ability to safely travel without a vehicle and the local parks are only geared toward very small children. There are very few opportunities for low cost/free outdoor recreation for youth and families in the area. Current programs and infrastructure are disjointed, half-hearted efforts that do nothing to benefit the community. - Public Health Representative
Lack of adequate coverage for nutrition services for children. Lack of programs to have patients enroll in so that may live healthier lives and have insurances cover these services. - Physician
I think making nutritious food available and affordable are important initiatives. I think there needs to be more education on why eating healthy and exercise is important. Another barrier we face in Southwest Florida is the high-heat summers. Many people are out of school and have a lot of free time, but it is not always safe to exercise outside in the heat. I think more focus could be put on helping people learn to exercise inside and do activities in the community indoors in the summertime. - Public Health Representative
Being able to purchase healthier foods. - Public Health Representative

## Awareness/Education

Lack of information and the misinformation that surrounds what is a healthy diet. Secondly the apparent aversion to exercise. Some people just don't think they have the power to change their lives whether through diet or exercise. - Other Health Provider
Lack of knowledge, access, cost of good food choices. - Physician
Lack of knowledge about effects of poor nutrition, lack of exercise, and the profound effects on our organs and weight. - Community Leader
Low income, misinformation. - Physician

## Built Environment

The physical environment does not assist those wanting a more organic, holistic way of managing their weight. Community Leader
There is a lack of city infrastructure that can promote physical activity. There are not sidewalks. Gym fees are expensive. Healthy food choices at supermarkets are expensive and it is cheaper to buy food at McDonalds. Health education about nutrition are offered at the health department but it is limited to women, infants and children (WIC). - Public Health Representative
More access for biking and walking paths to encourage more physical activity. Free access to nutrition information. Events which would encourage physical activity. - Other Health Provider
Shortage of sidewalks and safe walking spaces. Low income families cannot afford nutritional, fresh foods and vegetables. - Social Services Provider

## Nutrition

Regarding nutrition, it appears that due to the work demands of parents, families in Lee County may not be having nutritious meals and opt for less healthier choices like fast food or processed meals. In addition, affording more nutritional choices can be obstacle for many families. Regarding physical activity, there are challenges for different groups. Children get a small amount of physical activity during the school day and most activities outside of the school environment require a fee, which may be prohibitive to many families. Another challenge is unfortunately because of higher temperatures in our region, residents may not engage in outdoor physical activities due to the heat. Lastly, there are gyms throughout the county, however, they all have membership or use fees, which again may impact the number of residents that can engage in physical activities. Due to the lack of nutritional and physical activity options, weight is an issue for the people of this community. - Public Health Representative
Food deserts, lack of walkable communities, lack of sidewalks, lack of nutrition knowledge, lack of cooking skills. - Public Health Representative

Our community and country as a whole are not as healthy as is could be. There needs to be more education on the benefits of fruits, vegetables and exercise. Especially with our children. - Community Leader
Few good community resources for dietary education, weight management program and nutrition counseling. Physician

## Obesity

People are more overweight than ever before. The unfortunate side-effect of a two-person working household has something to do with this. The other issue is that people are too lazy to take the time to cook healthy foods and rely on fast food too much. - Community Leader

This county is overweight. - Other Health Provider
Obesity is rampant throughout the United States, and especially in the South. - Public Health Representative
The percentage of population with obesity continues to grow due to lack of proper nutrition and healthcare because of limited income and, or access to transportation to receive medical care and services. - Community Leader

## Lack of Physical Activity

We live in a society that emphasizes the automobile and discourages even minor physical exertion. For example, we tend to feel virtuous for taking the stairs instead of the elevator. Since so much can be accomplished without the need to engage in physical activity, one must then choose to become physically active. There is also an undeniable relationship between nutrition, weight, and physical activity. This is not an issue specific to SWFL. It is nationwide. - Community Leader

For some, acknowledgement that it is an issue which in turns, impacts motivation and acceptance of the issue. From under resourced communities, access to nutritional counseling, food, health and wellness engagement. Social Services Provider

Young kids and regular exercise and good nutrition. - Other Health Provider

Stress levels drive stress eating in many cases. There is either the real or perceived issue that eating healthy costs more and families are taxed financially. We have a nation (and community) with poor eating habits that have resulted in all-time high obesity. - Community Leader
Major lifestyle issues. - Social Services Provider

## Affordable Care/Services

Cost of gym and workout places. Cost of nutritional guidance. Nutritionists cost $\$ 80$ to $\$ 90$ per visit. That is cost prohibitive for young and older people living in poverty. Cost of fresh food is another factor. - Social Services Provider

## Contributing Factors

Healthier food options for better nutrition. - Public Health Representative
Obesity and poor nutrition are increasing every year and the reason cardiovascular death rates are increasing after a 50 -year decline. - Physician

## Cultural/Personal Beliefs

Cultural ideals, food deserts, transportation, lack of clean, safe parks. Limited resources, programs. - Public Health Representative

## Access to Care/Services

Lack of access and facilities. - Physician

## Denial/Stigma

Inclusion and support. - Community Leader

## Poverty/Income

Low-income families with inadequate resources, information, and education on the issue. - Community Leader

## SUBSTANCE ABUSE

## ABOUT SUBSTANCE ABUSE

Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. These problems include:

- Teenage pregnancy
- Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS)
- Other sexually transmitted diseases (STDs)
- Domestic violence
- Child abuse
- Motor vehicle crashes
- Physical fights
- Crime
- Homicide
- Suicide

Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. Social attitudes and political and legal responses to the consumption of alcohol and illicit drugs make substance abuse one of the most complex public health issues. In addition to the considerable health implications, substance abuse has been a flash-point in the criminal justice system and a major focal point in discussions about social values: people argue over whether substance abuse is a disease with genetic and biological foundations or a matter of personal choice.

Advances in research have led to the development of evidence-based strategies to effectively address substance abuse. Improvements in brain-imaging technologies and the development of medications that assist in treatment have gradually shifted the research community's perspective on substance abuse. There is now a deeper understanding of substance abuse as a disorder that develops in adolescence and, for some individuals, will develop into a chronic illness that will require lifelong monitoring and care.

Improved evaluation of community-level prevention has enhanced researchers' understanding of environmental and social factors that contribute to the initiation and abuse of alcohol and illicit drugs, leading to a more sophisticated understanding of how to implement evidence-based strategies in specific social and cultural settings.

A stronger emphasis on evaluation has expanded evidence-based practices for drug and alcohol treatment. Improvements have focused on the development of better clinical interventions through research and increasing the skills and qualifications of treatment providers.

- Healthy People 2020 (www.healthypeople.gov)


## Age-Adjusted Cirrhosis/Liver Disease Deaths

Between 2016 and 2018, Lee County reported an annual average age-adjusted cirrhosis/liver disease mortality rate of 12.8 deaths per 100,000 population.

[^20]Cirrhosis/Liver Disease: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population)

Healthy People $2020=8.2$ or Lower


# Cirrhosis/Liver Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) 

Healthy People $2020=8.2$ or Lower

|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| _Lee County | 11.7 | 11.7 | 11.9 | 11.3 | 12.5 | 13.7 | 13.5 | 12.8 |
| FL | 10.6 | 10.7 | 10.7 | 11.0 | 11.4 | 11.8 | 11.6 | 11.6 |
| US | 9.6 | 9.9 | 10.0 | 10.3 | 10.5 | 10.6 | 10.8 | 10.9 |

[^21]
## Alcohol Use

## Excessive Drinking

Excessive drinking includes heavy and/or binge drinkers:

- HEAVY DRINKERS $~>~ m e n ~ r e p o r t i n g ~ 2+~ a l c o h o l i c ~ d r i n k s ~ p e r ~ d a y ~ o r ~ w o m e n ~ r e p o r t i n g ~$ $1+$ alcoholic drink per day in the month preceding the interview.
- BINGE DRINKERS > men reporting 5+ alcoholic drinks or women reporting 4+ alcoholic drinks on any single occasion during the past month.

A total of $\mathbf{2 7 . 9 \%}$ of area adults are excessive drinkers (heavy and/or binge drinkers).
BENCHMARK $>$ Well above the Florida percentage.
TREND $>$ Marks a statistically significant increase from 2011 survey results.
DISPARITY $>$ Much higher among men and young adults.

## Excessive Drinkers

Healthy People $2020=25.4 \%$ or Lower


#### Abstract

Lee County 

Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 168] - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention Behavioral Risk Factor Sur 2020 PRC National Health Survey, PRC, Inc. - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-15]

Notes: - Asked of all respondents. Excessive drinking reflects the number of persons aged 18 years and over who drank more than two drinks per day on average (for men) or more than one drink per day on average (for women) OR who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.


## Excessive Drinkers

(Lee County, 2020)
Healthy People $2020=25.4 \%$ or Lower

Note: As a self-reported measure - and because this indicator reflects potentially illegal behavior - it is reasonable to expect that it might be underreported, and that the actual incidence of drinking and driving in the community is likely higher.


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 168]
Notes: US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-15]
Notes: - Asked of all respondents.

- Excessive drinking reflects the number of persons aged 18 years and over who drank more than two drinks per day on average (for men) or more than one drink per day on average (for women) $\underline{\mathrm{OR}}$ who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.


## Drinking \& Driving

A total of $1.2 \%$ of Lee County adults acknowledge having driven a vehicle in the past month after they had perhaps too much to drink.

BENCHMARK $>$ Lower than the state prevalence.
TREND $>$ Marks a statistically significant increase from 2007 survey findings.
DISPARITY $>$ Lowest in Market Areas 2 and 3.

Have Driven in the Past Month
After Perhaps Having Too Much to Drink


[^22]Notes: - Asked of all respondents.

## Age-Adjusted Unintentional Drug-Related Deaths

Between 2016 and 2018, there was an annual average age-adjusted unintentional drug-related mortality rate of 31.4 deaths per 100,000 population in Lee County.

BENCHMARK $>$ Well above the state and US rates.
TREND $>$ Increasing considerably in recent years, more notably than state and national trends.

## Unintentional Drug-Related Deaths: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population) <br> Healthy People $2020=11.3$ or Lower



Lee County


FL
18.1


US

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-12]

Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.


|  | $2009-2011$ | $2010-2012$ | $2011-2013$ | $2012-2014$ | $2013-2015$ | $2014-2016$ | $2015-2017$ | $2016-2018$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LLee County | 14.9 | 12.5 | 10.2 | 9.3 | 11.5 | 16.5 | 24.2 | 31.4 |
| FL | 13.5 | 12.4 | 11.2 | 10.6 | 11.9 | 15.7 | 19.6 | 21.8 |
| LUS | 10.1 | 10.7 | 11.1 | 11.6 | 12.4 | 14.3 | 16.7 | 18.1 |

Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-12].

Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

For the purposes of this survey, "illicit drug use" includes use of illegal substances or of prescription drugs taken without a physician's order.
Note: As a self-reported measure - and because this indicator reflects potentially illegal behavior - it is reasonable to expect that it might be underreported, and that actual illicit drug use in the community is likely higher.

## Illicit Drug Use

## A total of $6.4 \%$ of Lee County adults acknowledge using an illicit drug in the past month.

BENCHMARK $>$ Much worse than the US figure.
TREND > Increasing significantly from 2007 survey results.
DISPARITY $>$ Lowest in Market Area 3. Decreases with age and is higher among men than women.

Illicit Drug Use in the Past Month
Healthy People $2020=7.1 \%$ or Lower

Lee County

| 9.2\% | 6.1\% | 29\% | 6.1\% | 6.4\% |  | 1.9\% | 1.6\% | 2.7\% | 4.5\% | 6.4\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Market | Market | Market | Market | Lee County | US | 2007 | 2011 | 2014 | 2017 | 2020 |
| Area 1 | Area 2 | Area 3 | Area 4 |  |  |  |  |  |  |  |

Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 59]

- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-13.3]

Notes: - Asked of all respondents.

Illicit Drug Use in the Past Month<br>(Lee County, 2020)<br>Healthy People $2020=7.1 \%$ or Lower



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 59]

- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-13.3]

Notes: - Asked of all respondents.

## Use of Prescription Opioids

Opioids are a class of drugs used to treat pain Examples presented to respondents include morphine, codeine, hydrocodone, oxycodone, methadone, and fentanyl. Common brand name opioids include Vicodin, Dilaudid, Percocet, OxyContin, and Demerol.

## A total of $16.7 \%$ of Lee County report using a prescription opioid drug in the past year.

BENCHMARK $>$ Well above the national figure.
DISPARITY $>$ Unfavorably high in Market Area 2. Higher among adults under 65 and those in lowincome households.

Opiate Use in the Past Year


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 316]

- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

Opiate Use in the Past Year
(Lee County, 2020)


[^23]

## Use of Marijuana

A total of $\mathbf{1 4 . 3 \%}$ of Lee County report using marijuana in the past month.
BENCHMARK $>$ Well above the US prevalence.
TREND $>$ Denotes a statistically significant increase from 2017 survey results.
DISPARITY $>$ Highest in Market Area 3. The prevalence decreases with age and is higher among men and low-income residents.

Marijuana Use in the Past Month

Lee County

| 14.8\% | 15.7\% | 18.5\% | 9.4\% | 14.3\% | 8.5\% | 5.4\% | 12.6\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| Market | Market | Market | Market | Lee County | US | 2017 | 2020 |
| Area 1 | Area 2 | Area 3 | Area 4 |  |  |  |  |

Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 315]

- 2017 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

Marijuana Use in the Past Month
(Lee County, 2020)


[^24]
## Alcohol \& Drug Treatment

A total of $6.0 \%$ of Lee County adults report that they have sought professional help for an alcohol or drug problem at some point in their lives.

TREND $>$ Marks a statistically significant increase from previous survey findings.
DISPARITY $>$ Highest in Market Area 3.

# Have Ever Sought Professional Help for an Alcohol/Drug-Related Problem 



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 60]
Notes: - Asked of all respondents


## Personal Impact From Substance Abuse

Area adults were also asked to what degree their lives have been impacted by substance abuse (whether their own abuse or that of another).

Most Lee County residents' lives have not been negatively affected by substance abuse (either their own or someone else's).

Degree to Which Life Has Been Negatively
Affected by Substance Abuse (Self or Other's)
(Lee County, 2020)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 61]
Notes: - Asked of all respondents.

However, 36.9\% have felt a personal impact to some degree ("a little," "somewhat," or "a great deal").

DISPARITY $>$ The prevalence is higher among men, young adults, and low-income residents.

## Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else)



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 195]

- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

- Includes response of "a great deal," "somewhat," and "a little."


## Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else) (Lee County, 2020)



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 195]
Notes:

- Includes response of "a great deal," "somewhat," and "a little."


## Key Informant Input: Substance Abuse

The greatest share of key informants taking part in an online survey characterized Substance Abuse as a "major problem" in the community.

## Perceptions of Substance Abuse <br> as a Problem in the Community <br> (Key Informants, 2020)

- Major Problem - Moderate Problem - Minor Problem - No Problem At All


[^25]Among those rating this issue as a "major problem," reasons related to the following:

## Access to Care/Services

Program availability, access. - Community Leader
Wait list is too extensive. Not enough options or bed space for inpatient treatment priority given to IV users over others with significant substance abuse struggles. - Social Services Provider
Lack of availability or access to skilled treatment providers as well as existing providers unwilling to take uninsured and/or underinsured patients. - Community Leader
Despite the increase in funding for opiate-related issues, there are still limited available resources. Additionally, many commercial insurances are not complying with the Mental Health Parity and Substance Abuse Equity Act or with the Affordable Care Act by funding and supporting behavioral health services on par with other medical conditions and no one is holding them accountable. - Social Services Provider
Not enough resources or providers throughout the county. - Public Health Representative
Lack of treatment facilities, facilities that are affordable, access to trained professionals. - Public Health Representative
Adequate mental health coverage will help. - Other Health Provider
Lack of providers for care. Lack of insurance coverage for care. Patient unwillingness to pursue care. - Physician
Lack of services, people not ready to receive help, lack of insurance. - Public Health Representative
Limited facilities, funding and professionals. - Community Leader
Options for entering treatment centers. Individuals with substance abuse issues are diverse and come from all walks of life. A barrier may be the ability to pay and the type services offered to meet the needs of the client. The client lacking the will to overcome their problem can be a major barrier. - Other Health Provider
Lack of resources, treatment facilities, affordable care options. - Other Health Provider
Access to SUD services and ability to pay for same. - Physician
Limited access to care and treatment. - Other Health Provider
Lack of access to services, lack of detox beds, lack of support services in recovery, alcohol abuse in senior population. - Community Leader
There are limited facilities for more than 21 days of care, inpatient or outpatient. - Social Services Provider Lack of facilities, intervention, rehab, money. - Community Leader

## Contributing Factors

The opioid crisis is affecting many of the babies born prematurely. This is an area that can be greatly reduced by the number of prescriptions that doctors fill. And more education on the side effects for patients taking them. I also think that we will have many more issues come to light with the use of marijuana for medical uses. Community Leader
Doctors prescribe opioids too easily. There is a black market on it and it's a real problem. If doctors or drug stores report on who the doctor is prescribing and its tracked and monitored, hopefully this should help. Going to a facility is very expensive and it's hard to keep them there when they are going through the withdrawal. Community Leader
Rampant opioid use and meth is back. - Community Leader
Low income and peer pressure. - Physician
Our young people in poverty are experiencing it themselves and/or a parent with substance abuse issues. Greatest barrier is money, transportation, and support in follow-up. - Social Services Provider
The warm weather in Florida seems to make everyone irresponsible with drugs and alcohol use and abuse. Public Health Representative
Transportation, financial resources, capacity issues related to funding slots. Pay of the agencies creates staffing issues, inconsistency within residential programs. - Social Services Provider

## Funding

Funding to ensure there are enough services and capacity for serving all individuals in need. - Social Services Provider
Funding for services. Not enough providers. - Social Services Provider
Funding, inpatient substance abuse treatment. - Social Services Provider
Funding. - Community Leader
Funding is the driving force and the most significant barrier, followed by a shortage of psychiatrists. - Social Services Provider
Investment in programs. - Physician

## Affordable Care/Services

Not enough substance abuse facilities that are affordable. - Public Health Representative
Lack of affordable treatment centers. - Social Services Provider
Lack of affordable or free substance abuse centers. There is also a lack of help to treat people that have issues and want to quit. - Community Leader
Not a lot of quality care and cost. - Other Health Provider
Money and counselors. - Social Services Provider

## Denial/Stigma

The recognition that there is a problem. The desire to receive help. - Social Services Provider
Fear, shame. - Public Health Representative
Stigma, lack of access to care, limited treatment opportunities, lack of public transportation, lack of understanding of substance abuse disorder as a disease process. - Social Services Provider
Stigma and engagement. - Social Services Provider

## Access to Care for Uninsured/Underinsured

Lack of availability of treatment for those without insurance. - Social Services Provider Insurance to pay for long term treatment that is appropriate and respectable. We also need facilities like that here. What kind of facility would you want your loved one in and with whom. Mental health needs to be treated at the same time. - Community Leader
Lack of insurance and poverty. Lack of a comprehensive needle exchange program in our area that can decrease the use and sharing of needles and equipment among IDU. - Public Health Representative

## Awareness/Education

Knowledge, access, and the want to go. - Other Health Provider
The biggest barrier is education and identifying the problem. Affordable treatment and transportation to treatment is not readily available. - Social Services Provider

## Prevalence/Incidence

There is widespread substance abuse in our community in all demographic groups. And it is hard to treat. Other Health Provider
Prevalence is high. - Social Services Provider

## Most Problematic Substances

Key informants (who rated this as a "major problem") identified alcohol as causing the most problems in the community, followed closely by heroin or other opioids. Other substances mentioned included prescription medications, methamphetamine/other amphetamines, and cocaine/crack.

## SUBSTANCES VIEWED AS MOST PROBLEMATIC IN THE COMMUNITY (Among Key Informants Rating Substance Abuse as a "Major Problem")

| ALCOHOL | $42.9 \%$ |
| :--- | :---: |
| HEROIN OR OTHER OPIOIDS | $38.8 \%$ |
| PRESCRIPTION MEDICATIONS | $8.2 \%$ |
| METHAMPHETAMINE OR OTHER AMPHETAMINES | $6.1 \%$ |
| COCAINE OR CRACK | $4.1 \%$ |

## TOBACCO USE

## ABOUT TOBACCO USE

Tobacco use is the single most preventable cause of death and disease in the United States.
Scientific knowledge about the health effects of tobacco use has increased greatly since the first Surgeon General's report on tobacco was released in 1964.

Tobacco use causes:

- Cancer
- Heart disease
- Lung diseases (including emphysema, bronchitis, and chronic airway obstruction)
- Premature birth, low birth weight, stillbirth, and infant death

There is no risk-free level of exposure to secondhand smoke. Secondhand smoke causes heart disease and lung cancer in adults and a number of health problems in infants and children, including: severe asthma attacks; respiratory infections; ear infections; and sudden infant death syndrome (SIDS).

Smokeless tobacco causes a number of serious oral health problems, including cancer of the mouth and gums, periodontitis, and tooth loss. Cigar use causes cancer of the larynx, mouth, esophagus, and lung.

- Healthy People 2020 (www.healthypeople.gov)


## Cigarette Smoking

## Cigarette Smoking Prevalence

## A total of $15.2 \%$ of Lee County adults currently smoke cigarettes, either regularly (every day) or occasionally (on some days).

Cigarette Smoking Prevalence
(Lee County, 2020)


[^26]Note the following findings related to cigarette smoking prevalence in Lee County.
BENCHMARK $>$ Fails to satisfy the Healthy People 2020 objective.
DISPARITY $>$ Highest in Market Areas 1 and 3. The prevalence decreases with age and is especially high among low-income residents and non-Hispanic communities of color.

## Current Smokers

Healthy People $2020=12.0 \%$ or Lower

| 19.7\% | 12.5\% | 22.3\% |  | 15.2\% | 14.5\% | 17.4\% | 15.6\% 17.9\% |  | 13.5\% 13.4\% 15.2\% |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 7.1\% |  |  |  |  |  |  |  |  |
| Market | Market | Market | Market | Lee County | FL | US | 2007 | 2011 | 2014 | 2017 | 2020 |
| Area 1 | Area 2 | Area 3 | Area 4 |  |  |  |  |  |  |  |  |

Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 49]

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Florida data
- 2020 PRC National Health Survey, PRC, Inc
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.1]
- Includes regular and occasional smokers (those who smoke cigarettes every day or on some days).


## Current Smokers

(Lee County, 2020)
Healthy People $2020=12.0 \%$ or Lower


## Environmental Tobacco Smoke

Among all surveyed households in Lee County, $10.8 \%$ report that someone has smoked cigarettes in their home on an average of four or more times per week over the past month.

BENCHMARK $>$ Below the national percentage.
DISPARITY $>$ Unfavorably high in Market Area 3, especially compared with Market Area 4.

Member of Household Smokes at Home


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Items 52, 161-162]

- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

- "Smokes at home" refers to someone smoking cigarettes, cigars, or a pipe in the home an average of four or more times per week in the past month.


## Smoking Cessation

## ABOUT REDUCING TOBACCO USE

Preventing tobacco use and helping tobacco users quit can improve the health and quality of life for Americans of all ages. People who stop smoking greatly reduce their risk of disease and premature death. Benefits are greater for people who stop at earlier ages, but quitting tobacco use is beneficial at any age.

Many factors influence tobacco use, disease, and mortality. Risk factors include race/ethnicity, age, education, and socioeconomic status. Significant disparities in tobacco use exist geographically; such disparities typically result from differences among states in smoke-free protections, tobacco prices, and program funding for tobacco prevention.

- Healthy People 2020 (www.healthypeople.gov)

Just over half of regular smokers ( $52.3 \%$ ) went without smoking for one day or longer in the past year because they were trying to quit smoking.

BENCHMARK $>$ Fails to satisfy the Healthy People 2020 objective.
TREND $>$ Decreasing from 2014 survey findings (but similar to results from the remaining survey administrations).

# Have Stopped Smoking for One Day or Longer in the Past Year <br> (Everyday Smokers) <br> Healthy People $2020=80.0 \%$ or Higher 



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 50]

- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-4.1]

Notes: - Asked of respondents who smoke cigarettes every day.

## Other Tobacco Use

## Use of Vaping Products

Most Lee County adults have never tried electronic cigarettes (e-cigarettes) or other electronic vaping products.

## Use of Vaping Products <br> (Lee County, 2020)



[^27]However, $9.3 \%$ currently use vaping products either regularly (every day) or occasionally (on some days).

BENCHMARK $>$ Higher than the Florida prevalence.
TREND $>$ Marks a statistically significant increase from 2017 survey results.
DISPARITY $>$ Unfavorably high in Market Area 3. Highest among young adults and low-income residents.

## Currently Use Vaping Products

(Every Day or on Some Days)


Currently Use Vaping Products
(Lee County, 2020)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 194]
Notes: - Asked of all respondents.

- Includes regular and occasional users (those who smoke e-cigarettes every day or on some days).


## Cigars \& Smokeless Tobacco

A total of $5.6 \%$ of Lee County adults use cigars every day or on some days.
BENCHMARK $>$ Far from satisfying the Healthy People 2020 objective.
DISPARITY $>$ Highest in Market Area 3 (not shown).

Examples of smokeless tobacco include chewing tobacco, snuff, or "snus."

A total of $3.3 \%$ of Lee County adults use some type of smokeless tobacco every day or on some days.

BENCHMARK $>$ Far from satisfying the Healthy People 2020 objective. DISPARITY $>$ Unfavorably high in Market Area 3 (not shown).

## Currently

Smoke Cigars
Healthy People Goal $=0.3 \%$ or Lower

US = 7.5\%
Currently Use
Smokeless Tobacco
Healthy People Goal $=0.2 \%$ or Lower

| US = 7.5\% | US $=4.4 \%$ <br> FL $=2.9 \%$ |  |
| :---: | :---: | :---: |
| Lee County 2017 | Lee County 2020 | Lee County 2017 |

Sources: • 2020 PRC Community Health Survey, PRC, Inc. [ltems 313-314]

- 2017 PRC National Health Survey, PRC, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Florida data
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objectives TU-1.2, TU-1.3]

Notes: - Reflects the total sample of respondents.

- Smokeless tobacco includes chewing tobacco or snuff


## Key Informant Input: Tobacco Use

Key informants taking part in an online survey were equally likely to characterize Tobacco Use as a "moderate problem" and a "minor problem" in the community.

> Perceptions of Tobacco Use as a Problem in the Community
> (Key Informants, 2020)

- Major Problem - Moderate Problem - Minor Problem - No Problem At All


## 19.2\%

38.5\%
38.5\%

[^28]Among those rating this issue as a "major problem," reasons related to the following:

## Prevalence/Incidence

Increasing prevalence and incidence of tobacco use among teens. - Public Health Representative
Many people still smoke and many more have the sequelae of long-term tobacco abuse. - Physician
Tobacco is an ongoing problem worldwide. - Public Health Representative
Due to the amount of people I see smoking and the health problems it brings. - Other Health Provider
Despite the high cost of tobacco, people still consume tobacco at alarming levels. Since the consumption of tobacco is often banned in indoor settings today, once most frequently sees people smoke in their cars or outside of their houses, etc. Most businesses will see a significant percentage of their workforce frequently "step outside for a cigarette break." Tobacco use has been strongly correlated to overall poor health, which raises health care costs for everyone and reduces health care access to everyone. - Community Leader
Lung cancer is the number-one cancer killer of both men and women, and tobacco use is the number-one cause. COPD is also mainly contributed to smoking. We still have too many people who are smoking and using other tobacco products, too many young people starting, and way too many people needlessly suffering its preventable ill effects. - Other Health Provider
I witness far too many people smoking regularly and/or switching to vaping. - Community Leader
People are still vaping and using tobacco products. - Public Health Representative

## Addiction

Addiction. - Physician
Smoking is advertised a lot in the community, made to look lovely, and it's habit forming. - Public Health Representative
The active ingredient in tobacco, nicotine, is highly addictive for people who are susceptible. Experts believe nicotine to be as addictive or more addictive than heroin or cocaine. When nicotine products are used as directed, they are known to kill. The negative effects of nicotine products are particularly harmful to women. Compared to men, women have double the risk of lung cancer, have a greater risk of CHD, absorb greater quantity of carcinogens and other toxin agents from the same number of cigarettes and have more difficulty quitting. - Other Health Provider
Tobacco use is a major problem due to addiction. People of lower socioeconomic status have more of challenge with this addiction. They cannot afford to purchase a pack, so stores are selling singles to keep them coming. These individuals are high risk and high cost to the health system when they become ill. - Other Health Provider

## Teen/Young Adult Usage

With the advent of vaping, our youth population's use of nicotine has escalated exponentially. - Social Services Provider
Vaping among teens and young adults is viewed as not a problem as they are not ingesting smoke. It is a problem and a community health issue. - Social Services Provider
Smoking is catching on with the young including vaping. - Community Leader

## Education

Ineffective tobacco programs. - Other Health Provider

## SEXUAL HEALTH

## ABOUT HUMAN IMMUNODEFICIENCY VIRUS (HIV)

The HIV epidemic in the United States continues to be a major public health crisis. An estimated 1.1 million Americans are living with HIV, and 1 in 5 people with HIV do not know they have it. HIV continues to spread, leading to about 56,000 new HIV infections each year.

HIV is a preventable disease, and effective HIV prevention interventions have been proven to reduce HIV transmission. People who get tested for HIV and learn that they are infected can make significant behavior changes to improve their health and reduce the risk of transmitting HIV to their sex or drugusing partners. More than $50 \%$ of new HIV infections occur as a result of the $21 \%$ of people who have HIV but do not know it.

In the era of increasingly effective treatments for HIV, people with HIV are living longer, healthier, and more productive lives. Deaths from HIV infection have greatly declined in the United States since the 1990s. As the number of people living with HIV grows, it will be more important than ever to increase national HIV prevention and health care programs.

There are gender, race, and ethnicity disparities in new HIV infections:

- Nearly $75 \%$ of new HIV infections occur in men.
- More than half occur in gay and bisexual men, regardless of race or ethnicity.
- $45 \%$ of new HIV infections occur in African Americans, $35 \%$ in whites, and $17 \%$ in Hispanics.

Improving access to quality health care for populations disproportionately affected by HIV, such as persons of color and gay and bisexual men, is a fundamental public health strategy for HIV prevention. People getting care for HIV can receive:

- Antiretroviral therapy
- Screening and treatment for other diseases (such as sexually transmitted infections)
- HIV prevention interventions
- Mental health services
- Other health services

As the number of people living with HIV increases and more people become aware of their HIV status, prevention strategies that are targeted specifically for HIV-infected people are becoming more important. Prevention work with people living with HIV focuses on:

- Linking to and staying in treatment.
- Increasing the availability of ongoing HIV prevention interventions.
- Providing prevention services for their partners.

Public perception in the US about the seriousness of the HIV epidemic has declined in recent years. There is evidence that risky behaviors may be increasing among uninfected people, especially gay and bisexual men. Ongoing media and social campaigns for the general public and HIV prevention interventions for uninfected persons who engage in risky behaviors are critical.

- Healthy People 2020 (www.healthypeople.gov)
- 


## Age-Adjusted HIV/AIDS Deaths

Between 2009 and 2018, there was an annual average age-adjusted HIV/AIDS mortality rate of 2.1 deaths per 100,000 population in Lee County. BENCHMARK $>$ Less than half the Florida rate.

HIV/AIDS: Age-Adjusted Mortality (2009-2018 Annual Average Deaths per 100,000 Population)

Healthy People $2020=3.3$ or Lower


Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.
US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HIV-12]
Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.


## HIV Prevalence

In 2015, there was a prevalence of 334.3 HIV cases per 100,000 population in Lee County.
BENCHMARK $>$ Much lower than the Florida prevalence.

HIV Prevalence
(Prevalence Rate of HIV per 100,000 Population, 2015)


Sources: - Centers for Disease Control and Prevention, National Center for HIVIAIDS, Viral Hepatitis, STD, and TB Prevention.

- Retrieved February 2020 from CARES Eng

Notes: - This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

## Sexually Transmitted Diseases

## ABOUT SEXUALLY TRANSMITTED DISEASES

STDs refer to more than 25 infectious organisms that are transmitted primarily through sexual activity. Despite their burdens, costs, and complications, and the fact that they are largely preventable, STDs remain a significant public health problem in the United States. This problem is largely unrecognized by the public, policymakers, and health care professionals. STDs cause many harmful, often irreversible, and costly clinical complications, such as: reproductive health problems; fetal and perinatal health problems; cancer; and facilitation of the sexual transmission of HIV infection.

Because many cases of STDs go undiagnosed-and some common viral infections, such as human papillomavirus (HPV) and genital herpes, are not reported to CDC at all-the reported cases of chlamydia, gonorrhea, and syphilis represent only a fraction of the true burden of STDs in the US. Untreated STDs can lead to serious long-term health consequences, especially for adolescent girls and young women. Several factors contribute to the spread of STDs.

Biological Factors. STDs are acquired during unprotected sex with an infected partner. Biological factors that affect the spread of STDs include:

- Asymptomatic nature of STDs. The majority of STDs either do not produce any symptoms or signs, or they produce symptoms so mild that they are unnoticed; consequently, many infected persons do not know that they need medical care.
- Gender disparities. Women suffer more frequent and more serious STD complications than men do. Among the most serious STD complications are pelvic inflammatory disease, ectopic pregnancy (pregnancy outside of the uterus), infertility, and chronic pelvic pain.
- Age disparities. Compared to older adults, sexually active adolescents ages 15 to 19 and young adults ages 20 to 24 are at higher risk for getting STDs.
- Lag time between infection and complications. Often, a long interval, sometimes years, occurs between acquiring an STD and recognizing a clinically significant health problem.

Social, Economic, and Behavioral Factors. The spread of STDs is directly affected by social, economic, and behavioral factors. Such factors may cause serious obstacles to STD prevention due to their influence on social and sexual networks, access to and provision of care, willingness to seek care, and social norms regarding sex and sexuality. Among certain vulnerable populations, historical experience with segregation and discrimination exacerbates these factors. Social, economic, and behavioral factors that affect the spread of STDs include: racial and ethnic disparities; poverty and marginalization; access to health care; substance abuse; sexuality and secrecy (stigma and discomfort discussing sex); and sexual networks (persons "linked" by sequential or concurrent sexual partners).

- Healthy People 2020 (www.healthypeople.gov)


## Chlamydia \& Gonorrhea

In 2016, the chlamydia incidence rate in Lee County was 374.1 cases per 100,000 population.
The Lee County gonorrhea incidence rate in 2016 was 75.6 cases per 100,000 population.
BENCHMARK $>$ Both rates are well below state and national incidence rates.

Chlamydia \& Gonorrhea Incidence (Incidence Rate per 100,000 Population, 2016)

- Lee County - FL - US


Sources: - Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.

- Retrieved February 2020 from CARES Engagement Network at https://engagementnetwork.org.

Notes: - This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

## Key Informant Input: Sexual Health

A plurality of key informants taking part in an online survey characterized Sexual Health as a "minor problem" in the community.

# Perceptions of Sexual Health <br> as a Problem in the Community <br> (Key Informants, 2020) 



Sources: - PRC Online Key Informant Survey, PRC, Inc.
Notes:
Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

## Awareness/Education

Our youth are not receiving adequate abstinence-based sex education. They are experimenting with their sexuality long before they are capable of responsibly dealing with the consequences. - Social Services Provider Lack of information on prevention, low self-esteem. - Public Health Representative Lack of education, stigma, invincible mindset. - Public Health Representative

Teens in our county represent a vulnerable population. Health education prevention for HIV and STDs is not allow inside the school district. - Public Health Representative
Misinformation, non-educated teens. - Physician
More support is needed for young people to get education and birth control. While pregnancy has been reduced among our teens, they still need to have access to education in this area. - Social Services Provider

## STD Rates

The spread of sexually transmitted diseases. Community clients do not take seriously the consequences of communicable diseases. Educate our younger population. - Public Health Representative
There is a high incidence and prevalence of STDs among our Lee County members. The number of cases in Lee County represents the highest among other counties in area 8. - Public Health Representative

With advancements in treatment and prevention of HIV, free sex is once again rampant. Similar to when the birth control pill became available in the 60s. - Public Health Representative

Access to Care/Services
Providers unwilling to discuss with their patients, limited access to care and treatment. - Other Health Provider


ACCESS TO HEALTH CARE

## HEALTH INSURANCE COVERAGE

## Type of Health Care Coverage

Survey respondents were asked a series of questions to determine their health care insurance coverage, if any, from either private or government-sponsored sources.

A total of $53.7 \%$ of Lee County adults age 18 to 64 report having health care coverage through private insurance. Another 27.8\% report coverage through a government-sponsored program (e.g., Medicaid, Medicare, military benefits).

## Healthcare Insurance Coverage

(Adults Age 18-64; Lee County, 2020)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 169] Notes: - Reflects respondents age 18 to 64.

Here, lack of health insurance coverage reflects respondents age 18 to 64 (thus, excluding the Medicare population) who have no type of insurance coverage for health care services neither private insurance nor governmentsponsored plans (e.g. Medicaid).

## Lack of Health Insurance Coverage

Among adults age 18 to 64, 18.5\% report having no insurance coverage for health care expenses.

BENCHMARK $>$ Twice the US prevalence. The Healthy People 2020 objective is universal coverage.
TREND $>$ Although higher than reported in 2017, the prevalence has decreased significantly from 2007 survey findings.

DISPARITY $>$ Highest among young adults, low-income residents, and Hispanics.

# Lack of Healthcare Insurance Coverage <br> (Adults Age 18-64) 

Healthy People $2020=0.0 \%$ (Universal Coverage)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 169]

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Florida data.
- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-1]

Notes: - Asked of all respondents under the age of 65 .

## Lack of Healthcare Insurance Coverage

(Adults Age 18-64; Lee County, 2020)
Healthy People $2020=0.0 \%$ (Universal Coverage)


## DIFFICULTIES ACCESSING HEALTH CARE

## ABOUT ACCESS TO HEALTH CARE

Access to comprehensive, quality health care services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. It impacts: overall physical, social, and mental health status; prevention of disease and disability; detection and treatment of health conditions; quality of life; preventable death; and life expectancy.

Access to health services means the timely use of personal health services to achieve the best health outcomes. It requires three distinct steps: 1) Gaining entry into the health care system; 2) Accessing a health care location where needed services are provided; and 3) Finding a health care provider with whom the patient can communicate and trust.

- Healthy People 2020 (www.healthypeople.gov)


## Difficulties Accessing Services

This indicator reflects the percentage of the total population experiencing problems accessing health care in the past year, regardless of whether they needed or sought care. It is based on reports of the barriers outlined in the following section.

A total of $43.7 \%$ of Lee County adults report some type of difficulty or delay in obtaining health care services in the past year.

BENCHMARK $>$ Well above the national figure.
TREND $>$ Denotes a statistically significant increase since 2007.
DISPARITY $>$ Favorably lower in Market Area 4. The prevalence is higher among women, young adults, low-income residents, and non-Hispanic communities of color.

> Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year

Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 171]

- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

- Percentage represents the proportion of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.


## Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year (Lee County, 2020)



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 171]
Notes: - Asked of all respondents.

- Percentage represents the proportion of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.


## Barriers to Healthcare Access

To better understand health care access barriers, survey participants were asked whether any of seven types of barriers to access prevented them from seeing a physician or obtaining a needed prescription in the past year.

Again, these percentages reflect the total population, regardless of whether medical care was needed or sought.

Of the tested barriers, appointment availability impacted the greatest share of county adults.
BENCHMARK $>$ The barriers of appointment availability and trouble finding a physician are worse in Lee County when compared with national figures.

TREND $>$ Note the increases over time for appointment availability, difficulty finding a physician, and language/culture as a barrier to care.

DISPARITY $>$ Cost of doctor visits, appointment availability, difficulty finding a physician, and language/cultural barriers were each highest in Market Area 3 (not shown).

## Barriers to Access Have Prevented Medical Care in the Past Year (Lee County)

$$
=2007-2011 \quad-2014 \quad-2017 \quad-2020 \quad \text { - US }
$$



Note also that $14.1 \%$ of Lee County adults have skipped or reduced medication doses in the past year in order to stretch a prescription and save costs.

Among all Lee County adults, 15.6 \% report that a lack of insurance coverage or their insurance type prevented their medical care in the past year.

DISPARITY $>$ Unfavorably high in Market Area 3. The prevalence is notably higher among women, adults under 65, and low-income residents. Note the $51.7 \%$ response among respondents without insurance coverage.

Of these people indicating insurance-related access problems in the past year, 30.7\% lacked coverage, while $20.6 \%$ reported that their insurance type was not accepted, and $11.0 \%$ had reached their coverage limits. Another $24.5 \%$ reported that cost was prohibitive.

## Lack of Insurance or the Wrong Type of Insurance Prevented Medical Care at Some Point in the Past Year

Of these people, 30.7\% lacked healthcare coverage, while $20.6 \%$ reported that their insurance was not accepted and $11.0 \%$ reported problems with coverage Lee County limits. Another $24.5 \%$ mentioned the cost of services.


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Items 305-306] Notes: - Asked of all respondents.

## Lack of Insurance or the Wrong Type of Insurance Prevented Medical Care at Some Point in the Past Year (Lee County, 2020)



Surveyed parents were also asked if, within the past year, they experienced any trouble receiving medical care for a randomly selected child in their household.

## Accessing Health Care for Children

A total of $10.7 \%$ of parents say there was a time in the past year when they needed medical care for their child but were unable to get it.

## Had Trouble Obtaining Medical Care for Child in the Past Year (Parents of Children 0-17)

Lee County



Lee County


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 118-119]

- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents with children 0 to 17 in the household.

## Key Informant Input: Access to Health Care Services

Key informants taking part in an online survey most often characterized Access to Health Care Services as a "moderate problem" in the community.

## Perceptions of Access to Healthcare Services <br> as a Problem in the Community <br> (Key Informants, 2020)



```
Sources: - PRC Online Key Informant Survey, PRC, Inc
Notes: - Asked of all respondents
```

Among those rating this issue as a "major problem," reasons related to the following:

## Access to Care for Uninsured/Underinsured

Lack of healthcare coverage for a great number of lower-salaried or lower-income people. - Community Leader Those who have no insurance and those who are not legal residents do not have access to medical care, dental care. Mental health services. - Other Health Provider

There are a lot of clients that lack health insurance within Lee County. This factor decreases the access to healthcare services as they are very expensive. In addition, Lee County is a racially and culturally diverse population. There are beliefs and values from other cultures that can impact the access to health care services. If we aim to address the issue of diversity within our organizations, it is essential to understand the unique system of values and beliefs of Lee County members. - Public Health Representative

Uninsured and medically needy persons cannot find affordable health care. Sliding fee scales at FQHCs are still hundreds of dollars out of pocket. - Other Health Provider
Lack of insurance, affordability, unequal access, and quality, depending on which community you live in. - Social Services Provider
Many do not have insurance or the ability to pay for services. Florida is not a Medicaid expansion state - and this has negatively affected our state/community. Parity, for those that do have insurance - many insurances do not provide adequate coverage for mental, behavioral, and substance abuse treatment. There are a number of providers offering duplicative services - this is a poor allocation of resources. - Social Services Provider Lack of adequate health insurance or no health insurance at all. Shortage of physicians. - Community Leader No insurance or high copay. - Physician

## Access to Care/Services

The major challenges to accessing health care service in Lee County is available health care providers and health insurance. There are limited providers, and many don't accept Medicaid. - Social Services Provider
A challenge is access to effective preventive, integrative, natural approaches to healthcare. - Other Health Provider

Access to healthcare in underserved communities, including lack of local facilities, underinsured population, particularly the working poor, lack of physicians in general in underserved communities, cultural and language barriers, lack of access for the homeless population, lack of access for illegal immigrants/transient populations Social Services Provider

Availability of providers and wait times. When I moved to the area, I attempted to locate a primary care provider. We have great insurance, but I had difficulty finding a provider that could see anyone in less than 4 months and was told frequently, even after the provider saw us for the initial set up of services, sick visit waits were often booked at least 3 weeks out. We have now been here almost 2 years and have not been able to establish a primary care provider due to scheduling. We have been using urgent care centers and the VA for sick visits. Public Health Representative

Limited services, high rate on fee, and limited locations. - Public Health Representative

## Contributing Factors

Lack of trained and available home health care professionals. - Community Leader
Affordability of health care, costs are rising across the board and the government is paying less and less. Community Leader
Lack of emergency room space in season. We don't have enough rooms. - Community Leader
Lack of medical insurance for low income adults. There is no expanded Medicaid for adults in Florida. - Social Services Provider
It is difficult to obtain a primary care physician. If you do get accepted into their panel it is a long wait to actually get to see them. This keeps coming up. - Other Health Provider
We need more cost-effective surgical access. Our model in the community forces a lot of hospital surgical scheduled cases which is affecting hospital bed access and cost. - Physician

Physician shortage, especially surgeons. - Community Leader
The ability for individuals who are indigent to receive primary care services, urgent care versus going to the emergency room. - Social Services Provider

## Transportation

Many of the members of our community have transportation issues and financial restraints that impact access to services. Many services do not accept all insurances or provide services on a sliding scale. In addition, service times are limited to weekdays. - Social Services Provider

Client transportation to appointments, understanding of health risks and benefits with continued treatment, inability to meet copays. - Social Services Provider
Transportation, lack of community health services, lack of access to insurance. - Community Leader
Transportation for the disadvantaged including but not limited to Medicaid, Med Waiver, and non- Medicaid. If residents, who need medical care, can't get to facilities their conditions will become worse and healthcare costs increase to eventually treat these residents. - Social Services Provider

## Affordable Care/Services

Cost of health care, not access to facilities, keeps people at home. - Community Leader
Limited facilities with sliding fee scale or discounted services and transportation issues compounded by Good
Wheels going out of business. - Public Health Representative
Being able to afford the services. - Public Health Representative
Lack of funds or lack of properly budgeting to provide the transportation. - Other Health Provider
Funding
Lack of health care funding and resources. Need an outreach program. Need Community Care Centers better equipped and funded. Need to do a better job of recruiting health care professionals. - Community Leader

## PRIMARY CARE SERVICES

## ABOUT PRIMARY CARE

Improving health care services depends in part on ensuring that people have a usual and ongoing source of care. People with a usual source of care have better health outcomes and fewer disparities and costs. Having a primary care provider (PCP) as the usual source of care is especially important. PCPs can develop meaningful and sustained relationships with patients and provide integrated services while practicing in the context of family and community. Having a usual PCP is associated with:

- Greater patient trust in the provider
- Good patient-provider communication
- Increased likelihood that patients will receive appropriate care

Improving health care services includes increasing access to and use of evidence-based preventive services. Clinical preventive services are services that: prevent illness by detecting early warning signs or symptoms before they develop into a disease (primary prevention); or detect a disease at an earlier, and often more treatable, stage (secondary prevention).

- Healthy People 2020 (www.healthypeople.gov)


## Access to Primary Care

In 2017, there were 479 primary care physicians in Lee County, translating to a rate of 64.8 primary care physicians per 100,000 population.

BENCHMARK $>$ Well above the Florida and US ratios.

Access to Primary Care
(Number of Primary Care Physicians per 100,000 Population, 2017)


Sources: - US Department of Health \& Human Services, Health Resources and Services Administration, Area Health Resource File
Notes: - Doctors classified as "primary care physicians" by the AMA include: General Family Medicine MDs and DOs, General Practice MDs and DOs, General Internal Medicine MDs, and General Pediatrics MDs. Physicians age 75 and over and physicians practicing sub-specialties within the listed specialties are excluded. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

Having a specific source of ongoing care includes having a doctor's office, clinic, urgent care center, walk-in clinic, health center facility, hospital outpatient clinic, HMO or prepaid group, military/VA clinic, or some other kind of place to go if one is sick or needs advice about his or her health. This resource is crucial to the concept of "patient-centered medical homes" (PCMH).

A hospital emergency room is not considered a specific source of ongoing care in this instance.

## Specific Source of Ongoing Care

## A total of $68.5 \%$ of Lee County adults were determined to have a specific source of ongoing

 medical care.BENCHMARK $>$ Below the US prevalence. Fails to meet the Healthy People 2020 objective.
TREND $>$ Denotes a statistically significant decrease from 2007 survey findings.

Have a Specific Source of Ongoing Medical Care
Healthy People $2020=95.0 \%$ or Higher


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [ltem 170]

- 2020 PRC National Health Survey, PRC, Inc
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-5.1]

Notes: - Asked of all respondents.

## Utilization of Primary Care Services

## Adults

Nearly three in four adults (74.2\%) visited a physician for a routine checkup in the past year.
BENCHMARK $>$ Below the state prevalence.
DISPARITY $>$ Lowest among men, adults under 40, and those in low-income households.

Have Visited a Physician for a Checkup in the Past Year


Have Visited a Physician for a Checkup in the Past Year (Lee County, 2020)
90.8\%


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 18]
Notes:
Asked of all respondents.

## Children

Among surveyed parents, $83.1 \%$ report that their child has had a routine checkup in the past year.

TREND $>$ Though fluctuating over time, the prevalence is statistically unchanged from the 2007 baseline.

# Child Has Visited a Physician for a Routine Checkup in the Past Year (Parents of Children 0-17) 



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 120]
Notes: - Asked of all respondents with children 0 to 17 in the household.

## EMERGENCY ROOM UTILIZATION

A total of $11.5 \%$ of Lee County adults have gone to a hospital emergency room more than once in the past year about their own health.

TREND $>$ Increasing significantly since 2007.
DISPARITY $>$ Unfavorably high in Market Area 3. Highest among young adults and low-income residents.

## Have Used a Hospital <br> Emergency Room More Than Once in the Past Year



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [ltems 22-23]

- 2020 PRC National Health Survey, PRC, Inc

Notes: - Asked of all respondents.

Have Used a Hospital Emergency Room More Than Once in the Past Year (Lee County, 2020)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 22]
Notes: - Asked of all respondents.

## OUTMIGRATION

A total of $13.1 \%$ of Lee County residents report that they or a member of their household left the county for medical care in the past year.

DISPARITY $>$ The prevalence is higher in upper-income households and among residents in nonHispanic communities of color.

## Member of Household Left Lee County for Medical Care in the Past Year



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 302] Notes: - Asked of all respondents

## Member of Household Left Lee County for Medical Care in the Past Year (Lee County, 2020)



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 302]
Notes: - Asked of all respondents.

The majority ( $75.4 \%$ ) of those leaving Lee County for medical care sought some type of specialty care (especially surgical services).

A total of $10.4 \%$ sought primary medical care, while $14.2 \%$ were uncertain as to the specific care they received outside the county.

Type of Medical Care Sought Outside Lee County (Adults Who Left Lee County for Medical Care in the Past Year; 2020)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 303]
Notes:

- Asked of those residents who left Lee County in the past year for some type of medical care.

When asked about the reason for leaving Lee County for care, $\mathbf{2 0 . 4 \%}$ of these adults mentioned convenience and $19.8 \%$ indicated that the needed services were not available locally.

- Other reasons given among residents leaving Lee County for medical care included quality of care (mentioned by $16.7 \%$ ), a physician's referral ( $13.6 \%$ ), insurance/cost ( $9.7 \%$ ), and wait time ( $7.5 \%$ ).

Reason for Seeking Medical Care Outside Lee County (Adults Who Left Lee County for Medical Care in the Past Year; 2020)


Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 304]
Notes: - Asked of those residents who left Lee County in the past year for some type of medical care

## ORAL HEALTH

## ABOUT ORAL HEALTH

Oral health is essential to overall health. Good oral health improves a person's ability to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions to show feelings and emotions. However, oral diseases, from cavities to oral cancer, cause pain and disability for many Americans. Good self-care, such as brushing with fluoride toothpaste, daily flossing, and professional treatment, is key to good oral health. Health behaviors that can lead to poor oral health include: tobacco use; excessive alcohol use; and poor dietary choices.

The significant improvement in the oral health of Americans over the past 50 years is a public health success story. Most of the gains are a result of effective prevention and treatment efforts. One major success is community water fluoridation, which now benefits about 7 out of 10 Americans who get water through public water systems. However, some Americans do not have access to preventive programs. People who have the least access to preventive services and dental treatment have greater rates of oral diseases. A person's ability to access oral health care is associated with factors such as education level, income, race, and ethnicity.

Barriers that can limit a person's use of preventive interventions and treatments include: limited access to and availability of dental services; lack of awareness of the need for care; cost; and fear of dental procedures.

There are also social determinants that affect oral health. In general, people with lower levels of education and income, and people from specific racial/ethnic groups, have higher rates of disease. People with disabilities and other health conditions, like diabetes, are more likely to have poor oral health.

Potential strategies to address these issues include:

- Implementing and evaluating activities that have an impact on health behavior.
- Promoting interventions to reduce tooth decay, such as dental sealants and fluoride use.
- Evaluating and improving methods of monitoring oral diseases and conditions.
- Increasing the capacity of State dental health programs to provide preventive oral health services.
- Increasing the number of community health centers with an oral health component.
- Healthy People 2020 (www.healthypeople.gov)


## Dental Insurance

## Over half of Lee County adults (55.9\%) have dental insurance that covers all or part of their dental care costs.

BENCHMARK $\downarrow$ Below the US figure.
TREND $>$ Denotes a statistically significant increase from 2007 survey results.
DISPARITY $>$ Favorably higher in Market Area 3.

> Have Insurance Coverage That Pays All or Part of Dental Care Costs


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 21]

- 2020 PRC National Health Survey, PRC, Inc.

Notes: - Asked of all respondents.

## Dental Care

## Adults

A total of $61.5 \%$ of Lee County adults have visited a dentist or dental clinic (for any reason) in the past year.

BENCHMARK $>$ Below the Florida prevalence. Satisfies the Healthy People 2020 objective.
DISPARITY $>$ Unfavorably low in Market Areas 2 and 3 (relatively high in Market Area 4). The prevalence is notably lower among young adults, those in low-income households, Hispanics, and residents without dental insurance.

## Have Visited a Dentist or Dental Clinic Within the Past Year

Healthy People $2020=49.0 \%$ or Higher


[^29]Have Visited a Dentist or Dental Clinic Within the Past Year
(Lee County, 2020)
Healthy People $2020=49.0 \%$ or Higher


## Children

A total of $75.9 \%$ of parents report that their child (age 2 to 17) has been to a dentist or dental clinic within the past year.

BENCHMARK $>$ Easily satisfies the Healthy People 2020 objective.

# Child Has Visited a Dentist or Dental Clinic Within the Past Year <br> (Parents of Children Age 2-17) <br> Healthy People $2020=49.0 \%$ or Higher 



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 123]

- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]

Notes: - Asked of all respondents with children age 2 through 17.

## Key Informant Input: Oral Health

Key informants taking part in an online survey most often characterized Oral Health as a "minor problem" in the community.

## Perceptions of Oral Health <br> as a Problem in the Community <br> (Key Informants, 2020)



Sources: - PRC Online Key Informant Survey, PRC, Inc.
Notes: - Asked of all respondents.

Among those rating this issue as a "major problem," reasons related to the following:

## Affordable Care/Services

Few people have insurance to afford oral care. - Community Leader
Affordability poses a major obstacle for those without resources or insurance. - Social Services Provider
Oral health is a major problem because dental care is prohibitive even with dental insurance. - Public Health Representative
Cost of care is too high for the most vulnerable of our population. - Social Services Provider
Access, cost and providers that accept Medicaid are limited. I know of three adults who have died because of oral health neglect. They did not have insurance or access to dental care. Especially, major needs. - Social Services Provider
Very little resources for those in need of even basic dentistry. - Community Leader

## Access to Care for Uninsured/Underinsured

Expensive for uninsured; limited resources for uninsured. - Other Health Provider
Lack of dental insurance. Oral health isn't seen as a priority. - Public Health Representative
Low income, no insurance. - Physician
Low-income families have limited access to free dental care. Many kids in child welfare have dental neglect as a factor. - Social Services Provider

## Contributing Factors

Dental care for homeless, nonresidents. - Other Health Provider
Lack of pediatric services, lack of insurance, dental health not valued, people are fearful of the dentist. - Public Health Representative
Poverty is a detriment of health that prevents citizens to seek dental services. In addition, services are offered at out of pocket, however, they are expensive, and many cannot afford it. - Public Health Representative

## Youth

Dental work is the last type of care our children receive so they have too many cavities, poor nutrition, and lack of dental care. Many need braces and are not able to afford. - Social Services Provider

## Awareness/Education

Lack of education on the importance of oral health starting in infants. - Public Health Representative


## LOCAL RESOURCES

## PERCEPTIONS OF LOCAL HEALTH CARE SERVICES

Most Lee County adults rate the overall health care services available in their community as "excellent" or "very good."

## Rating of Overall Healthcare Services Available in the Community (Lee County, 2020)



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 6]
Notes:
Asked of all respondents.

However, $10.7 \%$ of residents characterize local health care services as "fair" or "poor." BENCHMARK $>$ Above the US prevalence.

TREND $>$ Improving significantly from 2007 survey findings.
DISPARITY $>$ Unfavorably high in Market Area 3. Higher among women, adults under 65, and residents with recent access difficulties.

## Perceive Local Healthcare Services as "Fair/Poor"



[^30]
## Perceive Local Healthcare Services as "Fair/Poor"

 (Lee County, 2020)

Notes:
Asked of all respondents

## AWARENESS OF COMMUNITY INITIATIVES

## Healthy Lee

A total of $16.9 \%$ of survey respondents had heard of the Healthy Lee community initiatives.
TREND $>$ The percentage has increased significantly since 2014.
DISPARITY $>$ The prevalence is notably low among non-Hispanic communities of color.

Have Heard of the Healthy Lee Community Initiatives


Have Heard of the Healthy Lee Community Initiatives (Lee County, 2020)


## "Choose, Commit, Change!"

Among Lee County residents, $12.2 \%$ have heard the community message "Choose, Commit, Change!" before being surveyed.

TREND $>$ The prevalence has increased significantly from previous survey findings.
DISPARITY $>$ Highest in Market Area 1. Awareness decreases with age in Lee County.

## Have Heard the "Choose, Commit, Change!" Message



Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 327] Notes: - Asked of all respondents.

Have Heard the "Choose, Commit, Change!" Message (Lee County, 2020)


Among respondents who have heard of either the Healthy Lee community initiatives or the Health Lee "Choose, Commit, Change!" message, 31.1\% report that Healthy Lee has impacted their lifestyle decisions.

## HEALTH CARE RESOURCES \& FACILITIES <br> Federally Qualified Health Centers (FQHCs)

The following map details Federally Qualified Health Centers (FQHCs) within Lee County as of November 2019.


## Resources Available to Address the Significant Health Needs

The following represent potential measures and resources (such as programs, organizations, and facilities in the community) identified by key informants as available to address the significant health needs identified in this report. This list only reflects input from participants in the Online Key Informant Survey and should not be considered to be exhaustive nor an all-inclusive list of available resources.

## Access Problems

AIDS Drug Assistance Program Blue Bird
Catholic Charities
City of Fort Myers
Doc in the Box
Elite DNA
FACT Teams
Fallon Transportation
Federally Qualified Health Centers
FGCU Community Counseling Clinic
Good Wheels
GoodWill Housing
HCA Health Services
Lee Convenient Care
Lee County Department of Health
Lee County VA Clinic
Lee Health Behavioral Health
Lee Health Community Clinics
Lee Health Parish Nurse Programs
Lee Tran
Lighthouse Counseling
Meals on Wheels
Millennium Physician Group
Park Royal Hospital
Passport Transportation
SalusCare
Salvation Army
Samaritan
United Way

## Cancer

21st Oncology
American Cancer Society
Candlelighters of Southwest Florida
FISH of Sanibel-Captiva
Florida Cancer Center
Lee County
Lee Health
Partners for Breast Cancer Care
United Way

## Chronic Kidney Disease

DaVita Dialysis
Lee Health

## Dementia/Alzheimer's Disease

Alvin A. Dubin Alzheimer's Resource Center
Alzheimer's Association
Alzheimer's/Dementia Support Devices
Brooksdale
Care Patrol in Lee County
Cypress Cove
Cypress Point
Department of Elder Affairs
Dubin Center
FISH of Sanibel-Captiva
Gulf Coast
Hospice
Lee County
Lee Health
Lee Memory Care
Neuropsychiatric Research Center
Senior Friendship Center
Shell Point
United Way

## Diabetes

American Diabetes Association
American Heart Association
Florida Department of Health
Lee County Department of Health
Lee County Public Schools
Lee Health
Lee Health Chronic Disease
Management
Lee Health Diabetes Program
Lee Health Healthy Life Centers
Lee Memorial Hospital
Lee Physician Group
Millennium Physician Group
Publix Grocery

## Disabilities

Florida Department of Children \&
Families
Lee County
Lee Health
Lee Health Balance Programs
Lee Health Healthy Life Centers
Lee Health Spine Center
Millennium Physician Group
PBS Programs
Silver Sneakers

## Family Planning

Early Head Start
Early Steps
Florida Diagnostic and Learning
Resources System (FDLRS)
Florida Department of Health
Golisano Children's Hospital
Healthy Start
Lee Community Healthcare
Lee County Department of Health
Lee Health
Lee Memorial Hospital
March of Dimes
Planned Parenthood
Women, Infants, and Children (WIC)

## Heart Disease and Stroke

American Heart Association
Florida Department of Health
Lee County Department of Health
Lee Health
Lee Health Cardiac Rehab
Lee Health Chronic Disease
Management
Lee Health Nutrition Team
NCH Healthcare System
Peninsula Regional Health System
Stroke Recovery Foundation
University of Florida IFAS Nutrition Program

## Injury and Violence

Abuse Counseling and Treatment (ACT)
Lee County Sheriff's Department
Lee Health Trauma Center
STARS Complex
YMCA

## Mental Health Issues

Abuse Counseling and Treatment, Inc. (ACT)
American Lung Association
Catholic Charities
Centerstone
Charlotte Behavioral Health
Coastal Behavioral Healthcare
Community Assisted and Support Living
Community Counseling Center
David Lawrence Center
Elite DNA
FACT Teams
Florida Gulf Coast Univ Community Counseling Clinic
Florida Gulf Coast University Training
With Interns
Food Stamps
Golisano Children's Hospital
GoodWill Housing
Healing Educational Alternatives for
Deserving Students, LLC (HEADS)
Healthy Lee
Hope Clubhouse
JFCS-Cares
Kids Minds Matter
Lee Community Healthcare
Lee County Ad Hoc Committee on
Behavioral Health
Lee County Department of Health
Lee County Mental Health Court
Lee County Public Schools
Lee Health
Lee Health Behavioral Health
Lee Health Memory Services
Lee Physician Group
Lighthouse Counseling
Mental Health Court
National Alliance on Mental Illness
Operation PAR
PACE Center for Girls of Lee County
Park Royal Hospital
Ruth Cooper Center
SalusCare
Samaritan
Southwest Florida Counseling
The Willow
Vista Behavior Crisis Service

## Nutrition, Physical Activity, and Weight

Alliance of the Arts
Blue Zones
Boys and Girls Club
Career Source Southwest Florida
CHIP Programs
Community Gardens
Farmer's Markets
Food Banks
Golisano Children's Hospital
Harry Chapin Food Bank
HealthLee
Healthy Lee
JetBlue Farmer's Market
Lee County Department of Health
Lee County Organized Leagues for Kids
Lee County Parks and Recreation
Lee County Public Schools
Lee Health
Lee Health Diabetes Program
Lee Health Healthy Life Centers
Lee Health Solutions
Lee Health Wellness Centers
Lee Physician Group
Linear Park
Planet Fitness
Platinum Fitness
Salvation Army
School System
University of Florida IFAS Nutrition
Program
USF Nutrition Classes
Weight Watchers
Wellness Programs
Women, Infants and Children (WIC)
YMCA

## Oral Health/Dental Care

Dental Van for Kids
Florida Southwestern College
Healthcare Network
Operation Smile
UF Dental Clinic
Volunteer Dentist Programs
We Care Medical Charity

Respiratory Diseases
American Cancer Society
American Heart Association
American Lung Association
Florida Department of Health
Lee Health
Lee Health Asthma Program
Lee Physician Group
Tobacco Free Lee

## Sexually Transmitted Diseases

Federally Qualified Health Centers
Lee County Department of Health
Lee Health
Lifeline Family Center
McGregor Clinic
Planned Parenthood
Premier Mobile Health Services
Source of Light
Verity

## Substance Abuse

AA/NA
AIM Target
Bob Janes Triage Center
Center for Progress and Excellence
Coalition for a Drug Free Lee County
Crossroads Program
David Lawrence Center
Drug Court
Elite DNA
Hazelden Betty Ford
Lee County Coalition for a Drug-Free Southwest Florida
Lee County Treatment Center
Lee Health
Lee Health Pain Management and Addiction Services
Lee Health Recovery Medicine
Methodone Clinic
Nextep
Operation PAR
Park Royal Hospital
Rescue Mission
SalusCare
Salvation Army
Southwest Florida Men's Center
Southwest Florida Women's Home

Sovereign Health Mental Health
Treatment Center
Southwest Florida Addiction Services
Teen Challenge
The Kimberly Center
The Willow
Vincent Smith
White Sands

## Tobacco Use

American Cancer Society
American Lung Association
Drug Free Lee
Everglades Area Health Education
Center
Lee County Department of Health
Lee County Public Schools
Lee Health
Neurotherapy Center
SalusCare
Tobacco Free Lee


APPENDIX

## EVALUATION OF OUTREACH RESPONSE TO 2017 CHNA

Approved by the Lee Health Board of Directors, the implementation plans integrate Lee Health's mission and strategy, transition to population health, ongoing investments in Community Benefit, Health and Wellness initiatives, and knit together the following goals to create a culture of health in Lee County:

1. Improve overall health of the community through strategic partnership with community based organizations and groups addressing social determinants of health
2. Strengthen integration and connections of wrap around health programs and services for defined populations
3. Decrease avoidable hospital utilization and readmission

The four prioritized implementation plan strategies:

1. Healthy Lifestyles $(\mathrm{HL})$
2. Behavioral Health (BH)
3. Access, Screenings, and Health Literacy (A)
4. Educational Attainment (EA)

Each of the four market areas in Lee County display diverse health disparities and opportunities, resulting in strategic deployment of health outreach and evaluation of long-term trends of specific health indicators.

Market Area Map


## Cape Coral Hospital, Market Area 1

After the 2017 CHNA, the following health indicators were mentioned as areas of opportunity for Market Area 1, Cape Coral Hospital:

- Access to timely care, appointments, and information
- Second highest area for emergency department use
- Second highest area for overweight, no leisure-time physical activity, diabetes, hypertension, and high cholesterol
- Highest illicit drug and tobacco use throughout county, and almost double the rate of other market areas in Lee County.


## Implementation Plan and Outreach Response

In response to the health indicators identified in Market Area 1 and overall in Lee County, the following implementation strategies were proposed (left), and the community health outreach programs, initiatives, and activities were completed and/or are ongoing initiatives (right).

| Cape Coral Hospital, Market Area 1 |  |
| :---: | :---: |
| Short-term implementation strategies |  |
| Target patients with high emergency department utilization for wrap around services including nutrition programs and prescription monitoring. | - CCH ED practice council involved with nutrition and overall health including weekly schedule at Cape Coral Caring Center/United Way House <br> - Support Community Care Outreach <br> - Various community-based health fairs with education, screenings, and referrals |
| Deploy communication strategies to reinforce Lee Community Healthcare and Convenience Care options. | - Lee Community Healthcare and schedulers active at health fairs and events <br> - Lee Health translators active at health fairs and events |
| Utilize community based partners Tobacco-Free Lee, The Lee County Coalition for the Drug Free SWFL and American Heart Association to implement evidence based practices. | - Hope for Tomorrow program for opioid awareness and treatment-collaboration with Coalition for a Drug-Free SWFL and Hazelden Betty Ford* <br> - Training for clinicians for substance abuse stigma* <br> - Connecting veterans to AA/NA resources for substance abuse* <br> - Stroke clinicians support at Lee Heart Walk <br> - Healthy Life Center support at Lee Heart Walk <br> - Shipley Cardiothoracic Center support at Lee Heart Walk |
| Support the Lee Health pediatric and adult behavioral health strategies currently in the planning stages. | - Lee Behavioral Health expanded mental health services to veterans <br> - Community Affairs Outreach Manager certified in Mental Health First Aid <br> - Community Affairs Outreach Director and ManagerCertified in LIFT Training <br> - Child Advocacy Program active in car seat checks, pediatric first aid, and safe sitter classes <br> - DCCI training for all employees of Lee Tran to bring sensitivity awareness to Alzheimer's and dementia <br> - Intervention Program for nurses and physicians |
| Continue work to: |  |
| Maintain and encourage use of the Cape Coral Hospital campus pathway. |  |
| Support the existing programs at the Healthy Life Center on the Cape Coral Hospital Campus. | - Veterans enrolled in Home Base SWFL Program receive free access to Healthy Life Centers for fitness and wellness services <br> - Healthy Life Center staff active at health fairs and events |

Broaden use of the Cape Coral Hospital campus teaching garden in collaboration with the American Heart

## Association and Lee County Schools.

Increase community awareness of programs and preventive services.

Provide chronic disease self-management education at multiple points of care.

Coordinate suicide prevention activities with substance abuse prevention coalitions and mental health organizations such as NAMI.
Support the services for adults with mental illness and/or co-occurring substance use disorders involved with the criminal justice system.

Maintain the American Heart and Stroke Association Gold Plus Achievement Hospital for Stroke Designation.
Continue community collaborative efforts by working with community based organizations such as the Cape Coral Chamber of Commerce, United Way, and the Cape Coral Community Foundation.

Participate in health care professional education for degree programs on campus, providing clinical experiences under the supervision of clinical professionals.

## Support the Medical Residency program in our region

 with Florida State University College of Medicine for Family Practice.- Health Fairs: Back to School Backpack Event, Kiwanis Kids Fest, Veteran Appreciation Day
- Special Olympics Zumba classes at Special Populations*
- Healthy Life Center cooking demos for nutritional education
- Parish Nurse program for health screenings and education (BMI, blood pressure, diabetes, meals, etc.) integrated at local churches
- Asthma and Vaping educational presentations to Ida Baker High School students
- Diabetes education and awareness presentations
- Collaboration with NAMI for increased referrals for substance abuse for veterans
- Drug House Odyssey for injury prevention and substance abuse awareness
- Substance abuse support group held at CCH
- Hope for Tomorrow program for opioid awareness and treatment-collaboration with Coalition for a Drug-Free SWFL and Hazelden Betty Ford*
- Training for clinicians for substance abuse stigma*
- Connecting veterans to AA/NA resources for substance abuse*
- Collaboration with Lee County Court for behavioral health resources for veterans involved with the criminal justice system
- Lee Behavioral Health active at health fairs and events
- Increased Speakers Bureau presentations in underserved areas
- Free swimming lessons for youth and back-to-school physicals in collaboration with Cape Coral Kiwanis Club
- Collaboration with Mission United and United Way 211 for referrals for resource knowledge for veterans
- Introduction of Veteran Visitation Program for inpatient veterans-collaboration with American Red Cross
- $\quad$ Fresh fruits and vegetables for sale (Double Up Food Bucks eligible) at health fair events-(collaboration with Hubbell Farms)
- Harry Chapin Food Bank mobile pantry active at health fairs
- Military Support Program integration of health resources with various veteran support organizations
- NOVA Nursing students active in population health clinical settings
- Clinical internship and training programs in partnership with Florida Gulf Coast University, Florida Southwestern University, Keiser University, Hodges University, Nova Southeastern University, Premier International Institute, Braxton College, Fort Myers Technical College, Cape Coral Technical College, and Southwest Florida Public Service Academy
- Family Medicine Residency Program residents active with health fairs and screenings
- Back-to-School physicals provided by Family Medicine Residency Program residents

- Special Olympics Zumba classes at Special Populations*
- Purse Project- distribution of purses filled with basic health products for homeless women (collaboration with Lee County Human \& Veteran Services)
- Child Advocacy Program active in car seat checks, pediatric first aid, and safe sitter classes*
*Outreach activities and services apply to more than one implementation strategy, and appear more than once throughout the table.


## Underserved Communities and Populations

Key community centers that support most vulnerable communities in Market Area 1, Cape Coral Hospital include, but are not limited to, the following:

- Lee Community Healthcare (LCH). Federally Qualified Health Center Look-Alike (FQHC-LAL) provides access to primary care, tests, immunizations, mental health, pediatrics, women's care, and more, regardless of patient financial situation. Market Area 1 has one location of LCH.
- Cape Coral Caring Center. Provides citizens of Cape Coral in need with food items, utility bill assistance, transportation, and referrals to other agencies. Cape Coral Caring Center maintains an office in the United Way House of Cape Coral.
- City of Cape Coral Summer Youth Program. Provides affordable and educational childcare summer camps for residents of Cape Coral.
- Freida B. Smith Special Populations. Provides adults and children with developmental delays social and educational opportunities designed to foster independence, self-esteem, individual growth and interpersonal relations.
- Houses of Worship. Parish Nurses provide health screenings and education for chronic disease management and prevention, including BMI, blood pressure, diabetes, nutrition, and more, all integrated at local churches.
- Market Area 1 locations include, St. John Episcopal, Christ Lutheran, Kings Highway, and Faith Presbyterian.


## Evaluation of Outreach Initiatives

Outreach initiatives within Market Area 1, Cape Coral Hospital were directed toward access to healthcare services, chronic disease management, and substance abuse intervention and prevention.

The most successful initiatives were defined by engagement level in community attendance and follow-up care plans:

- Cape Coral Hospital Emergency Department (ED) Practice Council and Cape Coral Caring Center/United Way. Nurses provide well checks within the Cape Coral Caring Center office of the United Way, while community members build relationships with ED nursing staff, acknowledging a personal connection for medical care.
- Hope for Tomorrow substance abuse program. Community members engaged in education series on illicit drug use and associated stigma towards users and receiving treatment.
- Veteran Visitation Program. Cross-trained Lee Health and American Red Cross volunteers serve as community liaisons by providing resources and education to inpatient veterans at Cape Coral Hospital.

Outreach initiatives with opportunity for improvement were defined by engagement level and demonstrated need for strategic redevelopment:

- Integration of the Family Medicine Residency Program. Residents work out of medical facilities in Fort Myers, and strategic planning is required for successful deployment of residents to initiatives in Market Area 1, Cape Coral Hospital.

Additional outreach initiatives that may be relevant, appropriate, and timely for the overall community health improvement of Market Area 1 may include:

- Emergency department nurses speaking publicly to community providing education via collaboration with AHEC, NAMI, American Heart Association, and Lee County Coalition for A DrugFree Southwest Florida.
- Strategic deployment of parish nurses to provide blood pressure clinics in churches in vulnerable communities.
- Strategic deployment of Family Medicine Residency Program residents, Lee Community Healthcare, and schedulers for increased education for primary care resources.
- Leveraging of Healthy Life Center at Cape Coral Hospital for members of churches via parish nurse recommendation.


## Lee Memorial Hospital, Market Area 2

Lee Memorial Hospital serves some of the poorest neighborhoods in Fort Myers, North Fort Myers, East Fort Myers and East Lee County/Lehigh Acres. Lee Health charity care expenses includes significant utilization of the Emergency Department for unattended primary care conditions, as well as the hospital's share of voluntary services by community physicians using hospital services under the We Care Program managed by The Salvation Army.

After the 2017 CHNA, the following health indicators were mentioned as areas of opportunity for Market Area 2, Lee Memorial Hospital:

- Access to timely care, appointments, and information
- Highest area for emergency department use
- Highest area for overweight, no leisure-time physical activity, diabetes, and hypertension
- Highest rate of stress and diagnosis of depressive disorders
- Highest rate of being impacted by substance abuse


## Implementation Plan and Outreach Response

In response to the health indicators identified in Market Area 2 and overall in Lee County, the following implementation strategies were proposed (left), and the community health outreach programs, initiatives, and activities were completed and/or are ongoing initiatives (right).

| Lee Memorial Hospital, Market Area 2 |  |
| :---: | :---: |
| Short-term implementation strategies |  |
| Target patients with high emergency department utilization for wrap around services including nutrition programs and prescription monitoring. | - Support Community Care Outreach <br> - Various community-based health fairs with education, screenings, and referrals |
| Deploy communication strategies to reinforce Lee Community Healthcare and Convenience Care options. | - Lee Community Healthcare and schedulers active at health fairs and events <br> - Lee Health translators active at health fairs and events |
| Utilize community based partners Tobacco-Free Lee, The Lee County Coalition for the Drug Free SWFL and American Heart Association to implement evidence based practices. | - Training for clinicians for substance abuse stigma* <br> - Connecting veterans to AA/NA resources for substance abuse <br> - Florida Department of Health and AHEC participation in Lee Health health fairs |


| Support the Lee Health pediatric and adult behavioral health strategies currently in the planning stages. | - Lee Behavioral Health expanded mental health services to veterans in collaboration with Home Base SWFL <br> - Stay Gorgeous Girls-program for girls' holistic health, including mental health, self-esteem, and women's health* <br> - DCCI training for all employees of Lee Tran to bring sensitivity awareness to Alzheimer's and dementia* <br> - Community Affairs Outreach Manager certified in Mental Health First Aid <br> - Community Affairs Outreach Director and ManagerCertified in LIFT Training <br> - Injury Prevention provides support groups for populations impacted by trauma* <br> - Intervention Program for nurses and physicians <br> - Regional Cancer Center cancer support groups monthly* <br> - Collaboration with NAMI for increased referrals for substance abuse for veterans* <br> - Mental Health First Aid presentation for developmentally delayed in Sandy Park and LARC* <br> - Sandpiper Run Apartments presentations in English and Spanish for fall prevention, memory care, and depression <br> - Lee Behavioral Health active at health fairs and events <br> - Increased Speakers Bureau presentations in underserved areas |
| :---: | :---: |
| Partner with Harry Chapin Food Bank and others to address food insecurity. | - Collaboration with CCMI--provides 2 food distributions monthly to veterans <br> - Harry Chapin Food Bank mobile pantry active at health fairs* |
| Conduct outreach activities with community based partners and support programs such as scholarships, sport and physical education programs and mentoring. | - NOVA Nursing students active in population health clinical settings* <br> - Build Your Future career education and hiring program at Stars Complex* <br> - Low-impact aerobic exercise classes and nutritional planning (Charleston Park and Nations Association) * <br> - Zumba fitness classes at Sandy Park and LARC <br> - Youth basketball camp for Charleston Park community* <br> - 6-week nutritional cooking class offered to Pace Center for Girls* <br> - Healthy Life Center cooking demos for nutritional education* |
| Continue work to: |  |
| Repurpose Lee Memorial Hospital campus to optimize Lee Health needs and community based programming. | - Military Support Program move from LMH - giving space for repurposing |
| Support the existing programs at the Healthy Life Center on Cleveland Avenue. | - Veterans enrolled in Home Base SWFL Program receive free access to Healthy Life Centers for fitness and wellness services <br> - Healthy Life Center cooking demos for nutritional education* <br> - Healthy Life Center staff active at health fairs and events |


| Increase community awareness of programs and preventive services. | - Health Fairs and Events: MLK Day, Centennial Park, Cypress Trail RV Resort, Lee County Stand Down event for homeless, Art Fest, Stay Gorgeous Girls, Haitian Heritage Community, Nations Association Back to Basics, NFM HUD, Charleston Park Day, Omega Health Forum, Juneteenth Celebration, Source of Light and Hope Health Fair, North Fort Myers Recreation Center Health Fair, Renaissance Preserve Health Fair <br> - Child Advocacy Program active in car seat checks, pediatric first aid, and safe sitter classes* <br> - Stay Gorgeous Girls-program for girls' holistic health, including mental health, self-esteem, and women's health* <br> - Pace Center for Girls collaboration for breast health and wellness for girls |
| :---: | :---: |
| Provide chronic disease self-management education at multiple points of care. | - Glucose screenings provided at health fairs and events <br> - Blood pressure clinic for Mount Hermon community <br> - Nurses stationed in barber shops to bring heart health education and screenings to urban community <br> - Living with Diabetes, Living with COPD, and Pain Management programs <br> - Diabetes education and blood glucose screening at Bonair Towers and Coastal Gardens (senior living) <br> - Asthma and Vaping educational presentations to Dunbar High School students <br> - Diabetes education and awareness presentations <br> - Community cancer education classes $3 x$ per month <br> - Regional Cancer Center cancer support groups monthly* |
| Coordinate suicide prevention activities with substance abuse prevention coalitions and mental health organizations such as NAMI. | - Collaboration with NAMI for increased referrals for substance abuse for veterans* <br> - Mental Health First Aid presentation for mentally delayed in Sandy Park and LARC* <br> - Injury Prevention provides support groups for populations impacted by trauma* <br> - Nurse Navigator and AHEC Smoking Cessation program at Suncoast Estates and HUD North Fort Myers* |
| Strengthen integration of substance abuse and mental health services with primary care delivery and training for primary care physicians. | - Training for clinicians for substance abuse stigma* |
| Support the services for adults with mental illness and/or co-occurring substance use disorders involved with the criminal justice system. | - Drug House Odyssey for injury prevention and substance abuse awareness <br> - Regional Cancer Center smoking cessation monthly program <br> - Nurse Navigator and AHEC Smoking Cessation program at Suncoast Estates and HUD North Fort Myers* <br> - Collaboration with Lee County Court for behavioral health resources for veterans involved with the criminal justice system |


| Maintain community collaborative efforts and outreach activities by working with community based organizations such as parishes, fraternities, sororities, Nations Association, The Quality of Life Center, United Way and the SW Community Foundation. | - Parish Nurse program for health screenings and education (BMI, blood pressure, diabetes, meals, etc.) integrated at local churches <br> - Fresh fruits and vegetables for sale (Double Up Food Bucks eligible) at health fair events-(collaboration with Hubbell Farms) <br> - Bicycle maintenance program at LARC <br> - DCCI training for all employees of Lee Tran to bring sensitivity awareness to Alzheimer's and dementia* <br> - Early Prevention Breast and Cervical Cancer-free mammograms and pap smears in collaboration with FDOH—at Suncoast Estates, Palmona Park, Fort Myers Mission, Charleston Park <br> - Collaboration with Mission United and United Way 211 for referrals for resource knowledge for veterans* <br> - Nurse Navigator and AHEC Smoking Cessation program at Suncoast Estates and HUD North Fort Myers* <br> - Military Support Program integration of health resources with various veteran support organizations <br> - Harry Chapin Food Bank mobile pantry active at health fairs* |
| :---: | :---: |
| Maintain workforce and educational attainment community collaborative efforts by working with FutureMakers, Fort Myers Technical College and CareerSource. | - Expanded collaboration with CareerSource <br> - Build Your Future career education and hiring program at Stars Complex* |
| Keep injury prevention training and education by the staff of the Regional level II Trauma Center at Lee Hospital for all ages and types of injury situations such as from falls and bicycles. | - Injury Prevention team active at health fairs and events with provision of drunk driving simulations, balance screenings, and other prevention activities and resources |
| Implement Health and Wellness Strategy. | - Various community-based health fairs with education, screenings, and referrals |
| Participate in health care professional education for degree programs on campus, providing clinical experiences under the supervision of clinical professionals. | - NOVA Nursing students active in population health rotations* <br> - Clinical internship and training programs in partnership with Florida Gulf Coast University, Florida Southwestern University, Keiser University, Hodges University, Nova Southeastern University, Premier International Institute, Braxton College, Fort Myers Technical College, Cape Coral Technical College, and Southwest Florida Public Service Academy |
| Support the Medical Residency program in our region with Florida State University College of Medicine for Family Practice. | - Family Medicine Residency Program residents active with health fair screenings <br> - Back-to-School physicals provided by Family Medicine Residency Program residents |
| Collaborate with Lee County sustainability efforts, incorporating the tenets of smart growth, and maximizing opportunities to promote balanced social, economic, and environmental resources and to cultivate of a livable and resilient community where there is a balance between social well-being and equity, economic prosperity and environmental resource conservation. | - Build Your Future career education and hiring program at Stars Complex* <br> - Purse Project- distribution of purses filled with basic health products for homeless women (collaboration with Lee County Human \& Veteran Services) <br> - 100 Black Men program for open conversation about men's' health and wellness <br> - Stay Gorgeous Girls-program for girls' holistic health, including mental health, self-esteem, and women's health* <br> - Child Advocacy Program active in car seat checks, pediatric first aid, and safe sitter classes* |

*Outreach activities and services apply to more than one implementation strategy, and appear more than once throughout the table.

## Underserved Communities and Populations

Lee County recognizes the following community centers as part of neighborhood revitalization plan in Market Area 2, Lee Memorial Hospital.

- Palmona Park-North Fort Myers Recreation Center. A suburban neighborhood based on population density. Part of Lee County's Neighborhood Building Program, the Community Center is the NFM Recreation Center.
- Suncoast Estates Community Center. Empowers residents of Suncoast Estates with programs to help with self-sufficiency including GED, exercise, and food and nutrition classes. Connects to resources to obtain help with medical care, prescriptions, child care, and more.
- Charleston Park Community Center. Home to about 500 adults and children. The Community Center assists approximately 30 individuals daily. Current needs are transportation, medical education and financial education.

Additional most vulnerable communities in Market Area 2, Lee Memorial Hospital include, but are not limited to, the following, along with the residing population.

- Lee Community Healthcare (LCH). Federally Qualified Health Center Look-Alike (FQHC-LAL) provides access to primary care, tests, immunizations, mental health, pediatrics, women's care, and more, regardless of patient financial situation. Market Area 2 has three locations of LCH.
- Lee County Housing Authority, North Fort Myers. Assists low-income families with safe, decent, and affordable housing opportunities as they strive to achieve self-sufficiency and improve their lives.
- Housing Authority of the City of Fort Myers. Assists low-income seniors with housing and rental aid.
- Sandy Park Development Center. Provides residential and skills development support for persons with intellectual and developmental delays.
- Lee County Association of Remarkable Citizens (LARC). Provides opportunities for individuals with intellectual and developmental delays in Lee County.
- Lee County Human Services and Veteran Services. Serves as a collaborative hub for resources to aid Lee County residents through supportive programs and services in family self-sufficiency, veteran services, housing, and neighborhood building.
- Source of Light and Hope Developmental Center. Promotes the welfare of disadvantaged persons and to provide eligible persons with facilities, goods, and services to meet their physical, social and psychological needs.
- Haitian American Coalition of Southwest Florida. Works to unite the Haitian-American community to achieve social equity in the allocation of educational resources, health care, and job training.
- Nations Association Charities. Provides support to at-risk youth in the community with mentoring programs and community engagement opportunities.
- Houses of Worship. Parish Nurses provide health screenings and education for chronic disease management and prevention, including BMI, blood pressure, diabetes, nutrition, and more, all integrated at local churches.
- Locations in Market Area 2 include, St. Luke's, Thomas A Edison Congregational, St. Michael, Mount Hermon, First Christian Church, St. Hillary, All Souls Episcopal, Good Shepherd United Methodist, Tice United Methodist, Grace Shores Methodist, Alva Countryside, and Alva United Methodist.
- Supportive Housing for Elderly and Families. Provides public housing resources for low-income elderly and families.
- Locations in Market Area 2 include, Renaissance Preserve, East Point, East Pointe Landing, SandPiper Run, Lee County Housing Authority of North Fort Myers, City of Fort Myers Housing Authority; economically disadvantaged seniors and underserved families.


## Evaluation of Outreach Initiatives

Outreach initiatives within Market Area 2, Lee Memorial Hospital were directed toward access to healthcare services, chronic disease management, behavioral health and stress, and substance abuse intervention and prevention.

The most successful initiatives were defined by engagement level in community attendance and follow-up care plans:

- Exercise classes in collaboration with LARC and Special Olympics. Low-impact aerobic exercise classes and Special Olympics screenings for physicals were provided to the community in partnership with LARC and Special Olympics to bring healthy lifestyle education and training to vulnerable populations.
- 100 Black Men. A program focused on bringing open conversation about men's health and wellness to vulnerable populations in which health and wellness are stigmatized.
- Stay Gorgeous Girls. A program advocating for girls' holistic health, including behavioral health, self-esteem, and women's health. Girls are introduced to healthy habits and exercises for physical and mental health, while creating a connection with developing self-confidence.

Outreach initiatives with opportunity for improvement were defined by engagement level and demonstrated need for strategic redevelopment:

- Family health outreach in apartment complexes. Low attendance at apartment complex health events, including East Pointe Place and Landings at East Pointe. Focus on family health services and resources to be extended in broader setting.

Additional outreach initiatives that may be relevant, appropriate, and timely for the overall community health improvement of Market Area 2 may include:

- Additional substance abuse resources and prevention campaign for all ages in continued collaboration with AHEC, NAMI, American Heart Association, and Lee County Coalition for A DrugFree Southwest Florida.
- Additional education and integration of schedulers and Lee Community Healthcare clinicians to support declining emergency department use.
- Regular scheduling of nutrition education and exercise classes and resources for vulnerable populations with high BMI and heart health indicators.
- Expanded collaboration with Nations Association to address social determinants of health for at-risk youth involved with the criminal justice system.


## Gulf Coast Medical Center, Market Area 3

After the 2017 CHNA, the following health indicators were mentioned as areas of opportunity for Market Area 3, Gulf Coast Medical Center:

- Lowest health literacy
- Lowest number of health screenings
- Lowest percentage of individuals (age 65+) receiving influenza and pneumococcal vaccinations
- Lowest percentage of cancer and mammography screenings
- Highest area for no leisure-time physical activity
- Substance abuse and behavioral health indicator higher/worse than national benchmarks


## Implementation Plan and Outreach Response

In response to the health indicators identified in Market Area 3 and overall in Lee County, the following implementation strategies were proposed (left), and the community health outreach programs, initiatives, and activities were completed and/or are ongoing initiatives (right).

## Gulf Coast Medical Center - Market Area 3

Short-term implementation strategies

## Target patients with high emergency department utilization for wrap around services including nutrition programs and prescription monitoring.

Deploy communication strategies to reinforce Lee Community Healthcare and Convenience Care options.

Deploy communication strategies to educate on the value of screenings and early detection and reinforce the positive outcomes from physical activity.

- Support Community Care Outreach
- Various community-based health fairs with education, screenings, and referrals
- Lee Community Healthcare and schedulers active at health fairs and events
- Lee Health translators active at health fairs and events
- Parish Nurse program for health screenings and education (BMI, blood pressure, diabetes, meals, etc.) integrated at local churches*
- Asthma 101 \& Medication Training Program for children (collaboration with FDOH)*
- Glucose screenings and referrals provided at health fairs and events*
Utilize community based partners American Heart
Association to implement evidence based practices

Support the Lee Health pediatric and adult behavioral health strategies currently in the planning stages.

- Stroke clinicians support at Lee Heart Walk
- Healthy Life Center support at Lee Heart Walk
- Shipley Cardiothoracic Center support at Lee Heart Walk
- Injury Prevention-GATE Alcoholism presentation to Students Against Destructive Decisions (SADD)
- Community Affairs Outreach Manager certified in Mental Health First Aid
- Community Affairs Outreach Director and Manager certified in LIFT Training
- Lee Behavioral Health expanded mental health services to veterans in collaboration with Home Base SWFL*
- Training for clinicians for substance abuse stigma*
- Injury Prevention active in domestic violence, bullying, gateway drug presentations to Lehigh Boys \& Girls Club*
- Drug House Odyssey for injury prevention and substance abuse awareness*
- Lee Behavioral Health expanded mental health services to veterans ${ }^{*}$
- DCCI training for all employees of Lee Tran to bring sensitivity awareness to Alzheimer's and dementia*
- Intervention Program for nurses and physicians
- Lee Behavioral Health active at health fairs and events
- Increased Speakers Bureau presentations in underserved areas
- Collaboration with Project Dental Care for underserved populations for access to dental screenings

Invest in emergency department diversion programs such as Project Dental Care, WE Care managed by the Salvation Army, and the Bob Janes Triage Center, Integrate Gulf Coast Medical Center campus pathway and encourage use.
Increase community awareness of programs and preventive services.

## Provide chronic disease self-management education at

 multiple points of care.Coordinate suicide prevention activities with substance abuse prevention coalitions and mental health organizations such as NAMI.

Strengthen integration of substance abuse and mental health services with primary care delivery and training for primary care physicians.

Support the services for adults with mental illness and/or co-occurring substance use disorders involved with the criminal justice system.

Maintain community collaborative efforts and outreach activities by working with community based organizations such as parishes, fraternities, sororities, Nations Association, The Quality Life Center, United Way and the SW Community Foundation.

Maintain workforce and educational attainment community collaborative efforts by working with FutureMakers, Fort Myers Technical College and CareerSource.
Keep injury prevention training and education by the staff of the Regional level II Trauma Center at Lee Hospital for all ages and types of injury situations such as from falls and bicycles.

- Veterans enrolled in Home Base SWFL Program receive free access to Healthy Life Centers for fitness and wellness services
- Healthy Life Center cooking demos for nutritional education
- Healthy Life Center staff active at health fairs and events
- Health Fairs and Events: Lehigh Seventh Day Adventist, St. John XXIII Villas, Make A Difference Day, Agape, Pacific Tomato Growers, Lehigh Senior Center health education series
- Parish Nurse program for health screenings and education (BMI, blood pressure, diabetes, meals, etc.) integrated at local churches*
- Asthma 101 \& Medication Training Program for children (collaboration with FDOH)*
- Glucose screenings provided at health fairs and events*
- Lee Behavioral Health expanded mental health services to veterans in collaboration with Home Base SWFL*
- Collaboration with NAMI for increased referrals for substance abuse for veterans*
- Training for clinicians for substance abuse stigma*
- Injury Prevention active in domestic violence, bullying, gateway drug presentations to Lehigh Boys \& Girls Club*
- Drug House Odyssey for injury prevention and substance abuse awareness*
- Collaboration with NAMI for increased referrals for substance abuse for veterans*
- Collaboration with Lee County Court for behavioral health resources for veterans involved with the criminal justice system
- Fresh fruits and vegetables for sale (Double Up Food Bucks eligible) at health fair events-(collaboration with Hubbell Farms)
- Harry Chapin Food Bank mobile pantry active at health fairs
- Collaboration with Mission United and United Way 211 for referrals for resource knowledge for veterans
- Military Support Program integration of health resources with various veteran support organizations
- Expanded collaboration with CareerSource
- Injury Prevention balance screenings and fall prevention for Lehigh Senior Center
- Injury Prevention active in domestic violence, bullying, gateway drug presentations to Lehigh Boys \& Girls Club*
- Drug House Odyssey for injury prevention and substance abuse awareness*
- Injury Prevention-GATE Alcoholism presentation to Students Against Destructive Decisions (SADD)*
Implement Health and Wellness Strategy.
- Various community-based health fairs with education, screenings, and referrals

Participate in health care professional education for degree programs on campus, providing clinical experiences under the supervision of clinical professionals.

Support the Medical Residency program in our region with Florida State University College of Medicine for Family Practice.

Collaborate with Lee County sustainability efforts, incorporating the tenets of smart growth, and maximizing opportunities to promote balanced social, economic, and environmental resources and to cultivate of a livable and resilient community where there is a balance between social well-being and equity, economic prosperity and environmental resource conservation.

- NOVA Nursing students active in population health clinical settings
- Clinical internship and training programs in partnership with Florida Gulf Coast University, Florida Southwestern University, Keiser University, Hodges University, Nova Southeastern University, Premier International Institute, Braxton College, Fort Myers Technical College, Cape Coral Technical College, and Southwest Florida Public Service Academy
- Family Medicine Residency Program active with health fairs and screenings
- Back-to-School physicals provided by Family Medicine Residency Program
- Child Advocacy Program active in car seat checks, pediatric first aid, and safe sitter classes
- Purse Project- distribution of purses filled with basic health products for homeless women (collaboration with Lee County Human \& Veteran Services)
*Outreach activities and services apply to more than one implementation strategy, and appear more than once throughout the table.


## Underserved Communities and Populations

Key community centers that support most vulnerable communities in Market Area 3, Gulf Coast Medical Center include, but are not limited to, the following:

- Lee Community Healthcare (LCH). Federally Qualified Health Center Look-Alike (FQHC-LAL) provides access to primary care, tests, immunizations, mental health, pediatrics, women's care, and more, regardless of patient financial situation. Market Area 3 has one location of LCH.
- Lehigh Acres Senior Center. A nonprofit organization providing seniors with opportunities to be engaged, enriched and empowered. Programs provide opportunities to meet others, stay active, volunteer, learn, and maintain a healthy lifestyle, all in a safe and secure setting.
- Houses of Worship. Parish Nurses provide health screenings and education for chronic disease management and prevention, including BMI, blood pressure, diabetes, nutrition, and more, all integrated at local churches.
- Locations in Market Area 3 include, Lehigh Seventh Day Adventist, Hope Hospice, New Life, Unity Church, and Faith Lutheran.
- Supportive Housing for Elderly and Families. Provides public housing resources for low-income elderly and families.
- Locations in Market Area 3 include, St. Johns XXIII Villas and Unity House Halfway House Fort Myers.


## Evaluation of Outreach Initiatives

Outreach initiatives within Market Area 3, Gulf Coast Medical Center were directed toward access to healthcare services and screenings, chronic disease management, behavioral health and stress, and substance abuse intervention and prevention.

The most successful initiatives were defined by engagement level in community attendance and follow-up care plans:

- Lehigh Acres Senior Center health education series. Outreach for seniors was holistic in nature, including resources for balance education, injury prevention, screenings and referrals for care, stroke education, sleep education, COPD and asthma screenings, lifestyle medicine, healthy eating, prescription use education, smoking cessation, military support, and cancer screenings and referrals.

Outreach initiatives with opportunity for improvement were defined by engagement level and demonstrated need for strategic redevelopment:

- Reassessment of behavioral health outreach for seniors. Connect with senior living communities to assess greatest behavioral health concerns.
- Expanded health outreach initiatives in southern Market Area 3. Health outreach in Market Area 3, Gulf Coast Medical Center was focused mostly in Lehigh Acres due to vulnerable rural population. Outreach should expand to additional densely populated communities in southern Market Area 3.

Additional outreach initiatives that may be relevant, appropriate, and timely for the overall community health improvement of Market Area 3 may include:

- Increased range of health outreach services to densely populated residential areas including Daniels Corridor, San Carlos Park, and Gateway. Services should include schedulers and Lee Community Healthcare clinicians to address healthcare access and emergency department use.
- Increased prevention and intervention services and resources for tobacco and illicit drug use, and alcohol consumption in collaboration with AHEC, NAMI, Florida Department of Health in Lee County, American Heart Association, and Lee County Coalition for A Drug-Free Southwest Florida.
- Additional behavioral health education for all ages, tailored to finding stress-relief and healthy habits.


## HealthPark Medical Center, Market Area 4

After the 2017 CHNA, the following health indicators were mentioned as areas of opportunity for Market Area 4, HealthPark Medical Center:

- Lowest reported access to ongoing primary care
- Highest rate of high cholesterol
- Highest area for excessive drinkers


## Implementation Plan and Outreach Response

In response to the health indicators identified in Market Area 4 and overall in Lee County, the following implementation strategies were proposed (left), and the community health outreach programs, initiatives, and activities were completed and/or are ongoing initiatives (right).

| HealthPark Medical Center, Market Area 4 |  |
| :---: | :---: |
| Short-term implementation strategies |  |
| Target patients with high emergency department utilization for wrap around services including nutrition programs and prescription monitoring. | - Support Community Care Outreach <br> - Various community-based health fairs with education, screenings, and referrals |
| Deploy communication strategies to reinforce Lee Community Healthcare and Convenience Care options for part time residents and non-English speakers. | - Lee Community Healthcare and schedulers active at health fair events <br> - Lee Health translators active at health fairs and events |
| Utilize community based partners for alcohol abuse prevention, intervention, and treatment options. | - Drug House Odyssey for injury prevention and substance abuse awareness <br> - Collaboration with NAMI for increased referrals for substance abuse for veterans* |
| Partner with American Heart Association to implement evidence based practices. | - Stroke clinicians support at Lee Heart Walk <br> - Healthy Life Center support at Lee Heart Walk <br> - Shipley Cardiothoracic Center support at Lee Heart Walk |
| Support the Lee Health Pediatric and Adult Behavioral health strategies currently in the planning strategies. | - DCCI training for all employees of Lee Tran to bring sensitivity awareness to Alzheimer's and dementia <br> - DCCI presentations and screenings at Pine Manor and Page Field community <br> - Memory care support groups monthly <br> - Collaboration with NAMI for increased referrals for substance abuse for veterans* <br> - Lee Behavioral Health expanded mental health services to veterans in collaboration with Home Base SWFL* <br> - Intervention Program for nurses and physicians <br> - Lee Behavioral Health active at health fairs and events <br> - Increased Speakers Bureau presentations in underserved areas |
| Continue work to: |  |
| Support the completion of Lee Health Coconut Point. | - Veterans enrolled in Home Base SWFL Program receive free access to Healthy Life Centers for fitness and wellness services |
| Support the existing programs at the Healthy Life Center in the Coconut Point Mall | - Healthy Life Center cooking demos for nutritional education <br> - Healthy Life Center staff active at health fairs and events |
| Increase community awareness of programs and preventive services. | - Health Fairs and Events: Pine Manor Health Fair, Peace Lutheran, Page Field Health Fair <br> - Early Prevention Breast and Cervical Cancer Programfree mammograms and pap smears in collaboration with FDOH-Pine Manor <br> - Dental Bus visits to Pine Manor for screenings <br> - Child Advocacy Program active in car seat checks, pediatric first aid, and safe sitter classes* |

Provide chronic disease self-management education at multiple points of care.

Coordinate suicide prevention activities with substance abuse prevention coalitions and mental health organizations such as NAMI

Strengthen integration of substance abuse and mental health services with primary care delivery and training for primary care physicians.
Support the services for adults with mental illness and/or co-occurring substance use disorders involved with the criminal justice system.
Continue community collaborative efforts and outreach activities by working with community based organizations such as parishes, fraternities, sororities, Nations Association, The Quality of Life Center, United Way and the SW Community Foundation.

Implement Health and Wellness Strategy.

Participate in health care professional education for degree programs on campus, providing clinical experiences under the supervision of clinical professionals.

Support the Medical Residency program in our region with Florida State University College of Medicine for Family Practice.

Collaborate with Lee County sustainability efforts, incorporating the tenets of smart growth, and maximizing opportunities to promote balanced social, economic, and environmental resources and to cultivate of a livable and resilient community where there is a balance between social well-being and equity, economic prosperity and environmental resource conservation.

- Diabetes education and awareness presentations
- Pine Manor Community-Asthma \& COPD Screenings and Education
- Parish Nurse program for health screenings and education (BMI, blood pressure, diabetes, meals, etc.) integrated at local churches*
- Lee Behavioral Health expanded mental health services to veterans in collaboration with Home Base SWFL*
- Community Affairs Outreach Manager- Mental Health First Aid certified
- Community Affairs Outreach Director and ManagerCertified in LIFT Training
- Training for clinicians for substance abuse stigma
- Collaboration with Lee County Court for behavioral health resources for veterans involved with the criminal justice system
- Collaboration with Mission United and United Way 211 for referrals for resource knowledge for veterans
- Parish Nurse program for health screenings and education (BMI, blood pressure, diabetes, meals, etc.) integrated at local churches*
- $\quad$ Fresh fruits and vegetables for sale (Double Up Food Bucks eligible) at health fair events-(collaboration with Hubbell Farms)
- Harry Chapin Food Bank mobile pantry active at health fairs
- Youth basketball camp for Pine Manor and Page Park
- Military Support Program integration of health resources with various veteran support organizations
- Various community-based health fairs with education, screenings, and referrals
- NOVA Nursing students active in population health clinical settings
- Clinical internship and training programs in partnership with Florida Gulf Coast University, Florida Southwestern University, Keiser University, Hodges University, Nova Southeastern University, Premier International Institute, Braxton College, Fort Myers Technical College, Cape Coral Technical College, and Southwest Florida Public Service Academy
- Family Medicine Residency Program residents active with health fairs and screenings
- Back-to-School physicals provided by Family Medicine Residency Program residents
- Purse Project- distribution of purses filled with basic health products for homeless women (collaboration with Lee County Human \& Veteran Services)
- Child Advocacy Program active in car seat checks, pediatric first aid, and safe sitter classes*
*Outreach activities and services apply to more than one implementation strategy, and appear more than once throughout the table.


## Underserved Communities and Populations

Lee County recognizes the following community centers as part of neighborhood revitalization plan in Market Area 4, HealthPark Medical Center.

- Pine Manor Community Center. With approximately 5,248 residents the Center serves about 400 families each month. Current needs are healthcare, food, and jobs.
- Page Park Community Center. Plans and coordinates services for residents, including access to food pantry and food bank, meals for seniors, job placement, clothing, and more.

Key community centers that support most vulnerable communities in Market Area 4, HealthPark Medical Center include, but are not limited to, the following:

- Houses of Worship. Parish Nurses provide health screenings and education for chronic disease management and prevention, including BMI, blood pressure, diabetes, nutrition, and more, all integrated at local churches.
- Locations in Market Area 4 include, Fountain Crest, Peace Lutheran, Zion Lutheran, Chapel by the Sea, St. Peter Lutheran, and Hope Lutheran Amigos en Cristo.
- Lee Community Healthcare (LCH). Federally Qualified Health Center Look-Alike (FQHC-LAL) provides access to primary care, tests, immunizations, mental health, pediatrics, women's care, and more, regardless of patient financial situation. Market Area 4 has one location of LCH.


## Evaluation of Outreach Initiatives

Outreach initiatives within Market Area 4, HealthPark Medical Center were directed toward access to healthcare services and primary care, cholesterol management, and excessive drinking intervention and prevention.

The most successful initiatives were defined by engagement level in community attendance and follow-up care plans:

- Youth basketball camp for Pine Manor and Page Park. Basketball camp provided for youth in Page Park and Pine Manor in response to health indicators such as prevalence of overweight/obesity and high cholesterol.
- Nutritional education at Lee Health Coconut Point Healthy Life Center. Located in Coconut Point, the Healthy Life Center provided nutritional education and demonstrations for local community.

Outreach initiatives with opportunity for improvement were defined by engagement level and demonstrated need for strategic redevelopment:

- Combine Pine Manor and Page Park outreach initiatives. Pine Manor and Page Park share similar demographic and geographical features, outreach may be combined for improved attendance and overall community engagement.
- Expanded health outreach initiatives throughout Market Area 4. Health outreach in Market Area 4, Health Park Medical Center was focused mostly in Pine Manor and Page Park due to vulnerable rural population. Outreach should expand to additional densely populated communities throughout Market Area 4, including Bonita Springs, Captiva, and Sanibel Island.

Additional outreach initiatives that may be relevant, appropriate, and timely for the overall community health improvement of Market Area 4 may include:

- Increased range of health outreach services to densely populated residential areas including Bonita Springs, Captiva, and Sanibel Island. Services should include schedulers and Lee Community Healthcare clinicians to address ongoing healthcare access opportunities.
- Increased partnership and promotion of the Healthy Life Center at Coconut Point for expanded health outreach services and awareness of programs.
- Increased prevention and intervention services and resources for healthy eating and access to affordable produce. Continued support of Pine Manor and Community Garden project.
- Increased implementation of aerobic exercise for all ages, similar to basketball camp in Pine Manor and Page Park.


[^0]:    Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 149]
    Notes: - Asked of all respondents.

    - Includes adults who A) ran out of food at least once in the past year and/or B) worried about running out of food in the past year.

[^1]:    Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.

    - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov

    Note: - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population and coded using ICD-10 codes.

    - *The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart; the Diabetes target is adjusted to reflect only diabetes mellitus coded deaths.

[^2]:    Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020

    - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-3]

    Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

    - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

[^3]:    Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 131]

    - 2020 PRC National Health Survey, PRC, Inc.

    Notes

    - Reflects all respondents
    - Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) high blood pressure; 4) high blood cholesterol; and/or 5) being overweight/obese.

[^4]:    Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020
    US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-1]
    Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

    - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

[^5]:    "Appropriate cervical cancer screening" includes Pap smear testing (cervical cytology) every three years in women age 21 to 29 and Pap smear testing and/or HPV testing every 5 years in women age 30 to 65. Women 21 to 65 with hysterectomy are excluded.

[^6]:    Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020

[^7]:    Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 144]

    - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Florida data
    - 2020 PRC National Health Survey, PRC, Inc.
    - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IID-12.12]

    Notes: - Asked of all respondents age 65 and older.

[^8]:    Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 312]
    Notes: - Asked of all respondents.

    - Texting while driving includes sending or reading a text message or email while driving and the vehicle was moving

[^9]:    Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020

    - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-29]

    Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10)

    - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

[^10]:    Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Items 37, 140] Notes:

    - Asked of all respondents.
    - Excludes gestational diabetes (occurring only during pregnancy).

[^11]:    Sources: - PRC Online Key Informant Survey, PRC, Inc.
    Notes: - Asked of all respondents.

[^12]:    Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 325 - 2017 PRC National Health Survey, PRC, Inc

    Notes: - Asked of those respondents age 45 and older

[^13]:    Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted February 2020

    - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-10.1]

    Note:
    This indicator reports the percentage of women who do not obtain prenatal care during their first trimester of pregnancy. This indicator is relevant because engaging in prenatal care decreases the likelihood of maternal and infant health risks. This indicator can also highlight a lack of access to preventive care, a lack of health, knowledge insufficient provider outreach, and/or social barriers preventing utilization of services.

[^14]:    Sources: - Centers for Disease Control and Prevention, National Vital Statistics System. Accessed using CDC WONDER.

    - Retrieved February 2020 from CARES Engagement Network at https://engagementnetwork.org.

    Note: - Percentages are the proportion of live births within each population born to mothers ages 15 to 19 years.

[^15]:    Sources: • 2020 PRC Community Health Survey, PRC, Inc. [ltem 335]

    - 2017 PRC National Health Survey, PRC, Inc.

[^16]:    - Healthy People 2020 (www.healthypeople.gov)

[^17]:    Sources:

    - 2020 PRC Community Health Survey, PRC, Inc. [Item 152]
    - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention
    (CDC): 2017 Florida data
    - 2020 PRC National Health Survey, PRC, Inc.
    - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-2.4]

    Notes

    - Asked of all respondents.
    - Meeting both guidelines is defined as the number of persons age $18+$ who report light or moderate aerobic activity for at least 150 minutes per week or who report vigorous physical activity 75 minutes per week or an equivalent combination of moderate and vigorous-intensity activity and report doing physical activities specifically designed to strengthen muscles at

[^18]:    Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 329]
    Notes: - Asked of all respondents with school-age children.

[^19]:    Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 154]
    Notes: - Based on reported heights and weights, asked of all respondents.

[^20]:    BENCHMARK $>$ Fails to satisfy the Healthy People 2020 objective.

[^21]:    Sources: - CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2020.

    - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-11]

    Notes: - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

    - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

[^22]:    Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 58]

    - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2016 Florida data

[^23]:    Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 316]

    - 2020 PRC National Health Survey, PRC, Inc

    Notes: - Asked of all respondents.

[^24]:    Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 315] - 2020 PRC National Health Survey, PRC, Inc.

    Notes: - Asked of all respondents.

[^25]:    Sources: - PRC Online Key Informant Survey, PRC, Inc
    Notes: - Asked of all respondents.

[^26]:    Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 49]
    Notes:

    - Asked of all respondents

[^27]:    Sources: - 2020 PRC Community Health Survey, PRC, Inc. [ltem 163] Notes:

    - Asked of all respondents

[^28]:    Sources: - PRC Online Key Informant Survey, PRC, Inc
    Notes: - Asked of all respondents.

[^29]:    Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 20]

    - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Florida data.
    - 2020 PRC National Health Survey, PRC, Inc.
    - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]

    Notes: - Asked of all respondents.

[^30]:    Sources: - 2020 PRC Community Health Survey, PRC, Inc. [Item 6] - 2020 PRC National Health Survey, PRC, Inc

    Notes: Asked of all respondents.

