

# 2017 Community Health Needs Assessment Report

## Lee County, Florida

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*Prepared for:*

Lee Health & Florida Department of Health in Lee County

*By:*

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2016-4726-02  
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# Introduction



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## Project Overview

### Project Goals

This Community Health Needs Assessment, a follow-up to similar studies conducted in 2007, 2011 and 2014, is a systematic, data-driven approach to determining the health status, behaviors and needs of residents in Lee County, Florida. 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 at-risk for various diseases and injuries. Intervention plans aimed at targeting these individuals may then be developed to combat some of the socio-economic factors which have historically 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 Professional Research Consultants, Inc. (PRC). PRC is a nationally recognized healthcare consulting firm with extensive experience conducting Community Health Needs Assessments such as this in hundreds of communities across the United States since 1994.





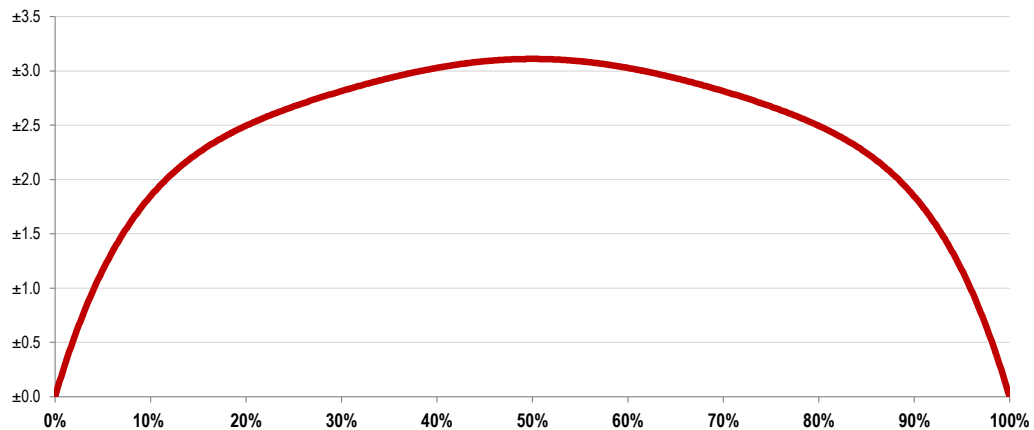
### Sample Approach & Design

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 1,005 individuals age 18 and older in Lee County, including 252 in Market Area 1 and 251 in each of the remaining three Market Areas. 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 Professional Research Consultants, Inc. (PRC).

For statistical purposes, the maximum rate of error associated with a sample size of 1,005 respondents is  $\pm 3.1\%$  at the 95 percent level of confidence.

### Expected Error Ranges for a Sample of 1,005 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 1,005 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.

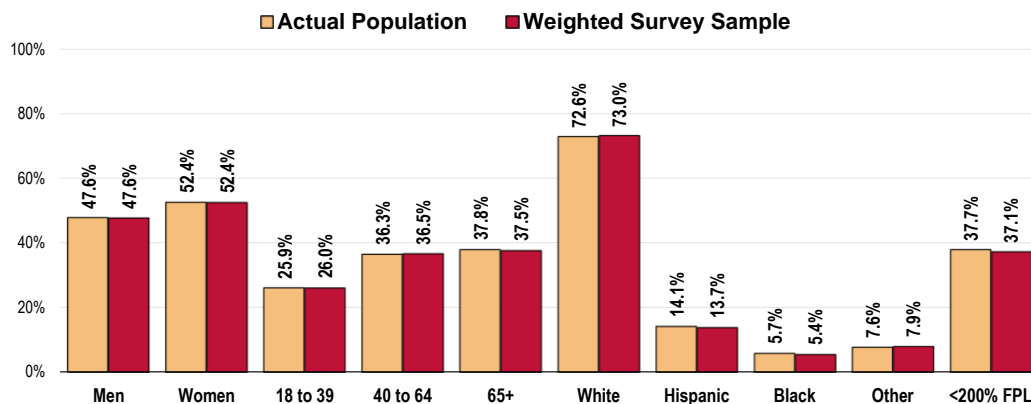
### Sample Characteristics

To accurately represent the population studied, PRC strives to minimize bias through application of a proven methodology and random-selection techniques. And, 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 gender, 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 healthcare needs, and these children are not represented demographically in this chart.]

### Population & Survey Sample Characteristics (Lee County, 2017)



Sources:   
 • Census 2010, Summary File 3 (SF 3). US Census Bureau.   
 • 2017 PRC Community Health Survey, Professional Research Consultants, Inc.

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 2016 guidelines place the poverty threshold for a family of four at \$24,300 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 the poverty threshold; “**mid/high income**” refers to those households living on incomes which are twice or more 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.

**Key Informant Input**

*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 was also 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, 146 community stakeholders took part in the Online Key Informant Survey, as outlined below:

Online Key Informant Survey Participation		
Key Informant Type	Number Invited	Number Participating
Physicians	50	20
Public Health Experts	26	17
Other Health Providers	33	21
Social Service Representatives	74	40
Community Leaders	121	48

Final participation included representatives of the organizations outlined below.

- AFCAAM Catholic Charities
- African Network of Southwest Florida
- Alta Resources
- Alvin A. Dubin Alzheimer's Resource Center, Inc.
- American Lung Association
- Arthrex
- B & I Contractors, Inc.
- Beacon of HOPE
- Big Brothers Big Sisters of the Sun Coast
- Bilingual Speech-Language Pathology Center, Inc.
- Blessings in a Backpack SWFL
- Bonita Springs Assistance Office
- Bonita Springs Lions Eye Clinic
- Bowers Accounting
- Brodeur Carvell
- Cafe of Life, Inc.
- Cape Coral Community Foundation
- Catholic Charities, Diocese of Venice, Inc.
- Century Link
- Children's Home Society of Florida
- Children's Network of Southwest

- Florida
  - City of Bonita Springs
  - Disabled Veterans Insurance Careers
  - Early Learning Coalition of Southwest Florida
  - Elite DNA Therapy Services
  - EnSite, Inc.
  - Estero Council of Community Leaders
  - Estero Village
  - Family Health Centers of Southwest Florida (FHCSWF)
  - FDLRS Island Coast Center
  - First Choice Kidcare
  - FISH of SANCAP
  - Florida Department of Health
  - Florida Gulf Coast University
  - Florida Radiology Consultants
  - Foundation for Lee County Public Schools
  - Girl Scouts of Gulfcoast Florida
  - Gladiolus Learning and Development Center, Inc.
  - Golisano Children's Hospital
  - Good Wheels, Inc.
  - Harry Chapin Food Bank
  - Health & Human Services Planning Committee of North Ft. Myers
  - Healthy Start Coalition of Southwest Florida
  - Heart & Soul Healing Arts and Massage Therapy
  - Henderson Franklin Starnes Holt
  - Hope Clubhouse of Southwest Florida
  - Hope Healthcare
  - Hope Lutheran/Amigos en Cristo Churches
  - IMA
  - Independent Insurance Agency
  - Injury Prevention Coalition
  - Interfaith Charities of South Lee
  - Internal Medicine Associates of Lee County
  - LARC, Inc.
  - LCEC
  - LCH Board of Directors
  - Lee Community Healthcare
  - Lee County Black History Society
  - Lee County Economic Development Office
  - Lee County Port Authority Southwest Florida
  - Lee Health
  - Lee Physician Group
  - Lehigh Acres Senior Citizens Center
  - Lehigh Community Services, Inc.
  - LHS Emergency Services
  - Lifeline Family Center, Inc.
  - Lighthouse of Southwest Florida, Inc.
  - Literacy Council Gulf Coast
  - Markham Norton Mosteller Wright & Co., PA
  - McGregor Clinic
  - Millennium Physician Group
  - NAACP Branch 5110
  - NAMI Lee County
  - Neurotherapy Center
  - Omega Youth and Community Development
  - Our Mother's Home of Southwest Florida, Inc.
  - PACE Center for Girls of Lee County
  - Pennies for Community Progress
  - Physicians Primary Care

- Quality Life Center
- SalusCare, Inc.
- School District of Lee County  
Head Start
- Senior Friendship Centers
- Shell Point Retirement  
Community
- Sinfonia Family Services of  
Florida
- Skinny Pantry
- South Lee County Hospital  
Committee
- Southwest Florida Community  
Foundation
- Southwest Florida Enterprise  
Center
- Southwestern Vocational Training
- Special Equestrians, Inc.
- Specialists in Healthcare
- Sprio & Associates
- Symmetric Revenue Solutions
- The Charitable Foundation of the  
Islands
- The Leadership Culture
- The Lee County Coalition for a  
Drug-Free SW Florida
- The News-Press Media Group
- The Salvation Army
- United Way

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

**Minority/medically underserved populations represented:**

*adolescents, adults with COPD, African-Americans, children, chronically ill, criminal justice/behavioral health, diabetics, disabled, dual eligibility, elderly, foster children, Haitians, Head Start, Hispanics, HIV/AIDS, homeless, LGBT, low-income, Medicare/ Medicaid, mentally ill, newly relocated residents, non-English speaking, pregnant women, rural population, single parents, undocumented, uninsured/underinsured, veterans, Vietnamese, young adults*

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 be better 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 from participants regarding their opinions and perceptions of the health of the residents in the area. Thus, these findings are not necessarily based on fact.*

### Key Informant Focus Groups

Once the input from the Online Key Informant Survey was collected and analyzed, a series of four in-person focus groups were planned to better understand some of the key issues that emerged, including: healthy lifestyles; behavioral health; chronic disease; injury and violence; and access to healthcare services. The four follow-up focus groups were held on January 17 and 18, 2017. A list of recommended participants for the focus groups was provided by the Healthy Lee Steering Committee. 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. Focus group candidates were first contacted by letter to request their participation. Follow-up phone calls were then made to ascertain if they would be able to attend. Confirmation calls were placed the day before the groups were scheduled to insure a reasonable turnout.

A total of 23 local key informants took part in these focus groups, including physicians, public health representatives, other health professionals, social service providers, business leaders and other community leaders.

Key Informant Focus Group Participation		
Key Informant Type	Number Invited	Number Participating
Physicians	28	2
Public Health Experts	9	3
Other Health Providers	8	3
Social Service Representatives	33	5
Other Community Leaders	59	10

Final participation included representatives of the organizations outlined below.

- Ad-Ler Roofing
- Cape Coral-Lee County Industrial Park
- Catholic Charities of Lee, Hendry, & Glades Counties
- Comcast
- District Eight Health Planning Council
- Florida Department of Health – Lee County
- Florida Southwestern State College
- Harry Chapin Food Bank
- Home Ownership Resource Center of Lee County
- Hudson Consulting
- Internal Medicine, Lipid & Wellness of Fort Myers PLLC
- Kadima Consulting
- Lee County Legal Aid Society, Inc.
- Lee County Schools
- Lotus Blossom Clinic
- Nations Association
- Scoma Chiropractic, P.A.
- Seniors Helping Seniors

- SWF Business Today
- Vein Specialists
- Wonderland Realty

Audio from the focus groups sessions was recorded, from which verbatim comments in this report are taken. There are no names connected with the comments, as participants were asked to speak candidly and assured of confidentiality.

Full description of the focus group discussions is provided as an appendix to this report. Highlights from the discussion are also dispersed among relative topics throughout the narrative

NOTE: These findings represent qualitative rather than quantitative data. The groups were designed to gather input from participants regarding their opinions and perceptions of the health 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 Environmental Systems (CARES)
- 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
- Community Commons
- 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 and 2014 by PRC on behalf of Lee Health (known then as Lee Memorial Health System). 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 *2015 PRC National Health Survey*; the methodological approach for the national study is identical 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:



- Encourage collaborations across communities and sectors.
- 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 secondary data indicators (which do not carry sampling error, but might be subject to reporting error), “significance,” for the purpose of this report, is determined by a 5% 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.

## 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 and the guidelines set forth in Healthy People 2020. 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. Below, these are grouped as they relate to the goal areas of the Healthy Lee initiative.

Areas of Opportunity Identified Through This Assessment	
<b>Healthy Lifestyles</b>	<p><b>Nutrition, Physical Activity &amp; Weight</b></p> <ul style="list-style-type: none"> <li>• Fruit/Vegetable Consumption</li> <li>• Low Food Access</li> <li>• Obesity [Adults]</li> <li>• Access to Recreation/Fitness Facilities</li> <li>• Nutrition, Physical Activity &amp; Weight ranked as a top concern in the Online Key Informant Survey.</li> </ul>
<b>Behavioral Health</b>	<p><b>Mental Health</b></p> <ul style="list-style-type: none"> <li>• “Fair/Poor” Mental Health</li> <li>• Diagnosed Depression</li> <li>• Symptoms of Chronic Depression</li> <li>• Suicide Deaths</li> <li>• Member of Household Seeking Mental Health Services</li> <li>• Mental Health ranked as a top concern in the Online Key Informant Survey.</li> </ul>
	<p><b>Substance Abuse</b></p> <ul style="list-style-type: none"> <li>• Cirrhosis/Liver Disease Deaths</li> <li>• Excessive Drinking</li> <li>• Drinking &amp; Driving</li> <li>• Illicit Drug Use</li> <li>• Negatively Affected by Substance Abuse (Self or Other’s)</li> <li>• Substance Abuse ranked as a top concern in the Online Key Informant Survey.</li> </ul>

—Continued on next page—

Areas of Opportunity (continued)	
Primary Care Alternatives	<p><b>Access to Healthcare Services</b></p> <ul style="list-style-type: none"> <li>• Lack of Health Insurance</li> <li>• Barriers to Access                             <ul style="list-style-type: none"> <li>◦ Cost of Prescriptions</li> <li>◦ Cost of Physician Visits</li> <li>◦ Appointment Availability</li> <li>◦ Finding a Physician</li> <li>◦ Lack of Transportation</li> </ul> </li> <li>• Skipping/Stretching Prescriptions</li> <li>• Difficulty Accessing Children’s Healthcare</li> <li>• Primary Care Physician Ratio</li> <li>• Emergency Room Utilization</li> </ul>
	<p><b>Oral Health</b></p> <ul style="list-style-type: none"> <li>• Dental Insurance Coverage</li> <li>• Children’s Dental Care</li> </ul>
Chronic Disease Management	<p><b>Heart Disease &amp; Stroke</b></p> <ul style="list-style-type: none"> <li>• Cardiovascular disease is a leading cause of death.</li> <li>• Heart Disease Prevalence</li> <li>• High Blood Pressure Prevalence</li> <li>• High Blood Cholesterol Prevalence</li> <li>• Overall Cardiovascular Risk</li> </ul>
	<p><b>Respiratory Diseases</b></p> <ul style="list-style-type: none"> <li>• Asthma Prevalence [Adults]</li> <li>• Asthma Prevalence [Children]</li> </ul>
	<p><b>Cancer</b></p> <ul style="list-style-type: none"> <li>• Cancer is a leading cause of death.</li> <li>• Cancer Incidence                             <ul style="list-style-type: none"> <li>◦ Including Cervical Cancer Incidence</li> </ul> </li> <li>• Skin Cancer Prevalence</li> <li>• Cancer (Non-Skin) Prevalence</li> <li>• Cervical Cancer Screening</li> </ul>
	<p><b>Diabetes</b></p> <ul style="list-style-type: none"> <li>• Prevalence of Borderline/Pre-Diabetes</li> <li>• Diabetes ranked as a top concern in the Online Key Informant Survey.</li> </ul>
	<p><b>Potentially Disabling Conditions</b></p> <ul style="list-style-type: none"> <li>• Activity Limitations</li> <li>• Arthritis Prevalence (50+)</li> <li>• Osteoporosis Prevalence (50+)</li> <li>• Sciatica/Back Pain Prevalence</li> <li>• Deafness/Hearing Trouble</li> </ul>
	<p><b>Tobacco Use</b></p> <ul style="list-style-type: none"> <li>• Electronic Cigarette Use (“E-Cigarettes”)</li> </ul>

—Continued on next page—

<b>Areas of Opportunity (continued)</b>	
<b>Other</b>	<b>Injury &amp; Violence</b> <ul style="list-style-type: none"> <li>• Unintentional Injury Deaths               <ul style="list-style-type: none"> <li>○ Including Motor Vehicle Crash Deaths</li> </ul> </li> <li>• Texting While Driving</li> <li>• Fall-Related Deaths [65+]</li> <li>• Firearm-Related Deaths</li> <li>• Homicide Deaths</li> </ul>
	<b>Family Planning</b> <ul style="list-style-type: none"> <li>• Teen Births</li> </ul>
	<b>HIV &amp; STDs</b> <ul style="list-style-type: none"> <li>• HIV/AIDS Deaths</li> <li>• Condom Use</li> </ul>

## 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 to correspond with the Focus Areas presented in Healthy People 2020.

### Reading the Summary Tables

■ In the following charts, Lee County results are shown in the larger, blue column.

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

■ The green 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” (☺) 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 targets. 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.*

#### TREND SUMMARY

(Current vs. Baseline Data)

#### Survey Data Indicators:

Trends for survey-derived indicators typically represent significant changes since 2007.

#### 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).

Social Determinants	Each Sub-Area vs. Others				Lee County vs. Benchmarks				
	Market Area 1	Market Area 2	Market Area 3	Market Area 4	Lee County	vs. FL	vs. US	vs. HP2020	TREND
Linguistically Isolated Population (Percent)					5.6	6.5	4.6		
Population in Poverty (Percent)					16.1	16.5	15.5		
Population Below 200% FPL (Percent)					37.7	37.9	34.3		
Children Below 200% FPL (Percent)					55.9	49.5	44.0		
No High School Diploma (Age 25+, Percent)					13.1	13.1	13.4		
Unemployment Rate (Age 16+, Percent)					4.3	4.7	4.6	3.2	
<p>Note: In the green section, each subarea 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.</p>					better     similar     worse				

Overall Health	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% "Fair/Poor" Physical Health	14.7	20.5	12.6	8.5
% Activity Limitations	30.1	27.5	25.9	24.8
% Caregiver to a Friend/Family Member	30.6	23.4	21.4	20.9
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
13.5	18.4	18.3		17.9
27.0	20.7	20.0		21.3
24.1		20.9		
better     similar     worse				

Access to Health Services	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% [Age 18-64] Lack Health Insurance	13.0	23.6	15.5	8.9
% [Insured 18-64] Have Coverage Through ACA	29.7	32.9	15.7	9.3
% Lack/Type of Insurance Prevented Care	11.9	21.9	14.3	15.4
% Difficulty Accessing Healthcare in Past Year (Composite)	45.4	48.7	39.9	41.2
% Inconvenient Hrs Prevented Dr Visit in Past Year	10.0	13.7	16.4	14.7

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
14.7	20.9	10.1	0.0	24.1
20.4		14.9		
15.5				15.4
43.5		35.0		37.9
13.6		14.4		12.4



Access to Health Services (continued)	Each Sub-Area vs. Others				Lee County	Lee County vs. Benchmarks			TREND
	Market Area 1	Market Area 2	Market Area 3	Market Area 4		vs. FL	vs. US	vs. HP2020	
% Cost Prevented Getting Prescription in Past Year	18.1	20.3	11.3	16.6	16.5		9.5	15.0	
% Cost Prevented Physician Visit in Past Year	13.3	19.3	12.9	19.3	16.2		11.5	14.1	
% Difficulty Getting Appointment in Past Year	17.7	24.1	15.7	23.8	20.4		15.4	16.0	
% Difficulty Finding Physician in Past Year	11.3	18.8	14.1	13.1	14.0		8.7	9.3	
% Transportation Hindered Dr Visit in Past Year	6.2	12.6	7.6	11.2	9.3		5.0	5.6	
% Language/Culture Prevented Care in Past Year	0.0	1.2	0.3	1.1	0.6		1.7		
% Skipped Prescription Doses to Save Costs	15.7	22.0	11.5	16.4	16.2		10.2	16.3	
% Difficulty Getting Child's Healthcare in Past Year					12.5		3.9	12.9	
% Low Health Literacy	24.2	24.2	22.1	25.5	24.1		23.3		
Primary Care Doctors per 100,000					64.3	79.8	87.8	53.1	
% [Age 18+] Have a Specific Source of Ongoing Care	77.3	75.6	73.1	72.7	74.6		74.0	95.0	

Access to Health Services (continued)	Each Sub-Area vs. Others				Lee County vs. Benchmarks				
	Market Area 1	Market Area 2	Market Area 3	Market Area 4	Lee County	vs. FL	vs. US	vs. HP2020	TREND
% [Age 18-64] Have a Specific Source of Ongoing Care	78.7	72.1	68.7	64.0	71.0		73.1	89.4	72.6
% [Age 65+] Have a Specific Source of Ongoing Care	73.9	82.2	83.6	81.4	80.1		76.8	100.0	84.4
% Have Had Routine Checkup in Past Year	72.8	69.6	77.0	80.6	75.6	73.5	70.5		75.7
% Child Has Had Checkup in Past Year					86.4		89.3		86.7
% Two or More ER Visits in Past Year	9.4	16.9	8.3	7.6	10.0		8.5		7.4
% Rate Local Healthcare "Fair/Poor"	14.4	26.2	10.4	14.3	15.8		14.2		17.4
% Outmigration for Care	12.5	13.1	13.4	20.3	15.2				14.5
Live in a Health Professional Shortage Area (Percent)					26.5	54.7	33.1		
<small>Note: In the green section, each subarea 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.</small>					better     similar     worse				

Arthritis, Osteoporosis & Chronic Back Conditions	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% [50+] Arthritis/Rheumatism	44.2	36.5	35.6	35.9
% [50+] Osteoporosis	15.3	13.4	15.4	10.9
% Sciatica/Chronic Back Pain	29.2	31.2	22.3	23.7
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
38.2		32.0		37.0
13.4		8.7	5.3	14.0
26.3		19.4		23.2
better     similar     worse				

Cancer	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
Cancer (Age-Adjusted Death Rate)				
Lung Cancer (Age-Adjusted Death Rate)				
Prostate Cancer (Age-Adjusted Death Rate)				
Female Breast Cancer (Age-Adjusted Death Rate)				
Colorectal Cancer (Age-Adjusted Death Rate)				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
139.5	153.1	161.0	161.4	154.5
37.5	41.3	42.0	45.5	
13.9	16.8	19.0	21.8	
16.5	19.4	20.6	20.7	
11.4	13.3	14.4	14.5	

Cancer (continued)	Each Sub-Area vs. Others				Lee County vs. Benchmarks					
	Market Area 1	Market Area 2	Market Area 3	Market Area 4	Lee County	vs. FL	vs. US	vs. HP2020	TREND	
Prostate Cancer Incidence per 100,000					101.2	111.2	123.4			
Female Breast Cancer Incidence per 100,000					109.8	115.3	123.4			
Lung Cancer Incidence per 100,000					59.2	63.0	62.6			
Colorectal Cancer Incidence per 100,000					32.3	37.9	40.6			
Cervical Cancer Incidence per 100,000					8.8	8.9	7.6			
% Skin Cancer	12.0	13.7	14.1	17.4	14.5	9.2	7.7	14.6		
% Cancer (Other Than Skin)	5.0	11.8	9.8	15.3	10.6	7.4	7.7	9.8		
% [Women 50-74] Mammogram in Past 2 Years	84.8	73.8	70.5	88.8	81.7	78.5	80.3	81.1	80.1	
% [Women 21-65] Pap Smear in Past 3 Years	65.9	72.1	84.2	82.5	76.0	79.5	84.8	93.0	81.9	
% [Age 50-75] Colorectal Cancer Screening	80.1	74.9	71.5	82.6	78.2	66.6	74.5	70.5	78.0	
<small>Note: In the green section, each subarea 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.</small>										
						better	similar	worse		

Chronic Kidney Disease	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
Kidney Disease (Age-Adjusted Death Rate)				
% Kidney Disease	5.1	4.6	2.7	2.8
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
5.0	10.8	13.3	8.1	
3.7	3.0	3.6	3.8	
better     similar     worse				

Dementias, Including Alzheimer's Disease	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
Alzheimer's Disease (Age-Adjusted Death Rate)				
% [Age 45+] Increasing Confusion/Memory Loss in Past Yr	14.0	16.9	15.3	11.9
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
12.1	19.2	26.1	16.0	
14.1		12.8		
better     similar     worse				

Diabetes	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
Diabetes Mellitus (Age-Adjusted Death Rate)				
% Diabetes/High Blood Sugar	14.4	20.4	12.9	11.8
% Borderline/Pre-Diabetes	8.6	6.8	9.2	9.5
% [Non-Diabetes] Blood Sugar Tested in Past 3 Years	55.1	56.3	63.2	62.1
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
15.8	19.0	21.1	20.5	18.5
14.5	11.3	14.5		12.5
8.7	1.6	5.7		
59.4		55.1		60.9
better     similar     worse				

Educational & Community-Based Programs	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% Heard of Healthy Lee Community Initiatives	13.7	15.9	11.8	18.5
% Heard the "Choose, Commit, Change!" Message	8.0	4.7	9.1	7.1
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
15.2				10.9
7.3				8.8
better     similar     worse				

Family Planning	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
Births to Teenagers Under Age 20 (Percent)				
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
6.8	5.9	6.4		11.1
better       similar       worse				

Hearing & Other Sensory or Communication Disorders	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% Deafness/Trouble Hearing	12.7	14.6	7.0	14.8
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
12.4		8.6		11.2
better       similar       worse				

Heart Disease & Stroke	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
Diseases of the Heart (Age-Adjusted Death Rate)				
Stroke (Age-Adjusted Death Rate)				
% Heart Disease (Heart Attack, Angina, Coronary Disease)	9.8	12.4	9.7	10.2

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
139.4	150.3	168.4	156.9	168.1
21.1	33.6	36.8	34.8	30.5
10.4		6.9		10.1

Heart Disease & Stroke (continued)	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% Stroke	2.6	3.8	2.5	4.7
% Blood Pressure Checked in Past 2 Years	92.7	91.7	97.9	95.4
% Told Have High Blood Pressure (Ever)	43.7	47.5	37.2	43.2
% [HBP] Taking Action to Control High Blood Pressure	94.6	92.9	89.4	99.3
% Cholesterol Checked in Past 5 Years	88.7	85.1	92.4	92.0
% Told Have High Cholesterol (Ever)	40.9	39.3	33.9	47.8
% [HBC] Taking Action to Control High Blood Cholesterol	88.4	88.1	85.2	94.9
% 1+ Cardiovascular Risk Factor	89.5	89.3	88.0	86.7
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
<b>3.5</b>	3.1	2.6		3.9
<b>94.5</b>		93.6	92.6	96.2
<b>42.8</b>	33.5	36.5	26.9	36.4
<b>94.7</b>		92.5		95.2
<b>89.8</b>	79.7	87.4	82.1	90.6
<b>41.1</b>		33.5	13.5	38.5
<b>90.1</b>		84.2		91.6
<b>88.3</b>		83.0		85.1
better       similar       worse				



HIV	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
HIV/AIDS (Age-Adjusted Death Rate)				
HIV Prevalence per 100,000				
% [Age 18-44] HIV Test in the Past Year				
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
3.1	5.9	2.7	3.3	
294.3	606.1	353.2		
31.6		21.3		28.1
better     similar     worse				

Immunization & Infectious Diseases	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% Would Not Want New Baby to Have All Recommended Vaccines	14.4	9.4	16.6	12.2
% [Age 65+] Flu Vaccine in Past Year	64.9	71.8	64.5	78.9
% [High-Risk 18-64] Flu Vaccine in Past Year				
% [Age 65+] Pneumonia Vaccine Ever	74.4	75.2	63.3	77.4





















Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
13.2				
71.6	51.4	58.9	70.0	71.8
52.0		48.0	70.0	34.7
73.8	68.4	76.3	90.0	74.2
























Immunization & Infectious Diseases (continued)	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% [High-Risk 18-64] Pneumonia Vaccine Ever				
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
41.2		38.7	60.0	40.1
	better	similar	worse	

Injury & Violence Prevention	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
Unintentional Injury (Age-Adjusted Death Rate)				
Motor Vehicle Crashes (Age-Adjusted Death Rate)				
% Child [Age 0-17] "Always" Uses Seat Belt/Car Seat				
% Child [Age 5-17] "Always" Wears Bicycle Helmet				
% Texting While Driving in the Past Month	32.7	22.9	29.2	21.8
% Always Wear Sunscreen	20.7	13.3	18.3	21.9
% Have a Swimming Pool at Home/Apartment	52.6	41.8	45.3	76.0

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
45.4	42.2	41.0	36.4	56.9
13.7	12.6	10.6	12.4	18.5
89.1		94.8		93.2
43.0		54.2		33.5
26.6				17.3
19.1				
56.1				43.1

Injury & Violence Prevention (continued)	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% Have Safety Features for Pool	 76.6	 86.8	 89.8	 87.9
[65+] Falls (Age-Adjusted Death Rate)				
% [Age 45+] Fell in the Past Year	 24.4	 37.4	 21.7	 26.1
Firearm-Related Deaths (Age-Adjusted Death Rate)				
Homicide (Age-Adjusted Death Rate)				
Violent Crime per 100,000				
% Perceive Neighborhood as "Slightly/Not At All Safe"	 5.9	 25.8	 15.7	 8.4
% Victim of Violent Crime in Past 5 Years	 0.9	 1.5	 1.8	 3.9
% Victim of Domestic Violence (Ever)	 17.2	 17.7	 5.5	 12.9
<small>Note: In the green section, each subarea 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.</small>				













Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
85.2				 80.2
86.2	 64.0	 59.0	 47.0	
26.9		 28.2		
12.1	 11.8	 10.6	 9.3	 13.9
6.2	 6.2	 5.3	 5.5	 9.0
359.2	 514.6	 395.5		
12.7		 15.3		
2.1		 2.3		 2.8
13.3		 15.1		 13.7
 better  similar  worse				










Maternal, Infant & Child Health	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
No Prenatal Care in First Trimester (Percent)				
Low Birthweight Births (Percent)				
Infant Death Rate				
<small>Note: In the green section, each subarea 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.</small>				









Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
36.6	28.3		22.1	38.3
8.1	8.6	8.0	7.8	8.2
5.8	6.2	5.9	6.0	6.8
better     similar     worse				







Mental Health & Mental Disorders	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% "Fair/Poor" Mental Health	12.6	18.0	11.2	11.8
% Diagnosed Depression	24.5	25.9	19.3	19.6
% Symptoms of Chronic Depression (2+ Years)	31.0	34.1	29.8	26.9
Suicide (Age-Adjusted Death Rate)				
% Have Ever Sought Help for Mental Health	31.1	35.3	27.4	29.1

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
13.1		15.5		9.2
22.1	16.5	17.9		17.4
30.0		29.9		25.2
16.9	14.0	13.0	10.2	15.7
30.5		27.4		18.8

Mental Health & Mental Disorders (continued)	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% Taking Rx/Receiving Mental Health Trtmt	 19.8	 16.5	 12.7	 13.4
% Member of HH Sought Mental Health Svcs	 15.8	 16.1	 14.0	 17.6
% Member of HH Received Needed Mental Health Svcs				
% Member of HH Received Mental Health Svcs in Lee County				
% Typical Day Is "Extremely/Very" Stressful	 13.6	 15.5	 12.1	 11.6
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
15.5		 13.6		
16.0			 10.3	
95.1			 85.0	
81.7			 86.0	
13.1		 11.7	 10.8	
 better  similar  worse				

Nutrition, Physical Activity & Weight	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% Eat 5+ Servings of Fruit or Vegetables per Day	 29.6	 24.8	 27.9	 33.6
% "Very/Somewhat" Difficult to Buy Fresh Produce	 24.0	 24.7	 25.2	 22.4
Population With Low Food Access (Percent)				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
29.5		 27.4	 41.4	
23.9		 21.9	 21.1	
38.2	 25.7	 22.4		

Nutrition, Physical Activity & Weight (continued)	Each Sub-Area vs. Others				Lee County	Lee County vs. Benchmarks			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4		vs. FL	vs. US	vs. HP2020	TREND
% Food Insecure	25.1	30.1	23.3	17.7	23.3		25.9		
% 7+ Sugar-Sweetened Drinks in Past Week	21.4	26.7	30.9	17.3	23.4		30.2		
% Healthy Weight (BMI 18.5-24.9)	32.0	23.7	33.1	36.1	32.0	33.9	32.9	33.9	34.5
% Overweight (BMI 25+)	66.5	74.9	65.7	61.6	66.3	64.1	65.2		64.0
% Obese (BMI 30+)	34.8	44.4	31.5	20.2	31.2	26.8	33.4	30.5	23.0
% [Overweights] Trying to Lose Weight Both Diet/Exercise	65.5	62.5	52.5	57.7	59.6		57.0		35.0
% Child [Age 5-17] Healthy Weight					67.2		67.2		
% Children [Age 5-17] Overweight (85th Percentile)					19.1		24.2		46.3
% Children [Age 5-17] Obese (95th Percentile)					11.9		9.5	14.5	31.6
% No Leisure-Time Physical Activity	28.8	21.9	30.9	14.4	23.4	26.2	27.9	32.6	26.7
% Meeting Physical Activity Guidelines	21.1	36.8	23.9	27.3	26.8	21.8	23.6	20.1	

Nutrition, Physical Activity & Weight (continued)	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
Recreation/Fitness Facilities per 100,000				
% Child [Age 2-17] Physically Active 1+ Hours per Day				
% Child [Age 5-17] 3+ Hours per Day of Total Screen Time				
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
7.4	9.8	10.1		
43.2		47.9		54.0
32.7				28.7
better     similar     worse				

Oral Health	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% [Age 18+] Dental Visit in Past Year	64.7	52.4	62.3	74.3
% Child [Age 2-17] Dental Visit in Past Year				
% Have Dental Insurance	47.3	43.9	52.4	56.2
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
64.8	61.9	67.2	49.0	65.2
78.7		90.7	49.0	68.0
50.6		66.5		50.0
better     similar     worse				

Respiratory Diseases	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
CLRD (Age-Adjusted Death Rate)				
Pneumonia/Influenza (Age-Adjusted Death Rate)				
% COPD (Lung Disease)	12.4	15.2	7.4	10.6
% [Adult] Currently Has Asthma	14.2	9.1	7.0	9.9
% Child [Age 0-17] Asthma (Ever Diagnosed)				
<small>Note: In the green section, each subarea 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.</small>				






Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
32.5	38.8	41.4	32.8	
4.9	9.3	15.4	8.3	
11.3	7.0	9.5	10.5	
10.2	7.5	9.5	6.1	
24.3		10.6	13.5	
better     similar     worse				





















Sexually Transmitted Diseases	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
Gonorrhea Incidence per 100,000				
Chlamydia Incidence per 100,000				
% [Unmarried 18-64] 3+ Sexual Partners in Past Year				





















Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
58.8	107.1	110.7		
363.6	429.8	456.1		
11.5		10.3	7.9	



Sexually Transmitted Diseases (continued)	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% [Unmarried 18-64] Using Condoms				
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
31.4		 44.5	 33.2	
 better  similar  worse				

Substance Abuse	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)				
% Current Drinker	 65.3	 53.5	 60.1	 77.0
% Excessive Drinker	 25.9	 24.3	 22.6	 32.0
% Drinking & Driving in Past Month	 6.1	 4.0	 3.1	 6.6
Drug-Induced Deaths (Age-Adjusted Death Rate)				
% Illicit Drug Use in Past Month	 7.1	 3.8	 1.9	 4.6
% Marijuana Use in Past Month	 4.2	 5.0	 3.5	 8.0

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
12.5	 11.4	 10.5	 8.2	 11.5
65.5	 53.6	 59.7		 60.1
26.8		 22.2	 25.4	 23.1
5.2	 3.2	 4.1		 3.0
14.7	 14.7	 15.8	 11.3	 18.3
4.5		 3.0	 7.1	 1.9
5.4				

Substance Abuse (continued)	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% Ever Sought Help for Alcohol or Drug Problem	3.1	3.5	1.7	4.0
% Life Negatively Affected by Substance Abuse	40.4	48.4	34.3	39.8
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
3.2		4.1		3.1
40.4		32.2		
better     similar     worse				

Tobacco Use	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% Current Smoker	15.2	10.3	13.4	13.9
% Someone Smokes at Home	10.3	10.6	11.9	10.3
% [Nonsmokers] Someone Smokes in the Home	5.6	6.6	6.8	3.4
% [Household With Children] Someone Smokes in the Home				
% [Smokers] Have Quit Smoking 1+ Days in Past Year				
% Currently Use Electronic Cigarettes	8.1	4.4	5.6	6.6

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
13.4	15.8	14.0	12.0	15.6
10.7		10.2		13.3
5.4		3.9		6.0
15.9		10.2		12.9
51.5		43.7	80.0	47.3
6.3		3.8		

Tobacco Use (continued)	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% Smoke Cigars	5.3	2.5	4.3	4.5
% Use Smokeless Tobacco	2.9	1.6	1.6	2.5
<small>Note: In the green section, each subarea 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.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
4.3		3.6	0.2	3.2
2.3	2.6	3.0	0.3	1.9
better       similar       worse				

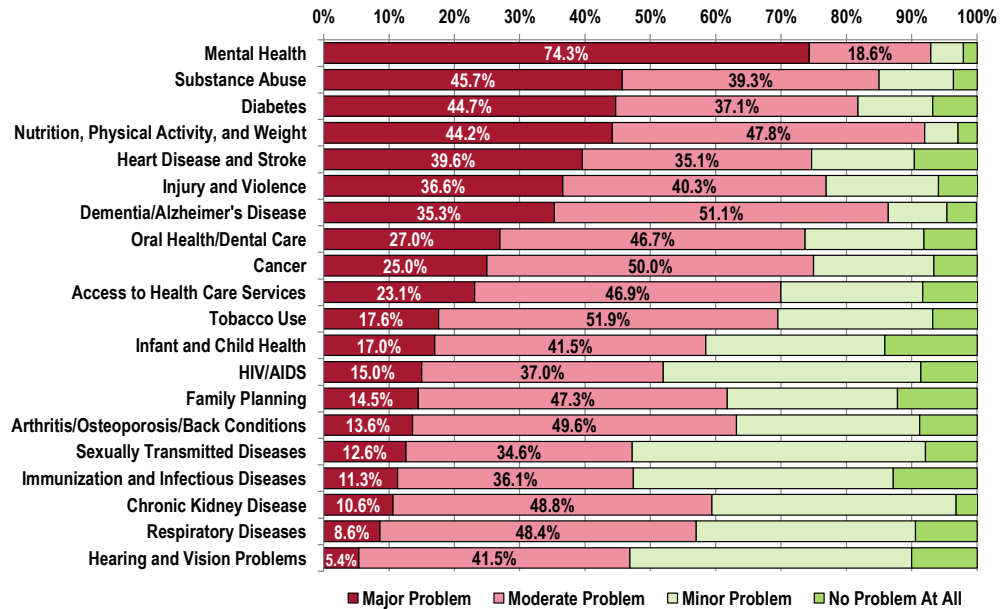
Vision	Each Sub-Area vs. Others			
	Market Area 1	Market Area 2	Market Area 3	Market Area 4
% Blindness/Trouble Seeing	8.0	8.1	8.5	9.1
<small>Note: In the green section, each subarea is compared against all other areas combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.</small>				

Lee County	Lee County vs. Benchmarks			TREND
	vs. FL	vs. US	vs. HP2020	
8.5	5.2	7.3		8.7
better       similar       worse				

## Summary of Key Informant Perceptions

In the Online Key Informant Survey, community stakeholders were asked to rate the degree to which each of 20 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 are also 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, but rather 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



In addition, follow-up focus groups were held to further explore many of these issues. A summary of these input are provided in an appendix to this report.

# Community Description



**Professional Research Consultants, Inc.**

## Population Characteristics

### Total Population

Lee County, the focus of this Community Health Needs Assessment, encompasses 784.3 square miles and houses a total population of 663,675 residents, according to latest census estimates.

**Total Population**  
(Estimated Population, 2011-2015)

	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
<b>Lee County</b>	663,675	784.3	846.2
<b>Florida</b>	19,645,772	53,631.5	366.3
<b>United States</b>	316,515,021	3,532,070.5	89.6

Sources:

- US Census Bureau American Community Survey 5-year estimates.
- Retrieved March 2017 from Community Commons at <http://www.chna.org>.

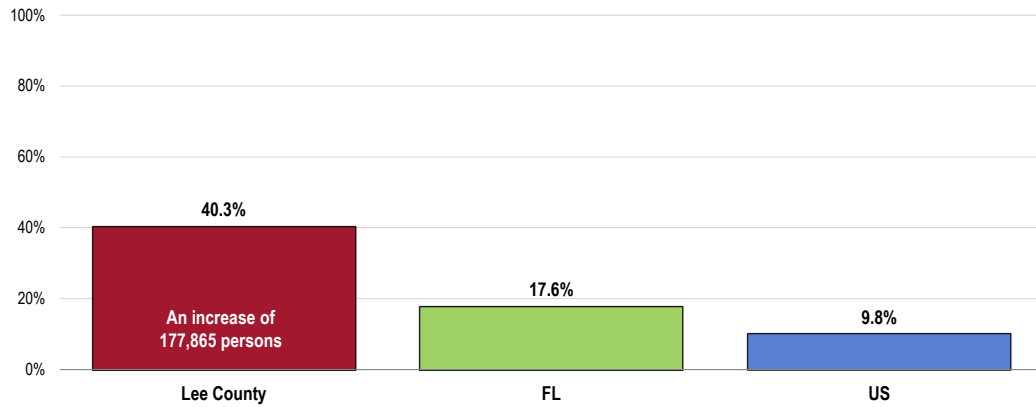
### Population Change 2000-2010

A significant positive or negative shift in total population over time impacts healthcare 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%.**

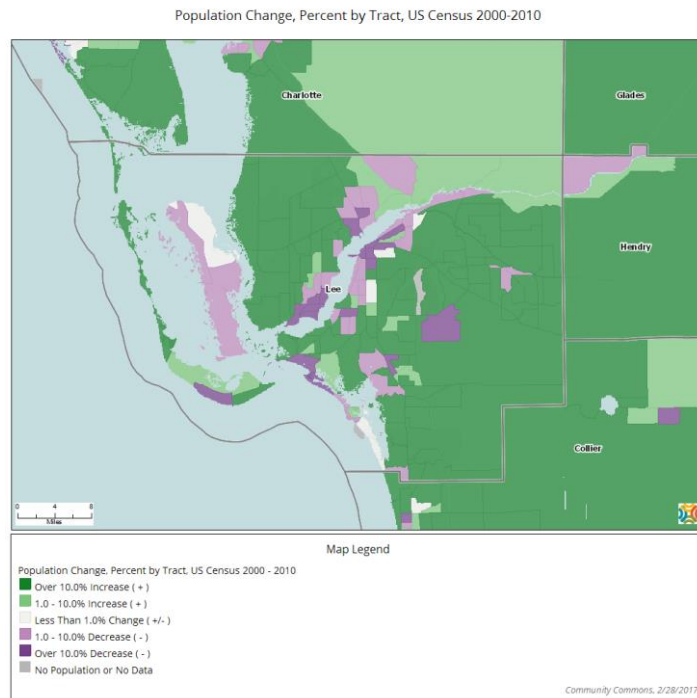
- A much greater proportional increase than seen across both the state and the nation overall.

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



- Sources:
- Retrieved March 2017 from Community Commons at <http://www.chna.org>.
  - 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.

While most of the county increased in population, note the pockets (in purple) in which the population decreased over time.

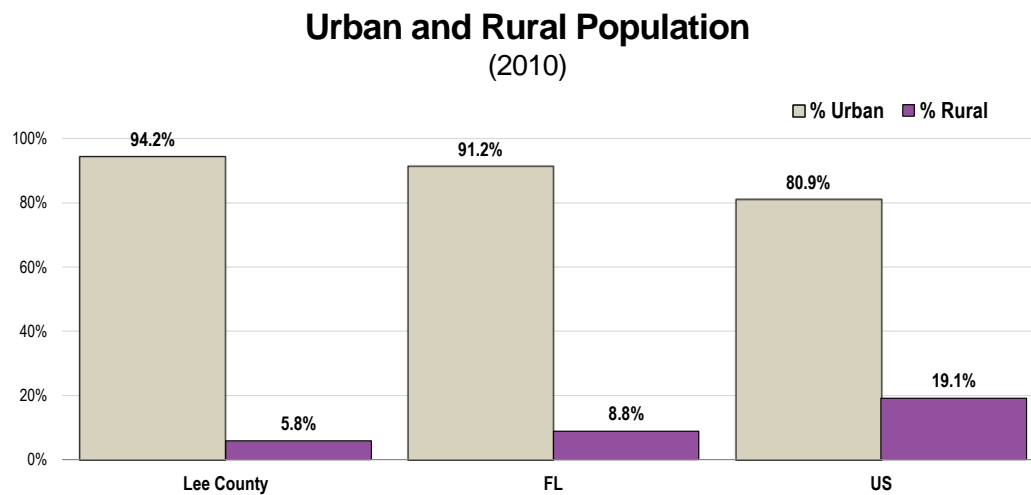


## Urban/Rural Population

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.**

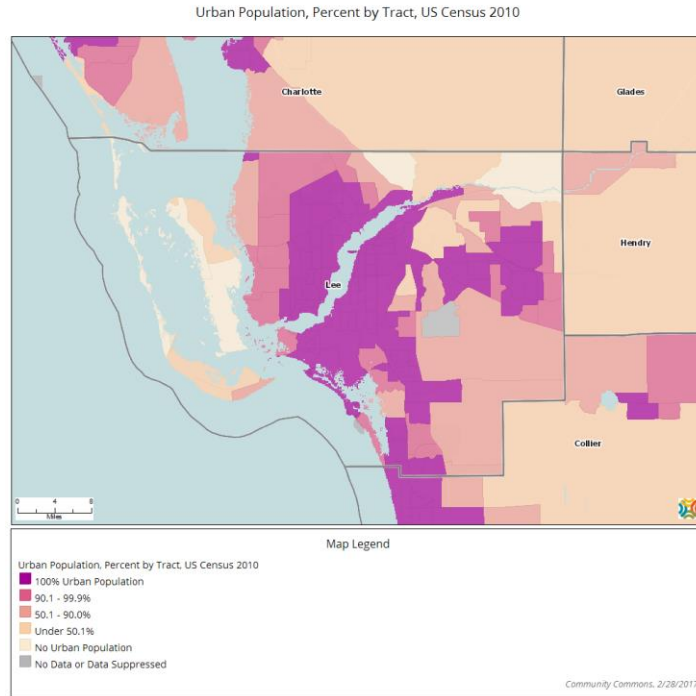
- Note that at roughly 80% to 90% of the national and state populations live in urban areas.



- Sources:
- US Census Bureau Decennial Census (2010).
  - Retrieved March 2017 from Community Commons at <http://www.chna.org>.
- Notes:
- This indicator reports the percentage of population living in urban and rural areas. 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.

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





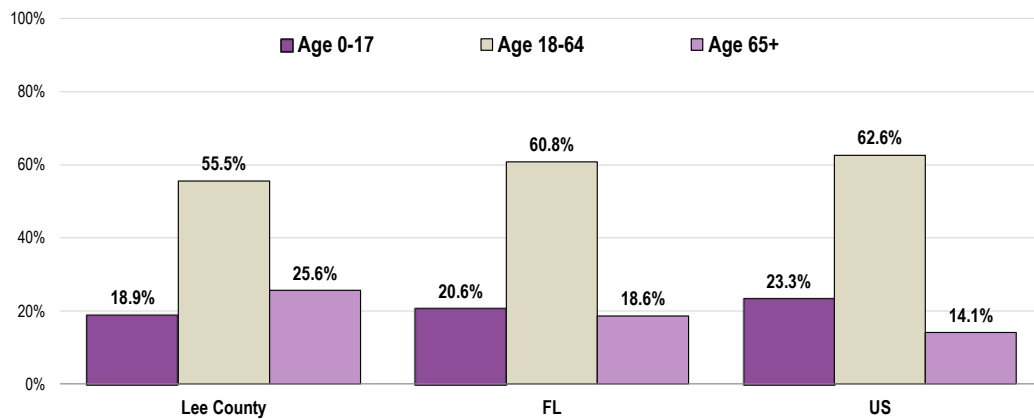
## Age

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

**In Lee County, 18.9% of the population are infants, children or adolescents (age 0-17); another 55.5% are age 18 to 64, while 25.6% are age 65 and older.**

- The percentage of older adults (65+) is much higher than that found statewide and nationally.

## Total Population by Age Groups, Percent (2011-2015)



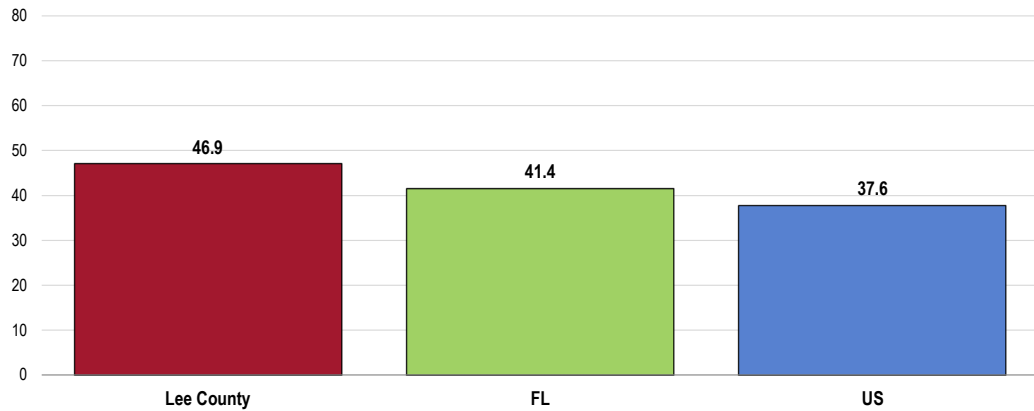
Sources:

- US Census Bureau American Community Survey 5-year estimates.
- Retrieved March 2017 from Community Commons at <http://www.chna.org>.

### Median Age

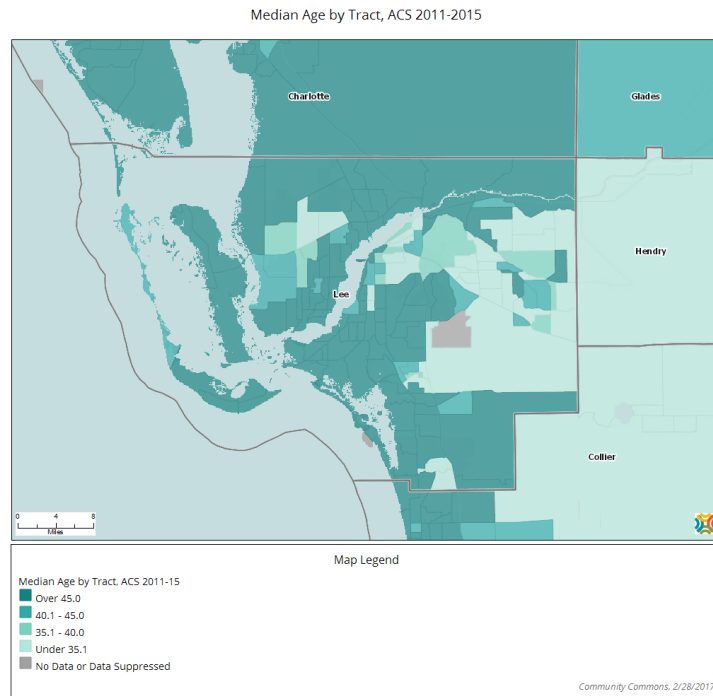
Lee County is “older” than the state and the nation in that the median age is higher.

### Median Age (2011-2015)



Sources: • US Census Bureau American Community Survey 5-year estimates.  
 • Retrieved March 2017 from Community Commons at <http://www.chna.org>.

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



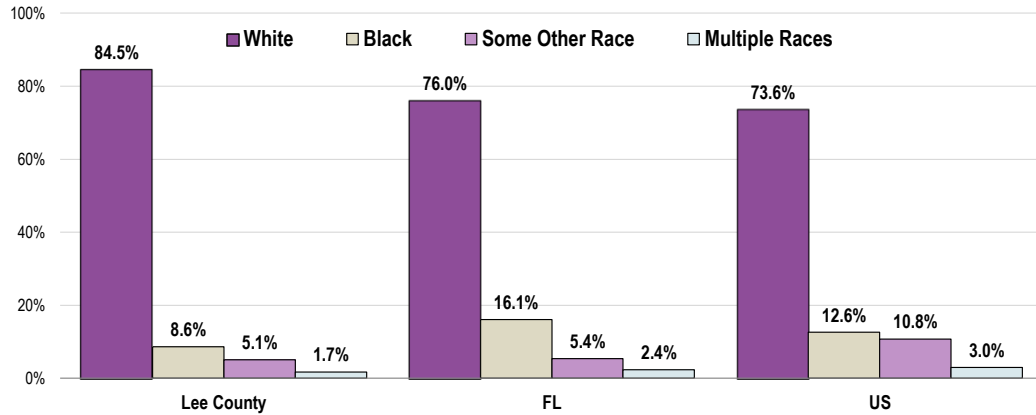
## Race & Ethnicity

### Race

In looking at race independent of ethnicity (Hispanic or Latino origin), 84.5% of residents of Lee County are White and 8.6% are Black.

- The state racial distribution is less White and more Black.
- Nationally, the US population is less White, more Black and more “Other” race.

**Total Population by Race Alone, Percent**  
(2011-2015)



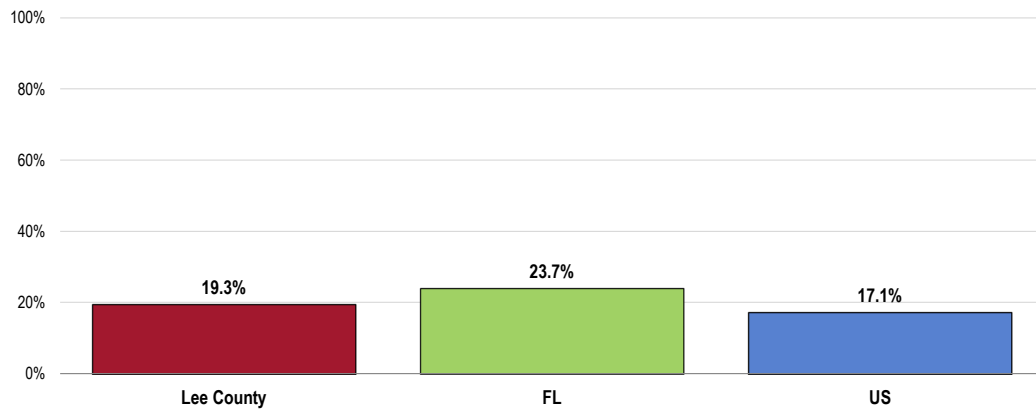
Sources: • US Census Bureau American Community Survey 5-year estimates.  
• Retrieved March 2017 from Community Commons at <http://www.chna.org>.

### Ethnicity

A total of 19.3% of Lee County residents are Hispanic or Latino.

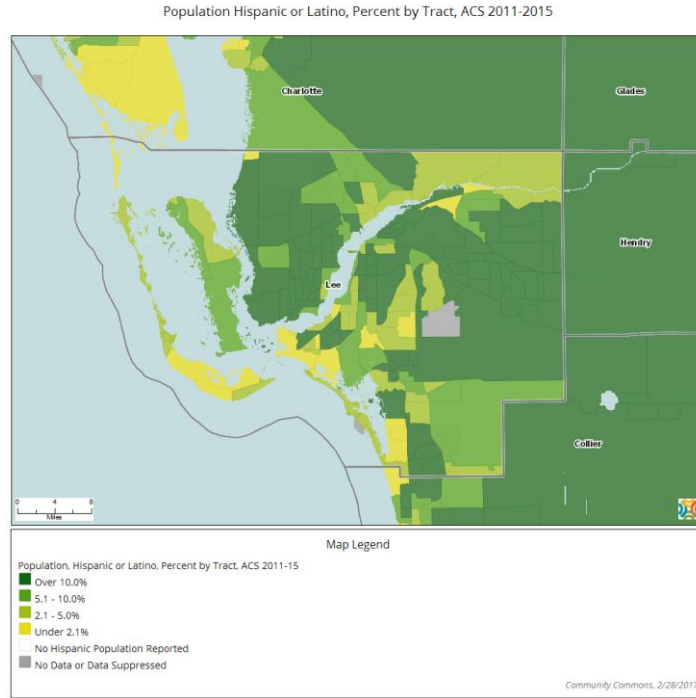
- Lower than state percentage, but higher than the nationwide percentage.

**Hispanic Population**  
(2011-2015)



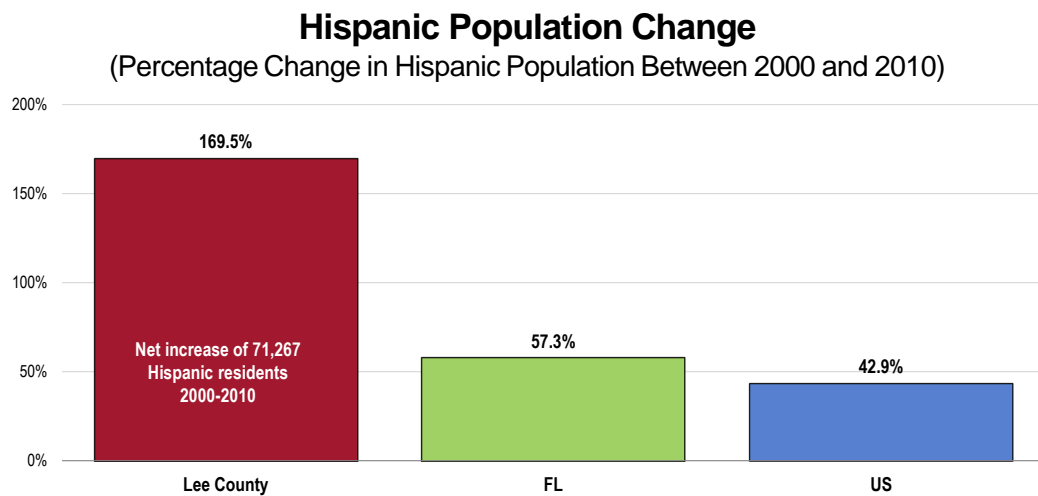
Sources: • US Census Bureau American Community Survey 5-year estimates.  
• Retrieved March 2017 from Community Commons at <http://www.chna.org>.  
Notes: • Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Hispanic, Latino, or Spanish may be of any race.

- The following map shows the concentration of Hispanic residents by census tract in Lee County.



Between 2000 and 2010, the Hispanic population in Lee County increased by 71,267 or 169.5%.

- Much higher (in terms of percentage growth) than found statewide and nationally.



Sources:
 

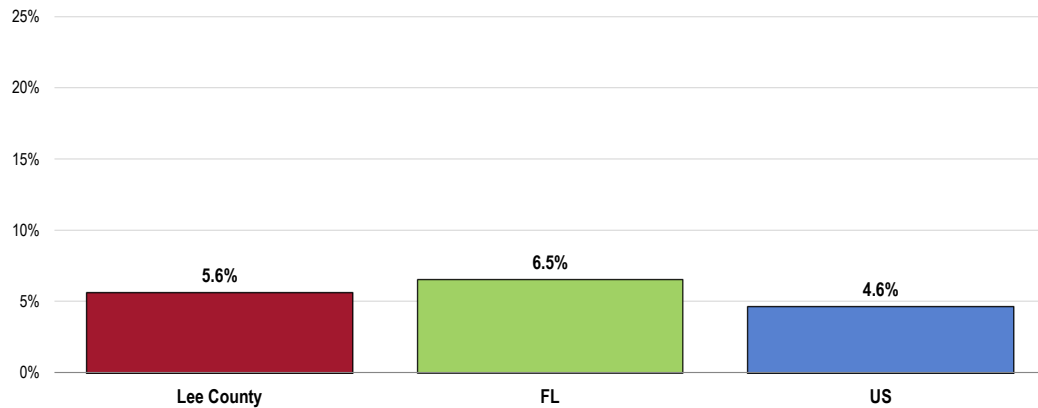
- US Census Bureau Decennial Census (2000-2010).
- Retrieved March 2017 from Community Commons at <http://www.chna.org>.

## Linguistic Isolation

A total of 5.6% of the Lee County population age 5 and older live in a home in which no persons age 14 or older is proficient in English (speaking only English, or speaking English “very well”).

- Lower than found statewide.
- Higher than found nationally.

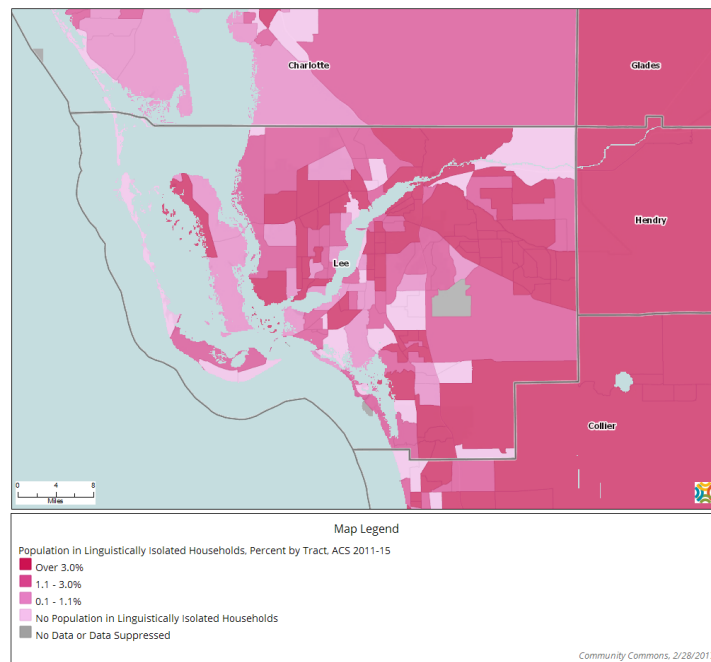
### Linguistically Isolated Population (2011-2015)



- Sources:
- US Census Bureau American Community Survey 5-year estimates.
  - Retrieved March 2017 from Community Commons at <http://www.chna.org>.
- 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 in Lee County.

Population in Linguistically Isolated Households, Percent by Tract, ACS 2011-2015



## 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](http://www.healthypeople.gov))

### Poverty

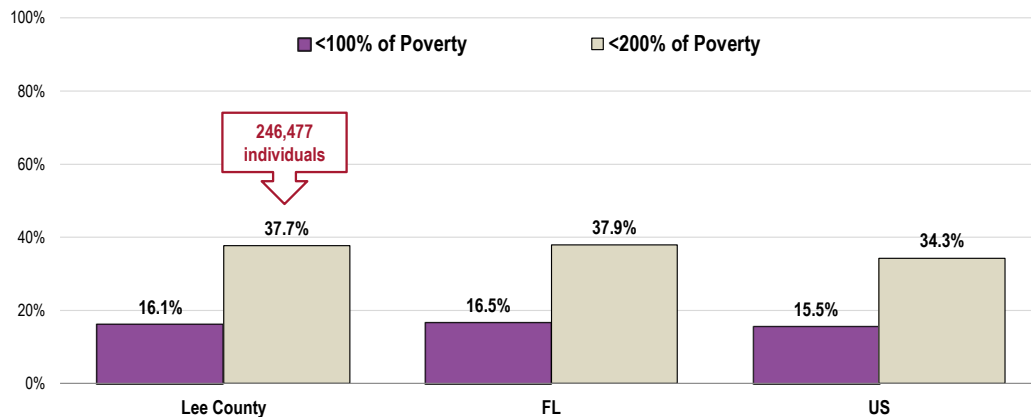
The latest census estimate shows **16.1%** of the Lee County population living below the federal poverty level.

In all, **37.7%** of Lee County residents (an estimated **246,477 individuals**) live below 200% of the federal poverty level.

- Similar to that found statewide.
- Higher than the proportion reported nationally.

### Population in Poverty

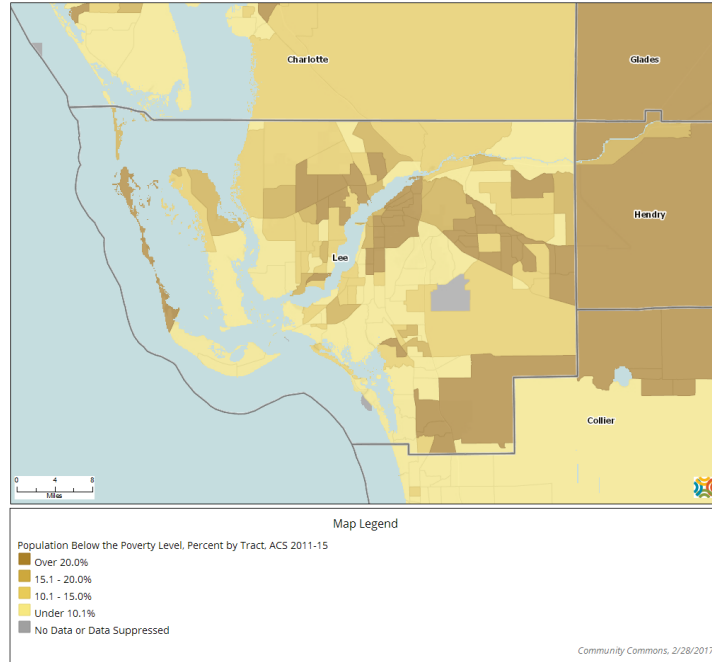
(Populations Living Below 100% and Below 200% of the Poverty Level; 2011-2015)



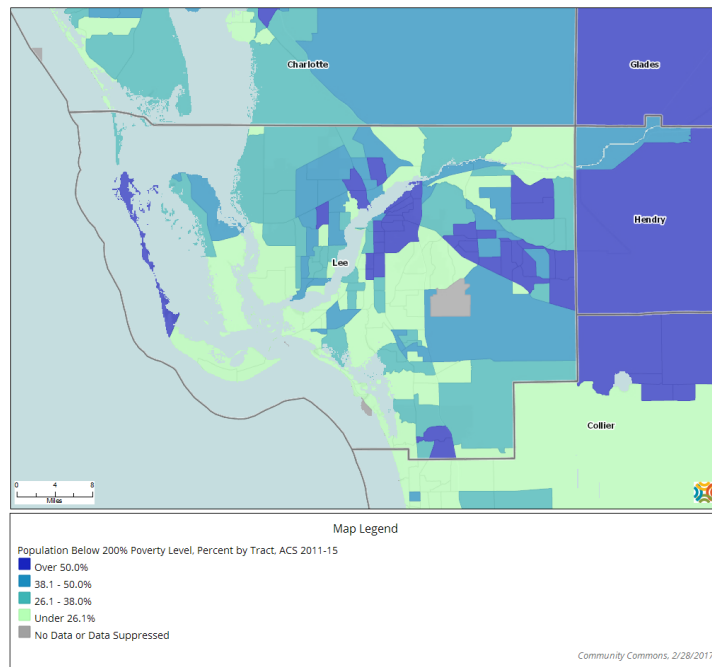
- Sources:
- US Census Bureau American Community Survey 5-year estimates.
  - Retrieved March 2017 from Community Commons at <http://www.chna.org>.
- Notes:
- Poverty is considered a key driver of health status. This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

- A higher concentration of persons living below the 200% poverty threshold is found in central and eastern portions of the county.

Population Below the Poverty Level, Percent by Tract, ACS 2011-2015



Population Below 200% of Poverty, Percent by Tract, ACS 2011-2015

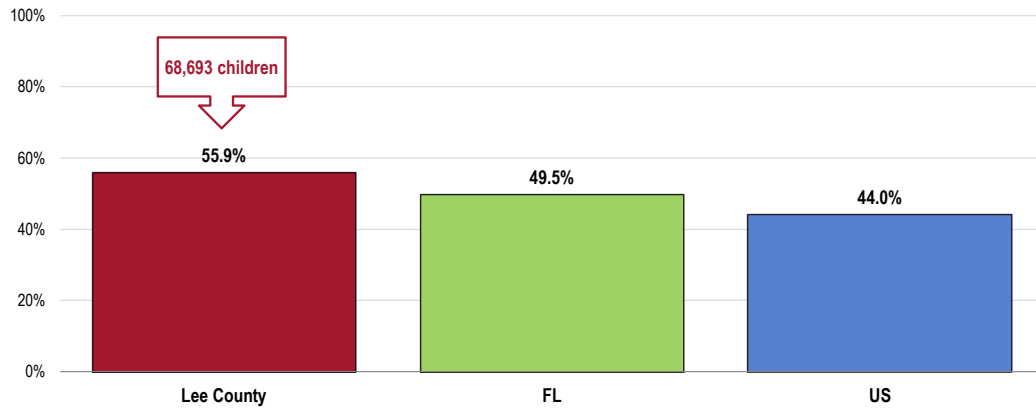


### Children in Low-Income Households

Additionally, 55.9% of Lee County children age 0-17 (representing an estimated 68,693 children) live below the 200% poverty threshold.

- Above the proportions found statewide and nationally.

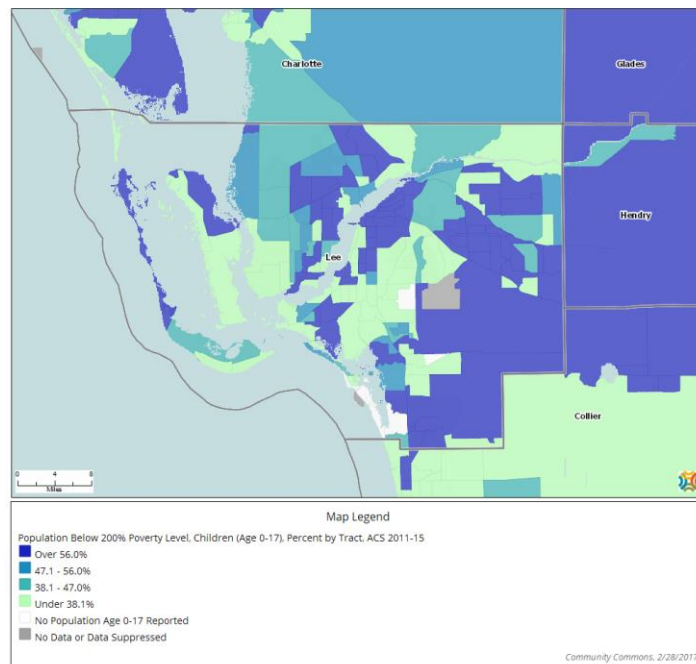
### Percent of Children in Low-Income Households (Children 0-17 Living Below 200% of the Poverty Level, 2011-2015)



- Sources:
- US Census Bureau American Community Survey 5-year estimates.
  - Retrieved March 2017 from Community Commons at <http://www.chna.org>.
- Notes:
- This indicator reports the percentage of children aged 0-17 living in households with income below 200% of the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

- Geographically, a notably higher concentration of children in lower-income households is found in southeastern Lee County.

Children (0-17) Living Below 200% of Poverty, Percent by Tract, ACS 2011-2015



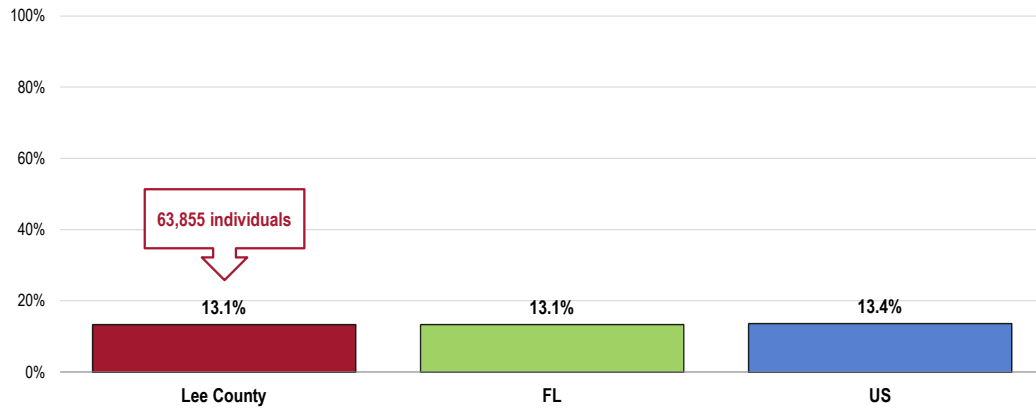


## Education

Among the Lee County population age 25 and older, an estimated 13.1% (over 63,800 people) do not have a high school education.

- Identical to that found statewide.
- Similar to national findings.

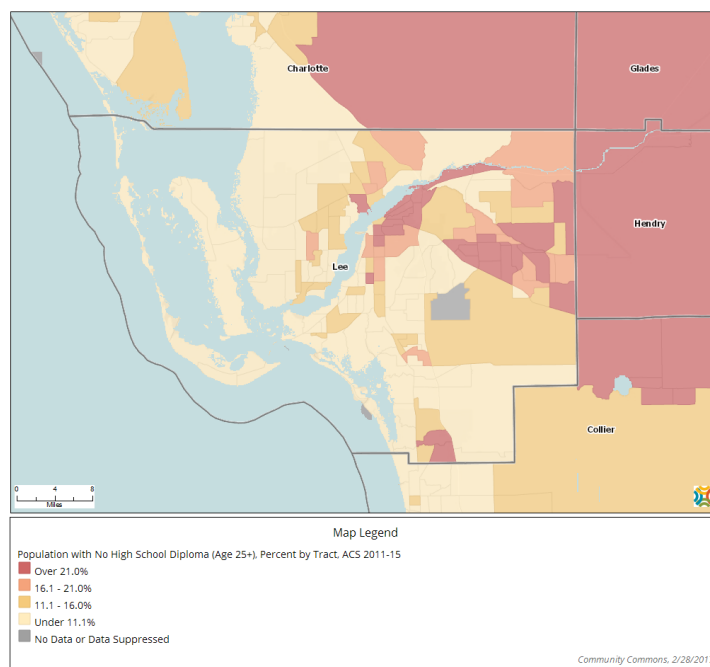
### Population With No High School Diploma (Population Age 25+ Without a High School Diploma or Equivalent, 2011-2015)



- Sources:
- US Census Bureau American Community Survey 5-year estimates.
  - Retrieved March 2017 from Community Commons at <http://www.chna.org>.
- Notes:
- This indicator is relevant because educational attainment is linked to positive health outcomes.

- Geographically, this indicator is more concentrated in parts of eastern Lee County.

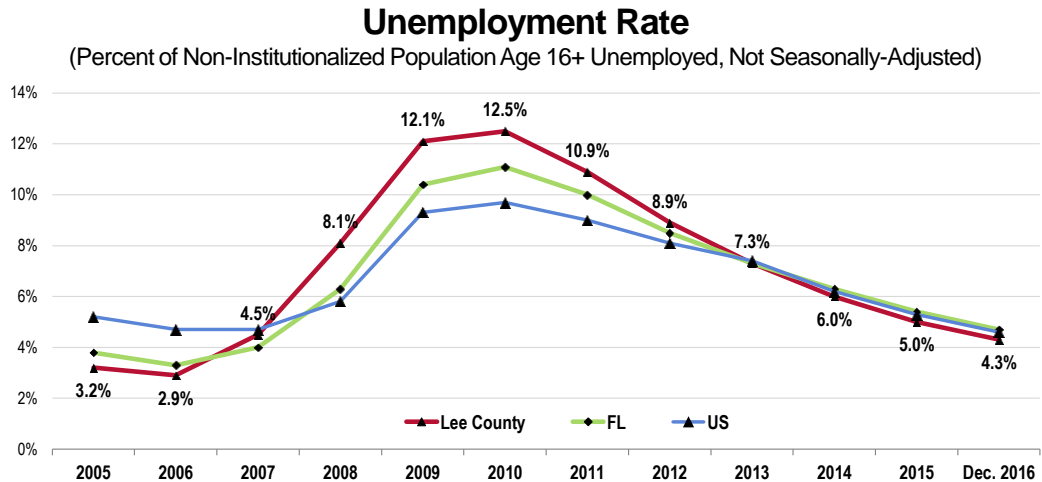
Population with No High School Diploma, Percent by Tract, ACS 2011-2015



## Employment

According to data derived from the US Department of Labor, the unemployment rate in Lee County as of December 2016 was 4.3%.

- More favorable than the statewide and national unemployment rates.
- TREND: Unemployment for Lee County has trended downward since 2010 at a faster rate than seen statewide and nationally.



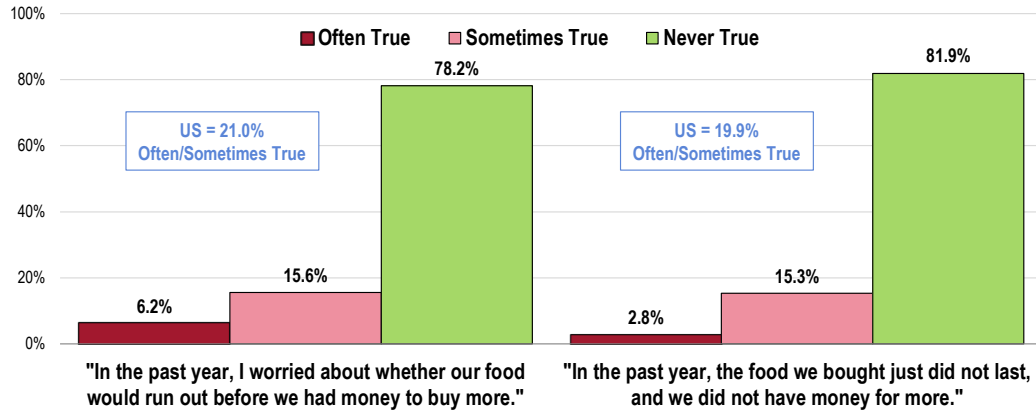
- Sources:
- US Department of Labor, Bureau of Labor Statistics.
  - Retrieved March 2017 from Community Commons at <http://www.chna.org>.
- Notes:
- This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

## Food Insecurity

In the past year, 21.8% of Lee County adults “often” or “sometimes” worried about whether their food would run out before they had money to buy more.

Another 18.1% report a time in the past year (“often” or “sometimes”) when the food they bought just did not last, and they did not have money to get more.

### Food Insecurity (Lee County, 2017)

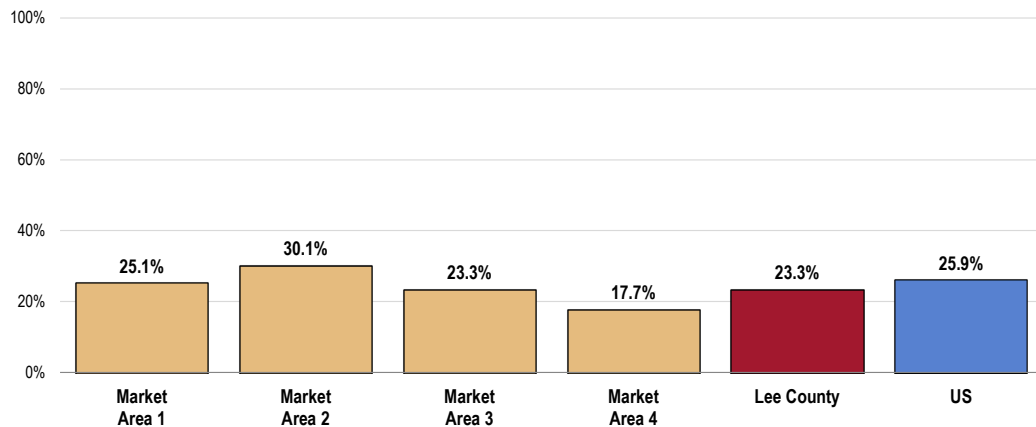


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 104-105]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Reflects the total sample of respondents.

**Overall, 23.3% 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.**

- Compared to US data, this finding is not significantly different.
- Highest in Market Area 2; lowest in Market Area 4.

### Food Insecurity



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 169]  
 • 2015 PRC National Health Survey, Professional Research Consultants, 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.

**NOTE:**

Differences noted in the text represent significant differences determined through statistical testing.

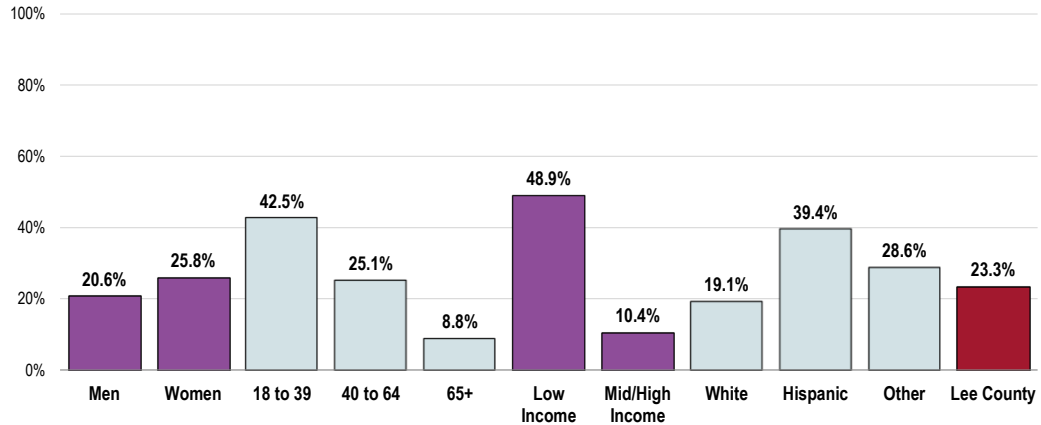
Where sample sizes permit, Market Area data are provided.

Trends are measured against baseline data – i.e., the earliest year that data are available or that is presented in this report.

Adults more likely affected by food insecurity include:

- Younger adults (negative correlation with age).
- Residents living at lower incomes.
- Hispanics.

### Food Insecurity (Lee County, 2017)



Charts throughout this report (such as that here) detail survey findings among key demographic groups – namely by gender, age groupings, income (based on poverty status), and race/ethnicity.

- Sources:
- 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 169]
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
  - 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.

# General Health Status



**Professional Research Consultants, Inc.**

## Overall Health Status

### Evaluation of Health Status

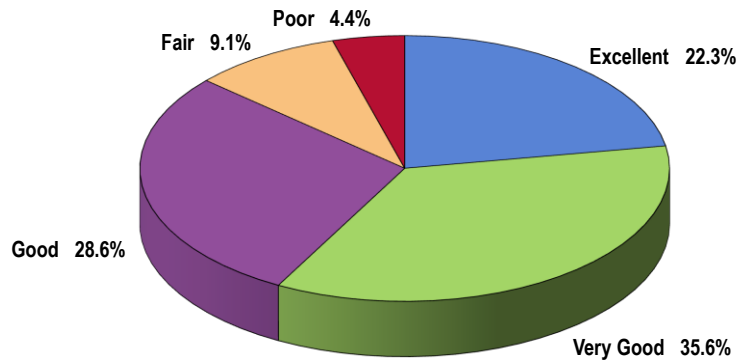
The initial inquiry of the PRC Community Health Survey asked respondents the following:

"Would you say that in general your health is: excellent, very good, good, fair or poor?"

A total of 57.9% of Lee County adults rate their overall health as "excellent" or "very good."

- Another 28.6% gave "good" ratings of their overall health.

### Self-Reported Health Status (Lee County, 2017)

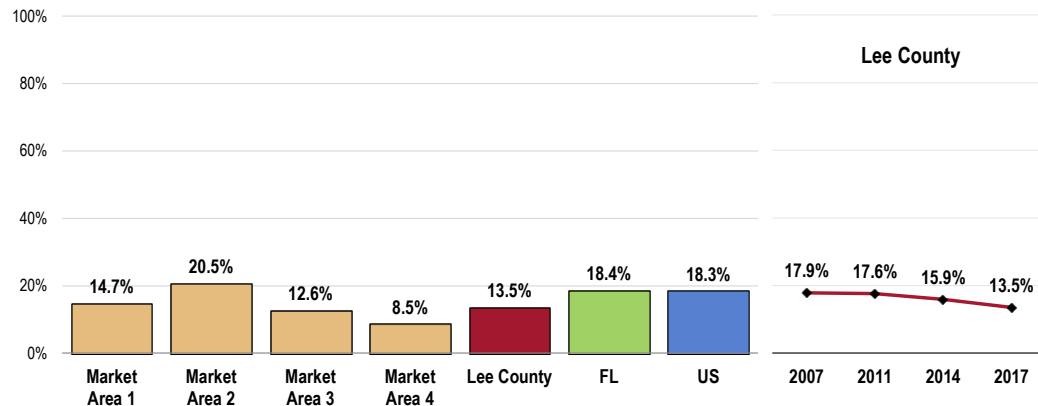


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]  
Notes: • Asked of all respondents.

However, 13.5% of Lee County adults believe that their overall health is "fair" or "poor."

- Better than statewide and national findings.
- Most favorable in Market Area 4; least favorable in Market Area 2.
- TREND: "Fair/poor" overall health reports have decreased significantly since 2007.

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

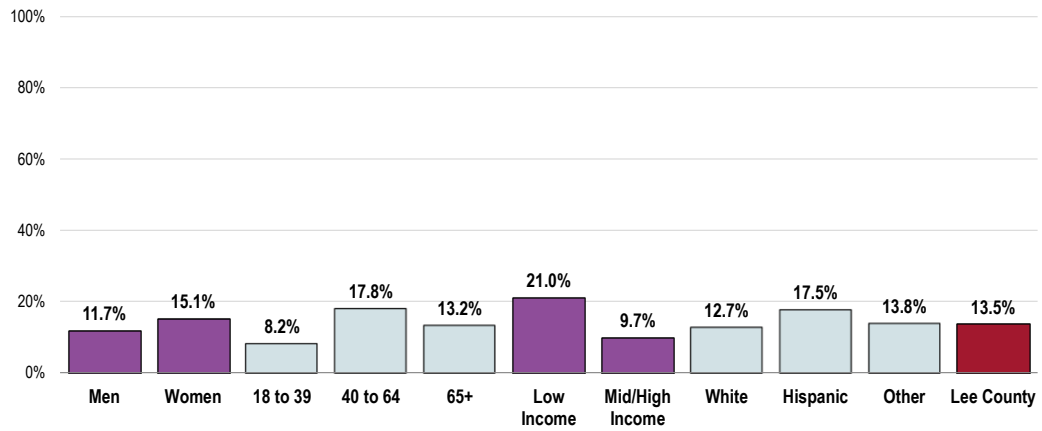


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 5]  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2015 Florida data.  
• 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

Adults more likely to report experiencing “fair” or “poor” overall health include:

- Adults age 40 to 64.
- Residents living at lower incomes.

### Experience “Fair” or “Poor” Overall Health (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]

Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).

• Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

## 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](http://www.healthypeople.gov))

**A total of 27.0% of Lee County adults are limited in some way in some activities due to a physical, mental or emotional problem.**

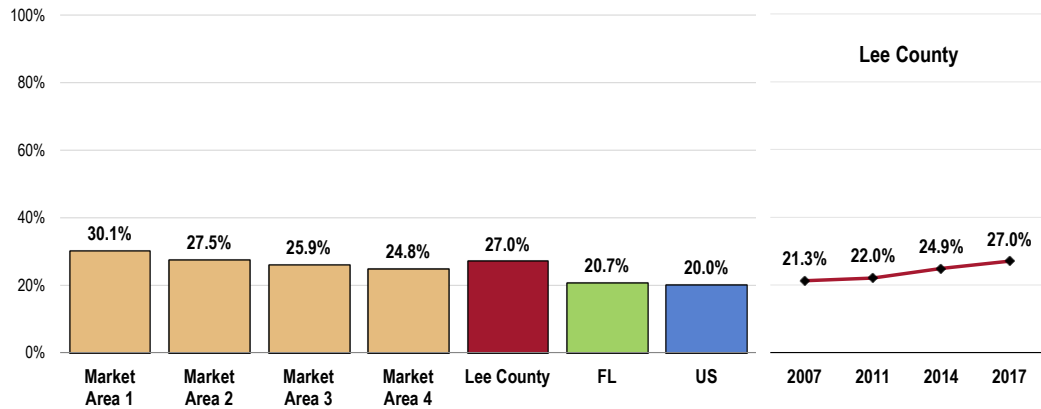
- Less favorable than the prevalence found statewide and nationally.
- Statically similar by Market Area.
- TREND: The steady rise in prevalence marks a statistically significant increase in activity limitations since 2007.

#### RELATED ISSUE:

See also *Potentially Disabling Conditions in the Death, Disease & Chronic Conditions* section of this report.



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



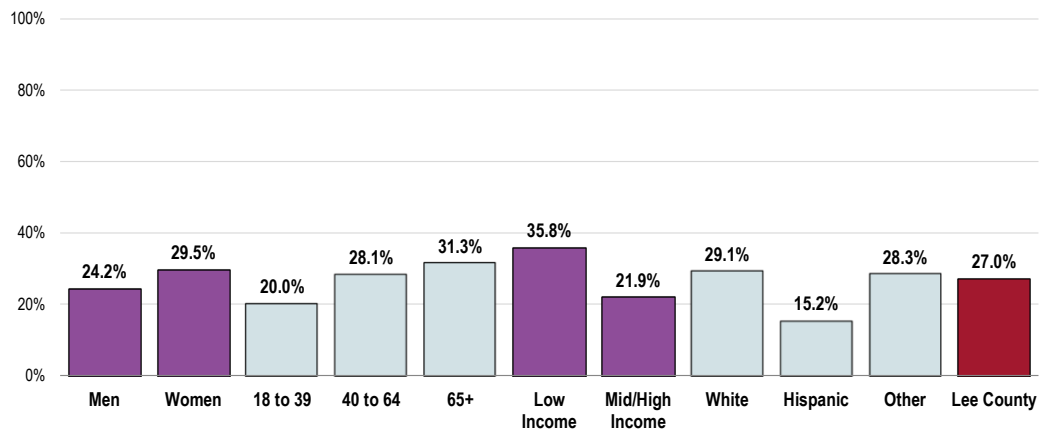
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 128]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2015 Florida data.  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

In looking at responses by key demographic characteristics, these adults are statistically more likely to report some type of activity limitation:

- Seniors age 65+ (note the positive correlation with age).
- Low-income residents.
- Non-Hispanic Whites when compared to Hispanics.

### Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem (Lee County, 2017)

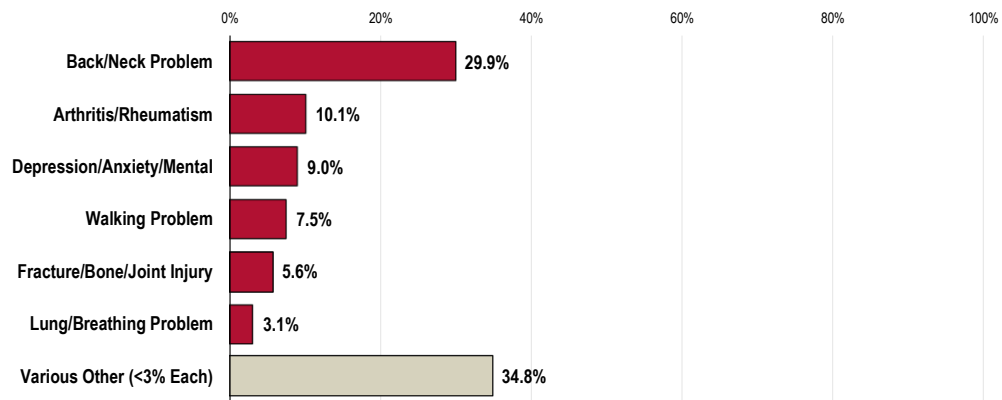


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 128]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Among persons reporting activity limitations, these are most often attributed to musculo-skeletal issues, such as back/neck problems, arthritis/ rheumatism, difficulty walking, fractures or bone/joint injuries,.

Other limitations noted with some frequency include those related to mental health (depression, anxiety) and lung or breathing problems.

**Type of Problem That Limits Activities**  
(Among Those Reporting Activity Limitations; Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 129]  
Notes: • Asked of those respondents reporting activity limitations.

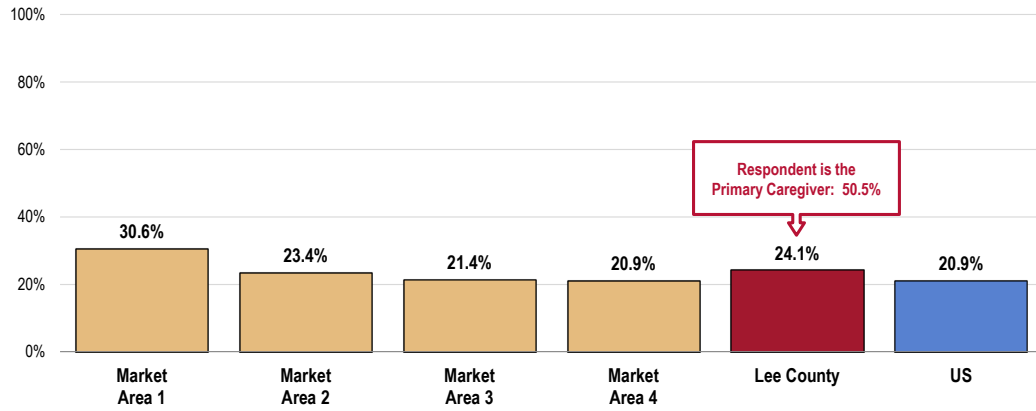
## Caregiving

A total of 24.1% 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.

- Statistically similar to the national finding.
- Most prevalent in Market Area 1.

Of these adults, one-half (50.5%) are the **primary** caregiver for the individual receiving care.

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

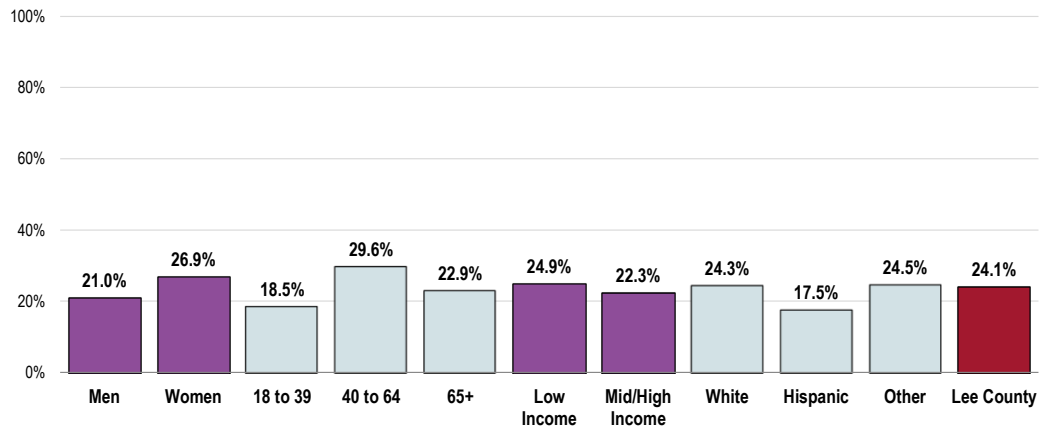


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 130-131]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

The prevalence of caregiving in the community is notably higher among:

- Women.
- Adults between the ages of 40 and 64.

### Act as Caregiver to a Friend or Relative with a Health Problem, Long-Term Illness, or Disability (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 130]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## 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. Over the past 20 years, research on the prevention of mental disorders has progressed. The major areas of progress include evidence that:

- MEB disorders are common and begin early in life.
- The greatest opportunity for prevention is among young people.
- There are multiyear effects of multiple preventive interventions on reducing substance abuse, conduct disorder, antisocial behavior, aggression, and child maltreatment.
- The incidence of depression among pregnant women and adolescents can be reduced.
- School-based violence prevention can reduce the base rate of aggressive problems in an average school by 25 to 33%.
- There are potential indicated preventive interventions for schizophrenia.
- Improving family functioning and positive parenting can have positive outcomes on mental health and can reduce poverty-related risk.
- School-based preventive interventions aimed at improving social and emotional outcomes can also improve academic outcomes.
- Interventions targeting families dealing with adversities, such as parental depression or divorce, can be effective in reducing risk for depression in children and increasing effective parenting.
- Some preventive interventions have benefits that exceed costs, with the available evidence strongest for early childhood interventions.
- Implementation is complex, it is important that interventions be relevant to the target audiences.
- In addition to advancements in the prevention of mental disorders, there continues to be steady progress in treating mental disorders as new drugs and stronger evidence-based outcomes become available.

• Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

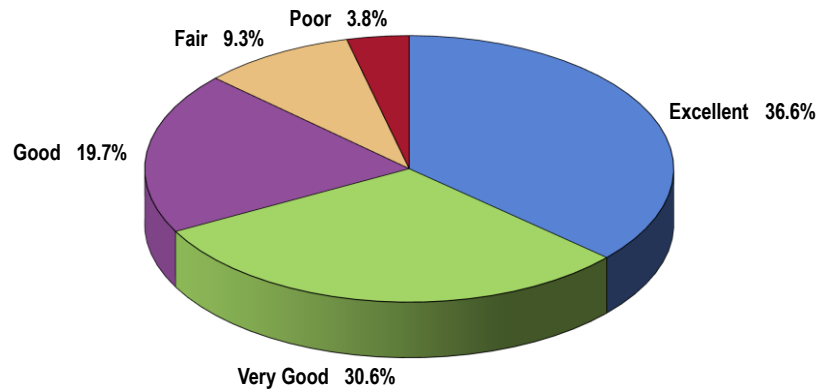
### Evaluation of Mental Health Status

**A total of 67.2% of Lee County adults rate their overall mental health as “excellent” or “very good.”**

- Another 19.7% gave “good” ratings of their own 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?”

### Self-Reported Mental Health Status (Lee County, 2017)

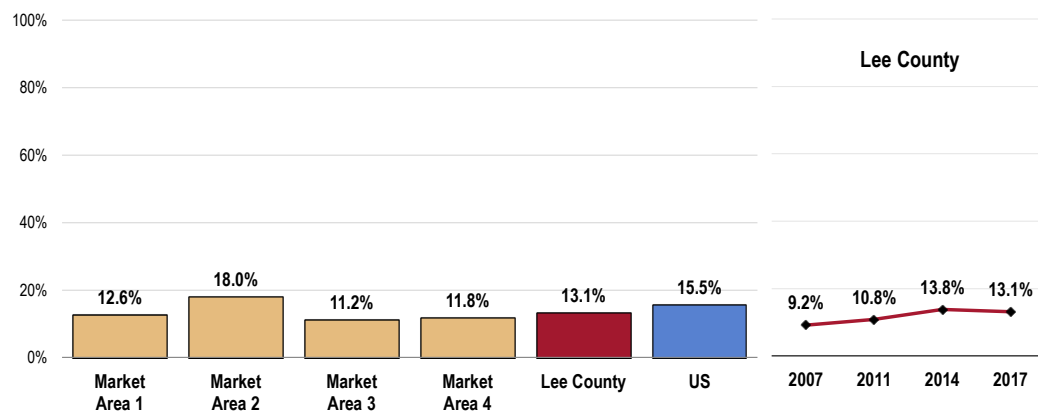


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 116]  
 Notes: • Asked of all respondents.

**A total of 13.1% of Lee County adults, however, believe that their overall mental health is “fair” or “poor.”**

- Similar to the “fair/poor” response reported nationally.
- Highest in Market Area 2.
- TREND: Significantly higher than reported in 2007.

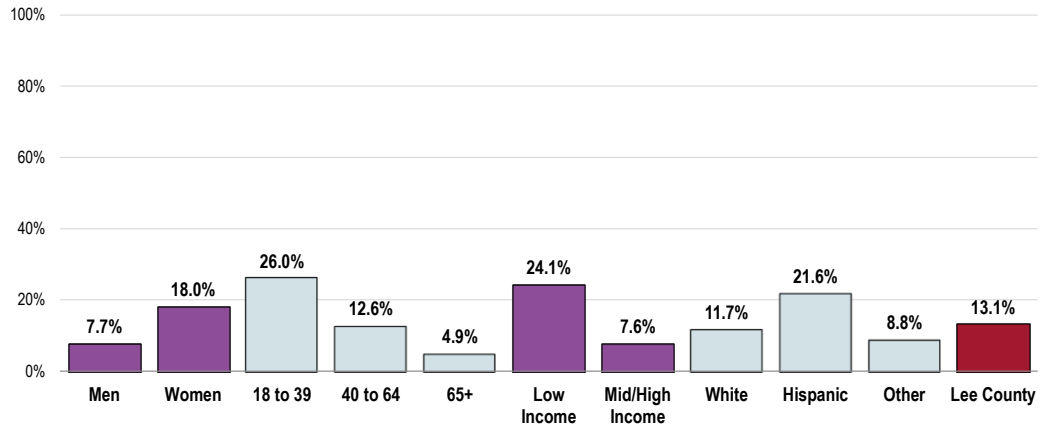
### Experience “Fair” or “Poor” Mental Health



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 116]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

- Note the negative correlation between poor mental health and age.
- Women and adults with lower incomes are much more likely to report experiencing “fair/poor” mental health than their demographic counterparts.

### Experience “Fair” or “Poor” Mental Health (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 116]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

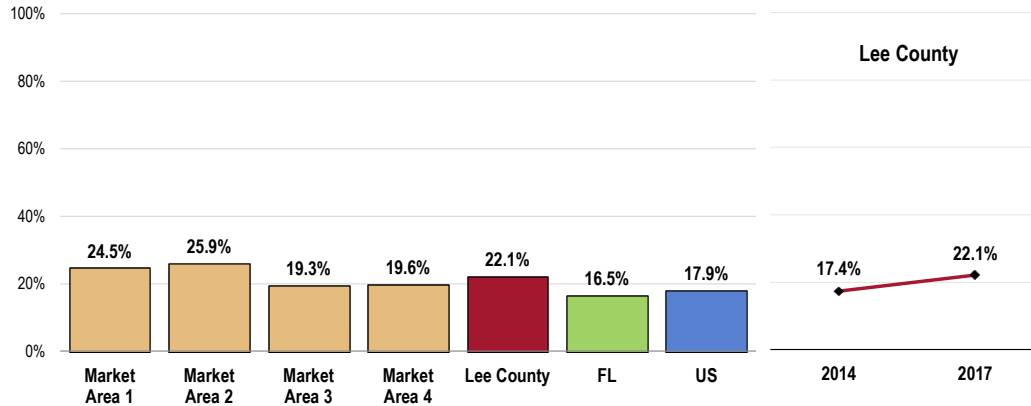
## Depression

### Diagnosed Depression

A total of 22.1% of Lee County adults have been diagnosed by a physician as having a depressive disorder (such as depression, major depression, dysthymia, or minor depression).

- Less favorable than the statewide and national findings.
- Statistically similar by Market Area.
- TREND: The prevalence of diagnosed depressive disorders has increased significantly since 2014 (not measured in 2007 and 2011).

## Have Been Diagnosed With a Depressive Disorder



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 119]  
 • 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.  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.

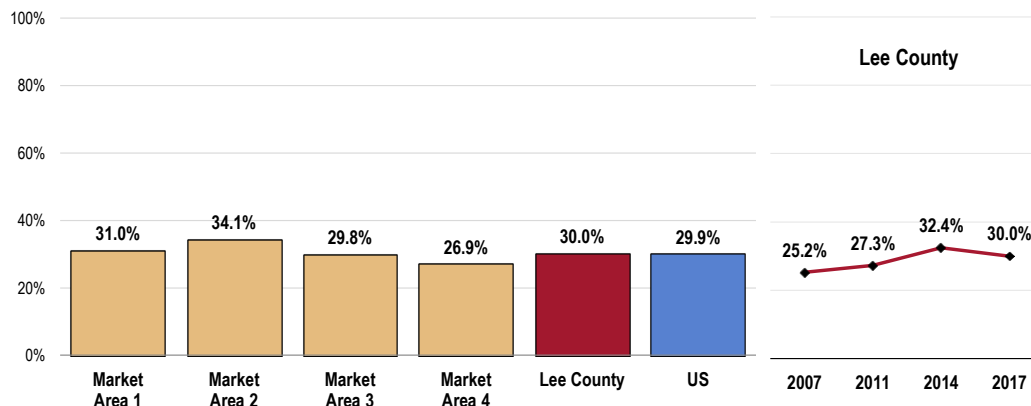
Notes: • Asked of all respondents.  
 • Depressive disorders include depression, major depression, dysthymia, or minor depression.

### Symptoms of Chronic Depression

Three in 10 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).

- Nearly identical to national findings.
- No statistical difference among Market Areas.
- TREND: Despite a slight decrease since 2014, chronic depression remains higher than the baseline 2007 prevalence.

## Have Experienced Symptoms of Chronic Depression



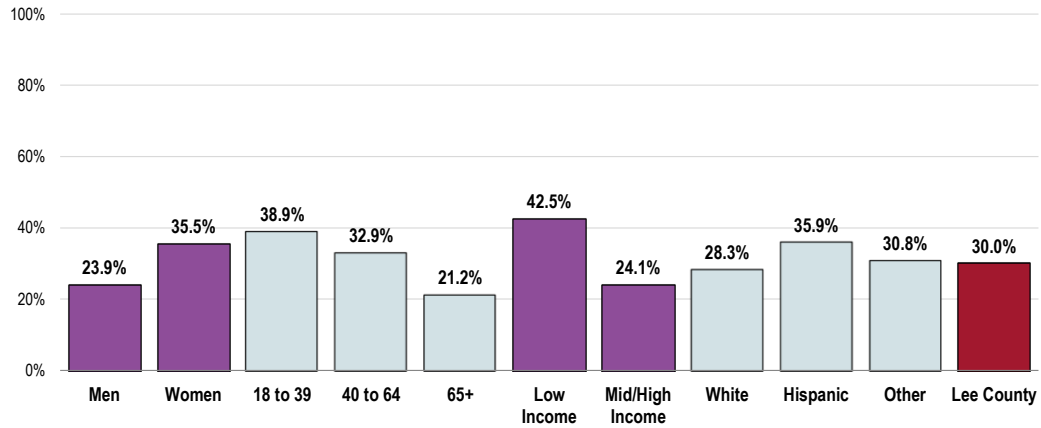
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 117]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.

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.

Note that the prevalence of chronic depression is notably higher among:

- Women.
- Adults under age 65.
- Adults with lower incomes.

### Have Experienced Symptoms of Chronic Depression (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 117]  
 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.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### Stress

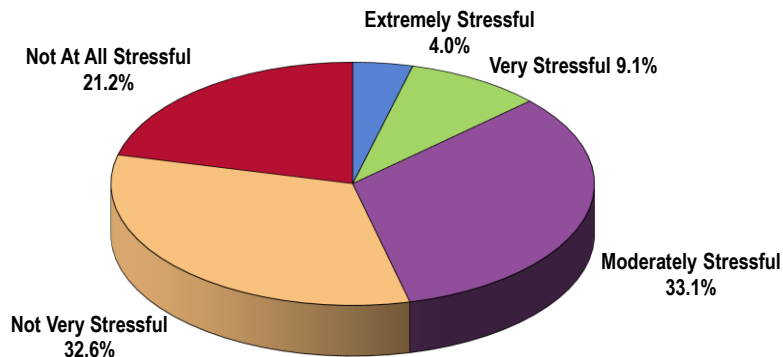
More than one-half of Lee County adults consider their typical day to be "not very stressful" (32.6%) or "not at all stressful" (21.2%).

RELATED ISSUE:

See also *Substance Abuse* in the **Modifiable Health Risks** section of this report.

- Another 33.1% of survey respondents characterize their typical day as "moderately stressful."

### Perceived Level of Stress On a Typical Day (Lee County, 2017)



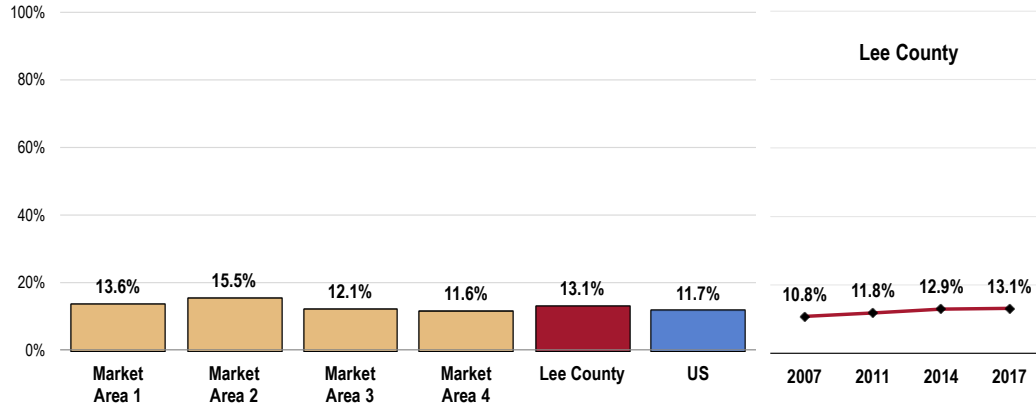
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 118]  
 Notes: • Asked of all respondents.



In contrast, 13.1% of Lee County adults experience “very” or “extremely” stressful days on a regular basis.

- Comparable to national findings.
- Comparable by Market Area.
- TREND: The increase since 2007 is not statistically significant.

### Perceive Most Days As “Extremely” or “Very” Stressful

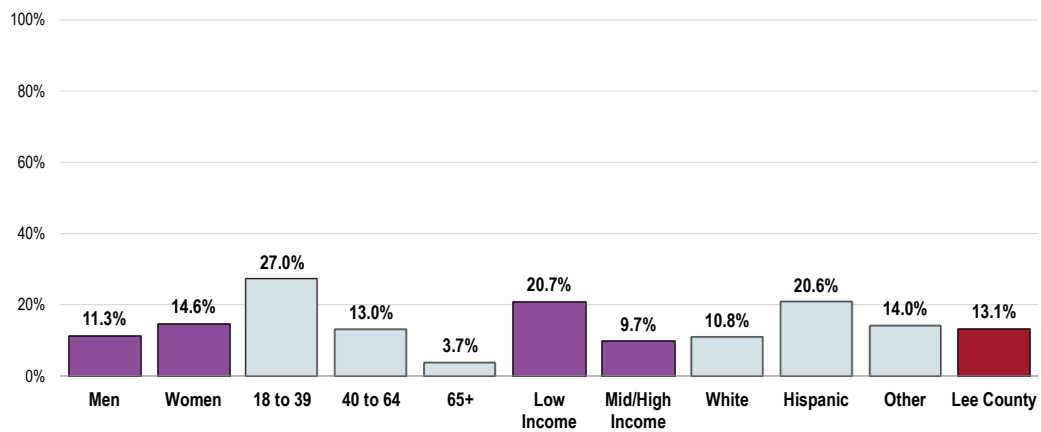


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 118]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

- Note that high stress levels are more prevalent among younger adults and adults with low incomes.

### Perceive Most Days as “Extremely” or “Very” Stressful (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 118]

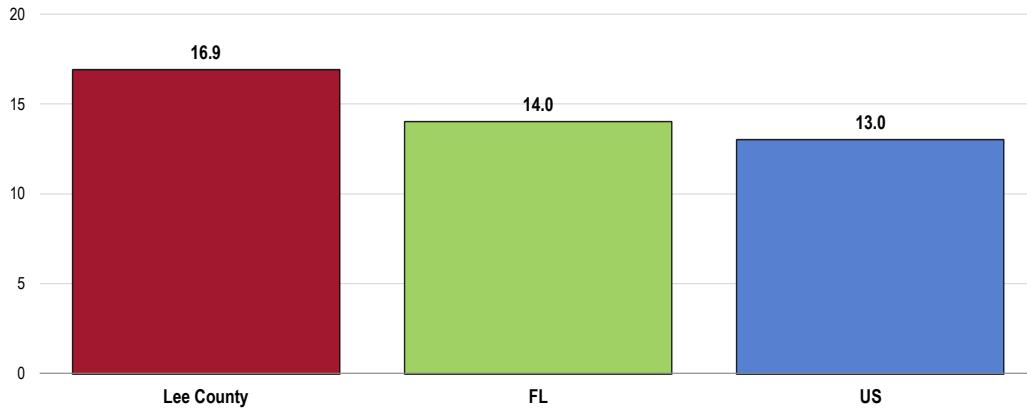
Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

## Suicide

Between 2013 and 2015, there was an annual average age-adjusted suicide rate of 16.9 deaths per 100,000 population in Lee County.

- Higher than the statewide and national rates.
- Fails to satisfy the Healthy People 2020 target of 10.2 or lower.

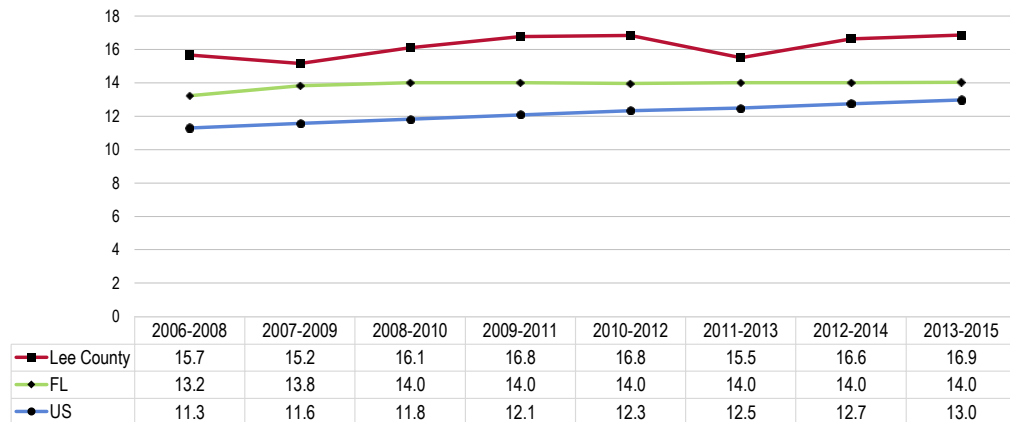
### Suicide: Age-Adjusted Mortality (2013-2015 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 10.2 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.
  - US Department of Health 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.

- TREND: The area suicide rate has overall trended upward.

### Suicide: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 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 March 2017.
  - US Department of Health 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.

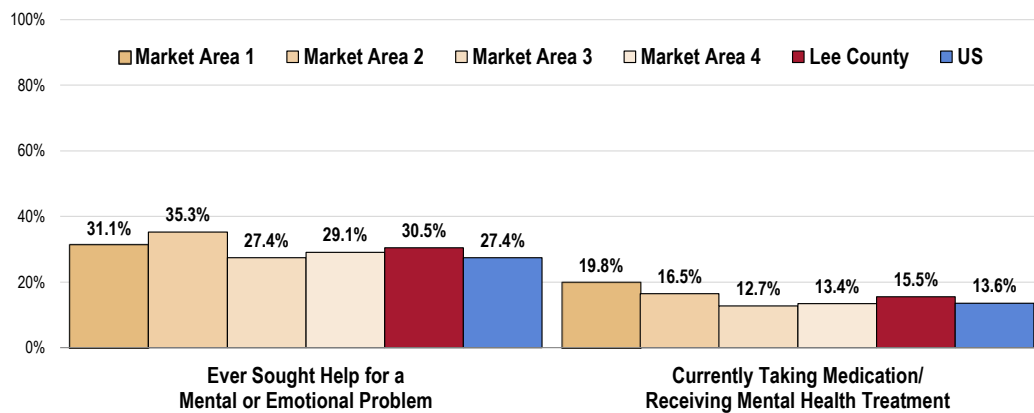
## Mental Health Treatment

A total of 30.5% of Lee County adults acknowledge having ever sought professional help for a mental or emotional problem.

A total of 15.5% are currently taking medication or receiving treatment from a doctor or other health professional for some type of mental health condition or emotional problem.

- Compared to national findings, Lee County results are statistically similar.
- Note that the proportion of adults taking medication or receiving treatment for mental health is highest in Market Area 1.

### Mental Health Treatment



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 120-121]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Reflects the total sample of respondents.

## Member of Household

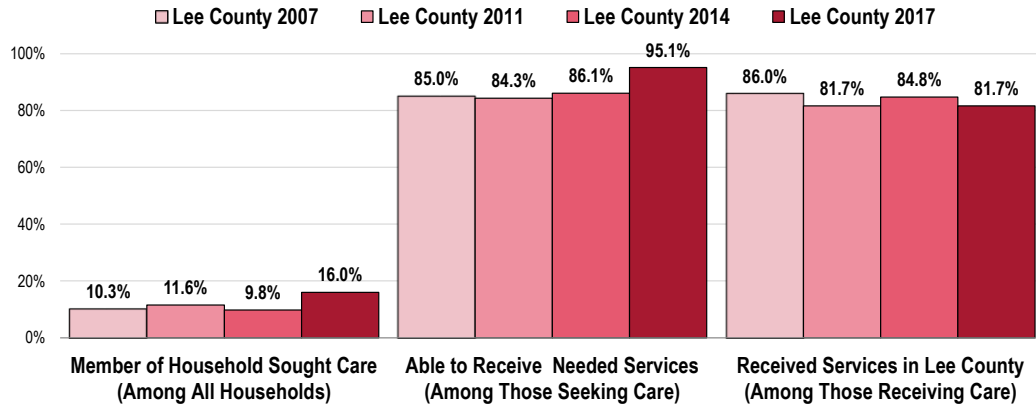
A total of 16.0% of survey respondents indicate that they or a member of their household have sought professional help for a mental health problem in the past year.

- Statistically similar by Market Area (not shown).
- TREND: Remained statistically unchanged before increasing significantly from 2014 to 2017.

Among households seeking care, 95.1% say they were able to receive the services they needed; this has also increased significantly since 2014.

Among households receiving the care they needed, 81.7% received care in Lee County (no significant change from previous findings).

### Member of Household Sought Mental Health Services in the Past Year

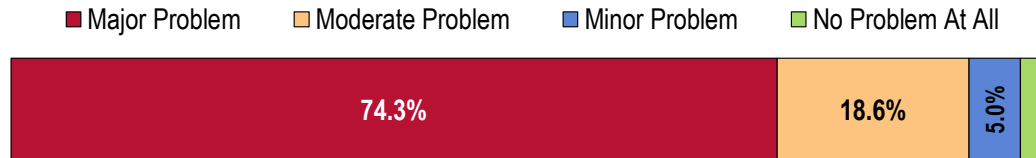


Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 313-315]  
 Notes: ● Reflects the total sample of respondents.

### Key Informant Input: Mental Health

The greatest share of 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, 2017)



Sources: ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
 Notes: ● Asked of all respondents.

### Challenges

Among those rating this issue as a “major problem,” the following represent what key informants see as the main challenges for persons with mental illness:

#### Access to Care/Services

*Lee County has very few mental health resources. There are only a small number of mental health facilities and no specialists readily available. Typically, this means only very severe cases of mental illness are attended to. – Public Health Representative*

*There is a huge need in our community for mental health services. Both Lee Behavioral and SalusCare are limited in the care they can provide. – Other Health Provider*

*Lack of inpatient facilities for crisis and long-term care. We do not have a long-term care facility. Many are on the streets or in jails. Only inpatient facility is private pay or Medicare, with high out-of-pocket expenses. Outpatient programs. – Other Health Provider*

*Very limited resources and a lack of public support for assistance programs. – Community Leader*

*Lee County has an insufficient number of beds for mental health treatment. This, combined with an insufficient number of providers, makes mental health diagnosis and treatment a significant problem. – Social Services Provider*

*Access to care for mental health. Not enough appointments—psychiatrist, psychologist. Social norms per mental health. – Physician*

*Access to care and stigma. – Other Health Provider*

*Inadequate healthcare resources. Poor funding for this service. – Physician*

*Lack of resources. – Community Leader*

*Access to care, and screening insufficient. Not enough physicians are screening or discussing mental health issues with patients. – Community Leader*

*Not having enough resources. Not enough providers for psychological therapy that accept insurances. Barely any Spanish-speaking providers in this area, as well. Long waiting times to get seen. – Physician*

*The biggest challenge for people with mental health issues is access to care. – Community Leader*

*Mobile crisis unit is not mobile; long wait times for initial appointment and evaluation. – Other Health Provider*

*There are few to no resources for parents raising children with mental health issues. It is hard for us to help parents locate any help. – Social Services Provider*

*Accessing limited resources—not just here, but on the national level as well. – Social Services Provider*

*No resources in our community. – Public Health Representative*

*I think we need more facilities that can address and help those with the illness. We also need more laws that will protect the victims from those (many times) family members with the illness. – Community Leader*

*Finding a place they can be treated for it, then trying to afford it. – Public Health Representative*

*Lack of resources. Lack of affordable quality care. Lack of medication management. Turnover rate of mental health professionals. Lack of wraparound services. No one addresses the issue. – Social Services Provider*

*Finding high quality services in time of need. The ability to get an appointment in a short period of time. – Public Health Representative*

*Lack of availability and lack of affordability. – Social Services Provider*

*Identification of need for treatment, then access to care. Short term or temporary nature of treatment offered. – Community Leader*

*Minimal access to mental health services for those without insurance. – Other Health Provider*

*Access to care. Psychiatric doctors not accepting insurance coverage. – Physician*

*Lack of services and being ostracized. – Social Services Provider*

*Easy access to care. – Social Services Provider*

*Not enough services. Police having to provide some level of support and evaluation without being trained when problems arise. Waiting lists for services that do exist. – Community Leader*

*Poor quality care in our community, many uninsured individuals with mental illness, expensive medications. The good private psychiatrists don't take insurance/Medicare. Poor input facilities. – Social Services Provider*

*People with serious chronic mental health issues need reliable source of treatment, medications and very structured support systems for the duration of their lives. – Social Services Provider*

*Not enough services for the need. Many behavioral health specialists do not accept uninsured, underinsured or patients with government insurance. – Physician*

*Many who desperately need help cannot receive quality help and I'm talking about the middle class under-insured. Many listed on people's plans are not in actuality taking their plans or new patience. It is a mirage that the coverage is there. – Other Health Provider*

*Not enough resources, no funds to pay for care. – Other Health Provider*

*Mental health issues cross generation and income groups. Many people do not have access, and there is little to no mental health services for young children. – Social Services Provider*

*Inadequate number of long term facilities for those suffering from mental illnesses. So many people are homeless or incarcerated as a result of mental illness. – Social Services Provider*

*Getting access to care, and getting services before they are in crisis. – Other Health Provider*

*Access to care and basic need resources are some of the biggest challenges for people with mental health issues in the community. Access to psychiatric services is specifically concerning. Many providers in the community do not accept Medicaid. – Other Health Provider*

*Inpatient facilities and lack of physicians treating mental health. – Community Leader*

*Access to mental health resources is difficult. – Other Health Provider*

*The availability of mental health practitioners who can prescribe medications. The outreach to communities that need education about mental health and the assistance available. – Social Services Provider*

*There is a lack of independent mental healthcare providers. Those providers are maxed out with patients. SalusCare is also so busy that appointments are difficult to schedule. There are few options for help. – Social Services Provider*

*Lack of quality mental health services. – Public Health Representative*

*No mental health providers to cover overwhelming needs. – Physician*

*Lack of providers and stigma associated with obtaining mental healthcare. – Public Health Representative*

*Availability of providers, lack of insurance. – Other Health Provider*

*Lack of providers. – Public Health Representative*

*There are not enough mental health professionals to provide the needed outpatient mental health services that the south Lee County community needs. – Community Leader*

### **Affordable Care/Services**

*In my profession, I come across many people who have mental health issues but cannot afford or choose not to seek treatment due to the stigma it may create for them. I also see children with severe behavioral issues that their parents need assistance. – Social Services Provider*

*The cost factor of obtaining help. – Social Services Provider*

*Lack of affordable clinics, social services and counselors. – Community Leader*

*Affordable behavioral healthcare for children and families. Access and affordable healthcare for low income families. – Community Leader*

*For young people, especially, being able to afford mental health services is a major barrier on top of the stigma barrier. It is also especially difficult for poor and middle class families to afford and find mental healthcare for their children. – Social Services Provider*

*Cost, ability to find it and insurance coverage. – Other Health Provider*

*Accessing affordable services. Most, if not all, private psychiatrists do not accept Medicaid or any insurance. State funding has remained flat for well over ten years and our population continues to increase exponentially; funding does not. – Social Services Provider*

*Access to affordable mental health. Stigma of mental health issues. Treating mental health differently than physical health. – Community Leader*

*Affordable and timely access to psychiatrist, psychologists and counselors. – Physician*

*The majority of those suffering with mental illness are low income and do not have the resources to deal with their illness, nor transportation or access to care. – Public Health Representative*

### **Insurance Issues**

*Lack of access, due to insurance coverage restrictions and lack of funding for SalusCare. Lack of consumer knowledge of symptoms and how to get help. Lack of primary care provider screenings. – Social Services Provider*

*Health insurance. Lacking coverage, individuals without funds to see a provider, limited number providers, barriers to transportation. – Social Services Provider*

*Appointments are not usually covered by insurance. It's costly to seek counseling privately. Many people are reluctant to ask for help, financially or emotionally. For those who are willing to seek help, there is little available. – Community Leader*

*Not enough providers that take insurance, certainly not enough for young people like children and teens. – Physician*

*Access to covered mental healthcare services. – Physician*

*Access to treatment for those without insurance. – Social Services Provider*

**Diagnosis/Treatment**

*Untreated and insufficiently treated mental health, especially in children and families. – Public Health Representative*

*Early identification and access to care. All age groups from children to seniors. Better lines of communication between all community agencies. More availability of less invasive integrative healthcare options offered to patients. – Other Health Provider*

*A lot of people with mental health issues get tagged as “problem people” with schools and law enforcement, so they get tied up in the criminal system and don’t get treatment for their condition. – Public Health Representative*

*Too many of these patients do not take their medications. – Community Leader*

*Those in need ignore treatment. – Community Leader*

*Early detection and intervention. Stigma. Finding good psychiatric care with medications that help. Access to support systems that include job placement programs. – Social Services Provider*

**Medicare/Medicaid**

*Access. Few psychiatrists, and even fewer who take Medicare. Many have cash pay practices. Very poor access through public health facilities such as SalusCare. Difficult for patients with more complex psychiatric issues. – Physician*

*There are no providers in Lee County that take children with Medicaid or Healthy Kids. Referrals take months, and children are sent to Sarasota, Naples, or out of their county. – Community Leader*

*Pediatric mental health access for Medicaid. – Physician*

*Poor reimbursement for psychiatrists and psychologists. Both Medicaid, Medicare and private insurance. – Physician*

**Health Education**

*Lack of education about available resources. Lack of mental health professionals and reluctance to seek help. – Community Leader*

*Education, stigma, affordable access and insurance. – Social Services Provider*

*Too many issues and lack of education; no insurance. – Community Leader*

*Lack of education at all levels, from youth to older. – Community Leader*

**Funding**

*Our state has one of the lowest rankings in funding for behavioral health. The access to behavioral healthcare is extremely limited. Children’s behavioral health is of particular concern. – Community Leader*

*No funding. – Social Services Provider*

*Many societal problems contribute to mental health challenges. Again, the lack of funding in Florida presents major challenges for access. – Other Health Provider*

**Co-Occurrences**

*Increase stress and increased use of drugs and alcohol contribute to this problem. The stigma attached to mental health prevents people from seeking help. – Social Services Provider*

*Nowhere to live, to have relationships, and be encouraged to be productive. Currently, many just walk the streets hour-after-hour-after-hour or are destroying the home/families where they try to live. – Social Services Provider*

*Gun ownership in the hands of people with mental health issues and/or dementia as well as criminals. – Social Services Provider Lack of overall support, funding and the number of psychiatrists in the market - Community Leader*

**Prevalence/Incidence**

*Huge problem. PTSD in our military—active and retired. Bipolar issues, depression, suicide. More education. More alternative options covered by insurance. More things people can do at home like aromatherapy, Himalayan salt lamps, music. – Other Health Provider*

*This has been a long-term problem for Lee County. Jails have become holding tanks for patients with mental issues—both chronic and acute. – Other Health Provider*

### **Childhood Adverse Experiences, Childhood Trauma**

*Childhood Adverse Experiences (ACEs): childhood trauma has been directly correlated with adult mental health issues, physical health issues, and community-type health issues. We need trauma-focused care in all of our healthcare providers and services. – Social Services Provider*

### **Transportation**

*It is the request for transportation to medical appointments and/or daycare centers. – Social Services Provider*

#### **Focus Group Findings: Mental Health**

Participants in the follow-up focus groups noted several factors relative to mental health in Lee County:

- **Prevalence** (increasing prevalence, economic drivers, at-risk younger and older adults, those who are homeless)
- **Stress** (consequences: drug abuse, lack of sleep, health status — contributors: economics, including healthcare costs)
- **Lack of resources** (underserved, not enough spending on mental health, patchwork approach, cost)
- **Stigma** (fear of being labeled)

*For a more detailed description of focus group discussions, along with supporting quotes, please see the Appendix provided at the end of this report.*



# Death, Disease & Chronic Conditions



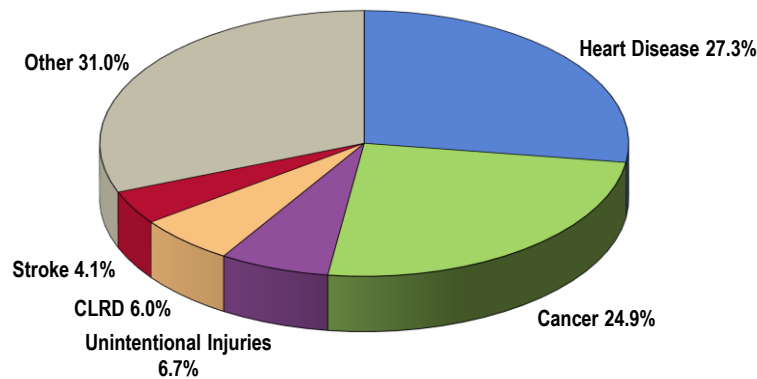
Professional Research Consultants, Inc.

## Leading Causes of Death

### Distribution of Deaths by Cause

Together, cardiovascular disease (heart disease and stroke) and cancers accounted for over one-half of all deaths in Lee County in 2015.

**Leading Causes of Death**  
(Lee County, 2015)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - CLRD is chronic lower respiratory disease.

### Age-Adjusted Death Rates for Selected Causes

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* targets.

The following chart outlines 2013-2015 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.

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

## Age-Adjusted Death Rates for Selected Causes (2013-2015 Deaths per 100,000 Population)

	Lee County	FL	US	HP2020
<b>Malignant Neoplasms (Cancers)</b>	139.5	153.1	161.0	161.4
<b>Diseases of the Heart</b>	139.4	150.3	168.4	156.9*
<b>Unintentional Injuries</b>	45.4	42.2	41.0	36.4
<b>Chronic Lower Respiratory Disease (CLRD)</b>	32.5	38.8	41.4	n/a
<b>Cerebrovascular Disease (Stroke)</b>	21.1	33.6	36.8	34.8
<b>Intentional Self-Harm (Suicide)</b>	16.9	14.0	13.0	10.2
<b>Diabetes Mellitus</b>	15.8	19.0	21.1	20.5*
<b>Drug-Induced</b>	14.7	14.7	15.8	11.3
<b>Motor Vehicle Deaths</b>	13.7	12.6	10.6	12.4
<b>Cirrhosis/Liver Disease</b>	12.5	11.4	10.5	8.2
<b>Firearm-Related</b>	12.1	11.8	10.6	9.3
<b>Alzheimer's Disease</b>	12.1	19.2	26.1	n/a
<b>Homicide</b>	6.2	6.2	5.3	5.5
<b>Kidney Diseases</b>	5.0	10.8	13.3	n/a
<b>Pneumonia/Influenza</b>	4.9	9.3	15.4	n/a
<b>HIV/AIDS (2006-15)</b>	3.1	5.9	2.7	3.3

Sources: 

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.

- 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.

## 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 healthcare 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 healthcare.

- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Age-Adjusted Heart Disease & Stroke Deaths

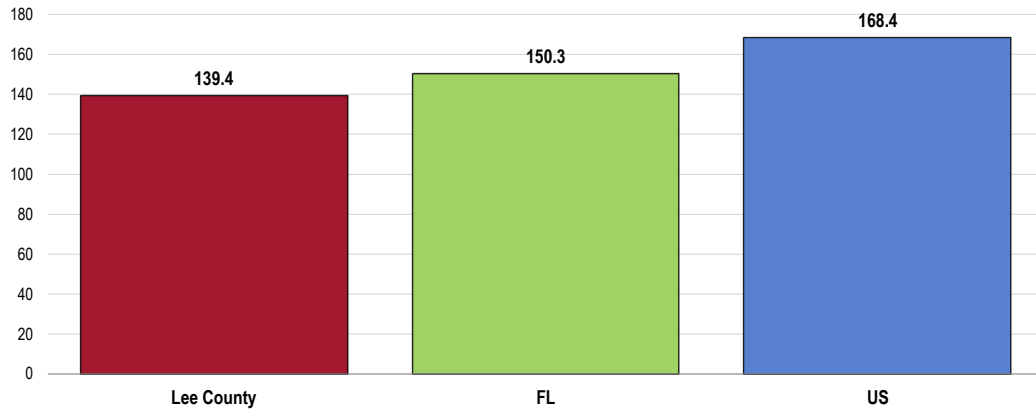
### Heart Disease Deaths

**Between 2013 and 2015, there was an annual average age-adjusted heart disease mortality rate of 139.4 deaths per 100,000 population in Lee County.**

- Lower than the statewide and national rates.
- Satisfies the Healthy People 2020 target of 156.9 or lower (as adjusted to account for all diseases of the heart).

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

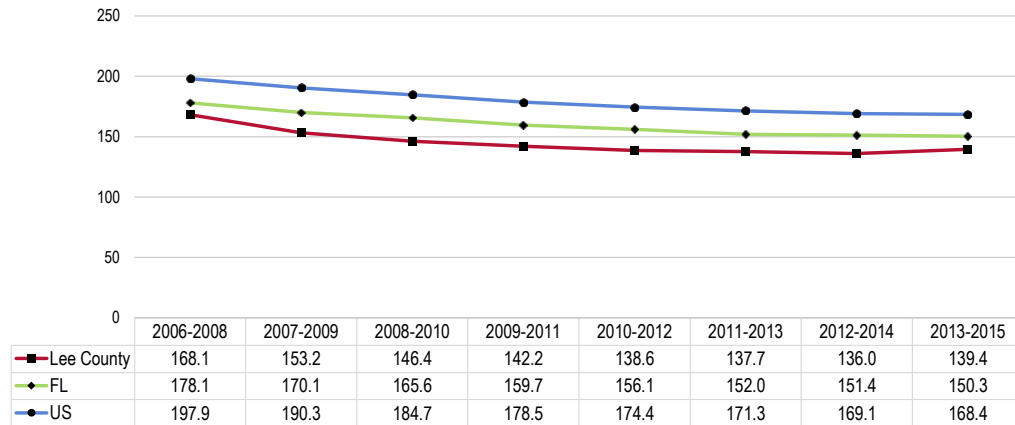
### Heart Disease: Age-Adjusted Mortality (2013-2015 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 156.9 or Lower (Adjusted)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.
  - 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.

- **TREND:** Despite a slight increase in recent years, heart disease mortality has overall decreased in Lee County, echoing the decreasing trends across Florida and the US overall.

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



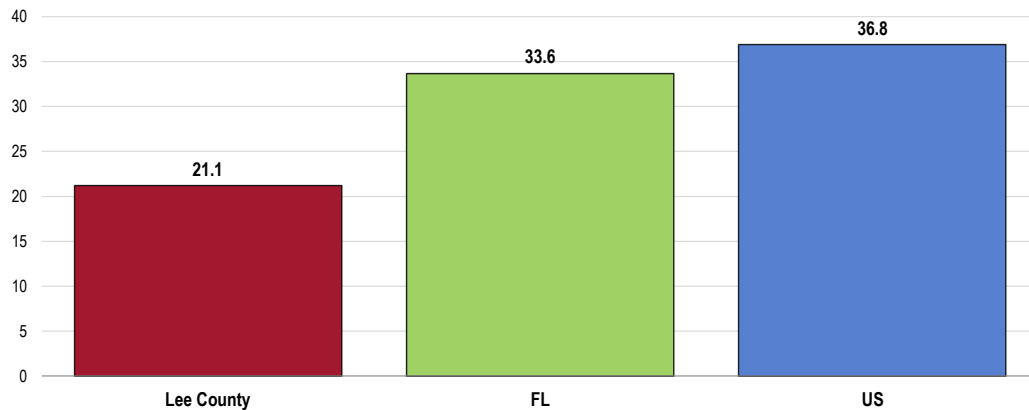
- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [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 2013 and 2015, there was an annual average age-adjusted stroke mortality rate of 21.1 deaths per 100,000 population in Lee County.

- More favorable than the Florida and national rates.
- Satisfies the Healthy People 2020 target of 34.8 or lower.

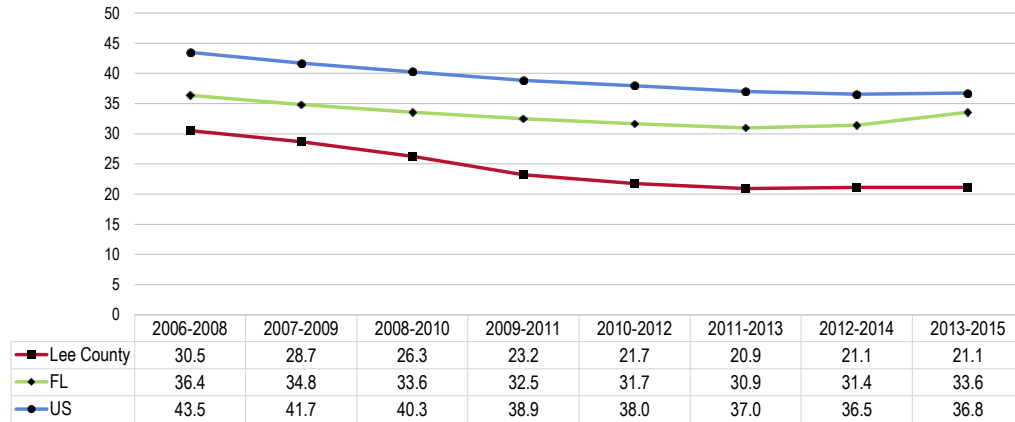
**Stroke: Age-Adjusted Mortality**  
(2013-2015 Annual Average Deaths per 100,000 Population)  
Healthy People 2020 Target = 34.8 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.
  - 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.

- **TREND:** The stroke rate declined from 2006 to 2012 and has remained relatively constant in recent years. The same trend can be seen across Florida and the US overall.

### Stroke: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 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 March 2017.
- 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.

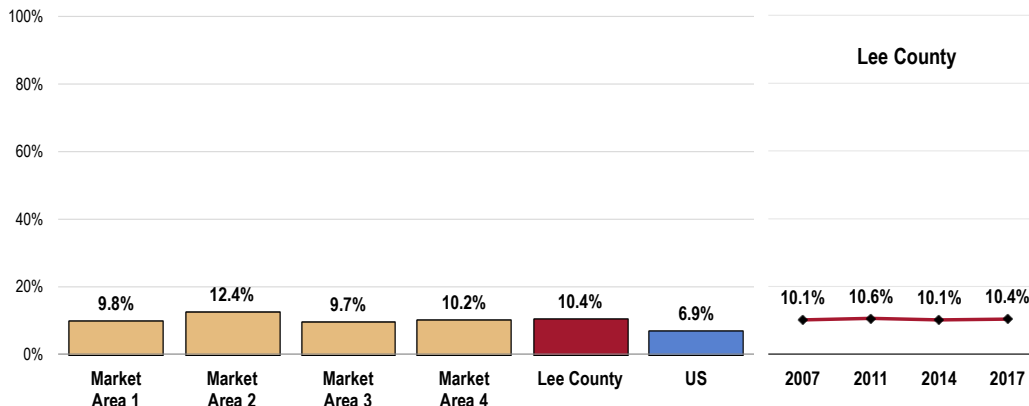
## Prevalence of Heart Disease & Stroke

### Prevalence of Heart Disease

A total of 10.4% of surveyed adults report that they suffer from or have been diagnosed with heart disease, such as coronary heart disease, angina or heart attack.

- Higher than the national prevalence.
- Similar by Market Area.
- TREND: Statistically unchanged since 2007.

### Prevalence of Heart Disease



Sources: 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 146]
- 2015 PRC National Health Survey, Professional Research Consultants, Inc.

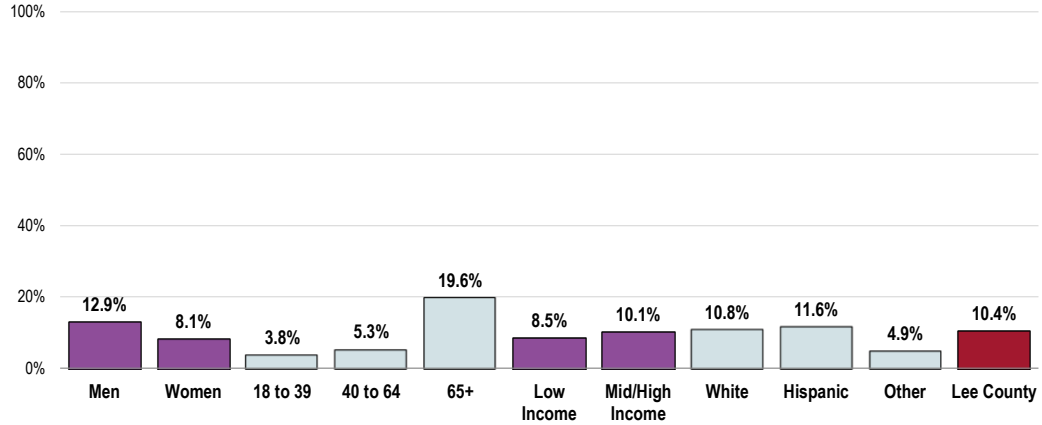
Notes: 

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

Adults more likely to have been diagnosed with chronic heart disease include:

- Men.
- Seniors (age 65+).
- Whites when compared to “Other” races.

### Prevalence of Heart Disease (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 146]  
 Notes: • Asked of all respondents.  
 • Includes diagnoses of heart attack, angina or coronary heart disease.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

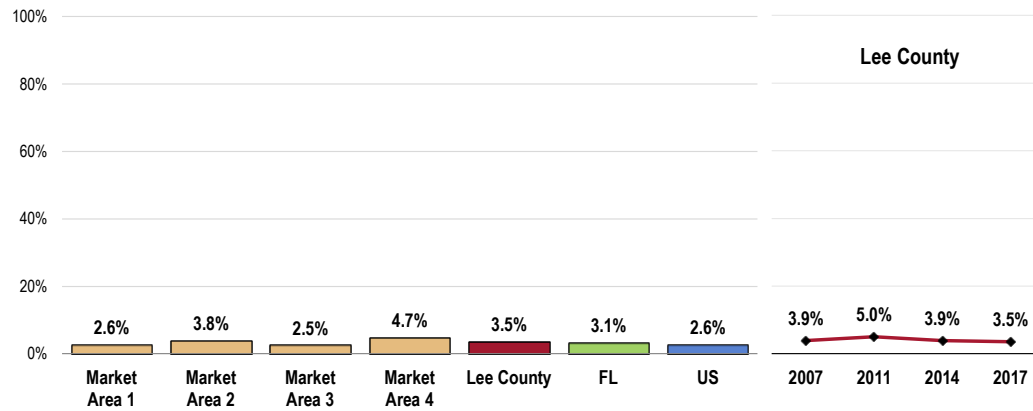
### Prevalence of Stroke

A total of 3.5% of surveyed adults report that they suffer from or have been diagnosed with cerebrovascular disease (a stroke).

- Similar to statewide and national findings.
- No statistical difference by Market Area.
- TREND: Stroke prevalence has not changed significantly over time.



## Prevalence of Stroke



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 35]  
 • 2015 PRC National Health Survey, Professional Research Consultants, 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); 2015 Florida data.

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](http://www.healthypeople.gov))

### High Blood Pressure

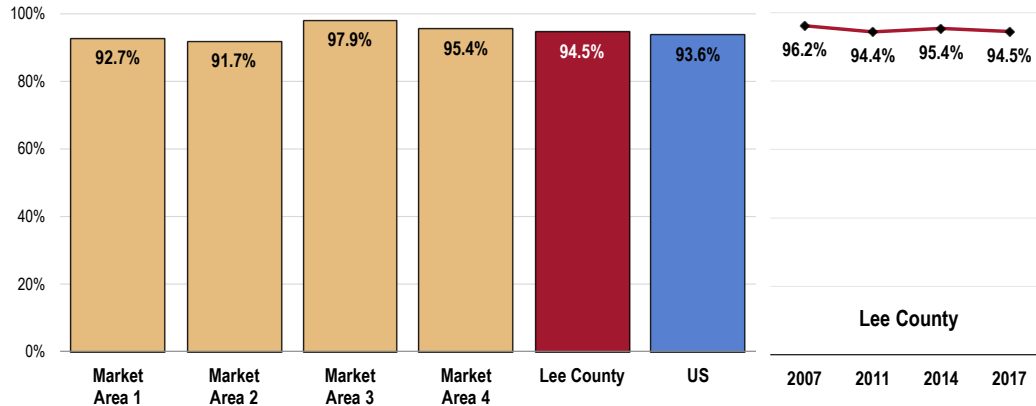
#### High Blood Pressure Testing

**A total of 94.5% of Lee County adults have had their blood pressure tested within the past two years.**

- Similar to national findings.
- Satisfies the Healthy People 2020 target (92.6% or higher).
- Higher in Market Area 3.
- TREND: Statistically unchanged over the past decade.

## Have Had Blood Pressure Checked in the Past Two Years

Healthy People 2020 Target = 92.6% or Higher



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 44]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-4]  
 Notes: • Asked of all respondents.

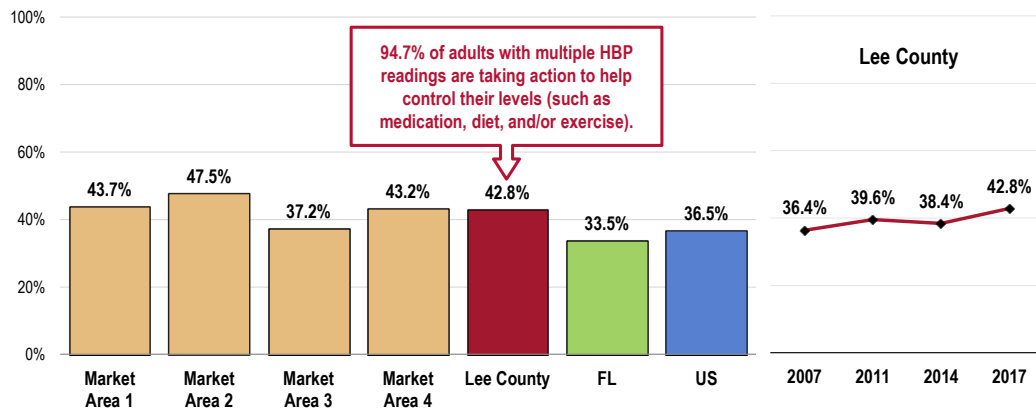
### Prevalence of High Blood Pressure

A total of 42.8% of Lee County adults have been told at some point that their blood pressure was high.

- Less favorable than the Florida and national prevalence.
- Fails to satisfy the Healthy People 2020 target (26.9% or lower).
- Most favorable in Market Area 3.
- TREND: Denotes a statistically significant increase since 2007.
- Among adults with multiple high blood pressure readings, 94.7% are taking action to lower their blood pressure (such as medication, change in diet, and/or exercise).

### Prevalence of High Blood Pressure

Healthy People 2020 Target = 26.9% or Lower



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 43, 147]  
 • 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.  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-5.1]  
 Notes: • Asked of all respondents.

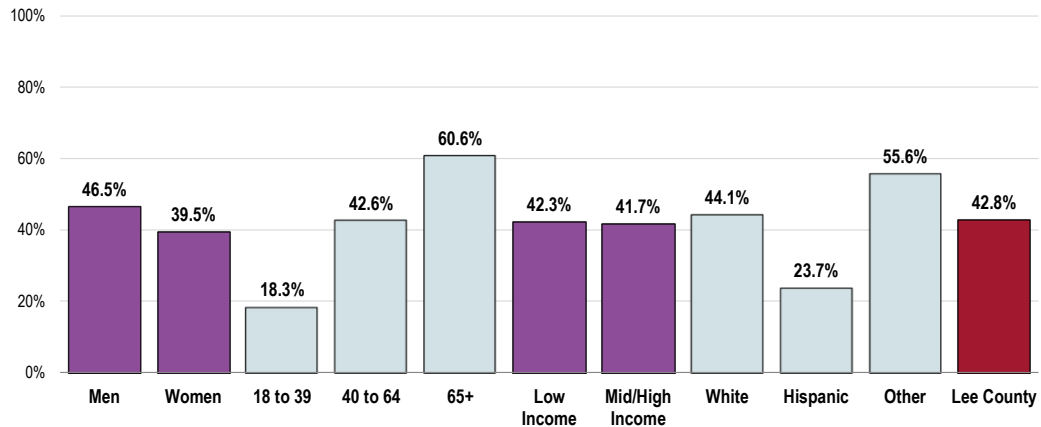
High blood pressure is more prevalent among:

- Men.
- Adults age 40 and older, and especially those age 65+.
- Non-Hispanics.

### Prevalence of High Blood Pressure

(Lee County, 2017)

Healthy People 2020 Target = 26.9% or Lower



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 147]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-5.1]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### High Blood Cholesterol

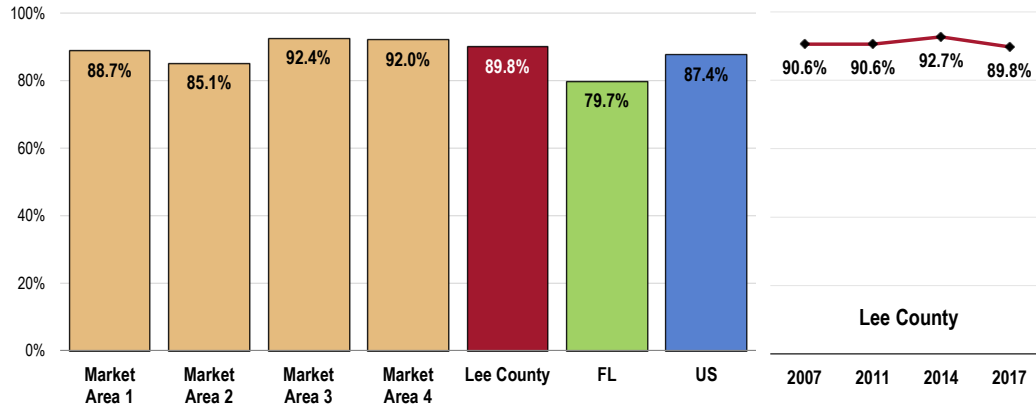
#### Blood Cholesterol Testing

**A total of 89.8% of Lee County adults have had their blood cholesterol checked within the past five years.**

- Much more favorable than Florida findings.
- Similar to the national findings.
- Satisfies the Healthy People 2020 target (82.1% or higher).
- Lowest in Market Area 2.
- TREND: Although similar to 2007 and 2011 survey findings, denotes a statistically significant decrease since 2014.

## Have Had Blood Cholesterol Levels Checked in the Past Five Years

Healthy People 2020 Target = 82.1% or Higher



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 47]  
 • 2015 PRC National Health Survey, Professional Research Consultants, 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); 2015 Florida data.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-6]

Notes: • Asked of all respondents.

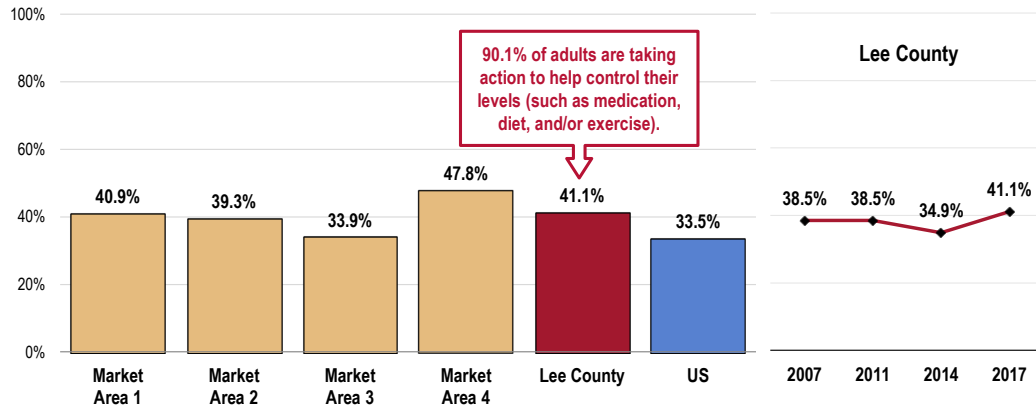
### *Prevalence of High Blood Cholesterol*

**A total of 41.1% of adults have been told by a health professional that their cholesterol level was high.**

- Above the national prevalence.
- More than three times the Healthy People 2020 target (13.5% or lower).
- Lowest in Market Area 3.
- TREND: Statistically similar to that found in 2007 and 2011, but has increased significantly since 2014.
- Among adults with high blood cholesterol readings, 90.1% are taking action to lower their numbers (such as medication, change in diet, and/or exercise).

### Prevalence of High Blood Cholesterol

Healthy People 2020 Target = 13.5% or Lower



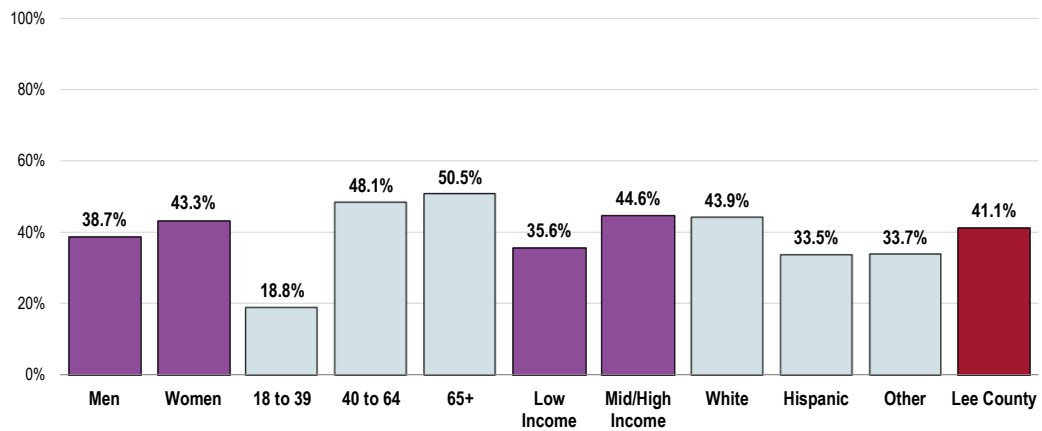
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 46, 148]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-7]  
 Notes: • Asked of all respondents.

- High blood cholesterol is more prevalent among adults age 40+ as well as those with higher incomes.

### Prevalence of High Blood Cholesterol

(Lee County, 2017)

Healthy People 2020 Target = 13.5% or Lower



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 148]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-7]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### About Cardiovascular Risk

Individual level risk factors which put people at increased risk for cardiovascular diseases include:

- High Blood Pressure
- High Blood Cholesterol
- Tobacco Use
- Physical Inactivity
- Poor Nutrition
- Overweight/Obesity
- Diabetes

- National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

Three health-related behaviors contribute markedly to cardiovascular disease:

**Poor nutrition.** People who are overweight have a higher risk for cardiovascular disease. Almost 60% of adults are overweight or obese. To maintain a proper body weight, experts recommend a well-balanced diet which is low in fat and high in fiber, accompanied by regular exercise.

**Lack of physical activity.** People who are not physically active have twice the risk for heart disease of those who are active. More than half of adults do not achieve recommended levels of physical activity.

**Tobacco use.** Smokers have twice the risk for heart attack of nonsmokers. Nearly one-fifth of all deaths from cardiovascular disease, or about 190,000 deaths a year nationally, are smoking-related. Every day, more than 3,000 young people become daily smokers in the US

Modifying these behaviors is critical both for preventing and for controlling cardiovascular disease. Other steps that adults who have cardiovascular disease should take to reduce their risk of death and disability include adhering to treatment for high blood pressure and cholesterol, using aspirin as appropriate, and learning the symptoms of heart attack and stroke.

- National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

### Total Cardiovascular Risk

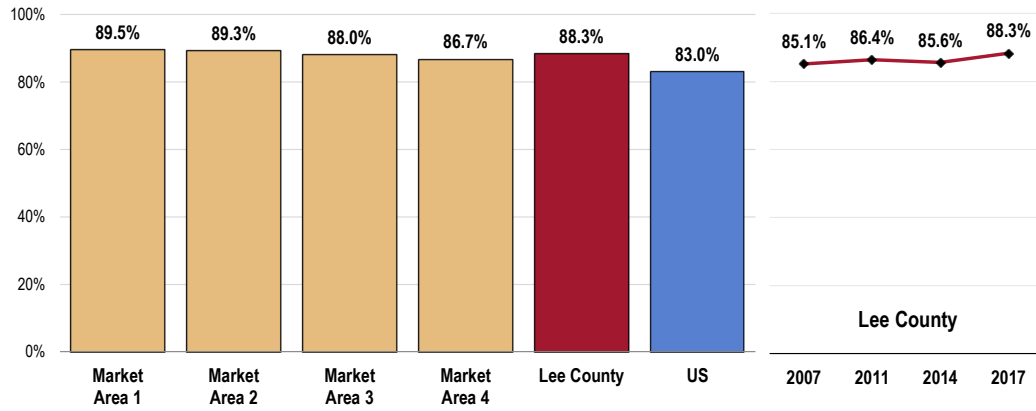
**A total of 88.3% of Lee County adults report one or more cardiovascular risk factors, such as being overweight, smoking cigarettes, being physically inactive, or having high blood pressure or cholesterol.**

- Higher than national findings.
- Comparable findings by Market Area.
- TREND: Statistically higher than the 2007 findings.

#### RELATED ISSUE:

See also  
Nutrition & Overweight,  
Physical Activity & Fitness and  
Tobacco Use in the Modifiable  
Health Risk section of this  
report.

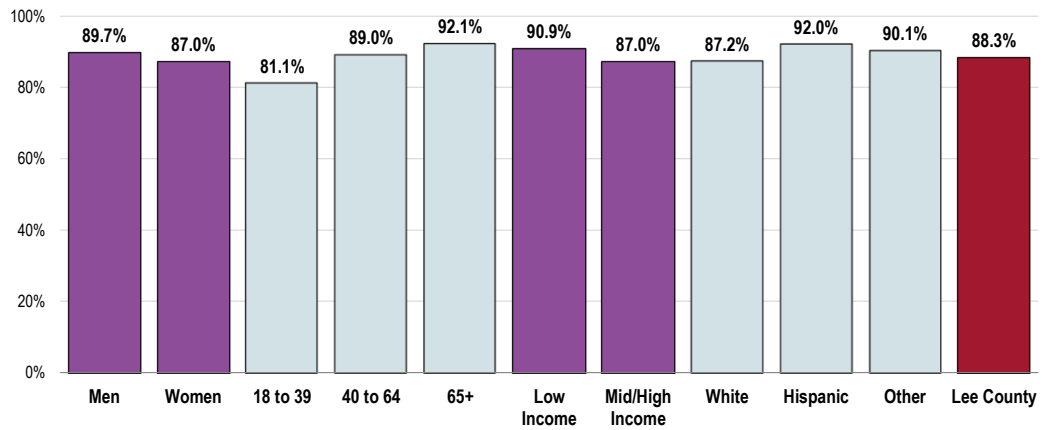
### Present One or More Cardiovascular Risks or Behaviors



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 149]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of 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) hypertension; 4) high blood cholesterol; and/or 5) being overweight/obese.

- Adults age 65 and older are more likely to exhibit cardiovascular risk factors.

### Present One or More Cardiovascular Risks or Behaviors (Lee County, 2017)

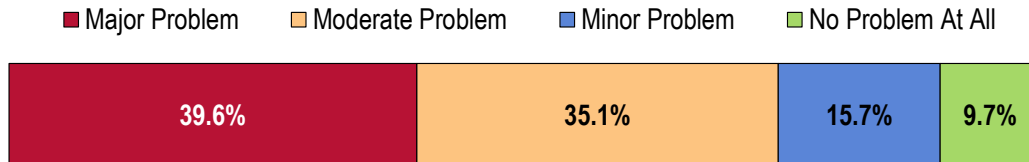


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 149]  
 Notes: • Asked of all respondents.  
 • Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) hypertension; 4) high blood cholesterol; and/or 5) being overweight/obese.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Key Informant Input: Heart Disease & Stroke

The greatest share of key informants taking part in an online survey characterized *Heart Disease & Stroke* as a “major problem” in the community.

### Perceptions of Heart Disease and Stroke as a Problem in the Community (Key Informants, 2017)



Sources: ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
Notes: ● Asked of all respondents.

### Top Concerns

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

#### Aging Population

- Our community is older, less active. Many people from the north visit us for three to six months a year, affecting our community. Some do not get a doctor in the area for follow-up for problems, such as high blood pressure, rapid heart rates, etc. – Other Health Provider*
- Elderly population in southwest Florida and obesity contribute to this disease. – Social Services Provider*
- Heart disease and stroke are prevalent, due to the aging population of Lee County. – Community Leader*
- Lots of elderly equals lots of patients. – Social Services Provider*
- Age of the population. – Community Leader*
- Age of population, poverty, and poor nutrition. – Social Services Provider*
- Aging populations with limited financial resources. – Community Leader*
- The Elder Helpline and United Way 211 can refer elders to potential help as long as elders/caregivers/family want the help and can afford it. Due to the numbers in need, heart disease/stroke can be a major program. – Social Services Provider*
- Diverse aging population in this area. – Community Leader*
- Due to our demographic; we have an older and sicker population. – Community Leader*
- Due to our senior population, obesity and smoking. – Other Health Provider*
- Age of the population. – Physician*
- Aging population. – Social Services Provider*

#### Prevalence/Incidence

- The rates of this problem continue to rise. – Community Leader*
- Heart disease and stroke are prevalent in our community. Resources for treatment and prevention are very limited. Many people are not eating properly or exercising, due to finances. – Public Health Representative*
- Large number of population who are obese or smoke. Poor dietary habits and lack of access to preventive services, due to low socio-economic status. – Social Services Provider*
- Based on current registry data within LPG per CAD, HTN, CHF, etc. – Physician*
- Heart disease and stroke are problems in every community. – Public Health Representative*
- Heart disease, diabetes and stroke go hand -in-hand. – Social Services Provider*



*The prevalence. – Social Services Provider*

### **Leading Cause of Death**

*It is the number one cause of death in the world, USA and everywhere. We underestimate it and leave it to the emergency room and cardiology, but it's huge and the impact on health, as well. – Physician*

*Always at or near the top of chronic conditions responsible for early mortality rates. – Social Services Provider*

*Leading cause of death and disability. – Public Health Representative*

*High mortality rates for these preventable causes of death. – Other Health Provider*

*A leading killer, especially with the age of our population. – Social Services Provider*

### **Obesity**

*There is a high incidence of obesity, thus increasing the risk of these diseases. – Public Health Representative*

*While improving, high BMIs and low activity continue to plague our population. – Public Health Representative*

*We have a generally obese population in Southwest Florida and many elderly people who suffer from hypertension and are at risk for heart attack and stroke. – Community Leader*

*So many people are overweight; their heart is growing unhealthier. – Public Health Representative*

### **Access to Care/Services**

*Not every hospital can provide these services. South Lee County is a long distance from both Lee Memorial and NCH systems heart care facilities. Sooner or later, a third location in the middle between these hospitals will be needed and feasible. – Community Leader*

*No services available to the uninsured. – Social Services Provider*

*Access to affordable medical care, medication, education and prevention. – Social Services Provider*

### **Lifestyle**

*Many people have lifestyles which promote these disease, such as sedentary lifestyles, poor diet, and obesity. Many are of lower socioeconomic status and find it difficult to break that cycle. – Physician*

*Unhealthy life styles are prevalent. No access to preventive services to many uninsured patients. – Physician*

*I think stress is a huge factor. I think people are doing way too much multitasking. I think our brains are on constant overload. People need to find ways to de-stress. Try yoga, meditation, exercise, massage, etc. – Other Health Provider*

*Exercising regularly is not prioritized. – Community Leader*

### **Health Education**

*People are suffering from heart disease and strokes in this community, from lack of education of the causes and prevention. Not enough "targeted" outreach in the community that's addressed the culture. – Community Leader*

*People are unaware of prevention measures and not accessing care until it's too late. – Public Health Representative*

## 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](http://www.healthypeople.gov))

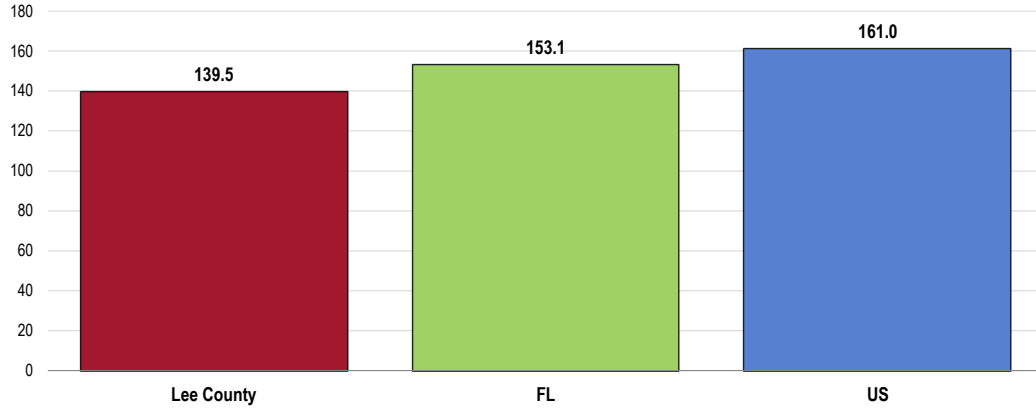
## Age-Adjusted Cancer Deaths

### All Cancer Deaths

**Between 2013 and 2015, there was an annual average age-adjusted cancer mortality rate of 139.5 deaths per 100,000 population in Lee County.**

- More favorable than the statewide and national rates.
- Satisfies the Healthy People 2020 target of 161.4 or lower.

### Cancer: Age-Adjusted Mortality (2013-2015 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 161.4 or Lower

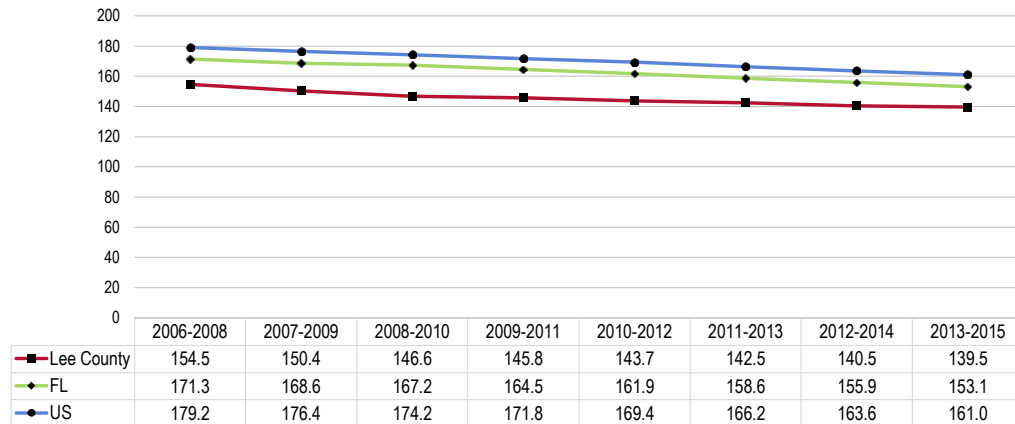


Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.  
 ● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [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.

- TREND: Cancer mortality has decreased over the past decade in Lee County; the same trend is apparent both statewide and nationwide.

### Cancer: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 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 March 2017.  
 ● 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 Deaths by Site

**Lung cancer is by far the leading cause of cancer deaths in Lee County.**

Other leading sites include prostate cancer among men, breast cancer among women, and colorectal cancer (both genders).

As can be seen in the following chart (referencing 2013-2015 annual average age-adjusted death rates):

- The Lee County death rate for each cancer site is lower than both the related state and national rates.

Note that each of the Lee County cancer death rates detailed below/in the following chart satisfies the related Healthy People 2020 target.

**Age-Adjusted Cancer Death Rates by Site**  
(2013-2015 Annual Average Deaths per 100,000 Population)

	Lee County	FL	US	HP2020
<b>ALL CANCERS</b>	<b>139.5</b>	<b>153.1</b>	<b>161.0</b>	<b>161.4</b>
<b>Lung Cancer</b>	<b>37.5</b>	<b>41.3</b>	<b>42.0</b>	<b>45.5</b>
<b>Prostate Cancer</b>	<b>13.9</b>	<b>16.8</b>	<b>19.0</b>	<b>21.8</b>
<b>Female Breast Cancer</b>	<b>16.5</b>	<b>19.4</b>	<b>20.6</b>	<b>20.7</b>
<b>Colorectal Cancer</b>	<b>11.4</b>	<b>13.3</b>	<b>14.4</b>	<b>14.5</b>

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov>

### Cancer Incidence

Incidence rates reflect the number of newly diagnosed cases in a given population in a given year, regardless of outcome. Here, these rates are also age-adjusted.

**The 2009-2013 Lee County annual average age-adjusted cervical cancer incidence rate is worse than the US rate.**

- All other rates compare favorably.

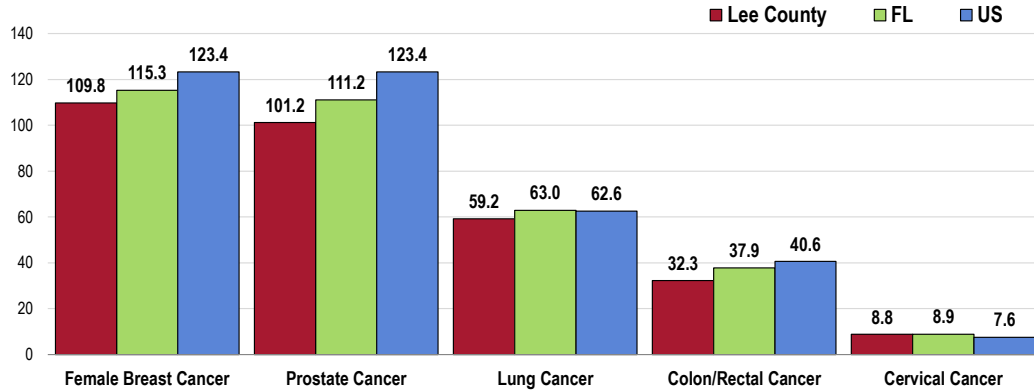
**None of the Lee County cancer incidence rates are worse than state rates for the same years.**

"Incidence rate" or "case rate" is the number of new cases of a disease occurring during a given period of time.

It is usually expressed as cases per 100,000 population per year.

### Cancer Incidence Rates by Site

(Annual Average Age-Adjusted Incidence per 100,000 Population, 2009-2013)

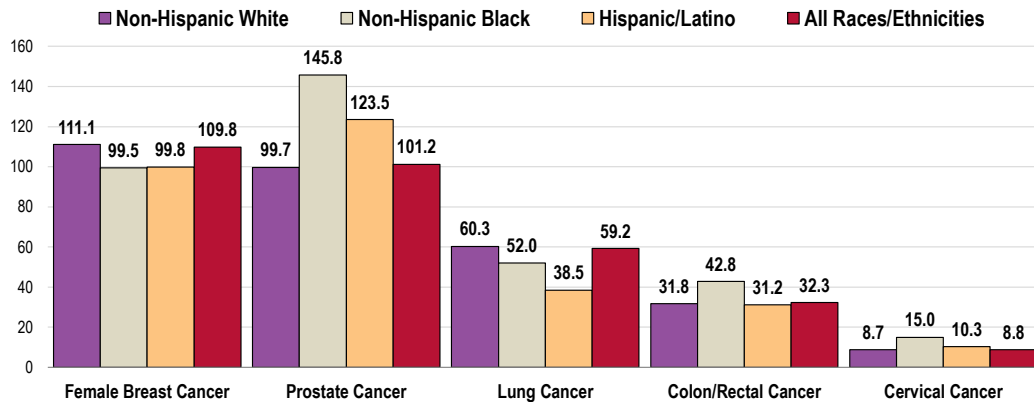


Sources: • State Cancer Profiles.  
 • Retrieved March 2017 from Community Commons at <http://www.chna.org>.  
 Notes: • This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of cancers, adjusted to 2000 US standard population age groups (under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

- By available race data, Non-Hispanic Blacks and Hispanics experience notably higher prostate cancer and cervical cancer incidences than Non-Hispanic Whites in Lee County.
- Blacks also report a higher colon/rectal cancer incidence rate, while Whites have higher incidence of female breast and lung cancers in Lee County.

### Cancer Incidence Rates by Site and Race/Ethnicity

(Annual Average Age-Adjusted Incidence per 100,000 Population, Lee County 2009-2013)



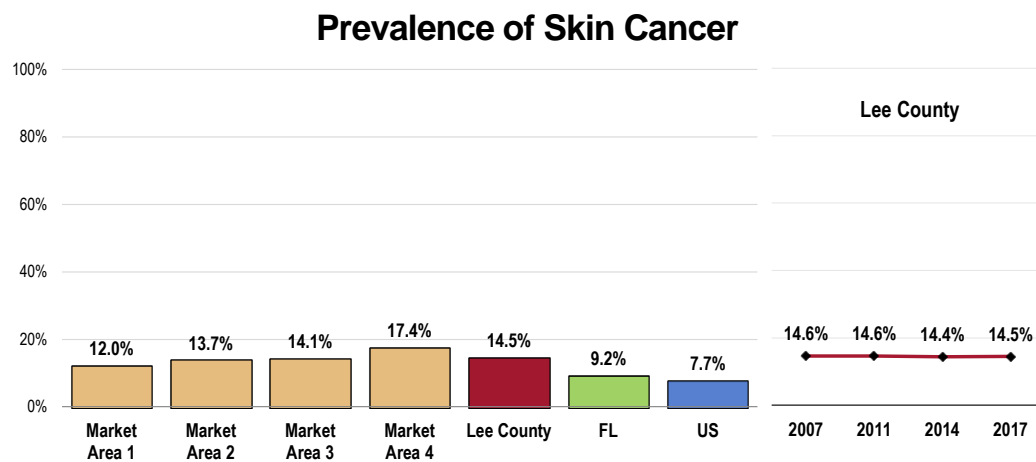
Sources: • State Cancer Profiles.  
 • Retrieved March 2017 from Community Commons at <http://www.chna.org>.  
 Notes: • This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of cancers, adjusted to 2000 US standard population age groups (under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

## Prevalence of Cancer

### Skin Cancer

A total of 14.5% of surveyed Lee County adults report having been diagnosed with skin cancer.

- Less favorable than the statewide and national averages.
- Similar findings by Market Area.
- TREND: The prevalence of skin cancer has remained statistically unchanged over time.



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 30]  
 • 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.  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.

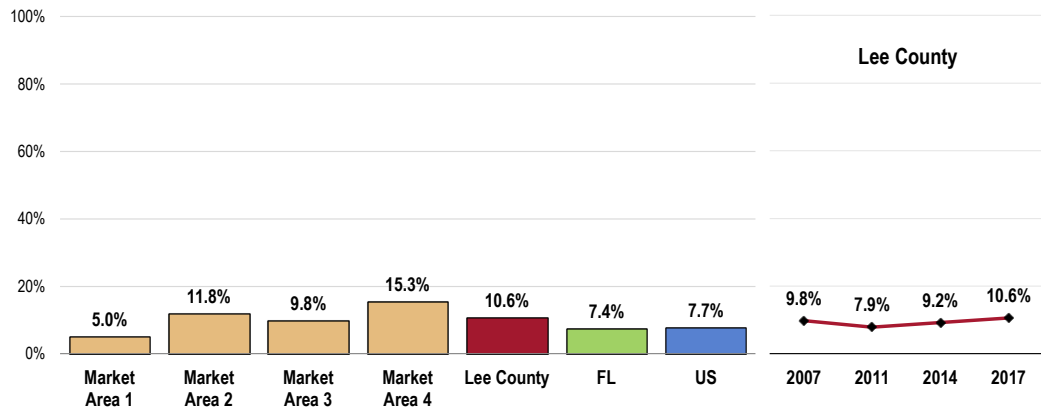
Notes: • Asked of all respondents.

### Other Cancer

A total of 10.6% of survey respondents have been diagnosed with some type of (non-skin) cancer.

- Higher than the statewide and national percentages.
- Particularly high in Market Area 4; lowest in Market Area 1.
- TREND: The prevalence of cancer has significantly increased since 2011, but is statistically similar to 2007 findings.

## Prevalence of Cancer (Other Than Skin Cancer)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 29]  
 • 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.  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

### Cancer Risk

**RELATED ISSUE:**

See also [Nutrition & Overweight](#), [Physical Activity & Fitness](#) and [Tobacco Use](#) in the **Modifiable Health Risk** section of this report.

#### 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

### 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 testing); and colorectal cancer (sigmoidoscopy and fecal occult blood testing).

## Female Breast Cancer Screening

### About Screening for Breast Cancer

The US Preventive Services Task Force (USPSTF) recommends screening mammography, with or without clinical breast examination (CBE), every 1-2 years for women age 40 and older.

Rationale: The USPSTF found fair evidence that mammography screening every 12-33 months significantly reduces mortality from breast cancer. Evidence is strongest for women age 50-69, the age group generally included in screening trials. For women age 40-49, the evidence that screening mammography reduces mortality from breast cancer is weaker, and the absolute benefit of mammography is smaller, than it is for older women. Most, but not all, studies indicate a mortality benefit for women undergoing mammography at ages 40-49, but the delay in observed benefit in women younger than 50 makes it difficult to determine the incremental benefit of beginning screening at age 40 rather than at age 50.

The absolute benefit is smaller because the incidence of breast cancer is lower among women in their 40s than it is among older women. The USPSTF concluded that the evidence is also generalizable to women age 70 and older (who face a higher absolute risk for breast cancer) if their life expectancy is not compromised by comorbid disease. The absolute probability of benefits of regular mammography increase along a continuum with age, whereas the likelihood of harms from screening (false-positive results and unnecessary anxiety, biopsies, and cost) diminish from ages 40-70. The balance of benefits and potential harms, therefore, grows more favorable as women age. The precise age at which the potential benefits of mammography justify the possible harms is a subjective choice. The USPSTF did not find sufficient evidence to specify the optimal screening interval for women age 40-49.

- 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.

### *Mammography*

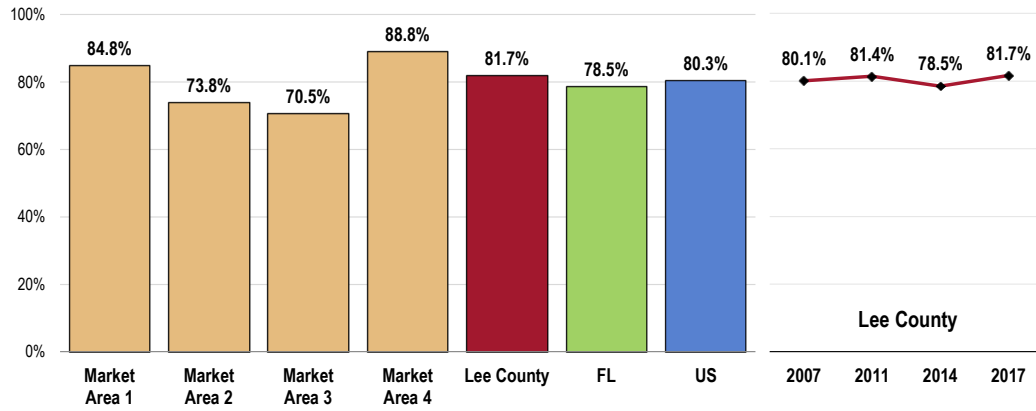
**Among women age 50-74, 81.7% have had a mammogram within the past 2 years.**

- Similar to statewide and US findings.
- Similar to the Healthy People 2020 target (81.1% or higher).
- Lower among women in Market Area 3; higher in Market Area 4.
- TREND: Statistically unchanged since 2007.



## Have Had a Mammogram in the Past Two Years (Among Women Age 50-74)

Healthy People 2020 Target = 81.1% or Higher



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 151]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2014 Florida data.
  - 2015 PRC National Health Survey, Professional Research Consultants, Inc.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-17]
- Notes:
- Reflects female respondents 50-74.

## Cervical Cancer Screenings

### About Screening for Cervical Cancer

The US Preventive Services Task Force (USPSTF) strongly recommends screening for cervical cancer in women who have been sexually active and have a cervix.

Rationale: The USPSTF found good evidence from multiple observational studies that screening with cervical cytology (Pap smears) reduces incidence of and mortality from cervical cancer. Direct evidence to determine the optimal starting and stopping age and interval for screening is limited. Indirect evidence suggests most of the benefit can be obtained by beginning screening within 3 years of onset of sexual activity or age 21 (whichever comes first) and screening at least every 3 years. The USPSTF concludes that the benefits of screening substantially outweigh potential harms.

The USPSTF recommends against routinely screening women older than age 65 for cervical cancer if they have had adequate recent screening with normal Pap smears and are not otherwise at high risk for cervical cancer.

Rationale: The USPSTF found limited evidence to determine the benefits of continued screening in women older than 65. The yield of screening is low in previously screened women older than 65 due to the declining incidence of high-grade cervical lesions after middle age. There is fair evidence that screening women older than 65 is associated with an increased risk for potential harms, including false-positive results and invasive procedures. The USPSTF concludes that the potential harms of screening are likely to exceed benefits among older women who have had normal results previously and who are not otherwise at high risk for cervical cancer.

The USPSTF recommends against routine Pap smear screening in women who have had a total hysterectomy for benign disease.

Rationale: The USPSTF found fair evidence that the yield of cytologic screening is very low in women after hysterectomy and poor evidence that screening to detect vaginal cancer improves health outcomes. The USPSTF concludes that potential harms of continued screening after hysterectomy are likely to exceed benefits.

- 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.

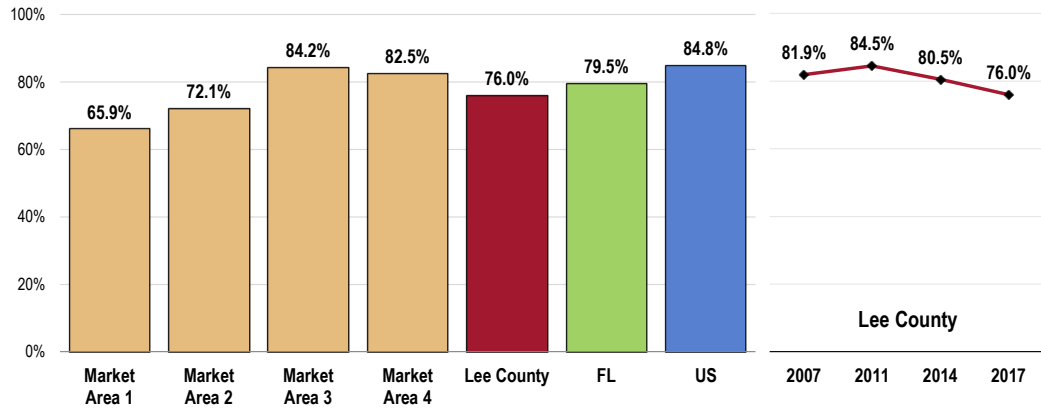
### *Pap Smear Testing*

**Among Lee County women age 21 to 65, 76.0% have had a Pap smear within the past 3 years.**

- Comparable to Florida findings.
- Lower than national findings.
- Fails to satisfy the Healthy People 2020 target (93% or higher).
- Lower among women in Market Area 1; higher in Market Area 3.
- TREND: Has decreased significantly since 2011.

## Have Had a Pap Smear in the Past Three Years (Among Women Age 21-65)

Healthy People 2020 Target = 93.0% or Higher



Sources: • PRC Community Health Surveys, Professional Research Consultants, 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); 2014 Florida data.  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-15]

Notes: • Reflects female respondents age 21 to 65.

## Colorectal Cancer Screenings

### About Screening for Colorectal Cancer

The USPSTF recommends screening for colorectal cancer using fecal occult blood testing, sigmoidoscopy, or colonoscopy in adults, beginning at age 50 years and continuing until age 75 years.

The evidence is convincing that screening for colorectal cancer with fecal occult blood testing, sigmoidoscopy, or colonoscopy detects early-stage cancer and adenomatous polyps. There is convincing evidence that screening with any of the three recommended tests (FOBT, sigmoidoscopy, colonoscopy) reduces colorectal cancer mortality in adults age 50 to 75 years. Follow-up of positive screening test results requires colonoscopy regardless of the screening test used.

- 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.

### Colorectal Cancer Screening

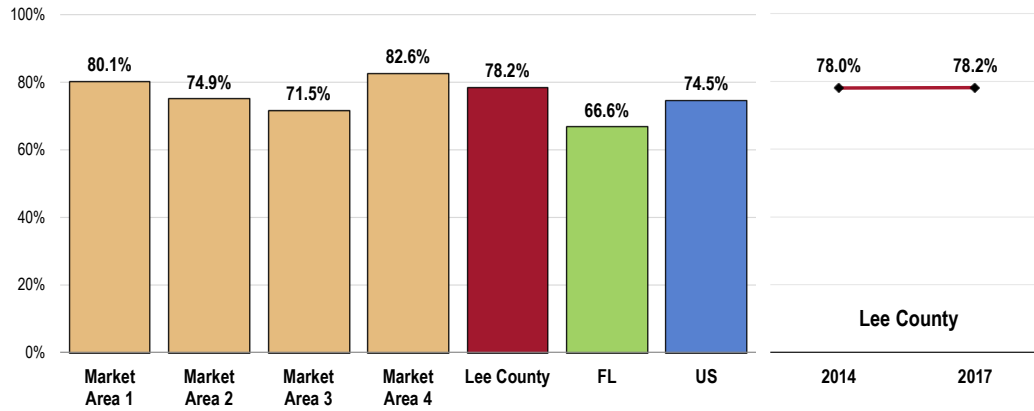
**Among adults age 50-75, 78.2% have had an appropriate colorectal cancer screening (fecal occult blood testing within the past year and/or sigmoidoscopy/colonoscopy [lower endoscopy] within the past 10 years).**

- Notably higher than found statewide.
- Similar to national findings.
- Satisfies the Healthy People 2020 target (70.5% or higher).
- Least favorable in Market Area 3.
- TREND: Since 2014, the colorectal cancer screening rate has barely changed.

"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.

## Have Had a Colorectal Cancer Screening (Among Adults Age 50-75)

Healthy People 2020 Target = 70.5% or Higher

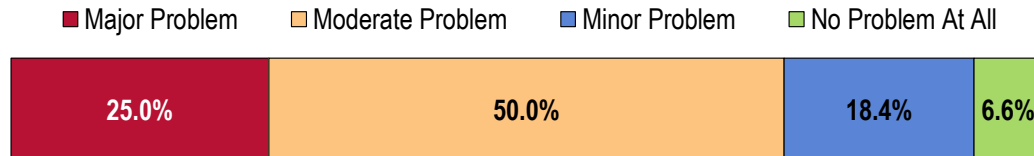


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 155]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2014 Florida data.  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-16]  
 Notes: • Asked of all respondents age 50 through 75.  
 • In this case, the term "colorectal screening" refers to adults age 50-75 receiving a FOBT (fecal occult blood test) in the past year and/or a lower endoscopy (sigmoidoscopy/colonoscopy) in the past 10 years.

### Key Informant Input: Cancer

Half of key informants taking part in an online survey characterized **Cancer** as a "moderate problem" in the community.

### Perceptions of Cancer as a Problem in the Community (Key Informants, 2017)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

### Top Concerns

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

#### Prevalence/Incidence

*A problem in that it seems the number of individuals with cancer has not/is not declining. I do believe that our community does a great job in detection and preventative care and in making it available. – Community Leader*

*The number of oncologists in this area and the fact that their practices are growing. The need for LMHS to build "cancer centers," such as The Sanctuary. – Other Health Provider*

*Cancer is prevalent in Lee County. Once diagnosed, resources such as copays for medications and to assist patients with expenses such as loss of employment are nonexistent in Lee County. – Public Health Representative*

*Cancer is a major problem in Lee County, due to the average age of the population. – Community Leader*

*It almost seems there is an epidemic. – Social Services Provider*

*The numbers are growing. Care is very expensive for a poor person. – Community Leader*

*A larger percentage of our workforce is being diagnosed with cancer. – Community Leader*

*I know many people, including myself, struck with cancer. – Social Services Provider*

*Reports state large prevalence of cancers occur here. Not definitive if from local population, or from retirees or others moving in from out of state. – Other Health Provider*

*This is a non-curable disease with genetic implications. More people are contracting cancer with major costs associated with medications. – Social Services Provider*

*Too many cases of cancer existing in our community. I personally know of quite a few, and I do believe those I don't know of are many. There's no "real" education attempts about cancer that's targeted for our community. – Community Leader*

*I see the visual effects of radiation in the community far more frequently in grocery stores, malls than I used to. Meaning it seems more people have cancer. – Public Health Representative*

*Cancer has been affecting our community for a long time, and there has not been a decrease or a cure to help those being affected. Way too often, I have spoken to family members who have lost a loved one due to cancer. – Community Leader*

### **Affordable Care/Services**

*Access is expensive, significant out-of-pocket expenses. – Other Health Provider*

*I believe that there are easily-accessible services for individuals who are well-insured. I believe that individuals without insurance are not screened for cancer. – Public Health Representative*

*Specifically for breast cancer, diagnosis and treatment services are expensive, and many people do not qualify for services, due to limited time living in the community. Partners for Breast Cancer Care requires a year of residency and legal status. – Public Health Representative*

*We have a significant number of under- or uninsured individuals; this makes obtaining health services a challenge. – Social Services Provider*

*Lack of diagnosis and affordable treatment in the area. Lack of quality care in the area. – Social Services Provider*

### **Aging Population**

*We have a large elderly population in this community, in which the incidence of cancer may be higher than the general population. It's a problem when this is considered together with the normal incidence of cancer in the population. – Community Leader*

*The Elder Helpline and United Way 211 can refer elders to potential help as long as elders/caregivers/family want the help and can afford it. When answering the first question, I am indicating due to the numbers in need it can be a major program. – Social Services Provider*

*Aging population. – Social Services Provider*

### **Access to Care/Services**

*We still have many cancer survivors going out of the area for treatment. – Community Leader*

*Access to patients without health insurance is very difficult. They do not receive the same level of care than those patients with insurance. – Physician*

*We are transporting clients for chemo within the county and as far away as Tampa and Miami. – Social Services Provider*

### **Health Education**

*The people are unaware of how to access healthcare services. They don't know that they should always stay in care to prevent or catch things early. They aren't aware of symptoms of cancer or what they should be looking for. – Public Health Representative*

### **Leading Cause of Death**

*It is high on the list of mortality. – Public Health Representative*

## 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 healthcare 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 healthcare 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](http://www.healthypeople.gov))

[NOTE: COPD was changed to chronic lower respiratory disease (CLRD) with the introduction of ICD-10 codes. CLRD is used in vital statistics reporting, but COPD is still widely used and commonly found in surveillance reports.]

## Age-Adjusted Respiratory Disease Deaths

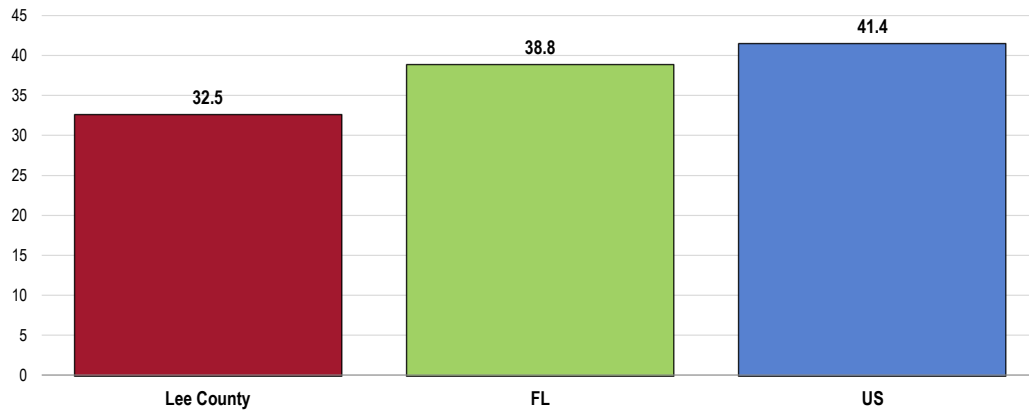
### Chronic Lower Respiratory Disease Deaths (CLRD)

Between 2013 and 2015, there was an annual average age-adjusted CLRD mortality rate of 32.5 deaths per 100,000 population in Lee County.

- Lower than the statewide and national rates.

Note: COPD was changed to chronic lower respiratory disease (CLRD) in 1999 with the introduction of ICD-10 codes. CLRD is used in vital statistics reporting, but COPD is still widely used and commonly found in surveillance reports.

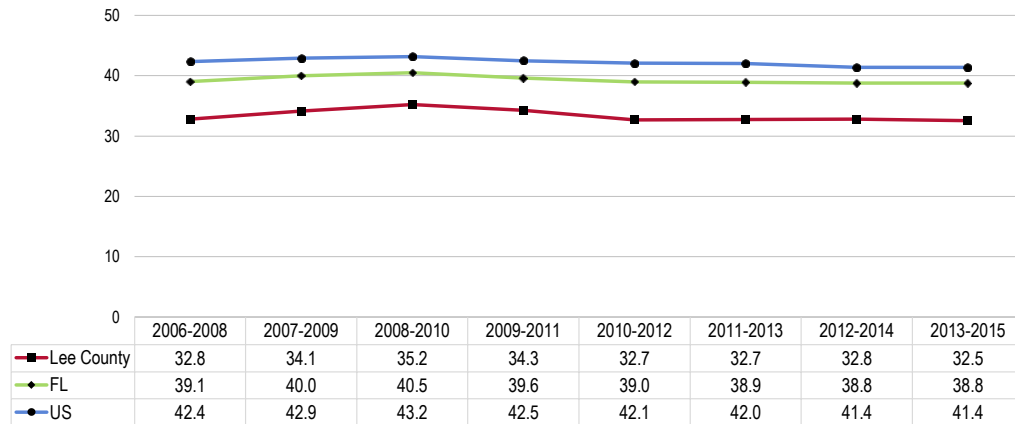
**CLRD: Age-Adjusted Mortality**  
(2013-2015 Annual Average Deaths per 100,000 Population)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.
- 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.

- TREND: CLRD mortality in Lee County has remained relatively stable over time; the same can be seen both statewide and nationwide.

**CLRD: Age-Adjusted Mortality Trends**  
(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 March 2017.
- 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.

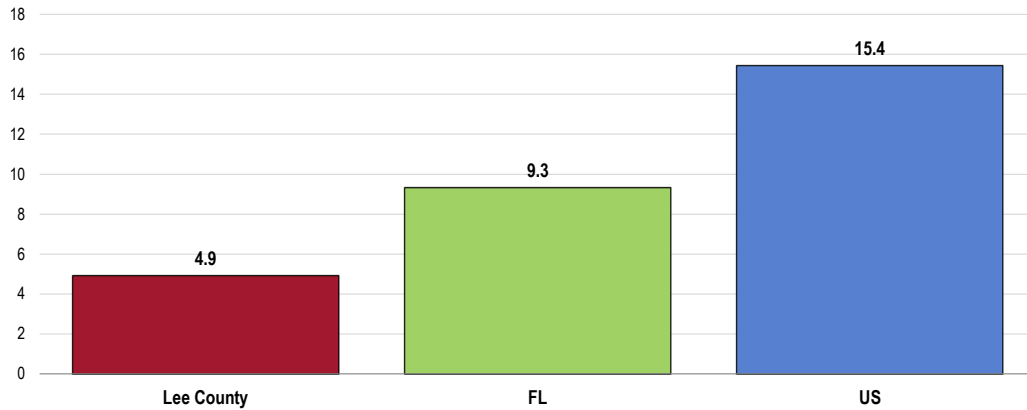
### Pneumonia/Influenza Deaths

Between 2013 and 2015, Lee County reported an annual average age-adjusted pneumonia influenza mortality rate of 4.9 deaths per 100,000 population.

- Lower than found statewide and nationally.

For prevalence of vaccinations for pneumonia and influenza, see also *Immunization & Infectious Disease*.

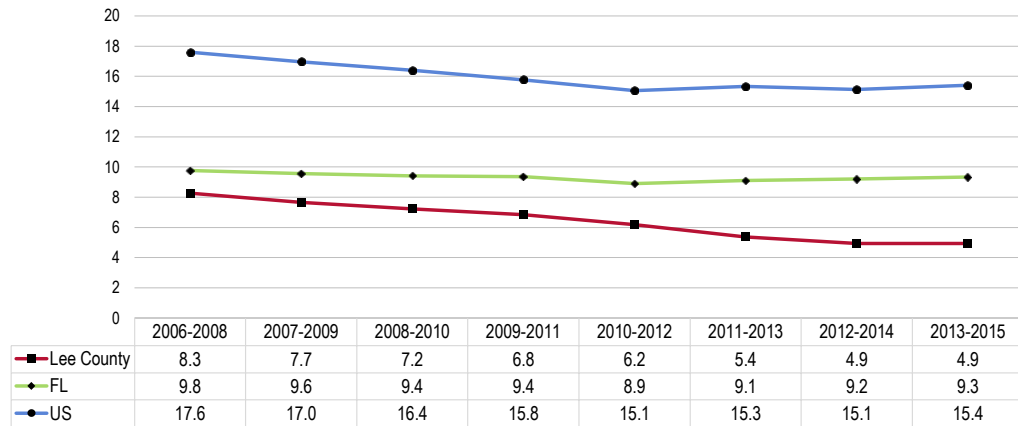
### Pneumonia/Influenza: Age-Adjusted Mortality (2013-2015 Annual Average Deaths per 100,000 Population)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.
- 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.

- TREND: Lee County pneumonia/influenza mortality has trended downward over time.

### Pneumonia/Influenza: Age-Adjusted Mortality Trends (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 March 2017.
- 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.



## Asthma

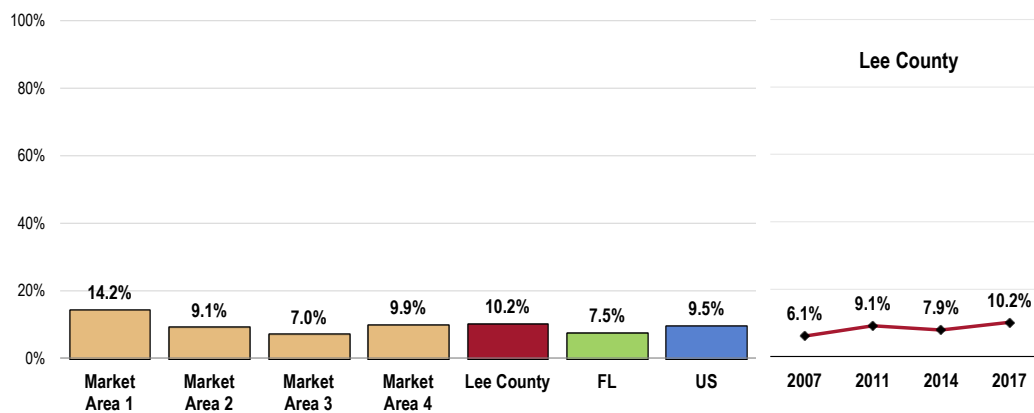
### Adults

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

**A total of 10.2% of Lee County adults currently suffer from asthma.**

- Higher than the statewide prevalence.
- Similar to the national prevalence.
- Highest in Market Area 1; lowest in Market Area 3.
- TREND: Prevalence has increased significantly since 2007.

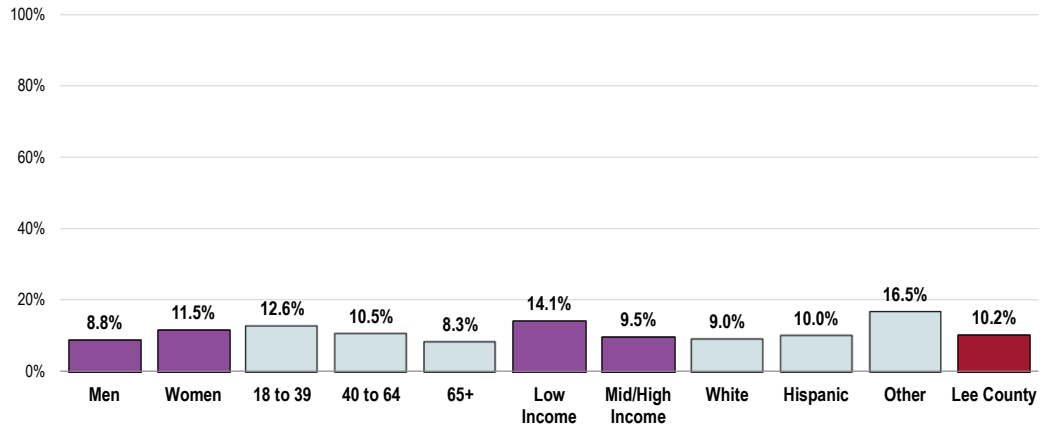
### Adult Asthma: Current Prevalence



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 156]
  - 2015 PRC National Health Survey, Professional Research Consultants, 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): 2015 Florida data.
- Notes:
- Asked of all respondents.
  - Includes those who have ever been diagnosed with asthma, and who report that they still have asthma.

- When viewed by key demographic characteristics, there are no significant differences in asthma prevalence.

### Currently Have Asthma (Lee County, 2017)



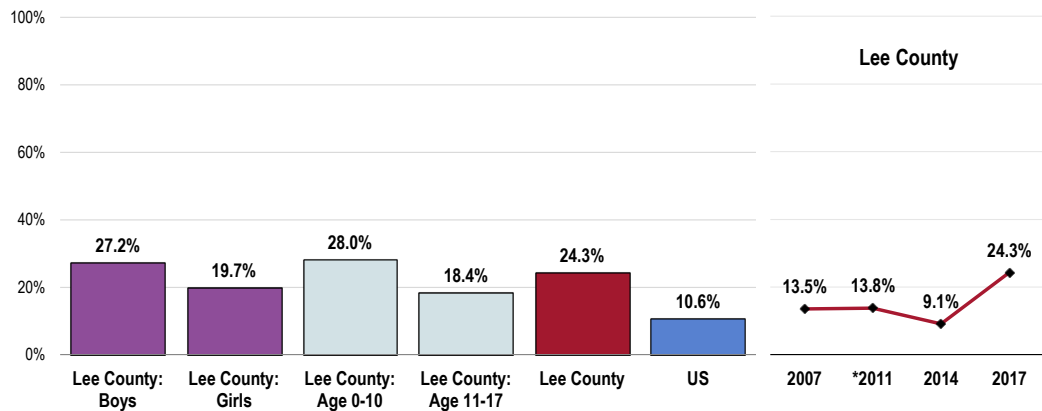
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 156]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

#### Children

Among Lee County children under age 18, 24.3% have ever been diagnosed with asthma.

- Notably higher than national findings.
- TREND: Marks a statistically significant increase in childhood asthma since 2014.
- Viewed by age and gender, differences in children's asthma prevalence are not statistically significant.

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

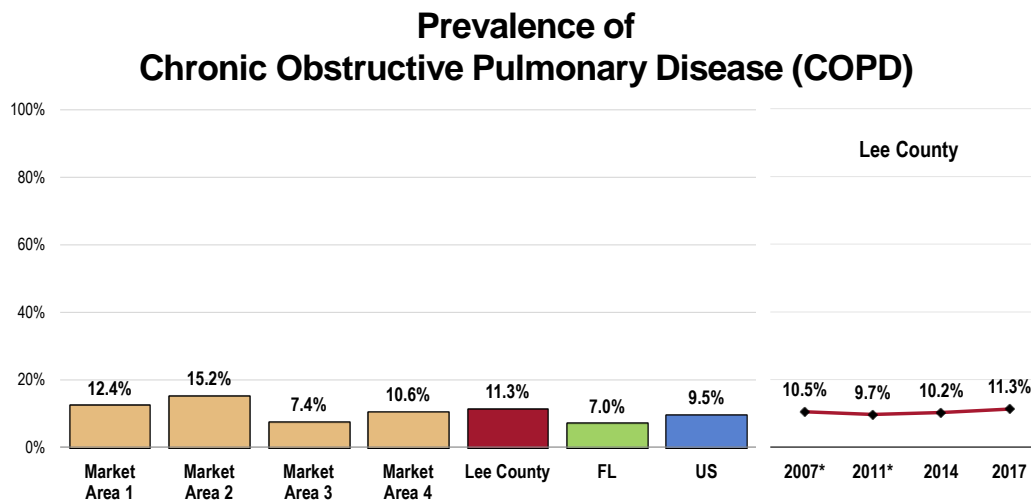


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 139]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents with children 0 to 17 in the household.  
 • Includes children who have ever been diagnosed with asthma.  
 • \*Data from 2011 represents children age 2 to 17.

### Chronic Obstructive Pulmonary Disease (COPD)

A total of 11.3% of Lee County adults suffer from chronic obstructive pulmonary disease (COPD, including emphysema and bronchitis).

- Less favorable than the state prevalence.
- Similar to the national prevalence.
- Most favorable in Market Area 3.
- TREND: In comparing to previous data, the prevalence of COPD is statistically unchanged.
- NOTE: in prior data, this question was asked slightly differently; respondents in 2007 and 2011 were asked if they had ever been diagnosed with “chronic lung disease, including bronchitis or emphysema,” rather than “COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema” as is asked currently.



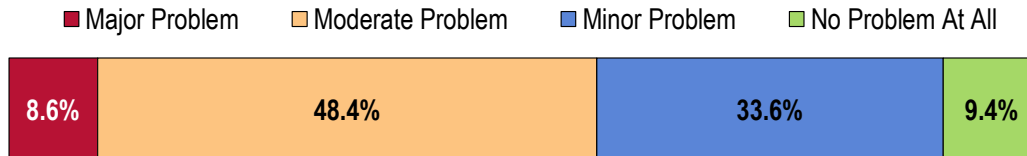
- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 24]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2015 Florida data.
  - 2015 PRC National Health Survey, Professional Research Consultants, 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.
  - \*In prior data, the term “chronic lung disease” was used, which also included 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 as a Problem in the Community

(Key Informants, 2017)



Sources:   ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
Notes:   ● Asked of all respondents.

### Top Concerns

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

#### *Environmental Contributors*

*Welcome to Florida: Pollen year-round. Red tide. – Social Services Provider*

*I think a lot of people in our area have issues due to pollen, mold, living on canals, and red tide. I think a lot have breathing issues due to being overweight. I think the extreme heat causes problems. More indoor activities. – Other Health Provider*

#### *Comorbidities*

*We have many more people than others realize dealing with things like asthma, COPD, and lung cancer. Most people are totally unaware that lung cancer is currently the number -ne cancer killer for both men and women. – Other Health Provider*

#### *Access to Care/Services*

*Without referral and insurance, treatment is impossible. – Public Health Representative*

#### *Leading Cause of Death*

*A major cause of death and disability. – Public Health Representative*

#### *Health Education*

*Lack of education. – Physician*

## 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 healthcare 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.

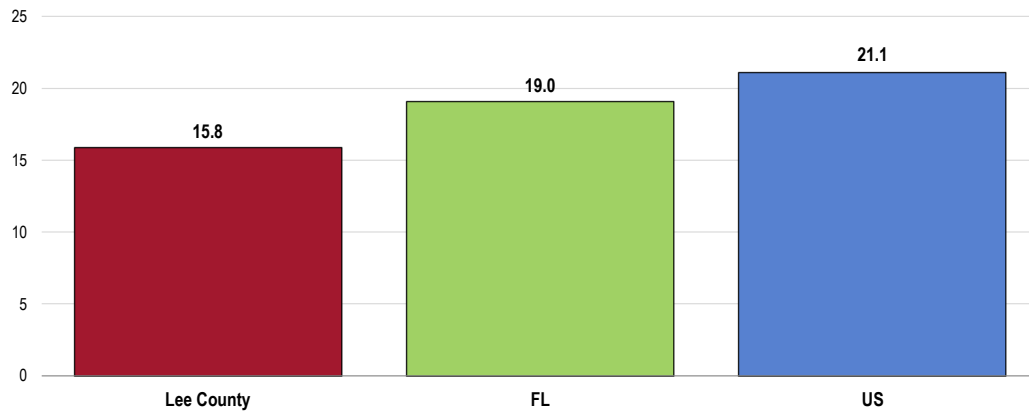
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Age-Adjusted Diabetes Deaths

**Between 2013 and 2015, there was an annual average age-adjusted diabetes mortality rate of 15.8 deaths per 100,000 population in Lee County.**

- More favorable than that found statewide or nationally.
- Satisfies the Healthy People 2020 target (20.5 or lower, adjusted to account for diabetes mellitus-coded deaths).

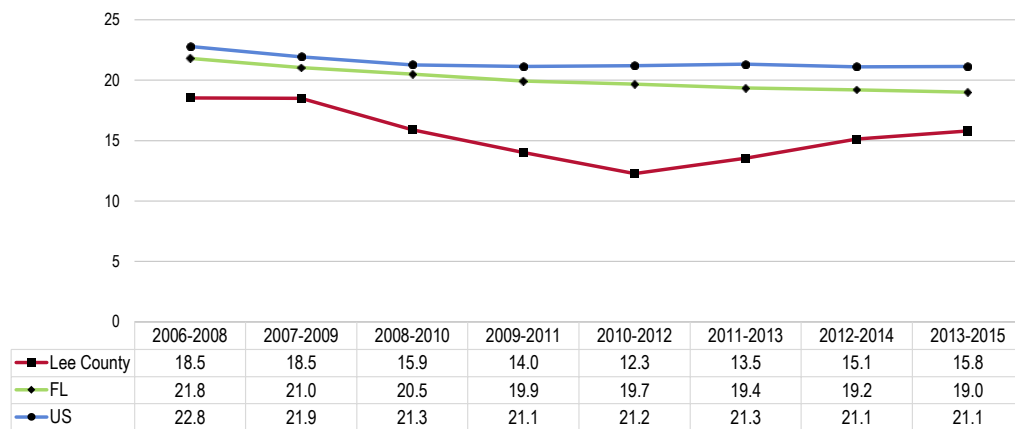
### Diabetes: Age-Adjusted Mortality (2013-2015 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 20.5 or Lower (Adjusted)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.
  - 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.

- **TREND:** Diabetes mortality in Lee County has been increasing since 2011. Nationally, the rate appears to be stable, while decreasing slightly statewide.

### Diabetes: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 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 March 2017.
  - 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.

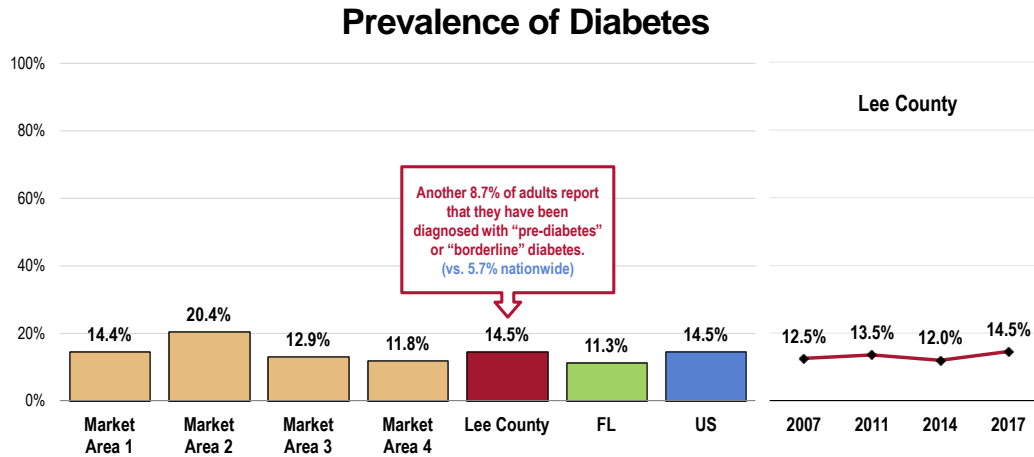
## Prevalence of Diabetes

A total of 14.5% of Lee County adults report having been diagnosed with diabetes.

- Worse than the statewide proportion.
- Identical to the national proportion.
- Notably high in Market Area 2.
- TREND: Statistically unchanged since 2007.

In addition to the prevalence of diagnosed diabetes referenced above, another 8.7% of Lee County adults report that they have “pre-diabetes” or “borderline diabetes.”

- Higher than the US prevalence.
- Similar findings by Market Area (not shown).



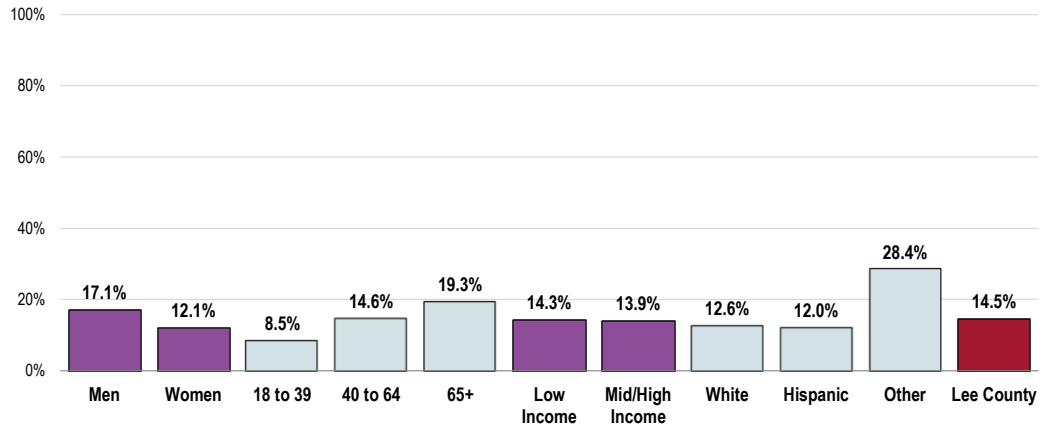
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 158]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2015 Florida data.

Notes: • Asked of all respondents.

A higher prevalence of diagnosed diabetes (excluding pre-diabetes or borderline diabetes) is reported among:

- Men.
- Older adults (note the positive correlation between diabetes and age, with 19.3% of seniors with diabetes).
- “Other” races.

## Prevalence of Diabetes (Lee County, 2017)



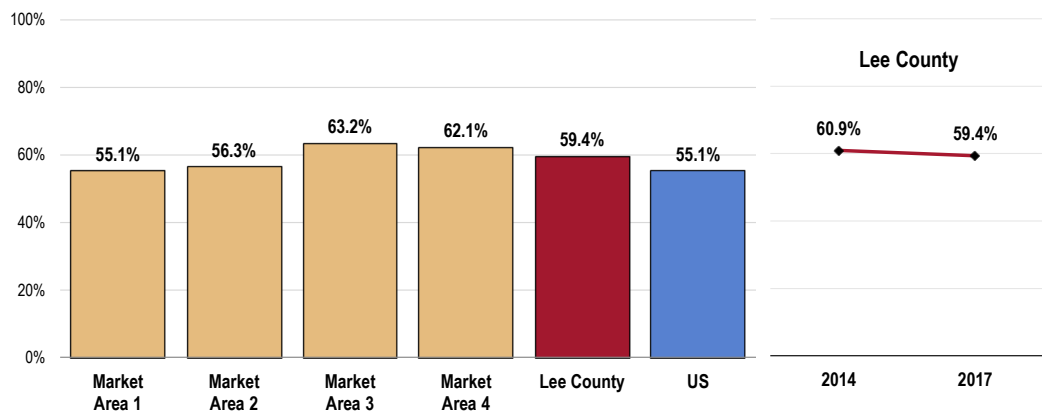
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 158]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • Excludes gestational diabetes (occurring only during pregnancy).

### Diabetes Testing

**Of area adults who have not been diagnosed with diabetes, 59.4% report having had their blood sugar level tested within the past three years.**

- Statistically similar to the national proportion.
- Statistically similar by Market Area.
- Similar to previous findings.

### Have Had Blood Sugar Tested in the Past Three Years (Among Nondiabetics)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 39]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of respondents who have not been diagnosed with diabetes.



## Key Informant Input: Diabetes

A high percentage of key informants taking part in an online survey characterized *Diabetes* as a “major problem” in the community.

### Perceptions of Diabetes as a Problem in the Community

(Key Informants, 2017)

■ Major Problem   ■ Moderate Problem   ■ Minor Problem   ■ No Problem At All



Sources: ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
Notes: ● Asked of all respondents.

### Challenges

Among those rating diabetes as a “major problem,” the biggest challenges for people with diabetes are seen as:

#### Health Education

*More education for the general area. – Community Leader*

*Lack of awareness. – Community Leader*

*The need for treatment and lack of understanding the disease. The Elder Helpline and United Way 211 can refer elders to potential help as long as elders/caregivers/family want the help and can afford it. – Social Services Provider*

*Education of prevention, proper eating, and monitoring sugar levels. Affordable medical access and medication. – Social Services Provider*

*Access to education in language other than English. Very diverse population here. Need to provide information and support in Spanish and Creole. – Community Leader*

*Initially being diagnosed because they are not accessing care and when they receive the diagnosis. There is a lack of education on how to treat diabetes, how to adjust diet according to how they eat. – Public Health Representative*

*Lack of education and how culture and what we eat and lack of exercise are all part of the disease and its cure. Older people still cook with lard and heavy salt. Everyone is talking about diabetes, but no one is dealing with it in the form of education. – Community Leader*

*Lack of access to affordable, healthy food combined with lack of education, both how bad excessive sugar and greasy, processed food is and how to prepare healthy food. – Community Leader*

*Families need support to understand the disease and how to support their family member. This is especially true for young children. – Social Services Provider*

*Education, based on the sky rocketing cost of specialty drugs, those with chronic conditions are pricing group health insurance out of sight. It is simply not affordable and it is because of the minority who suffer from chronic disease. – Community Leader*

#### Nutrition

*Low income individuals living in food deserts without the ability to get to a variety of economical sources of healthy foods. – Public Health Representative*

*Access to proper foods. – Social Services Provider*

*Maintaining a healthier weight, eating healthier and getting the exercise they need. – Public Health Representative*

*Proper nutrition among the poor. – Social Services Provider*

*Diet and exercise. Also, there is a general lack of knowledge and understanding how to identify the warning signs and then how to manage the illness. The biggest challenge is to break the "culture" of fast food and sugary high-carb diets. – Social Services Provider*

*I think the better question is how do we prevent people from becoming diabetic in the first place. We have an over-eating problem in this country and many middle-aged and elderly people in SW Florida who may have been prevented to get diabetes. – Community Leader*

*Overwhelming food everywhere, cheapest and the worst is poor nutritional content. Addictive nature of sugar and wheat products. Sedentary, lack of meal planning. Lack of motivational interviewing techniques to change eating habits. – Physician*

*Lack of trained nutritionists. – Public Health Representative*

### **Affordable Care/Services**

*Providers ordering expensive medications without considering most do not have insurance to pay for them. – Public Health Representative*

*More affordable care and courses teaching and aiding patients to care for themselves. – Community Leader*

*Cost of medication. – Community Leader*

*Diabetes and pre-diabetes is an epidemic in Lee County. People are making less money, cannot afford to eat properly. Cannot afford to seek proper medical care and access mental healthcare. – Public Health Representative*

*Underdiagnosed diabetes in lower socioeconomic populations. Primary care with limited access to follow up appropriately. – Other Health Provider*

*Cost of insulin. Cost of testing strips. Lack of communication of doctors to patients when they have pre-diabetes. – Social Services Provider*

*Access to new medications due to cost. – Physician*

*Cost of medications are prohibitive to quality care. – Social Services Provider*

### **Lifestyle**

*I think a lot of people have diabetes due to being overweight. I know several people who would rather eat what they want and take insulin, rather than changing their diets. I think when people are getting diagnosed with diabetes. – Other Health Provider*

*Our community is overweight, despite multiple community events to encourage walking and biking and healthy lifestyles. Healthy Lee is an organization that helps to encourage people. Many just lack the initiative and funds to purchase fresh vegetables. – Other Health Provider*

*Not taking care of themselves. Not controlling their diet. Not doing enough exercise. Not enough education. – Community Leader*

*Sedentary population with obesity, higher rates than desired. – Social Services Provider*

*Inactivity and overeating. Healthy food and low-carb diets are more expensive with emphasis on proteins, vegetables and better oils. Restaurant portions are huge and that encourages unhealthy eating. Age-related weight gain/disability. – Community Leader*

*Obesity which relates to diabetes and lack of opportunity for outdoor activities. – Social Services Provider*

*Significant number of very good restaurants, but not extensive menus for diabetics. Six months out of the year, it is a challenge to get appropriate levels of outdoor exercise. – Other Health Provider*

### **Disease Management**

*Uninsured receiving quality follow-up and education. – Public Health Representative*

*Understanding how to control or eliminate their issues. Additionally, the cost of treatment is a barrier for some. – Other Health Provider*

*Controlling the disease, disease management. Supplies and costs associated with disease. Nutrition and food sources. – Social Services Provider*

*Lack of available treatment options. – Community Leader*

*Follow up and community services. – Physician*

*Diet training. I have been a patient of Lee Memorial doctors for years with type II. Instead of sending/recommending a class or dietitian, they gave a handout. Biggest issue is diet. Biggest problem is*

*absence of education about a proper diet. – Social Services Provider*

*Ability to afford food for healthy diets, patient education/understanding of their disease, patient engagement, prices of newer drugs are not affordable for our population. – Physician*

#### **Prevalence/Incidence**

*Large number of undiagnosed diabetics, larger number of pre-diabetics/overweight people. – Social Services Provider*

*The percentage of our workforce that is diabetic or pre-diabetic. – Community Leader*

#### **Aging Population**

*Age-related onset is very common to the area. Current medications that have become available to assist in managing the disease are too costly for many. – Community Leader*

*Aging population. – Social Services Provider*

## Kidney Disease

### 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.

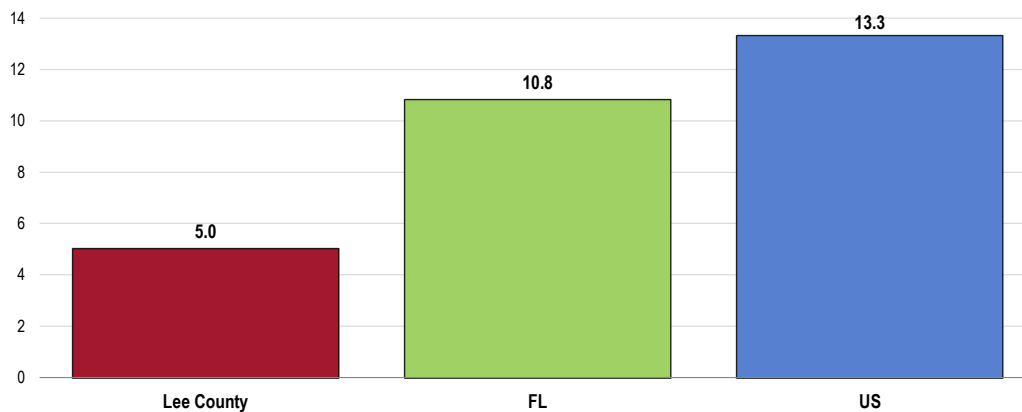
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Age-Adjusted Kidney Disease Deaths

Between 2013 and 2015 there was an annual average age-adjusted kidney disease mortality rate of 5.0 deaths per 100,000 population in Lee County.

- Considerably more favorable than the rates found statewide and nationally.

**Kidney Disease: Age-Adjusted Mortality**  
(2013-2015 Annual Average Deaths per 100,000 Population)

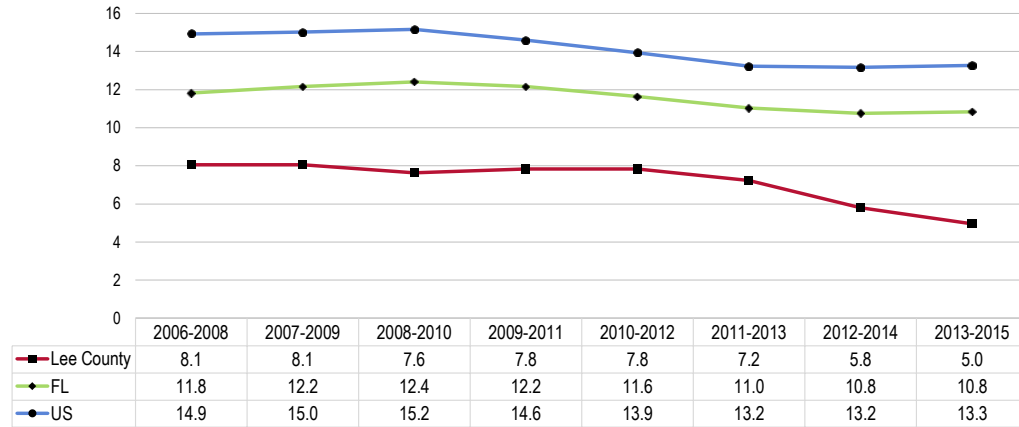


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.

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.

- TREND: The death rate has decreased over the past decade in Lee County.

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



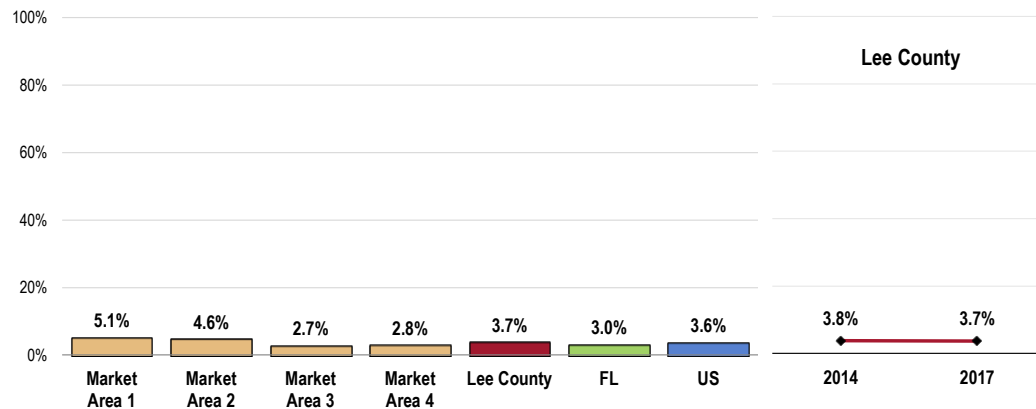
Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.  
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification 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 3.7% of Lee County adults report having been diagnosed with kidney disease.

- Similar to the state and national proportions.
- Statistically similar by Market Area.
- TREND: Statistically unchanged since 2014.

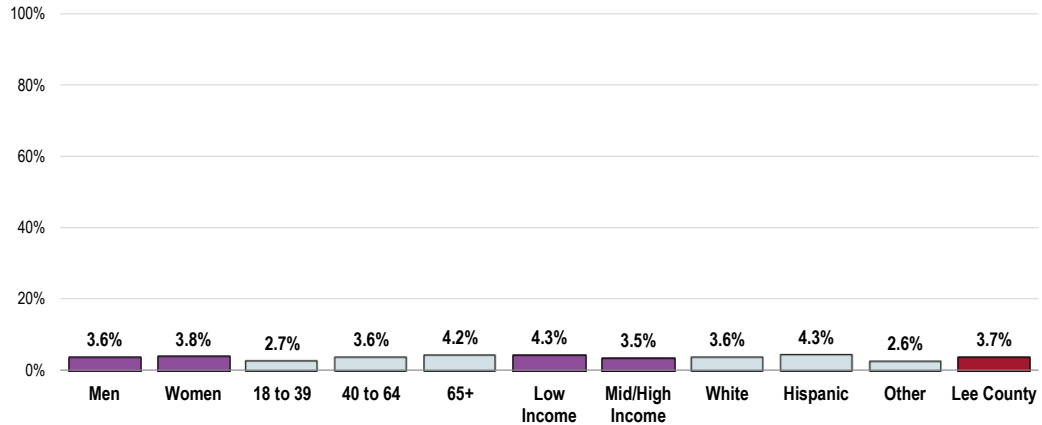
### Prevalence of Kidney Disease



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 32]  
 • 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.  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

- The prevalence of kidney disease is statistically similar within the following population segments.

### Prevalence of Kidney Disease (Lee County, 2017)

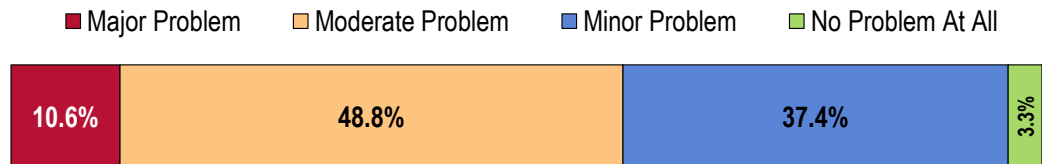


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 32]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### Key Informant Input: Kidney Disease

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

### Perceptions of Chronic Kidney Disease as a Problem in the Community (Key Informants, 2017)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

## Top Concerns

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

### Access to Care/Services

*Access for uninsured patients very difficult for renal problems. – Physician*

*Services are difficult to access for uninsured population. – Other Health Provider*

*Little access other than LHS for indigent dialysis. – Physician*

*Our focus is transportation. We take many clients to dialysis within the county. Some appear to travel longer distances to facilities, passing facilities. Possibly coordination of client address and selected dialysis center would reduce travel time. – Social Services Provider*

*Limited providers. – Other Health Provider*

### Co-Occurrences

*Many people have this condition as a complication of diabetes and hypertension. – Physician*

*Many clients have kidney disease, but they cannot afford to eat properly or take care of themselves to prevent further issues. In addition, many have comorbidities such as visual complications and cannot afford care. – Public Health Representative*

*Diabetes and affordable care for diabetic medications. – Social Services Provider*

### Education/Diagnosis

*Difficulty diagnosing. – Social Services Provider*

*Many people in our area are not aware of what to look for if they may be having this problem. – Community Leader*

### Prevalence/Incidence

*High number of patients with the condition; cost of treatment. – Other Health Provider*

*The increase of diabetics and need for dialysis. – Social Services Provider*

## Potentially Disabling Conditions

### About Arthritis, Osteoporosis & Chronic Back Conditions

There are more than 100 types of arthritis. Arthritis commonly occurs with other chronic conditions, such as diabetes, heart disease, and obesity. Interventions to treat the pain and reduce the functional limitations from arthritis are important, and may also enable people with these other chronic conditions to be more physically active. Arthritis affects 1 in 5 adults and continues to be the most common cause of disability. It costs more than \$128 billion per year. All of the human and economic costs are projected to increase over time as the population ages. There are interventions that can reduce arthritis pain and functional limitations, but they remain underused. These include: increased physical activity; self-management education; and weight loss among overweight/obese adults.

Osteoporosis is a disease marked by reduced bone strength leading to an increased risk of fractures (broken bones). In the United States, an estimated 5.3 million people age 50 years and older have osteoporosis. Most of these people are women, but about 0.8 million are men. Just over 34 million more people, including 12 million men, have low bone mass, which puts them at increased risk for developing osteoporosis. Half of all women and as many as 1 in 4 men age 50 years and older will have an osteoporosis-related fracture in their lifetime.

Chronic back pain is common, costly, and potentially disabling. About 80% of Americans experience low back pain in their lifetime. It is estimated that each year:

- 15%-20% of the population develop protracted back pain.
- 2-8% have chronic back pain (pain that lasts more than 3 months).
- 3-4% of the population is temporarily disabled due to back pain.
- 1% of the working-age population is disabled completely and permanently as a result of low back pain.

Americans spend at least \$50 billion each year on low back pain. Low back pain is the:

- 2<sup>nd</sup> leading cause of lost work time (after the common cold).
- 3<sup>rd</sup> most common reason to undergo a surgical procedure.
- 5<sup>th</sup> most frequent cause of hospitalization.

Arthritis, osteoporosis, and chronic back conditions all have major effects on quality of life, the ability to work, and basic activities of daily living.

- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### **Arthritis, Osteoporosis, & Chronic Back Conditions**

**Nearly two-fifths of Lee County adults age 50 and older (38.2%) report suffering from arthritis or rheumatism.**

- Less favorable than that found nationwide.
- Least favorable in Market Area 1.

**A total of 13.4% of Lee County adults age 50 and older have osteoporosis.**

- Less favorable than that found nationwide.
- Fails to satisfy the Healthy People 2020 target of 5.3% or lower.
- Similar by Market Area.

#### RELATED ISSUE:

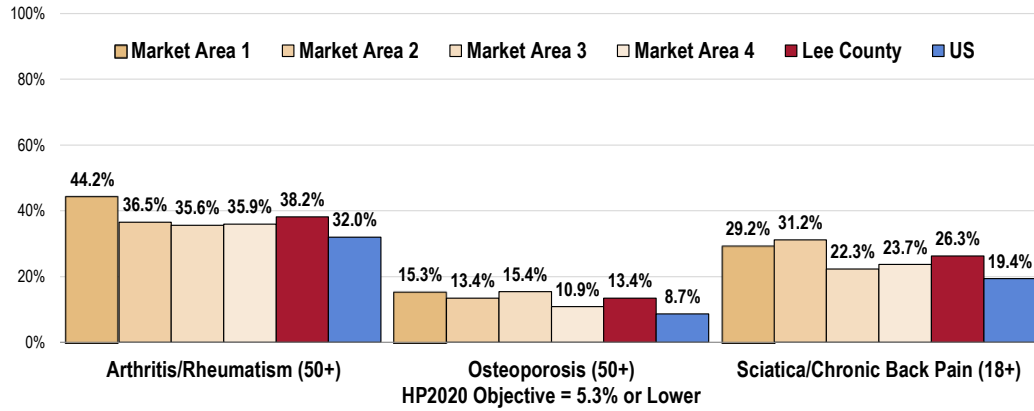
See also *Activity Limitations* in the **General Health Status** section of this report.



A total of 26.3% of Lee County adults (18 and older) suffer from chronic back pain or sciatica.

- Less favorable than that found nationwide.
- Statistically similar by Market Area.

### Prevalence of Potentially Disabling Conditions



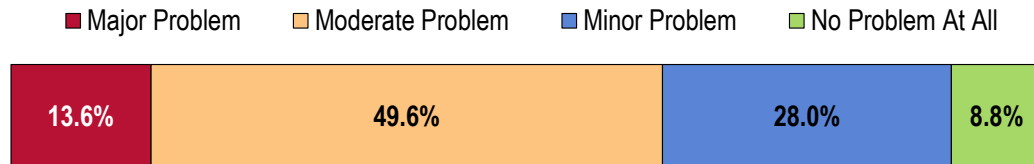
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 28, 161-162]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AOCBC-10]  
 Notes: • The sciatica indicator reflects the total sample of respondents; the arthritis and osteoporosis columns reflect adults age 50+.

### Key Informant Input: Arthritis, Osteoporosis & Chronic Back Conditions

Half of key informants taking part in an online survey characterized *Arthritis, Osteoporosis & Chronic Back Conditions* as a “moderate problem” in the community.

### Perceptions of Arthritis/Osteoporosis/Back Conditions as a Problem in the Community

(Key Informants, 2017)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

## Top Concerns

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

### Aging Population

*Aging population. – Social Services Provider*

*We have a very large number of elderly people with arthritic conditions. – Community Leader*

*Age of the population. – Community Leader*

*Aging population and disability, loss of work and quality of life. – Public Health Representative*

*Given the average age of the Lee County population, it is inevitable that this would present a major problem. – Community Leader*

*Age-related condition. Our community is heavily geriatric. – Community Leader*

*Age of the population. – Physician*

*Large elderly population. – Public Health Representative*

*Due to the numbers of elders in our community, the waiting list for frail, low-income elders who need in-home care for any potential elder-type condition is a major problem. – Social Services Provider*

### Prevalence/Incidence

*Many people complain about these issues as affecting their ability to work and provide for themselves and so is one of the main reasons why they seek disability. – Physician*

*It is a very common condition and most in the community never receive the proper treatment. It's treated as a pain issue and they just seek out medication for the pain until they fall, break or fracture a bone. – Public Health Representative*

### Access to Care/Services

*If you have no resources or insurance access for this care, it is very difficult to obtain. In addition, pain medications to treat these conditions. Impossible to get in without a specialist's intervention. – Public Health Representative*

*Access to orthopedic surgeons is difficult and limited for patients without health insurance. – Physician*

### Health Education

*Lack of knowledge and understanding of why and how it occurs and/or can be prevented or treated. People are not being educated on these subjects, and many of the elderly and caregivers are also uneducated on the subjects. – Community Leader*

### Work Related

*Overuse and abuse, mainly at work. Even at home and obesity. – Physician*

## Vision & Hearing Impairment

### About Vision

Vision is an essential part of everyday life, influencing how Americans of all ages learn, communicate, work, play, and interact with the world. Yet millions of Americans live with visual impairment, and many more remain at risk for eye disease and preventable eye injury.

The eyes are an important, but often overlooked, part of overall health. Despite the preventable nature of some vision impairments, many people do not receive recommended screenings and exams. A visit to an eye care professional for a comprehensive dilated eye exam can help to detect common vision problems and eye diseases, including diabetic retinopathy, glaucoma, cataract, and age-related macular degeneration.

These common vision problems often have no early warning signs. If a problem is detected, an eye care professional can prescribe corrective eyewear, medicine, or surgery to minimize vision loss and help a person see his or her best.

Healthy vision can help to ensure a healthy and active lifestyle well into a person's later years. Educating and engaging families, communities, and the nation is critical to ensuring that people have the information, resources, and tools needed for good eye health.

- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### About Hearing & Other Sensory or Communication Disorders

An impaired ability to communicate with others or maintain good balance can lead many people to feel socially isolated, have unmet health needs, have limited success in school or on the job. Communication and other sensory processes contribute to our overall health and well-being. Protecting these processes is critical, particularly for people whose age, race, ethnicity, gender, occupation, genetic background, or health status places them at increased risk.

Many factors influence the numbers of Americans who are diagnosed and treated for hearing and other sensory or communication disorders, such as social determinants (social and economic standings, age of diagnosis, cost and stigma of wearing a hearing aid, and unhealthy lifestyle choices). In addition, biological causes of hearing loss and other sensory or communication disorders include: genetics; viral or bacterial infections; sensitivity to certain drugs or medications; injury; and aging.

As the nation's population ages and survival rates for medically fragile infants and for people with severe injuries and acquired diseases improve, the prevalence of sensory and communication disorders is expected to rise.

- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Vision and Hearing Trouble

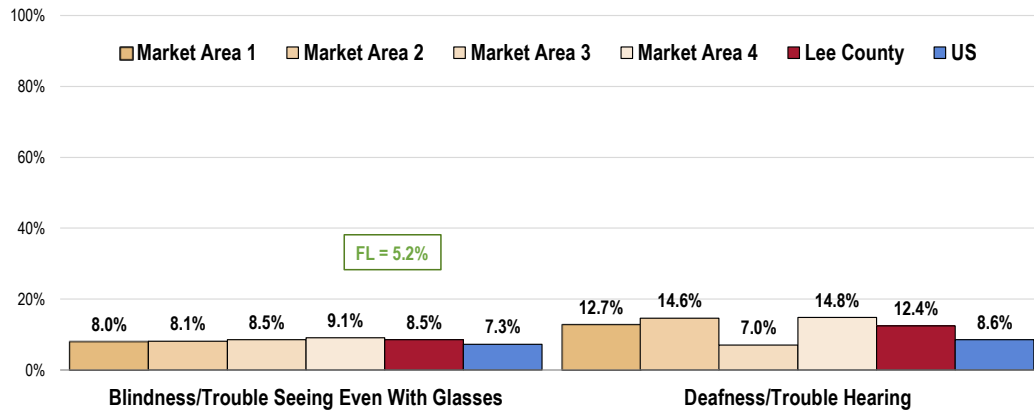
**A total of 8.5% of Lee County adults are blind or have trouble seeing even when wearing corrective lenses, and 12.4% are deaf or have trouble hearing.**

- The proportion of Lee County adults with vision trouble is worse than reported across Florida but similar to national findings.
- Deafness or trouble hearing in Lee County is more prevalent than found nationally; however, it is lower in Market Area 3.

#### RELATED ISSUE:

See also *Vision Care* in the *Access to Health Services* section of this report.

### Prevalence of Blindness/Deafness



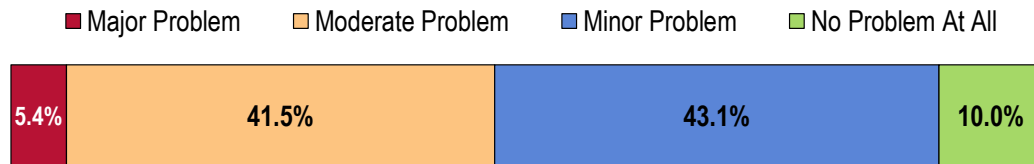
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 25-26]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2015 Florida data.

Notes: • Reflects the total sample of respondents.

### Key Informant Input: Vision & Hearing

A plurality of key informants taking part in an online survey characterized *Vision & Hearing* as a “minor problem” in the community.

### Perceptions of Vision and Hearing as a Problem in the Community (Key Informants, 2017)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

### Top Concerns

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

#### Aging Population

- Aging population. – Social Services Provider*
- We have a large elderly population with every possible variation of hearing and sight issues. – Community Leader*
- Disability, and much support is needed for vision and hearing loss in adults, not covered by insurance. – Public Health Representative*
- I just think it's a problem because we have so many older adults. – Other Health Provider*
- The Elder Helpline and United Way 211 can refer elders to potential help as long as elders/caregivers/family want the help and can afford it. When answering the first question, I am indicating due to the numbers in need it can be a major program. – Social Services Provider*

### *Access to Care/Services*

*Access is very limited and lack of resources. Lions Eye Clinic is overwhelmed. – Public Health Representative*

#### **Focus Group Findings: Chronic Disease**

Discussion regarding chronic disease in the follow-up focus groups covered the following:

- **Prevalence** (COPD, diabetes, addiction, congestive heart failure)
- **Risk factors** (comorbidities, obesity, medications)
- **Education** (self-management, effectiveness, reducing readmissions)

*For a more detailed description of focus group discussions, along with supporting quotes, please see the Appendix provided at the end of this report.*

## 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.

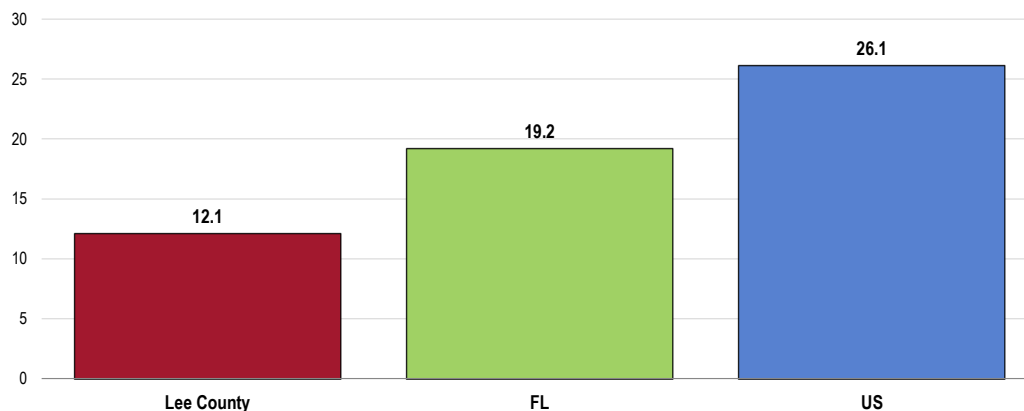
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Age-Adjusted Alzheimer's Disease Deaths

Between 2013 and 2015, there was an annual average age-adjusted Alzheimer's disease mortality rate of 12.1 deaths per 100,000 population in Lee County.

- More favorable than the statewide and national rates.

### Alzheimer's Disease: Age-Adjusted Mortality (2013-2015 Annual Average Deaths per 100,000 Population)

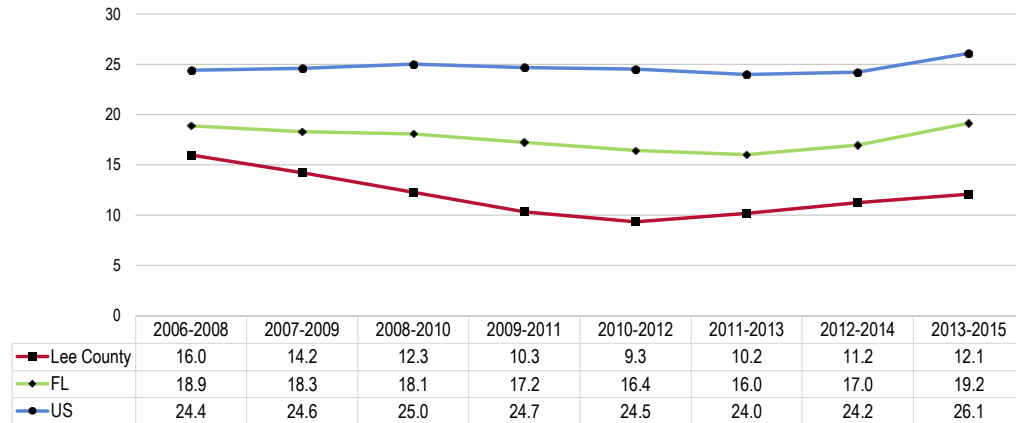


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.

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.

- **TREND:** Following declines, the Alzheimer's disease mortality rate in Lee County has increased steadily in recent years.

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



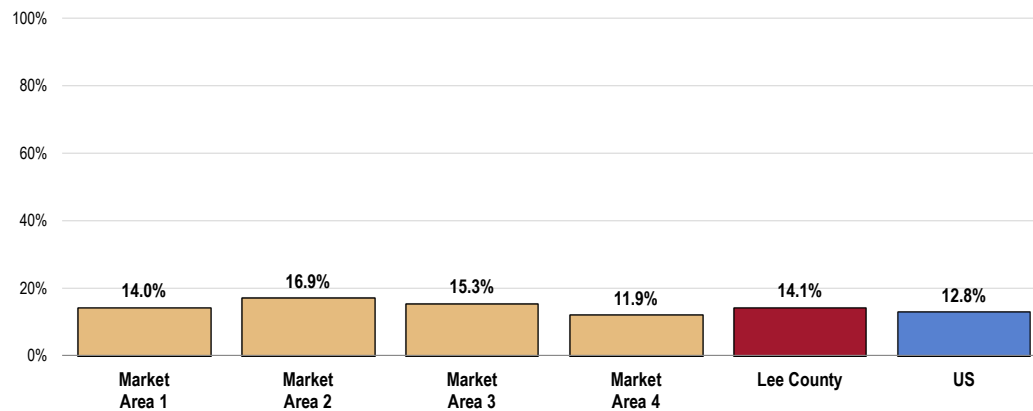
Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.  
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification 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 14.1% of adults age 45 and older report experiencing confusion or memory loss in the past year that is happening more often or getting worse.

- Comparable to the US prevalence.
- Statistically comparable among the four Market Areas.

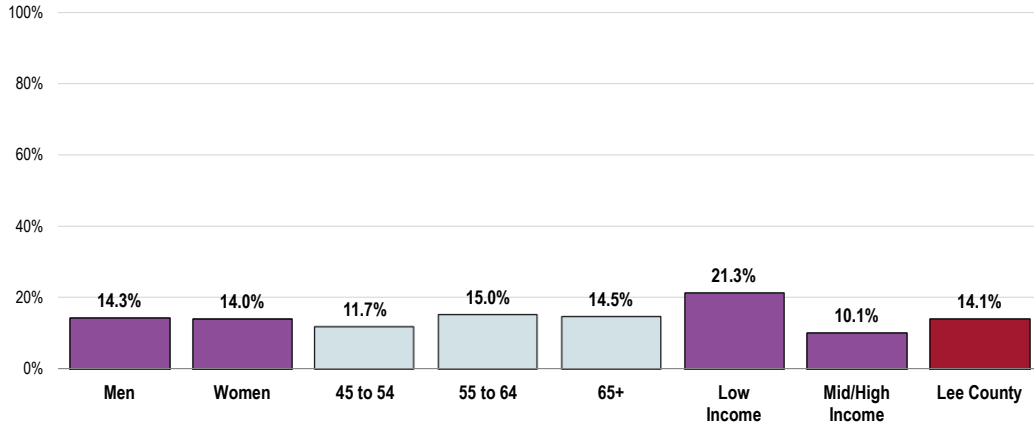
### Experienced Increasing Confusion/Memory Loss in Past Year (Among Respondents Age 45 and Older)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 127]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of those respondents age 45 and older.

- A higher prevalence of progressive confusion/memory loss is reported among adults with low incomes (Note the 21.3% responding affirmatively).

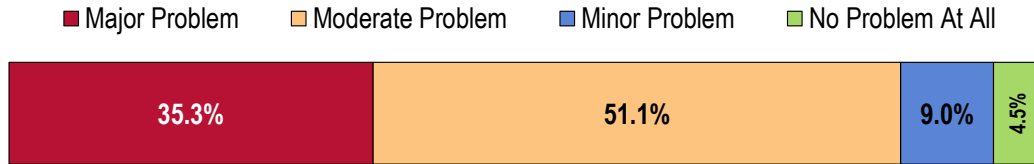
**Experienced Increasing Confusion/Memory Loss in Past Year**  
(Among Respondents Age 45 and Older; Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 127]  
 Notes: • Asked of those respondents age 45 and older.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

**Key Informant Input: Dementias, Including Alzheimer's Disease**  
 Key informants taking part in an online survey are most likely to consider *Dementias, Including Alzheimer's Disease* as a "moderate problem" in the community.

**Perceptions of Dementia/Alzheimer's Disease as a Problem in the Community**  
(Key Informants, 2017)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

**Top Concerns**

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

**Aging Population**

*In Lee County, we have a lot of elder people. We have senior living facilities geared towards these issues, but I think maybe we need to do more to reverse the aging process. More educational talks and brain clinic games etc. – Other Health Provider*



*Age of our population and our regional Memory Clinic/primary care office population. – Physician*  
*The numbers of elders who are aging. The Elder Helpline and United Way 211 can refer elders to potential help as long as elders/caregivers/family want the help and can afford it. – Social Services Provider*

*Age of the population. – Physician*

*Baby boomers are approaching key time when symptoms begin forming. By 2020 an all-time high for elders with dementia issues is expected. Many retirees here in Florida do not have local family and/or local family members needed. – Other Health Provider*

*Due to our senior population as well as there is no standard screening by physicians to catch this and treat it at an early age. – Community Leader*

*Demographics of area, huge senior population. Limited resources. Limited quality skilled nursing facilities. Limited support groups. Access to resources for low income seniors and access for home-bound seniors. – Social Services Provider*

*Older population. – Community Leader*

*Given our aging population, this condition is increasingly prevalent. There are very limited resources available in the community. The funding to support this work is not sufficient to meet the needs. Lack of funding is a critical barrier. – Other Health Provider*

*Age related. We have a geriatric population. – Community Leader*

*Demographics of our community. – Community Leader*

*Based on the demographics, statistically speaking, it must be an issue in SE/SW Florida. Many care facilities are limited by insurance as to how many beds they can have in specialty insurance programs. – Community Leader*

*Lots of elderly equals lots of patients. – Social Services Provider*

*A higher than average population of older adults increases the number of cases of dementia and Alzheimer's disease. With the "silver tsunami" our community may not have enough resources to meet the increased need. – Community Leader*

*There is a large year-round and seasonal elderly demographic in Lee County. Alzheimer's patients and families can be very isolated and unaware of available services and how to access what is available. – Social Services Provider*

*We have a higher proportion of elderly residents, seasonal and year-round, than national, state and almost all parts of Southwest Florida. – Community Leader*

*We have a very large elderly population in the community, many of whom do not have family locally to address their needs when they begin to show signs of dementia or Alzheimer's. – Community Leader*

*Aging population. – Social Services Provider*

*The age of our population and the increasing diagnosis. – Social Services Provider*

### **Access to Care/Services**

*There is an insufficient supply of practitioners, mental health appears to be underfunded, and our system of care is in need of a re-design. – Community Leader*

*Access to care for people with this diagnosis is difficult. – Other Health Provider*

*Not enough qualified neurologists and psychologists to treat it. Not enough support services for patients and their families suffering from this horrible illness. – Physician*

*Lack of Medicaid beds. Large population with dementia. – Social Services Provider*

*There is a service gap between assisted living memory care and when people have to go to nursing homes. Gap causes inappropriate care/services and causes extreme stress and hardship for caregiver. – Community Leader*

### **Affordable Care/Services**

*Many residents are affected with this disease and cannot afford to pay for assistance to help them care for their loved ones. Support is limited. – Public Health Representative*

*High copay fees for access to providers. – Other Health Provider*

*Lack of resources available at an affordable cost. – Community Leader*

*Once advanced, the level of care that these patients require is often not reimbursed for the family providing care, which eventually leads to the need for expensive inpatient care. Families often can't afford. – Social Services Provider*

*Affordability of care; families unable to care for them in the home; and denial. – Public Health Representative*

*I know of persons who have dementia and are unable to afford the cost of dementia care, so they are living at home. My concern is for their safety without individual care. – Social Services Provider*

### **Impact on Families/Caregivers**

*So many families are dealing with a family member dealing with dementia or Alzheimer's. More and more it seems more families are struggling to care for a family member suffering from these afflictions. – Public Health Representative*

*Debilitation and effects on family, community friends, and community resources. – Public Health Representative*

### **Prevalence/Incidence**

*We have more than our share of people that fit this demographic, and it is difficult to deal with and there are not enough quality facilities or well-trained, well-paid staff to do so. We can do better! – Other Health Provider*

*More than 500,000 Alzheimer's patients reside in Florida. Alzheimer's patients require 24-hour care. Largely, these patients are being misdiagnosed and not receiving that required service, which ultimately leaves them at risk. – Community Leader*

### **Diagnosis/Treatment**

*Unrecognized, fear of admitting the presence of disease. Also not enough services available to those without insurance coverage. – Physician*

*Underdiagnosed and undertreated. Not utilizing available resources and research as well as they could be. – Physician*

### **Health Education**

*Lack of education as to what it is and how it's treated. Many of the community believe these diseases simply come with old age. I believe it would be more preventable if people knew things they could do in the early years to prevent or delay its onset. – Community Leader*

### **Focus Group Findings: Dementia**

One issue that participants in the follow-up focus groups feel will persist is dementia, and discussion covered the following issues:

- **Prevalence** (aging population)
- **Financial and emotional toll** (end-of-life care, emotional toll on families/spouses)
- **Education** (for older adults and their families about dementia and end-of-life issues, also education for healthcare workers)

*For a more detailed description of focus group discussions, along with supporting quotes, please see the Appendix provided at the end of this report.*

## 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](http://www.healthypeople.gov))

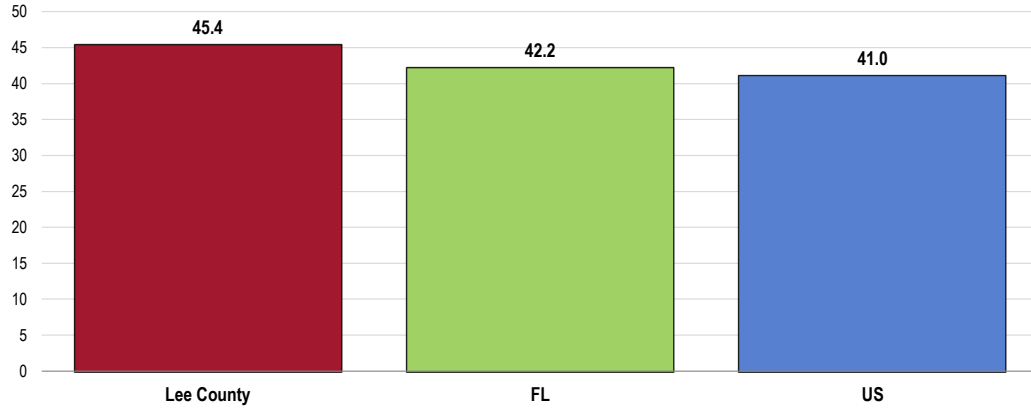
## Unintentional Injury

### Age-Adjusted Unintentional Injury Deaths

**Between 2013 and 2015, there was an annual average age-adjusted unintentional injury mortality rate of 45.4 deaths per 100,000 population in Lee County.**

- Less favorable than the Florida and national rates.
- Fails to satisfy the Healthy People 2020 target (36.4 or lower).

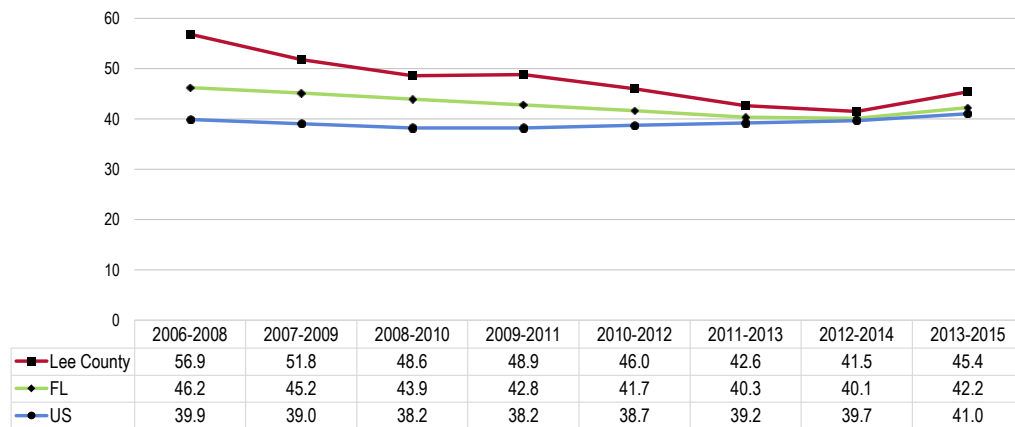
### Unintentional Injuries: Age-Adjusted Mortality (2013-2015 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 36.4 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.
  - 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.

- **TREND:** Despite a slight uptick in the latest reporting period, the unintentional injury mortality has generally declined over the past decade.

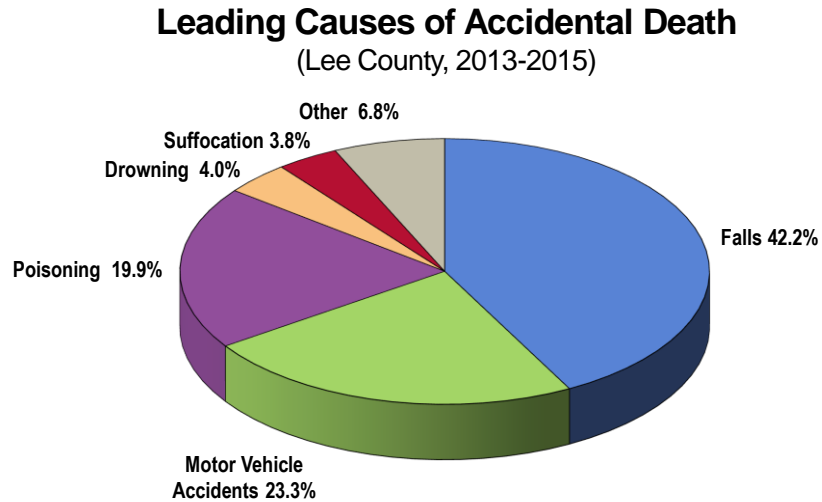
### Unintentional Injuries: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 36.4 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.
  - 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.

### Leading Causes of Accidental Death

Falls, motor vehicle accidents, poisoning (including accidental drug overdose), drowning, and suffocation accounted for most accidental deaths in Lee County between 2013 and 2015.



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.

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

### Selected Injury Deaths

The following chart outlines mortality rates for drug-induced deaths (both intentional and unintentional overdoses), motor vehicle crashes, and falls (among adults age 65 and older).

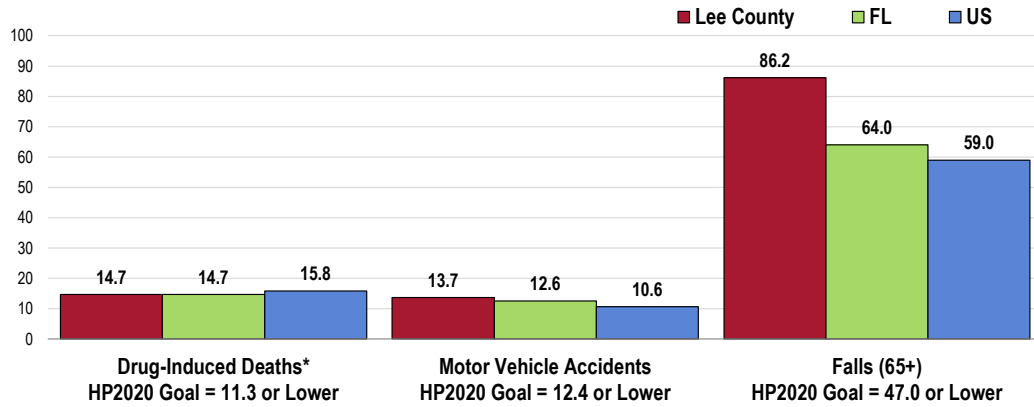
**Lee County annual average age-adjusted mortality rates are worse than US rates for:**

- Motor vehicle accidents.
- Falls.

**Lee County mortality rates are worse than state rates for:**

- Motor vehicle accidents.
- Falls.

### Select Injury Death Rates (By Cause of Death; 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 March 2017.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-13.1, IVP-23.2, 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.
- \*Drug-induced deaths include both intentional and unintentional drug overdoses.

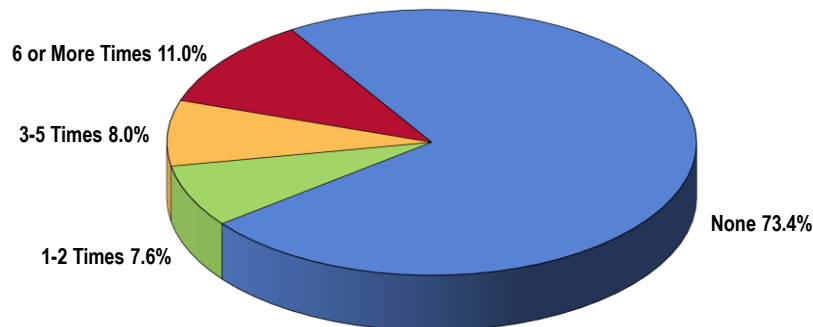
### Motor Vehicle Safety

#### Distracted Driving

Most Lee County adults (73.4%) report that they did not text while driving a vehicle at any time in the past month.

- On the other hand, 26.6% texted while driving a vehicle at least once in the past month (including 11.0% who texted 6+ times in the past month while operating a vehicle).

### Frequency of Texting While Driving in the Past Month (Lee County, 2017)



Sources: 

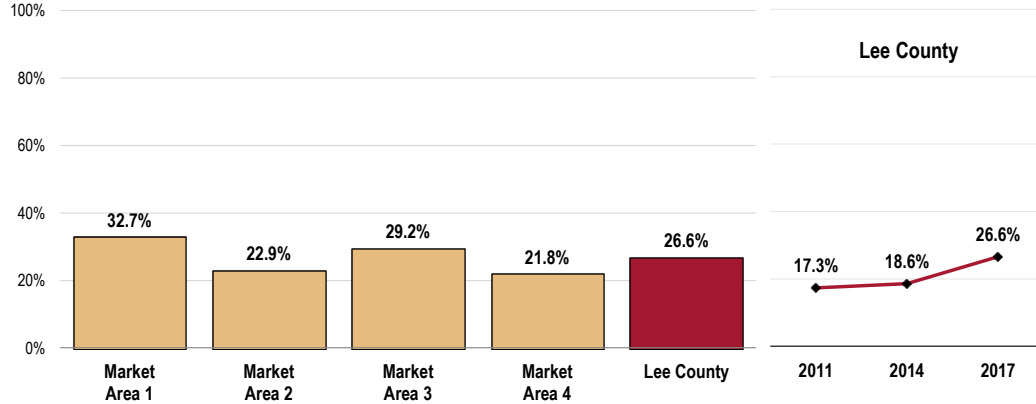
- 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 310]

Notes: 

- Asked of all respondents.
- Texting while driving includes sending or reading a text message or e-mail while driving and the vehicle was moving.

- Texting while driving is highest in Market Area 1 and lowest in Market Area 4.
- TREND: Texting while driving has increased significantly since 2011.

### Texted While Driving in the Past Month

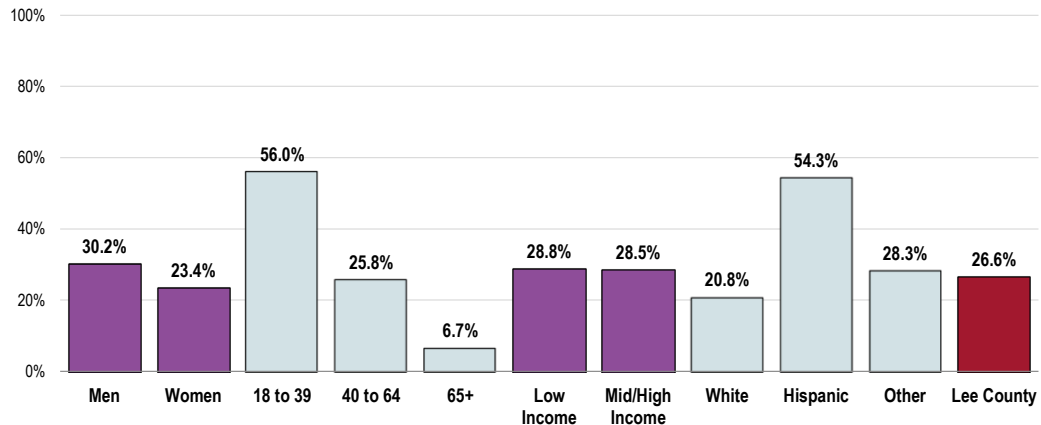


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 310]  
 Notes: • Asked of all respondents.  
 • Texting while driving includes sending or reading a text message or e-mail while driving and the vehicle was moving.

These population segments are more likely to report texting while driving:

- Men.
- Young adults (strong negative correlation with age).
- Hispanics.

### Texted While Driving in the Past Month (Lee County, 2017)



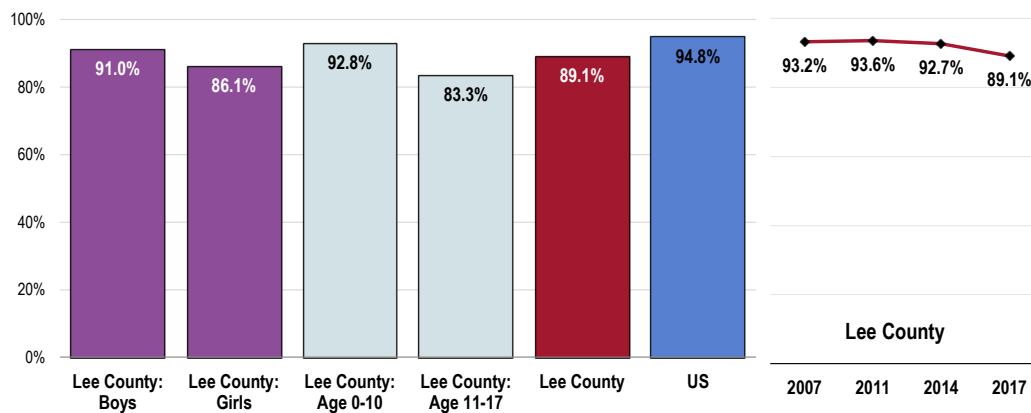
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 310]  
 Notes: • Asked of all respondents.  
 • Texting while driving includes sending or reading a text message or e-mail while driving and the vehicle was moving.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

**Children’s Seat Belt Usage**

**A total of 89.1% 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.**

- Statistically comparable to the US prevalence.
- No statistical difference by child’s age or gender.
- TREND: The change in prevalence over time is not statistically significant.

**Child “Always” Wears a Seat Belt or Appropriate Restraint When Riding in a Vehicle**  
(Among Parents of Children Age 0-17)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 321]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents with children 0 to 17 in the household.

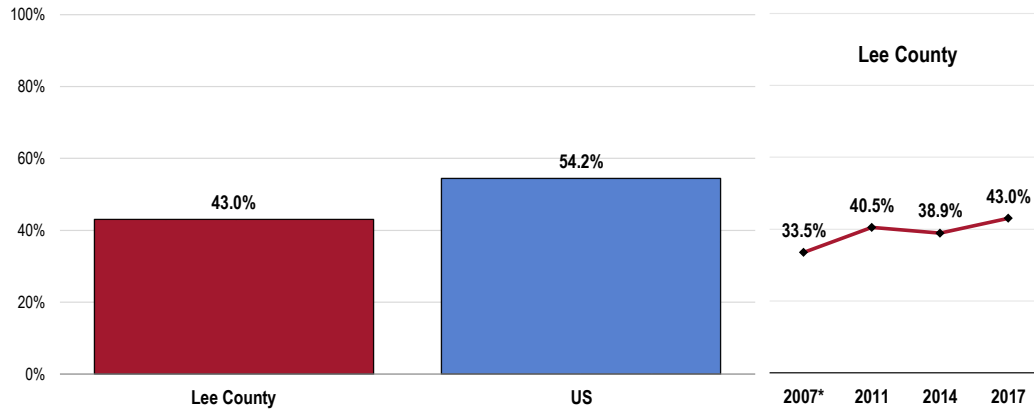
**Bicycle Safety**

**A total of 43.0% of Lee County children age 5 to 17 are reported to “always” wear a helmet when riding a bicycle.**

- Statistically comparable to the national prevalence.
- TREND: Despite a rise in responses, the change since 2007 is not statistically significant.



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



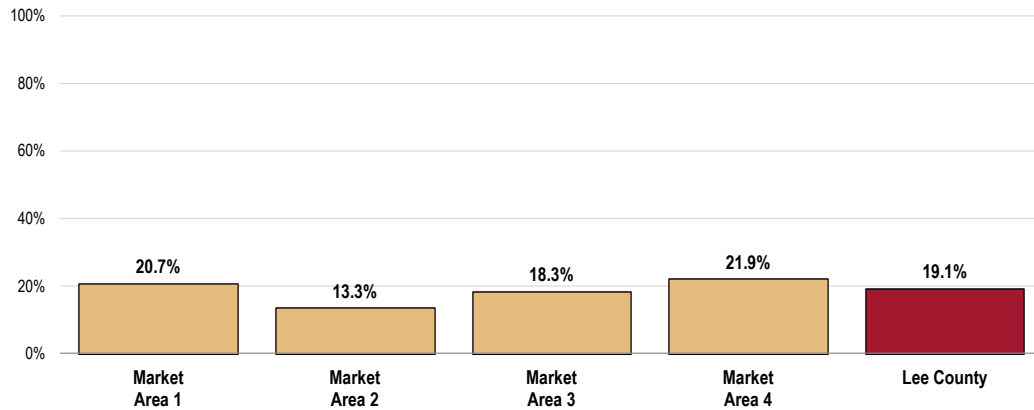
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 320]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents with children 5 to 17 in the household.  
 • \*2007 data reflects children age 5 to 16.

### Sun Safety

A total of 19.1% of Lee County residents “always” wear sunscreen or sunblock when outside on a sunny day for more than one hour.

- This is lowest in Market Area 2.

### Always Wear Sunscreen When Outside on a Sunny Summer Day for More than 1 Hour

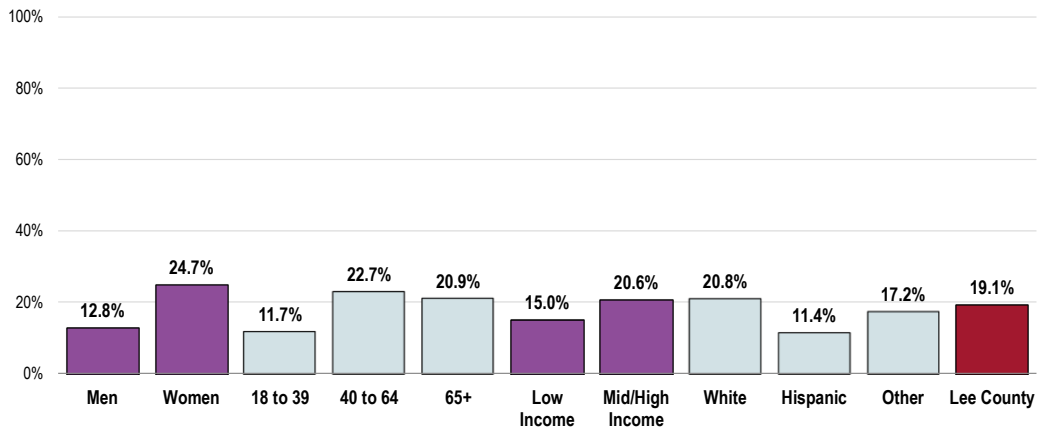


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 307]  
 Notes: • Asked of all respondents.

These populations are less likely to report consistent usage of sunscreen:

- Men.
- Adults age 18 to 39.

### Always Wear Sunscreen When Outside on a Sunny Summer Day for More than 1 Hour (Lee County, 2017)



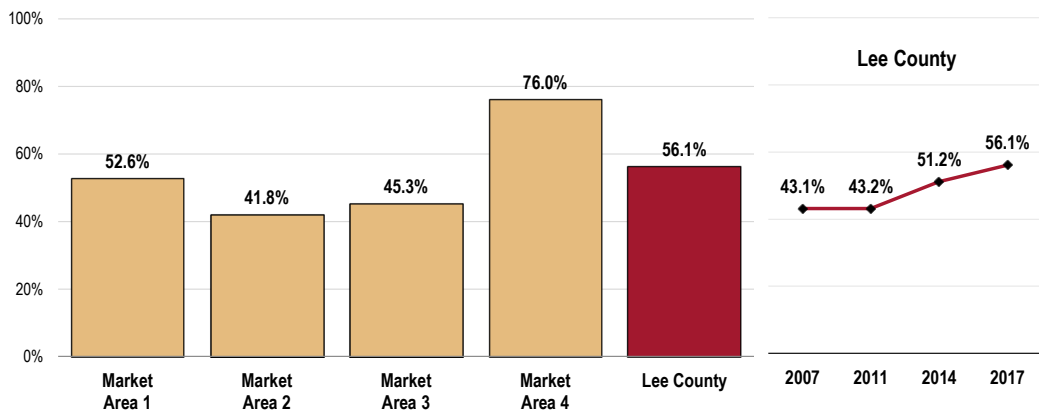
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 307]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### Water Safety

Just over one-half (56.1%) of Lee County residents have a swimming pool available to them, either in their backyard or in their apartment complex.

- Highest in Market Area 4; lowest in Market Areas 2 and 3.
- TREND: Marks a significant increase from previous survey results.

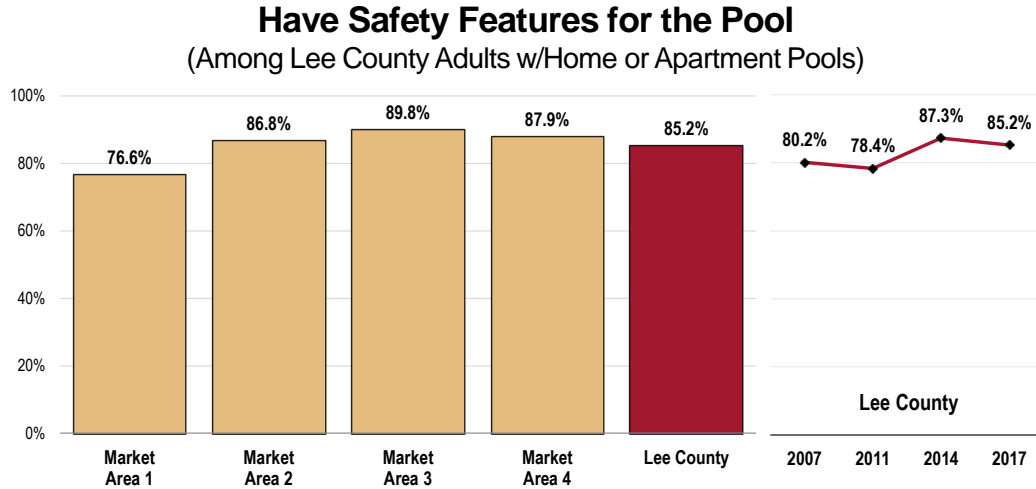
### Have a Swimming Pool at Home or Apartment



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 308]  
 Notes: • Asked of all respondents.

Among those residents with pools, 85.2% indicate that the pool has safety features in place (such as a fence/wall on all four sides of the pool that separates it from the house, a safety pool cover, or alarms/locks on any doors or windows that allow access to the pool).

- Lowest in Market Area 1.
- TREND: Marks a significant improvement since 2007.



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 309]  
 Notes: • Asked of all respondents who have a pool at their home or apartment.

## Falls

### Falls

Each year, an estimated one-third of older adults fall, and the likelihood of falling increases substantially with advancing age. In 2005, a total of 15,802 persons age ≥65 years died as a result of injuries from falls.

Falls are the leading cause of fatal and nonfatal injuries for persons aged ≥65 years ... in 2006, approximately 1.8 million persons aged ≥65 years (nearly 5% of all persons in that age group) sustained some type of recent fall-related injury. 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.

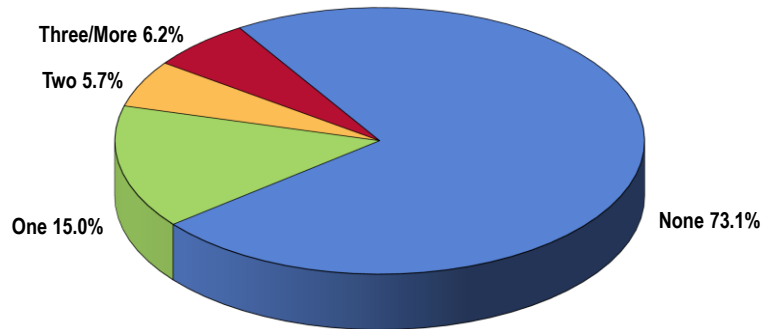
In addition, fall-related medical treatment places a burden on US healthcare services. In 2000, direct medical costs for fall-related injuries totaled approximately \$19 billion. A recent study determined that 31.8% of older adults who sustained a fall-related injury required help with activities of daily living as a result, and among them, 58.5% were expected to require help for at least 6 months.

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

Among surveyed Lee County adults age 45 and older, 26.9% fell at least once in the past year, including 6.2% who fell three or more times.

### Number of Falls in Past 12 Months (Among Adults Age 45 and Older; Lee County, 2017)

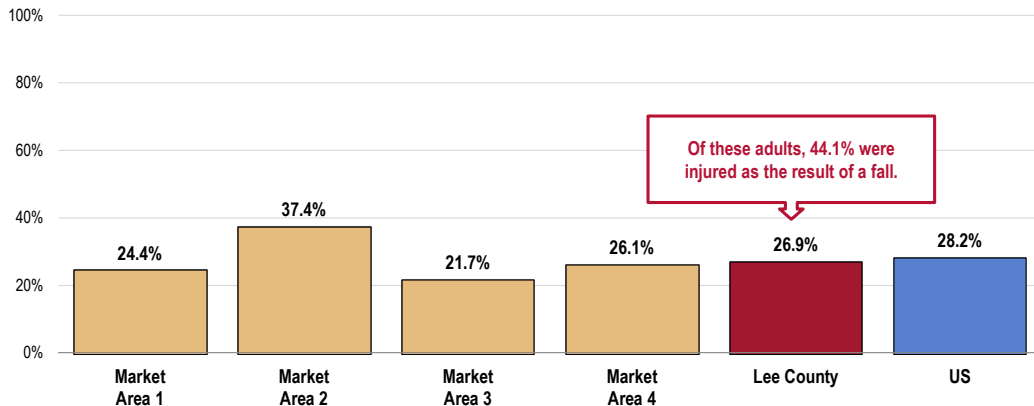


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 125]  
 Notes: • Asked of all respondents age 45+.

- The prevalence of adults age 45+ who fell at least once in the past year is similar to the national proportion.
- Falls were most prevalent in Market Area 2.

Among those who fell in the past year, 44.1% were injured as a result of the fall.

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

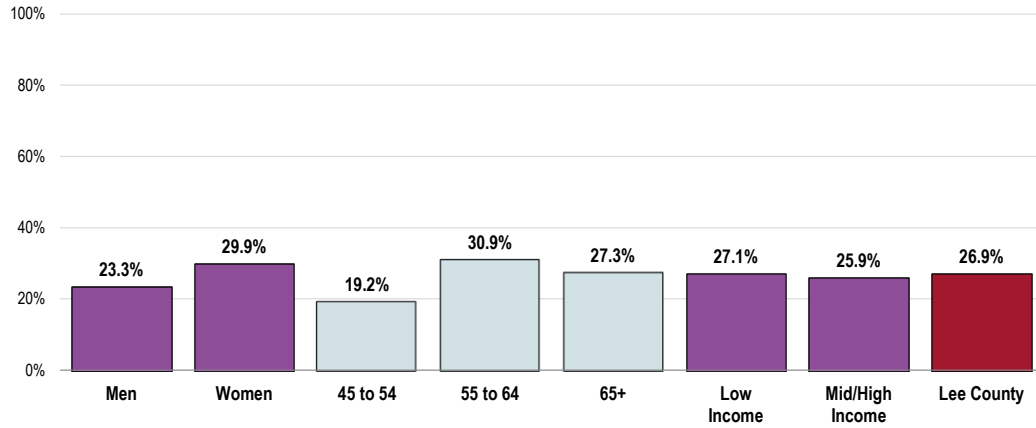


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 125-126]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of those respondents age 45 and older.

These population groups (age 45+) were more likely to have fallen in the past year:

- Women.
- Adults age 55 and older.

**Fell One or More Times in the Past Year**  
(Among Respondents Age 45 and Older; Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 125]  
 Notes: • Asked of those respondents age 45 and older.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

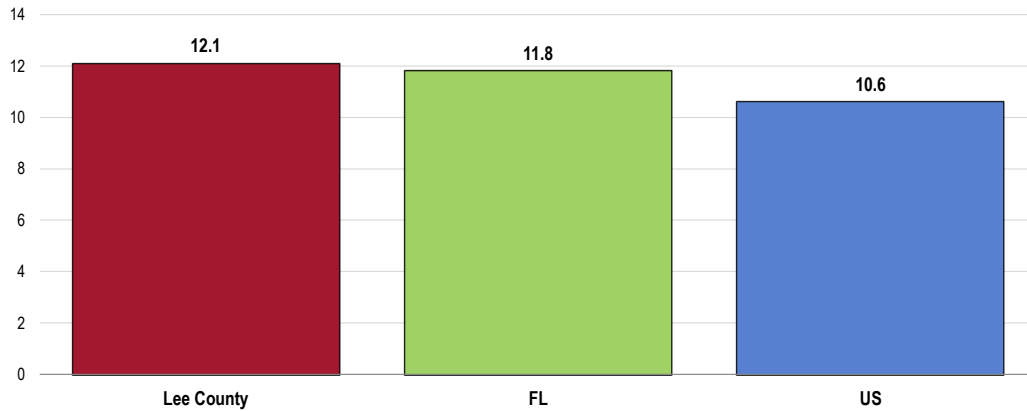
**Firearm Safety**

*Age-Adjusted Firearm-Related Deaths*

**Between 2013 and 2015, there was an annual average age-adjusted rate of 12.1 deaths per 100,000 population due to firearms in Lee County.**

- Similar to statewide findings.
- Higher than found nationally.
- Fails to satisfy the Healthy People 2020 objective (9.3 or lower).

## Firearms-Related Deaths: Age-Adjusted Mortality (2013-2015 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 9.3 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 March 2017.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-30]

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.

## Intentional Injury (Violence)

### Age-Adjusted Homicide Deaths

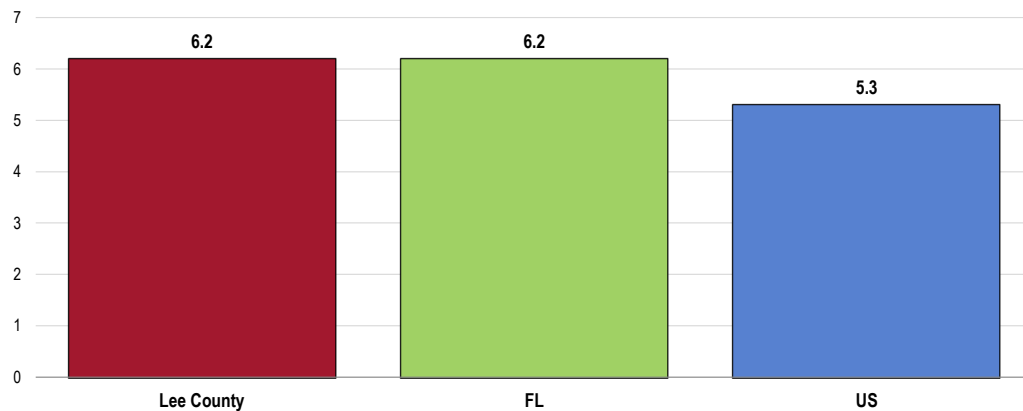
Between 2013 and 2015, there was an annual average age-adjusted homicide rate of 6.2 deaths per 100,000 population in Lee County.

RELATED ISSUE:

See also *Suicide* in the **Mental Health** section of this report.

- Identical to the rate found statewide.
- Less favorable than the national rate.
- Fails to satisfy the Healthy People 2020 target of 5.5 or lower.

## Homicide: Age-Adjusted Mortality (2013-2015 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 5.5 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 March 2017.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-29]

Notes: 

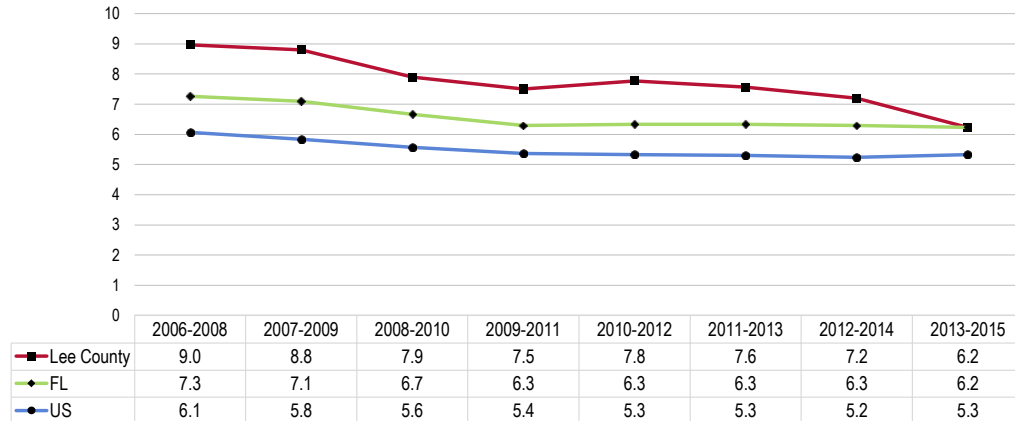
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

- **TREND:** The homicide rate in Lee County has continued to decrease even though the Florida and US rates have leveled off since 2011.

### Homicide: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 5.5 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 March 2017.
  - 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

### Violent Crime Rates

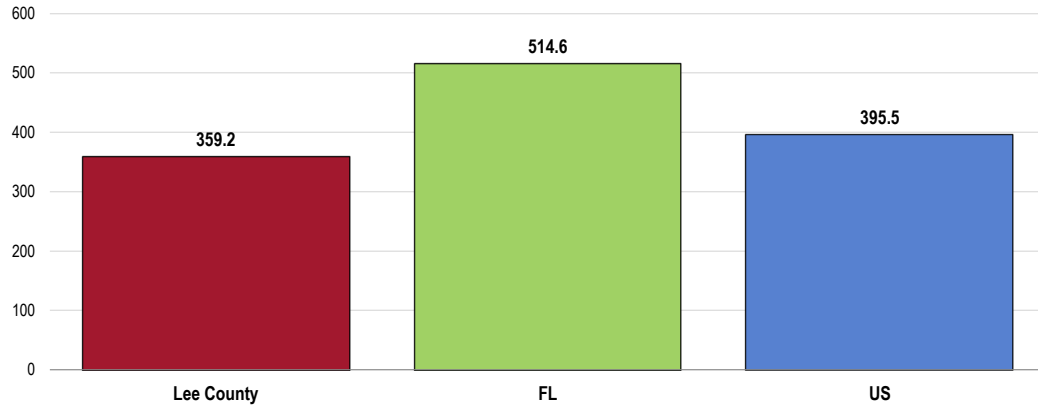
**Between 2010 and 2012, there were a reported 359.2 violent crimes per 100,000 population in Lee County.**

- Lower than the Florida and national rates for the same period.

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 (Rate per 100,000 Population, 2010-2012)



Sources: 

- Federal Bureau of Investigation, FBI Uniform Crime Reports.
- Retrieved March 2017 from Community Commons at <http://www.chna.org>.

Notes: 

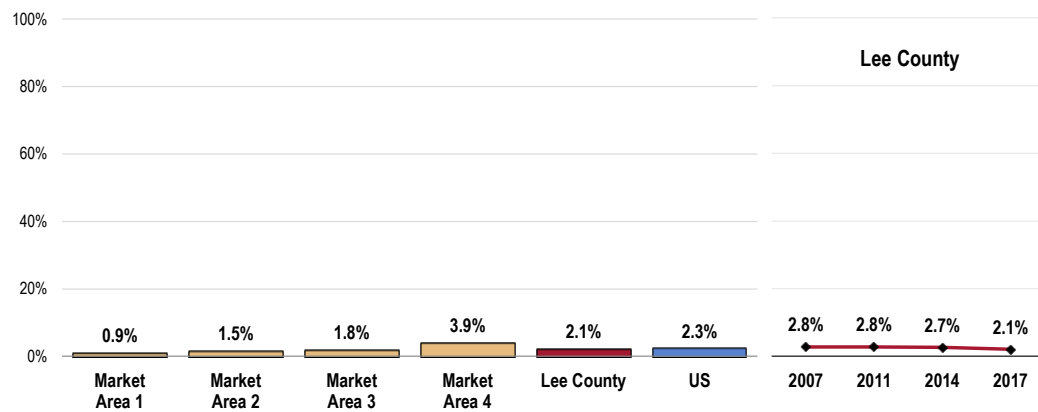
- This indicator reports the rate of violent crime offenses reported by the sheriff's office or county police department per 100,000 residents. Violent crime includes homicide, rape, robbery, and aggravated assault. This indicator is relevant because it assesses community safety.
- Participation by law 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 are not included in the violent crime statistics, but can be obtained from the Uniform Crime Reports Universities and Colleges data tables.

#### Community Violence

**A total of 2.1% of surveyed Lee County adults acknowledge being the victim of a violent crime in the area in the past five years.**

- Similar to national findings.
- Lowest in Market Area 1.
- TREND: Statistically unchanged since 2007.

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



Sources: 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 49]
- 2015 PRC National Health Survey, Professional Research Consultants, Inc.

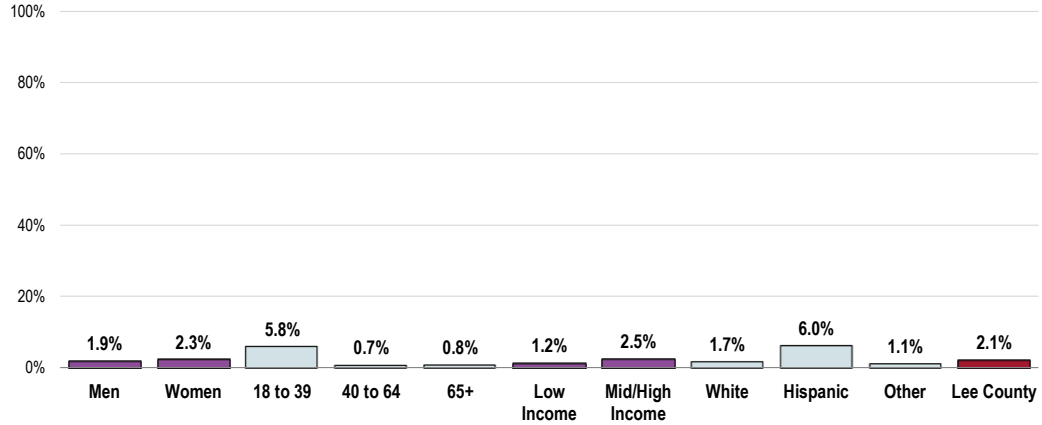
Notes: 

- Asked of all respondents.



- Reports of violence are higher among adults age 18 to 39.

### Victim of a Violent Crime in the Past Five Years (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 49]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

#### Intimate Partner Violence

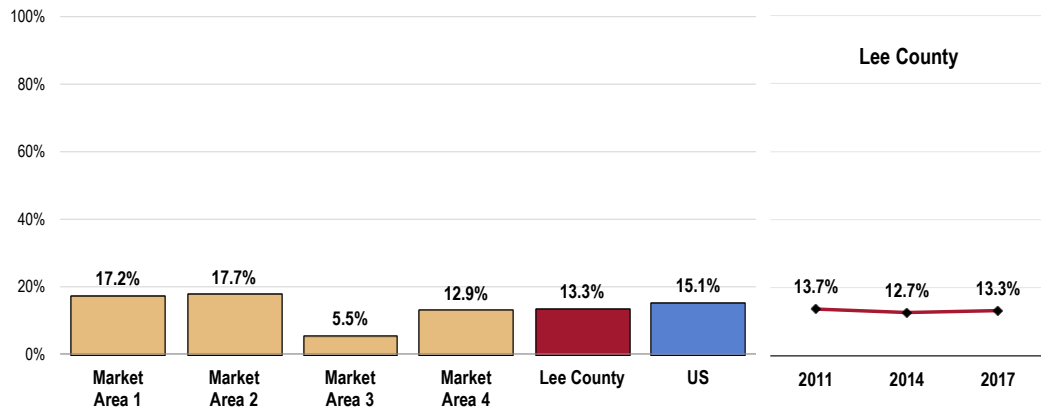
**A total of 13.3% of Lee County adults acknowledge that they have ever been hit, slapped, pushed, kicked, or otherwise hurt by an intimate partner.**

Respondents were told:

"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."

- Comparable to national findings.
- Highest in Market Areas 1 and 2; lowest in Market Area 3.
- TREND: Has not changed significantly since 2011.

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

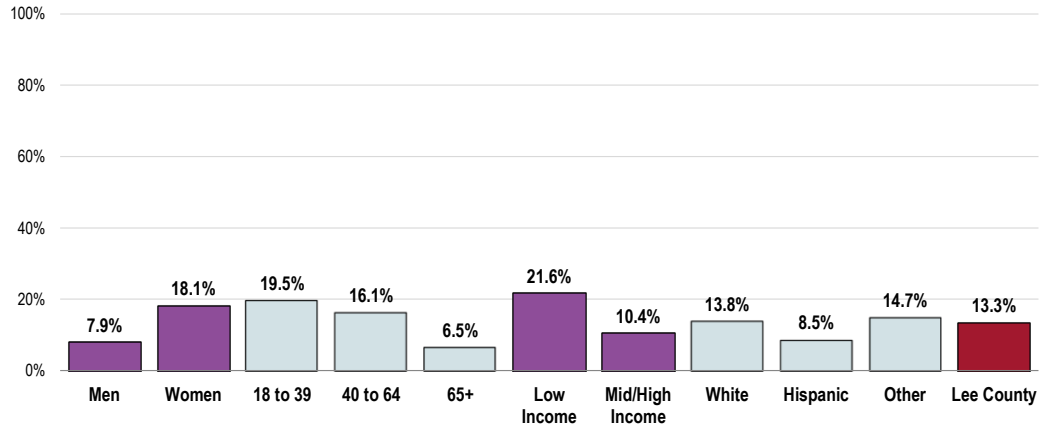


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 50]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

Reports of intimate partner violence are notably higher among:

- Women.
- Adults under 65.
- Those with lower incomes.

### Have Ever Been Hit, Slapped, Pushed, Kicked, or Hurt in Any Way by an Intimate Partner (Lee County, 2017)

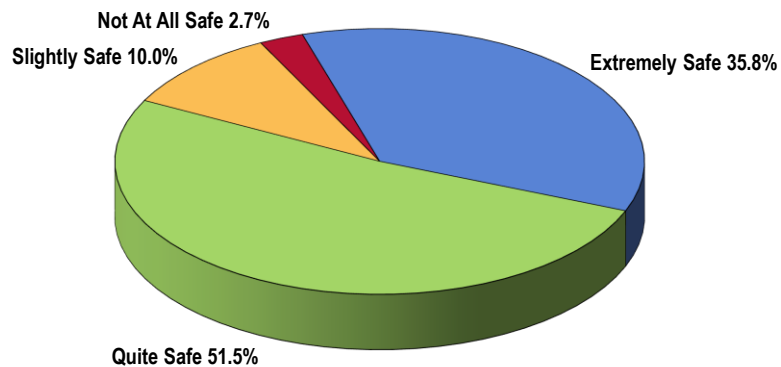


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 50]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### Perceived Neighborhood Safety

While most Lee County adults consider their own neighborhoods to be "extremely safe" or "quite safe," 12.7% consider it "not at all safe" or only "slightly safe."

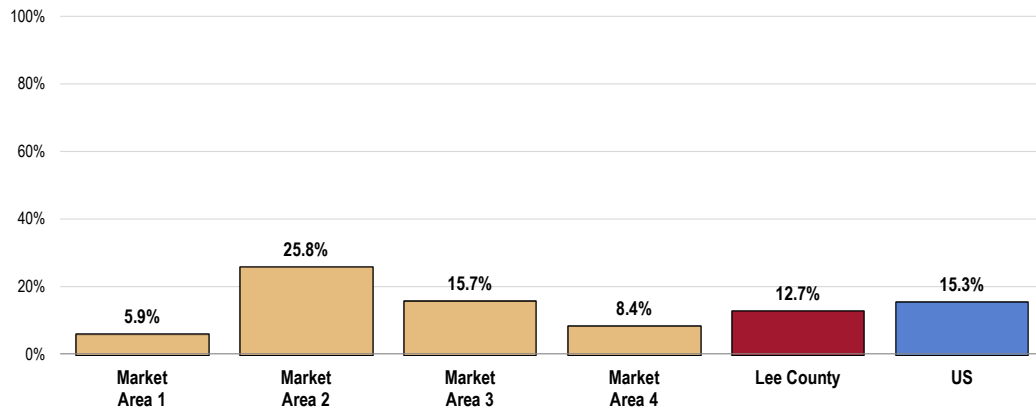
### Perceived Safety of Own Neighborhood (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 48]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

- Compared with the US prevalence, a similar proportion of local adults consider their neighborhood to be “slightly” or “not at all” safe.
- Unsafe ratings are most prevalent in Market Area 2 and least prevalent in Market Areas 1 and 4.

### Perceive Own Neighborhood as “Slightly” or “Not At All” Safe

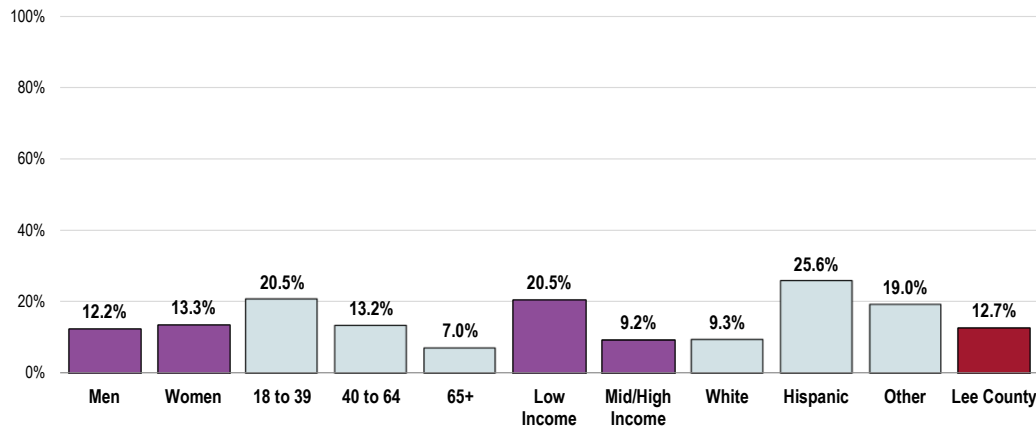


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 48]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

Reports of unsafe neighborhoods are notably higher among these residents:

- Those under age 65.
- Lower income.
- Hispanics and “Other” races.

### Perceive Own Neighborhood as “Slightly” or “Not At All” Safe (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 48]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

## 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

(Key Informants, 2017)

■ Major Problem   ■ Moderate Problem   ■ Minor Problem   ■ No Problem At All



Sources: ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
 Notes: ● Asked of all respondents.

### Top Concerns

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

#### Prevalence/Incidence

- Injury and violence in Ft. Myers have been escalating. What else can I say? – Public Health Representative*
- Not one day passes that there is not violence, injuries, and deaths reported in certain areas of Lee County. Something is desperately needed to stop this terrible situation. – Other Health Provider*
- High crime area. – Social Services Provider*
- High incidence of violent crimes. Congested roads. – Community Leader*
- Over the past decade, a criminal element has expanded in the area, and local police agencies have been unable to reduce or control it. – Community Leader*
- Rising crime rate in certain geographical areas, related to a lack of education, opportunities and the popularization of violent games and deteriorating community norms. – Community Leader*
- Lee County has become a violent county. – Public Health Representative*
- Increase reports of murders and rapes, and shelters of domestic violence at capacity with wait list. – Social Services Provider*
- Crime rate is up, and violent crimes are an issue in this county. – Physician*
- Vehicle fatalities and violence, especially gun violence, are so prevalent that they are almost the norm. – Social Services Provider*
- Injury and violence is on the rise, as people are angry and do not feel they have an outlet. – Public Health Representative*
- Number of pedestrian fatalities and accidents, especially bike riding, and domestic violence. – Public Health Representative*
- Just watch television and read the paper. – Physician*
- Read the paper any day for the Ft. Myers and Lee County area. The drive by shootings, club shootings and violence. Now, the human trafficking problem that is growing. – Community Leader*
- By media accounts, increasing numbers of crimes committed. Related to community violence, lack of jobs, drug epidemic. – Social Services Provider*

#### Gun Violence

- Our new Ft. Myers police chief has stated that we have too much crime and violence for a community our size. Too many shootings and murders are taking place in some of our neighborhoods, and this applies to more than just the Dunbar area. – Community Leader*
- Drug and gun violence is rampant in the community. Sometimes there are multiple deaths in a week.*

*Gangs are an issue. – Social Services Provider*

*Ft. Myers is 54th among the nation's most dangerous cities. Shootings have become increasingly more common than years past. There is an absence of a sense of community, particularly in under-resourced and disadvantaged communities. – Social Services Provider*

*Violence, a shooting or murder a week. Some are not limited to destitute neighborhoods. – Social Services Provider*

*More and more gun violence being reported, a lot more. – Public Health Representative*

*Violence, shootings are happening on a regular basis. – Community Leader*

*Violence is epidemic in SW Florida. We hear of drive-by shootings or other forms of gun play on a daily basis. – Community Leader*

*Significant and prolonged occurrences of gun violence. – Other Health Provider*

*Because we have been having shootings and killings. – Community Leader*

*Our community has experienced an increase in gun violence in certain ZIP Codes, and there appears to be a struggle in determining a community wide solution to curb the violence. – Community Leader*

*There are too many guns in the hands of disadvantaged young people. Racism is a major issue in this community. Black-on-black crime happens frequently with people not coming forward. – Social Services Provider*

*Gun violence is on the rise. – Public Health Representative*

*Multiple shootings, killings within the community. Many young people dying of violence which is always in the news. – Physician*

*Too many guns, too many gangs, too much poverty and not enough community policing. – Physician*

*Recurring episodes of gun violence/crime resulting in injuries/deaths, infrequent arrests related to same. – Social Services Provider*

*Too many guns in the wrong hands. Gang violence is rampant in certain areas of our community. – Physician*

### **Co-Occurrences**

*Root causes include poverty, lack of education, gangs, unstable family environment, mental health, meaningful and sustainable employment. – Community Leader*

*Our youth are unsupervised. The parents, not the community, need to step up and take control. – Community Leader*

*Inadequate mental healthcare, ease of available of guns, lower socioeconomic issues, and a failing economy. – Other Health Provider*

### **Domestic Violence**

*Domestic violence and abuse. – Community Leader*

*More than 100,000 domestic violence cases are reported annually in Florida. More frequent, 1 out of 3 women of those cases are the victim and 1 out of 4 men are also victims. – Community Leader*

### **Human Trafficking**

*Human trafficking is a healthcare issue, because healthcare providers can and should be on the front lines for identifying potential victims. – Social Services Provider*

### **Access to Care/Services**

*Lack of access to comprehensive follow-up care. – Social Services Provider*

**Focus Group Findings: Injury & Violence**

Those in the follow-up focus groups who feel that this is a notable issue in the community divided this into the following concerns:

- **Prevalence** (increasing with the population: driver/pedestrian injury and gun/gang violence)
- **Infrastructure** (to promote both health and biker/pedestrian safety)
- **Coping skills and mental health** (stress, road rage)

*For a more detailed description of focus group discussions, along with supporting quotes, please see the Appendix provided at the end of this report.*

# Infectious Disease



**Professional Research Consultants, Inc.**

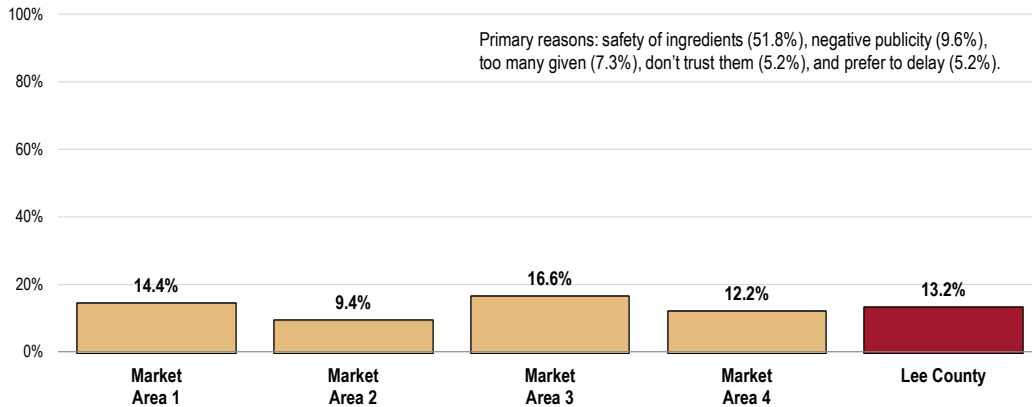
## Childhood Vaccinations

If you had a new baby, would you want to get ALL of the recommended vaccines?

While most of the surveyed Lee County adults say they would want their (hypothetical) newborn to receive all recommended vaccinations, a total of 13.2% would not.

- Acceptance of recommended infant immunizations is best in Market Area 2.

### If Had New Baby, Would Not Want Him/Her to Get All Recommended Vaccines



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 322-323]  
 Notes: • Asked of all respondents.

Among those adults who would not want their child to receive all recommended vaccinations, one-half (51.8%) were concerned with the **safety of vaccine ingredients**. Other reasons mentioned less often included the **negative publicity** (mentioned by 9.6%), the perception that **too many vaccinations** are given already (7.3%), a **lack of trust** (5.2%), and a **preference for delaying** vaccinations (5.2%).

Note that 7.7% could not specify why they would not want all recommended vaccinations for a newborn.



## 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)

### Flu Vaccinations

Among Lee County seniors, 71.6% received a flu shot within the past year.

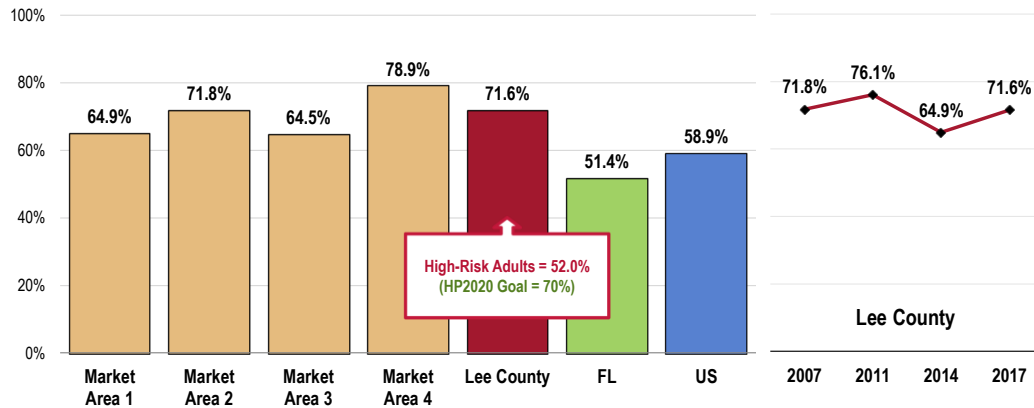
- Much higher than the Florida and national findings.
- Similar to the Healthy People 2020 target (70% or higher).
- Highest in Market Area 4.
- TREND: Flu vaccination among seniors has increased significantly since 2014, but is similar to the 2007 and 2011 survey findings.

"High-risk" includes adults who report having been diagnosed with heart disease, diabetes or respiratory disease.

A total of 52.0% of high-risk adults age 18 to 64 received a flu vaccination within the past year.

### Older Adults: Have Had a Flu Vaccination in the Past Year (Among Adults Age 65+)

Healthy People 2020 Target = 70.0% or Higher



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 163-164]
  - 2015 PRC National Health Survey, Professional Research Consultants, 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): 2015 Florida data.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-12.12]
- Notes:
- Reflects respondents 65 and older.
  - "High-Risk" includes adults age 18 to 64 who have been diagnosed with heart disease, diabetes or respiratory disease.
  - Includes FluMist as a form of vaccination.

## Pneumonia Vaccination

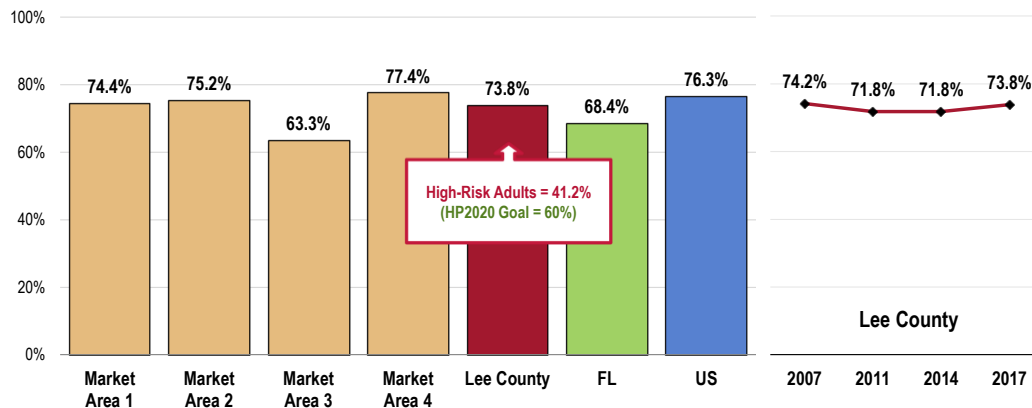
Among Lee County adults age 65 and older, 73.8% have received a pneumonia vaccination at some point in their lives.

- Higher than the Florida finding.
- Comparable to the national finding.
- Fails to satisfy the Healthy People 2020 target of 90% or higher.
- Lowest in Market Area 3.
- TREND: Statistically unchanged since 2007.
- A total of 41.2% of high-risk adults age 18 to 64 have ever received a pneumonia vaccination.

### Older Adults: Have Ever Had a Pneumonia Vaccine

(Among Adults Age 65+)

Healthy People 2020 Target = 90.0% or Higher



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 165-166]
  - 2015 PRC National Health Survey, Professional Research Consultants, 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): 2015 Florida data.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objectives IID-13.1, IID-13.2]
- Notes:
- Reflects respondents 65 and older.
  - "High-Risk" includes adults age 18 to 64 who have been diagnosed with heart disease, diabetes or respiratory disease.

## HIV

### About 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 drug-using 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 healthcare 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 healthcare 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](http://www.healthypeople.gov))

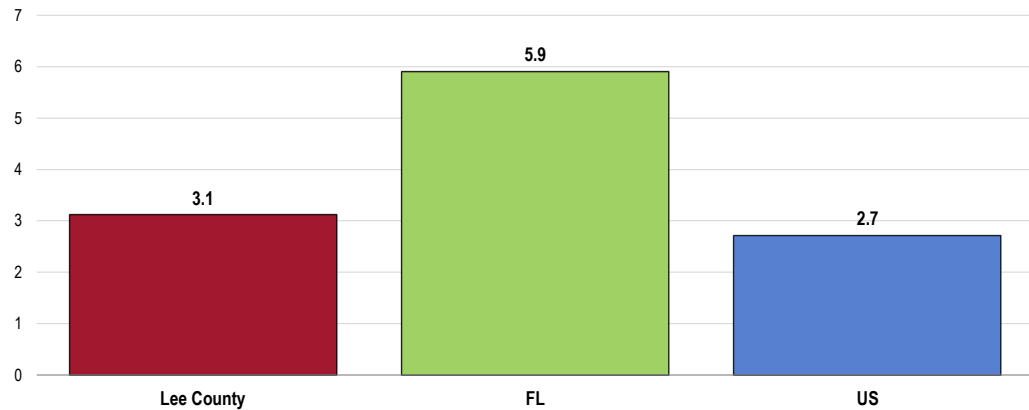
## Age-Adjusted HIV/AIDS Deaths

Between 2013 and 2015, there was an annual average age-adjusted HIV/AIDS mortality rate of 3.1 deaths per 100,000 population in Lee County.

- Lower than found statewide.
- Slightly higher than reported nationally.
- Satisfies the Healthy People 2020 target (3.3 or lower).

### HIV/AIDS: Age-Adjusted Mortality (2006-2015 Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 3.3 or Lower



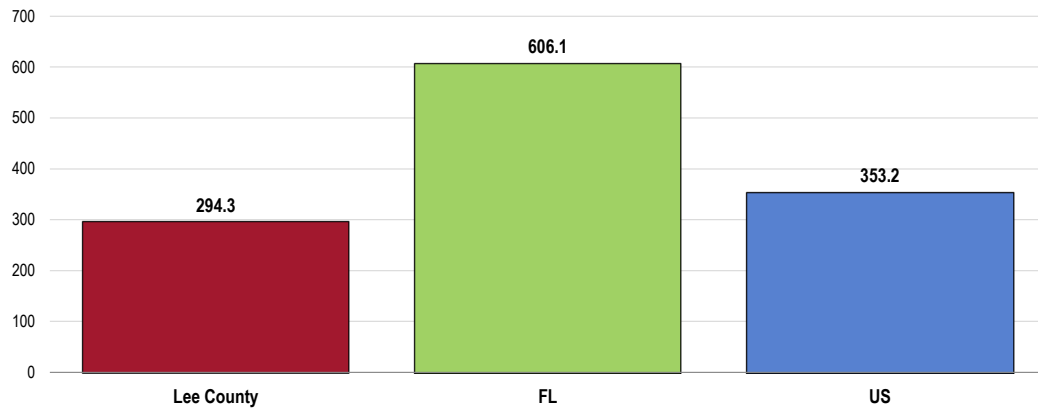
- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [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 2013, there was a prevalence of 294.3 HIV cases per 100,000 population in Lee County.

- Half the statewide prevalence.
- More favorable than the national prevalence.

### HIV Prevalence (Prevalence Rate of HIV per 100,000 Population, 2013)



Sources: 

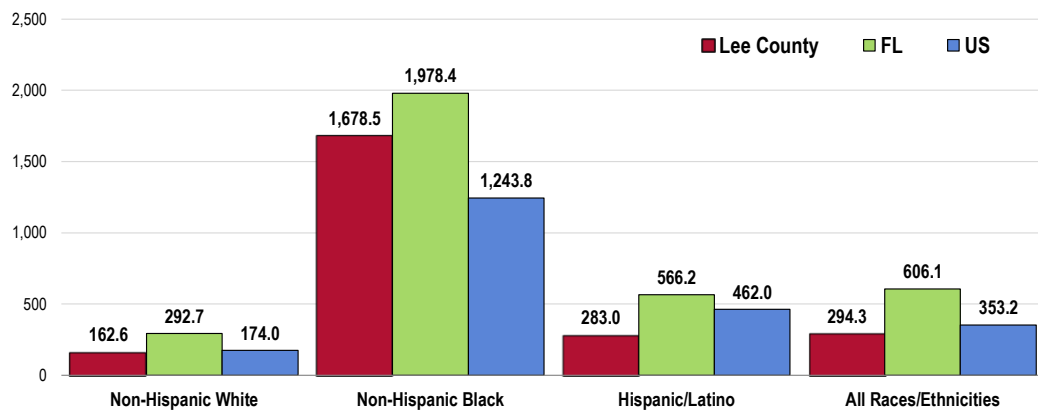
- Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
- Retrieved March 2017 from Community Commons at <http://www.chna.org>.

  
 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.

- By race and ethnicity, HIV/AIDS prevalence in Lee County is particularly high among non-Hispanic Blacks, similar to what is found statewide or nationally.

### HIV Prevalence Rate by Race/Ethnicity (Prevalence Rate of HIV per 100,000 Population, 2013)



Sources: 

- Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
- Retrieved March 2017 from Community Commons at <http://www.chna.org>.

  
 Notes: 

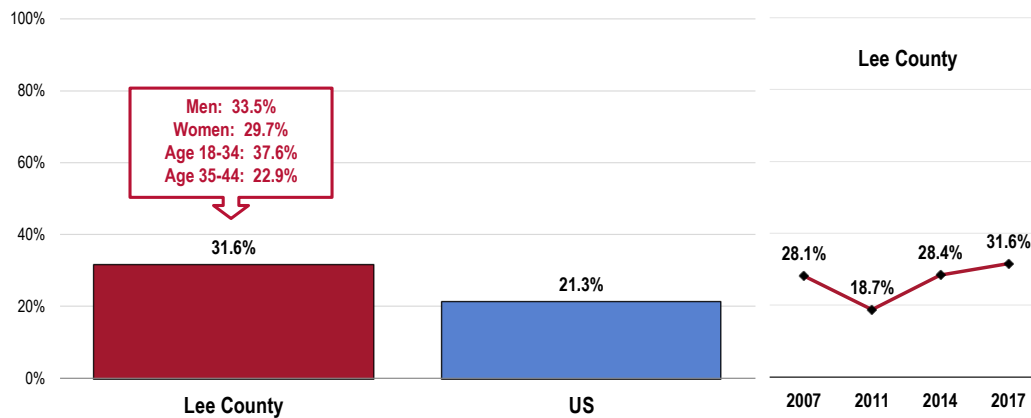
- This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

## HIV Testing

Among Lee County adults age 18-44, 31.6% report that they have been tested for human immunodeficiency virus (HIV) in the past year.

- Notably higher than the proportion found nationwide.
- TREND: Testing has increased significantly since 2011, but is similar to the baseline 2007 finding.
- No statistical difference by gender or age.

### Tested for HIV in the Past Year (Among Adults Age 18-44)

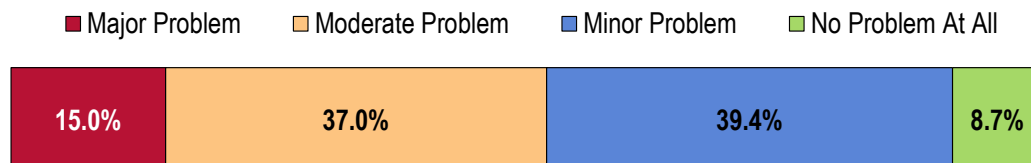


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 167]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Reflects respondents age 18 to 44.

## Key Informant Input: HIV/AIDS

The largest share of key informants taking part in an online survey characterized *HIV/AIDS* as a “minor problem” in the community.

### Perceptions of HIV/AIDS as a Problem in the Community (Key Informants, 2017)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

## Top Concerns

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

### Prevalence/Incidence

*HIV and AIDS rates are escalating due to lack of education and unsafe practices. – Public Health Representative*

*Cape Coral FL ranks 13 in new HIV cases annually. Overall new cases in Lee County FL was up over 25% from the previous year. We need Medicaid expansion and additional prevention services. – Social Services Provider*

*HIV/AIDS rates are on the rise and disproportionately among the MSM and African-American communities. – Public Health Representative*

*Lee County has a high rate of HIV/AIDS infections due to many factors, including lack of education. It has been downplayed for many years after treatment came along, so some think it's not a problem anymore. – Public Health Representative*

*More people are becoming HIV-positive. – Public Health Representative*

*Not sure of the numbers, but often hear it's still a problem in our community. The education about HIV/AIDS seems to have died down in the community as it relates to awareness. – Community Leader*

*Still seeing new cases. – Physician*

*We have high incidence of HIV/STD coinfections. – Public Health Representative*

*Increasing infection rate. – Other Health Provider*

*It's a longstanding, expensive disease with many social and economic impacts. – Public Health Representative*

*According to the Department of Health and nonprofit groups, Florida ranks third with the largest population of people living with AIDS. Clearly that is an issue that needs to be subdued for the greater good of our community. – Community Leader*

*The number of newly diagnosed HIV-positive people in Lee County continues to increase. Fort Myers/Cape Coral is #26 out of all cities in the US for the number of HIV-positive cases based on population. – Public Health Representative*

### Diagnosis/Treatment

*Very underdiagnosed. Few physicians with specialized knowledge to properly treat HIV/AIDS. Poor access to those who do. – Physician*

### Access to Care/Services

*Lack of care and resources. – Social Services Provider*

## 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 healthcare; 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](http://www.healthypeople.gov))

### Chlamydia & Gonorrhea

**In 2014, the chlamydia incidence rate in Lee County was 363.6 cases per 100,000 population.**

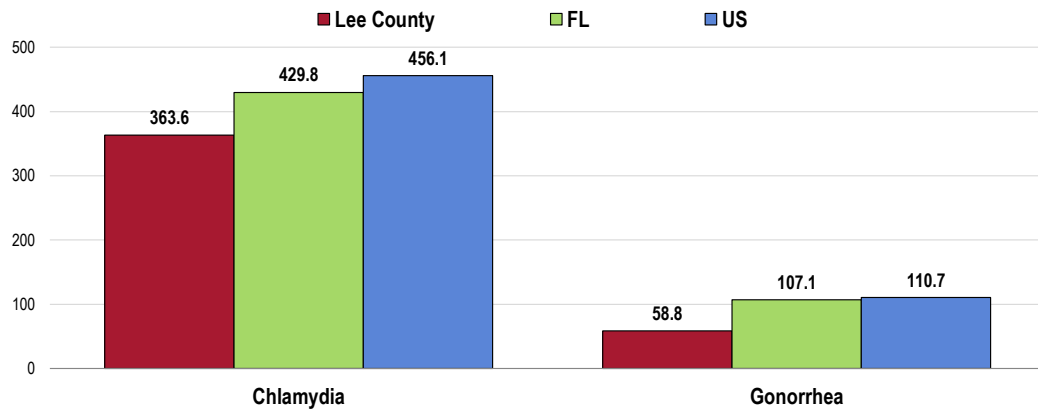
- Notably lower than the Florida and national incidence rates.

**The Lee County gonorrhea incidence rate in 2014 was 58.8 cases per 100,000 population.**

- Notably lower than the Florida and national incidence rates.



### Chlamydia & Gonorrhea Incidence (Incidence Rate per 100,000 Population, 2014)



Sources: • Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.  
 • Retrieved March 2017 from Community Commons at <http://www.chna.org>.  
 Notes: • This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

### Safe Sexual Practices

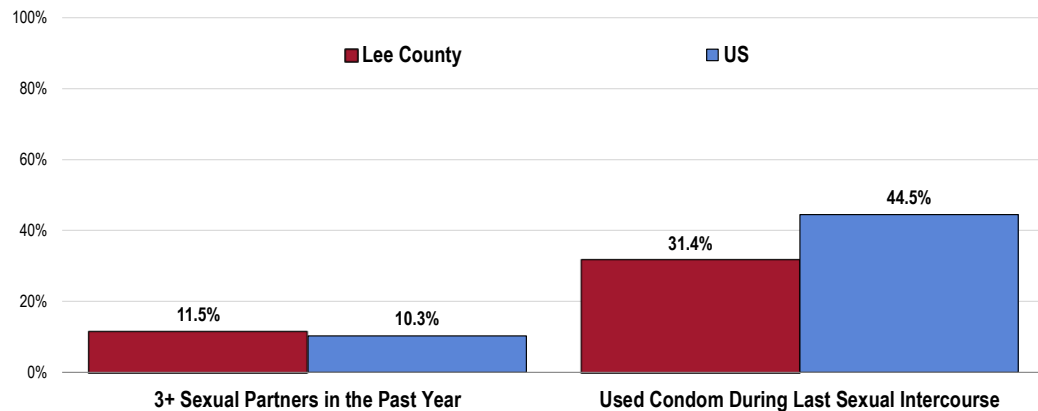
Among unmarried Lee County adults under the age of 65, the majority cites having one (43.2%) or no (39.2%) sexual partners in the past 12 months. However, 11.5% report three or more sexual partners in the past year.

- Comparable to that reported nationally.

A total of 31.4% of unmarried Lee County adults age 18 to 64 report that a condom was used during their last sexual intercourse.

- Much lower than national findings.

### Sexual Risk (Unmarried Adults Age 18-64)

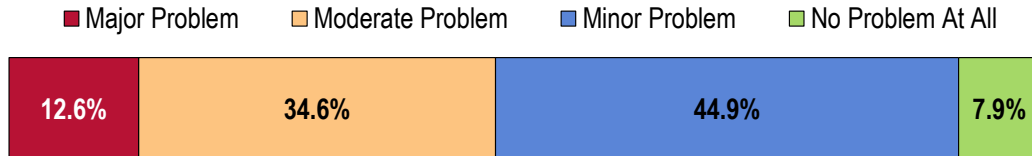


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 97-98]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Reflects unmarried respondents under the age of 65.

## Key Informant Input: Sexually Transmitted Diseases

The greatest share of key informants taking part in an online survey characterized *Sexually Transmitted Diseases* as a “minor problem” in the community.

### Perceptions of Sexually Transmitted Diseases as a Problem in the Community (Key Informants, 2017)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

### Top Concerns

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

#### Prevalence/Incidence

*High rate of STDs. – Public Health Representative*

*STIs are on the rise, people engaging in risky behavior. More education and intervention is needed. – Public Health Representative*

*Increased infections. – Other Health Provider*

*Like HIV/AIDS, STDs are a major concern which is affecting our community. The cost of healthcare and lack of education are some of the reasons that I believe are considerable causes. – Community Leader*

*Lee County has more cases of STDs than Collier, Sarasota, Desoto, Charlotte, Hendry, and Glades combined. Teen STD rates in Lee County are also higher than any other county in our region. – Public Health Representative*

#### Health Education

*Even though mandated by Florida law, our schools do not provide sex education classes. – Social Services Provider*

*There is an increased number of teens infected with STIs in the community. School systems don't collaborate with the Department of Health in Lee in providing STD, HIV prevention education in middle and high schools. Also, there is an increased number of pregnant teens. – Public Health Representative*

*Lack of education and support for our school aged population. Parents refused to accept that kids are having sex and they won't allow the professionals with the correct knowledge to educate the kids. – Public Health Representative*

#### Unprotected Sex

*Teen population lacks adult reasoning. There also are socioeconomic and culture factors associated with lack of use of condoms or abstinence. – Other Health Provider*

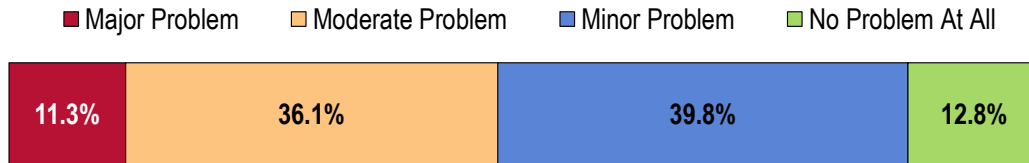
*Sex is a part of life and people take stupid risks. – Public Health Representative*

## Immunization & Infectious Diseases

### Key Informant Input: Immunization & Infectious Diseases

A plurality of key informants taking part in an online survey characterized *Immunization & Infectious Diseases* as a “minor problem” in the community.

#### Perceptions of Immunization and Infectious Diseases as a Problem in the Community (Key Informants, 2017)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

### Top Concerns

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

#### Access to Care/Services

*Many people do not have insurance or they are underinsured. Therefore, vaccines can be costly. – Public Health Representative*

*Uninsured do not have access to infectious disease doctors. – Social Services Provider*

*Many adults with Medicaid or no insurance cannot get affordable immunizations. Their only option is the health department in Lee County. – Physician*

*DOH-Lee does not have the capacity to immunize the number of children needing vaccinations; the private MDs, FQHCs etc. are not making it easy for patients to receive vaccinations. Adult vaccines are often not covered by Medicaid or insurance. – Public Health Representative*

#### Prevalence/Incidence

*Without vaccines, this would be a very sick nation with the mortality rates of third-world countries. – Public Health Representative*

*Infectious diseases are on the rise and overuse of ABX has resulted in multi-strain resistance. – Public Health Representative*

#### Cultural/Personal Beliefs

*Providing adequate and timely immunization to denigrate the risks of infectious diseases is a continued concern. – Community Leader*

# Births



Professional Research Consultants, Inc.

## Prenatal Care

### 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 healthcare 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 healthcare, 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](http://www.healthypeople.gov))

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

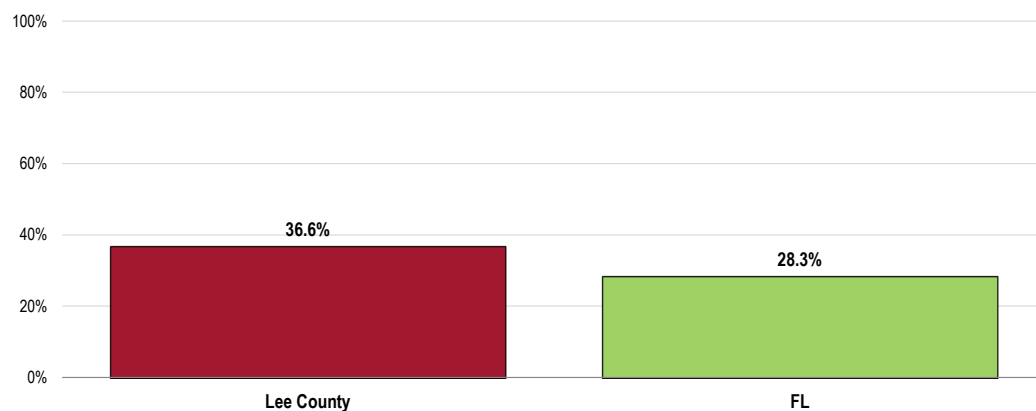
**Between 2013 and 2015, 36.6% of all Lee County births did not receive prenatal care in the first trimester of pregnancy.**

- Less favorable than the Florida proportion.
- Fails to satisfy the Healthy People 2020 target (22.1% or lower).

### Lack of Prenatal Care in the First Trimester

(Percentage of Live Births, 2013-2015)

Healthy People 2020 Target = 22.1% 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 March 2017.
  - 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

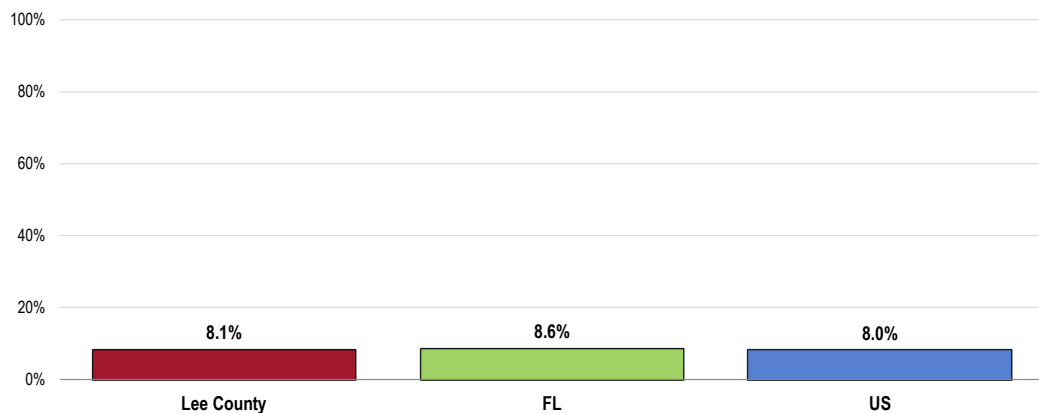
**A total of 8.1% of 2013-2015 Lee County births were low-weight.**

- Slightly better than the Florida proportion.
- Nearly identical to the national proportion.
- Similar to the Healthy People 2020 target (7.8% or lower).

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, 2013-2015) Healthy People 2020 Target = 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 March 2017.  
• 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 2500g). 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.

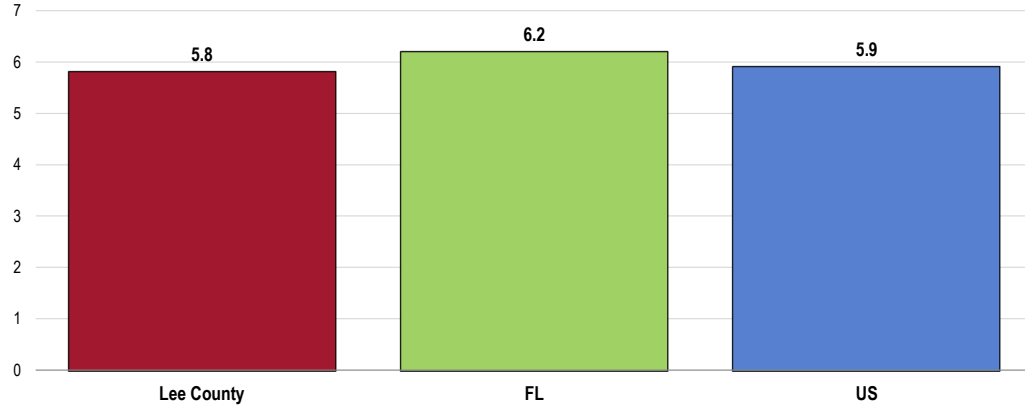
### Infant Mortality

**Between 2013 and 2015, there was an annual average of 5.8 infant deaths per 1,000 live births.**

- More favorable than the Florida rate.
- Nearly identical to the national rate.
- Similar to the Healthy People 2020 target of 6.0 per 1,000 live births.

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

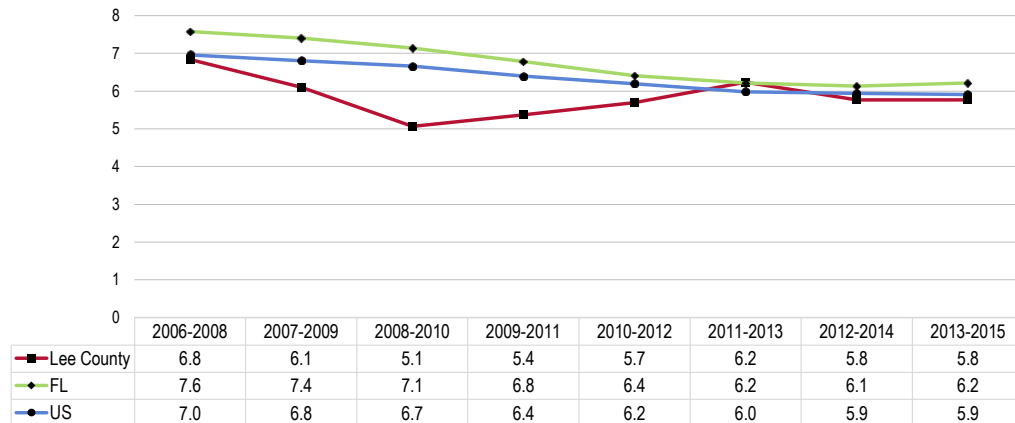
### Infant Mortality Rate (Annual Average Infant Deaths per 1,000 Live Births, 2013-2015) Healthy People 2020 Target = 6.0 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.
  - 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.

- **TREND:** There is no clear pattern apparent in regard to infant mortality in Lee County. The Florida and US rates have trended downward over the past decade.

### Infant Mortality Rate (Annual Average Infant Deaths per 1,000 Live Births) Healthy People 2020 Target = 6.0 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 March 2017.
  - 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.

## Key Informant Input: Infant & Child Health

Key informants taking part in an online survey generally characterized *Infant & Child Health* as a “moderate problem” in the community.

### Perceptions of Infant and Child Health as a Problem in the Community

(Key Informants, 2017)

■ Major Problem   ■ Moderate Problem   ■ Minor Problem   ■ No Problem At All



Sources:   ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
Notes:   ● Asked of all respondents.

### Top Concerns

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

#### Prevalence/Incidence

*Infant mortality rates remain high in African-American communities. – Public Health Representative*  
*Infant mortality rate, children born to drug-addicted mothers, abuse, neglect, and difficulty accessing minimal resources. – Social Services Provider*  
*0-5 years of age are critical for mental development for children, yet significant numbers of malnourished in our community. – Other Health Provider*  
*Large number of pregnant and parenting teens and young adults without access to preventive and affordable healthcare, contraception, parenting. Manual labor jobs without proper health insurance, time off, transportation to medical care. – Social Services Provider*  
*Children are our future and need to be protected. – Public Health Representative*  
*Infant mortality on the rise. People are distrustful of many people who are sent to help them, as their actions and their promises are not congruent. – Public Health Representative*

#### Socioeconomic Factors

*There are many kids in foster care. – Public Health Representative*  
*Disparity in infant morbidity and mortality in the black population. – Public Health Representative*  
*There is a large population of children living in poverty or near poverty. Medicaid/Healthy Kids/etc. is available, but can be confusing for parents to understand and use. Many doctors will not accept Medicaid patients. – Social Services Provider*

#### Affordable Care/Services

*We need to care for our smallest citizens. Affordable healthcare for the working poor is the biggest challenge. – Social Services Provider*  
*There is limited funding available for infant and child care in our county. Other counties across the country are doing much better and provide more services. Infant mortality is dramatically reduced when a resource is available to check on the mom. – Community Leader*

#### Access to Care/Services

*Limited access to care. – Other Health Provider*  
*Not enough providers in Lee County who accept Medicaid. Very low reimbursements for Medicaid patients and lack of coverage for medications or sub-specialists for patients on Medicaid. – Physician*  
*Lack of health insurance. – Community Leader*



| *This will improve with our new hospital. – Community Leader*

***Health Education***

| *Lack of education of caregiver. – Physician*

## Family Planning

### Births to Teen Mothers

#### About Teen Births

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

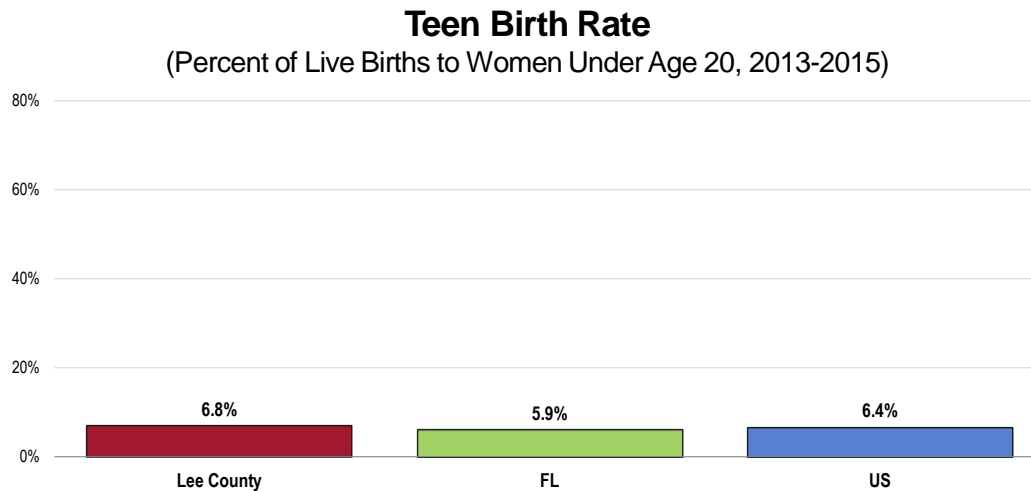
- Are less likely to graduate from high school or attain a GED by the time they reach age 30.
- Earn an average of approximately \$3,500 less per year, when compared with those who delay childbearing.
- Receive nearly twice as much Federal aid for nearly twice as long.

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](http://www.healthypeople.gov))

**Between 2013 and 2015, a total of 6.8% of all live births were to women under age 20.**

- Statistically higher than the Florida and national proportions.

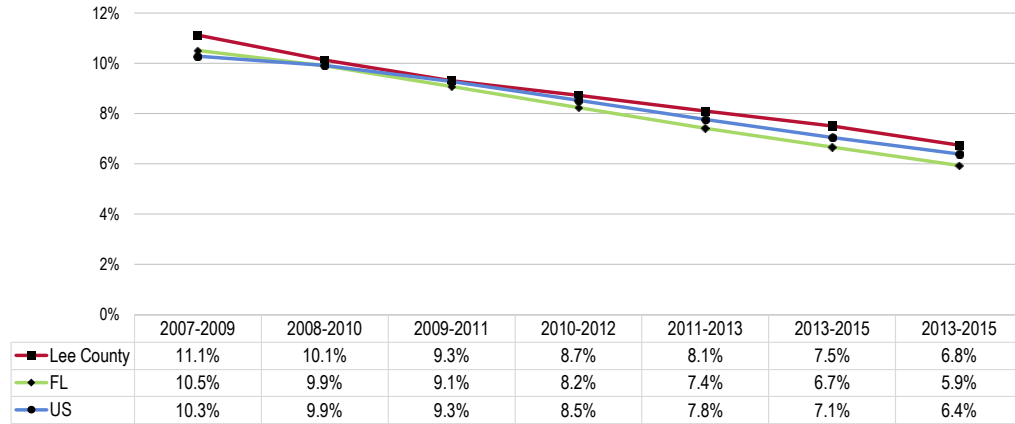


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted March 2017.

Notes: • This indicator reports the percentage of live births to women under the age of 20. 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.

- **TREND:** This proportion has decreased significantly in Lee County since 2007, echoing the trends seen statewide and nationwide.

### Teen Birth Rate (Percent of Live Births to Women Under Age 20)



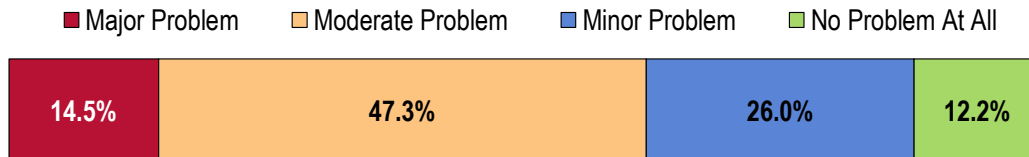
Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted March 2017.

Notes: ● This indicator reports the percentage of live births to women under the age of 20. 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: Family Planning

Key informants taking part in an online survey largely characterized *Family Planning* as a “moderate problem” in the community.

### Perceptions of Family Planning as a Problem in the Community (Key Informants, 2017)



Sources: ● PRC Online Key Informant Survey, Professional Research Consultants, Inc.

Notes: ● Asked of all respondents.

### Top Concerns

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

#### Unplanned Pregnancies

*Too many out-of-wedlock/unplanned pregnancies. Education and birth control inadequate. – Community Leader*

*Family planning is important throughout the world. Unchecked population growth puts a strain on all resources. Affordable contraceptive care needs to be available to all women who request it, as a child can be a very expensive lifetime commitment. – Public Health Representative*

*People are not planning, they're just doing. There was a time when teen pregnancies were a rare thing many, many years ago. Today, there's a school for pregnant teens; they're allowed to go to regular school while pregnant. – Community Leader*

*In addition, many babies are born due to unplanned pregnancies. Many of these children end up being abused or neglected. – Public Health Representative*

*Teen pregnancy and the physical and emotional damage that results from abortion. – Social Services Provider*

*Increase of unplanned child birth and STDs. – Social Services Provider*

### **Access to Care/Services**

*Need more services and education in local schools. – Public Health Representative*

*Need access to services particularly in low income areas. – Social Services Provider*

*Our young women need affordable access to birth control. We also need Planned Parenthood to be vibrant and accessible. – Social Services Provider*

*Funding cuts. – Other Health Provider*

*The topic is too political and Planned Parenthood is always under attack and has decreased funding. – Social Services Provider*

*I am not aware of any well-known source. Also as a percentage of the "community" need for family planning is real issue. Perhaps welfare feeds into this problem. – Community Leader*

*Scarcity and accessibility of free family planning clinics. – Other Health Provider*

### **Teen Pregnancies**

*Teen pregnancies are high. – Social Services Provider*

*Teen pregnancy and repeat teen pregnancy rates are high in Lee County. – Public Health Representative*

### **Health Education**

*There is a lack of education in the community. – Public Health Representative*

# Modifiable Health Risks



Professional Research Consultants, Inc.

## Actual Causes of Death

### About Contributors to Mortality

A 1999 study (an update to a landmark 1993 study), estimated that as many as 40% of premature deaths in the United States are attributed to behavioral factors. This study found that behavior patterns represent the single-most prominent domain of influence over health prospects in the United States. The daily choices we make with respect to diet, physical activity, and sex; the substance abuse and addictions to which we fall prey; our approach to safety; and our coping strategies in confronting stress are all important determinants of health.

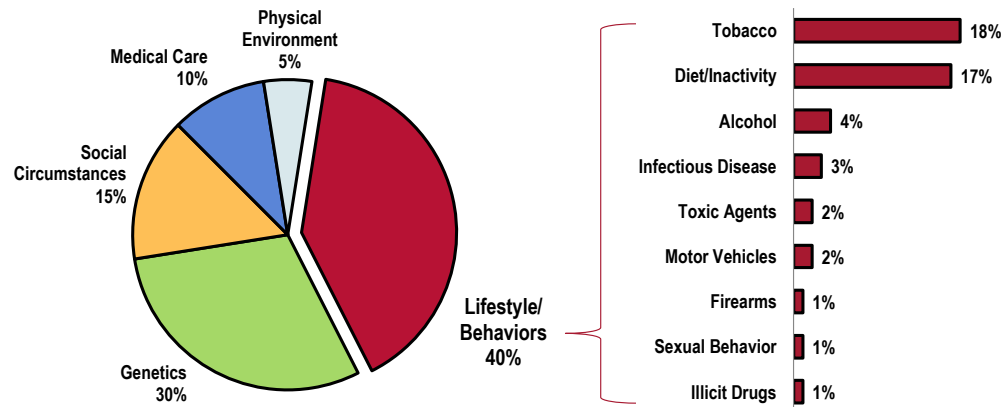
The most prominent contributors to mortality in the United States in 2000 were **tobacco** (an estimated 435,000 deaths), **diet and activity** patterns (400,000), **alcohol** (85,000), **microbial agents** (75,000), **toxic agents** (55,000), **motor vehicles** (43,000), **firearms** (29,000), **sexual behavior** (20,000), and **illicit use of drugs** (17,000). Socioeconomic status and access to medical care are also important contributors, but difficult to quantify independent of the other factors cited. Because the studies reviewed used different approaches to derive estimates, the stated numbers should be viewed as first approximations.

These analyses show that smoking remains the leading cause of mortality. However, poor diet and physical inactivity may soon overtake tobacco as the leading cause of death. These findings, along with escalating healthcare costs and aging population, argue persuasively that the need to establish a more preventive orientation in the US healthcare and public health systems has become more urgent.

- Ali H. Mokdad, PhD; James S. Marks, MD, MPH; Donna F. Stroup, PhD, MSc; Julie L. Gerberding, MD, MPH. "Actual Causes of Death in the United States." JAMA, 291(2004):1238-1245.

While causes of death are typically described as the diseases or injuries immediately precipitating the end of life, a few important studies have shown that the actual causes of premature death (reflecting underlying risk factors) are often preventable.

### Factors Contributing to Premature Deaths in the United States



Sources: • "The Case For More Active Policy Attention to Health Promotion"; (McGinnis, Williams-Russo, Knickman) Health Affairs. Vol. 32. No. 2. March/April 2002. "Actual Causes of Death in the United States"; (Ali H. Mokdad, PhD; James S. Marks, MD, MPH; Donna F. Stroup, PhD, MSc; Julie L. Gerberding, MD, MPH.) JAMA. 291 (2000) 1238-1245.

## 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, healthcare 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](http://www.healthypeople.gov))

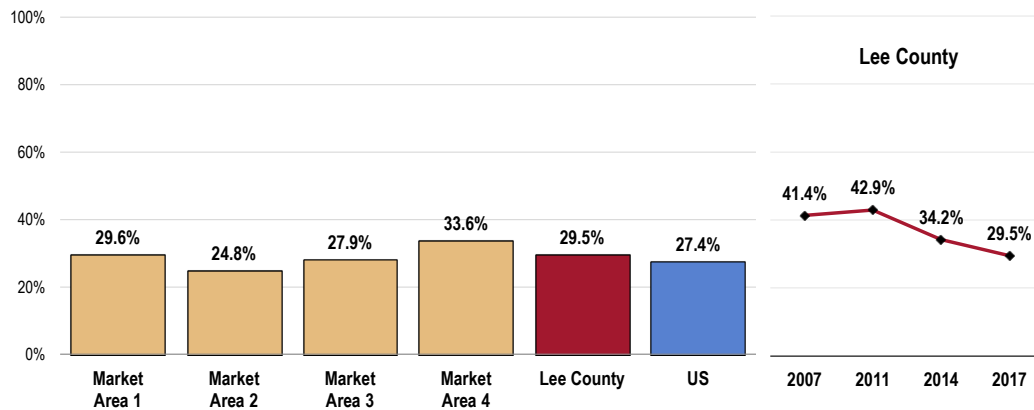
## Daily Recommendation of Fruits/Vegetables

**A total of 29.5% of Lee County adults report eating five or more servings of fruits and/or vegetables per day.**

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.

- Similar to national findings.
- Statistically similar among the four Market Areas.
- **TREND:** Fruit/vegetable consumption decreased significantly from 2011-2014 and from 2014-2017. Note however, that a slight wording change in the 2014/2017 survey could account for some of this difference.

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

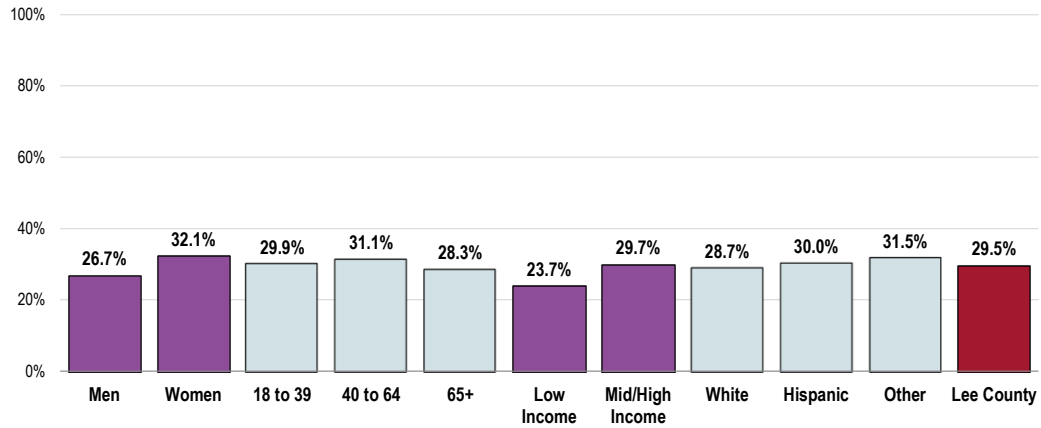


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 168]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.  
 • For this issue, respondents were asked to recall their food intake on the previous day.

- There is no significant difference in fruit/vegetable consumption when viewed by key demographic characteristics.



## Consume Five or More Servings of Fruits/Vegetables Per Day (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 168]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • For this issue, respondents were asked to recall their food intake on the previous day.

## Access to Fresh Produce

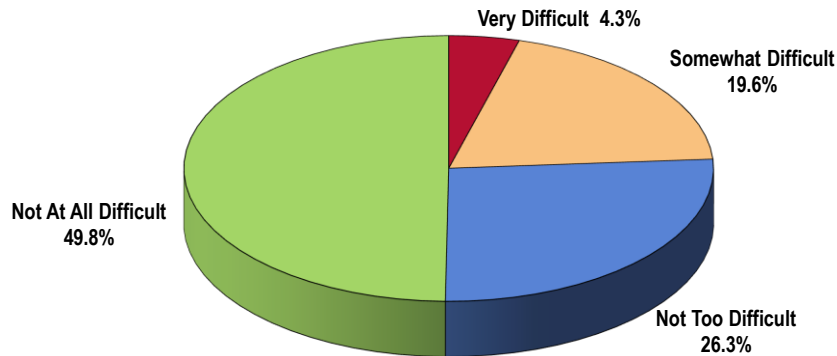
### Difficulty Accessing Fresh Produce

While most report little or no difficulty, 23.9% of Lee County adults find it "very" or "somewhat" difficult to access affordable, fresh fruits and vegetables.

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?"

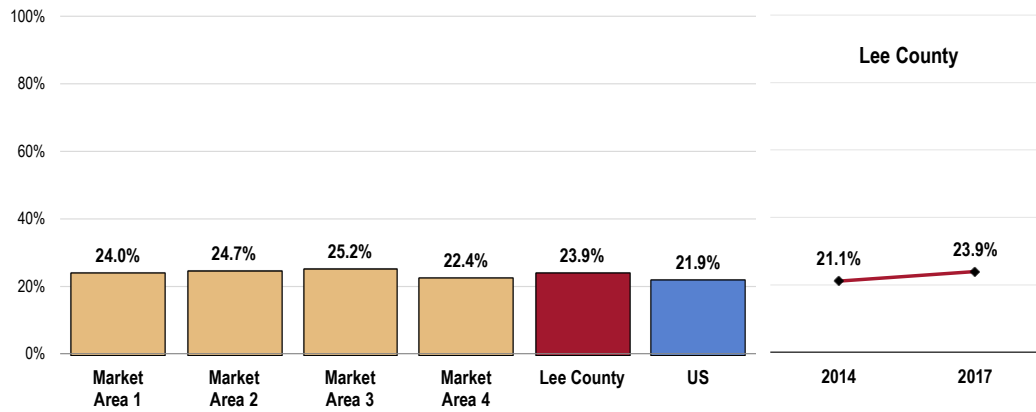
## Level of Difficulty Finding Fresh Produce at an Affordable Price (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 103]  
 Notes: • Asked of all respondents.

- Comparable to national findings.
- Comparable findings by Market Area.
- TREND: Has not changed significantly since 2014.

### Find It “Very” or “Somewhat” Difficult to Buy Affordable Fresh Produce

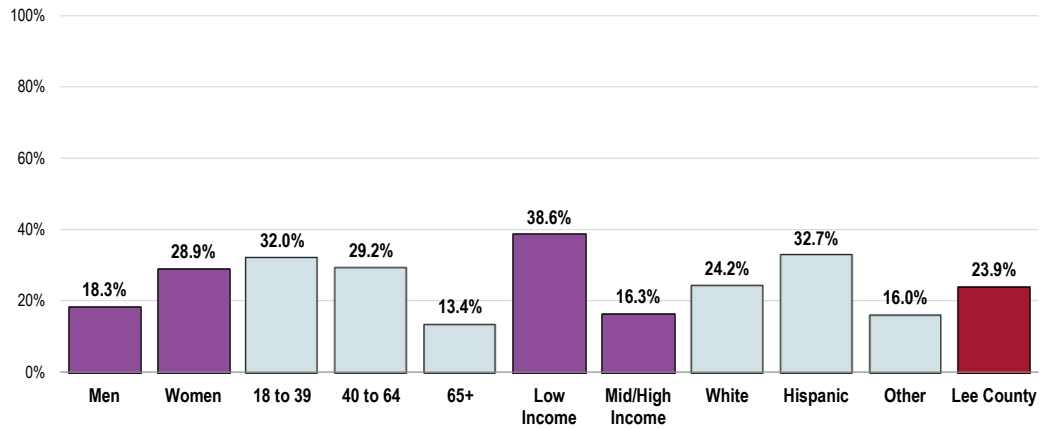


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 103]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

Those more likely to report difficulty getting fresh fruits and vegetables include:

- Women.
- Adults under age 65.
- Lower-income residents.
- Hispanics.

### Find It “Very” or “Somewhat” Difficult to Buy Affordable Fresh Produce (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 103]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

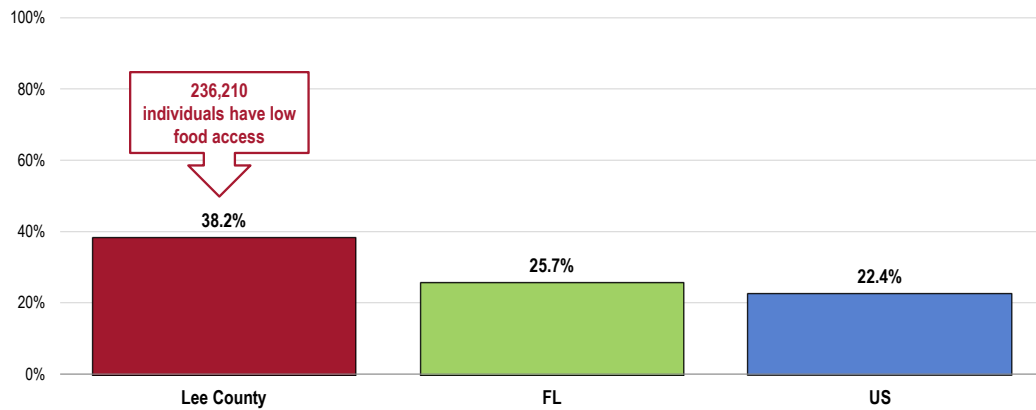
A food desert is defined as a low-income area where a significant number or share of residents is far from a supermarket, where "far" is more than 1 mile in urban areas and more than 10 miles in rural areas.

### Low Food Access (Food Deserts)

US Department of Agriculture data show that 38.2% of the Lee County population (representing over 236,000 residents) have low food access or live in a "food desert," meaning that they do not live near a supermarket or large grocery store.

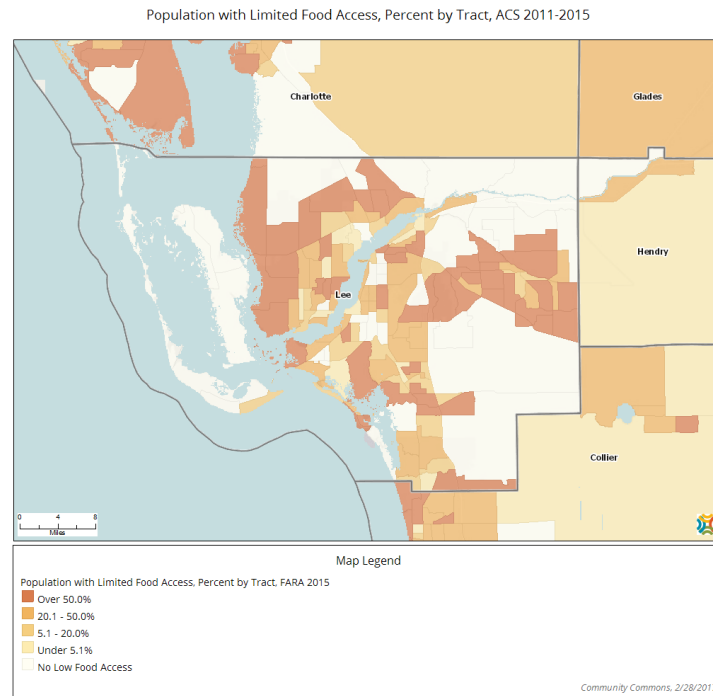
- Considerably less favorable than statewide and national findings.

**Population With Low Food Access**  
(Percent of Population That Is Far From a Supermarket or Large Grocery Store, 2015)



Sources: • US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas (FARA).  
 • Retrieved March 2017 from Community Commons at <http://www.chna.org>.  
 Notes: • This indicator reports the percentage of the population living in census tracts designated as food deserts. A food desert is defined as low-income areas where a significant number or share of residents is far from a supermarket, where "far" is more than 1 mile in urban areas and more than 10 miles in rural areas. This indicator is relevant because it highlights populations and geographies facing food insecurity.

- The following map provides an illustration of food deserts by census tract.

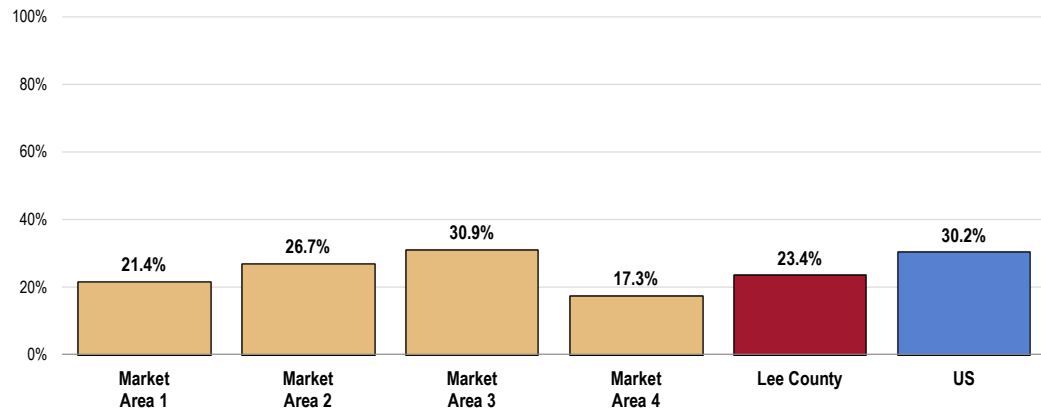


## Sugar-Sweetened Beverages

A total of 23.4% of Lee County adults report drinking an average of at least one sugar-sweetened beverage per day in the past week.

- More favorable than national findings.
- Most favorable in Market Area 4; least favorable in Market Area 3.

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



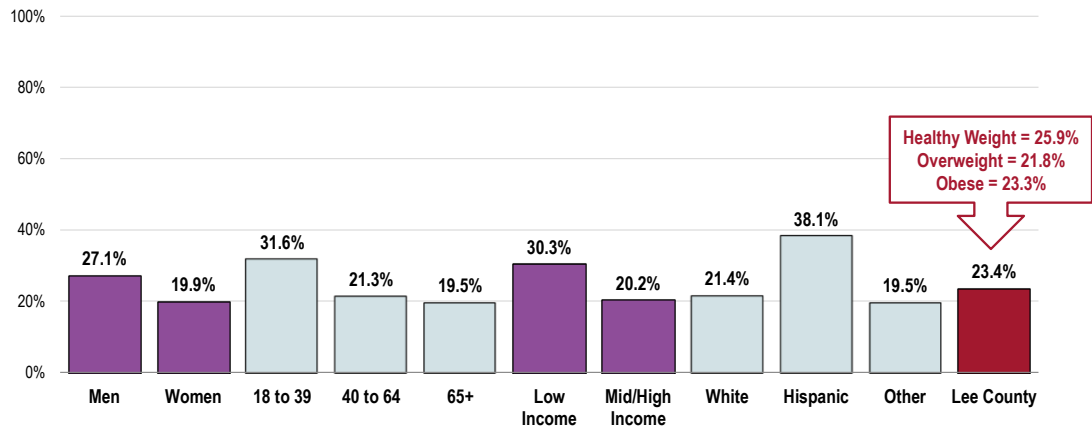
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 212]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

Those more likely to consume this level of sugar-sweetened beverages include:

- Men.
- Adults age 18 to 39.
- Lower-income residents.
- Hispanics.
- No statistical difference by weight status.

### Had Seven or More Sugar-Sweetened Beverages in the Past Week (Lee County, 2017)



- Sources:
- 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 212]
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## 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 and older 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.

- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Leisure-Time Physical Activity

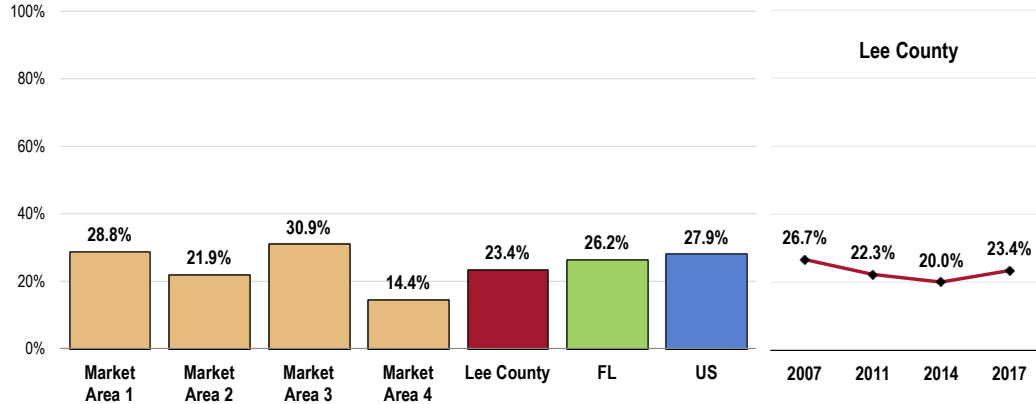
**A total of 23.4% of Lee County adults report no leisure-time physical activity in the past month.**

- More favorable than statewide and national findings.
- Satisfies the Healthy People 2020 target (32.6% or lower).

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.

- Least favorable in Market Areas 1 and 3; most favorable in Market Area 4.
- TREND: The current lack of leisure-time physical activity among Lee County adults is statistically similar to previous survey results.

### No Leisure-Time Physical Activity in the Past Month Healthy People 2020 Target = 32.6% or Lower

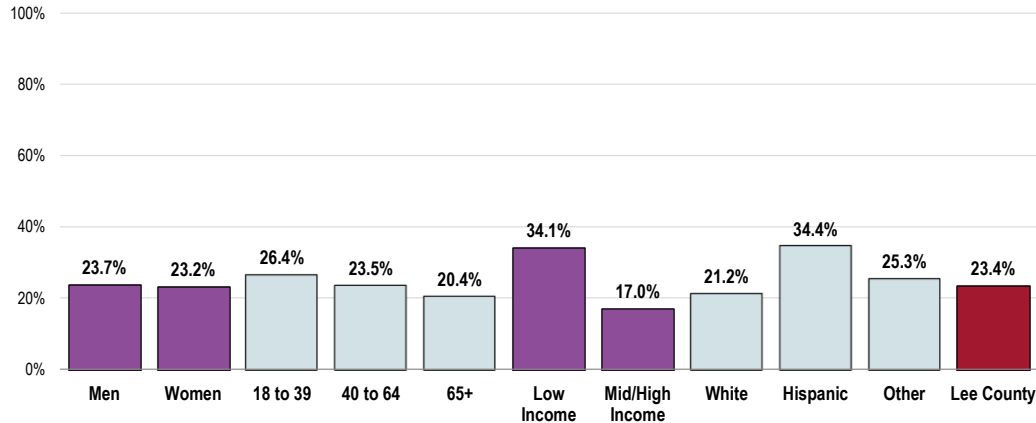


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 106]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2015 Florida data.  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-1]

Notes: • Asked of all respondents.

- Lack of leisure-time physical activity in the area is higher among adults with low incomes.

### No Leisure-Time Physical Activity in the Past Month (Lee County, 2017) Healthy People 2020 Target = 32.6% or Lower



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 106]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-1]

Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.



## Activity Levels

### 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, sit-ups, 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](http://www.cdc.gov/physicalactivity)
- Learn more about CDC's efforts to promote walking by visiting <http://www.cdc.gov/vitalsigns/walking>.

#### Aerobic & Strengthening Physical Activity

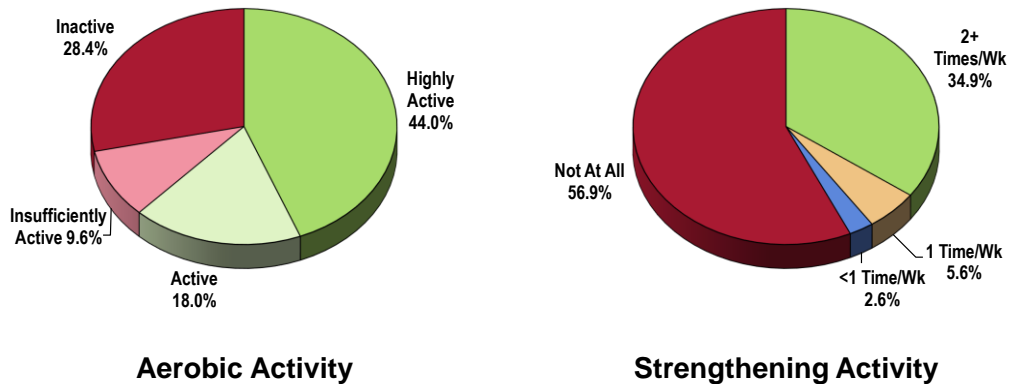
Based on reported physical activity intensity, frequency and duration over the past month, **38.0% of Lee County adults are found to be “insufficiently active” or “inactive.”**

**Over one-half (56.9%) of Lee County adults do not participate in any types of physical activities or exercises to strengthen their muscles.**

Survey respondents were asked about the types of physical activities they engaged in during the past month, as well as the frequency and duration of these activities.

- “Inactive” includes those reporting no aerobic physical activity in the past month.
- “Insufficiently active” includes those with the equivalent of 1-150 minutes of aerobic physical activity per week.
- “Active” includes those with 150-300 minutes of weekly aerobic physical activity.
- “Highly active” includes those with >300 minutes of weekly aerobic physical activity.

**Participation in Physical Activities**  
(Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 113, 173]

Notes: • Reflects the total sample of respondents.

- In this case, “inactive” aerobic activity represents those adults participating in no aerobic activity in the past week; “insufficiently active” reflects those respondents with 1–149 minutes of aerobic activity in the past week; “active” adults are those with 150–300 minutes of aerobic activity per week; and “highly active” adults participate in 301+ minutes of aerobic activity weekly.

**Recommended Levels of Physical Activity**

**A total of 26.8% of Lee County adults regularly participate in adequate levels of both aerobic and strengthening activities (meeting physical activity recommendations).**

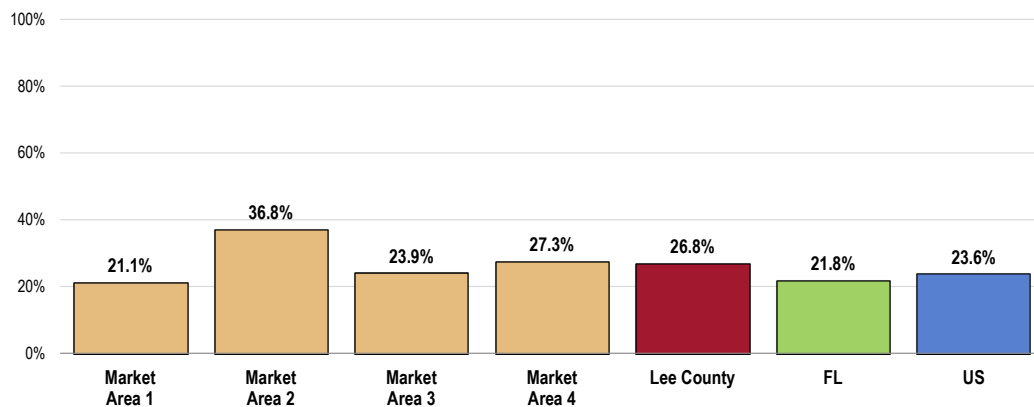
- More favorable than statewide findings.
- Statistically similar to national findings.
- Satisfies the Healthy People 2020 target (20.1% or higher)
- Least favorable in Market Area 1; most favorable in Market Area 2.

"Meeting physical activity recommendations" includes adequate levels of both aerobic and strengthening activity:

**Aerobic** activity is at least 150 minutes per week of light to moderate activity or 75 minutes per week of vigorous physical activity or an equivalent combination of both; and

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

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



Sources:
 

- 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 174]
- 2015 PRC National Health Survey, Professional Research Consultants, 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). 2015 Florida data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-4]

 Notes:
 

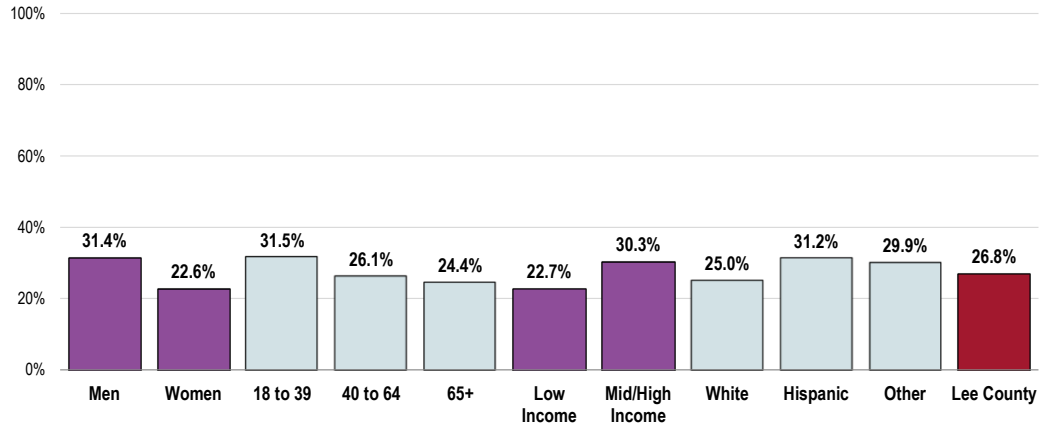
- Meeting both guidelines is defined as the number of persons age 18+ who report light or moderate aerobic activity for at least 150 minutes per week or who report vigorous physical activity 75 minutes per week or an equivalent combination of moderate and vigorous-intensity activity and report doing physical activities specifically designed to strengthen muscles at least twice per week.

Those less likely to meet physical activity requirements include:

- Women.
- Low-income residents.

## Meets Physical Activity Recommendations (Lee County, 2017)

Healthy People 2020 Target = 20.1% or Higher



- Sources:
- 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 174]
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-4]
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
  - 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 least twice per week.

## Children

### Recommended Levels of Physical Activity

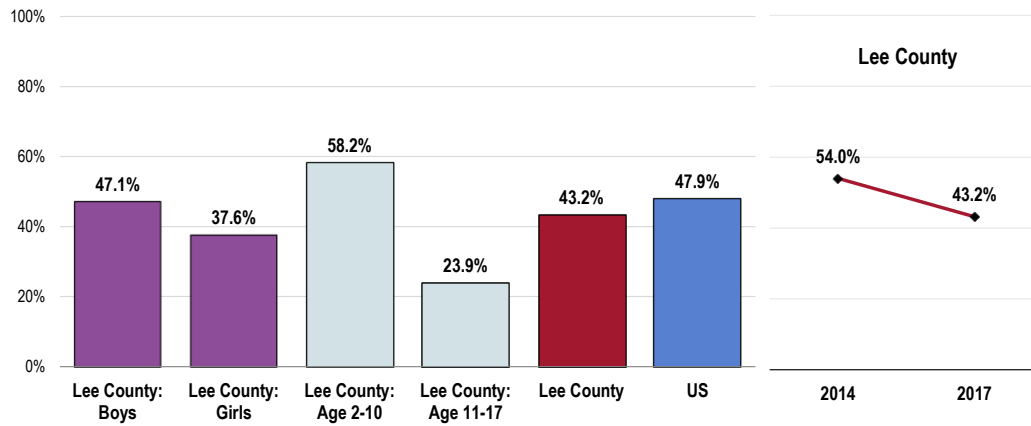
Children and adolescents should do 60 minutes (1 hour) or more of physical activity each day.

- 2013 Physical Activity Guidelines for Americans, US Department of Health and Human Services. [www.cdc.gov/physicalactivity](http://www.cdc.gov/physicalactivity)

**Among Lee County children age 2 to 17, 43.2% are reported to have had 60 minutes of physical activity on each of the seven days preceding the interview (1+ hours per day).**

- Statistically similar to the national proportion.
- No statistical difference by gender.
- Much lower among children age 11 to 17.
- TREND: The change in proportion since 2014 is not statistically significant.

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



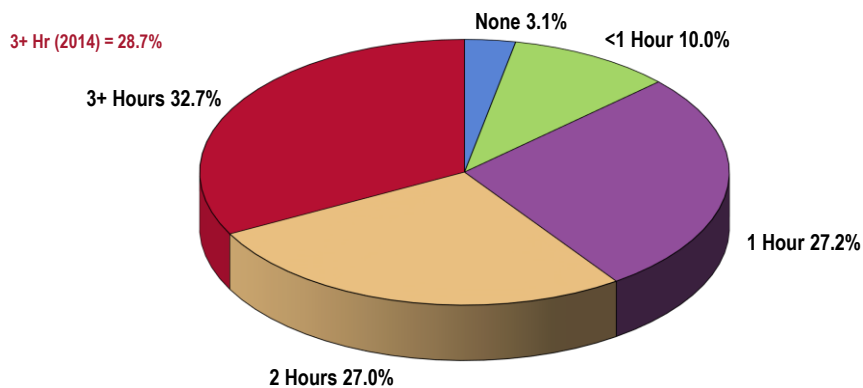
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 142]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents with children age 2-17 at home.  
 • Includes children reported to have one or more hours of physical activity on each of the seven days preceding the survey.

#### Total Screen Time

A total of 32.7% of Lee County children aged 5 to 17 spend three or more hours on screen time (whether television or computer, Internet, video games, etc.) per day.

- TREND: In comparison to 2014 survey results, children’s screen time has not changed significantly.

### Children’s Total Screen Time Per Day [TV, Computer, Video Games, Etc. for Entertainment] (Among Children Age 5-17; Lee County, 2017)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 319]  
 Notes: • Asked of all respondents with children age 5-17 at home.  
 • “Three or more hours” includes reported screen time of 180 minutes or more per day.

## Access to Physical Activity

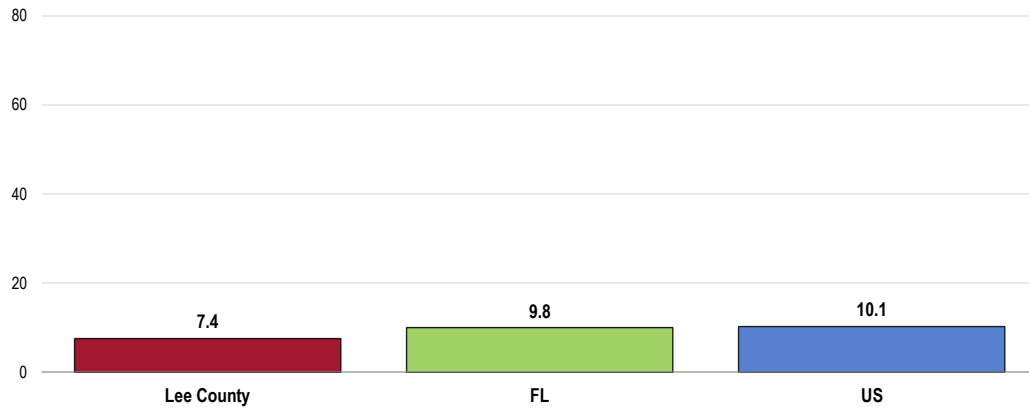
In 2014, there were 7.4 recreation/fitness facilities for every 100,000 population in Lee County.

- Lower than found statewide and nationally.

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.

### Population With Recreation & Fitness Facility Access (Number of Recreation & Fitness Facilities per 100,000 Population, 2014)



Sources: • US Census Bureau, County Business Patterns. Additional data analysis by CARES.  
 • Retrieved March 2017 from Community Commons at <http://www.chna.org>.

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, gymnasiums, dance centers, tennis clubs, and swimming pools. This indicator is relevant because access to recreation and fitness facilities encourages physical 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 healthcare 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](http://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 (m<sup>2</sup>). To estimate BMI using pounds and inches, use: [weight (pounds)/height squared (inches<sup>2</sup>)] x 703.

In this report, overweight is defined as a BMI of 25.0 to 29.9 kg/m<sup>2</sup> and obesity as a BMI ≥30 kg/m<sup>2</sup>. The rationale behind these definitions is based on epidemiological data that show increases in mortality with BMIs above 25 kg/m<sup>2</sup>. The increase in mortality, however, tends to be modest until a BMI of 30 kg/m<sup>2</sup> is reached. For persons with a BMI ≥30 kg/m<sup>2</sup>, 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 kg/m<sup>2</sup>.

- 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/m <sup>2</sup> )
Underweight	<18.5
Normal	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	≥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.

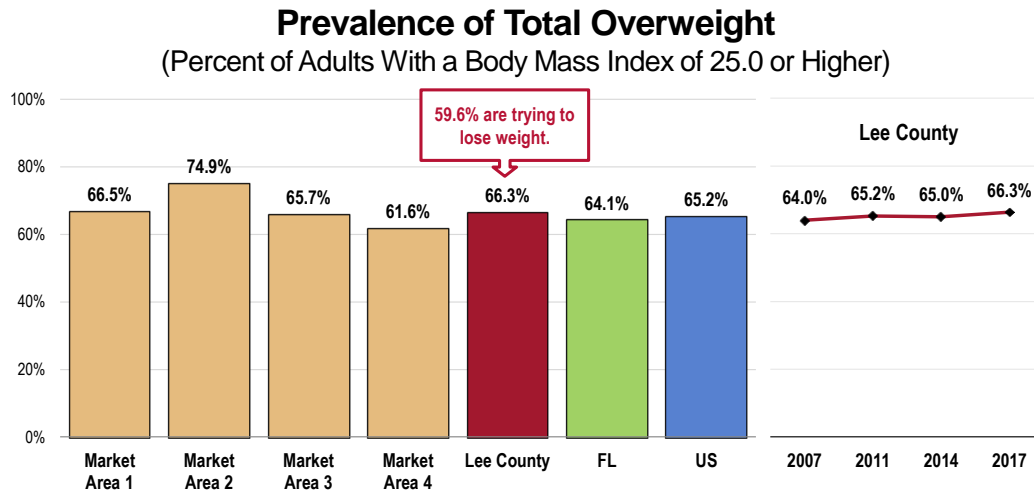
## Overweight Status

Nearly 2 in 3 Lee County adults (66.3%) are overweight.

Here, "overweight" includes those respondents with a BMI value  $\geq 25$ .

- Comparable to the Florida and US prevalence.
- Highest in Market Area 2; lowest in Market Area 4
- TREND: The overweight prevalence has remained relatively stable over time.

Note that 59.6% of overweight adults are currently trying to lose weight.



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 176-177]  
 • 2015 PRC National Health Survey, Professional Research Consultants, 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); 2015 Florida data.

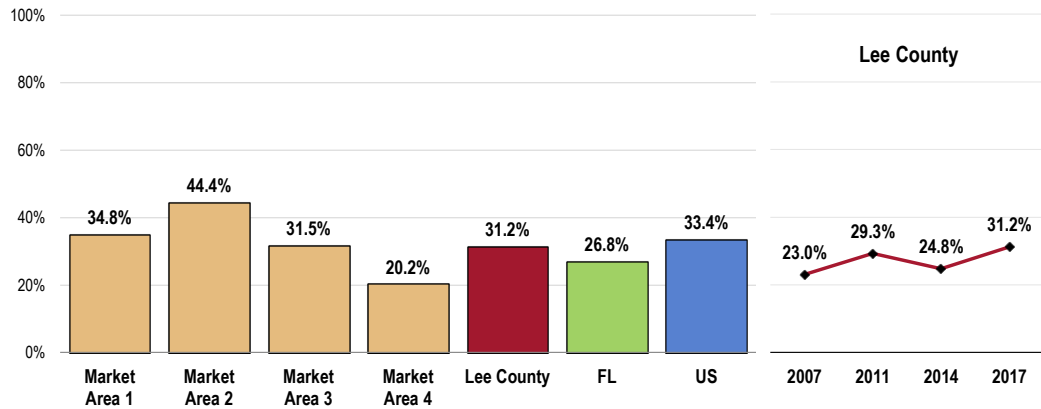
Notes: • Based on reported heights and weights, asked of all respondents.  
 • The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender. The definition for obesity is a BMI greater than or equal to 30.0.

Further, 31.2% of Lee County adults are obese.

"Obese" (also included in overweight prevalence discussed previously) includes respondents with a BMI value  $\geq 30$ .

- More favorable than Florida findings.
- Similar to US findings.
- Similar to the Healthy People 2020 target (30.5% or lower).
- Particularly less favorable in Market Area 2; much more favorable in Market Area 4.
- TREND: The current prevalence of obesity in Lee County is similar to the 2011 findings, but significantly higher than found in 2007 and 2014.

### Prevalence of Obesity (Percent of Adults With a Body Mass Index of 30.0 or Higher) Healthy People 2020 Target = 30.5% or Lower



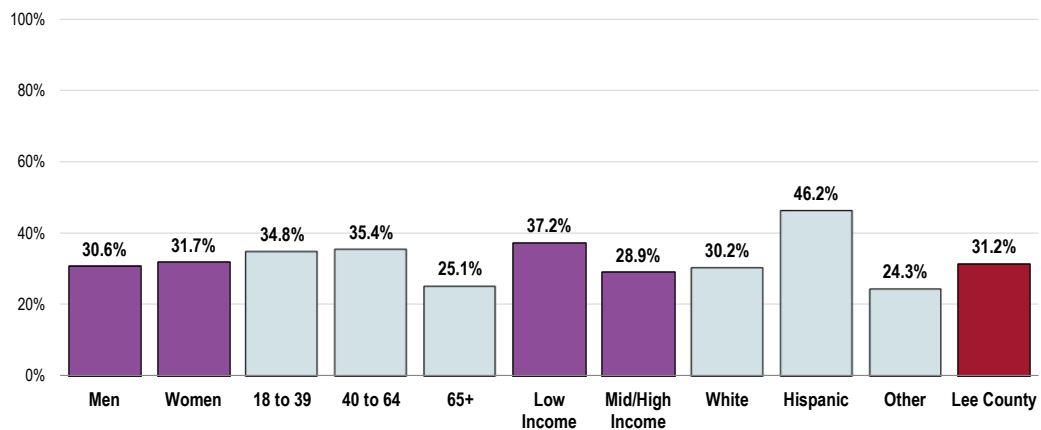
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 176]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-9]  
 • 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.

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.

Obesity is notably more prevalent among:

- Those between the ages of 40 and 64 when compared to seniors (65+).
- Respondents with lower incomes.
- Hispanics.

### Prevalence of Obesity (Percent of Adults With a BMI of 30.0 or Higher; Lee County, 2017) Healthy People 2020 Target = 30.5% or Lower



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 176]  
 • 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.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • 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

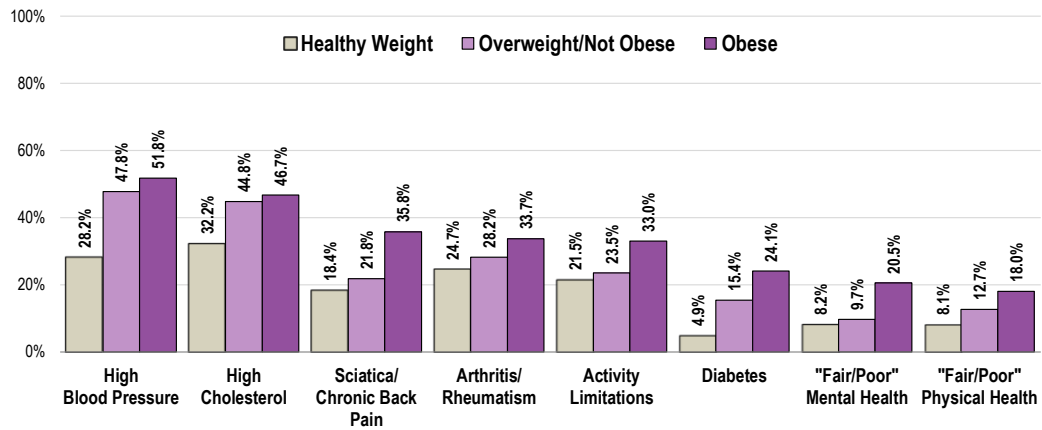
Overweight and obese adults are more likely to report a number of adverse health conditions.

Among these are:

- High blood pressure
- High cholesterol.
- Sciatica/chronic back pain.
- Arthritis/rheumatism.
- Activity limitations.
- Diabetes.
- “Fair” or “poor” mental health.
- “Fair” or “poor” physical health.

### Relationship of Overweight With Other Health Issues

(By Weight Classification; Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 5, 27, 28, 116, 128, 147, 148, 158]  
 Notes: • Based on reported heights and weights, asked of all respondents.

## 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<sup>th</sup> percentile
- Healthy Weight ≥5<sup>th</sup> and <85<sup>th</sup> percentile
- Overweight ≥85<sup>th</sup> and <95<sup>th</sup> percentile
- Obese ≥95<sup>th</sup> percentile

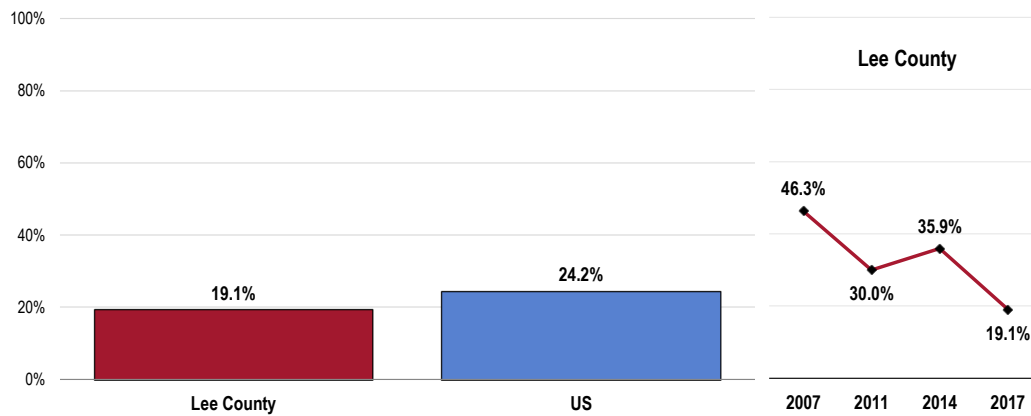
• Centers for Disease Control and Prevention

**Based on the heights/weights reported by surveyed parents, 19.1% of Lee County children age 5 to 17 are overweight or obese (≥85<sup>th</sup> percentile).**

- Statistically comparable to national findings.
- TREND: Statistically similar to 2011 findings, but lower than found in 2007 and 2014. (Note that, due to the smaller sample size for children, swings in trend data may appear more dramatic than they actually are.)

### Child Total Overweight Prevalence

(Children Age 5-17 Who Are Overweight/Obese; BMI in the 85<sup>th</sup> Percentile or Higher)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 180]

• 2015 PRC National Health Survey, Professional Research Consultants, Inc.

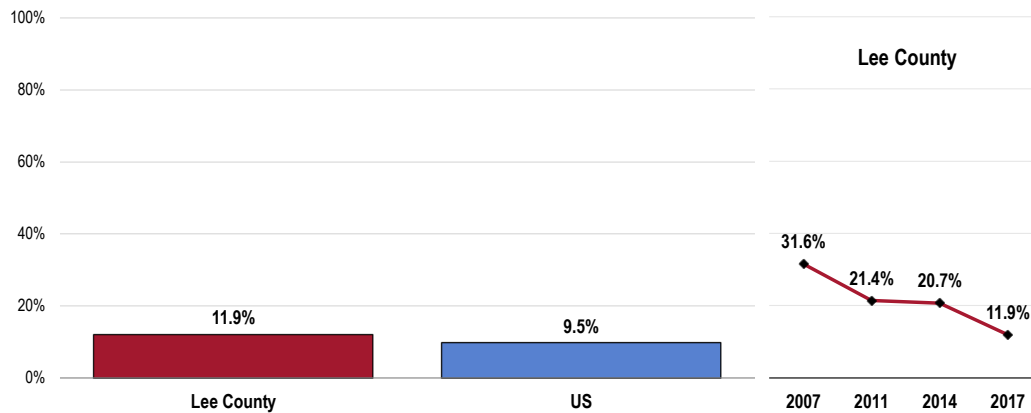
Notes: • Asked of all respondents with children age 5-17 at home.

• Overweight among children is determined by children’s Body Mass Index status at or above the 85<sup>th</sup> percentile of US growth charts by gender and age.

Further, 11.9% of area children age 5 to 17 are obese (≥95th percentile).

- Similar to the national percentage.
- Statistically similar to the Healthy People 2020 target (14.5% or lower for children age 2-19).
- TREND: Denotes a statistically significant decrease since 2007.

### Child Obesity Prevalence (Children Age 5-17 Who Are Obese; BMI in the 95<sup>th</sup> Percentile or Higher) Healthy People 2020 Target = 14.5% or Lower

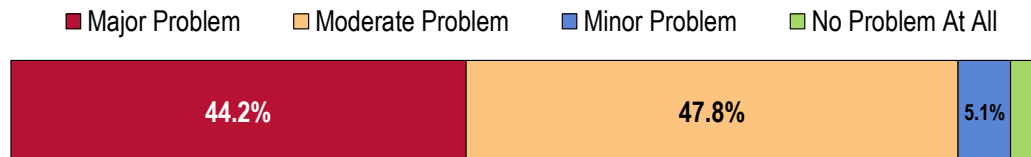


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 180]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-10.4]  
 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<sup>th</sup> 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 (although 44.2% said “major problem.”)

### Perceptions of Nutrition, Physical Activity, and Weight as a Problem in the Community (Key Informants, 2017)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

## Top Concerns

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

### Access to Healthy Food

*Lack of knowledge, lack of availability of healthy foods in low-income communities. – Other Health Provider*

*Many people in low-income communities do not have access to transportation so that they can acquire healthy food options. They typically shop at stores within walking distance, mostly convenience stores. – Public Health Representative*

*Many people are struggling to put food on the table. With the cut in BPL, many people eat junk food as this is all they can afford. – Public Health Representative*

*Financial barriers to being able to purchase the proper nutritious foods, transportation barriers, lack of preventative coaching and parenting skills. – Social Services Provider*

*No access to nutritional information for families that rely on food pantries. – Community Leader*

*Majority of schools offer lunch and breakfast for all students. Families cannot afford food. Inability to afford fresh healthy food choices. – Physician*

*Access to proper food. – Social Services Provider*

*There are food deserts within our community that don't provide access to healthy food choices. Our transportation system and development patterns are focused on the car, making it inconvenient and unsafe to walk, bike, use transit. – Community Leader*

*One of three kids and adults is overweight. Healthy/fresh foods are expensive, fast food is quite inexpensive. Families are often too busy to cook and/or to engage in physical activity. – Social Services Provider*

### Weight Status

*Obesity. Lack of education regarding benefits of healthy lifestyles, food, and exercise. Lack of access for poor and aging to healthy and fresh food. – Community Leader*

*The obesity rate is increasing in the nation. Kids are diagnosed with heart problems, diabetes, etc., at a very young age. – Public Health Representative*

*This is a problem across the age spectrum, but very scary when you look at future numbers based on current childhood obesity. Multi-faceted problem involving fear of kids being outside unchaperoned. – Other Health Provider*

*Many Lee County residents suffer from obesity. – Community Leader*

*Our area has a significant obesity problem and needs more access to reliable nutrition and healthy living information. – Community Leader*

*Overweight people, heart conditions, diabetes, etc. are a major problem here. – Social Services Provider*

*I think Lee County has made great strides in improving health. But there are still many people with weight problems and kids being raised with very bad habits that result in their obesity and health problems. – Community Leader*

*Obesity. – Physician*

*Obesity. Many people are above their ideal BMI. – Physician*

*Overweight in the young and older population because of a lack of exercises and physical activities. Too many people are sitting on their computers, watching television and playing games on computers. – Other Health Provider*

*Percentage of overweight, access to healthy foods, and safe places to be outdoors. – Public Health Representative*

### Nutrition

*Poor participation in Lee County Healthy Place initiative. High cost of quality food, high cost of fresh fruit/vegetables. Physical activity not highly regarded in school system. High-calorie menus offered in schools. Minimal resources for families. – Social Services Provider*

*Childhood obesity is on the rise, no nutrition training or education on schools that is adequate enough. – Other Health Provider*

*School breakfasts and lunches are high-sugar and high-carb because we are told that is what kids*

want. *Why don't we change this to make healthier people?* – Community Leader

*Not preparing their meals in their home, eating out instead, actually participating in a physical activity at least a few times a week. Both of these require time; seems people are so busy they don't make or have the time to do either.* – Public Health Representative

*Too many fast food restaurants. Insurance does not pay for nutrition or dietician visits. Too much screen time and electronic media.* – Physician

### Co-occurrences

*Physicians do not provide nutritional teaching. Fad diets with misleading health claims.* – Social Services Provider

*Long-term risk in pediatric population for diabetes, heart disease, cancer, and other associated complications. Not all cultures view obesity as a health concern. Socio-economic challenges as it is much cheaper to eat unhealthy foods.* – Other Health Provider

*Poverty, age, and apathy.* – Social Services Provider

*Poor eating habits due to lack of education/information. Low income. Obesity in youth population that becomes lifelong. Not enough emphasis on these issues in educational institutions.* – Community Leader

*People's willingness to make lifestyle changes.* – Other Health Provider

*Crime in Lee County. People are concerned for their safety. Eating healthy is expensive. Computers are a problem; people don't know how to disconnect.* – Other Health Provider

*Increased risk of many diseases. Poor eating habits and popularity of junk food. Technology, TV, and lack of physical education at schools.* – Social Services Provider

*Learned behaviors from family and peers. There is a prevalent culture of poor nutrition, lack of physical exercise, and high rates of obesity within certain pockets of socioeconomic groups in Lee County.* – Social Services Provider

### Health Education

*Education of healthy eating, access and ability to buy healthy foods.* – Social Services Provider

*Confusion between lack of proper knowledge in physicians and even nutritionists, media, and the general public in the new era of nutrition. The food industry, biased advertisement.* – Physician

*Educational level.* – Physician

*More education for all in these areas.* – Community Leader

*Lack of education, people dying from diabetes, strokes, and heart conditions. No one is giving "real" education that addresses the cultural changes needed to avoid these issues.* – Community Leader

*More people made aware of the wellness centers in Ft. Myers and Cape Coral. The programs Lee Health has available free of charge or for a fee. Doctors and nurses being better educated about nutrition.* – Other Health Provider

*Education and access to wellness programs.* – Community Leader

*Lack of education. Lack of resources to provide education. Many food deserts, especially in poorer neighborhoods. Lack of interest in nutrition, physical activity, and weight in the retired population.* – Physician

### Inactivity

*Get the kids off the couch and off the phone and on the track!* – Community Leader

*Lack of sidewalks, schools not in vicinity of people's homes, lack of PE in schools, and lack of neighborhood safety. Conflicting information from healthcare providers and food deserts.* – Public Health Representative

*Technology has made what was normal outdoor play and activity for children obsolete. Screen time has replaced tag, hide-and-go-seek, and dodgeball.* – Social Services Provider

*Lack of community involvement in outside activities, as well as community restaurants not offering healthier food choices. Calories and fat content should be listed next to all menu choices to remind the individual of their choices.* – Other Health Provider

*Some communities are not walkable/bikeable. Food deserts remain in some areas; sugar-sweetened beverages and snacks dominate the retail environment.* – Public Health Representative

*Sedentary lifestyle and mobility issues as people age.* – Community Leader

*Sedentary lifestyles.* – Social Services Provider

### Comorbidities

*We have heart attack, stroke, hypertension, and diabetes issues in our area that are a direct result of unhealthy choices. The biggest challenge in combating these problems is teaching people to unlearn unhealthy behavior. – Community Leader*

#### Focus Group Findings: Healthy Lifestyles

Lifestyle affects so many health issues, yet a healthy lifestyle is difficult to achieve; a majority of the time in each of the follow-up focus groups was spent discussing reasons as to why that is. Participants cited a variety of root causes contributing to unhealthy lifestyles in Lee County:

- **Knowledge** (regarding nutrition, budgeting, skills needed to live healthfully)
- **Motivation** to make the right choices (willingness to change, self-value, parenting, positive modeling)
- **Socioeconomic status** (in terms of prioritizing health living, access to services)
- **Cultural & societal norms** (e.g., dietary staples, reliance on fast food/prepackaged meals, work-life balance)
- **Infrastructure** (which can either support or discourage physical activity, or offer easier access to healthful foods)

Focus group participants agreed that multi-faceted **health education** is the key to promoting healthy lifestyles.

*For a more detailed description of focus group discussions, along with supporting quotes, please see the Appendix provided at the end of this report.*

## 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.

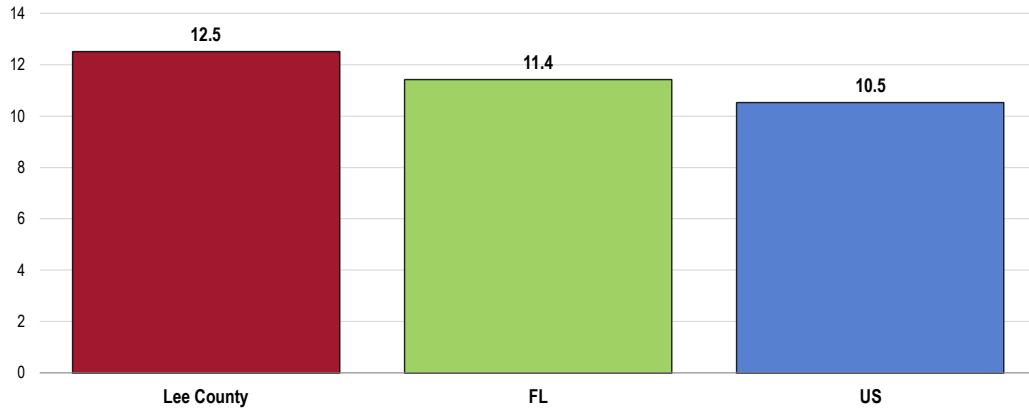
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### **Age-Adjusted Cirrhosis/Liver Disease Deaths**

**Between 2013 and 2015, Lee County reported an annual average age-adjusted cirrhosis/liver disease mortality rate of 12.5 deaths per 100,000 population.**

- Higher than the statewide and national rates.
- Fails to satisfy the Healthy People 2020 target (8.2 or lower).

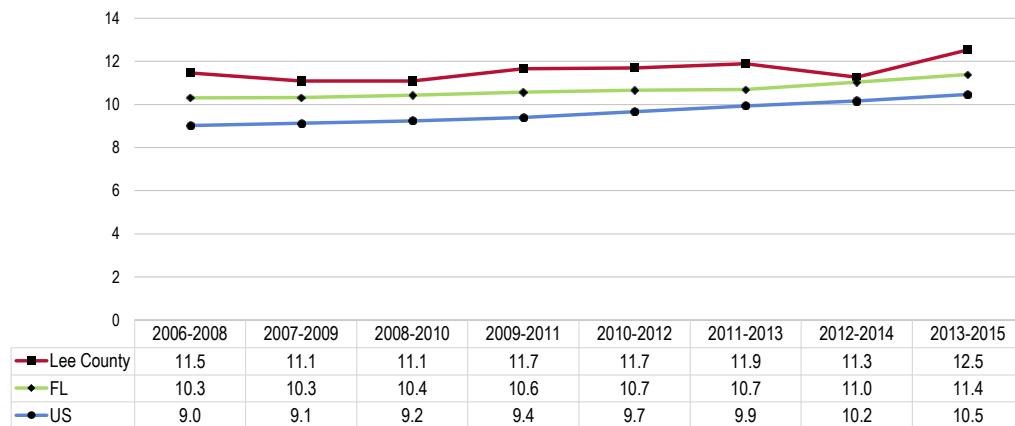
### Cirrhosis/Liver Disease: Age-Adjusted Mortality (2013-2015 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 8.2 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.
  - 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.

- **TREND:** The mortality rate in the region has not shown a clear trend. Statewide and nationwide, rates have increased gradually.

### Cirrhosis/Liver Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 8.2 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 March 2017.
  - 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.



## Alcohol Use

### Excessive Drinking

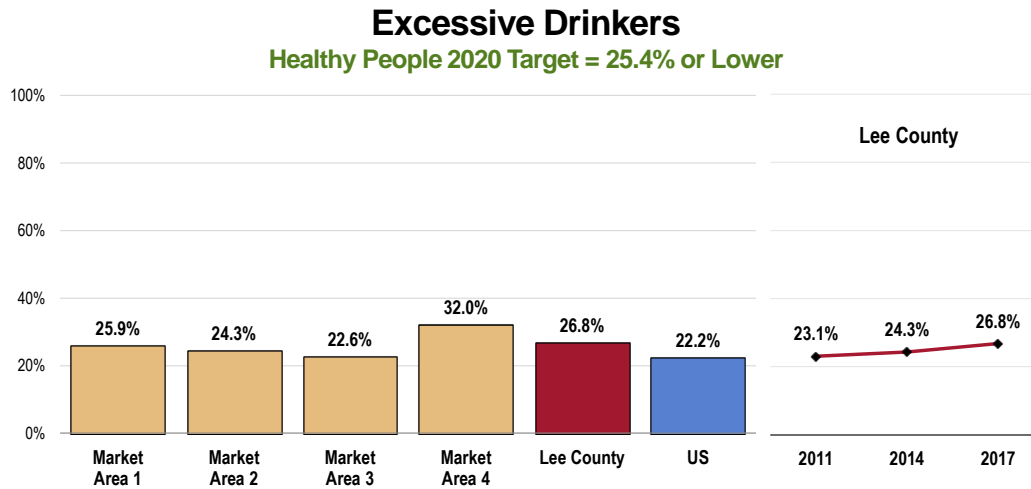
**A total of 26.8% of area adults are excessive drinkers (heavy and/or binge drinkers).**

“Excessive drinking” includes heavy and/or binge drinkers:

- **Heavy drinkers** include men reporting 2+ alcoholic drinks per day or women reporting 1+ alcoholic drink per day in the month preceding the interview.
- **Binge drinkers** include men reporting 5+ alcoholic drinks or women reporting 4+ alcoholic drinks on any single occasion during the past month.

- Higher than the national proportion.
- Similar to the Healthy People 2020 target (25.4% or lower).
- Highest in Market Area 4.
- **TREND:** Statistically unchanged since 2011.

**RELATED ISSUE:**  
See also *Stress* in the **Mental Health** section of this report.



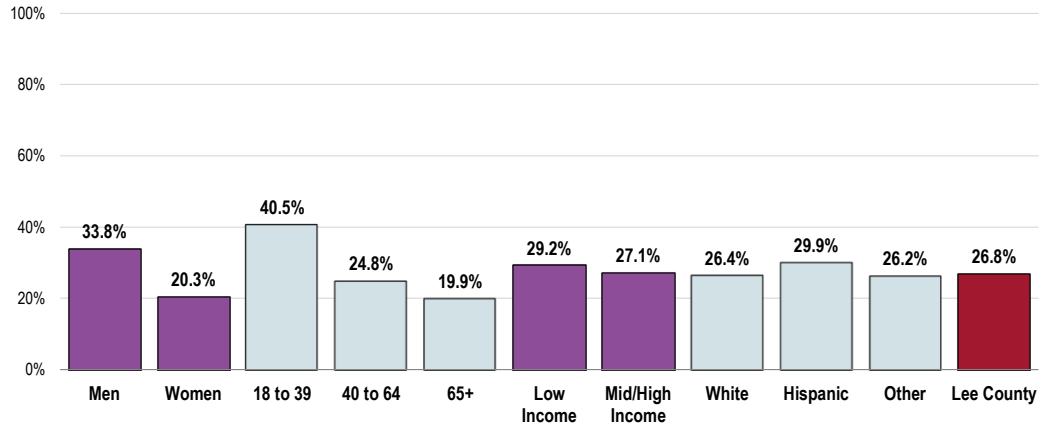
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 189]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-15]  
 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 drinking is more prevalent among men and especially adults age 18 to 39.

## Excessive Drinkers

(Lee County, 2017)

Healthy People 2020 Target = 25.4% or Lower



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 189]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-15]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • 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) 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.

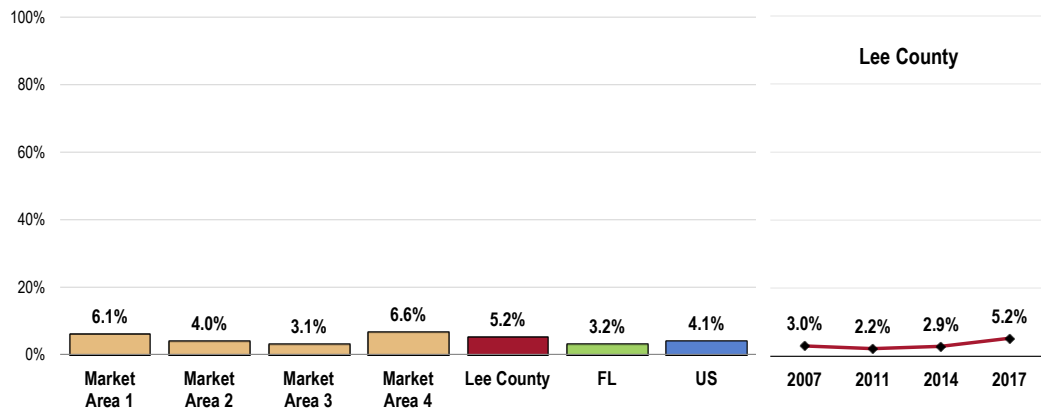
## Drinking & Driving

A total of 5.2% of Lee County adults acknowledge having driven a vehicle in the past month after they had perhaps too much to drink.

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.

- Statistically higher than found statewide.
- Comparable to the national findings.
- Statistically comparable findings by Market Area.
- TREND: The drinking and driving prevalence has increased significantly since 2014.

## Have Driven in the Past Month After Perhaps Having Too Much to Drink



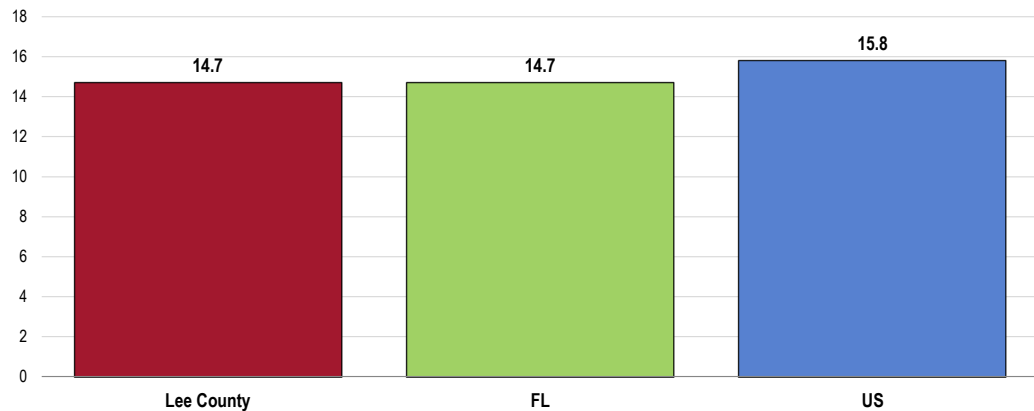
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 66]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2014 Florida data.  
 Notes: • Asked of all respondents.

## Age-Adjusted Drug-Induced Deaths

Between 2013 and 2015, there was an annual average age-adjusted drug-induced mortality rate of 14.7 deaths per 100,000 population in Lee County.

- Identical to the statewide rate.
- Lower than the national rate.
- Fails to satisfy the Healthy People 2020 target (11.3 or lower).

### Drug-Induced Deaths: Age-Adjusted Mortality (2013-2015 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 11.3 or Lower

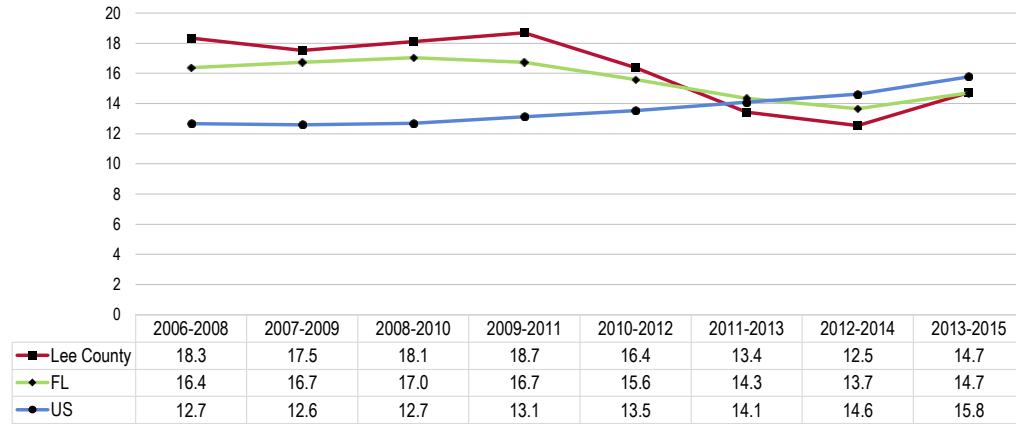


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2017.

Notes: • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-12]  
• 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.

- **TREND:** The mortality rate was declining, but showed an uptick in the latest reporting period. Nationwide, rates have increased slightly.

## Drug-Induced Deaths: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 11.3 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 March 2017.
- UD 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.

## Illicit Drug Use

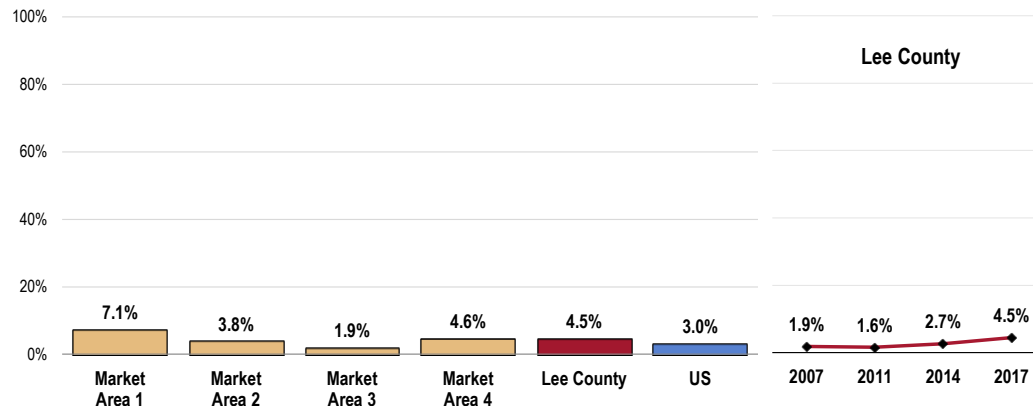
**A total of 4.5% of Lee County adults acknowledge using an illicit drug in the past month.**

- Similar to the proportion found nationally.
- Satisfies the Healthy People 2020 target of 7.1% or lower.
- Highest in Market Area 1; lowest in Market Area 3.
- TREND: Marks a statistically significant increase over time.

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 in the Past Month Healthy People 2020 Target = 7.1% or Lower



Sources: 

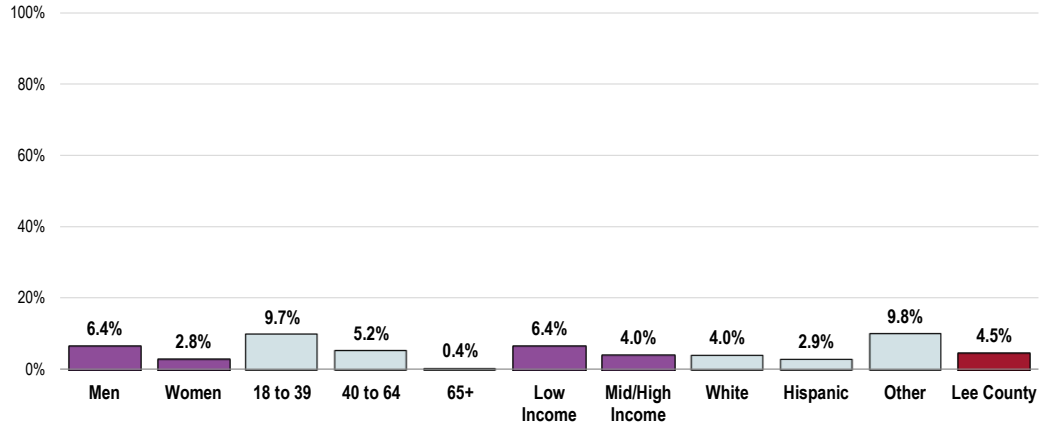
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 67]
- 2015 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-13.3]

Notes: 

- Asked of all respondents.

- Illicit drug use is more prevalent among men and younger adults.

### Illicit Drug Use in the Past Month (Lee County, 2017) Healthy People 2020 Target = 7.1% or Lower



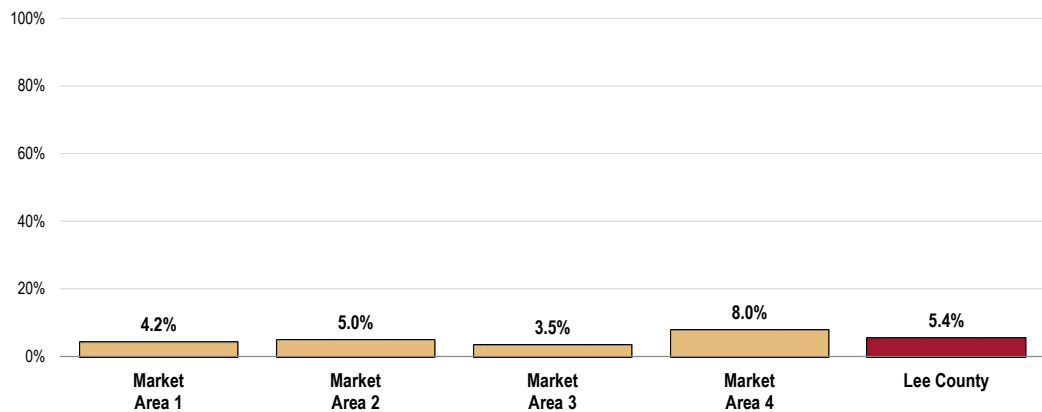
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 67]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-13.3]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### Marijuana Use

A total of 5.4% of Lee county adults acknowledge using marijuana in the past month (excludes those volunteering that they were prescribed marijuana by their doctor.)

- Marijuana use is highest in Market Area 4.

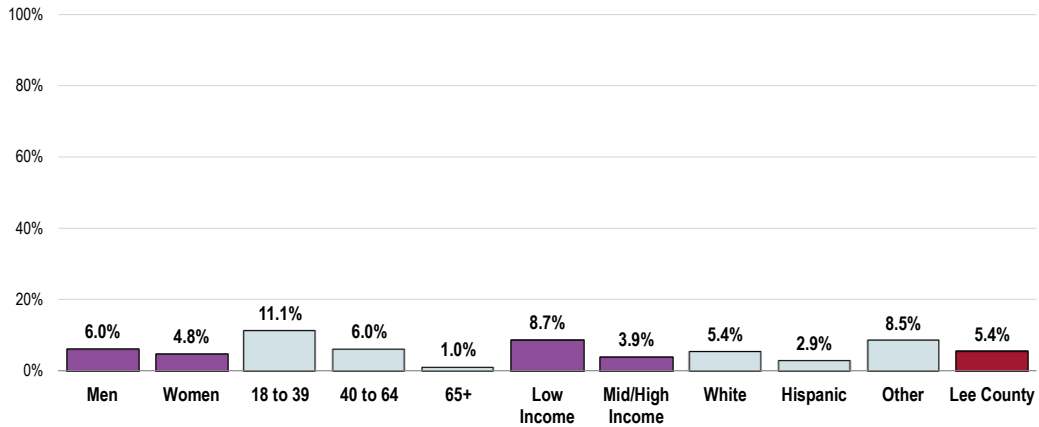
### Marijuana Use in the Past Month



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 311]  
 Notes: • Asked of all respondents.  
 • Does not include those who were prescribed marijuana by their doctor.

- Younger adults and low-income residents are more likely to report using marijuana in the past month.

### Marijuana Use in the Past Month (w/out Rx) (Lee County, 2017)



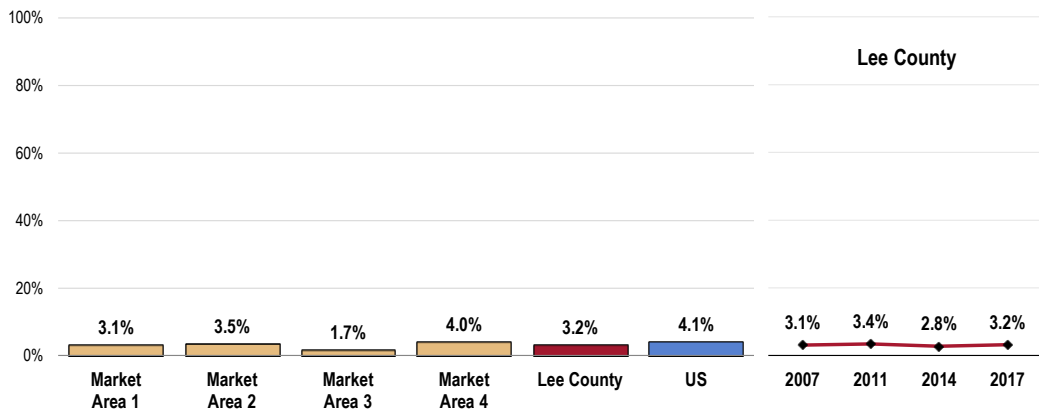
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 311]  
 Notes: • Asked of all respondents.  
 • Does not include those who were prescribed marijuana by their doctor.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### Alcohol & Drug Treatment

A total of 3.2% of Lee County adults report that they have sought professional help for an alcohol or drug problem at some point in their lives.

- Similar to national findings.
- Statistically similar by Market Area.
- TREND: Statistically unchanged over time.

### Have Ever Sought Professional Help for an Alcohol/Drug-Related Problem



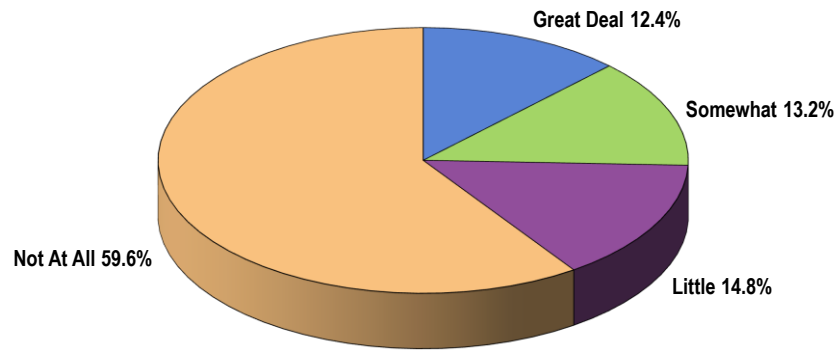
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 68]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

## Negative Effects of Substance Abuse

Respondents were also asked to what degree their lives have been negatively affected by substance abuse (whether their own abuse or that of another).

In all, most respondents have not been negatively affected (59.6% “not at all” responses).

**Degree to Which Life Has Been Negatively Affected by Substance Abuse (Self or Other’s)**  
(Lee County, 2017)

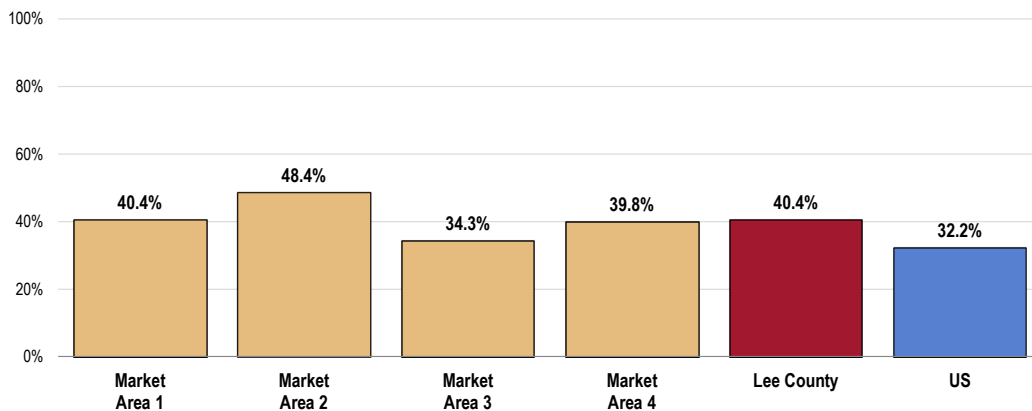


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 69]  
Notes: • Asked of all respondents.

In contrast, 40.4% of survey respondents indicate that their lives have been negatively affected by substance abuse, including 12.4% who gave “a great deal” responses.

- Less favorable than the US figure.
- Least favorable in Market Area 2; most favorable in Market Area 3.

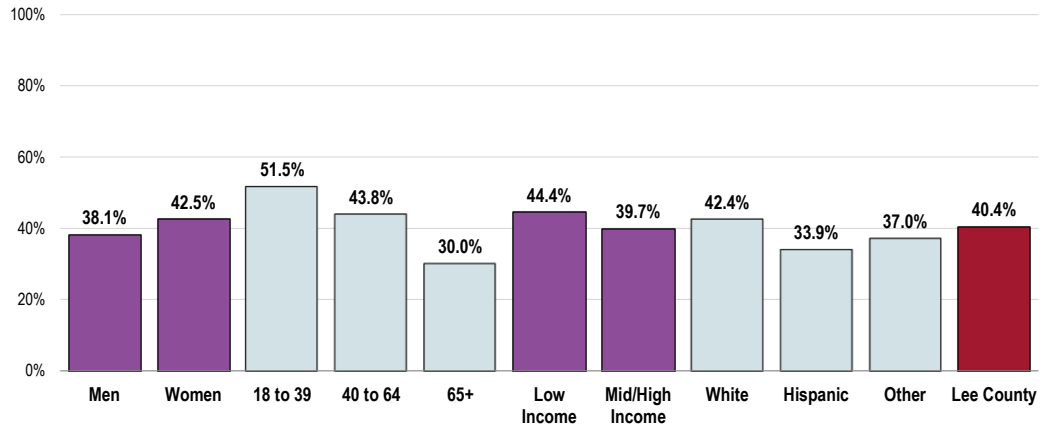
**Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else)**



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 69]  
• 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

- The prevalence of survey respondents whose lives have been negatively impacted by substance abuse, whether their own abuse or that of another, is higher among adults under age 65.

### Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else) (Lee County, 2017)

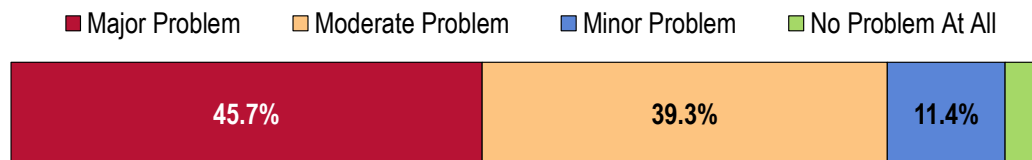


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 69]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### 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 as a Problem in the Community (Key Informants, 2017)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.



## Barriers to Treatment

Among those rating this issue as a “major problem,” the greatest barriers to accessing substance abuse treatment are viewed as:

### Access to Care/Services

*Lack of resources, lack of affordability, no Spanish speaking, and need for inpatient detox. – Social Services Provider*

*There is a lack of treatment beds for individuals without insurance or whose insurance doesn't cover treatment. – Public Health Representative*

*Lack of facilities and doctors to treat patients. – Community Leader*

*Again, there is a lack of detox beds, a lack of inpatient and outpatient treatment providers, and a lack of providers. There is generally a wait list for treatment beds in Lee County, especially for those without sufficient insurance. – Social Services Provider*

*Access to proper treatment for those without insurance. – Social Services Provider*

*People aren't aware of what's available and others don't want the stigma. Lack of education, screening, and rights of family members with relatives needing the assistance. – Community Leader*

*Access. – Physician*

*Program efficacy and recidivism. The need for alternate sentencing drug courts for adults, peer courts for juveniles. – Public Health Representative*

*Limited number of treatment options. – Social Services Provider*

*Amount of treatment facilities and cost. – Other Health Provider*

*Transportation and turnover in treatment providers. – Social Services Provider*

*Lack of programs to serve large number of clients. – Public Health Representative*

*Many of those who have substance abuse issues are not insured, and many programs require some treatment cost beyond a 72-hour Baker Act for hostility or self-harm issues. Being close to Miami and the coast, drugs enter via ports and waterways. – Other Health Provider*

*Insurance coverage, transportation, medical openings in day- and residential-treatment programs. – Social Services Provider*

*Not enough services for the demand. Large numbers of people with addiction problems and not wanting to receive help. – Physician*

*Inadequate mental health and substance abuse services. Increased availability of illicit drugs. – Physician*

*More programs needed. Lack of initiative. – Social Services Provider*

*Access to care and providers that accept Medicaid and no insurance are some of the biggest challenges for people with SA issues in the community. Suboxone treatment and management is a significant deficit in the community. – Other Health Provider*

*Too few accessible treatment centers. – Other Health Provider*

### Prevalence/Incidence

*Too easy to obtain these substances. – Community Leader*

*On the rise, effective intervention is needed in Lee County. – Public Health Representative*

*Too much use of drugs within the community. – Community Leader*

*Less drugs prescribed for pain that can become addictive. Older seasonal people who have scripts in two states for medication. More education in schools. Too many drugs available on the street. – Other Health Provider*

*Substance abuse/heroin use. – Social Services Provider*

*The availability and distribution. I think drug testing prior to welfare benefits should be mandatory. – Community Leader*

*High usage, easily available. Limited initiatives, particularly for adults. Limited wrap around services for individuals with co-occurring disorders. High youth abuse rate. – Social Services Provider*

*Substance abuse is so widespread. It is hard to know where to begin. Aren't we all excited that they are making marijuana legal? – Social Services Provider*

*Our community has felt the impact of increased prescription drug and heroin addiction. The challenge comes both in lack of education around prevention, access to services and resources available to increase services. – Community Leader*

*There are so many people that need help that the community cannot provide enough help. The court system and jails are not equipped to handle the massive amount of drug violations. – Social Services Provider*

### **Denial/Stigma**

*The primary problem is that the individuals will not admit substance abuse. The police should refer those people when it is known to them refer them immediately to a primary care physician for counseling and follow up that the person indeed seeks help. – Other Health Provider*

*Denial and concern for confidentiality. – Community Leader*

*Stigma continues to exist, which prevents those that can afford the service from coming forward. Cost is a concern and many facilities that accept state funding have a considerable wait for services. – Social Services Provider*

*Stigma and the reluctance to seek help in the first place. – Social Services Provider*

*Patient's lack of acknowledgement of abuse, lack of insurance. – Other Health Provider*

*Social stigma of admitting condition. – Community Leader*

*Admitting there is a problem. – Public Health Representative*

### **Affordable Care/Services**

*Affordable care and access. – Social Services Provider*

*Accessing affordable care. – Social Services Provider*

*Cost and the fact that addicts often try treatment many times before they seriously commit to it. – Social Services Provider*

*Cost and stigma. Clients in denial about the abuse and not seeing how it affects others around them. Clients afraid of being labeled and judged by others. – Public Health Representative*

*Funding for Salus for more beds and treatment programs. High cost of private programs. Insurance coverage limits, co-disorders. – Social Services Provider*

*Money. Insurance often does not cover much of the cost. Minimal Medicaid coverage. Many facilities are poorly run. – Physician*

### **Health Education**

*Awareness of treatment options, socio-economic and educational challenges. "Not in my backyard" mentality with respect to creation and location of additional treatment facilities. – Community Leader*

*Information about where to go and which services are available. – Community Leader*

*Awareness and getting into the community where this is a problem. – Physician*

*Diagnosis and referral, by primary care physicians, employers, law enforcement, courts, attorneys, family members, regulatory agencies. – Social Services Provider*

*Alongside mental health issues; I see these as very interrelated. – Other Health Provider*

### **Vulnerable Populations**

*Societal problems, poverty, lack of education, lack of funding for treatment. – Other Health Provider*

### Most Problematic Substances

Key informants (who rated this as a “major problem”) clearly identified **alcohol** as the most problematic substance abused in the community, followed by **heroin/other opioids**, **prescription medications**, and **cocaine/crack**.

Problematic Substances as Identified by Key Informants				
	Most Problematic	Second-Most Problematic	Third-Most Problematic	Total Mentions
Alcohol	36.5%	23.1%	12.0%	37
Heroin or Other Opioids	23.1%	23.1%	18.0%	33
Prescription Medications	21.2%	19.2%	16.0%	29
Cocaine or Crack	13.5%	5.8%	16.0%	18
Methamphetamines or Other Amphetamines	1.9%	11.5%	8.0%	11
Marijuana	1.9%	5.8%	10.0%	9
Club Drugs (e.g. MDMA, GHB, Ecstasy, Molly)	1.9%	1.9%	6.0%	5
Hallucinogens or Dissociative Drugs (e.g. Ketamine, PCP, LSD, DXM)	0.0%	3.8%	4.0%	4
Synthetic Drugs (e.g. Bath Salts, K2/Spice)	0.0%	1.9%	6.0%	4
Over-the-Counter Medications	0.0%	3.8%	2.0%	3
Inhalants	0.0%	0.0%	2.0%	1

#### Focus Group Findings: Substance Abuse

Discussion on this issue in the follow-up focus groups was relatively sparse, but it centered on the following issues:

- **Prevalence** (increasing, addiction as a chronic disease, closely linked with mental health)
- **Marijuana** (concern over legalization)
- **Age** (older adults as an often-overlooked risk group)

*For a more detailed description of focus group discussions, along with supporting quotes, please see the Appendix provided at the end of this report.*

## 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.

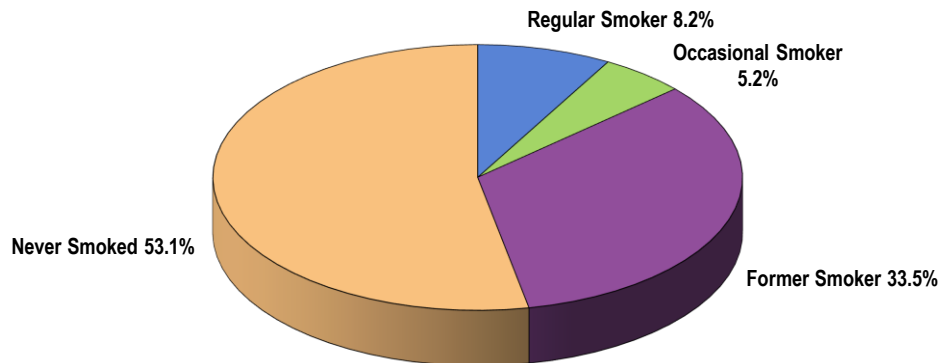
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Cigarette Smoking

### Cigarette Smoking Prevalence

A total of 13.4% of Lee County adults currently smoke cigarettes, either regularly (8.2% every day) or occasionally (5.2% on some days).

**Cigarette Smoking Prevalence**  
(Lee County, 2017)



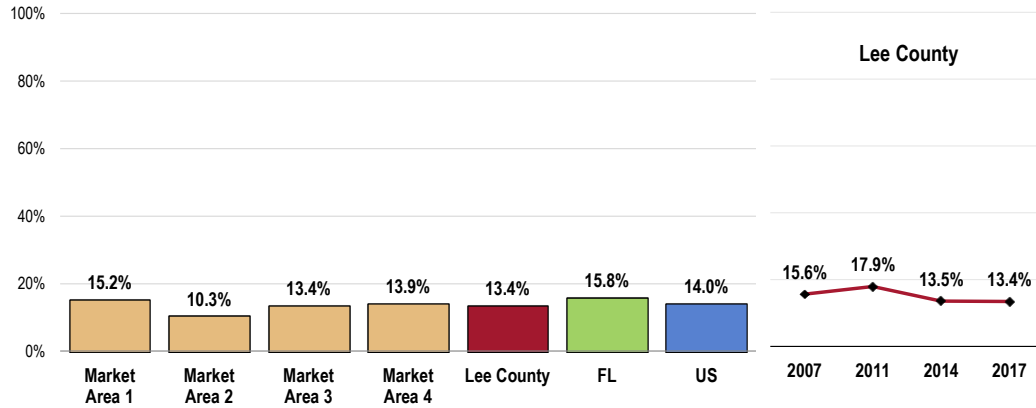
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 181]  
Notes: • Asked of all respondents.

- More favorable than statewide findings.
- Similar to national findings.
- Similar to the Healthy People 2020 target (12% or lower).
- No statistical difference by Market Area.

- **TREND:** The smoking percentage has decreased significantly since 2011, but is statistically similar to the 2007 and 2014 results.

### Current Smokers

Healthy People 2020 Target = 12.0% or Lower



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 181]  
 • 2015 PRC National Health Survey, Professional Research Consultants, 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); 2015 Florida data.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.1]

Notes: • Asked of all respondents.  
 • Includes regular and occasional smokers (those who smoke cigarettes every day or on some days).

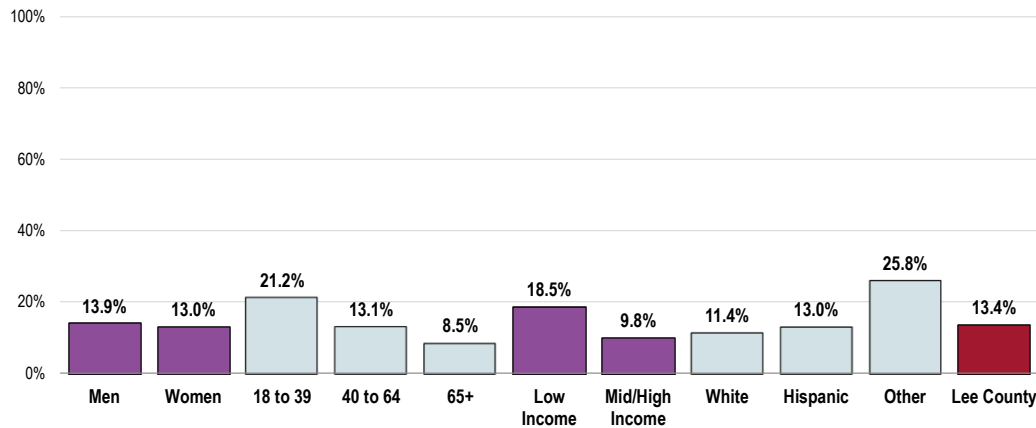
Cigarette smoking is more prevalent among:

- Adults under age 65.
- Lower-income residents.
- “Other” races.

### Current Smokers

(Lee County, 2017)

Healthy People 2020 Target = 12.0% or Lower



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 181]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.1]

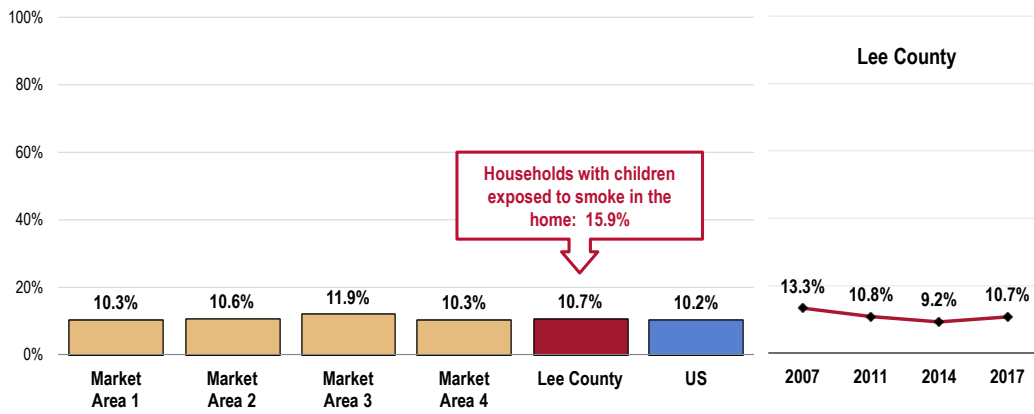
Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.  
 • Includes regular and occasion smokers (every day and some days).

### Environmental Tobacco Smoke

A total of 10.7% of Lee County adults (including smokers and nonsmokers) report that a member of their household has smoked cigarettes in the home an average of 4+ times per week over the past month.

- Similar to national findings.
- Similar by Market Area.
- TREND: Statistically similar to previous survey findings.
- Note that 15.9% of Lee County children are exposed to cigarette smoke at home, statistically similar to what is found nationally (not shown).

### Member of Household Smokes at Home

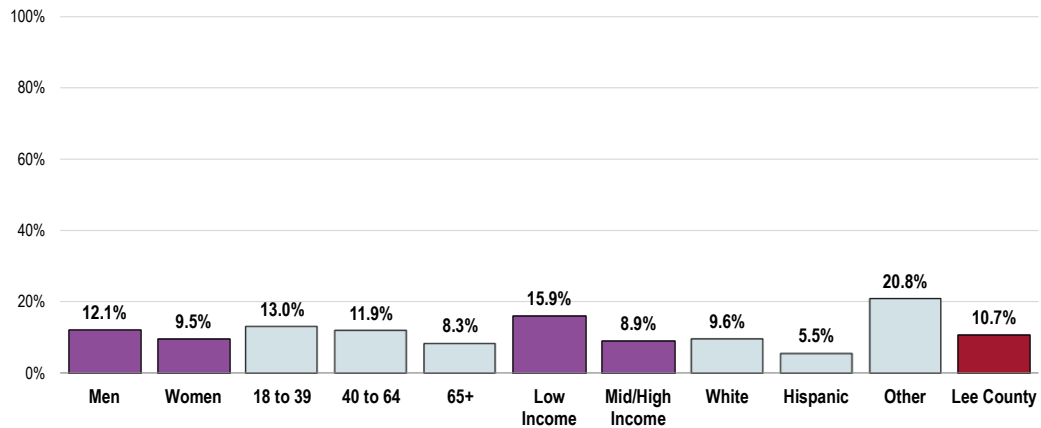


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 58, 184]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.

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.

- Exposure to environmental tobacco smoke is notably higher among residents with lower incomes and "Other" races.

## Member of Household Smokes At Home (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 58]

Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).

• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

• "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](http://www.healthypeople.gov))

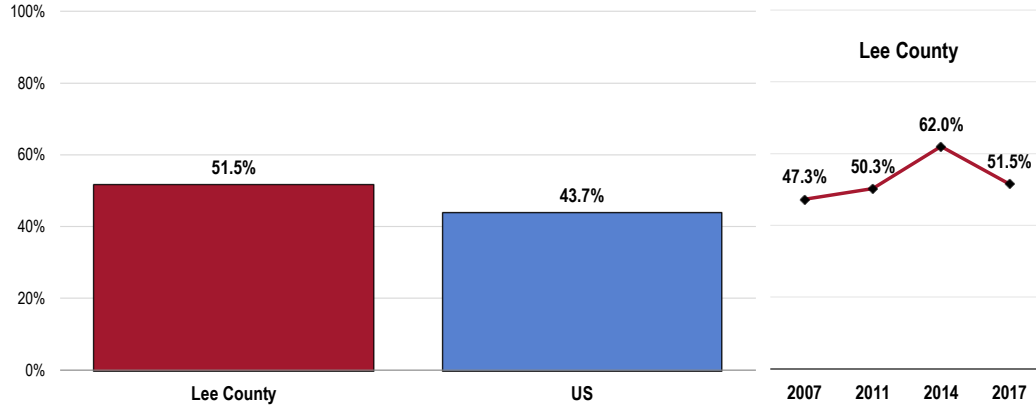
### Smoking Cessation Attempts

**One-half of regular smokers (51.5%) went without smoking for one day or longer in the past year because they were trying to quit smoking.**

- Statistically similar to the national percentage.
- Fails to satisfy the Healthy People 2020 target (80% or higher).
- TREND: No statistically significant change has occurred over time.

## Have Stopped Smoking for One Day or Longer in the Past Year in an Attempt to Quit Smoking (Among Everyday Smokers)

Healthy People 2020 Target = 80.0% or Higher



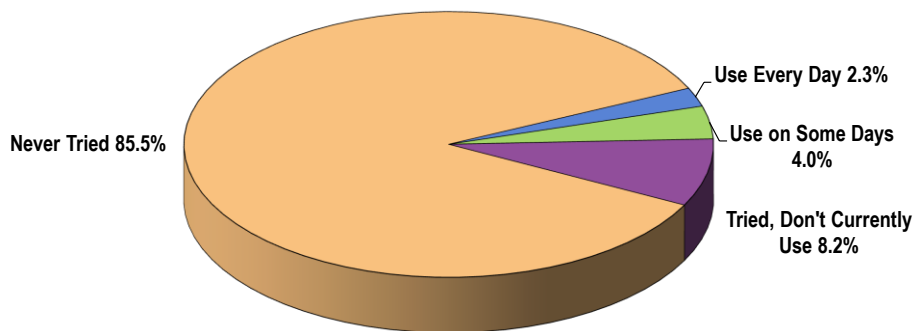
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 56-57]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-4.1]  
 Notes: • Asked of respondents who smoke cigarettes every day.

## Other Tobacco Use

### Electronic Cigarettes

A total of 6.3% of Lee County adults currently use electronic cigarettes (“e-cigarettes”), either regularly (2.3% every day) or occasionally (4.0% on some days).

### Electronic Cigarette Use (Lee County, 2017)



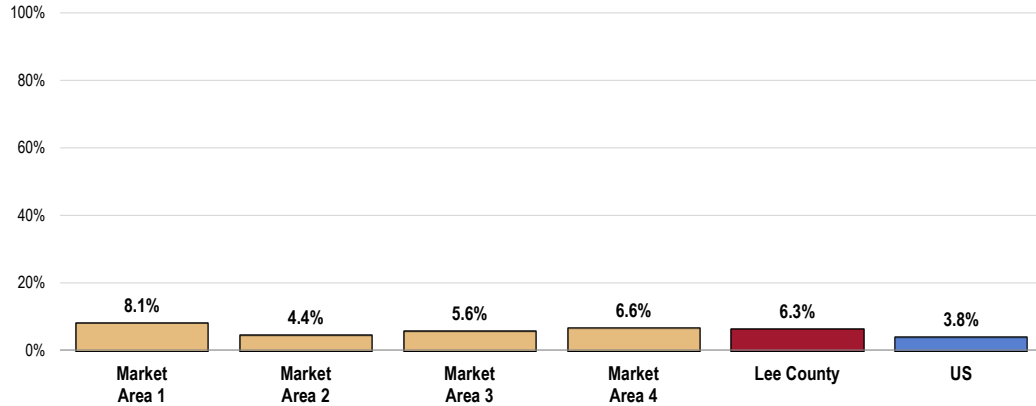
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 208]  
 Notes: • Asked of all respondents.

- Electronic cigarette usage in Lee County is less favorable than national findings.



- No statistical difference among the four Market Areas.

### Currently Use Electronic Cigarettes (Every Day or on Some Days)

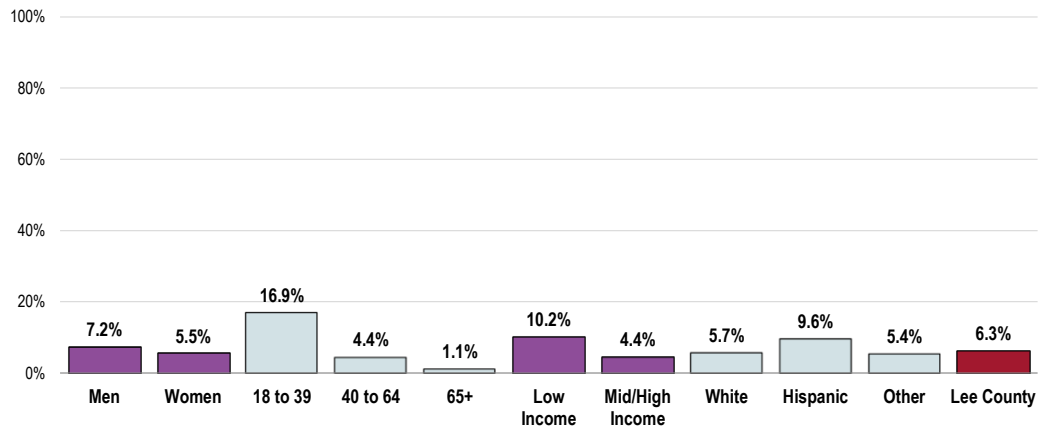


- Sources:
- 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 208]
  - 2015 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
  - Includes regular and occasional users (those who smoke e-cigarettes every day or on some days).

Electronic cigarette use is more prevalent among:

- Younger adults (note the negative correlation with age).
- Lower-income residents.

### Currently Use Electronic Cigarettes (Lee County, 2017)



- Sources:
- 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 208]
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
  - Includes regular and occasional users (those who smoke e-cigarettes every day or on some days).

### Cigars & Smokeless Tobacco

A total of 4.3% of Lee County adults use cigars every day or on some days.

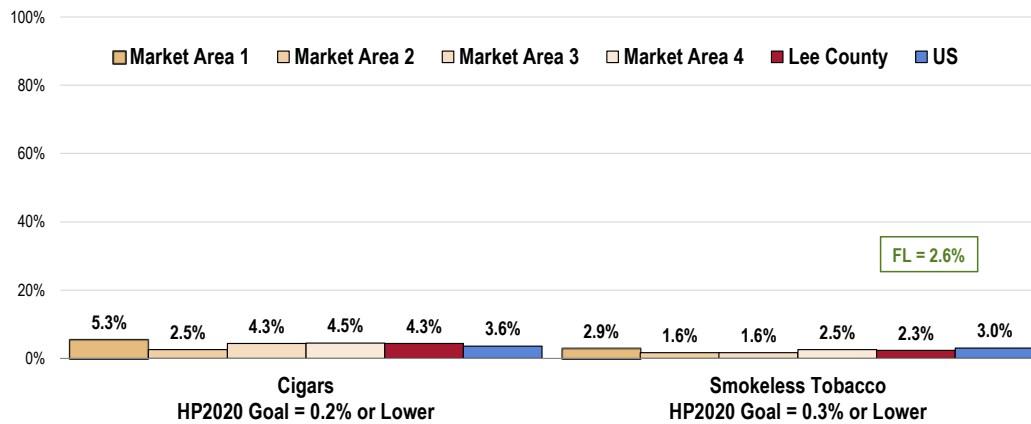
- Similar to the national percentage.
- Fails to satisfy the Healthy People 2020 target (0.2% or lower).
- Similar by Market Area.
- TREND: Statistically similar to the 2007 survey findings (not shown).

A total of 2.3% of Lee County adults use some type of smokeless tobacco every day or on some days.

- Comparable to the state and national percentages.
- Fails to satisfy the Healthy People 2020 target (0.3% or lower).
- Comparable by Market Area.
- TREND: Statistically comparable to the prevalence in 2007 (not shown).

Examples of smokeless tobacco include chewing tobacco, snuff, or "snus."

### Other Tobacco Use



Sources:
 

- 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 59-60]
- 2015 PRC National Health Survey, Professional Research Consultants, 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); 2015 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]

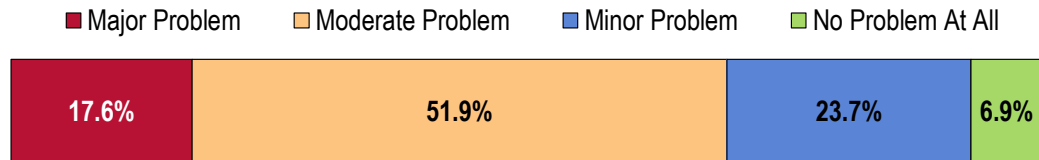
 Notes:
 

- Reflects the total sample of respondents.
- Smokeless tobacco includes chewing tobacco or snuff.

### Key Informant Input: Tobacco Use

Over half of key informants taking part in an online survey characterized *Tobacco Use* as a “moderate problem” in the community.

## Perceptions of Tobacco Use as a Problem in the Community (Key Informants, 2017)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

### Top Concerns

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

#### Prevalence/Incidence

- High number of tobacco users unmotivated to quit, despite efforts. – Other Health Provider*
- Smoking is the number one underlying cause of preventable death. Smoking rate, especially young adults, is high. – Other Health Provider*
- In Lee County, there is a greater-than-state -average of pregnant women who smoke—roughly 17%. Researchers, Brown Medical School, June issue of Pediatrics, now report that nicotine exposure in the womb produces behavioral changes in babies. – Other Health Provider*
- Number of people using tobacco products and increasing prevalence among younger population. – Community Leader*
- We have not been able to decrease use over the last 10 years. Increase use among younger generations. Vapor cigarettes. – Community Leader*
- The incidence of tobacco use is too high. Lack of education or understanding regarding the harmful impact of tobacco. There is a lot of education, but it is not effective. – Other Health Provider*
- Tobacco use continues as well as the related health issues related to tobacco use. – Public Health Representative*
- Way too many smoke, especially teens. – Social Services Provider*
- Efforts to reduce smoking has been moderately successful, still many kids begin smoking in FL. – Social Services Provider*
- Too much use without considering the consequences. – Community Leader*
- We have no doubt that tobacco use is a major contributor to things like lung cancer and COPD, heart disease and countless other diseases and conditions, and yet we still have not been successful in teaching kids not to start and getting adults to quit. – Other Health Provider*
- Many tobacco users, younger section of population are being targeted. – Public Health Representative*
- Multiple people who identify as smokers within the community. – Physician*

#### Co-Occurrences

- Stress. People smoke when stressed. – Other Health Provider*
- Leads to multiple early-mortality risk factors. – Social Services Provider*

#### Vaping

- Vaping. It now appears and has been reported in the media that fewer teens are smoking cigarettes that in the past; however, a percentage of teens or young adults have switched to vaping. Vaping products are just another way to ingest nicotine. – Other Health Provider*

#### Education

- Too many people still smoke. It amazes me how many people in the medical field smoke. Better education. Natural ways to quit smoking through hypnosis. Educating kids early. – Other Health Provider*

# Access to Health Services



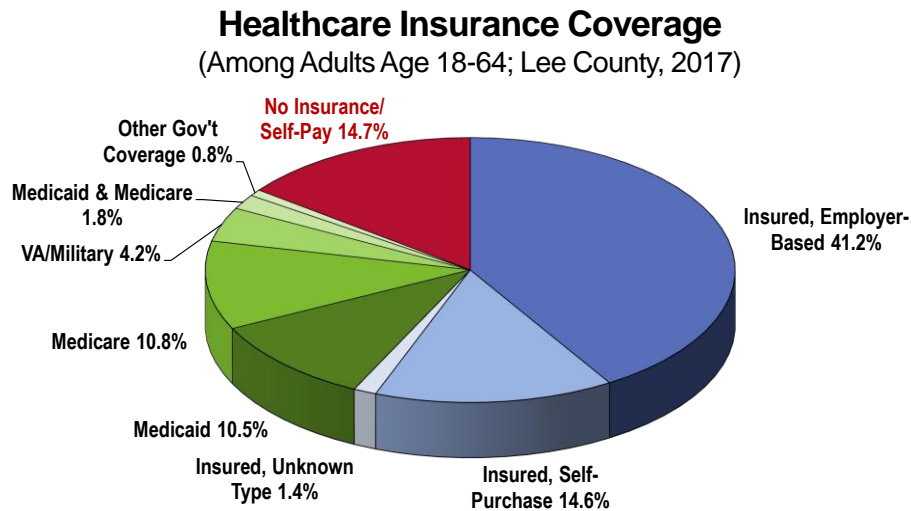
Professional Research Consultants, Inc.

## Health Insurance Coverage

### Type of Healthcare Coverage

A total of 57.2% of Lee County adults age 18 to 64 report having healthcare coverage through private insurance. Another 28.1% report coverage through a government-sponsored program (e.g., Medicaid, Medicare, military benefits).

Survey respondents were asked a series of questions to determine their healthcare insurance coverage, if any, from either private or government-sponsored sources.

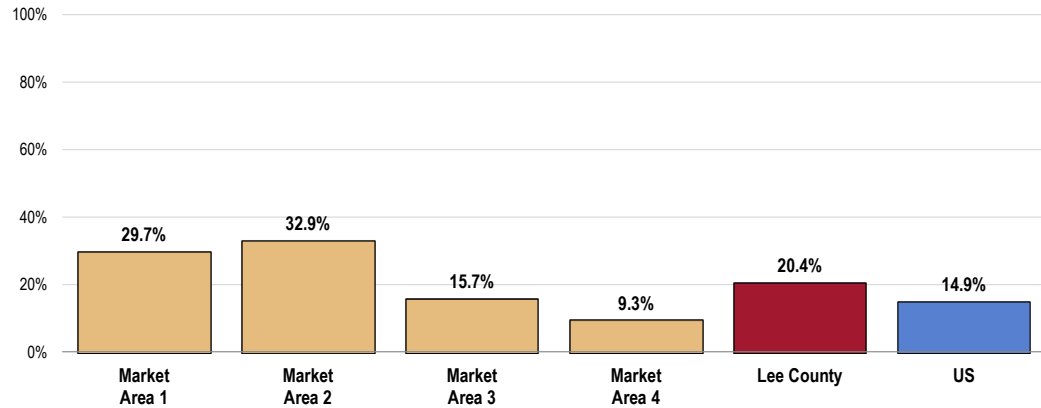


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 190]  
Notes: • Reflects respondents age 18 to 64.

A total of 20.4% of residents under 65 with private coverage or Medicaid secured their coverage under the Affordable Care Act (ACA), otherwise known as “Obamacare.”

- Higher than the national finding.
- Highest in Market Areas 1 and 2; lowest in Market Area 4.

## Insurance Was Secured Under the Affordable Care Act/“Obamacare” (Insured Adults Age 18-64, By Type of Coverage)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 84]  
• 2015 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents under 65 with private insurance or Medicaid.

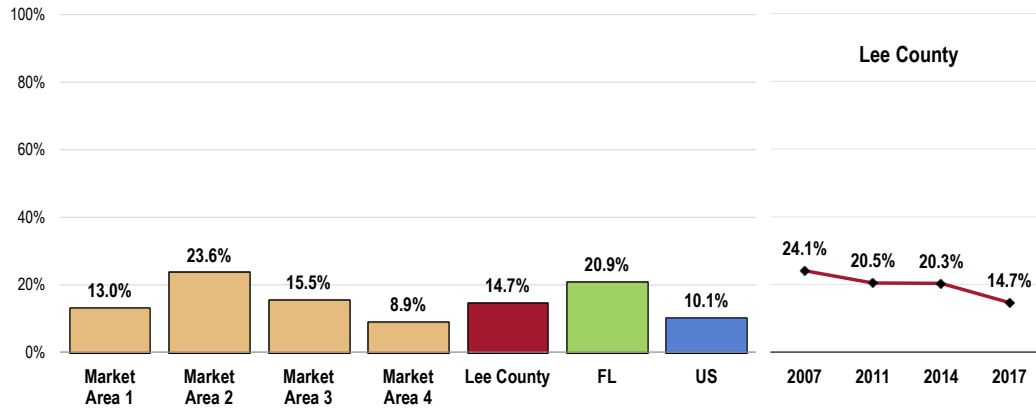
## Lack of Health Insurance Coverage

**Among adults age 18 to 64, 14.7% report having no insurance coverage for healthcare expenses.**

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 healthcare services – neither private insurance nor government-sponsored plans (e.g., Medicaid).

- Better than the state finding.
- Worse than the national finding.
- The Healthy People 2020 target is universal coverage (0% uninsured).
- Worst in Market Area 2; best in Market Area 4.
- TREND: Marks a statistically significant improvement in health insurance coverage since 2007.

### Lack of Healthcare Insurance Coverage (Among Adults Age 18-64) Healthy People 2020 Target = 0.0% (Universal Coverage)



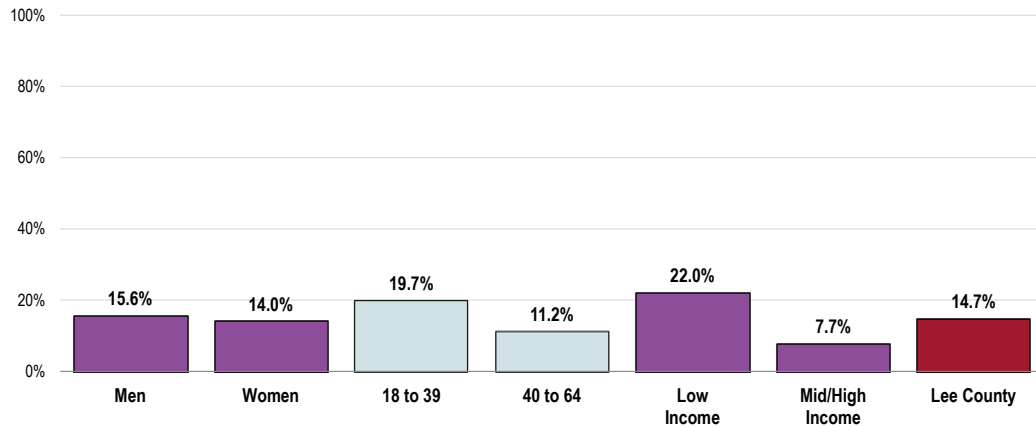
Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 190]  
 ● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2015 Florida data.  
 ● 2015 PRC National Health Survey, Professional Research Consultants, 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.

The following population segments are more likely to be without healthcare insurance coverage:

- Adults age 18 to 39.
- Residents living at lower incomes.

### Lack of Healthcare Insurance Coverage (Among Adults Age 18-64; Lee County, 2017) Healthy People 2020 Target = 0.0% (Universal Coverage)



Sources: ● 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 190]  
 ● 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.  
 ● Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 ● Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Difficulties Accessing Healthcare

### About Access to Healthcare

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](http://www.healthypeople.gov))

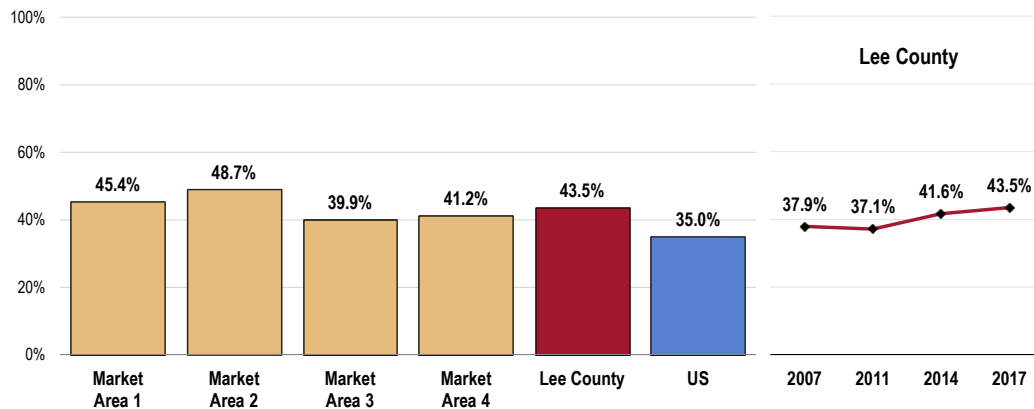
### Difficulties Accessing Services

**A total of 43.5% of Lee County adults report some type of difficulty or delay in obtaining healthcare services in the past year.**

- Less favorable than national findings.
- Statistically similar by Market Area.
- TREND: Has increased significantly since 2007.

This indicator reflects the percentage of the total population experiencing problems accessing healthcare in the past year, regardless of whether they needed or sought care.

### Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year



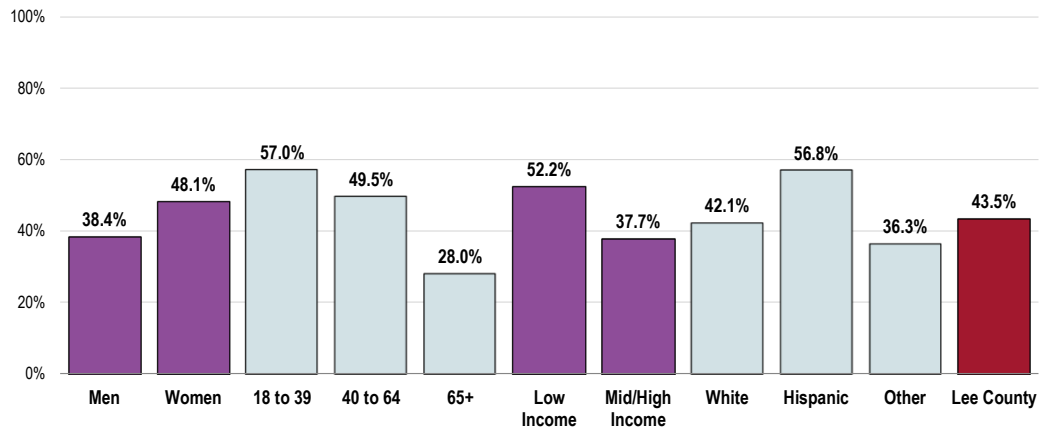
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 194]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.  
 • Represents the percentage of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.



Note that the following demographic groups more often report difficulties accessing healthcare services:

- Women.
- Adults under the age of 65.
- Lower-income residents.
- Hispanics.

### Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 194]  
 Notes: • Asked of all respondents.  
 • Represents the percentage of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### Barriers to Healthcare Access

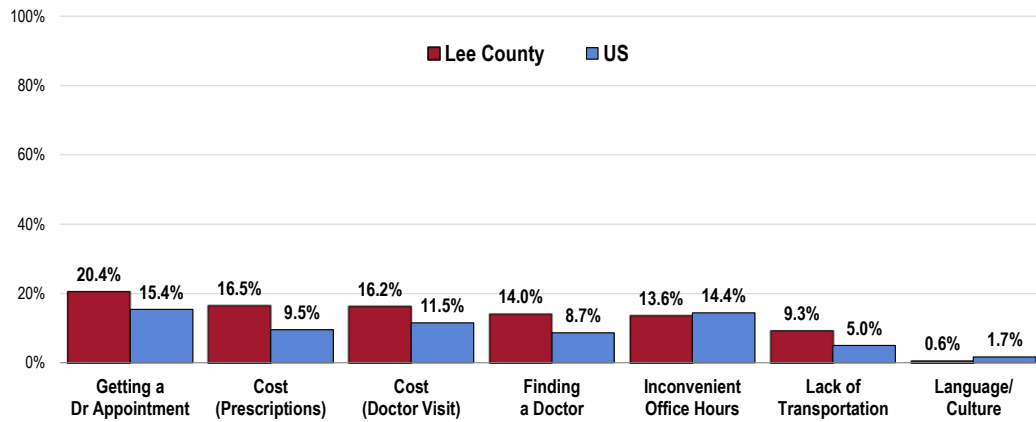
**Of the tested barriers, getting an appointment impacted the greatest share of Lee County adults (20.4% say that appointment availability prevented them from obtaining a visit to a physician in the past year).**

- The proportion of Lee County adults impacted was statistically comparable to or worse than that found nationwide for each of the tested barriers except difficulties caused by language or cultural differences.
- Note that difficulty finding a physician was most prevalent in Market Area 2 (not shown).
- Difficulty getting an appointment, trouble finding a doctor, and lack of transportation affected a significantly greater proportion of residents than in baseline 2007 findings.

To better understand healthcare 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.

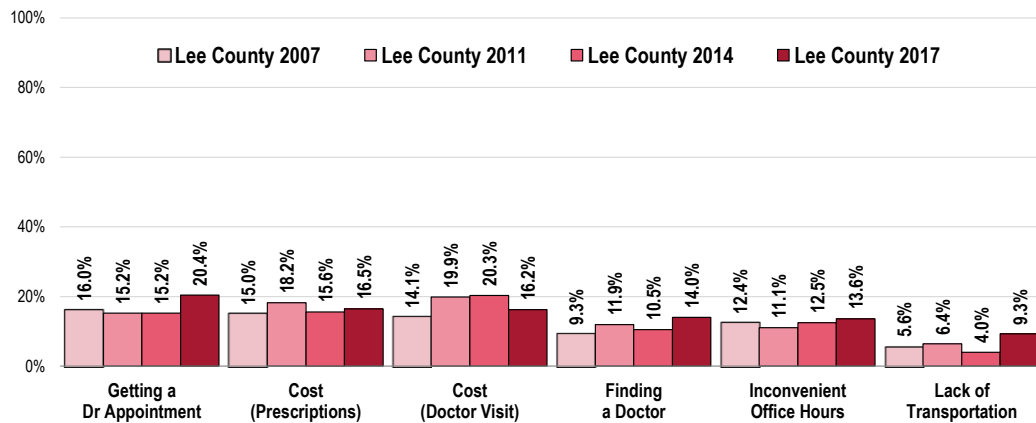
Again, these percentages reflect the total population, regardless of whether medical care was needed or sought.

### Barriers to Access Have Prevented Medical Care in the Past Year



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 7-13]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

### Trend in Barriers to Access Have Prevented Medical Care in the Past Year



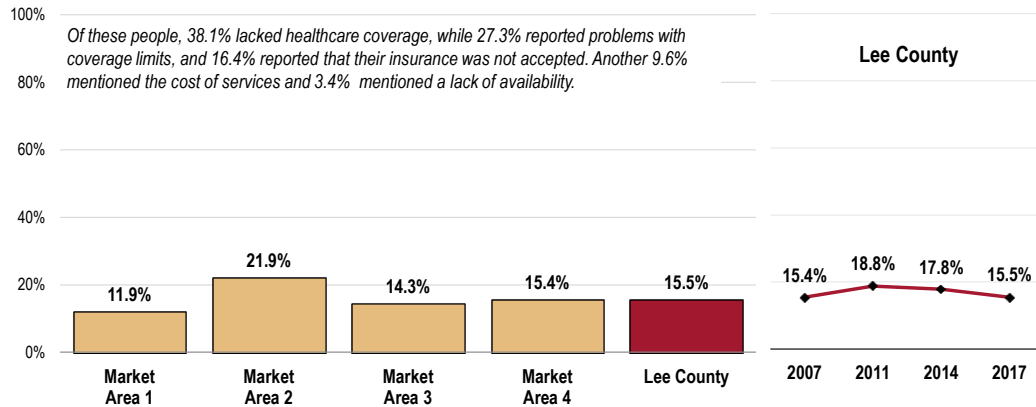
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 7-12]  
 Notes: • Asked of all respondents.  
 • Language and cultural differences were not asked about in previous surveys.

### Insurance Issues

Among all Lee County adults, 15.5% report that a lack of insurance coverage or their insurance type prevented their medical care in the past year.

- Most favorable in Market Area 1; least favorable in Market Area 2.
- TREND: Has decreased significantly since 2011.
- Of these people indicating insurance-related access problems in the past year, 38.1% **lacked coverage**, while 27.3% had reached their **coverage limits**. Another 16.4% indicated their insurance was **not accepted**, while 9.6% reported that **cost was prohibitive**, and 3.4% mentioned **lack of availability**.

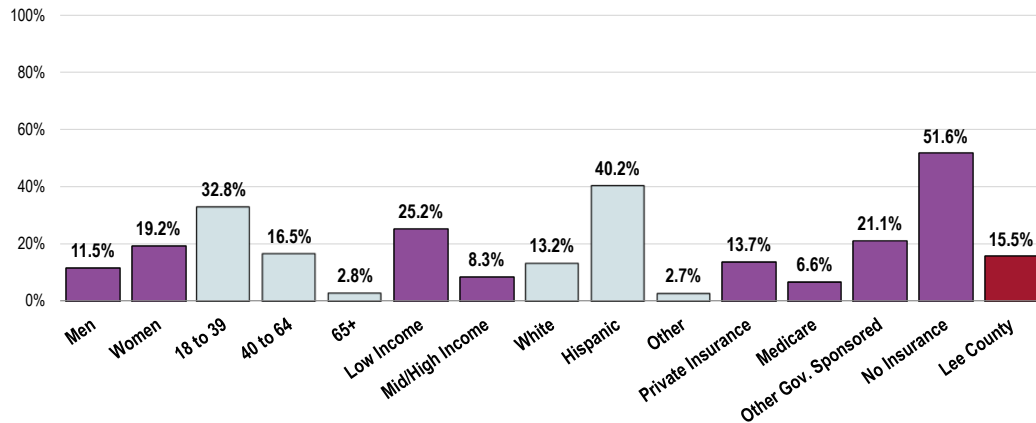
### Lack or Type of Insurance Coverage Prevented Medical Care at Some Point in the Past Year



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 305-306]  
 Notes: ● Asked of all respondents.

- This disproportionately affects women, younger adults (negative correlation with age), respondents with lower incomes, and Hispanic residents.
- Not surprising, over one-half of uninsured respondents report problems getting care in the past year because of lack or type of insurance.

### Lack or Type of Insurance Coverage Prevented Medical Care at Some Point in the Past Year (Lee County, 2017)



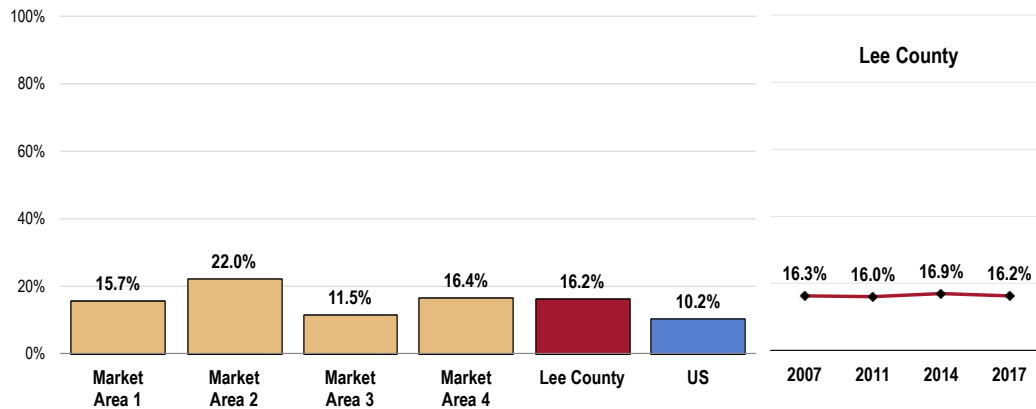
Sources: ● 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 305]  
 Notes: ● Asked of all respondents.  
 ● Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 ● Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### Prescriptions

Among all Lee County adults, 16.2% skipped or reduced medication doses in the past year in order to stretch a prescription and save money.

- Less favorable than national findings.
- Least favorable in Market Area 2; most favorable in Market Area 3.
- TREND: Statistically unchanged over time.

### Skipped or Reduced Prescription Doses in Order to Stretch Prescriptions and Save Money

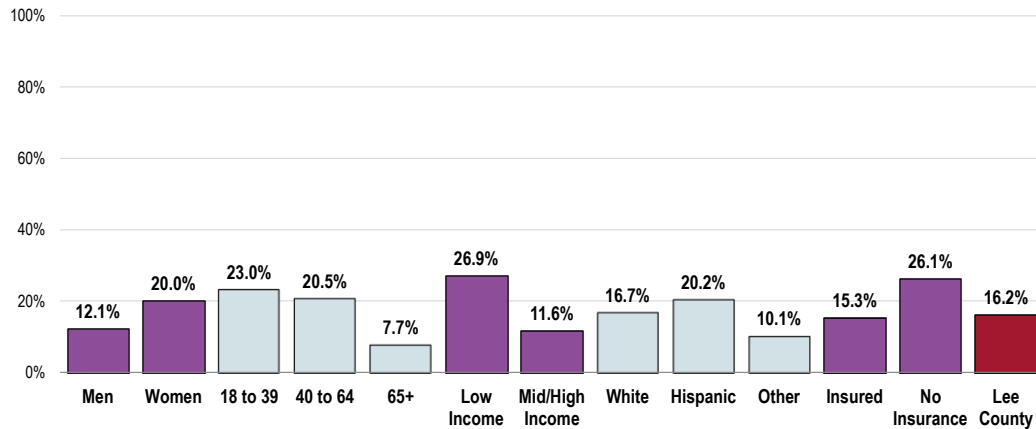


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 14]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

Adults more likely to have skipped or reduced their prescription doses include:

- Women.
- Adults age 18 to 64.
- Respondents with lower incomes.
- The percentage difference between insured and uninsured residents is not statistically significant.

## Skipped or Reduced Prescription Doses in Order to Stretch Prescriptions and Save Money (Lee County, 2017)



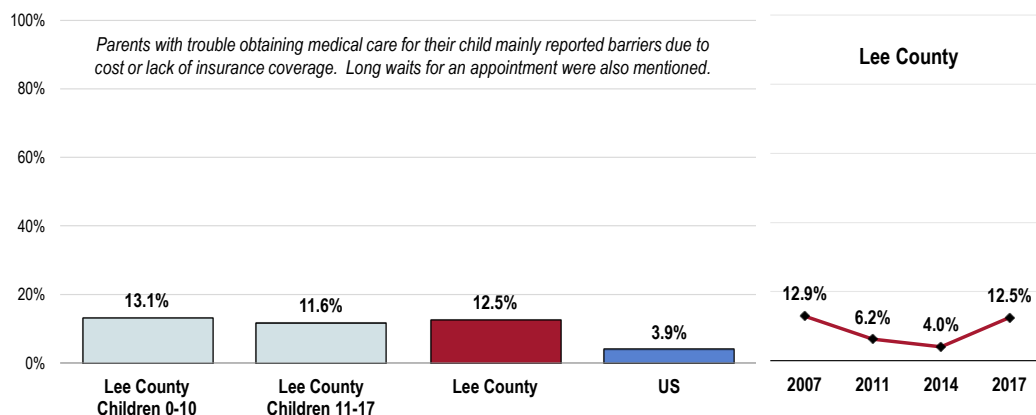
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 14]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Accessing Healthcare for Children

A total of 12.5% 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.

- More than three times the national percentage.
- TREND: Marks a statistically significant increase since 2014, however statistically similar to 2007 and 2011 findings.
- Similar findings when viewed by child's age.

## Had Trouble Obtaining Medical Care for Child in the Past Year (Among Parents of Children 0-17)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 136-137]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents with children 0 to 17 in the household.

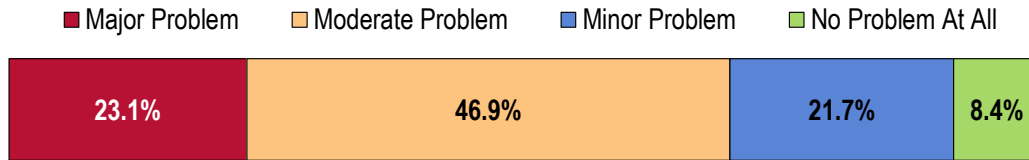
Surveyed parents were also asked if, within the past year, they experienced any trouble receiving medical care for a randomly-selected child in their household.

Among the parents experiencing difficulties, the majority cited **cost or a lack of insurance** as the primary reason; others cited long waits for appointments.

### Key Informant Input: Access to Healthcare Services

Key informants taking part in an online survey most often characterized **Access to Healthcare Services** as a “moderate problem” in the community.

### Perceptions of Access to Healthcare Services as a Problem in the Community (Key Informants, 2017)



Sources: • PRC Online Key Informant Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

### Top Concerns

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

#### Affordability

- Cost for low income; noninsured. Access to healthcare for uninsured or low-income. – Community Leader*
- People living at or below the poverty level who are not yet insured or underinsured. They misuse the Emergency Room and bottle the actual emergency medical needs. – Social Services Provider*
- Providing healthcare services to the uninsured, or underinsured. Making the target groups aware of services offered. Making healthcare accessible during day and evening hours, weekdays and weekends. – Public Health Representative*
- The cost of flu, shingles, pneumonia and other vaccines for uninsured or underinsured adults. – Public Health Representative*
- The cost and availability of quality healthcare coverage for many employees and retirees is a major problem throughout Southwest Florida. Poor healthcare coverage leads to higher healthcare costs for individuals, families and retirees. – Community Leader*
- Healthcare is not affordable. The exchanges and co-ops are failing miserably. ACA is not working. – Community Leader*
- Obtaining affordable insurance to cover healthcare expenses. – Social Services Provider*
- Limited affordable care for persons without health insurance. – Other Health Provider*
- There is a disparity in access to healthcare based on income. People with less income either don't have health insurance or have a high deductible or other limitations, they put off or avoid getting healthcare. – Community Leader*
- Lack of services available for residents 45-65 with no or limited income. – Social Services Provider*
- Many people without health insurance. – Social Services Provider*
- Too many indigent individuals with little or no access to primary and specialty care. – Physician*
- Funding as a direct result of Florida's decision not to expand Medicaid. – Social Services Provider*

#### Transportation

- Poor public transportation. – Social Services Provider*
- Most needed healthcare is availability to the residents here in Lehigh by not having to drive to Ft.*

*Myers for help. The transportation issue is huge. Buses only travel the main routes; many folks do not have access to buses. – Social Services Provider*

*Transportation to healthcare facilities from remote areas, poverty, illegal alien status. – Public Health Representative*

*For the conditions selected, we are asked to transport the disadvantaged for care. We do not have sufficient funding from the state to transport all non-Medicaid requests. – Social Services Provider*

*Not enough services on bus lines. Inadequate amount of clinics offering sliding fee scale services for the growing population with large expanses of land with no clinic. – Public Health Representative*

*Transportation, language barriers and cultural differences. – Public Health Representative*

### **Awareness/Education**

*Many are unaware of how to access services, especially those that are uninsured. They don't know that they have options except for the Emergency Room. Some won't use the Emergency Room anymore because they can't afford it. – Public Health Representative*

*Accountability and expectation. People don't want to be accountable for their health. People struggle to afford healthcare. Everyone wants it free. – Other Health Provider*

*Challenge in getting resources and information to those that need it. Fact that healthcare is local, what are we going to do about it? ACA is a disaster; most people don't know it. If you have healthcare for the first time and your deductible is high. – Community Leader*

*High volume of need, not enough services or resources. – Public Health Representative*

### **Mental Health Providers**

*Tremendous lack of access to competent psychiatrists and psychologists. SalusCare provides horrible mental healthcare and Park Royal has proven to be a great disappointment. It is almost as bad as SalusCare. – Physician*

*There is a lack of healthcare services for mental health, especially among HIV clients. Also, lack of health insurance and transportation. – Public Health Representative*

*The lack of mental health services in this community is a major issue. Families, and adults cannot get timely services. Also, Autism services in this town is 25 years behind the rest of the country. – Other Health Provider*

### **Lack of Providers**

*Lack of non-emergent care after 8pm in the evenings. Hospitals admitting patients that do not need to be admitted, thereby reducing bed availability. – Other Health Provider*

*Behavioral healthcare for children, shortage of primary healthcare professionals. – Community Leader*

*It is very hard for families with special needs to see quality doctors. Most specialized doctors do not accept Healthy Kids, Medicaid, or other government-funded insurances. – Community Leader*

### **Vulnerable Populations**

*Health equity. We continue to see disparities in healthcare outcomes in people of racial and ethnic minorities as well as in individuals of low socioeconomic status. – Public Health Representative*

*A sizable and growing elderly population that is living longer with all the healthcare needs that come with it. In addition, we have a rapidly growing Hispanic population with larger families and too few healthcare relationships. – Community Leader*

### **Advanced Care Planning**

*Advanced-care planning. Not enough people are giving this thought ahead of time and it is a difficult conversation. – Social Services Provider*

### **Alternative Medicine**

*Access to alternative and integrative medicine and medical options. – Community Leader*

### Type of Care Most Difficult to Access

Key informants (who rated this as a “major problem”) most often identified mental health services, primary care, and substance abuse treatment as the most difficult to access in the community.

Medical Care Difficult to Access as Identified by Key Informants				
	Most Difficult	Second-Most Difficult	Third-Most Difficult	Total Mentions
Mental Health Services	65.4%	12.5%	4.3%	21
Primary Care	11.5%	20.8%	17.4%	12
Substance Abuse Treatment	3.8%	33.3%	13.0%	12
Dental Care	7.7%	20.8%	8.7%	9
Specialty Care	3.8%	0.0%	30.4%	8
Chronic Disease Care	0.0%	8.3%	13.0%	5
Elder Care	7.7%	0.0%	4.3%	3
Urgent Care	0.0%	4.2%	4.3%	2
Pain Management	0.0%	0.0%	4.3%	1

#### Focus Group Findings: Access to Healthcare Services

Themes emerging around access to healthcare in the follow-up focus groups include:

- **Demographics** (seasonal shifts, seniors, migrant workers, urban/rural)
- **Insurance and costs** (only part of the access equation, uncertainty due to current politics, consumer knowledge, rising healthcare costs for consumers/employers/hospitals, physician reimbursement)
- **Healthcare system** (replicating innovative models that work, discussion around end-of-life care)
- **Physician availability** (shortage of primary care doctors/certain specialists, insurance constraints)
- **Transportation** (public transportation, ability to get to services/appointments)
- **Resource knowledge** (consumer awareness of services, promotion)

*For a more detailed description of focus group discussions, along with supporting quotes, please see the Appendix provided at the end of this report.*



# Health Literacy

## Understanding Health Information

### Written & Spoken Information

Respondents were read:

“You can find written health information on the internet, in newspapers and magazines, on medications, at the doctor’s office, in clinics, and many other places.

How often is health information written in a way that is easy for you to understand?

How often is health information spoken in a way that is easy for you to understand?”

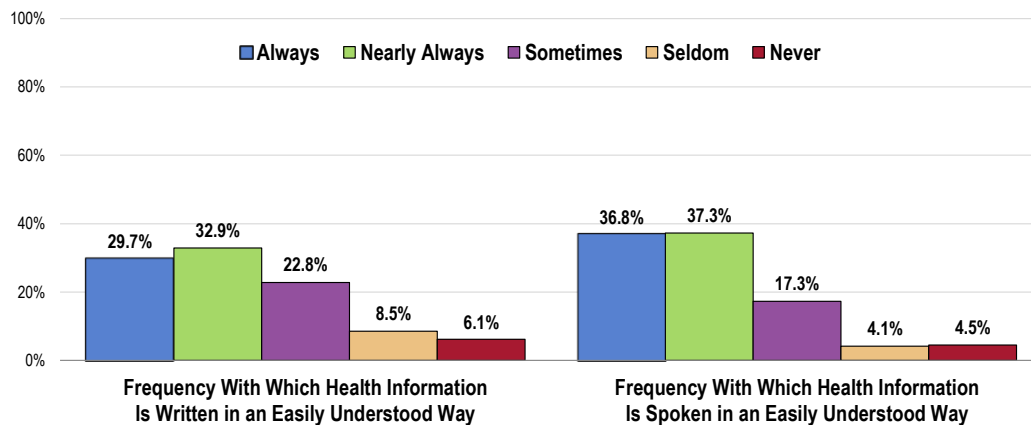
When asked about the frequency with which health information is written in an easily understood way, 62.6% of Lee County adults said “always” or “nearly always.”

- On the other hand, 37.4% of Lee County adults consider **written** health information to be difficult to understand, including 6.1% who gave “never” reports.

When asked about spoken health information, 74.1% stated that this is “always” or “nearly always” easy for them to understand.

- On the other hand, 25.9% of Lee County adults consider **spoken** health information to be difficult to understand, including 4.5% who gave “never” reports.

**Understanding Health Information**  
(Lee County, 2017)



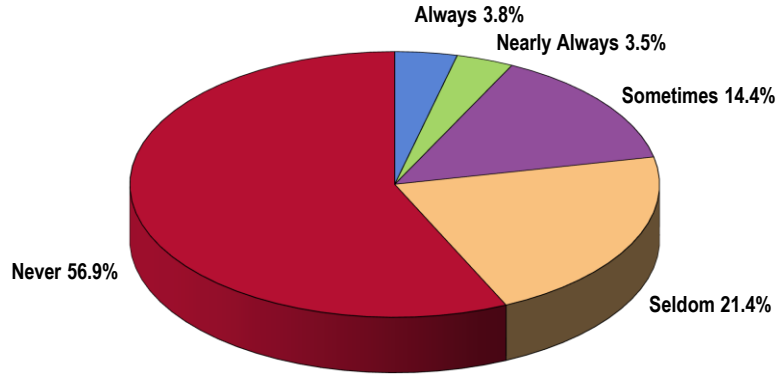
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 87, 89]  
Notes: • Asked of all respondents.

### Help Reading Health Information

A total of 78.3% of Lee County adults report “seldom” or “never” needing help reading health information.

- Another 14.4% of community adults “sometimes” need someone to help them read health information.
- Note that 7.3% of residents “always” or “nearly always” need help reading health information.

### Frequency of Needing Someone to Help Read Health Information (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 88]  
 Notes: • Asked of all respondents.

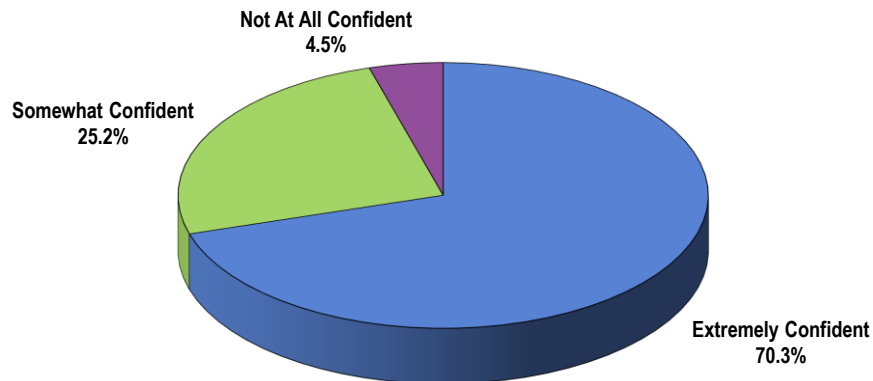
### Completing Health Forms

Asked to describe their confidence in filling out health forms, most survey respondents are “extremely confident” (70.3%).

Examples of health forms include insurance forms, questionnaires, doctor’s office forms, and other forms related to health and healthcare.

- Another 25.2% of community adults are “somewhat confident” in their own ability to fill out health forms.
- However, 4.5% of respondents gave “not at all confident” ratings.

### Self-Perceived Confidence in Ability to Fill Out Health Forms (Lee County, 2017)



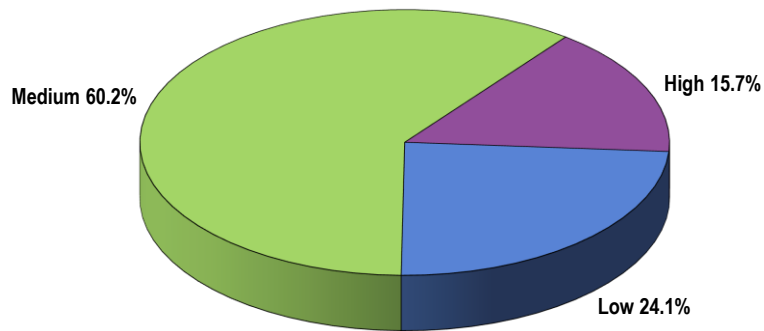
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 90]  
 Notes: • Asked of all respondents.  
 • In this case, health forms include insurance forms, questionnaires, doctor’s office forms, and other forms related to health and healthcare.

## Population With Low Health Literacy

Among Lee County survey respondents, 15.7% are considered to be of high health literacy, while 60.2% have medium health literacy, and the remaining 24.1% are considered to be of low 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.

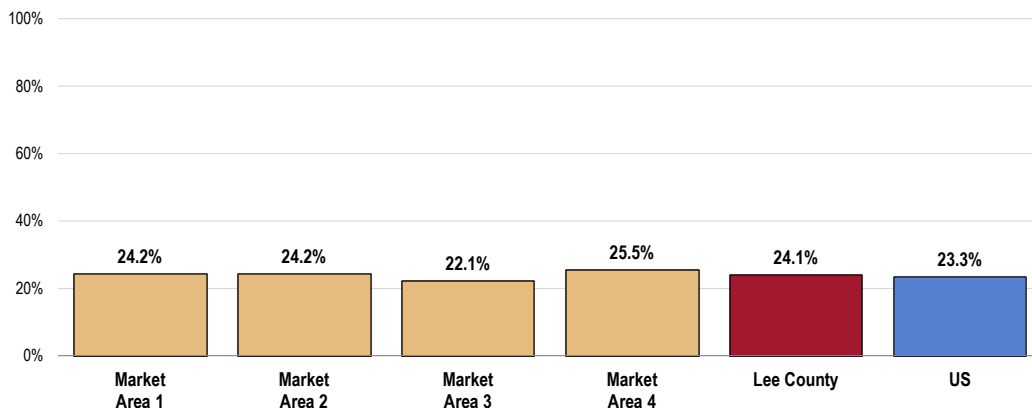
**Level of Health Literacy**  
(Lee County, 2017)



- Sources:
- 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 195]
- 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.

- The prevalence of Lee County adults with low levels of health literacy is similar to the national average.
- Similar among the four Market Areas.

## Low Health Literacy

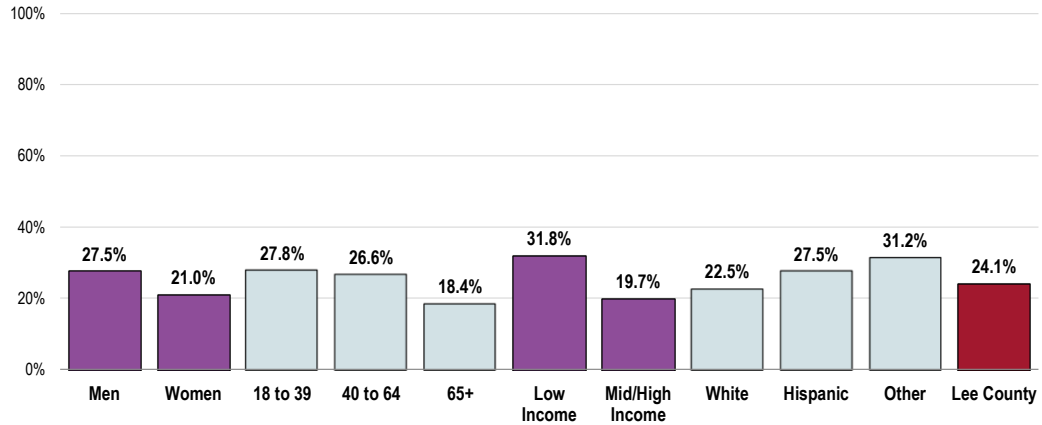


- Sources:
- 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 195]
  - 2015 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
  - Respondents with low health literacy are those who "seldom/never" find written or spoken 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.

These local adults are more likely to have low health literacy levels:

- Men.
- Adults under age 65.
- Low-income residents.

### Low Health Literacy (Lee County, 2017)



- Sources:
- 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 195]
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
  - 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.

## 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

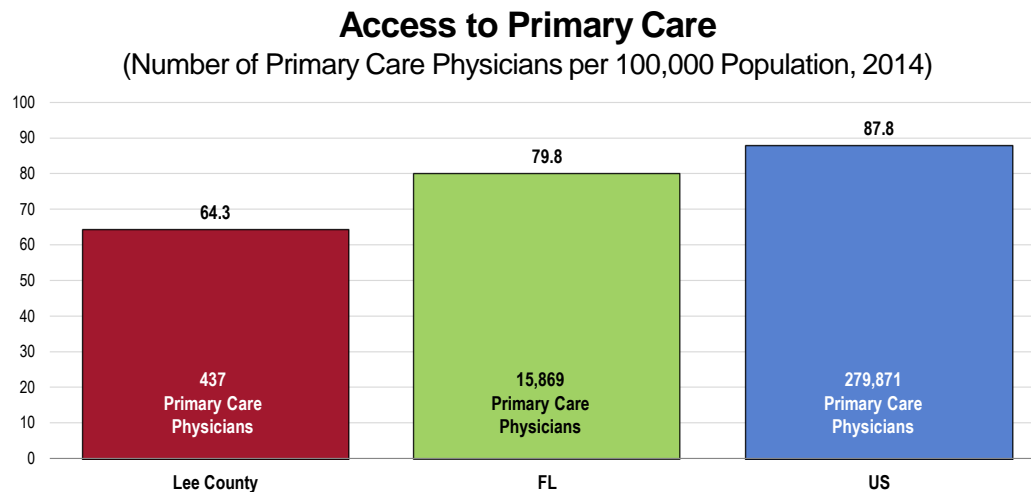
Improving health care services includes increasing access to and use of evidence-based preventive services. Clinical preventive services are services that: **prevent** illness by detecting early warning signs or symptoms before they develop into a disease (primary prevention); or **detect** a disease at an earlier, and often more treatable, stage (secondary prevention).

- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Access to Primary Care

In Lee County in 2014, there were 437 primary care physicians, translating to a rate of 64.3 primary care physicians per 100,000 population.

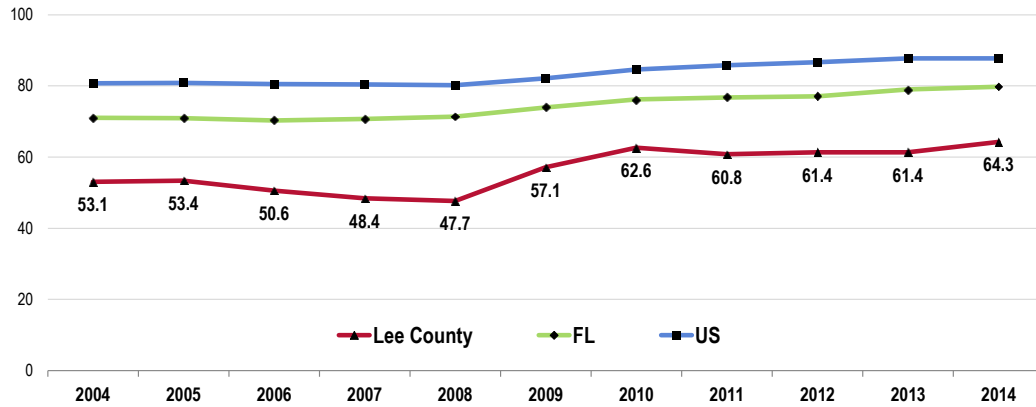
- Below the primary care physician-to-population ratios found statewide and nationally.



- Sources:
- US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File.
  - Retrieved March 2017 from Community Commons at <http://www.chna.org>.
- Notes:
- This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

- **TREND:** Access to primary care (in terms of the ratio of primary care physicians to population) has trended upward over the past decade in Lee County.

### Trends in Access to Primary Care (Number of Primary Care Physicians per 100,000 Population)



Sources: • US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File.  
 • Retrieved March 2017 from Community Commons at <http://www.chna.org>.  
 Notes: • This indicator is relevant because a shortage of health professionals contributes to access and health status issues.  
 • These figures represent all primary care physicians practicing patient care, including hospital residents. In counties with teaching hospitals, this figure may differ from the rate reported in the previous chart.

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).

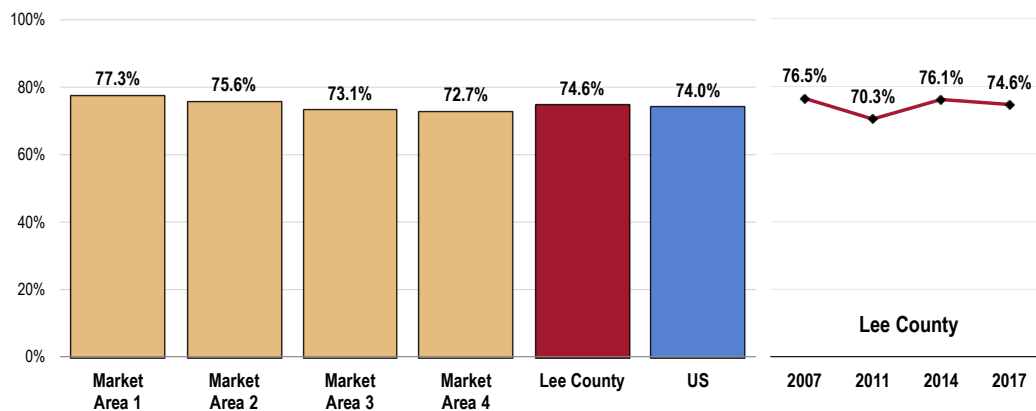
A hospital emergency room is not considered a specific source of ongoing care in this instance.

### Specific Source of Ongoing Care

**A total of 74.6% of Lee County adults were determined to have a specific source of ongoing medical care.**

- Similar to national findings.
- Fails to satisfy the Healthy People 2020 objective (95% or higher).
- No statistical difference by Market Area.
- TREND: Statistically similar to the survey findings in 2007 and 2014, but higher than found in 2011.

### Have a Specific Source of Ongoing Medical Care Healthy People 2020 Target = 95.0% or Higher



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 191]  
 • 2015 PRC National Health Survey, Professional Research Consultants, 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.

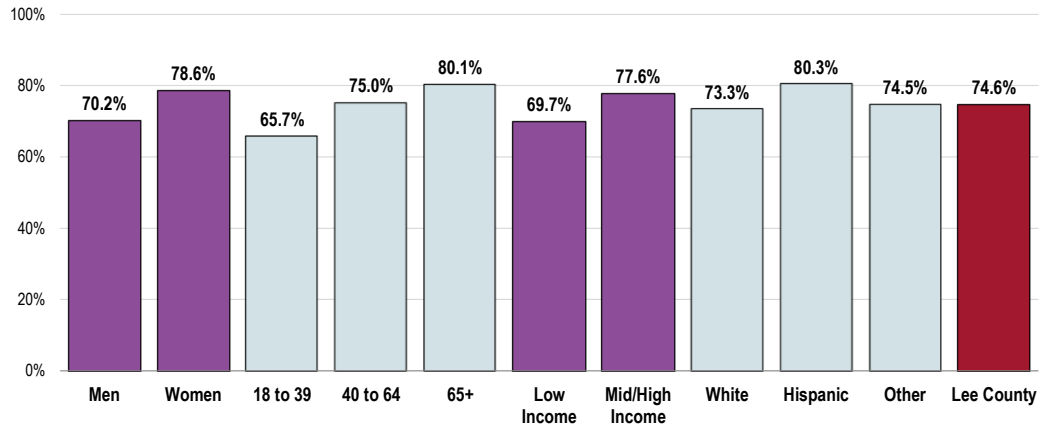
When viewed by demographic characteristics, the following population segments are less likely to have a specific source of care:

- Men.
- Adults under age 65.
- Lower-income adults.

### Have a Specific Source of Ongoing Medical Care

(Lee County, 2017)

Healthy People 2020 Target = 95.0% or Higher



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 191-193]  
 • 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.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

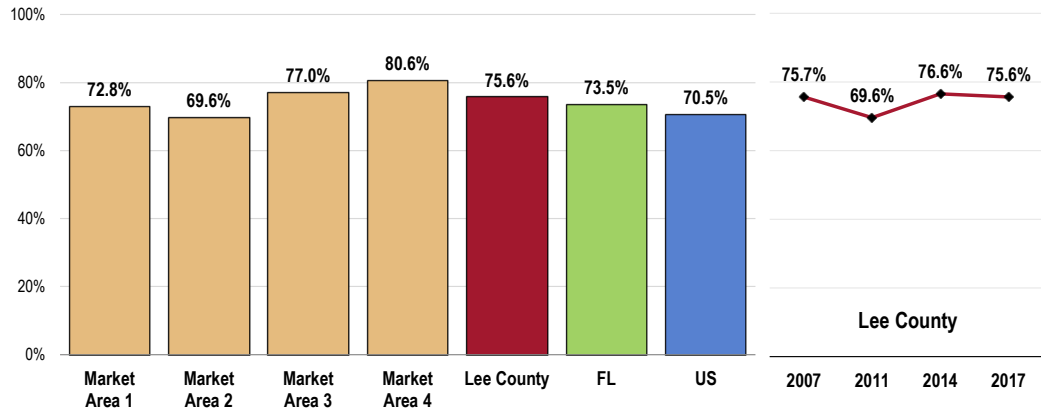
## Utilization of Primary Care Services

### Adults

Three-fourths of adults (75.6%) visited a physician for a routine checkup in the past year.

- Comparable to state findings.
- Higher than national findings.
- Highest in Market Area 4; lowest in Market Area 2.
- TREND: Denotes a statistically significant increase since 2011, however similar to the prevalence levels found in 2007 and 2014.

### Have Visited a Physician for a Checkup in the Past Year



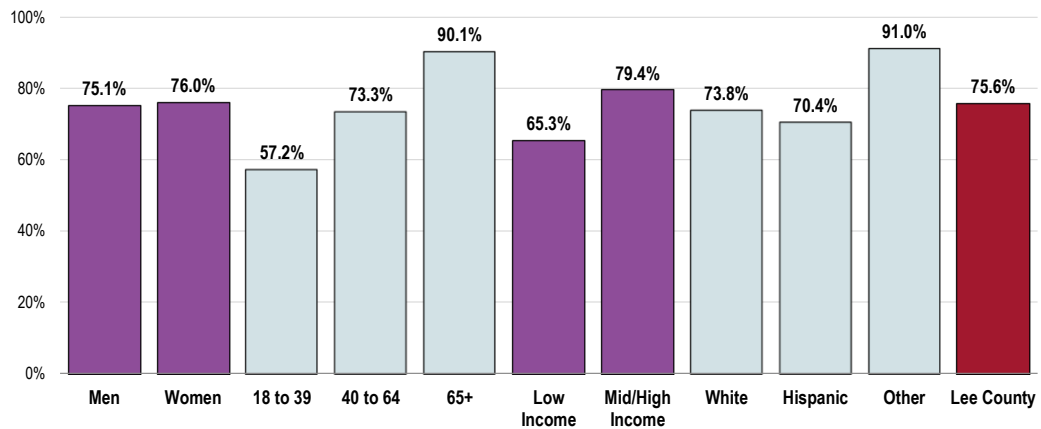
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 18]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2015 Florida data.  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

The following population segments are less likely to have received routine care in the past year:

- Younger adults (note the strong positive correlation with age).
- Lower-income residents.
- Non-Hispanic Whites and Hispanics.

### Have Visited a Physician for a Checkup in the Past Year (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 18]  
 • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

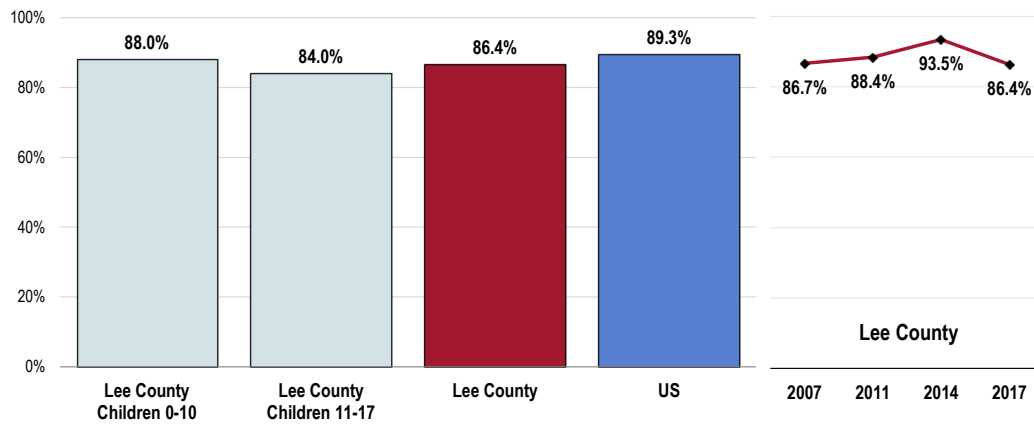


## Children

Among surveyed parents, 86.4% report that their child has had a routine checkup in the past year.

- Statistically similar to national findings.
- TREND: Statistically similar to previous survey findings.
- No significant difference by child's age.

### Child Has Visited a Physician for a Routine Checkup in the Past Year (Among Parents of Children 0-17)

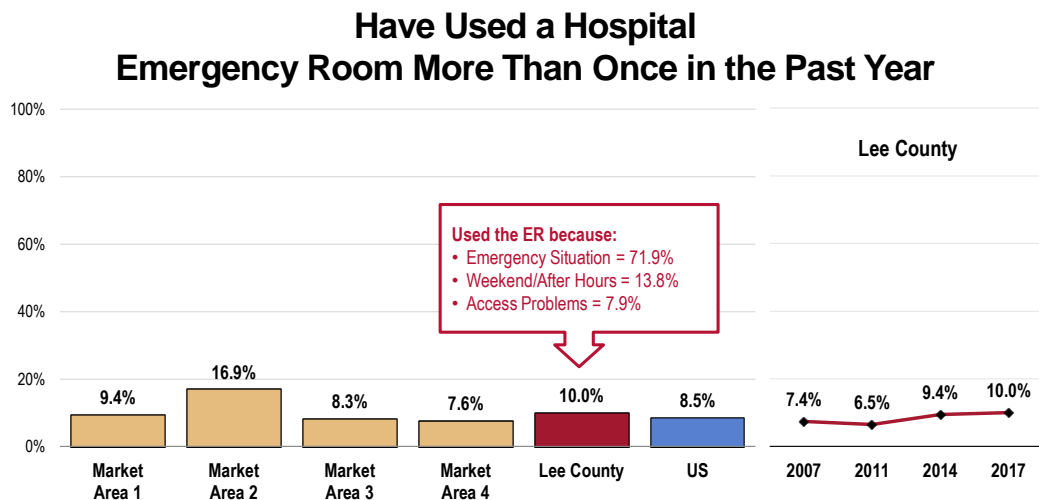


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 138]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents with children 0 to 17 in the household.

## Emergency Room Utilization

A total of 10.0% of Lee County adults have gone to a hospital emergency room more than once in the past year about their own health.

- Similar to national findings.
- Highest in Market Area 2.
- TREND: Emergency room utilization in Lee County has increased significantly since 2007.



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 22-23]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

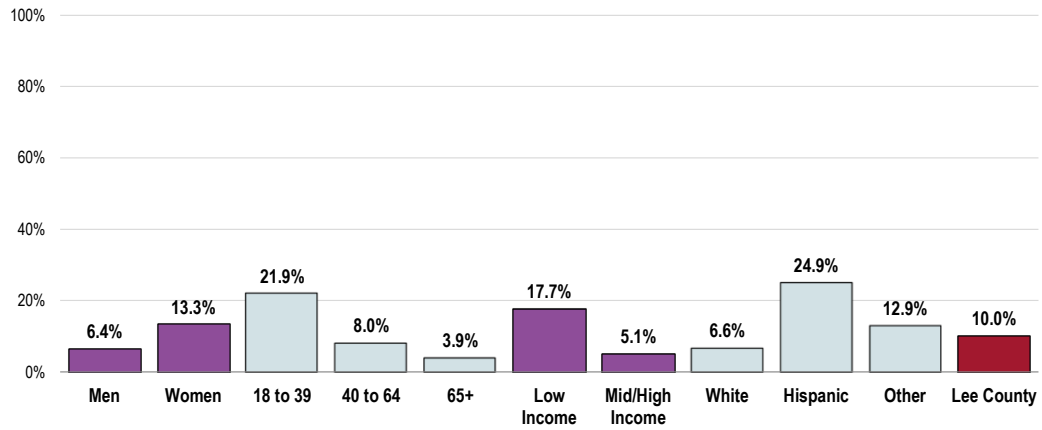
Of those using a hospital ER, 71.9% say this was due to an **emergency or life-threatening situation**, while 13.8% indicated that the visit was during **after-hours or on the weekend**. A total of 7.9% cited **difficulties accessing primary care** for various reasons.

These population segments are more likely to have used an ER for their medical care more than once in the past year:

- Women.
- Young adults (negative correlation with age).
- Adults with low incomes.
- Hispanics (note that one-fourth of Hispanic residents used the ER more than once in the past year.)

## Have Used a Hospital Emergency Room More Than Once in the Past Year

(Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 22]

Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).

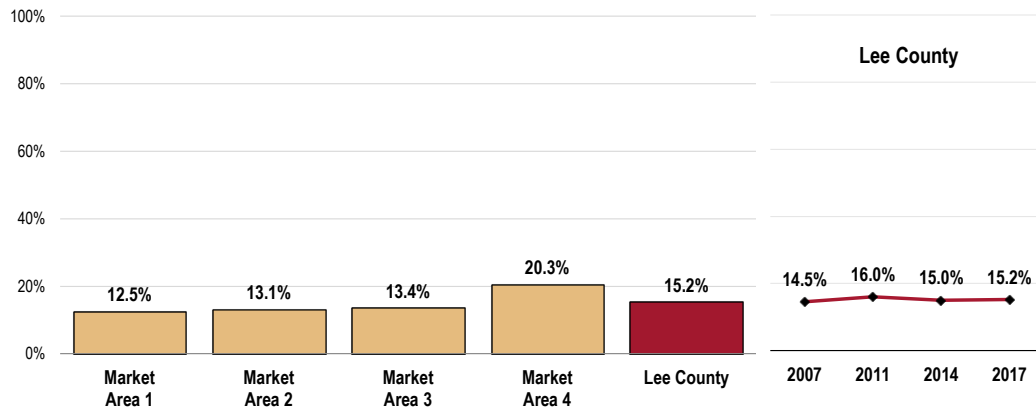
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Outmigration

A total of 15.2% of Lee County residents indicate that they or a member of their household left the county for medical care in the past year.

- Highest in Market Area 4.
- TREND: Statistically unchanged over time.

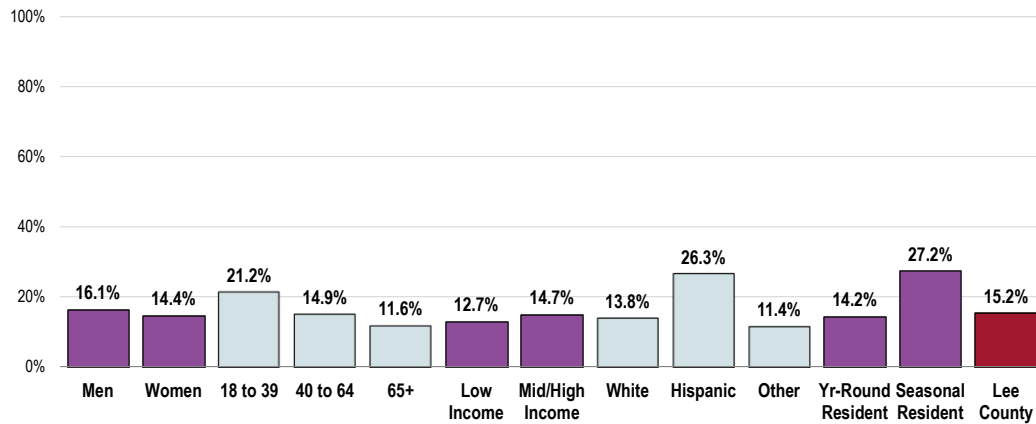
### Member of Household Left Lee County for Medical Care in the Past Year



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 302]  
 Notes: • Asked of all respondents.

- Adults more likely to have left the county for medical care include those age 18 to 39 and seasonal residents.

### Member of Household Left Lee County for Medical Care in the Past Year (Lee County, 2017)

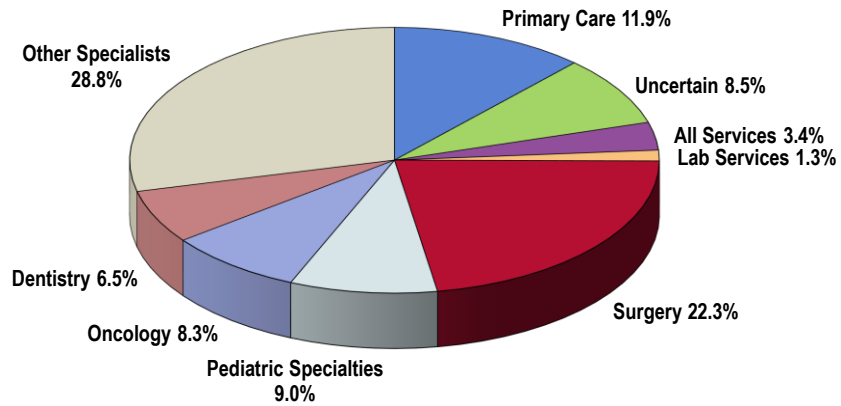


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 302]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

A total of 11.9% of those leaving Lee County for medical care sought primary medical care, while 8.5% were uncertain, 3.4% reported seeking all services, and 1.3% sought lab services.

The majority (74.9%) sought some type of specialty care (especially surgery, pediatric specialties, oncology, or dentistry).

**Type of Medical Care Sought Outside Lee County**  
 (Among Adults Who Left Lee County for Medical Care in the Past Year, 2017)

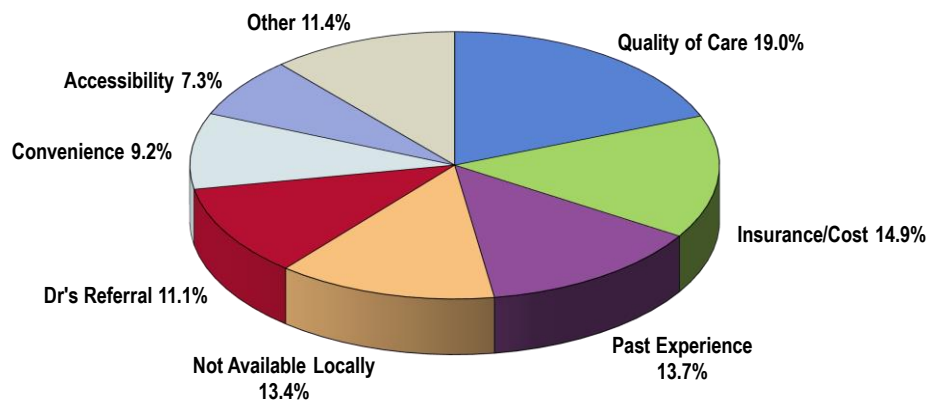


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 303]  
 Notes: • Asked of those residents who left Lee County in the past year for some type of medical care.

When asked about the reasoning behind leaving Lee County for care, 19.0% of these adults mentioned quality of care and 14.9% cited insurance or cost reasons.

- Other reasons given among residents leaving Lee County for medical care included **past experience** (mentioned by 13.7%), the care needed **not being available locally** (13.4%), a **physician’s referral** (11.1%), **convenience** (9.2%), and **accessibility** (7.3%).

**Reason for Seeking Medical Care Outside Lee County**  
 (Among Adults Who Left Lee County for Medical Care in the Past Year, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, 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 healthcare 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.

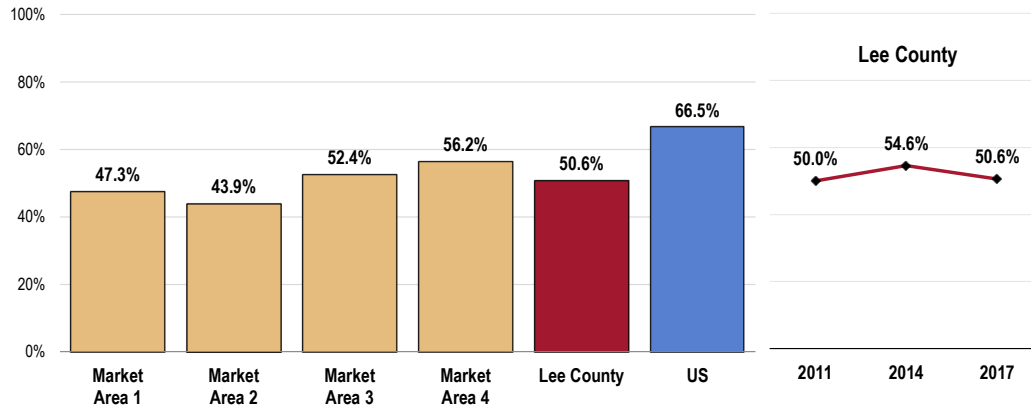
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Dental Insurance

**One-half of Lee County adults (50.6%) have dental insurance that covers all or part of their dental care costs.**

- Notably lower than the national finding.
- Lowest in Market Area 2; highest in Market Area 4.
- TREND: Statistically similar to 2011 findings.

### Have Insurance Coverage That Pays All or Part of Dental Care Costs

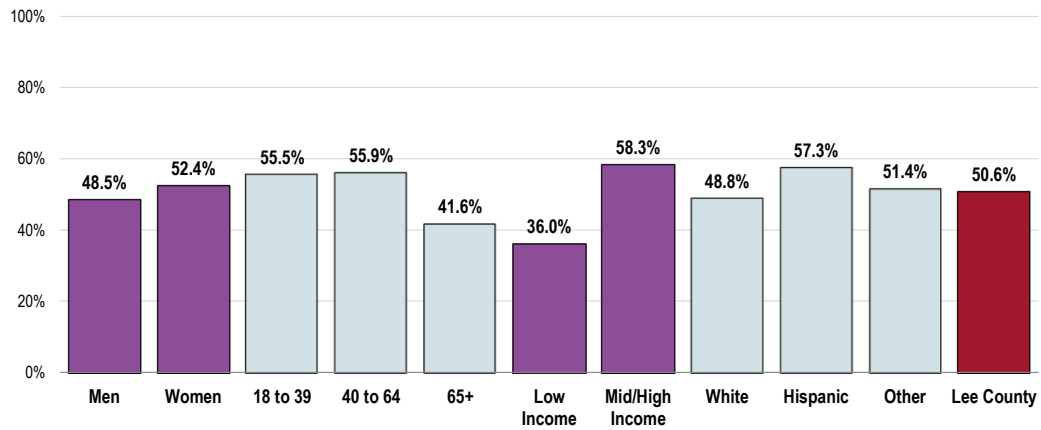


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 21]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

These adults are less likely to be covered by dental insurance:

- Seniors (65+).
- Low-income residents.

### Have Insurance Coverage That Pays All or Part of Dental Care Costs (Lee County, 2017)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 21]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.



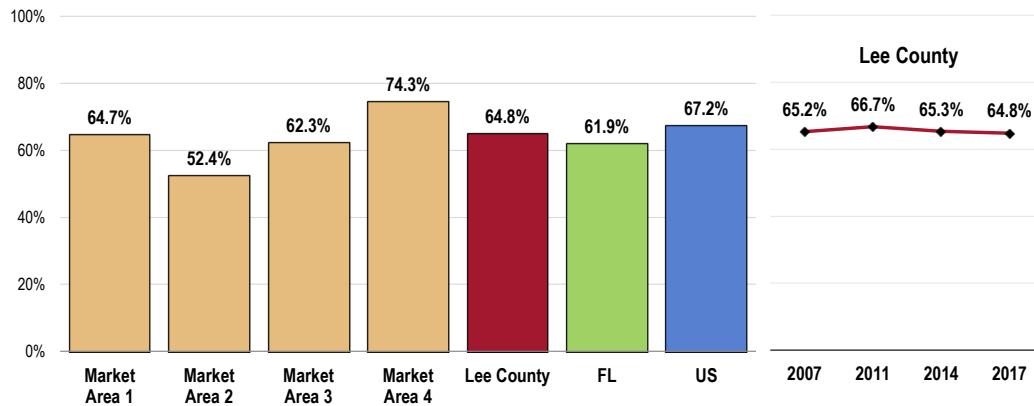
## Dental Care

### Adults

A total of 64.8% of Lee County adults have visited a dentist or dental clinic (for any reason) in the past year.

- Similar to statewide and national findings.
- Satisfies the Healthy People 2020 target (49% or higher).
- Much lower in Market Area 2; much higher in Market Area 4.
- TREND: Statistically unchanged since 2007.

### Have Visited a Dentist or Dental Clinic Within the Past Year Healthy People 2020 Target = 49.0% or Higher



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 20]  
 • 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2014 Florida data.

Notes: • Asked of all respondents.

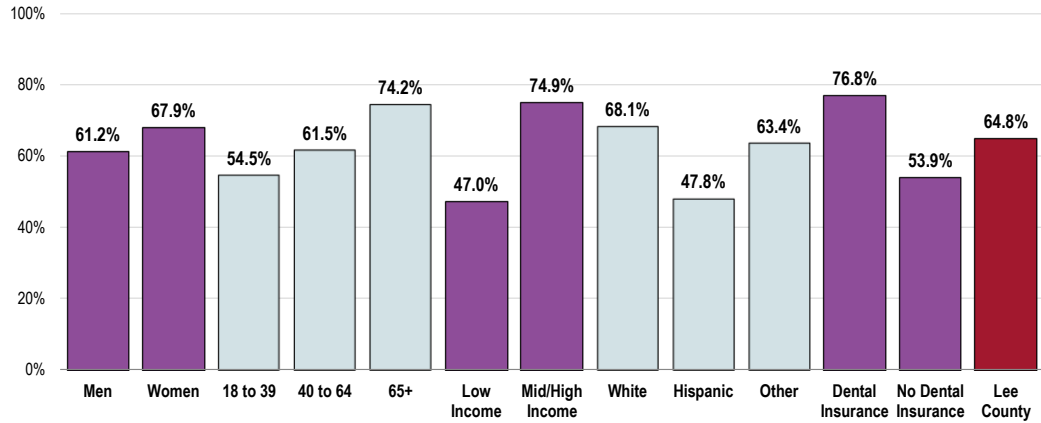
Note the following:

- There is a positive correlation between age and recent dental visits.
- Persons living in the higher income categories report much higher utilization of oral health services.
- Women and Whites are more likely than their demographic counterparts to report recent dental care.
- As might be expected, persons without dental insurance report much lower utilization of oral health services than those with dental coverage.

## Have Visited a Dentist or Dental Clinic Within the Past Year

(Lee County, 2017)

Healthy People 2020 Target = 49.0% or Higher



- Sources:
- 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

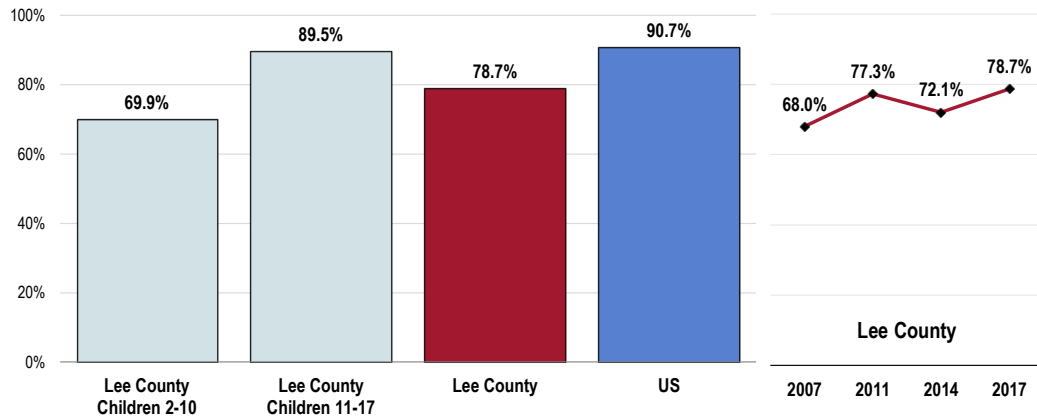
### Children

A total of 78.7% of parents report that their child (age 2 to 17) has been to a dentist or dental clinic within the past year.

- Considerably less favorable than national findings.
- Satisfies the Healthy People 2020 target (49% or higher).
- TREND: Marks a statistically significant increase in children's dental care since 2007.
- Regular dental care is notably lower among children age 2 to 10.

## Child Has Visited a Dentist or Dental Clinic Within the Past Year (Among Parents of Children Age 2-17)

Healthy People 2020 Target = 49.0% or Higher



Sources: 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 141]
- 2015 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]

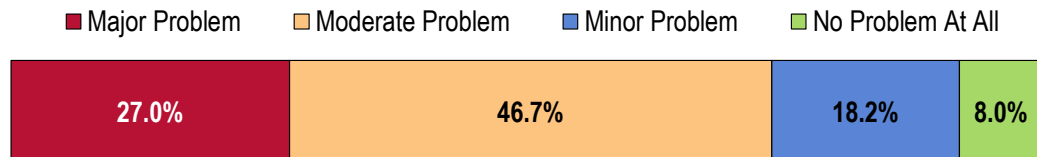
  
Notes: 

- 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 “moderate problem” in the community.

### Perceptions of Oral Health as a Problem in the Community (Key Informants, 2017)



Sources: 

- PRC Online Key Informant Survey, Professional Research Consultants, Inc.

  
Notes: 

- Asked of all respondents.

## Top Concerns

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

### Affordable Care/Services

*In my interactions in the community, I see people in need of dental care. I hear stories of coworkers with a family member needing dental care but can't afford it. – Public Health Representative*

*In low-income communities, oral health access for children is difficult to obtain. There is a time period where no one will accept their child to be seen because of coverage gap. Stay-well providers are difficult to find and transportation is huge. – Public Health Representative*

*Access to affordable dental care and insurance. – Social Services Provider*

*I notice this in my physical exams every day and the biggest problem is access because of pricing. – Physician*

*Services for uninsured/needy clients are so slim as to be almost nonexistent. The Salvation Army runs a program and it has a really long waiting list. – Public Health Representative*

*Healthy teeth and gums are important for nutrition and overall health. Access to free or affordable dental care. – Other Health Provider*

*Inadequate dental healthcare for economically disadvantaged children and adults. Dental insurance does not provide adequate coverage and is a disincentive to establish a preventative program. – Social Services Provider*

*High cost, limited resources. Limited coverage through insurance, Medicaid/Medicare coverage poor. Aging population. – Social Services Provider*

*All dental services are too costly. – Community Leader*

*Many people cannot afford full price dental care. Dental insurance offers minimal assistance and there is no discounted or subsidized dental care for most adults. – Community Leader*

*Affordable oral health is not available anywhere in Lee County. – Community Leader*

*Child dental caries and cost for dental care even when insured. – Public Health Representative*

*Low-cost affordable care is very limited; “free” is a very long list. – Public Health Representative*

*It’s a population where 80% of all children are on free or reduced lunch programs and numerous elderly people are sliding by on Social Security. There are insufficient funds in many family budgets for dental care. – Community Leader*

### **Access to Care/Services**

*Lack of access for low income families. – Community Leader*

*Access to good dental care. Need for hygiene. – Community Leader*

*Limited resources for uninsured patients. – Other Health Provider*

*Lack of access to dentists, especially for children who require sedation and hospitalization in the Medicaid population. Lack of orthodontist for children on Medicaid. – Social Services Provider*

*Dental health services for young children are difficult to access. No one wants to serve young children or do not take Medicaid. – Social Services Provider*

*Limited services for insured. No services for uninsured and exorbitant costs. – Social Services Provider*

*I see many young children who have not had access to dental care and need it badly. I personally researched for one particular family and found an option for them to have low-cost dental work completed for their uninsured 4-year-old. – Social Services Provider*

### **Insurance Issues**

*Not covered adequately by most insurances, payment plans are most times not an option. This is an expensive service, and most will sacrifice this to pay bills and to buy food. – Social Services Provider*

*In my organization, we ask about dental care and the majority of families do not have dental insurance. Food and housing take up most of the family's finances. Unemployment. – Public Health Representative*

*Poor insurance coverage. Virtually no Medicaid coverage. Even with private dental insurance, out-of-pocket cost is high. – Physician*

*Dental insurance only covers cleaning. Anything beyond that takes thousands of dollars. The choice is to live without dental care and risk health issues or spend thousands of dollars to try to address the cost issue. – Social Services Provider*

*Lack of health insurance for underserved clients. – Public Health Representative*

### **Health Education**

*Lack of education. – Physician*

# Health Education & Outreach



**Professional Research Consultants, Inc.**

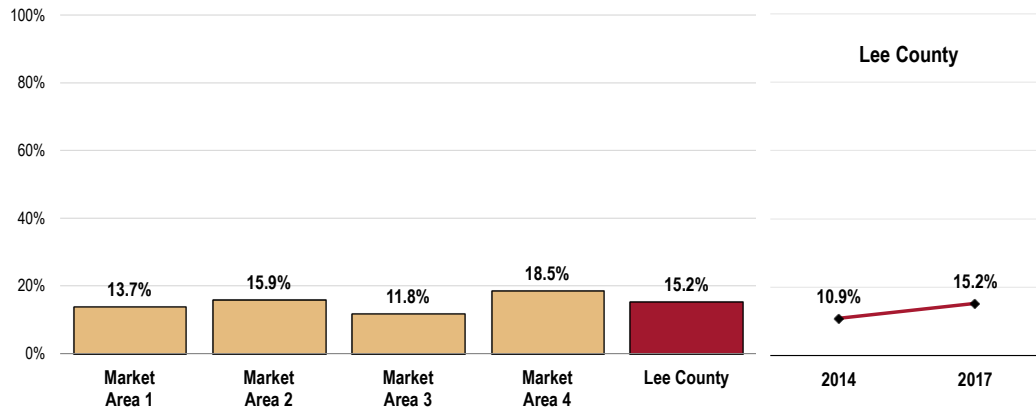
## Awareness of Community Initiatives

### Healthy Lee

A total of 15.2% of Lee County adults had heard of the Healthy Lee Community Initiatives before being surveyed.

- No significant difference by Market Area.
- TREND: Since 2014, awareness of the Healthy Lee Community Initiatives has increased significantly.

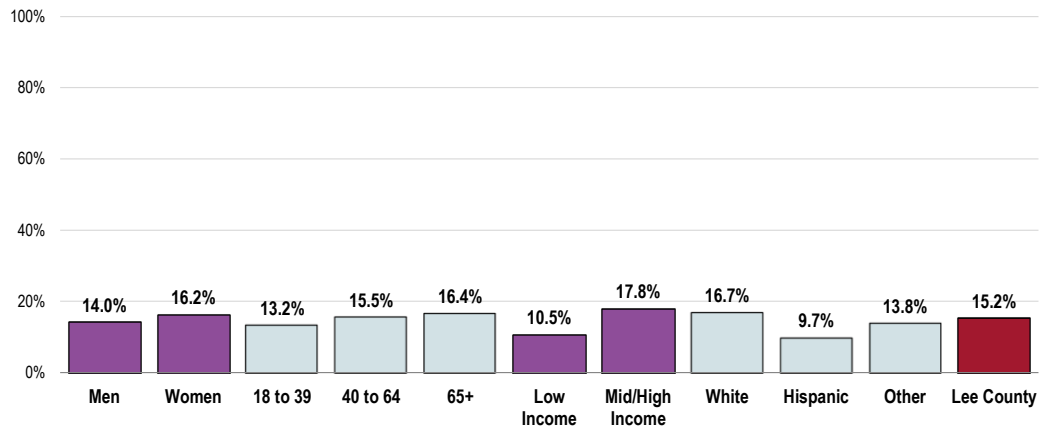
### Have Heard of the Healthy Lee Community Initiatives



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 316]  
 Notes: • Asked of all respondents.

- Residents in lower-income households are less likely to report awareness of the initiatives.

### Have Heard of the Healthy Lee Community Initiatives (Lee County, 2017)



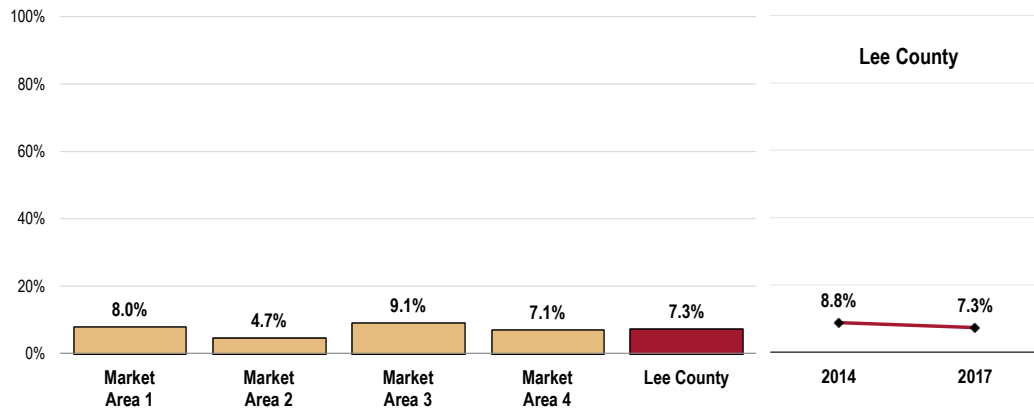
Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 316]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### “Choose, Commit, Change!”

A total of 7.3% of survey respondents had heard the community message “Choose, Commit, Change!” before being surveyed.

- Lowest in Market Area 2.
- TREND: Similar to previous survey findings.

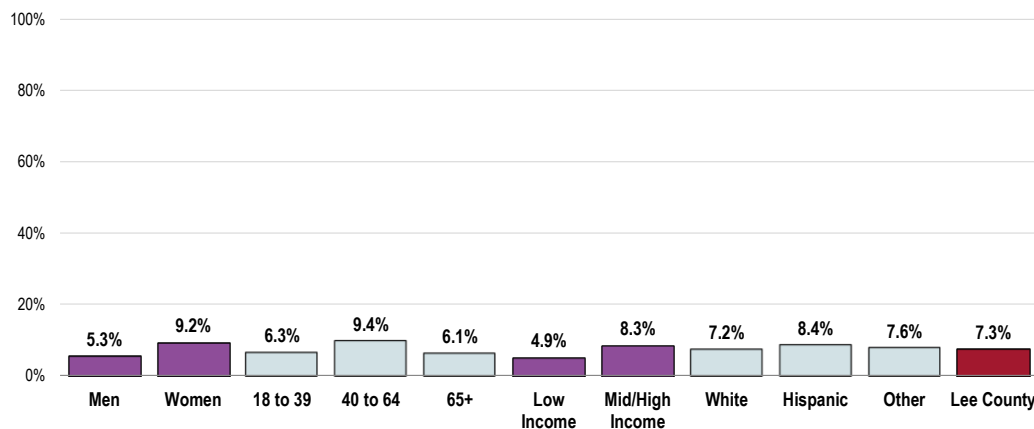
### Have Heard the “Choose, Commit, Change!” Message



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 317]  
 Notes: • Asked of all respondents.

- Men are less likely to have heard the “Choose, Commit, Change!” message.

### Have Heard the “Choose, Commit, Change!” Message (Lee County, 2017)

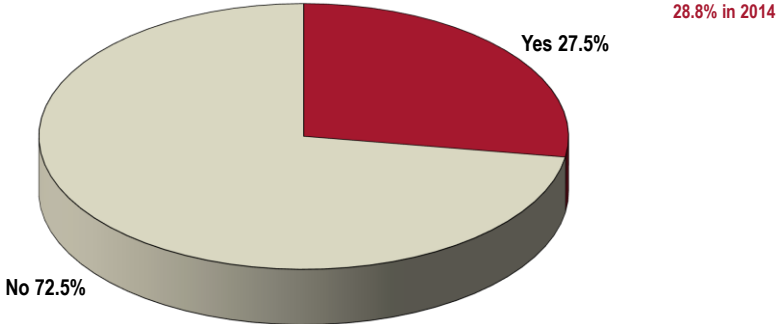


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 317]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

Among respondents who have heard of either the Healthy Lee Community Initiatives or the Healthy Lee “Choose, Commit, Change!” message, 27.5% report that Healthy Lee has impacted their lifestyle decisions.

- TREND: Comparable to that found in 2014.

### Healthy Lee Has Impacted Lifestyle Choices (Among Adults Who Have Heard of Healthy Lee Community Initiatives or the Healthy Lee “Choose, Commit, Change!” Message; Lee County, 2017)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 318]  
Notes: • Asked of respondents who have heard of either Healthy Lee Community Initiatives or the Healthy Lee “Choose, Commit, Change!” message.



# Local Resources



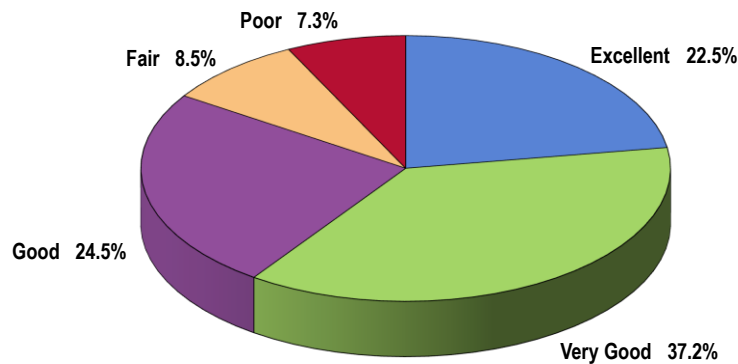
**Professional Research Consultants, Inc.**

## Perceptions of Local Healthcare Services

Most Lee County adults (59.7%) rate the overall healthcare services available in their community as “excellent” or “very good.”

- Another 24.5% gave “good” ratings.

**Rating of Overall Healthcare Services Available in the Community**  
(Lee County, 2017)

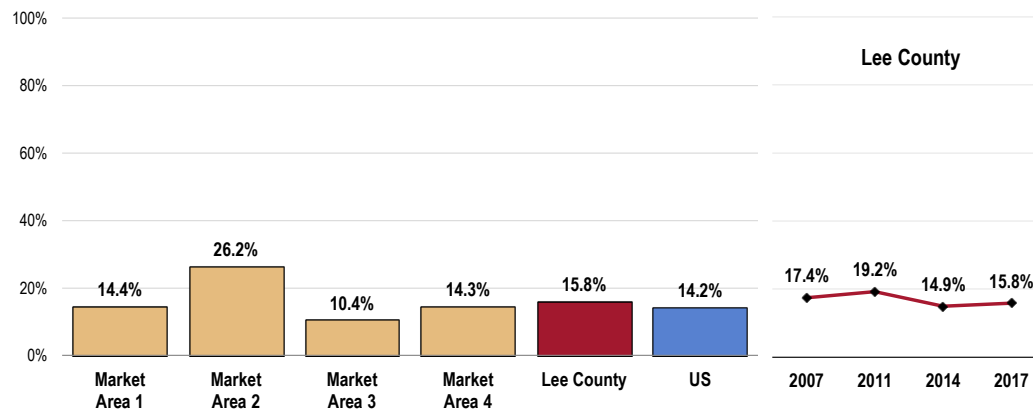


Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]  
Notes: • Asked of all respondents.

However, 15.8% of residents characterize local healthcare services as “fair” or “poor.”

- Similar to that reported nationally.
- Least favorable in Market Area 2; most favorable in Market Area 3.
- TREND: Marks a statistically significant improvement in ratings since 2011.

### Perceive Local Healthcare Services as “Fair/Poor”

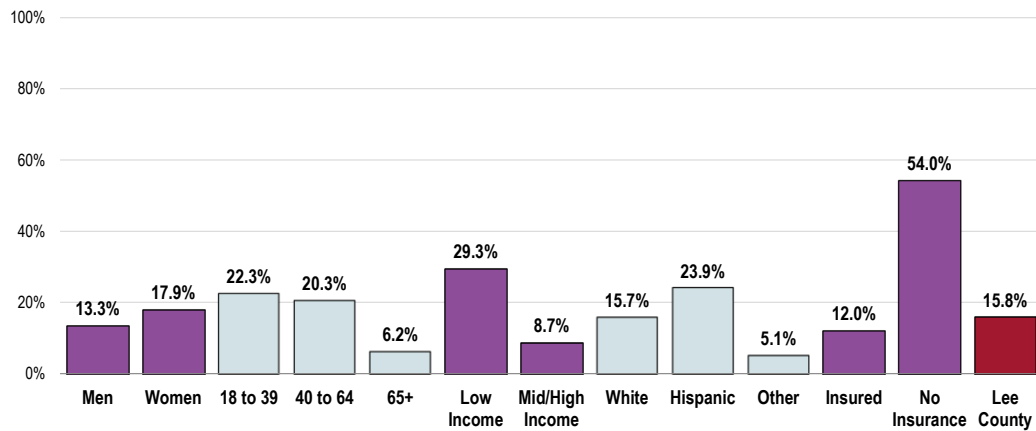


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 6]  
• 2015 PRC National Health Survey, Professional Research Consultants, Inc.  
Notes: • Asked of all respondents.

The following residents are more critical of local healthcare services:

- Women.
- Adults under age 65.
- Residents with lower incomes.
- Hispanics and Whites.
- Uninsured adults (especially).

### Perceive Local Healthcare Services as “Fair/Poor” (Lee County, 2017)



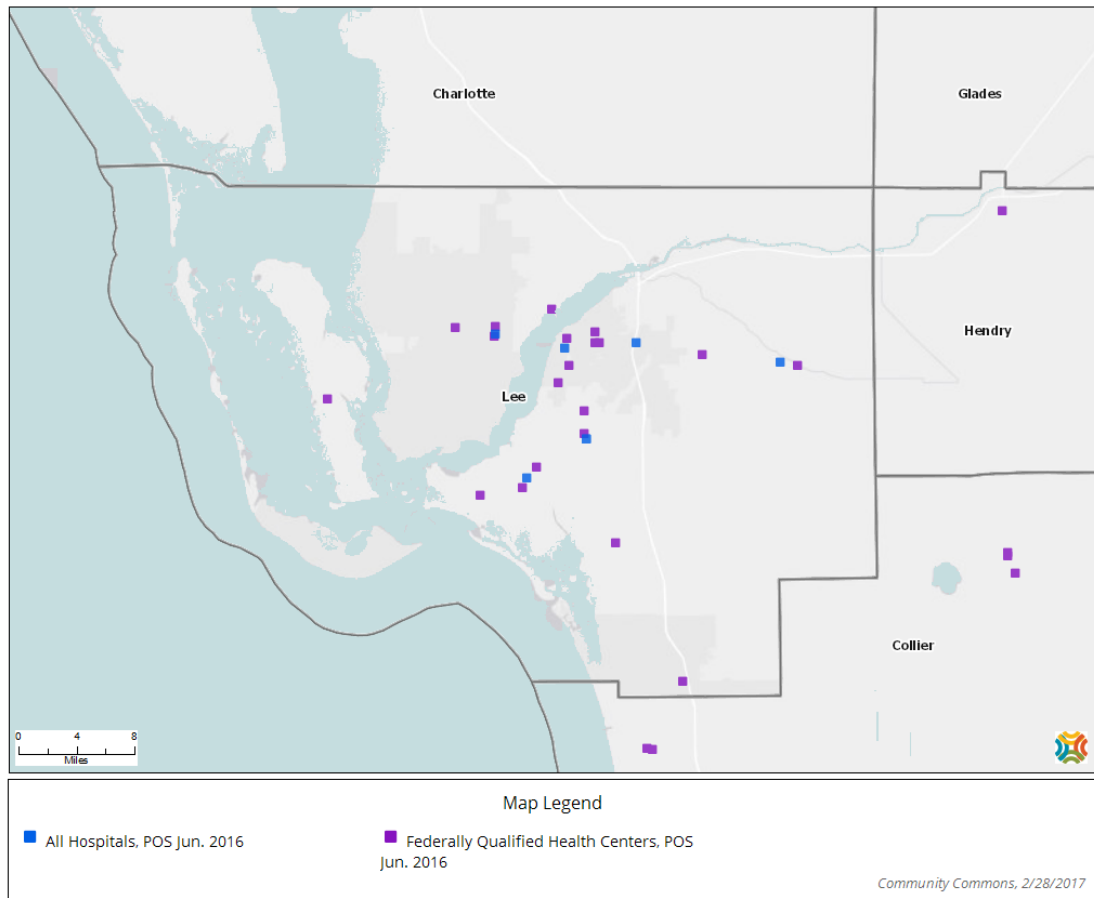
- Sources:
- 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]
- Notes:
- Asked of all respondents.
  - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Healthcare Resources & Facilities

### Hospitals & Federally Qualified Health Centers (FQHCs)

The following map details the hospitals and Federally Qualified Health Centers (FQHCs) within Lee County as of June 2016.

Hospitals and Federally Qualified Health Centers, POS June 2016

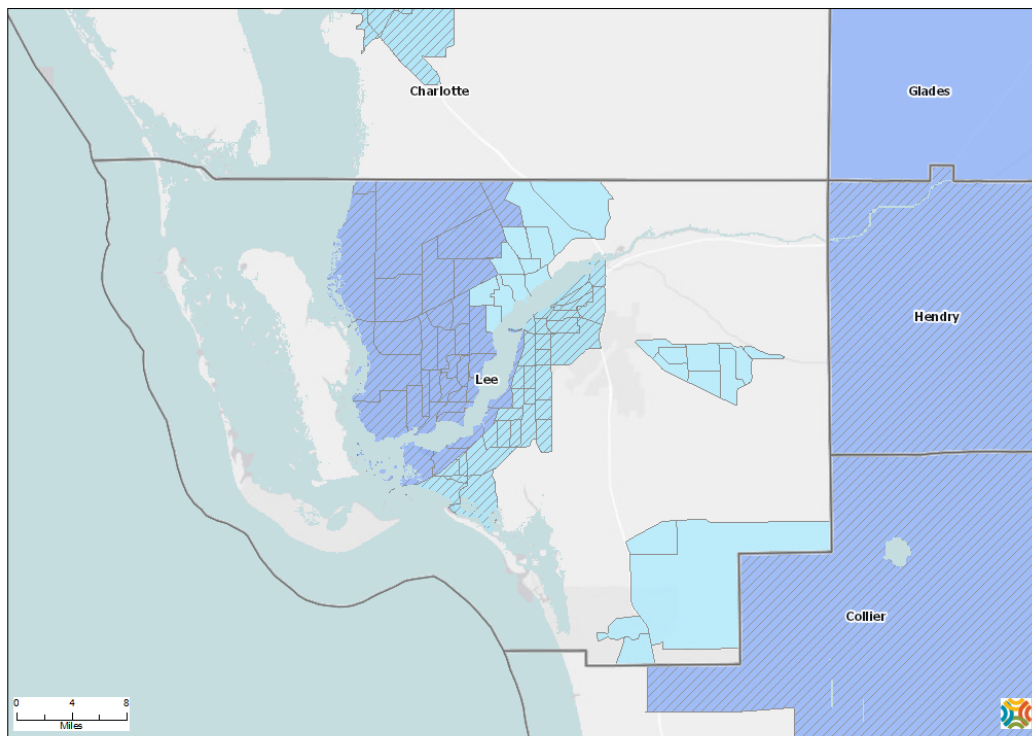


## Health Professional Shortage Areas (HPSAs)

A "health professional shortage area" (HPSA) is defined as having a shortage of primary medical care, dental or mental health professionals.

The following map illustrates those areas within Lee County that have been designated by the US Department of Health and Human Services as a health professional shortage area (HPSA).

Population Living in a HPSA, Percent, HRSA HPSA Database April 2016



### Map Legend

Primary Care HPSA Components. Type and Degree of Shortage by Tract / County, HRSA HPSA Database April 2016

-  Population Group: Over 20.0 FTE Needed
-  Population Group: 1.1 - 20.0 FTE Needed
-  Population Group: Under 1.1 FTE Needed
-  Geographic Area: Over 20.0 FTE Needed
-  Geographic Area: 1.1 - 20.0 FTE Needed
-  Geographic Area: Under 1.1 FTE Needed

Community Commons, 2/28/2017

## 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 to Healthcare Services

- ADAP
- Beacon of Hope
- Bonita Community Health Center
- Civic Organizations
- Doctor's Office
- Elite DNA Therapy
- Family Health Clinic
- Family/Friends
- Federally Qualified Health Centers
- Florida Blue Walk-In Centers
- Florida Department of Health
- Good Wheels, Inc.
- Gulf Coast ACO
- Florida Department of Health in Lee County
- Hospitals
- Lee Community Healthcare
- Lee County Human Services
- Lee Health
- LeeTran
- Lehigh Regional Medical Center
- Lutheran Family Services
- McGregor Clinic
- Medicaid
- Mobile Mammogram Vehicles
- Park Royal Hospital
- Partners for Breast Cancer Care
- Public Transportation
- Publix Pharmacy
- RW Program
- SalusCare
- Salvation Army
- Samaritan Healthcare
- Senior Friendship Center
- Sinfonia
- Social Services, Department of Children and Families

- Taxi
- United Way
- Urgent Care Center
- We Care

### Arthritis, Osteoporosis & Chronic Back Conditions

- Advance Physical Therapy Department
- Churches
- Community Centers
- Doctor's Office
- Elder Helpline
- Family Health Centers
- Fitness Centers/Gyms
- Hospitals
- Injury Prevention Coalition
- Lee Community Healthcare
- Lee Health
- North Fort Myers Community Pool
- Nutrition Services
- Parks and Recreation
- Physical Therapy
- We Care
- Weight Loss Program
- Wellness Centers
- Work Ergonomics and Body Mechanics
- YMCA

### Cancer

- 21st Century Oncology
- American Cancer Society
- Breast Cancer Awareness Events
- Cancer Care Specialists
- Cancer Support Groups
- Cancer Treatment Centers
- Community and Religious Organizations
- Doctor's Office
- Family Health Centers

Florida Cancer Specialists  
 Florida Department of Health  
 Florida Radiology  
 Good Wheels, Inc.  
 Florida Department of Health in Lee County  
 Hospitals  
 Lee Health  
 Mammogram Buses  
 MD Cancer Center  
 Moffitt Cancer Center  
 NCH Healthcare System  
 Partners for Breast Cancer Care  
 Radiology Regional  
 Regional Cancer Center  
 Salvation Army  
 Susan G. Komen  
 United Way  
 We Care

#### **Chronic Kidney Disease**

Associates in Neurology  
 DaVita  
 Doctor's Office  
 Family Health Centers  
 Florida Dialysis Center  
 Fort Myers Kidney Center  
 Good Wheels, Inc.  
 Florida Department of Health in Lee County  
 Lee Health  
 Lee Kidney Center  
 LeeTran

#### **Dementias, Including Alzheimer's Disease**

Alvin Dubin Resource Center  
 Alzheimer's Association  
 Alzheimer's Foundation  
 Alzheimer's Resource Center  
 Alzheimer's Support Group Lee County  
 Alzheimers.net  
 American House  
 Arden Courts  
 Area Agency on Aging  
 Assisted Living Centers  
 Autumn Leaves Memory Care Facility  
 Barkley Place  
 Brookdale Senior Living Facilities  
 Calusa Harbor Fort Myers  
 Comfort Keepers  
 Department of Elder Affairs  
 Doctor's Office

Gulf Coast Village  
 HealthPark Hospital  
 Home Health  
 Hospice  
 Hospitals  
 Jails  
 Lee Health  
 Lee Memory Care  
 Memory Care Clinic  
 Mental Health Providers  
 Neuropsychiatric Research Center  
 Office of Aging  
 Hope PACE  
 Palms Memory Care Unit  
 Park Royal Hospital  
 Right at Home  
 Rose Garden  
 SalusCare  
 Senior Friendship Center  
 Senior Living Communities  
 Shell Point  
 Springwood Court Fort Myers  
 Support Groups  
 The Crossings at Hancock Creek  
 Tony Rotino Complex  
 Veterans Hospital  
 Voice of America  
 Windsor

#### **Diabetes**

American Diabetes Association  
 Annual Health Forums for Diabetes  
 Bright Star Care  
 CHIP Program  
 Community and Religious Organizations  
 Community Cooperative  
 Community Health Center  
 Community Outreach Events  
 Diabetes Association  
 Diabetic Education  
 Doctor's Office  
 Drug Assistance Programs  
 Family Health Centers  
 Family/Friends  
 Federally Qualified Health Centers  
 Fitness Centers/Gyms  
 Florida Department of Health  
 Florida Department of Health in Lee County  
 Health Educators

*Healthy Lee*  
*Healthy Start*  
*Hospitals*  
*Internal Medicine Associates*  
*Lee Community Health Clinic*  
*Lee Community Healthcare*  
*Lee County Library*  
*Lee Diabetes Care*  
*Lee Health*  
*Lehigh Pharmacy*  
*Lee Physician Group*  
*NCH Health System*  
*Nutrition Services*  
*Online Resources*  
*Parks and Recreation*  
*Pharmacies*  
*Plant Pure Nation Program*  
*Publix Pharmacy*  
*Red Cross*  
*Samaritan Healthcare*  
*School System*  
*Senior Friendship Center*  
*Senior Living Communities*  
*Support Groups*  
*United Way*  
*Weight Clinics*  
*Wellness Centers of Fort Myers and Cape Coral*  
*Winn-Dixie*  
*YMCA*

**Family Planning**

*Doctor's Office*  
*Family Health Centers*  
*Federally Qualified Health Centers*  
*Florida Department of Health*  
*Florida Department of Health in Lee County*  
*Healthy Start*  
*Lee Adolescent Mothers Program (LAMP)*  
*Lee County School District*  
*Lee Health*  
*Lifeline Family Center*  
*Our Mother's Home*  
*Planned Parenthood*  
*Women's Health Center*

**Hearing & Vision**

*Lions Eye Clinic*  
*Optical Centers*

**Heart Disease & Stroke**

*American Heart Association*  
*Cardiac Rehab*  
*Chronic Disease Management*  
*Churches*  
*Community and Religious Organizations*  
*Doctor's Office*  
*Employee Assistance Programs*  
*Family Health Centers*  
*Family Health Centers of Southwest Florida*  
*Fitness Centers/Gyms*  
*Florida Heart Association*  
*Food Pantries*  
*Free Health Clinics*  
*Gulf Coast Hospital*  
*Gulf Coast Village*  
*Florida Department of Health in Lee County*  
*Healthiest Weight Florida*  
*HealthPark Hospital*  
*Healthy Lee*  
*Healthy Living Center Coconut Point Estero*  
*Hospitals*  
*Internal Medicine Associates*  
*Lee Community Care Centers*  
*Lee Community Health Clinic*  
*Lee Community Healthcare*  
*Lee Health*  
*Medicaid*  
*NCH Health System*  
*Nutrition Services*  
*Red Cross*  
*Stress Management Initiatives*  
*Support Groups*  
*We Care*  
*Wellness Centers of Fort Myers and Cape Coral*

**HIV/AIDS**

*ADAP*  
*AIDS Clinic*  
*AIDS Healthcare Foundation*  
*CDC*  
*Community and Religious Organizations*  
*Doctor's Office*  
*Florida Department of Health*



Florida Department of Health in Lee County  
 Hospitals  
 Island Coast AIDS Network  
 Lee County HIV Providers Group  
 Lee Health  
 McGregor Clinic  
 Planned Parenthood  
 Ryan White Program  
 School System  
 St. John the Apostle Metropolitan Church

### **Immunization & Infectious Diseases**

Doctor's Office  
 Federally Qualified Health Centers  
 Florida Department of Health  
 Florida Department of Health in Lee County  
 Lee Health  
 Walgreens

### **Infant & Child Health**

Catholic Charities  
 Children's Medical Services, Medicaid  
 Department of Children and Family Services  
 Doctor's Office  
 Family Health Centers  
 Federally Qualified Health Centers  
 Florida Department of Health  
 Golisano Children's Hospital  
 Harlem Heights Foundation  
 Healthy Start  
 Island Coast Pediatrics  
 Lee Adolescent Mothers Program (LAMP)  
 Lee Health  
 Lehigh Regional Medical Center  
 Lee Physician Group  
 Medicaid  
 Migrant Worker Services  
 Nations Association  
 Planned Parenthood  
 Quality Life Center  
 SalusCare  
 WIC

### **Injury & Violence**

Abuse Counseling and Treatment Center  
 African Caribbean American Catholic Center  
 (AFCAAM)  
 After School Programs  
 After the Rain  
 AMIKids

Beacon of Hope  
 Bike-Ped Lee  
 Bob Janes Triage Center  
 Boys and Girls Clubs of Lee County  
 Catholic Charities  
 Churches  
 Community Awareness  
 Community Organizations  
 Florida Department of Children and Families  
 Domestic Violence Unit of the Family Court  
 Services  
 Economic Development Southwest Florida  
 Enterprise  
 Education  
 Family Health Centers  
 Family Health Centers of Southwest Florida  
 Family/Friends  
 Florida Coalition Against Domestic Violence  
 Florida Department of Health  
 Fort Myers Police Department  
 Golisano Children's Hospital  
 Goodwill  
 Harlem Heights Foundation  
 Hospitals  
 Injury Prevention Coalition  
 Justice System  
 Lee County School District  
 Lee County Sheriff's Office  
 Lee Health  
 LIFE Justice  
 Nations Association  
 PACE Center for Girls  
 Parents of Murdered Children  
 Parks and Recreation  
 Police Department  
 Quality Life Center  
 SalusCare  
 STARS Complex  
 State Attorney's Office  
 Stay Alive Just Drive  
 Take Stock in Children  
 The City  
 United Way

**Mental Health**

AA/NA  
 ACT  
 Alvin Dubin Resource Center  
 Alzheimer's Association  
 Beacon of Hope  
 Bob Janes Triage Center  
 Catholic Charities  
 Children's Home Society of Florida  
 Churches  
 Coastal Behavioral Healthcare  
 Community and Religious Organizations  
 David Lawrence Center  
 Department of Children and Family Services  
 Doctor's Office  
 Drug Free Coalition  
 Elite DNA Therapy  
 Employee Assistance Programs  
 Faith Based  
 Federally Qualified Health Centers  
 Florida Department of Health  
 Golisano Children's Hospital  
 Good Wheels, Inc.  
 Gulf Coast Psychology  
 Florida Department of Health in Lee County  
 HealthPark Hospital  
 Help Me Grow  
 Hope Clubhouse  
 Hospitals  
 LARC, Inc.  
 Lee Behavioral Health  
 Lee Community Healthcare  
 Lee County  
 Lee Health  
 Lee Mental Health  
 LeeTran  
 Lutheran Family Services  
 Mental Health Providers  
 NAMI  
 NCH Health System  
 Park Royal Behavioral Health  
 Park Royal Hospital  
 Quality Life Center  
 Ruth Cooper Center  
 SalusCare  
 Salvation Army  
 School System  
 SEDNET

Sinfonia Family Services

SWFAS

United Way

VA Services

**Nutrition, Physical Activity & Weight**

Bike-Ped Lee  
 Blue Zones  
 City of Fort Myers Skatium Complex  
 Doctor's Office  
 Employee Assistance Programs  
 Family Health Centers  
 Fitness Centers/Gyms  
 Florida Department of Health  
 Food Pantries  
 Fort Myers Nutritionists and Dietitians  
 Girl Scouts  
 Harry Chapin  
 Florida Department of Health in Lee County  
 Healthiest Weight Florida  
 Healthy Lee  
 Healthy Living Center Coconut Point Estero  
 Hospitals  
 Lee County Extension Nutrition Education  
 Program  
 Lee County Government  
 Lee County School District  
 Lee Health  
 Lee Nutrition Clinic  
 Lee Physician Group  
 Meals on Wheels  
 Medi Weight Loss  
 Nutrition Services  
 Obesity Action Coalition  
 Online Resources  
 Orangetheory  
 Overeaters Anonymous  
 Parks and Recreation  
 Plant Pure Nation Program  
 Restaurants  
 Rural Ministries  
 Safe Streets  
 School System  
 Shell Point  
 Soup Kitchens  
 STARS Complex  
 Weight Loss Support Groups  
 Weight Watchers  
 Wellness Centers of Fort Myers and Cape  
 Coral

WIC  
YMCA

**Oral Health**

Basic Resources  
Dentist's Office  
Doctor's Office  
Education  
Family Health Centers  
Family Health Centers of Southwest Florida  
Federally Qualified Health Centers  
Florida Department of Health  
Florida SouthWestern State College  
Goodwill  
Lee Community Healthcare  
Project Dentist  
Riverdale Dental  
Salvation Army  
United Way  
University of Florida Dental Clinic  
Urgent Care Center  
We Care

**Respiratory Diseases**

American Cancer Society  
American Lung Association  
Doctor's Office  
Federally Qualified Health Centers  
Lee Health

**Sexually Transmitted Diseases**

Doctor's Office  
Family Health Centers  
Federally Qualified Health Centers  
Florida Department of Health  
Florida Department of Health in Lee County  
Hospitals  
Lee County School District  
Lee Health  
Lifeline Family Center  
Parks and Recreation  
Planned Parenthood  
School System

**Substance Abuse**

AA/NA  
Aim Target  
Catholic Charities  
Coalition for a Drug Free Lee County  
Coalition for a Drug Free Southwest Florida  
Community and Religious Organizations  
Court Systems  
David Lawrence Center  
Department of Children and Family Services  
Detox Center  
Doctor's Office  
Drug Treatment Centers of Fort Myers  
ECHO Program  
Education  
Elite DNA Therapy  
Family Health Centers of Southwest Florida  
Family/Friends  
Gabel Center  
Hospitals  
Injury Prevention Coalition  
Lee Behavioral Health  
Lee County Drug Court  
Lee County Police Department  
Lee County Triage Center  
Lee Health  
Lee Mental Health  
MADD  
Operation PAR  
Park Royal Behavioral Health  
Police Department  
Private Treatment Facilities  
Rehabilitation Services  
Ruth Cooper Center  
Students Against Destructive Disorders  
SalusCare  
Salvation Army  
School System  
Sinfonia Family Services  
Southwest Florida Addiction Services  
Sovereign Health Group  
Substance Abuse Hotline  
Treatment Works  
United Way  
White Sands Treatment Center

**Tobacco Use**

*1-800-Quit-Now*  
*AA/NA*  
*Area Health Education Center*  
*American Cancer Society*  
*American Heart Association*  
*American Lung Association*  
*Community SWAT Programs*  
*CVS*  
*Doctor's Office*  
*Education*  
*Family Health Centers*  
*Family Health Centers of Southwest Florida*  
*Family/Friends*  
*Florida Department of Health*  
*Florida Department of Health in Lee County*  
*Healthy Lee*  
*Lee Health*  
*Prestige Insurance*  
*SalusCare*  
*Tobacco Free Florida*  
*Tobacco Free Lee*

# Appendix



**Professional Research Consultants, Inc.**

## Appendix: Focus Group Findings

The following provides an overview of the discussions from four follow-up focus groups among key informants in Lee County, targeting specific health topics. Select verbatim comments are provided throughout to better illustrate the input given.

### Healthy Lifestyle

Overall, group respondents feel that Lee County is a relatively healthy place, and there is now a greater focus on healthy lifestyles than ever before.

*I, for one, admire the seniors in this community. I think a lot of them are very active... I see people on tricycles and walking in the mall. I do think that we need to celebrate that we have done some things really well in this community, and I see it everywhere I drive and just in my interactions with people.*

*It's nice that there are efforts. And I've really noticed in the last 10 to 15 years, to see the healthier things. So we're on track. We're only just at the beginning of it.*

*One thing that I noticed... that I didn't ten years ago, is a lot of the health-conscious activities. People are asking for the bike paths, adult exercise programs and facilities, and things like that. And we had never seen that before. So I think, yes, America's gotten fat, lazy, and obese, but I do see a trend with the amount of gymnasiums that are opening up and that kind of thing... People out there really do want to get healthier.*

Still, there is much work to do.

#### Overview

Lifestyle affects so many health issues, yet a healthy lifestyle is difficult to achieve; a majority of the time in each of the follow-up focus groups was spent discussing reasons as to why that is. Participants cited a variety of root causes contributing to unhealthy lifestyles in Lee County:

- **Knowledge** (regarding nutrition, budgeting, skills needed to live healthfully)
- **Motivation** to make the right choices (willingness to change, self-value, parenting, positive modeling)
- **Socioeconomic status** (in terms of prioritizing health living, access to services)
- **Cultural & societal norms** (e.g., dietary staples, reliance on fast food/prepackaged meals, work-life balance)
- **Infrastructure** (which can either support or discourage physical activity, or offer easier access to healthful foods)

Focus group participants agreed that multi-faceted **health education** is the key to promoting healthy lifestyles.

#### Knowledge

At the very core of leading healthy lifestyle is **knowledge**, and group participants feel that some residents do not understand that healthier options are within their grasp. Group discussion gives the impression that this is largely a product of education level, though misinformation or shifting recommendations might be a barrier that everyone faces.

*A lot of people, I think, don't altogether realize what their problems are health-wise. They don't go to the right place to get the right answers.*

*[Doctors] will tell them, "Just eat a balanced diet." What does that mean?*

*For the last 30 years, we, as a population, have been told that we need to stay away from fat... And, as a result, we've gone to a high-carbohydrate diet. Now all the research is coming out... So all these years of your doctor yelling at you [about] fat... has led us to the obesity, to the diabetes, to the heart disease. And it's even worse than it was. Research is showing that high-fat, low-carb is the better way to go, to produce a healthier lifestyle. And I think that message hasn't gotten out yet.*

Knowledge related to budgeting and the cost of healthy food can also be major barriers toward a healthy lifestyle.

*We actually take people shopping as part of our program because they don't know what to buy; they think they'll spend too much money... I think some things should be organic and other things you don't need as much, but people need to know what's what with that.*

*I think that that is part of the budgeting, too, is understanding. Yes, these are better nutritional things, but it's also time management. And if it's something they need, one of the things that has been successful in other programs has been understanding the budgeting aspect.*

*If some people say, "I can't pay my rent... I need money." Okay, well, let's look at why is it. Let's look at your budgeting. Let's look at a financial education course. Let's look at your [nutrition]... There are parents that if you look at it, and you give them the proper tools and then the understanding, they'll start implementing it, and it's an encouragement. It's a betterment.*

For many, though, knowledge is coupled with other factors such as skills to utilize that knowledge, which is not necessarily taught in school.

*You have to realize the knowledge about what to eat, but you also have to have some skills to prepare food. And time is key because a lot of people are working, and they have hardly any time [to cook].*

### **Motivation**

Another determinant is **motivation** to prioritize healthy decisions, which is more complicated than simply choosing an apple over a cookie. Unlike knowledge, group participants feel that motivation is something that affects everyone, albeit in different ways.

*The whole issue of wellness is a function of time, money, knowledge, and motivation. And each one of those needs to be separately addressed.*

*Even if [people could afford healthcare], I don't know if people are still going to make the healthy lifestyle choices... This is still America; people still have a choice.*

*If I give people the benefit of the doubt, I think most of the country is fairly intelligent and fairly knowledgeable. If you've got a bag of potato chips in front of you and an apple in front of you, I can't imagine one person — unless they have a very severe intellectual disability — who couldn't say, "This apple is healthier than this bag of chips." There's very few people who don't know the difference. It's up to your choice.*

It was noted that while leading a healthy lifestyle it is a choice, motivation might be tied to factors such as parental involvement, age, and self-esteem.

*We have a lot of older population here that are stuck in their ways, and that's the way they are. And so some people find change difficult, especially if they've been doing it that way a long, long time. So that's a huge barrier.*

*If you have a really good self-concept... and care about what you look like when you look in the mirror, you invest in yourself... People can show that they care about you, but you can't transplant self-worth. Somewhere, somewhere down the line, that person has got to care enough about themselves to eat the apple and walk the mile.*

*I babysat a child who, if you put a cookie in front of her and a piece of fresh broccoli, she'd eat the broccoli. She was reared in a home where fresh vegetables and fresh fruit was the norm and was what her stay-at-home mother put in front of her, who did not have a lot of money; it had nothing to do with income, whatsoever. It had to do with the priority of the parent. I've been in many low-income homes, and I don't equate nutritional decisions with income... I've yet to be in a home that doesn't have a refrigerator.*

### **Socioeconomic Status**

In each of the focus groups, participants agreed that **socioeconomic status** affects health

status in their community, and that a healthy lifestyle might not rank highly on the priority list for those with lower incomes. Further, the “working poor” often do not qualify for safety net services as do those living in poverty.

*Is it a tale of two cities...? I think it's socioeconomic to a large degree. You know, there's a trend and there's definitely a growing awareness to eat locally and organic, on one level, and then there's another population that doesn't have access to it. Too busy with two jobs and not enough money and [eating] McDonald's. I just see this kind of bifurcation, in general.*

*We provide free legal services... at 125 percent or below [the Federal Poverty Level]... If you are minimum wage, you do not qualify. If you are one single person asking for legal services, and you're minimum wage and working 40 hours a week, you don't qualify because you are above... If you have a family of 4, to provide the basic needs of those 2 children... it takes 200 percent of the federal poverty guidelines. That's why you're seeing the latest studies, where it's been out in the news for us.*

*Lee County, I think, is still up with higher rates of children living in poverty. At one point, it was 33 percent... We're one of the highest in the nation.*

*With the loss of their housing security and an inability to pay their mortgages, one of the things that's going to go are health plan expenses. They may keep their kids on the KidCare, but a lot of them cannot afford it [for themselves]... What scares them is that deductible.*

*The people in poverty and in extreme poverty, there's a lot of social supports for them... But it's the working poor that are really falling through the cracks right now... But how do we reach the working poor? Because they don't necessarily qualify for the things.*

*The vast majority of the things I see are the working poor. They're that group that fall under that category. They're trying very hard, and many of them working two or three jobs, a lot of them with families, trying to get to a point where they can have a position that will be more than just a subsistence living.*

### Cultural & Societal Norms

Achieving a healthy lifestyle is difficult anywhere in this nation, not only in Lee County, and the overarching issue of **culture** plays a role.

*I had a very interesting interaction with a Guatemalan family... Guatemalans don't eat food out of cans. And she always had fresh fruit and vegetables on the countertop... And was she educated? No... And they did not have a lot of money; it was a farm-working father, but they still knew about nutrition and took the time to make that kind of thing.*

*I had the opportunity to travel to Cuba three different times... And I noticed... those kids had nothing, but they ate [well] and exercised and played. And I get back to America, and I don't see that at all... You don't see the level of obesity in the other countries that you would in America.*

*As a Cuban girl growing up, I didn't know much vegetables. We grew up with our rice, our black beans, our pork, our chicken, our steak, and then it would be a simple salad of vinegar, oil, tomato.*

As part of the issue of culture, changing American **societal norms** and pressures affect healthy lifestyles. A group participant mentioned that in the past few generations, everything has been made so much faster and simpler, which has also brought myriad unintended consequences. In terms of nutrition, which was a much-discussed topic in the groups, it is easy to point to the proliferation of fast food restaurants and large serving sizes. Group respondents feel that this making nutrient-poor meals in their home microwave might be a product more of their culture than lacking knowledge.

*Culture takes long periods of time to change, and it took us our last four generations to get to this process.*

*Through 3 or 4 generations, we have completely changed our lifestyle.*

*Everything's quick; everything is microwaved. I don't have a microwave in my house... because it makes you eat foods that are prepackaged, as opposed to making the food in the oven... All these young kids, that's all they know, is microwaved food.*

*There's this tendency here to providing instant food, but a great deal more than you need. And I think*



*that's part of the problem today, with obesity.*

*I think most of the food that we get these days, it's all got preservatives... And I think the whole population, in this fast-living world we're in, I think we do get by on pre-packaged or instantly-prepared.*

*I also think it's generational. I think your senior generations weren't exposed to that type of activity [electronics] and, therefore, don't partake in it to a large degree. But younger generations, who were brought up in activities, teach their children that type of activity.*

*Kids now, they're on their tablets, they're playing video games, they're on computers. When I was a kid and I had McDonald's, it was a treat. But we were outside... It was just so different. Times have changed.*

A shift in the work-life balance, leading to longer work hours, is a societal norm for many adults.

*I also agree that one of the factors – and it's a cultural thing– is our work balance and the length of time we work. It affects our eating... And so, culturally, we have placed too much emphasis on trying to be superhuman, working too many hours and juggling too many things.*

*They have gone to longer workdays. And, with the 40-hour rule, a lot of the people work three 12-hour shifts. That throws a family life totally off balance.*

### **Infrastructure**

Healthy lifestyle is also partially dependent on infrastructure. Some parts of the region are more conducive to outdoor physical activity than others. Participants mentioned Cape Coral having good park and trail systems in their area, whereas other parts of the county's infrastructure were not planned with physical activity in mind.

*We're not a super friendly walking or biking community.*

*I'm from Massachusetts, and I've noticed that it's not easy to walk places.*

*They're putting 400-and-some miles, and they're connecting bike paths in Cape Coral. She has done an excellent job of that, and our city council have really supported her, so. And I know our rotary club is going to do... a little mini-park – you can park your cars, to get on your bicycle to go. Cape Coral is almost going to be covered with bike paths by the time this one project is over.*

*I feel like they're trying to implement it more... They're working on the linear park here in Ft. Myers.*

*I know Lee does a really nice job with the BikeWalkLee group, so they're doing their part.*

Public transportation is part of this concern. The fact that infrastructure and transportation issues are on committee and council agendas shows how important infrastructure is to the health of Lee County, not only for getting to appointments.

*I think that also you have to look at the difference between... [here and] anywhere else where you have easy access to the T or the subways or the metros. Florida is still very much dependent on cars. We don't have that central transportation.*

*You're saying a mass transit system actually makes you walk more, but it does. Because you're going somewhere. It's not going to drop you off at your front door, so you're going to get that little bit of walk in, depending on where you get dropped off.*

*But here you don't have that walkability built in.. We don't have enough transportation infrastructure, in general, in southwest Florida. They just had a big summit about that 2 months ago; I think it was just discussing the problems with the transportation systems... It'll take years to get those kinds of things in place... There's not enough money. There's not enough money in the budget to do everything that needs to be done.*

Furthermore, if there is not easy access to healthful foods, then the chances that residents will choose to eat a healthful diet are lessened. Some community residents are surrounded by fast food and convenience stores, and it is difficult for them to reach a grocery store or farmers' market. This makes it difficult to prioritize choosing and eating healthful food, though it is also more complicated than simply building more grocery stores. In addition, healthful

food choices might be limited in restaurants.

*I think it's a poverty issue if we say that eating healthy is going to help you be healthier, but you can't afford the healthy food.*

*We have areas where there aren't very many grocery stores. Downtown, there are places where people don't have a lot of money, and there are fewer [healthy] choices.*

*When I was growing up, poor people were thin because they didn't have enough to eat. Now poor people are fat because they go to McDonald's.*

*It's cheaper to go to McDonald's and buy a hamburger there... It's more affordable to take your family out to eat, sometimes, than to actually go and buy the food [at Publix].*

*You can go into almost any restaurant now and get a bean burger of some kind, but it is very limited.*

*That is a huge issue because it's a social issue and it's economic. When you build a new [grocery] store, you're going to spend a lot of money on it. You don't want to build your store where you're not going to make as much money. You want to hit a market where you're going to be able to sell and make a lot more money.*

### Education

Above all, participants in the focus groups believe that **education** is the answer to promoting healthy lifestyles.

*Well, if there's one overriding theme that I keep hearing over and over again is education, education, education. Everybody's saying that on some level, people need to have education.*

*I do agree that education is the answer and especially in our demographics, especially with some of the problems that we face.*

Some respondents feel that instead of speaking in all negative commands, health education, in particular, should focus on what residents can do. Focus group members agree that programs emphasizing small behavior changes might be more effective than those requiring complete lifestyle overhauls.

*Some people say, "Well, I can't do this. I can't do that. What can I do?" They need to know what they can do, instead. If they stop eating meat, well what do they eat? And that's the big question. People often lose track, and they go back to do what they used to do because they're used to it.*

*We grew up thinking that you had to do aerobic exercise. You really had to get at it. We're learning that you don't really have to. The simple act of just walking and low-impact aerobics is very simple. It doesn't hurt; you don't dirty your clothes up as much. And then the idea of eating – you know, just eat less. So it's fairly simple. Just putting it in action.*

Participants noted that programs should focus on prevention and working with already-established relationships to really reach the intended audience. They also referenced existing programs, such as CHIP (Coronary Health Improvement Project).

*One of the rehab doctors... in his orthopedic rehab practice, he adds nutrition to this rehabilitation. And all these other factors that are affecting orthopedic health kind of go away.*

*They [CHIP] also have a network where you can socialize with one another... They literally have groups where folks can go together, and they can talk the same language... I've been in the room where they have said that, as consumers, we are responsible for our own healthcare. And how do you do that? Well, the first thing is, of course, stay out of the way of the healthcare system by preventing all those things that you can prevent.*

*So for the CHIP program with the school district, we pay for it 100 percent, as long as you go. So if you don't go to the program, it comes out of your paycheck... We don't expect you to lose a certain amount of weight; we don't expect you to lower your blood pressure by a certain amount. We want you to learn about this program. We think it's a great program because it's the education that can change minds of a lot of people; it doesn't matter how stubborn they are. It can change their minds if they know they can make the choice, commit to it, and then change.*

*The research shows that the most effective way to impart information is through relationships... Impart your education through people who have relationships with people... It's not just education, but it's how do you get the message across? I mean, I think we have plenty of education... Work through the*

*people who have relationships already formed and enhance what they're doing and, hopefully, try to educate people so that they're going to learn.*

*The relational aspect of all this, living healthy. Sometimes there's little bit more pressure in groups... That may be a way to share the responsibility with the community, versus it all being on the [hospital].*

*We need a coach because many people don't make that choice of the apple over the potato chip, and it's a simple choice. We're making mistakes at that level.*

Other ideas to educate the public include better utilizing grocery stores, resurrecting the public service announcement, and offering classes for employees.

*In the [Publix] cooking class, to give them credit, they have on the side everything they're using. But to take away credit, they have one person standing there in a very busy zone where people are trying to check out and stuff. There is no comfort level. There aren't any seats that somebody could sit and watch them do it. So basically what happens is people just hear the announcement that the food is ready, and they go by and they take a little cup or a little plate and they walk out. So they have really no clue.*

*The public service announcement has really gone to the wayside. It's very difficult for at least the health department to get messages out for free.*

*Is there an official day, like a national day of health or anything like that? Or maybe Lee County helps establish a day where we generate a buzz in the community, everyone's talking about it, we get other companies to work with their employees, maybe hand out some literature, and create a day... Maybe it's time to leverage that a little bit more or expand it.*

*Socioeconomics are difficult for [school] bus drivers, and we're going there and teaching them how to cook healthy meals. And there's so many people that are interested in it that we can't keep them out of the class... Things are definitely changing for us in the school district, and our healthcare costs are definitely reflecting that in the millions... Healthcare cost has gone down every year.*

*One of the things that we're teaching at the school district [for adult employees] is how to prepare cheap and healthy meals through the CHIP program and the Food for Life program. And we're removing the dairy and the meat and things like that out of the diet because people know how to cook that stuff. So our focus is to try to teach them how to prepare lentils and how to prepare beans and rice and things that are healthy, whole grain, and that don't taste like sawdust. So that your kids will eat it... You can still eat meat and cheese and things like that, but let's teach you how to do other things. Let's teach you how to do some of these healthier things, and maybe some of those unhealthy things will kind of fall off your plate.*

Outside of providing educational programs for residents, group members questioned how much a hospital could do to change the status quo.

*I do think Lee [Health] already has some remarkable programs... They are as in the community as you can be. They have so many programs and things, but are we really reaching the people? And how do you do that?*

*What would you imagine that Lee Health could do to better educate the community, to communicate with the restaurants, to deal with the schools? They do a tremendous amount now in some of the activities that they promote, but this is almost something that's out of our control.*

*It's very difficult, because we're placing a new burden on Lee Health that maybe they shouldn't really have to do.*

Education for the younger generations is also an issue raised by group participants. Schools are uniquely positioned to promote healthy lifestyles to their students, and there are efforts currently in place.

*There are two conduits where you could get the most people. One is the schools, K through college, and the other is the workplace.*

*Health for sure is education. The fact that you're starting at the older group, that's a real problem.*

*It definitely starts on the ground, with education for the kids.*

*If we could get it in the elementary school system, just pour the money into it and take the time in that area, these kids are going to start out [in a better position].*

*I know the schools are trying. I know the snacks are much healthier, and I know they're trying to introduce these things to the children on a daily basis.*

*More and more schools are working on walking paths to school and trying to encourage more people to walk to school. Especially in areas where there's more of a community- like the downtown area- [there's encouragement] not to drive busses or drop your kids off. Get a safe walking path and get the streets better marked and safer for kids to be able to walk... I think it's like 86 percent of our students are on free and reduced lunch. So it's most of our students.*

There is also an issue of education regarding available resources, especially for those outside the “safety net” services. Some group participants feel that county residents are not aware of available resources such as the 2-1-1 resource hotline, whereas others disagree.

*The people who are going to the [farmers] markets are probably not the people who need to learn how to do this stuff.*

*Because of your area of knowledge, that's why you're aware of it and you also pursue it. But the general public doesn't have that initiative; they don't even know where to start. Someone has to tell them about 2-1-1.*

*I think people who are underserved, the low income, they know about 2-1-1.*

*For a long time, 2-1-1 used to have a manual they would put out. United Way had them, where all these resources were in a manual, or they had the website. You could go on the website and put in whatever you're looking for.*

Others question the utility and long-term effectiveness of “safety net” services that are being given for free.

*It's not a stopgap measure. Safety net programs are important because they're there, but what is the long-term impact?*

*No matter how much money you pump into certain organizations, there's going to be always more need than ability to serve... We have the safety net services here, but how can we get them above that so that we can break a generational poverty issue? How do we get this moving forward? Because as a community, if we're able to make those long-standing impacts, impacting education, health, and income... There's your three basic issues for a community. If we can start where it's a long-term thing, you'll start seeing as a community improving.*

*I think that people need to participate in their lives... Without dignity, you can't make any further progress... Whatever they participate in has to be something that's theirs, that you're not speaking down to them from some ivory tower. But earning their way, I think, is a critical piece for any program. And unless you want to give people food forever, they need to start getting it themselves, and they need to have the self-respecting dignity to do that.*

*Maybe the safety net needs to be set up in a way that is like school... You're going to have more asked of you as you go along. Eventually you're going to graduate; there is a term limit. And I don't think you can set that for everybody at the same exact time, though. I think there are some people who are further down in the hole, trying to dig out.*

*We provide free legal services so long as you qualify... Now, the whole point of that was because these people cannot afford lawyers, they cannot traverse the justice system, or they won't realize what their rights are... As far as a safety net program... these free programs do have limitations on how many bites you get that at, but also what they have to do.*

### Stigma

Finally, some participants cautioned against the tendency to **stigmatize** or blame individuals who, by appearance, might be viewed as leading an unhealthy lifestyle. One group respondent mentioned that some people are unable to take responsibility for their wellness. Similarly, health problems could just be the result of aging, rather than an unhealthy lifestyle.

*There are people who are obese and on [riding wheelchairs], but you're not seeing their health issues. They may be obese because they have a problem with breathing or can't exercise... So you can't really make judgments on obesity or the mobility of people without knowing their previous health.*

*I'm getting older myself... You do have more ailments and things as you age... So does that mean they're unhealthy? Or they're just aging...? Because of the demographics of southwest Florida, we're always going to... look a little more unhealthy in comparison because of the demographics.*

## Behavioral Health

### Mental Health

#### Overview

Focus group participants noted several factors relative to mental health in Lee County:

- **Prevalence** (increasing prevalence, economic drivers, at-risk younger and older adults, those who are homeless)
- **Stress** (consequences: drug abuse, lack of sleep, health status — contributors: economics, including healthcare costs)
- **Lack of resources** (underserved, not enough spending on mental health, patchwork approach, cost)
- **Stigma** (fear of being labeled)

#### Prevalence

As evident across the country, behavioral health remains an issue in Lee County. According to group respondents, **prevalence** of mental health issues has grown. Particular populations of note include the younger and older age groups, as well as the homeless.

*Mental health today is... beginning to grow, and you can't stop the growth. One of the bigger issues [in this community] is mental health.*

*Mental health, I think, is a big problem here. During the economic downturn, people lost everything, and they just had so much depression and stress trying to make ends meet. And we still have it here.*

*I see so many young people who kill themselves in this area.*

*One other population group I'll throw out there is senior care. There's a lot of isolation issues.... Access to programs, services, social services; not just healthcare, but activities... Getting the seniors involved in some things.*

*It's a homeless situation, as well.*

#### Stress

**Stress** plays an increasing role in residents' mental health. For some, there is the stress of surviving day-to-day. Others stress about navigating the complex and constantly-evolving healthcare system and the associated cost of medical bills.

*With the stressful lifestyles, we're going to have a lot more of the drug abuse or stress issues. Or even lack of sleep... which causes a real mental health problem.*

*You know, one of the biggest problems that I see — and I can't believe this statistic can be correct — is that the third leading cause of bankruptcy is medical bills... That's what's causing a large portion of financial stress on families... It is expensive to be poor.*

*We could talk about medication costs. I think a lot of the families and individuals that we see, it's because they're making decisions between medication and food or medication and keeping their electricity on... I think that's a big health issue.*

*If you're living paycheck to paycheck, have two jobs, and your car breaks down, you don't have money to pay for the car; but if you don't fix the car, then you can't get to work. And this isn't psychotic; this isn't like I have to go to residential treatment. But there's that kind of stress, which is constant... And I can't imagine it not affecting your health at some point. And there are more and more in that shrinking middle class that have fallen in that bucket.*

*A lot of people that I talk to, specifically the elderly, are calling and saying, "I'm now [deciding] between paying for my medications or paying to keep my electricity on." They're on a fixed income. They're not going to be in a situation that's going to change.*

*I feel stressed a lot of the time, and I'm sure that most people do, in meeting needs for everyday existence... When it comes to my healthcare and the choices I make about it, a lot is left to me... We*

*talk about the time management. I do my prescriptions, do my appointments, do my loan fund, do my mortgage. Everything is sitting in the citizen's lap to do... I'm extremely stressed out about that because I'm afraid of missing a beat and that something is going to be cut off.*

Still others might not be used to constant stress, so relatively minor issues might seem too much to handle. Participants pointed to the younger generations, in particular.

*We've always tried to make it better for our kids, to the younger generations. And we have made it so good that if they have to work more than 20 hours, they get stressed out because they don't know what they're doing. So I think... we're going to be dealing a lot more on mental health.*

*I think we've seen a tremendous amount of changes [in society]. I think that it's difficult for these couple of generations of people to readjust to the changes. And I think this is a stress factor... I see it more and more. I come upon people who are really on the edge of almost a breakdown, they're so stressed with everything.*

*After the election, they had to send therapists to some of the millennials and babysit them. They were having a nervous breakdown over the election.*

Respondents also blamed society and our expectation of immediacy in everything we do.

*I don't want anyone to expect me to get back to them immediately, unless it really is an emergency; I can respond to anybody in an emergency. But we have an expectation of immediacy... I think we did that to ourselves. And, yeah, that causes stress.*

An interesting comment was made to the effect that some of the burden should be lifted from the individual and placed on the government, though that would interact with individual liberty.

*We were talking about a lot of the decisions being a choice for families to make... Maybe the government should step in and really regulate some of it. Some of it does come down to the freedom of being able to choose what's right for your own family and then not overstepping your bounds. It would be interesting to see where the right balance might be.*

*How much is the government going to tell people what they need to do when it comes to health? Insurance is insurance. Insurance is not healthcare; insurance is a form of payment for healthcare. Healthcare is... a partnership... [Even if accessing healthcare were made simpler,] there will still be that segment of our population that makes poor lifestyle decisions. And they have the right to do that in this country... So we are really blessed to have what we have in this country, if we choose to utilize it and take advantage of it.*

### **Lack of Resources**

One of the major issues with mental health mentioned by several respondents is the **lack of available resources**, which is evident nationwide, but locally might be correlated with the amount of money being spent in this area. It is difficult to reduce barriers associated with mental health treatment when there simply are not adequate resources available to address the issue.

*I think the fact that our state is 49th in mental health spending in all of the country probably means that we're pretty close to 49th in mental health services that are provided.*

*Lee County has been underserved by mental health forever.*

*We're being underserved, and that is something that has constantly come up in almost every one of the little group get-togethers, is the need for more. There's been tremendous changes, but we're having more trouble, as well.*

*We just have a lack of resources, and it comes down to cents... it's [also] a national problem.*

*It's institutional resources. We don't have the institutional resources that we [once] had. At one time, we had both state-run and private mental health facilities, and now that's shrunk.*

*It's trying to find space or beds or units. You can't always just throw money at the situation; we have to think our way out of this box.*

*When we do bring them in [to the hospital], it's so acute; it's not enough. They bring them in, and it's like patchwork, and then they're sent back out. And they come right back. I mean, we love outpatient services, but there is some time when people have to be really nurtured for a while. And the system is*

*not set up to handle that at all.*

*The jails are not the proper way to take care of them. Putting them in the legal system is not helping them.*

Part of this issue is the relative number of physicians who specialize in mental health.

*We don't have enough psychiatric care in this country. We should have institutions for people that need them; we don't.*

*It's really hard to get doctors that want to specialize in mental health.*

Consequently, the existing resources are constantly at capacity, contributing to long wait times for treatment. Those in crisis might not have the time to wait. The cost of seeking available treatment may be a barrier, as well.

*In psychiatry, if you have a mental health issue, forget it, [you're not getting an appointment] for children and adults.*

*[We] alluded to the merger of SWFAS and Ruth Cooper. Sometimes you call up to get an appointment, and if you have an issue — whether it's a substance issue or a mental health issue — it's almost a crisis. It might be a couple of weeks before you're able to get in. The resources just aren't there to treat the volume of the problems in both mental health and substance abuse.*

*It comes down to health insurance, too. Even if you are able to get in to someone, you're not necessarily able to afford the appointments. Many of them have sliding scales; but even with sliding scales, if you're living in poverty or working poor, to be able to afford that is daunting.*

A few respondents shared a divergent view, that some mental health resources are available through organizations.

*There are plenty of services. If you get out there, there's 2-1-1. You have SalusCare. You do have them right here. There are services. It's just a matter of getting to know that.*

*Lee... did put together a small inpatient service. But ... it's being run by nurse practitioners.... And these are really psychiatrically-ill people.*

### **Stigma**

Still, there are those who will not attempt to seek treatment because they either do not want to know their diagnosis, or they do not want to be stigmatized with a label of mental illness.

*They're not willing to ask for help if they think they're going to be labeled.*

*If you're in the socioeconomic level where you can't afford treatment, you're on the street, you can't get a job... You're stuck. You're [labeled as] a crazy person, and nobody wants to be near you, or nobody wants to be a part of that. I think outreach for that would be helpful.*

*They put labels on them and put them in the corner.*

## Substance Abuse

### Overview

Group discussion on this issue was relatively sparse, but it centered on the following issues:

- **Prevalence** (increasing, addiction as a chronic disease, closely linked with mental health)
- **Marijuana** (concern over legalization)
- **Age** (older adults as an often-overlooked risk group)

### Prevalence

Group respondents feel that substance abuse is increasing in **prevalence**, with one respondent likening it to a chronic disease in its own right.

*The fire service... deal[s] with a lot more substance abuse [now]... And so I think that drug abuse is definitely on the increase... And behavioral health... I'm thinking there's a parallel.*

*We've got more challenges than we did back then, both in drug abuse, as well as mental health.*

*I read recently it used to be heart disease, cancer, and stroke were the three primary [chronic diseases]. But I think addiction snuck in there somewhere; it might even be equal or higher than stroke right now.*

*In some communities, it's really a crisis, where the heroin epidemic has overtaken those that were addicted to painkillers... It's a problem here, but it's a bigger problem in some other communities.*

*On the news last night, there was a mother who's in jail because she... was under the influence, and the baby was face-down in the tub.*

Participants also mentioned that it is common for mental health to co-occur with substance abuse. Consequently, much of the groups' mental health discussion also encompassed substance abuse.

*Trying to separate grave emotional and mental disorders from addiction, those things collide and intertwine, as we all know.*

*And behavioral health... I'm thinking there's a parallel.*

### Marijuana

The state of Florida recently had a vote on legalizing marijuana, which group respondents mentioned had passed with 70% of the votes. According to respondents, this vote was largely based on misperception.

*About 70 percent of Floridians voted for it.*

*It's really based on misinformation, too... The public perception drove that vote.... For most of the conditions, the claims of efficacy don't match the evidence. But the problem, too, is because of the way that it's classified by the federal government, we can't do the studies that need to be done to really show whether it'd be effective or not... We have the medicine that's ahead of the sociological resources to deal with it.*

### Age

Older adults might fly under the radar when it comes to substance abuse. If they are taking multiple medications from multiple doctors, there might not be anyone looking to see if the medications are compatible, or if they are overmedicating by accident.

*There's so much isolation. Substance abuse is sometimes an issue with seniors.*

*I work with seniors, and there definitely is a problem with addiction: the drug abuse with over-medication... You go to the doctor for your hip, and he's going to give you this prescription. You're*



*going to go to your regular doctor, and he's got you on these three... Who's looking at all of these to say, "Are these compatible...?" It's causing problems with seniors taking too many medications, taking them at the wrong times. There's also such a high degree of dementia out there that people are over-medicating – they're taking their pills and then, an hour later... [forgetting] and taking more. So there's, I think, a serious problem with addiction and also alcohol abuse from seniors living alone and lonely.*

## Dementia

### Overview

One issue that participants in the focus groups feel will persist is dementia, and discussion covered the following issues:

- **Prevalence** (aging population)
- **Financial and emotional toll** (end-of-life care, emotional toll on families/spouses)
- **Education** (for older adults and their families about dementia and end-of-life issues, also education for healthcare workers)

### Prevalence

One main idea raised by group respondents in reference to this issue is that the **prevalence** of dementia is bound to increase as the majority of the population grows older. Given all the older adults who come to Lee County for the winter, respondents feel this community is a model for what the rest of the country will be in the future.

*We've had discussions that Lee County is really kind of a pilot for what the rest of the country is going to be in 15 years. We really have an opportunity to look at senior care, the broad spectrum, and I'm including social services and activities. There's so much isolation.*

*We have a lot of older people that struggle with dementia and mental loss, so I see a huge amount of that.*

*I would say, and all of the home health [care organizations] in this area would probably agree, that the rate of dementia in-home is probably 80 to 85 percent.*

*I don't see dementia going anywhere anytime soon, and I don't see us coming up with a cure any time soon.*

The rising prevalence is evident, given the number of available local resources for dementia and in-home healthcare.

*Lee Memorial has a diagnosis program for dementia... There's also the Alvin A. Dubin Alzheimer's Center on Brantley Road.*

*If you're around a large medical facility or university facility, a lot of times there will be [adult daycare], but in rural areas there's a real lack of those kinds of facilities.*

*Hope Hospice has really stepped up a lot.*

### Financial & Emotional Toll

As individuals live longer with advances in medicine, there are higher **costs** for treatments and medications, which is shouldered by both insurance and the family.

*The immense advances that are being made in medicine, generally it's enabled many people to live 20 years longer than they did. And that's when the dementia problems start to take place, is in the latter years, for most people.*

*I think any study that looks on the rising healthcare costs, you will see that the majority of healthcare dollars are spent in the last couple months of life. The reality is that we have interventions... now far more sophisticated than they were [even] four years ago. So we have a lot of solutions. We also have a growing population of elderly that have access to the solutions... The [families] come at the 11th hour, and that's when the healthcare costs are tremendous.*

In addition to the financial toll is the emotional cost shouldered by the family.

*With many of these elderly folks that are separated from their loved ones or not in their households, the care has to go to some institutional involvement; and if the spouse is unable to care for them, that's where we'll have the strain. Of course this is a growing issue. We call Alzheimer's the long goodbye because that's exactly what it is. It's very debilitating on the family to watch that individual become*

*further and further distant from their families.*

*The family is in denial about the degree of the dementia. My neighbor is going through it... His wife... she's so angry at him. He's not that man you married 50 years ago. You just can't hold him responsible... I know for her, living with him day to day, it's a difficulty that she's not accepting.*

*I can't tell you how many times I sit with families, and the mother has dementia... And the daughter or the son says, "Mom, I told you that ten times," and screams at them. That's not going to change the mother's behavior. The children have to change to adapt to what the situation is.*

### Education

Again, respondents mentioned **education** as a needed resource as a result of the growing prevalence.

*I think that much more education to the general public is needed for dementia.*

*Most people aren't educated on dementia. Most people don't realize that there are several types of dementia, and even just aging.*

*Even though more and more elderly individuals are taking that step in planning for those situations [with advance directives], their family members are not educated.*

*I would love to see as much education as possible here. I mean, it's such a widespread problem... A lot of seniors might not utilize it, but the families that are here may utilize it. It may give them an understanding of a disease that they don't [understand]. Dementia, for some reason, isn't looked at as a disease like heart congestion or cancer, and it should be because it's not going to get better.*

According to one group member, part of this education should focus on the ethics of diminishing quality of life in exchange for prolonging life.

*Our ethics. At what point do you curtail some of these services? In many cases, the dilemma is that the family would like absolutely everything possible be done for their loved one, even in the situation where their loved one has advance directives, directing against certain interventions... So we need to educate the public, in general, about the fact that even though you have certain interventions, they're not always appropriate. They're going to prolong life, but not prolong quality of life.*

Another type of needed education would be for healthcare workers.

*We're not educated, not even our home health people, our CNAs, our HHAs... I think that higher standards of education in our healthcare workers is needed for dementia... I think that that's a suggestion for Lee, that they start their own CNA programs within their educational system... A lot of the facilities have their own [programs] so that everything is in-house, but you still have to staff those.*

*The fire industry did something a number of years ago... when it comes to education for their personnel. We used to spend money for training and... invariably, we'd get calls during this time, and so your training didn't really sink in because you never really focused on it. So we went to training days, which were paid overtime days, so that the employees could truly get the trainings... However, there's a cost associated with it... It's very difficult to be able to offer that... A lot of places are trying to make the differentiation between work and your private life. Sometimes, that's impossible, and people don't want to do things on their own time, they want to spend time with their family. So employers, if they want to have a well-educated workforce, have to find alternative ways to do it. You just can't do it by signing a piece of paper.*

## Chronic Disease

### Overview

Group discussion on this issue covered the following:

- **Prevalence** (COPD, diabetes, addiction, congestive heart failure)
- **Risk factors** (comorbidities, obesity, medications)
- **Education** (self-management, effectiveness, reducing readmissions)

### Prevalence

When group respondents mentioned chronic disease, it was initially in terms of **prevalence**.

According to respondents, top diagnoses have shifted.

*I'm thinking about the senior population in terms of diabetes and COPD — that it's growing.*

*I read recently it used to be heart disease, cancer, and stroke were the three primary ones. But I think addiction snuck in there somewhere. It might even be equal or higher than stroke right now.*

*COPD is big, up there in the top three.*

*Diabetes and COPD are the two chronic diseases that I think of.*

*Congestive heart failure is right up there with it.*

### Risk Factors

According to group participants, the comorbidities and **risk factors** for these chronic diseases vary widely.

*In a lot of cases, the COPD patient may also have comorbidities for congestive heart failure, too.*

*All disease begins as an inflammatory process... If you eat badly over a period of time, you then develop the chronic inflammation. And, again, research has shown that that is what leads to chronic disease – heart disease, diabetes... But you have to address that with the population; they won't understand that... We go out and do these talks on inflammation, how to reduce it, what foods to eat, what supplements to take.*

Obesity is acknowledged to be a main culprit.

*I think they're seeing signs of illness, so knowing that we're overweight is an issue. You know, the obesity rates were nearly 35 percent here — not just overweight, but obesity.*

*[Obesity] leads to so many other issues.*

Other risk factors might come from the plethora of new, highly-promoted drugs on the market.

*I'm of the belief that these drugs (with all of those side effects that we hear when they talk about drugs on TV) somehow over time... breaks down one's conduction system.*

*Also, unfortunately we have solutions in search of a problem. The advertising for pharmaceuticals has created a demand for pharmaceuticals that we didn't used to have. Now that the patient is conditioned to go to their physician's office and ask for the latest pharmaceutical they saw advertised. Which because it's newer, is going to be more expensive than a generic for that particular condition. So the idea of the physician dispensing medication has changed. The patient is demanding certain pharmaceuticals by brand name.*

### Education

Though programs are available for managing chronic disease, there are other barriers related to residents utilizing or learning from these **educational** services.

*We're not trying to teach people miracle cures and things like that. We're just proving that disease reversal is easy and possible in a couple of short weeks.*

*There's a big movement, and there are programs for self-management of chronic diseases. It's the*

*education aspect of getting the folks with chronic diseases to participate in the self-management program. Because if you let it go, you're ending up in the ER.*

*If you have diabetes, if you have Type I or Type II, there's all kinds of education. But are we delivering the message in a way that people are learning? Educating and learning are two different things. Any kid could sit in class, but how many of them earn an A? How many of them really learned?*

*I think that in some of the education, at least in the medical profession where I am, there's nobody who really brightens dark spaces. There's a standard thing. Everything's got an outline: 'Here are the objectives, and that's all I want you to do.'*

*I knew someone who was diagnosed with Type I [diabetes]; he had so many pamphlets and videos, it was overwhelming.*

Group members are in agreement that prevention of readmission for a variety of chronic diseases would go a long way toward reducing overall healthcare costs.

*The situation with the Affordable Care Act, there were certain disincentives for the hospitals to have a patient with congestive heart failure or COPD readmitted within 30 days of your discharge... But that has forced [hospitals] to develop programs to provide support to these individuals so that they get access to the outpatient healthcare that they need after the discharge. A significant amount of resources are going into that because there's the incentive to save significant resources. Because the average COPD readmission is \$15,000 to \$20,000 over a couple of days. If you spend \$4,000 or \$5,000 to assist that individual with access to the services, that can make a difference. But we need to do that across the spectrum of diseases, such as the epidemic of diabetes and heart and related obesity-type issues and mental health issues. COPD and congestive heart failure are at the top.*

*The patient education piece is huge. If you understand how your body works and how the disease or affliction you have is going to progress, you can prepare much better. And that reduces cost. If you can anticipate things and not wait until a crisis occurs when you have to go to the emergency department, that can be huge. A big part of these congestive heart failure or COPD readmission programs is patient education. Pulmonary rehabilitation, for example, has been around for 25 years, but it was underutilized because of the cost, even though the costs are relatively small compared to the hospitalization costs. But now it's come into its own, and so now we have some growth and support federally for COPD and pulmonary rehabilitation and cardiac rehabilitation programs that keep people out of the hospital. If they can become educated about their pharmaceuticals, about their lifestyle, about their diet, and what level they can exercise, their quality of life goes way up, and the healthcare costs go down. We're just at the threshold of getting into the mindset that everything doesn't have to be an acute care experience. We can treat people and educate people so that we can do things on an outpatient basis, but it's a slow transition. I just hope that that evolution can continue because it's in everybody's benefit to be able to be educated about it and how to deal with their own problems.*

## Injury & Violence

### Overview

Focus group respondents who felt that this is a notable issue in the community divided this into the following concerns:

- **Prevalence** (increasing with the population: driver/pedestrian injury and gun/gang violence)
- **Infrastructure** (to promote both health and biker/pedestrian safety)
- **Coping skills and mental health** (stress, road rage)

### Prevalence

Group discussion mentioned daily instances of injury and violence in the news, with this **prevalence** stemming from the number of car accidents, lacking biker and pedestrian safeguards, and gun and gang violence. Lee County has a Level 1 trauma center, and respondents feel that it is absolutely needed.

*As the population grows, which it has grown dramatically, you're going to see that. If you spend the evening in the trauma center over at Lee Memorial, you get a different view than almost anywhere else in the community because that's the focal point of most of the violence that we see in this community.*

*We have a level-one trauma center, and we need it; it should stay.*

*We know that the trauma center changed mortality in this community, and we want that to continue. It's a hospital service; that's what hospitals are for.*

*I was just thinking of the number of car accidents here.*

*Injury from the trauma from our automobiles running bikers over.*

*Every day in the paper and on the news, you're reading about violence.*

*Trauma from the drugs and gangs are huge — not in our own neighborhood, but in Fort Myers, Tice, Lehigh Acres, North Fort Myers, San Carlos Park, The Heights.*

*Shootings outside of Edison Mall.*

### Infrastructure

According to participants, Lee County is rated highest in the state for biker and pedestrian casualties. Changes in community **infrastructure** might be a particularly needed avenue for improvement in this community, which also might affect the adoption of healthy lifestyles by county residents.

*We are the number-one casualty for bikers and pedestrians in this county for the whole state, even though there's a lot more bike paths than there used to be.*

*I've ridden my bike out to Cape Coral, and that's a terrible bridge, the southern bridge... Going back into Cape Coral, there's no lane. You're in the road.*

*A lot of that is driver education, because pedestrians don't seem to have the appropriate lights.*

### Coping Skills & Mental Health

The ability to cope with life's stressors differs person-to-person. One group respondent feels that American life is becoming more stressful, and individuals might respond with violence in order to **cope with mental health** issues.

*As society becomes more stressed-out over geopolitical things and as people lack coping skills, then they're going to be lashing out more — beating up their spouse or kids, or going into the mall and shooting everybody. There's no magic bullet for that, either.*

*We just had the shooting in Fort Lauderdale, and I think that that's really, truly, a high-profile mental health issue.*

Instances of road rage are also another outlet, some of which group members attribute to drivers using their phone while in the car.

*And the worst case today is people driving while using their phone. It's not only in Florida. If you're driving and texting, it makes people mad.*

*I don't know if there's any statistics to support it, but it seems like road rage has increased as phone use has increased.*

Even the use of energy drinks can impact this issue:

*I decided to try [Red Bull], but I didn't know that you don't drink Red Bull and also drink coffee. I noticed such a change in my behavior. I screamed at someone who cut me off on the street. I said, "What is wrong with me?" I had to pull over, and I realized that it was the combination. But there are so many people, young people, who are constantly drinking that or Monster.*

*[Energy drinks are] a legalized form of amphetamines... It gives you that tremendous boost. It's legal, but there's consequences.*

## Access to Healthcare Services

### Overview

Themes emerging around access to healthcare include:

- **Demographics** (seasonal shifts, seniors, migrant workers, urban/rural)
- **Insurance and costs** (only part of the access equation, uncertainty due to current politics, consumer knowledge, rising healthcare costs for consumers/employers/hospitals, physician reimbursement)
- **Healthcare system** (replicating innovative models that work, discussion around end-of-life care)
- **Physician availability** (shortage of primary care doctors/certain specialists, insurance constraints)
- **Transportation** (public transportation, ability to get to services/appointments)
- **Resource knowledge** (consumer awareness of services, promotion)

### Demographics

One interesting characteristic of Lee County is the **demographics** of its population, with its seasonality being perhaps the most visible characteristic. Come winter, the population surges with “snowbirds” who come from other parts of the county. However, hospitals and community organizations cannot create programs for the peak of the population.

*The seasonality issue is huge. I was in a meeting recently, and someone said, “Don’t get sick in January, February, or March — or injured. It’s a zoo at any of the hospitals or physicians’ offices.” Our church has the seasonality issue... We have maybe 300 in July, two services. This winter we had 1,200 or 1,300. Trying to manage that is one of our challenges in religion and healthcare... You can’t build for the peak. Just like in education, if you build for the average, then you’re going to have problems, either way.*

*I heard statistically of 1,000 people coming to Florida every week, or something like that. That’s incredible.*

*Seasonality is an issue, and it’s become more acute over time. But the season doesn’t just last from January to March, although that’s the peak. We’re now seeing the hospital censuses particularly high for half of the year... We’re busier in the busy season than we used to be, but we’re also busier in the summer.*

As a result of this seasonality, the county is very much senior-oriented. Other demographic issues are found its migrant workers, Spanish-speakers, and those in the rural areas of the county.

*This community is very much a senior-oriented community, so we’re unique in that respect.*

*Southwest Florida is getting their share of seniors, and I’m not sure we’re keeping up with the services that could be available.*

*You also have to look at demographically, what do we have here? We are still a rural county. We have migrant workers that come in and out. There are certain demographic issues.*

*There’s a lot of things that we really need to assess to make it more open to everyone. Language is another. I mean, I get a lot of Spanish [speakers] because when I speak Spanish, they trust me more. They’re not as afraid because they think, “Okay, well she understands. She speaks my language.” But that’s just another variable.*



### Insurance & Costs

**Insurance** was a much-discussed topic in the groups. Participants mentioned that maybe the solution to the rising costs of healthcare should not strictly be addressed through insurance.

*We have a big push this year for kids. Kids are really underinsured if you look at the numbers in Florida, and especially in Southwest Florida, where they don't even match up even with some national numbers, even state numbers. So we're really trying to emphasize getting kids covered.*

*Insurance is not healthcare; insurance is a form of payment for healthcare. Healthcare is... a partnership.*

*If the idea is to really to keep people out of the hospital to lower our cost for healthcare, I think the government's failing tremendously. And it's because they're only trying to solve it with insurance and HMOs.*

*They don't want to get labeled with... a diagnosis of high blood pressure, because then they have a pre-existing thing... They don't want to get a label because the label tracks them around [with their insurance].*

*We have this idea that we're going to solve all our healthcare problems with insurance, and yet we've got so much redundancy.*

Uncertainty regarding the future of insurance is perhaps the greater issue, given the changing political climate related to the Affordable Care Act. Some respondents are hopeful that improvements will be made, but individuals and organizations currently cannot plan for the future.

*We can go back to 1965, when Medicare was passed. There was an awful lot of division about that... but as society and as Medicare adapted over time, it became a lot more bipartisan. Now, I'm very hopeful that that's what's going to happen as we go forward... Hopefully the same thing will happen with the successor to the Affordable Care Act, that we'll begin to look at it as something that is really part of a fabric and join the rest of the industrialized world, where healthcare is not a privilege, but is a right.*

*I would think that planning is the key issue. As long as I've been around healthcare, we've been having a debate about how healthcare costs are managed... To try to plan is a nightmare because you really don't know what the policy is going to be, meaning references to a replacement plan [to the ACA]... It's a nightmare for planning for individual families about what they're going to do. That's why you see a big surge here in Lee County and Southwest Florida of folks trying to get into the healthcare exchanges because they feel like this is a window that's closing.*

*We've had the Navigator contract under the Affordable Care Act... The first two years, it was pretty active. We've had basically record numbers of employment... But we've also had record numbers of folks who are uninsured come in... I think the thought is, "If I have the insurance, I'll be grandfathered. Then it's not going to go away," et cetera... We think the Navigator program is going to continue on at least through September... But we don't know at this point.*

According to group respondents, many residents do not realize the difference between the Affordable Care Act and "Obamacare." There seems to be a lot of confusion about insurance and healthcare, in general.

*I think the thing that's the most ironic is the fact that the average individual doesn't know the difference between what was labeled "Obamacare" and the "Affordable Care Act." They think that they are different things. Many individuals believe that the Affordable Care Act is how they're insured; that's going to be preserved, and it's only Obamacare that's going to be repealed. There's a lot of misperception. As the Affordable Care Act was unfolded, the public relations for it was terrible. Nobody really explained. Early on, it was too complex to explain. Later on, they really didn't do a very good job of explaining. Of course you had false and incomplete information on both sides of the aisle about this issue.*

However, the costs of healthcare and insurance is perhaps the larger issue and contributes to the uncertainty regarding the future.

*I think healthcare goes up every year no matter what they do. [How can we] possibly go back to substandard type of policies that may not necessarily cover those folks who have to go to the hospital? I do my best to try to structure clients' budgets so that maybe they can afford [care]... But it's only going to go up.*

*Healthcare is going through the roof... It can't keep going the way it's going. So we have to do something about the cost of healthcare.*

*I think a lot of people are afraid to go to the doctor because they don't have good insurance. Or they pay a huge deductible... [so] everything really is pretty much out-of-pocket unless they get hit by a bus.*

*Now with the premiums going up, a lot of people just can't afford the increases. They either lose their tax credit, or they lose their subsidy. What's the alternative?*

*We surveyed to find out how big of an impact [this] is this going to be for our students... They traditionally dropped their insurance because they don't have an employer — or are in that gap where they make a little bit too much money to have Medicaid, but they don't make enough money to be in the healthcare exchanges. So that's a dilemma.*

*One thing I see all the time with the older people is they say, "I've got this problem, and I can hardly walk." They're limping along, they're 63, and they're saying, "I've got to make it [until] I can get Medicare." So they won't do anything... because they can't afford it.... They just wait till they're old enough to get Medicare before they can get that help.*

*I don't care what you offer [for your employees' health insurance]. Unless you pay for it completely, my [employees] are going to opt out.*

*Healthcare or groceries can be a decision, a lot of times.*

Rising costs for employers and the hospital is also becoming more of a related issue.

*When I came [to Lee Health]... for every \$1 [spent], we collected maybe \$0.83. When I left in [the 90's], we were down to maybe \$0.47 for every \$1 charged.*

*Employers can't stay in business if they can't afford to provide the healthcare that they need to their employees.*

*There is a big abuse of the system [with people using the ER], too, and I know that that's a cost-prohibitive thing for Lee Health. And how do you resolve that? They talk about the community "doc-in-a-box" centers that used to be around the county, and now they're not so much. That keeps people out of the ERs... I mean, we call them frequent flyers. Being able to avoid the same person calling for the same thing is not going to get any better.*

*I think a lot of your ER visits are financial. Our hospitals do take care of charity cases. I had an incident where I went into the ER; I got a bill for \$3,600. Yet there are other people that go in the ER, and they don't have any money. Guess what? They don't pay a penny. But I have insurance, and I got billed. I mean, I'm glad that I have insurance... I was glad for what they did. But I think that you're never going to end that primary doctor being the ER on a financial basis.*

### Healthcare System

At a more global level than either insurance or costs is **the healthcare system**. A common theme in all the focus groups was that the system can always be improved upon, though respondents had differing ideas regarding what should change. One respondent mentioned best practices for how the system handles another disease (HIV/AIDS) and using that same system for other chronic diseases that affect lower-socioeconomic status individuals who might not have insurance or a way to pay for treatment.

*I think in the case of healthcare, it could be improved on. This is just a template. It scratched the surface. It can be improved... Everybody wants to have instant gratification, a quick fix. If it didn't happen overnight, it's not going to reverse overnight.*

*Look what we've done with AIDS. The AIDS scenario is very similar to what happens in all of our economically-challenged groups... We have managed to take AIDS and put it into a system. And we have an AIDS clinic in this community that runs quite well... There is nowhere in this country where you can't get good AIDS care. How did that happen? These people couldn't pay for their care, most of*

*them. That needs to be looked at, because that's a success, and no one talks about it... It involved the pharmaceutical industry participating. It involved medical research money. It involved tax dollars... We should look at the AIDS model and replicate it for the medical need. And I think we would get a lot accomplished very efficiently if we put our efforts in that degree... But it involved a thoughtful, careful, and well-orchestrated healthcare system. That's the healthcare system we need for the indigent... The state would be able to dedicate resources in a very efficient way, and you could find the doctors, nurses, case managers, and the meds. All that stuff has been done before with AIDS; it can be done with any chronic illness.*

Ethics were also mentioned in group discussion, with the rationale that as individuals are living longer, they are taxing the healthcare system exponentially more later in life. This is also something that came up when discussing dementia.

*[These are] downstream issues from an upstream problem of society not coming to grips with some profound ethical issues. That's the bottom line in my mind of who do you keep alive for how long? Who do you treat? Our political establishment can't deal with those ethical issues, so they deflect.*

*To put a pacemaker into a 91-year-old that's sick, how many thousands of dollars does that cost, and who makes those decisions? That's all part of this equation.*

### **Physician Availability**

According to respondents, there is no shortage of hospitals in Lee County, and avenues exist for most people to access care; however, having enough **physicians** appears to be a growing problem.

*When you get into resources, there aren't enough doctors to keep coming to all these hospitals. That's part of the problem.*

*Access to primary and specialty care. We have a growing problem. Now, we have a lot of programs like family health centers... But they have trouble recruiting primary care doctors even coming to Lee County... There's just not enough students graduating in primary care, anymore, to attract those... The more people who need the system, it's a growing lack of primary care.*

*We have a project called Project Dental Care, where dentists volunteer certain days and time to work in a clinic. And they do charge whatever insurance they have, but they only handle emergencies because they can't do everything because there's not enough doctors.*

Consequently, physicians' time is also affected. Case managers might help with some of the paperwork by managing medical records and such, but physicians still need to find the time to meet with patients and go through the notes in their medical records.

*When you go to your primary doctor, if you get 15 minutes of their time on a visit, you're fortunate... You go ten times; do you get your primary every time, or do you get your primary once and his/her PA the other nine times?*

*Five years ago, one of the things that we got back from the focus groups from communities is the lack of ability to have access to medical records from one health facility or doctor to the other health facility. And that was a real problem on... one doctor prescribing this drug or the other drug – so there was a tremendous push. And Lee Health has done an excellent job making a data bank that almost anybody could get in and find it. What you run into is the various doctors don't necessarily have the staff or the time to go in and read that... So a lot of emphasis has now been put on the pharmacies. The pharmacies are starting to be the guardian angels of the medications or doubling up of medications or whatever. So, yes, there's a lot more room for improvement in the system ...also the doctors have to stand up and, somehow, get some more time.*

*I like how they've moved to the case manager format now. I know that not everyone agrees, but I think that really helps... The case manager is supposed to take a look at everything: the patient and all their medicine and all their doctors.*

In addition to primary care, specialty care also appears to be an issue in the county. On a positive note, local hospitals do have their particular specialties, though some specialties can be difficult to access, and insurance can exacerbate the issue.

*Once you get in to see a primary care physician and you need extended care, the specialty care is a*

*growing-worse situation because there are so many specialists that just do not take you unless you have insurance. They're not on the Medicaid rolls.*

*You need the resources to take care of people. Again, you talk to primary care docs, and they're frustrated because a lot of times they can't get their patients in to see an orthopedic surgeon or neurologist. In psychiatry, if you have a mental health issue, forget it, for children and adults.*

*Each hospital here specializes ... I think that it does affect the quality of care. If you're having a heart problem and you can get in that ambulance, you want them to take you to HealthPark because that is their specialty. You have a car accident or a trauma, you want to be at Lee – that is where they specialize in that – so I do think that that's an excellent way to handle things.*

### **Transportation**

**Transportation** is an issue that was mostly discussed in terms of healthy lifestyle, but it also impacts residents trying to get to appointments. Group participants mentioned that there are volunteer programs that drive individuals to appointments, but these services might be limited to certain types of individuals only.

*Every single community meeting I go to, transportation is one of the key topics that come up. And related to healthcare, if you can't get to your appointments. And even if you do use public transportation, the reliability of it and the timing of it is not optimal ... Just things to think about when people are making appointments. They aren't necessarily able to make them for when they're going to be able to get there [due to public transportation schedules] ... I know the [city and county] are [looking at that], and that's one of those big issues in our community.*

*Really, just the mass transit systems here... The busses are great, but you'll still have areas where they're not served, or they shut down. Or it's not as populous because it's so rural. Because we are very much still a rural community.*

*Then it's the issue of transportation. All of these people have issues of lack of transportation to reach [services].*

*[When no one shows up,] I may be missing the fact that they don't have their own car. So we have to start maybe doing an assessment of the clients we see, that it's convenient for coming. Because [the program] is free.*

*There are volunteer programs where people will drive. American Countryside, I think, has a program that you can volunteer and sign up to take people to appointments and bring them back. I'm not sure how well that functions.*

*There's certain [transportation] programs for certain individuals. But if you don't fall in specific categories, what do you do?*

### **Resource Knowledge**

Another issue related to accessing healthcare services is **knowledge about available resources**. A lot of resources that are available to county residents are not known, and it also might be difficult to get the word out about them.

*It comes back to the public, too. Even though we have these resources, A) we are not aware of them, and B) when we are aware of them, a lot of times the public doesn't want to use them. It's not very user-friendly... I don't see us spending money in that. I don't see ads on TV. I don't see, "...You can get your vaccines at the health clinic." ... There's not many public service announcements [or that] kind of thing.*

*In Lee County... case management helps people use the system appropriately... There's a lot of programs out there, but a lot of people just don't know about it.*

*I think that's also getting the word out that there are not-for-profits, there are agencies out there that are providing all of these things. But it's just a matter of, like, 2-1-1 resources. United Way does have the 2-1-1... They provide you with the referrals to the services that you need or that may even assist you beyond your basic need is... It's just a matter of getting the materials out there, getting the information, but it is there.*

*You have the resources in many communities to do a lot, but we don't leverage them very well. And it starts with education.*