2022

COMMUNITY HEALTH NEEDS ASSESSMENT

Saint Francis Hospital Muskogee Service Area

Sponsored by
Saint Francis Hospital Muskogee

April 2022
Prepared by PRC

SaintFrancis Health System

INTRODUCTION

PROJECT OVERVIEW

This Community Health Needs Assessment is a systematic, data-driven approach to determining the health status, behaviors, and needs of residents in the service area of Saint Francis Hospital Muskogee. 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 assessment was conducted on behalf of Saint Francis Hospital Muskogee by PRC, a nationally recognized health care consulting firm with extensive experience conducting Community Health Needs Assessments in hundreds of communities across the United States since 1994.

Methodology

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

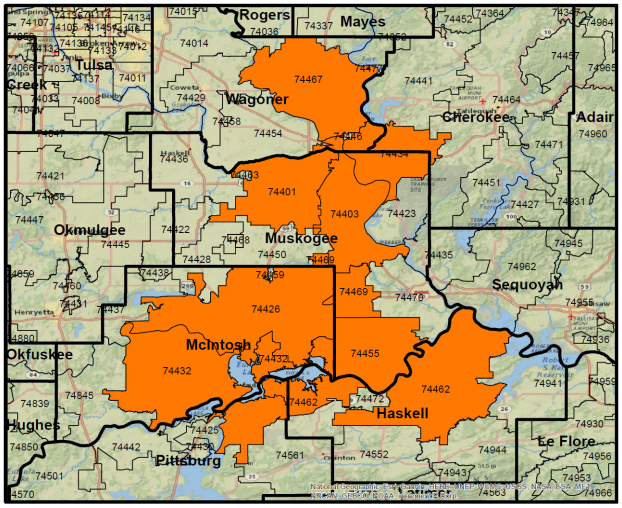
PRC Community Health Survey

Survey Instrument

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

Community Defined for This Assessment

The study area for the survey effort (referred to as the "Saint Francis Hospital Muskogee Service Area" or "SFHM" in this report) is determined based on the ZIP Codes of residence of 75% of the hospital's recent patients. This community definition is illustrated in the following map.



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 targeted surveys conducted by PRC via telephone (landline and cell phone) as well as a community outreach component promoted by Saint Francis Health System through social media posting and other communications. These population based surveys were conducted from December 17, 2020 to March 13,2021.

- **RANDOM-SAMPLE SURVEYS (PRC)** ▶ For the targeted administration, PRC administered 150 random-sample interviews by phone.
- **COMMUNITY OUTREACH SURVEYS (SPONSORING ORGANIZATIONS)** ▶ PRC also created a link to an online version of the survey, and Saint Francis Health System promoted this link throughout the various communities in order to drive additional participation and bolster overall samples, yielding an additional 17 surveys to the overall sample.

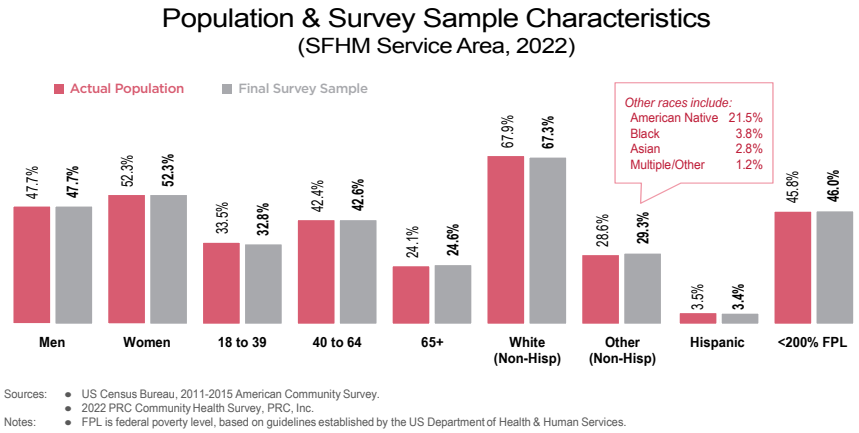
In all, 167 surveys were completed through these mechanisms. Once the interviews were completed, these were weighted in proportion to the actual population distribution so as to appropriately represent the Saint Francis Hospital Muskogee Service Area as a whole. All administration of the surveys, data collection, and data analysis was conducted by PRC.

For statistical purposes, the maximum rate of error associated with a sample size of 167 respondents is ±6.9% at the 95 percent confidence level.

Sample Characteristics

To accurately represent the population studied, PRC strives to minimize bias through application of a proven telephone methodology and random-selection techniques. While this random sampling of the population produces a highly representative sample, it is a common and preferred practice to "weight" the raw data to improve this representativeness even further. This is accomplished by adjusting the results of a random sample to match the geographic distribution and demographic characteristics of the population surveyed (poststratification), so as to eliminate any naturally occurring bias.

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



Sources:
- US Census Bureau, 2011-2015 American Community Survey.
- 2022 PRC Community Health Survey, PRC, Inc.

Notes:
- FPL is federal poverty level, based on guidelines established by the US Department of Health & Human Services.

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.

INCOME & RACE/ETHNICITY

INCOME ► 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 2021 guidelines place the poverty threshold for a family of four at $26,500 annual household income or lower). In sample segmentation: "low income" refers to community members living in a household with defined poverty status or living just above the poverty level, earning up to twice (<200% of) the poverty threshold; "mid/high income" refers to those households living on incomes which are twice or more (≥200% of) the federal poverty level.

RACE & ETHNICITY ► While the survey data are representative of the racial and ethnic makeup of the population, the samples for Hispanic and non-White race groups were not of sufficient size for independent analysis.

Online Key Informant Survey

To solicit input from key informants, those individuals who have a broad interest in the health of the community, an Online Key Informant Survey also was implemented as part of this process. A list of recommended participants was provided by Saint Francis Health System; 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. The Online Key Informant Survey too place between March 9, 2021 and March 30, 2021.

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, 24 community stakeholders took part in the Online Key Informant Survey, as outlined below:

ONLINE KEY INFORMANT SURVEY PARTICIPATION

KEY INFORMANT TYPE	NUMBER PARTICIPATING
Physicians	5
Public Health Representatives	6
Other Health Providers	2
Other Community Leaders	11

Final participation included representatives of the organizations outlined below.

- City of Muskogee
- Community Advisory Member–Muskogee
- Connor's State and Community Advisory Member–Muskogee
- Greater Muskogee Area Chamber of Commerce
- Green Country Behavior Health
- Lake Area United Way
- Muskogee County EMS
- Muskogee Health Department
- Muskogee Medical Center Authority
- Muskogee Public Schools
- Saint Francis Hospital Muskogee

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

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

NOTE ▶ These findings represent qualitative rather than quantitative data. The Online Key Informant Survey was designed to gather input regarding participants' opinions and perceptions of the health needs of the residents in the area.

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 the service area were obtained from the following sources (specific citations are included with the graphs throughout this report):

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

Note that secondary data reflect county-wide (Muskogee County) data.

Benchmark Data

Oklahoma 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 2020 PRC National Health Survey; the methodological approach for the national study is similar to that employed in this assessment, and these data may be generalized to the US population with a high degree of confidence. National-level vital statistics are also provided for comparison of secondary data indicators.

Healthy People 2030

Healthy People provides 10-year, measurable public health objectives — and tools to help track progress toward achieving them. Healthy People identifies public health priorities to help individuals, organizations, and communities across the United States improve health and well-being. Healthy People 2030, the initiative's fifth iteration, builds on knowledge gained over the first four decades.

Healthy People 2030's overarching goals are to:

- Attain healthy, thriving lives and well-being free of preventable disease, disability, injury, and premature death.
- Eliminate health disparities, achieve health equity, and attain health literacy to improve the health and well-being of all.
- Create social, physical, and economic environments that promote attaining the full potential for health and well-being for all.
- Promote healthy development, healthy behaviors, and well-being across all life stages.
- Engage leadership, key constituents, and the public across multiple sectors to take action and design policies that improve the health and well-being of all.

The Healthy People 2030 framework was based on recommendations made by the Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2030. After getting feedback from individuals and organizations and input from subject matter experts, the U.S. Department of Health and Human Services (HHS) approved the framework which helped guide the selection of Healthy People 2030 objectives.

Information Gaps

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

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

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

Public Comment

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

IRS Form 990, Schedule H Compliance

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

IRS FORM 990, SCHEDULE H (2019)	See Report Page
Part V Section B Line 3a A definition of the community served by the hospital facility	4
Part V Section B Line 3b Demographics of the community	27
Part V Section B Line 3c Existing health care facilities and resources within the community that are available to respond to the health needs of the community	103
Part V Section B Line 3d How data was obtained	4
Part V Section B Line 3e The significant health needs of the community	11
Part V Section B Line 3f Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups	Addressed Throughout
Part V Section B Line 3g The process for identifying and prioritizing community health needs and services to meet the community health needs	12
Part V Section B Line 3h The process for consulting with persons representing the community's interests	6
Part V Section B Line 3i The impact of any actions taken to address the significant health needs identified in the hospital facility's prior CHNA(s)	107

SUMMARY OF FINDINGS

Significant Health Needs of the Community

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

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

AREAS OF OPPORTUNITY IDENTIFIED THROUGH THIS ASSESSMENT	
ACCESS TO HEALTH CARE SERVICES	• Barriers to Access • Appointment Availability • Finding a Physician • Emergency Room Utilization • Ratings of Local Health Care
CANCER	• Leading Cause of Death • Cancer Deaths • Including Lung Cancer and Colorectal Cancer Deaths • Lung Cancer Incidence
DIABETES	• Diabetes Deaths
HEART DISEASE & STROKE	• Leading Cause of Death • Heart Disease Deaths • Heart Disease Prevalence • Stroke Deaths • High Blood Pressure Prevalence • High Blood Cholesterol Prevalence • Overall Cardiovascular Risk
INFANT HEALTH & FAMILY PLANNING	• Infant Deaths • Teen Births
INJURY & VIOLENCE	• Unintentional Injury Deaths • Including Motor Vehicle Crashes • Firearm-Related Deaths • Homicide Deaths • Violent Crime Rate

—continued on the following page—

AREAS OF OPPORTUNITY (continued)	
MENTAL HEALTH	• "Fair/Poor" Mental Health • Diagnosed Depression • Symptoms of Chronic Depression • Suicide Deaths • Receiving Treatment for Mental Health
NUTRITION, PHYSICAL ACTIVITY & WEIGHT	• Difficulty Accessing Fresh Produce • Leisure-Time Physical Activity • Overweight & Obesity [Adults] • Key Informants: Nutrition, physical activity, and weight ranked as a top concern.
ORAL HEALTH	• Regular Dental Care [Adults]
POTENTIALLY DISABLING CONDITIONS	• Multiple Chronic Conditions • Activity Limitations • High-Impact Chronic Pain • Caregiving
RESPIRATORY DISEASE	• Lung Disease Deaths • Pneumonia/Influenza Deaths • COVID-19 Deaths
SEXUAL HEALTH	• Gonorrhea Incidence
SUBSTANCE ABUSE	• Cirrhosis/Liver Disease Deaths • Use of Prescription Opioids • Key Informants: Substance abuse ranked as a top concern.
TOBACCO USE	• Key Informants: Tobacco use ranked as a top concern.

Prioritization of Health Needs

On May 12, 2022, representatives of Saint Francis Health and Saint Francis Hospital Muskogee gathered to review the data — including feedback from community members and stakeholders (representing a cross-section of community-based agencies and organizations) — and to evaluate, discuss, and prioritize health issues for community, based on findings of this Community Health Needs Assessment (CHNA). Professional Research Consultants, Inc. (PRC) began the online meeting with a presentation of key findings from the CHNA, highlighting the significant health issues identified from the research (see Areas of Opportunity above). Following the data review, PRC answered any questions. Finally, participants were provided an overview of the prioritization exercise that followed.

In order to assign priority to the identified health needs (i.e., Areas of Opportunity), a wireless audience response system was used in which each participant was able to register his/her ratings using a small remote keypad. The participants were asked to evaluate each health issue along two criteria:

- **Scope & Severity —** The first rating was to gauge the magnitude of the problem in consideration of the following:
    - *How many people are affected?*
    - *How does the local community data compare to state or national levels, or Healthy People 2030 targets?*
    - *To what degree does each health issue lead to death or disability, impair quality of life, or impact other health issues?*

  Ratings were entered on a scale of 1 (not very prevalent at all, with only minimal health consequences) to 10 (extremely prevalent, with very serious health consequences).
- **Ability to Impact —** A second rating was designed to measure the perceived likelihood of the hospital having a positive impact on each health issue, given available resources, competencies, spheres of influence, etc. Ratings were entered on a scale of 1 (no ability to impact) to 10 (great ability to impact).

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

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

Hospital Implementation Strategy

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

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

Summary Tables: Comparisons With Benchmark Data

The following tables provide an overview of indicators in the Saint Francis Hospital Muskogee (SFHM) Service Area, including comparisons among the individual communities. These data are grouped by health topic.

Reading the Summary Tables

- In the following tables, service area results are shown in the larger, gray column.
- The columns to the right of the SFHM column provide comparisons between local data and any available state and national findings, and Healthy People 2030 objectives. Symbols indicate whether the service area compares favorably (☀️), unfavorably (🌧️), or comparably (☁️) to these external data.

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

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

SOCIAL DETERMINANTS	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
Linguistically Isolated Population (Percent)	0.5	2.1	4.3	
Population in Poverty (Percent)	21.1	15.7	13.4	8.0
Children in Poverty (Percent)	29.4	21.5	18.5	8.0
No High School Diploma (Age 25+, Percent)	14.8	12.0	12.0	
% Unable to Pay Cash for a $400 Emergency Expense	34.7		24.6	
% Worry/Stress Over Rent/Mortgage in Past Year	30.9		32.2	
% Unhealthy/Unsafe Housing Conditions	18.1		12.2	
% Food Insecure	36.1		34.1	

OVERALL HEALTH	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
% “Fair/Poor” Overall Health	20.7	21.9	12.6	

ACCESS TO HEALTH CARE	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
% [Age 18-64] Lack Health Insurance	11.8	19.1	8.7	7.9
% Difficulty Accessing Health Care in Past Year (Composite)	45.6		35.0	
% Cost Prevented Physician Visit in Past Year	18.0	16.2	12.9	

Better Similar Worse

ACCESS TO HEALTH CARE (continued)	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
% Cost Prevented Getting Prescription in Past Year	14.6		12.8	
% Difficulty Getting Appointment in Past Year	27.0		14.5	
% Inconvenient Hrs Prevented Dr Visit in Past Year	15.1		12.5	
% Difficulty Finding Physician in Past Year	20.2		9.4	
% Transportation Hindered Dr Visit in Past Year	10.5		8.9	
% Language/Culture Prevented Care in Past Year	0.0		2.8	
% Skipped Prescription Doses to Save Costs	17.6		12.7	
Primary Care Doctors per 100,000	101.0	85.6	102.0	
% Have a Specific Source of Ongoing Care	71.0		74.2	84.0
% Have Had Routine Checkup in Past Year	64.6	74.5	70.5	
% Two or More ER Visits in Past Year	18.0		10.1	
% Eye Exam in Past 2 Years	60.3		61.0	61.1
% Rate Local Health Care “Fair/Poor”	14.5		8.0	

Better Similar Worse

CANCER	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
Cancer (Age-Adjusted Death Rate)	195.1	174.1	146.5	122.7
Lung Cancer (Age-Adjusted Death Rate)	58.5	45.5	33.4	25.1
Prostate Cancer (Age-Adjusted Death Rate)	20.9	19.5	18.5	16.9
Female Breast Cancer (Age-Adjusted Death Rate)	20.1	22.7	19.4	15.3
Colorectal Cancer (Age-Adjusted Death Rate)	20.1	16.3	13.1	8.9
Cancer Incidence Rate (All Sites)	473.5	450.2	448.6	
Female Breast Cancer Incidence Rate	103.8	124.2	126.8	
Prostate Cancer Incidence Rate	91.9	95.7	106.2	
Lung Cancer Incidence Rate	84.7	66.7	57.3	
Colorectal Cancer Incidence Rate	41.4	41.2	38.0	
% Cancer	11.2	12.2	10.0	
% [Women 50-74] Mammogram in Past 2 Years	68.8	74.3	76.1	77.1
% [Women 21-65] Cervical Cancer Screening	70.3	76.1	73.8	84.3
% [Age 50-75] Colorectal Cancer Screening	69.1	62.6	77.4	74.4

Better Similar Worse

DIABETES	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
Diabetes (Age-Adjusted Death Rate)	34.9	29.9	22.6	
% Diabetes/High Blood Sugar	19.9	12.2	13.8	
% Borderline/Pre-Diabetes	14.1		9.7	
% [Non-Diabetics] Blood Sugar Tested in Past 3 Years	45.9		43.3	

HEART DISEASE & STROKE	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
Diseases of the Heart (Age-Adjusted Death Rate)	342.8	234.7	164.4	127.4
% Heart Disease (Heart Attack, Angina, Coronary Disease)	11.7	8.3	6.1	
Stroke (Age-Adjusted Death Rate)	54.6	39.8	37.6	33.4
% Stroke	3.1	4.4	4.3	
% Told Have High Blood Pressure	56.5	37.8	36.9	27.7
% Told Have High Cholesterol	41.9		32.7	
% 1+ Cardiovascular Risk Factor	96.1		84.6	

Better Similar Worse

INFANT HEALTH & FAMILY PLANNING	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
Low Birthweight Births (Percent)	8.0	8.0	8.2	
Infant Death Rate	7.8	6.6	5.5	5.0
Births to Adolescents Age 15 to 19 (Rate per 1,000)	43.1	33.3	20.9	

INJURY & VIOLENCE	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
Unintentional Injury (Age-Adjusted Death Rate)	67.7	60.8	51.6	43.2
Motor Vehicle Crashes (Age-Adjusted Death Rate)	17.0	16.7	11.4	10.1
[65+] Falls (Age-Adjusted Death Rate)	72.2	106.4	67.1	63.4
Firearm-Related Deaths (Age-Adjusted Death Rate)	16.1	18.7	12.5	10.7
Homicide (Age-Adjusted Death Rate)	12.3	8.3	6.1	5.5
Violent Crime Rate	744.3	443.5	416.0	
% Victim of Violent Crime in Past 5 Years	2.8		6.2	
% Victim of Intimate Partner Violence	19.7		13.7	

Better Similar Worse

KIDNEY DISEASE	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
Kidney Disease (Age-Adjusted Death Rate)	10.3	10.7	12.8	
% Kidney Disease	4.2	4.0	5.0	

MENTAL HEALTH	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
% "Fair/Poor" Mental Health	24.3		13.4	
% Diagnosed Depression	37.3	23.0	20.6	
% Symptoms of Chronic Depression (2+ Years)	46.8		30.3	
% Typical Day Is "Extremely/Very" Stressful	15.9		16.1	
Suicide (Age-Adjusted Death Rate)	19.0	20.8	13.9	12.8
Mental Health Providers per 100,000	327.1	219.0	123.1	
% Taking Rx/Receiving Mental Health Trtmt	30.5		16.8	
% Unable to Get Mental Health Svcs in Past Yr	8.7		7.8	
% Spent <7 Hours on Personal Time Last Week	35.4			

Better Similar Worse

NUTRITION, PHYSICAL ACTIVITY & WEIGHT	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
Population With Low Food Access (Percent)	14.6	25.2	22.2	
% "Very/Somewhat" Difficult to Buy Fresh Produce	30.6		21.1	
% 5+ Servings of Fruits/Vegetables per Day	26.0		32.7	
% No Leisure-Time Physical Activity	41.9	34.0	31.3	21.2
% Meeting Physical Activity Guidelines	15.4	15.6	21.4	28.4
% Overweight (BMI 25+)	76.6	71.4	61.0	
% Obese (BMI 30+)	48.8	36.8	31.3	36.0

ORAL HEALTH	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
% Have Dental Insurance	67.7		68.7	59.8
% [Age 18+] Dental Visit in Past Year	47.2	60.4	62.0	45.0

Better Similar Worse

POTENTIALLY DISABLING CONDITIONS	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
% 3+ Chronic Conditions	60.9		32.5	
% Activity Limitations	37.9		24.0	
% With High-Impact Chronic Pain	28.2		14.1	7.0
Alzheimer's Disease (Age-Adjusted Death Rate)	33.4	38.0	30.9	
% Caregiver to a Friend/Family Member	31.8		22.6	

RESPIRATORY DISEASE	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
CLRD (Age-Adjusted Death Rate)	78.5	62.0	38.1	
Pneumonia/Influenza (Age-Adjusted Death Rate)	22.8	15.1	13.4	
% [Age 65+] Flu Vaccine in Past Year	84.8	69.5	71.0	
% [Adult] Asthma	11.9	10.2	12.9	
% COPD (Lung Disease)	9.0	8.7	6.4	
COVID-19 (Age-Adjusted Death Rate)	125.4	100.3	85.0	

Better Similar Worse

SEPTICEMIA	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
Septicemia (Age-Adjusted Death Rate)	14.8	9.2	9.8	

SEXUAL HEALTH	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
HIV Prevalence Rate	191.6	192.0	372.8	
Gonorrhea Incidence Rate	221.5	228.9	179.1	

SUBSTANCE ABUSE	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	19.2	16.2	11.9	10.9
% Excessive Drinker	19.6	13.6	27.2	
Unintentional Drug-Related Deaths (Age-Adjusted Death Rate)	21.1	15.9	21.0	
% Illicit Drug Use in Past Month	3.6		2.0	12.0
% Used a Prescription Opioid in Past Year	23.2		12.9	
% Ever Sought Help for Alcohol or Drug Problem	6.8		5.4	
% Personally Impacted by Substance Abuse	39.0		35.8	

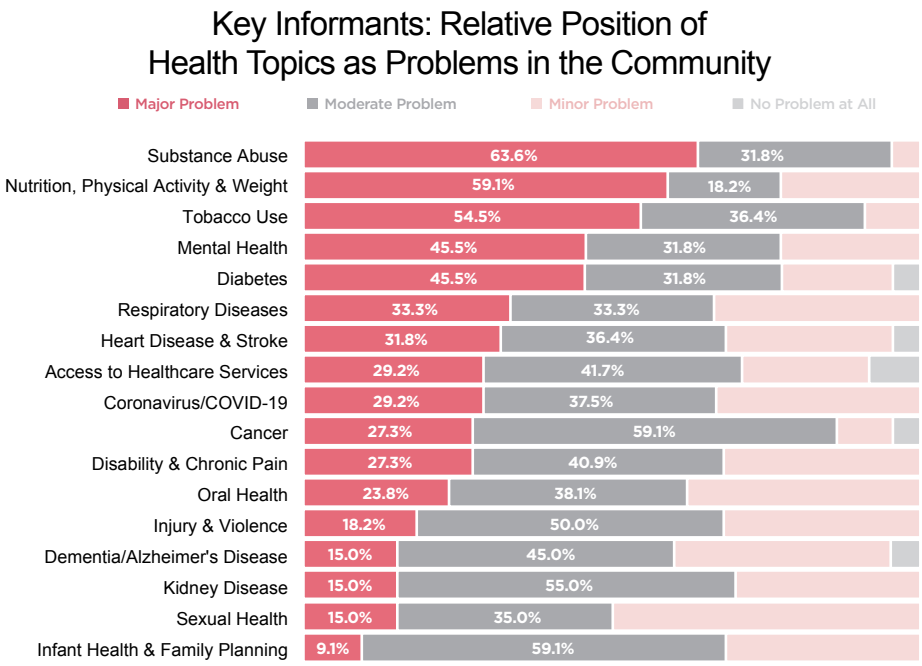
Better Similar Worse

TOBACCO USE	SFHM	SFHM vs. BENCHMARKS		
		vs. OK	vs. US	vs. HP2030
% Current Smoker	22.1	18.9	17.4	5.0
% Someone Smokes at Home	17.5		14.6	
% Currently Use Vaping Products	10.0	7.1	8.9	

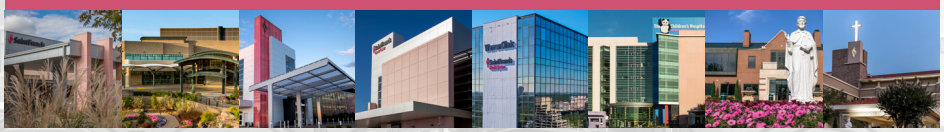
Better Similar Worse

SUMMARY OF KEY INFORMANT PERCEPTIONS

In the Online Key Informant Survey, community stakeholders were asked to rate the degree to which each of 17 health issues is a problem in their own community, using a scale of "major problem," "moderate problem," "minor problem," or "no problem at all." The following chart summarizes their responses; these findings also are outlined throughout this report, along with the qualitative input describing reasons for their concerns. (Note that these ratings alone do not establish priorities for this assessment; rather, they are one of several data inputs considered for the prioritization process described earlier.)



DATA CHARTS & KEY INFORMANT INPUT



The following sections present data from multiple sources, including the population- based PRC Community Health Survey, public health and other existing data sets (secondary data), as well as qualitative input from the Online Key Informant Survey.

Data indicators from these sources are intermingled and organized by health topic. To better understand the source data for specific indicators, please refer to the footnotes accompanying each chart.

COMMUNITY CHARACTERISTICS

Population Characteristics

Land Area, Population Size & Density

Data from the US Census Bureau reveal the following statistics for our community relative to size, population, and density.

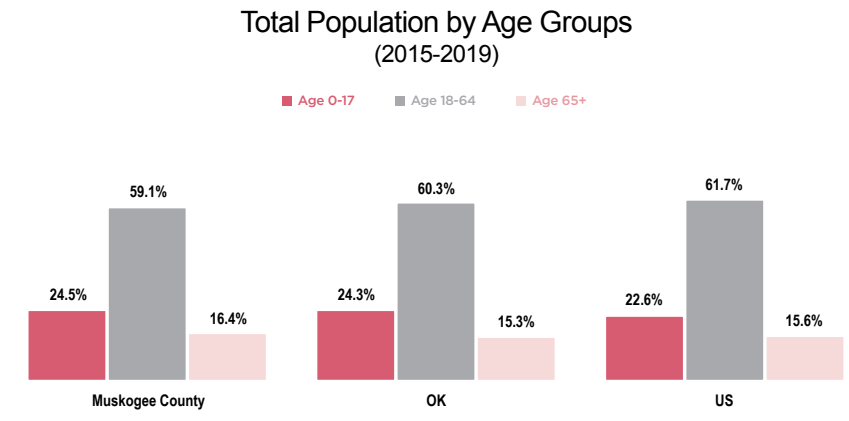
Total Population
(Estimated Population, 2015-2019)

	TOTAL POPULATION	TOTAL LAND AREA (SQUARE MILES)	POPULATION DENSITY (PER SQUARE MILE)
Muskogee County	68,736	810.38	85
Oklahoma	3,932,870	68,596.35	57
United States	324,697,795	3,532,068.58	92

Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved March 2022 via SparkMap (sparkmap.org).

Age

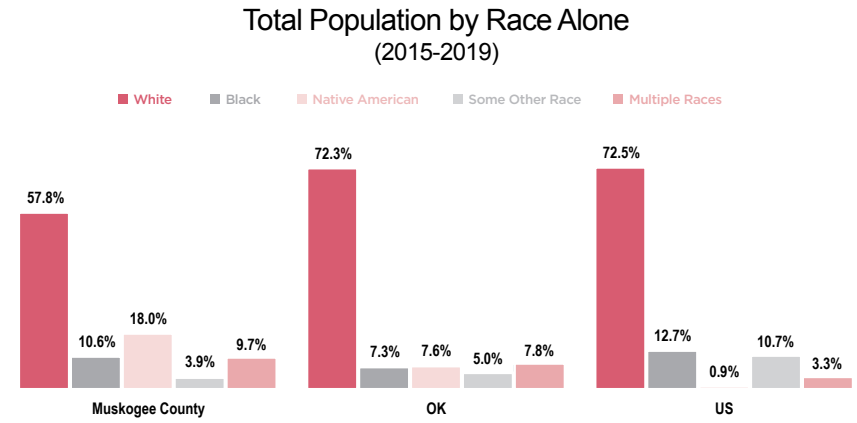
It is important to understand the age distribution of the population, as different age groups have unique health needs that should be considered separately from others along the age spectrum.



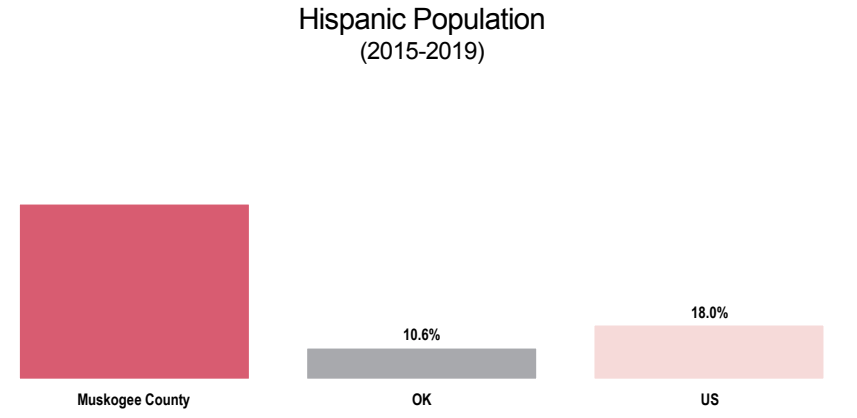
Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved March 2022 via SparkMap (sparkmap.org).

Race & Ethnicity

The following charts illustrate the racial and ethnic makeup of our community. Note that ethnicity (Hispanic or Latino) can be of any race.



Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved March 2022 via SparkMap (sparkmap.org).



Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved March 2022 via SparkMap (sparkmap.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.

Social Determinants of Health

ABOUT SOCIAL DETERMINANTS OF HEALTH

Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.

Social determinants of health (SDOH) have a major impact on people's health, well-being, and quality of life. Examples of SDOH include:

- Safe housing, transportation, and neighborhoods
- Racism, discrimination, and violence
- Education, job opportunities, and income
- Access to nutritious foods and physical activity opportunities
- Polluted air and water
- Language and literacy skills

SDOH also contribute to wide health disparities and inequities. For example, people who don't have access to grocery stores with healthy foods are less likely to have good nutrition. That raises their risk of health conditions like heart disease, diabetes, and obesity — and even lowers life expectancy relative to people who do have access to healthy foods.

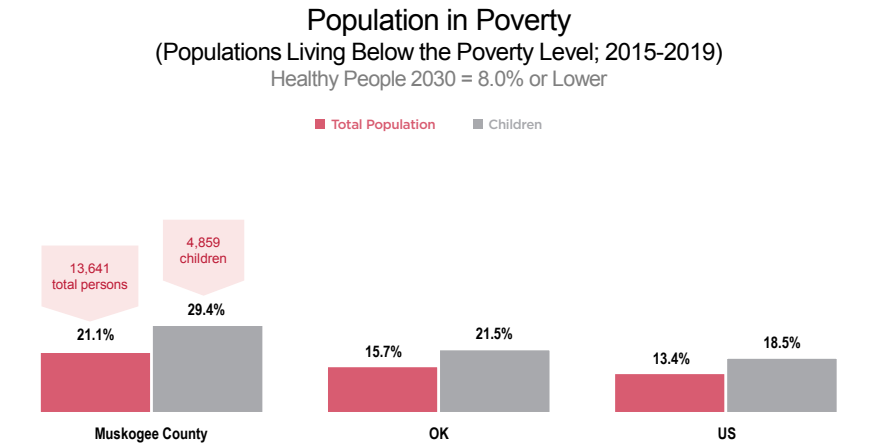
Just promoting healthy choices won't eliminate these and other health disparities. Instead, public health organizations and their partners in sectors like education, transportation, and housing need to take action to improve the conditions in people's environments.

- *Healthy People 2030 (https://health.gov/healthypeople)*

Income & Poverty

Poverty

The following chart outlines the proportion of our population below the federal poverty threshold in comparison to state and national proportions.



Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved March 2022 via SparkMap (sparkmap.org).
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

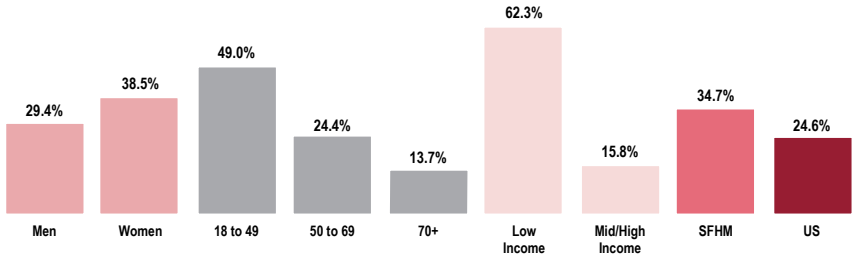
Notes:
- Poverty is considered a key driver of health status. This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

Financial Resilience

"Suppose that you have an emergency expense that costs $400. Based on your current financial situation, would you be able to pay for this expense either with cash, by taking money from your checking or savings account, or by putting it on a credit card that you could pay in full at the next statement?"

The following charts further detail percentage responses among survey respondents in the Saint Francis Hospital Muskogee Service Area in comparison to benchmark data, as well as by basic demographic characteristics (namely by gender, age groupings, and income [based on poverty status].

Do Not Have Cash on
Hand to Cover a $400 Emergency Expense
(SFHM Service Area, 2022)



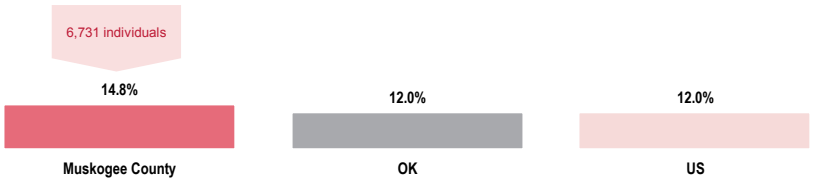
Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 63]

Notes:
- Asked of all respondents.
- Includes respondents who say they would not be able to pay for a $400 emergency expense either with cash, by taking money from their checking or savings account, or by putting it on a credit card that they could pay in full at the next statement.

Education

Education levels are reflected in the proportion of our population without a high school diploma.

Population With No High School Diploma
(Population Age 25+ Without a High School Diploma or Equivalent, 2015-2019)



Sources:
- US Census Bureau American Community Survey 5-year estimates.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved March 2022 via SparkMap (sparkmap.org).

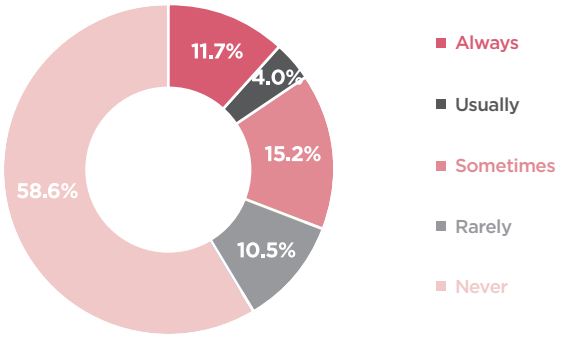
Notes:
- This indicator is relevant because educational attainment is linked to positive health outcomes.

Housing

Housing Insecurity

"In the past 12 months, how often were you worried or stressed about having enough money to pay your rent or mortgage? Would you say you were worried or stressed: always, usually, sometimes, rarely, or never?"

Frequency of Worry or Stress
About Paying Rent or Mortgage in the Past Year
(SFHM Service Area, 2022)

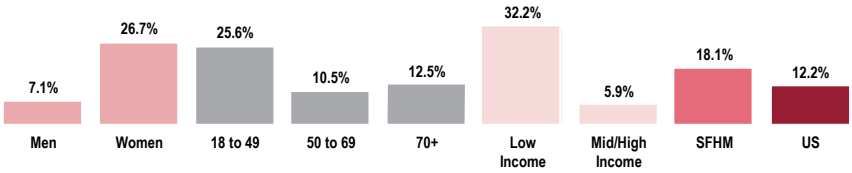


Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 66]
Notes: • Asked of all respondents.

Unhealthy or Unsafe Housing

"Thinking about your current home, over the past 12 months have you experienced ongoing problems with water leaks, rodents, insects, mold, or other housing conditions that might make living there unhealthy or unsafe?"

Unhealthy or Unsafe Housing Conditions in the Past Year
(SFHM Service Area, 2022)



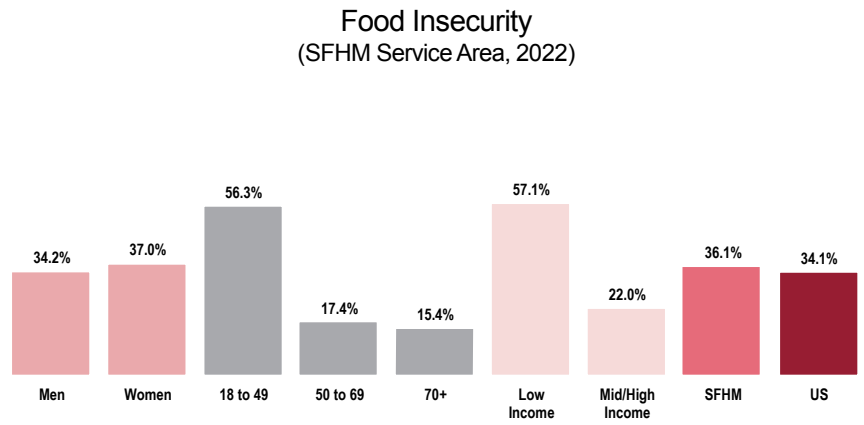
Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 65]
Notes: • Asked of all respondents.
• Includes respondents who say they experienced ongoing problems in their current home with water leaks, rodents, insects, mold, or other housing conditions that might make living there unhealthy or unsafe.

Food Insecurity

"Now I am going to read two statements that people have made about their food situation. Please tell me whether each statement was 'often true,' 'sometimes true,' or 'never true' for you in the past 12 months.

- The first statement is: 'I worried about whether our food would run out before we got money to buy more.'
- The next statement is: 'The food that we bought just did not last, and we did not have money to get more.'"

Agreement with either or both of these statements ("often true" or "sometimes true") defines food insecurity for respondents.

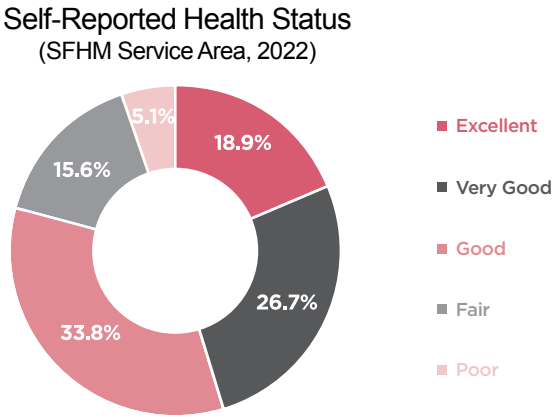


Sources: ● 2022 PRC Community Health Survey, PRC, Inc. [Item 112]
Notes: ● Asked of all respondents.
● Includes adults who A) ran out of food at least once in the past year and/or B) worried about running out of food in the past year.

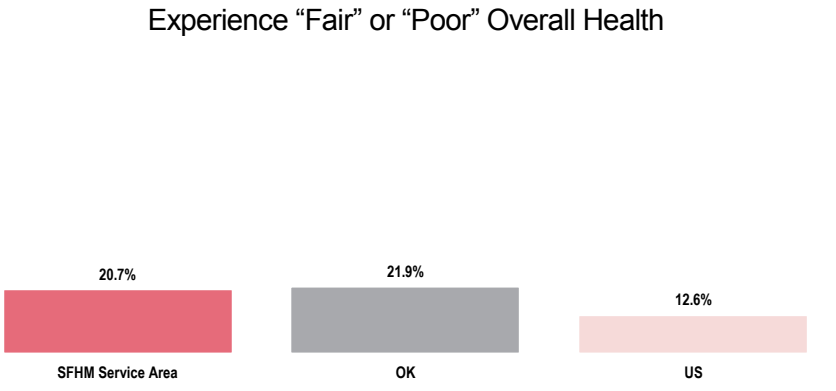
HEALTH STATUS

Overall Health

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

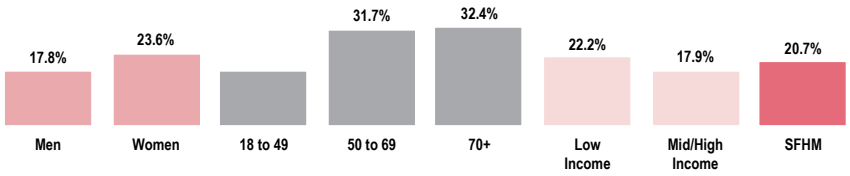


Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 5]
Notes: • Asked of all respondents.



Sources: • 2022 PRC Community Health Survey, PRC, 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): 2019 Oklahoma data.
• 2020 PRC National Health Survey, PRC, Inc.
Notes: • Asked of all respondents.

Experience “Fair” or “Poor” Overall Health
(SFHM Service Area, 2022)



Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 5]
Notes: • Asked of all respondents.

Mental Health

Mental Health Status

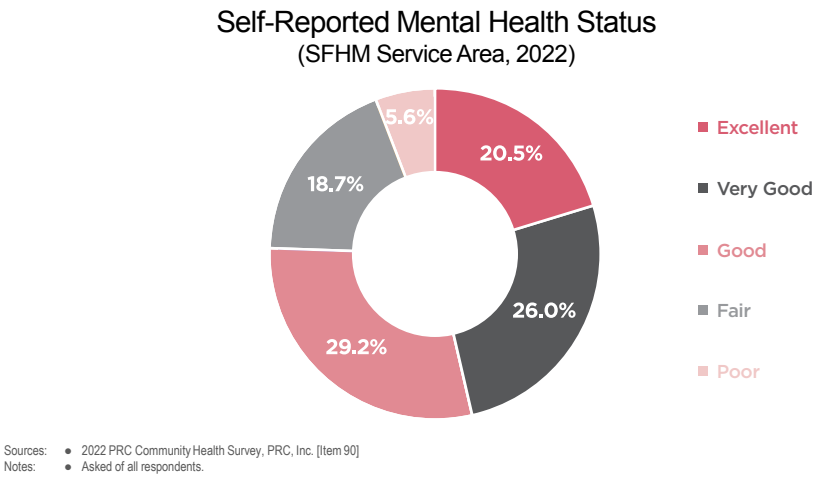
"Now thinking about your mental health, which includes stress, depression and problems with emotions, would you say that, in general, your mental health is: excellent, very good, good, fair, or poor?"

ABOUT SOCIAL DETERMINANTS OF HEALTH

About half of all people in the United States will be diagnosed with a mental disorder at some point in their lifetime.... Mental disorders affect people of all age and racial/ethnic groups, but some populations are disproportionately affected. And estimates suggest that only half of all people with mental disorders get the treatment they need.

In addition, mental health and physical health are closely connected. Mental disorders like depression and anxiety can affect people's ability to take part in healthy behaviors. Similarly, physical health problems can make it harder for people to get treatment for mental disorders. Increasing screening for mental disorders can help people get the treatment they need.

– Healthy People 2030 (https://health.gov/healthypeople)



Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 90]
Notes: • Asked of all respondents.

Experience “Fair” or “Poor” Mental Health

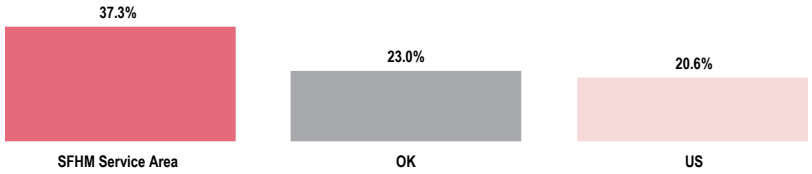
Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 90]
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.

Depression

DIAGNOSED DEPRESSION ▶ ***“Has a doctor or other healthcare provider ever told you that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?”***

Have Been Diagnosed With a Depressive Disorder

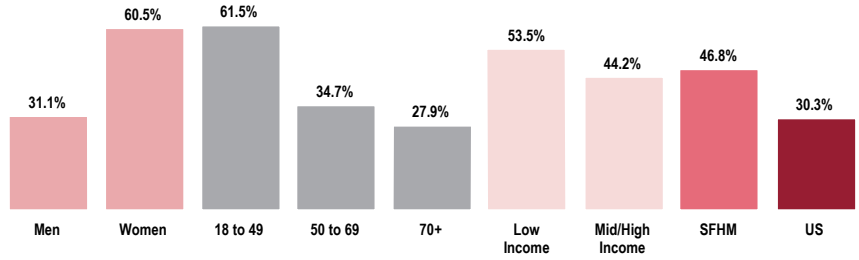


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 93]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.

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

SYMPTOMS OF CHRONIC DEPRESSION ▶ ***"Have you had two years or more in your life when you felt depressed or sad most days, even if you felt okay sometimes?"***

Have Experienced Symptoms of Chronic Depression
(SFHM Service Area, 2022)



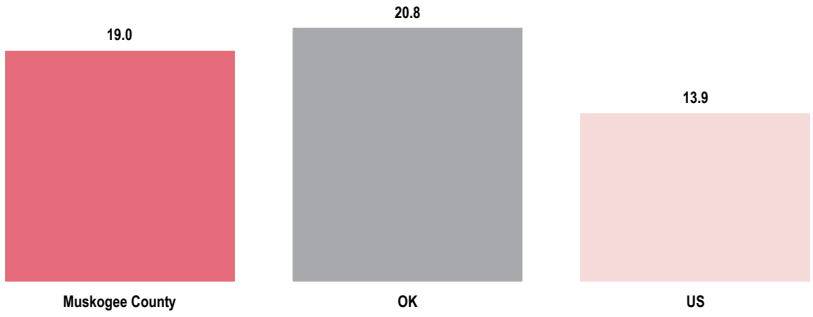
Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 91]
- 2020 PRC National Health Survey, PRC, Inc.

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

Suicide

The following chart outlines the most current age-adjusted mortality rates attributed to suicide in our population (refer to "Leading Causes of Death" for an explanation of the use of age-adjusting for these rates).

Suicide: Age-Adjusted Mortality
(2018-2020 Annual Average Deaths per 100,000 Population)
Healthy People 2030 = 12.8 or Lower

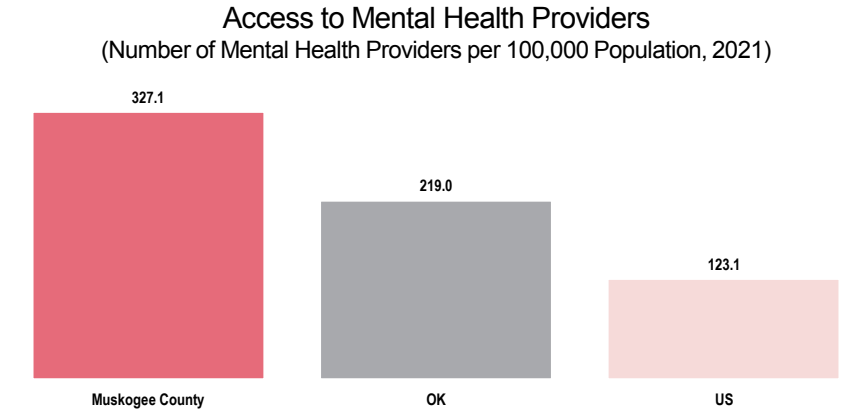


Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2022.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

Mental Health Treatment

The following chart outlines access to mental health providers, expressed as the number of providers (psychiatrists, psychologists, clinical social workers, and counsellors who specialize in mental health care) per 100,000 residents.

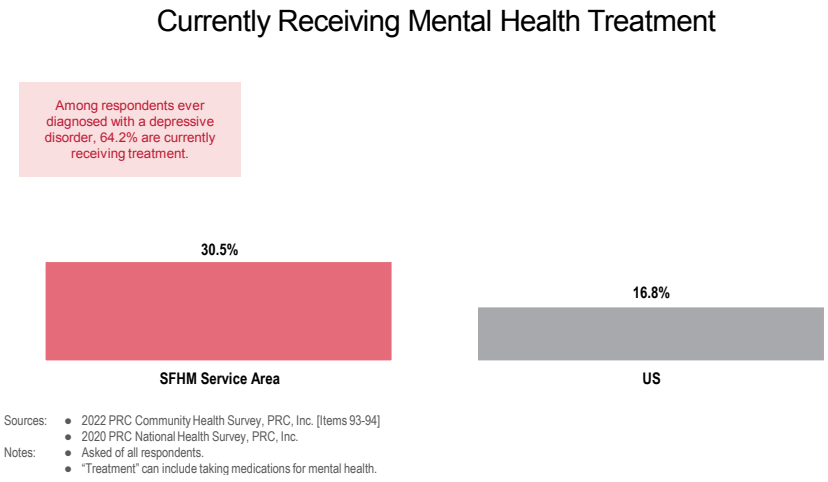
Here, "mental health providers" includes psychiatrists, psychologists, clinical social workers, and counsellors who specialize in mental health care. Note that this indicator only reflects providers practicing in Muskogee County and residents in Muskogee County; it does not account for the potential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



Sources:
- University of Wisconsin Population Health Institute, County Health Rankings.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved March 2022 via SparkMap (sparkmap.org).

Notes:
- This indicator reports the rate of the county population to the number of mental health providers including psychiatrists, psychologists, clinical social workers, and counsellors that specialize in mental health care.

"Are you now taking medication or receiving treatment from a doctor or other health professional for any type of mental health condition or emotional problem?"

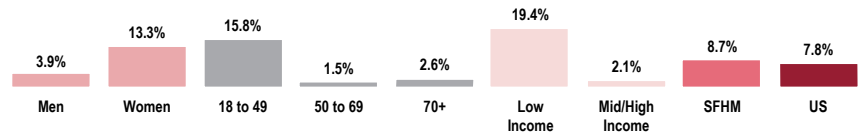


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Items 93-94]
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.
- "Treatment" can include taking medications for mental health.

"Was there a time in the past 12 months when you needed mental health services but were not able to get them?"

Unable to Get Mental Health Services
When Needed in the Past Year
(SFHM Service Area, 2022)

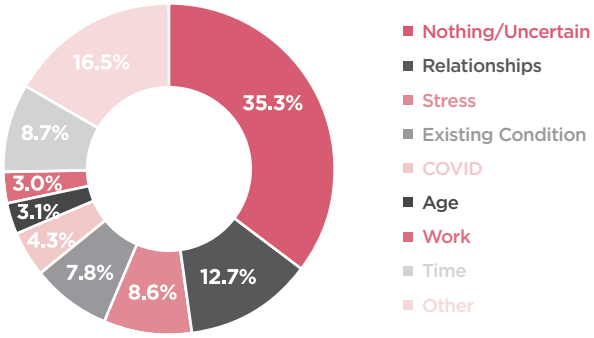


Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 95]
Notes: • Asked of all respondents.

Barriers to Maintaining Mental Health

"For you, what is the biggest barrier to maintaining your mental health?"

Biggest Barrier to Maintaining Mental Health
(SFHM Service Area, 2022)



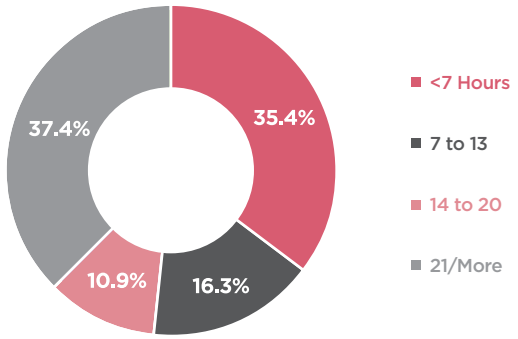
Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 304]
Notes: • Asked of all respondents.

Personal Time

There are many demands on peoples' time, such as working, doing housework, running errands, caregiving, and otherwise taking care of obligations. The following survey question was asked in the interest of gauging how much time people have for themselves.

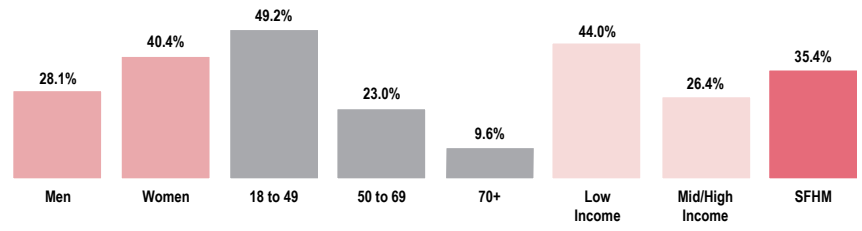
"In the past seven days, how many hours would you say that you spent doing the things you wanted to do, such as relaxing, socializing, pursuing hobbies, traveling, or otherwise taking care of yourself?"

Hours Spent in the Past Week On Personal Time
(SFHM Service Area, 2022)



Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 305]
Notes: • Asked of all respondents.

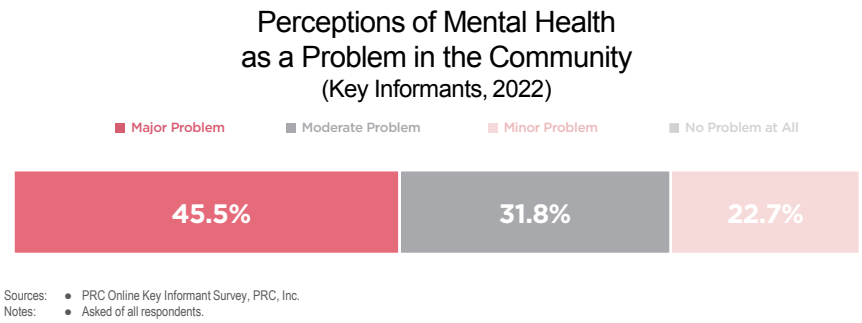
Spent <7 Hours on Personal Time Last Week
(SFHM Service Area, 2022)



Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 305]
Notes: • Asked of all respondents.

Key Informant Input: Mental Health

The following chart outlines key informants' perceptions of the severity of Mental Health as a problem in the community:



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

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

Contributing Factors

> Little effort by the community to see mental health issues as a disease which needs to be treated. Many of these patients wind up homeless or wind up "treating" their mental illness with street drugs. – Physician
>
> Green Country Mental Health is great, good to see expanded services in Muskogee. – Community Leader
>
> APS not fulfilling their responsibilities to the community. The health care system routinely becomes social services for unmet needs in the community. – Other Health Provider
>
> The homeless in our community have mental issues and live in the bushes, on the street. Also, many working-class healthcare workers and many populations suffer from mental health issues. – Public Health Representative
>
> Daily there are at least five or six homeless people that wander past my office. Most are probably schizophrenic. Some are in catatonic stupors. They range in age from teenagers to older adults. They sleep in doorways most of the time unless it's cold. Many wander all day and go to a homeless shelter at night. Based on conversations I have had with teenagers, there are a multitude of students in our school system that need help with mental health problems. I also think there are not enough psychiatrists and psychologists in Muskogee. – Community Leader

Access to Care/Services

> Access to appropriate care and follow up care, including accurate diagnoses, treatment, and medication if appropriate. – Community Leader
>
> Mental health, we have a great asset with Green Country Behavioral Health Services, but they are so busy that there is obviously a bigger need to expand or add additional services in the community. – Community Leader

Mental Health

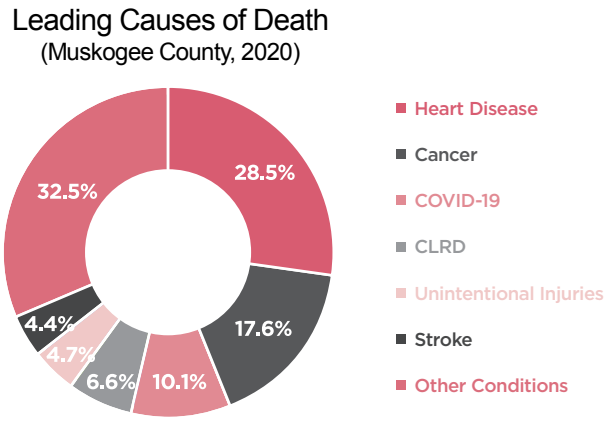
> Mental health. – Community Leader

DEATH, DISEASE & CHRONIC CONDITIONS

Leading Causes of Death

Distribution of Deaths by Cause

Heart disease and cancers are leading causes of death in the community.



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 2022.

Notes: • Lung disease is CLRD, or chronic lower respiratory disease.

Age-Adjusted Death Rates for Selected Causes

AGE-ADJUSTED DEATH RATES

In order to compare mortality in the region with other localities (in this case, Oklahoma 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 2030 objectives.

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

Age-Adjusted Death Rates for Selected Causes
(2018-2020 Deaths per 100,000 Population)

	MUSKOGEE COUNTY	OK	US	HP2030
Diseases of the Heart	342.8	234.7	164.4	127.4*
Malignant Neoplasms (Cancers)	195.1	174.1	146.5	122.7
COVID-19	125.4	100.3	85.0	
Chronic Lower Respiratory Disease (CLRD)	78.5	62.0	38.1	—
Falls (Age 65+)	72.2	106.4	67.1	63.4
Unintentional Injuries	67.7	60.8	51.6	43.2
Cerebrovascular Disease (Stroke)	54.6	39.8	37.6	33.4
Diabetes	34.9	29.9	22.6	—
Alzheimer's Disease	33.4	38.0	30.9	—
Pneumonia/Influenza	22.8	15.1	13.4	—
Unintentional Drug-Related Deaths	21.1	15.9	21.0	—
Cirrhosis/Liver Disease	19.2	16.2	11.9	10.9
Intentional Self-Harm (Suicide)	19.0	20.8	13.9	12.8
Motor Vehicle Deaths	17.0	16.7	11.4	10.1
Firearm-Related	16.1	18.7	12.5	10.7
Homicide/Legal Intervention	12.3	8.3	6.1	5.5
Kidney Disease	10.3	10.7	12.8	—

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 2022.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov.

Note:
- *The Healthy People 2030 Heart Disease target is adjusted to account for all diseases of the heart.

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

Cardiovascular Disease

ABOUT HEART DISEASE & STROKE

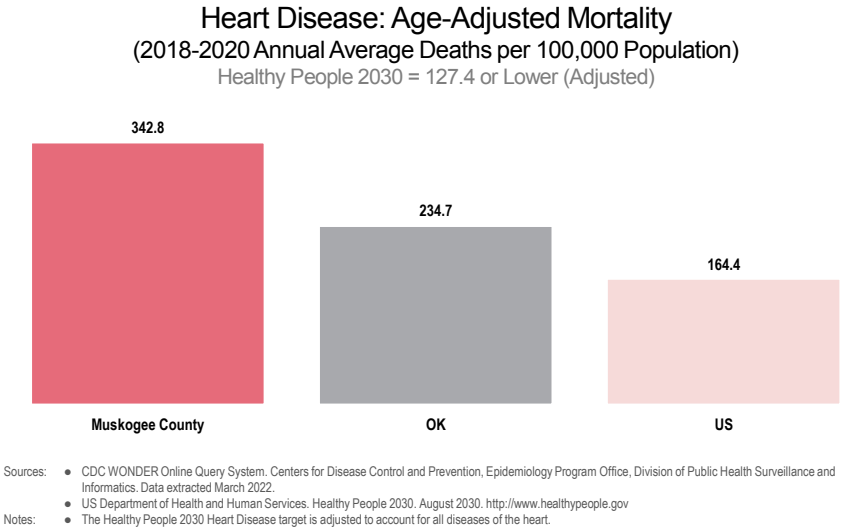
Heart disease is the leading cause of death in the United States, and stroke is the fifth leading cause. ...Heart disease and stroke can result in poor quality of life, disability, and death. Though both diseases are common, they can often be prevented by controlling risk factors like high blood pressure and high cholesterol through treatment.

In addition, making sure people who experience a cardiovascular emergency — like stroke, heart attack, or cardiac arrest — get timely recommended treatment can reduce their risk for long-term disability and death. Teaching people to recognize symptoms is key to helping more people get the treatment they need.

– Healthy People 2030 (https://health.gov/healthypeople)

Age-Adjusted Heart Disease & Stroke Deaths

The greatest share of cardiovascular deaths is attributed to heart disease. The following charts outline age-adjusted mortality rates for heart disease and for stroke in our community.



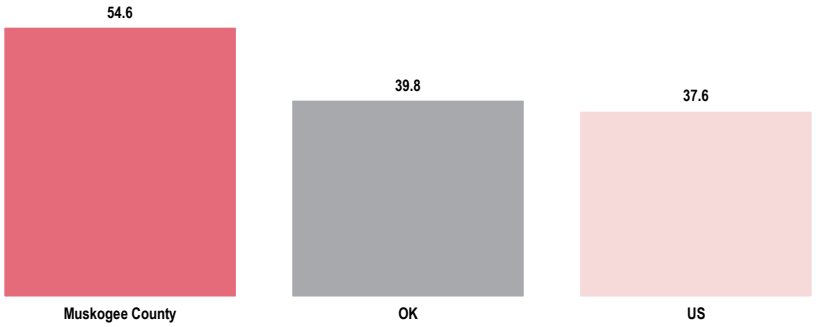
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2022.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

Notes:
- The Healthy People 2030 Heart Disease target is adjusted to account for all diseases of the heart.

Stroke: Age-Adjusted Mortality

(2018-2020 Annual Average Deaths per 100,000 Population)

Healthy People 2030 = 33.4 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 2022.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

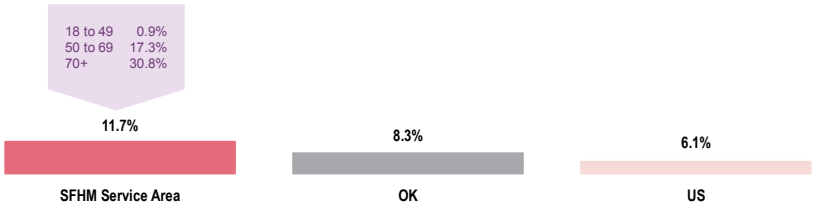
Prevalence of Heart Disease & Stroke

"Has a doctor, nurse, or other health professional ever told you that you had:

- A heart attack, also called a myocardial infarction?
- Angina or coronary heart disease?"

Heart disease prevalence here is a calculated prevalence that includes those responding affirmatively to either.

Prevalence of Heart Disease

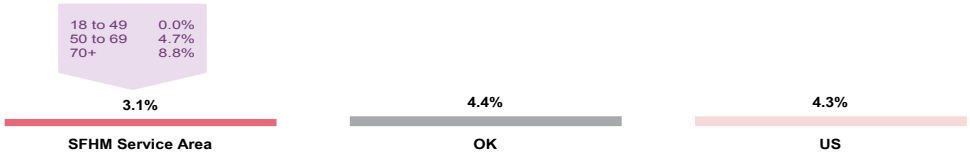


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 114]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.

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

"Has a doctor, nurse, or other health professional ever told you that you had a stroke?"

Prevalence of Stroke



Sources:
- 2022 PRC Community Health Survey, PRC, 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): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.

Cardiovascular Risk Factors

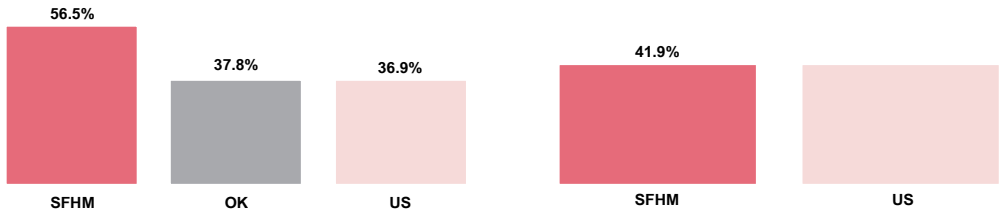
Blood Pressure & Cholesterol

"Have you ever been told by a doctor, nurse, or other health care professional that you had high blood pressure?"

"Blood cholesterol is a fatty substance found in the blood. Have you ever been told by a doctor, nurse, or other health care professional that your blood cholesterol is high?"

Prevalence of
High Blood Pressure
Healthy People 2030 = 27.7% or Lower

Prevalence of
High Blood Cholesterol



Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Items 35-36]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

Notes:
- Asked of all respondents.

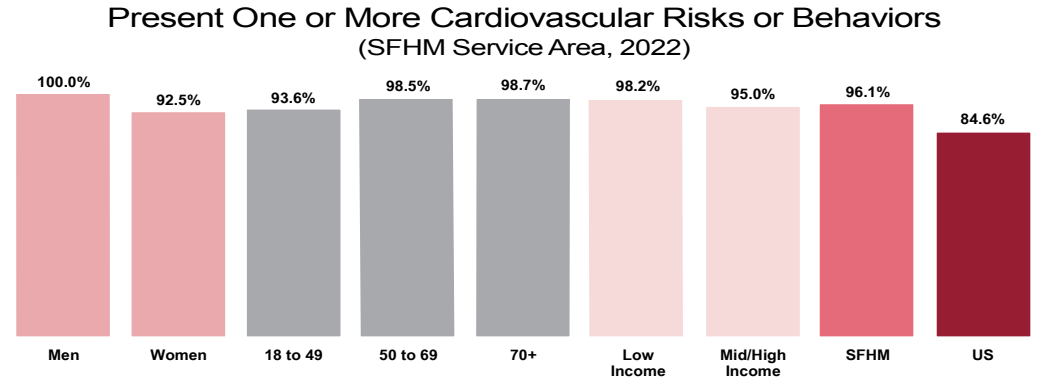
Total Cardiovascular Risk

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

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

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

The following chart reflects the percentage of adults in the Saint Francis Hospital Muskogee Service Area who report one or more of the following: being overweight; smoking cigarettes; being physically inactive; or having high blood pressure or cholesterol.



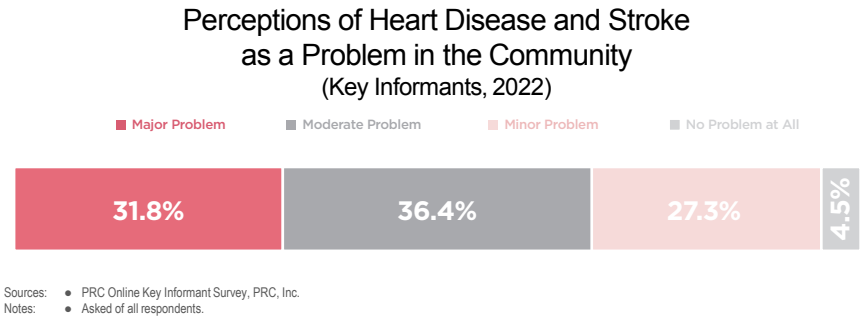
Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 115]
- 2020 PRC National Health Survey, PRC, Inc.

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

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

Key Informant Input: Heart Disease & Stroke

The following chart outlines key informants' perceptions of the severity of Heart Disease & Stroke as a problem in the community:



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

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

Contributing Factors

> Overweight population, sedentary lifestyle, diabetes. – Physician
>
> Obesity, lack of physical exercise, poor diet. – Community Leader
>
> Unhealthy lifestyle, obesity, smoking, diabetes, lack of exercise and high fat diets. – Physician

Incidence/Prevalence

> Higher proportion of patients with these disease processes in this community when compared to more metropolitan areas of the state. – Physician
>
> CDC has our stroke rates as high in Muskogee County and CDC data says our rate is 50.2%. From 2017-2019. One out of two have heart disease and stroke in our community due to improper diet and sedentary lifestyle. – Public Health Representative

Cancer

ABOUT CANCER

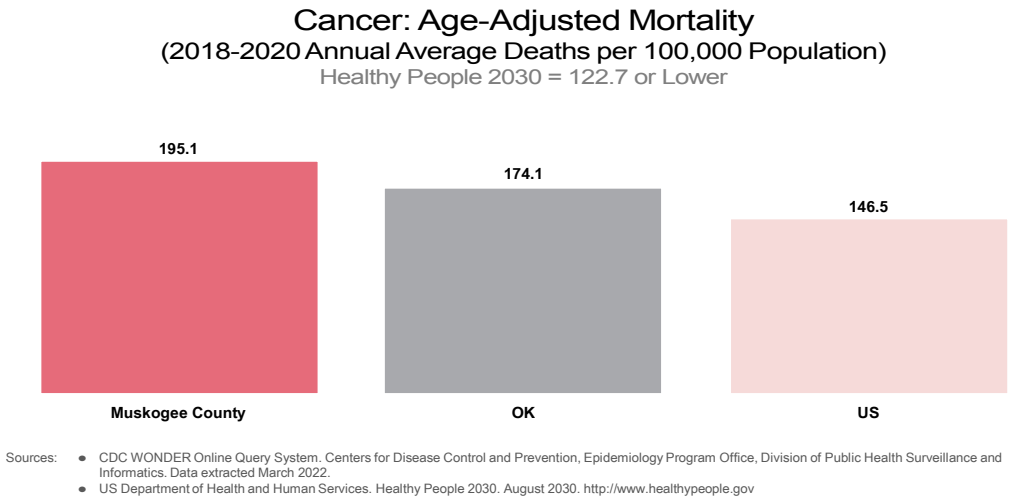
Cancer is the second leading cause of death in the United States. ...The cancer death rate has declined in recent decades, but over 600,000 people still die from cancer each year in the United States. Death rates are higher for some cancers and in some racial/ethnic minority groups. These disparities are often linked to social determinants of health, including education, economic status, and access to health care.

Interventions to promote evidence-based cancer screenings — such as screenings for lung, breast, cervical, and colorectal cancer — can help reduce cancer deaths. Other effective prevention strategies include programs that increase HPV vaccine use, prevent tobacco use and promote quitting, and promote healthy eating and physical activity. In addition, effective targeted therapies and personalized treatment are key to helping people with cancer live longer.

– Healthy People 2030 (https://health.gov/healthypeople)

Age-Adjusted Cancer Deaths

The following chart illustrates age-adjusted cancer mortality (all types) in Tulsa County.



Lung cancer is by far the leading cause of cancer deaths in the county.

Age-Adjusted Cancer Death Rates by Site
(2018-2020 Annual Average Deaths per 100,000 Population)

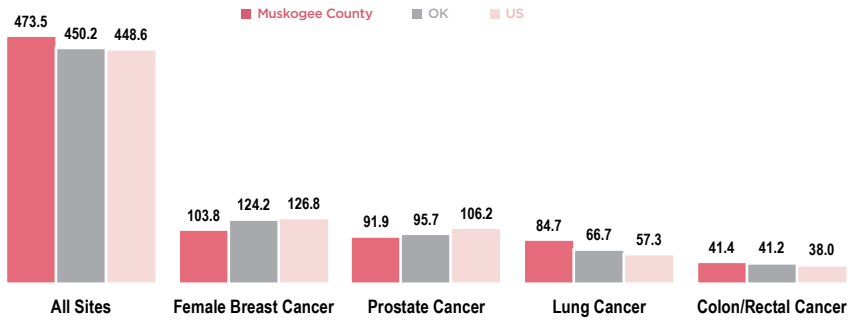
	MUSKOGEE COUNTY	OK	US	HP2030
ALL CANCERS	**195.1**	**174.1**	**146.5**	**122.7**
Lung Cancer	58.5	45.5	33.4	25.1
Prostate Cancer	20.9	19.5	18.5	16.9
Female Breast Cancer	20.1	22.7	19.4	15.3
Colorectal Cancer	20.1	16.3	13.1	8.9

Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2022.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

Cancer Incidence

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

Cancer Incidence Rates by Site
(Annual Average Age-Adjusted Incidence per 100,000 Population, 2014-2018)



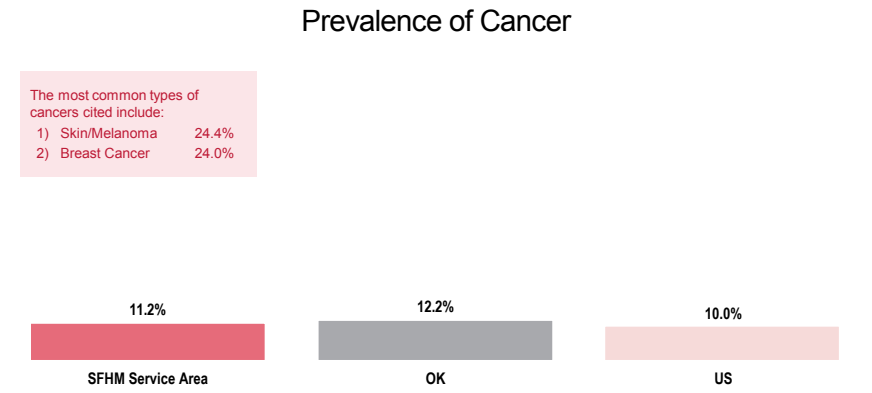
Sources:
- State Cancer Profiles.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved March 2022 via SparkMap (sparkmap.org).

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

"Have you ever suffered from or been diagnosed with cancer?"

"Which type of cancer were you diagnosed with? (If more than one past diagnosis, respondent was asked about the most recent.)



Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Items 25-26]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.

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.

– Healthy People 2030 (https://health.gov/healthypeople)

RELATED ISSUE

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

Cancer Screenings

The American Cancer Society recommends that both men and women get a cancer-related checkup during a regular doctor's checkup. It should include examination for cancers of the thyroid, testicles, ovaries, lymph nodes, oral cavity, and skin, as well as health counseling about tobacco, sun exposure, diet and nutrition, risk factors, sexual practices, and environmental and occupational exposures.

FEMALE BREAST CANCER

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

CERVICAL CANCER

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

COLORECTAL CANCER

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

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

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

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).

BREAST CANCER SCREENING ▶ ***"A mammogram is an x-ray of each breast to look for cancer. How long has it been since you had your last mammogram?"***

Breast cancer screening is calculated here among women age 50 to 74 who indicate mammography within the past 2 years.

CERVICAL CANCER SCREENING ▶ ***"A Pap test is a test for cancer of the cervix. How long has it been since you had your last Pap test?"***

[If Pap test in the past five years] ***"HPV, or the human papillomavirus, is a common infection that can cause several types of cancer. When you received your last Pap test, were you screened for HPV?"***

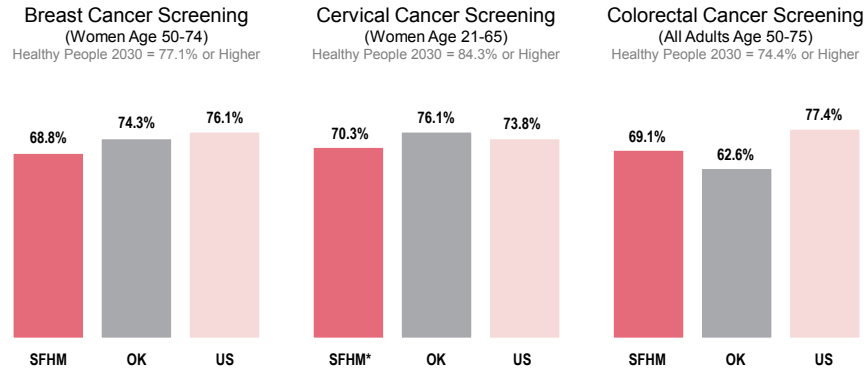
"Have you ever had a hysterectomy?"

"Appropriate cervical cancer screening" includes Pap smear testing (cervical cytology) every three years in women age 21 to 29 and Pap smear testing and/or HPV testing every 5 years in women age 30 to 65. Women 21 to 65 with hysterectomy are excluded.

COLORECTAL CANCER SCREENING ▶ ***"Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. How long has it been since your last sigmoidoscopy or colonoscopy?"***

"A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. How long has it been since you had your last blood stool test?"

"Appropriate colorectal cancer screening" is calculated here among men and women age 50 to 75 years who have had a fecal occult blood test within the past year and/or a lower endoscopy (sigmoidoscopy or colonoscopy) within the past 10 years.

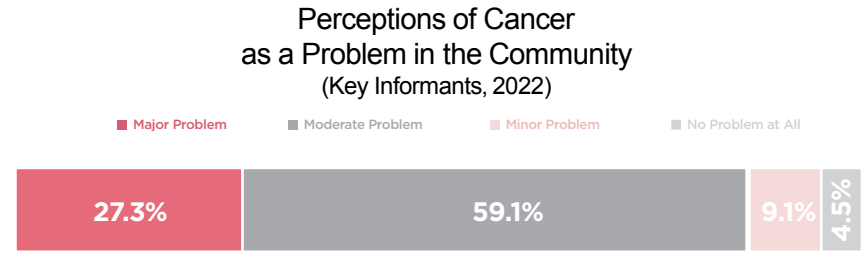


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Items 116-118]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

Notes:
- Each indicator is shown among the gender and/or age group specified; *note that the service area prevalence for cervical cancer screening reflects a sample of <50.

Key Informant Input: Cancer

The following chart outlines key informants' perceptions of the severity of Cancer as a problem in the community:



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

Notes:
- Asked of all respondents.

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

Incidence/Prevalence

> Muskogee cancer rate is above the state rate and national rate. – Public Health Representative

> I know far too many friends, acquaintances, and family members that have experienced or died as a result of cancer. – Community Leader

Contributing Factors

> Patient on not getting screening, colonoscopies, and mammograms. Also, high risk and has obesity and increased prevalence of smoking. – Physician

Access to Care/Services

> Not sure if we have sources to address our cancer patients and support for families. – Community Leader

Tobacco Use

> Tobacco and alcohol use is a major community problem. – Physician

Respiratory Disease

ABOUT RESPIRATORY DISEASE

Respiratory diseases affect millions of people in the United States. ...More than 25 million people in the United States have asthma. Strategies to reduce environmental triggers and make sure people get the right medications can help prevent hospital visits for asthma. In addition, more than 16 million people in the United States have COPD (chronic obstructive pulmonary disease), which is a major cause of death. Strategies to prevent the disease — like reducing air pollution and helping people quit smoking — are key to reducing deaths from COPD.

Interventions tailored to at-risk groups can also help prevent and treat other respiratory diseases — for example, pneumonia in older adults and pneumoconiosis in coal miners. And increasing lung cancer screening rates can help reduce deaths from lung cancer through early detection and treatment.

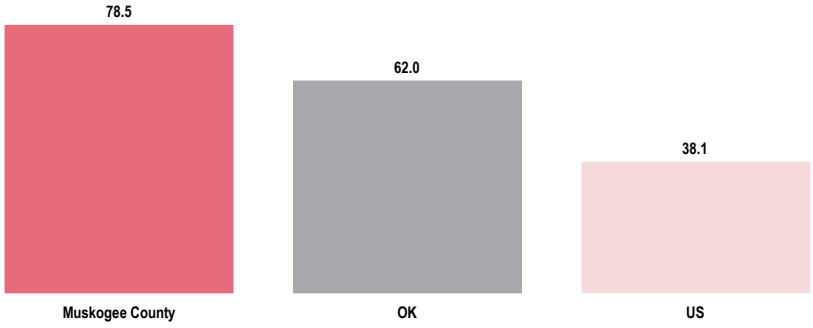
– Healthy People 2030 (https://health.gov/healthypeople)

Age-Adjusted Respiratory Disease Deaths

Chronic lower respiratory diseases (CLRD) are diseases affecting the lungs; the most deadly of these is chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis. Mortality for CLRD is illustrated in the charts that follow.

Pneumonia and influenza mortality is also illustrated.

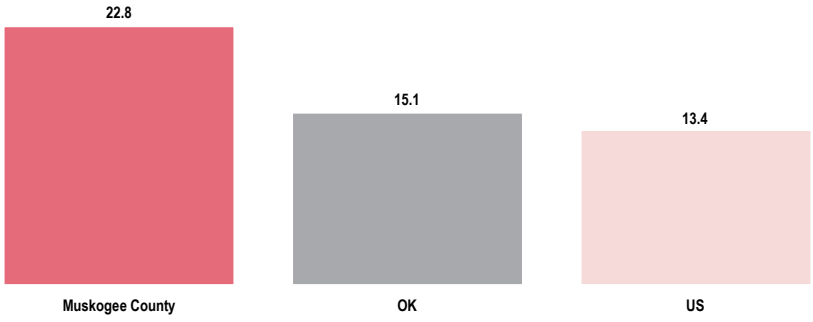
CLRD: Age-Adjusted Mortality
(2018-2020 Annual Average Deaths per 100,000 Population)



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 2022.

Notes:
- CLRD is chronic lower respiratory disease.

Pneumonia/Influenza: Age-Adjusted Mortality
(2018-2020 Annual Average Deaths per 100,000 Population)



Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 124]
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2022.

Prevalence of Respiratory Disease

Asthma

"Have you ever been told by a doctor, nurse, or other health professional that you had asthma?" and "Do you still have asthma?" (Calculated here as a prevalence of all adults who have ever been diagnosed with asthma and who still have asthma.)

Prevalence of Asthma

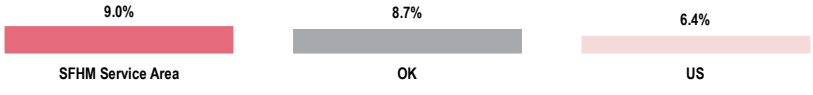
Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 119]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.
- Includes those who have ever been diagnosed with asthma and report that they still have asthma.

Chronic Obstructive Pulmonary Disease (COPD)

"Would you please tell me if you have ever suffered from or been diagnosed with COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema?"

Prevalence of
Chronic Obstructive Pulmonary Disease (COPD)

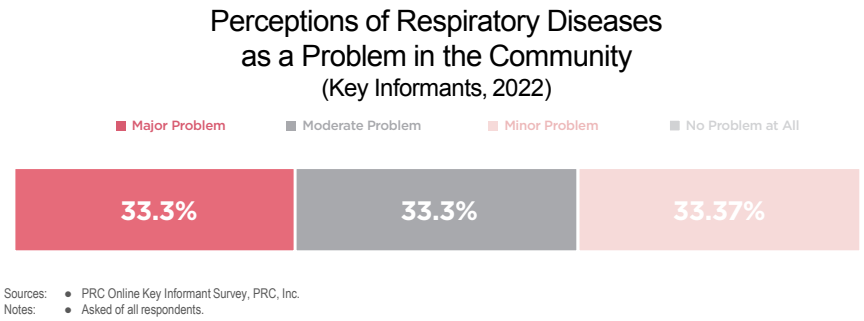


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 23]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.
- Includes those having ever suffered from or been diagnosed with COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema.

Key Informant Input: Respiratory Disease

The following chart outlines key informants' perceptions of the severity of Respiratory Disease as a problem in the community:



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

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

Tobacco Use

> High tobacco abuse rate. – Physician
>
> Associated with smoking/tobacco use and obesity rates. – Community Leader
>
> Smoking. – Physician

Contributing Factors

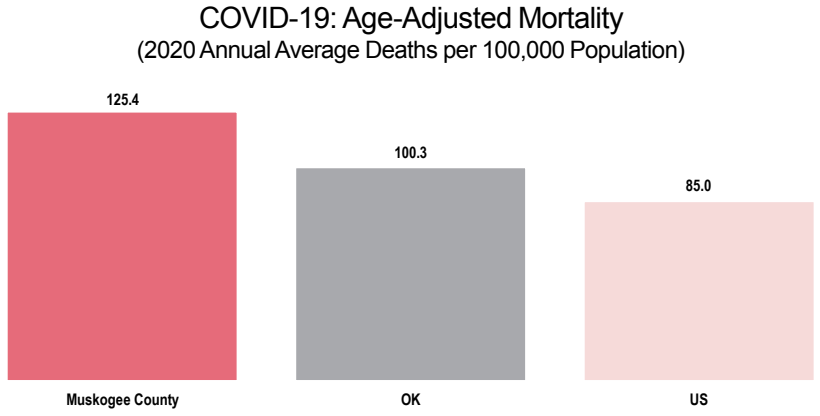
> Smoking and vaping still seem to run rampant in our area. The belief that vaping is safer than cigarettes seems to be the prime reason there is so much of it. I can't rule out allergies as a cause for respiratory disease either. – Community Leader

Incidence/Prevalence

> Based off the data it is an issue in our community. – Public Health Representative

Age-Adjusted COVID-19 Deaths

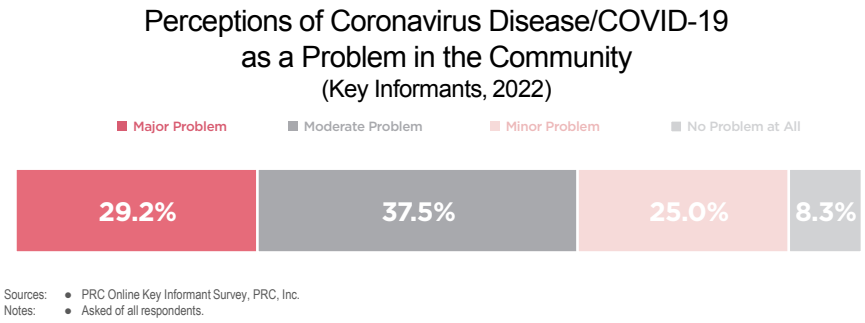
2020 death rates for COVID-19 are illustrated in the following chart.



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 2022.

Key Informant Input: Coronavirus Disease/COVID-19

The following chart outlines key informants' perceptions of the severity of Coronavirus Disease/COVID-19 as a problem in the community:



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

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

Contributing Factors

> General health of the population (obesity, tobacco use, etc.) appears to be very prevalent. – Community Leader
>
> Unwillingness to learn about and/or accept the severity of the problem or address the problem and unwillingness to get vaccinated. – Community Leader
>
> Community severe disease has been more widespread due to lower-than-average vaccination rates, higher rates of co-morbidities and lack of compliance with safety protocols. – Physician
>
> Low vaccination rates. Denial. Poor masking and distancing practices by a large number of the population. High rate of hospitalization and death. – Physician

Not Enough People are Getting Vaccinated

> Community severe disease has been more widespread due to lower-than-average vaccination rates, higher rates of co-morbidities and lack of compliance with safety protocols. – Physician
>
> Low vaccination rates. Denial. Poor masking and distancing practices by a large number of the population. High rate of hospitalization and death. – Physician

Lack of Compliance with Public Health Mitigation Measures

> Muskogee is resistant to following mitigation guidelines, therefore, we have seen some of the higher numbers in the state. – Community Leader

Vulnerable Populations

> The underserved ethnic minority populations are at risk and contracting the virus at a high rate due to vaccine hesitancy and historical injustices. – Public Health Representative

Injury & Violence

ABOUT INJURY & VIOLENCE

INJURY ▶ In the United States, unintentional injuries are the leading cause of death in children, adolescents, and adults younger than 45 years. ...Many unintentional injuries are caused by motor vehicle crashes and falls, and many intentional injuries involve gun violence and physical assaults. Interventions to prevent different types of injuries are key to keeping people safe in their homes, workplaces, and communities.

Drug overdoses are now the leading cause of injury deaths in the United States, and most overdoses involve opioids. Interventions to change health care providers' prescribing behaviors, distribute naloxone to reverse overdoses, and provide medications for addiction treatment for people with opioid use disorder can help reduce overdose deaths involving opioids.

VIOLENCE ▶ Almost 20,000 people die from homicide every year in the United States, and many more people are injured by violence. ...Many people in the United States experience physical assaults, sexual violence, and gun-related injuries. Adolescents are especially at risk for experiencing violence. Interventions to reduce violence are needed to keep people safe in their homes, schools, workplaces, and communities.

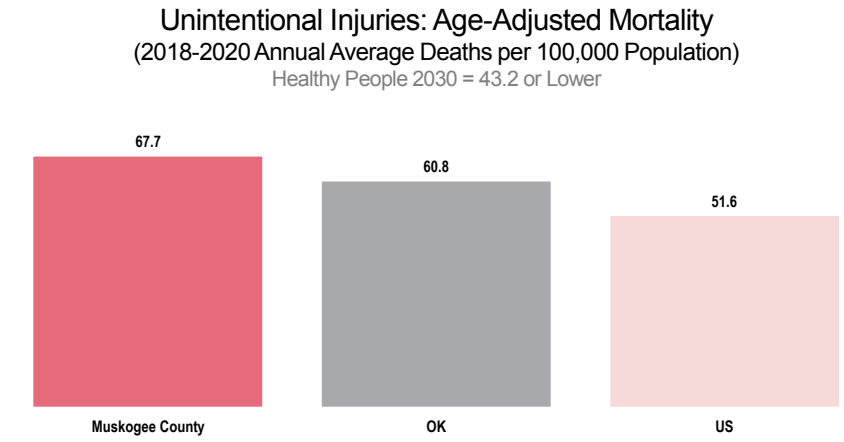
Children who experience violence are at risk for long-term physical, behavioral, and mental health problems. Strategies to protect children from violence can help improve their health and well-being later in life.

– Healthy People 2030 (https://health.gov/healthypeople)

Unintentional Injury

Age-Adjusted Unintentional Injury Deaths

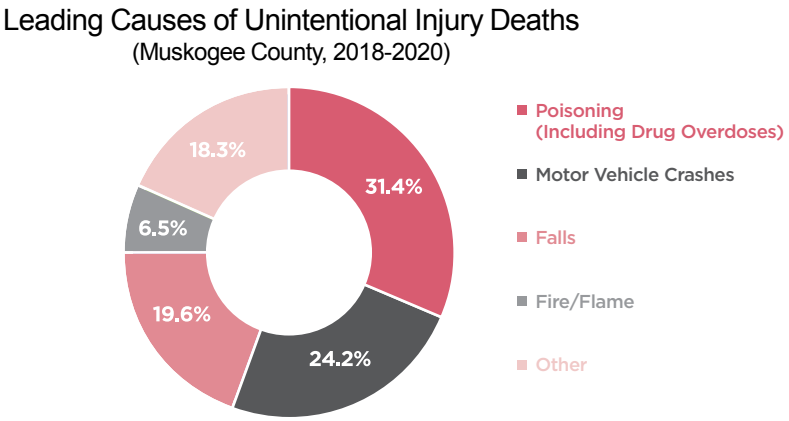
The following chart outlines age-adjusted mortality rates for unintentional injury in the area.



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 2022.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

Leading Causes of Unintentional Injury Deaths

Leading causes of accidental death in the county include the following:



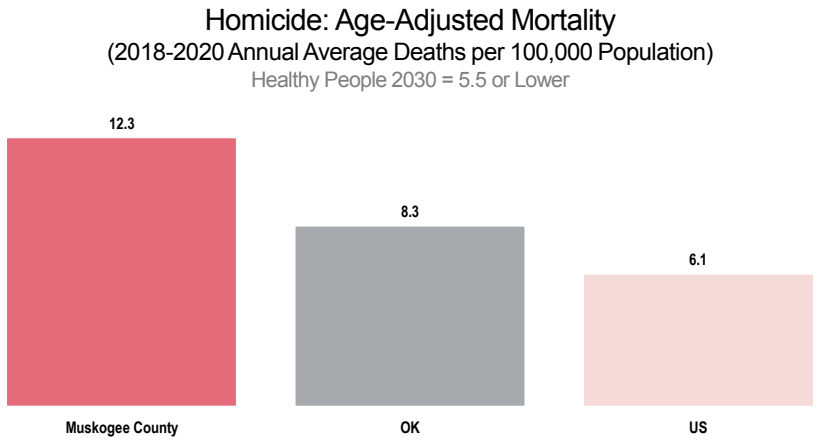
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2022.

RELATED ISSUE
*For more information about unintentional drug-related deaths, see also **Substance Abuse** in the **Modifiable Health Risks** section of this report.*

Intentional Injury (Violence)

Age-Adjusted Homicide Deaths

Age-adjusted mortality attributed to homicide is shown in the following chart.



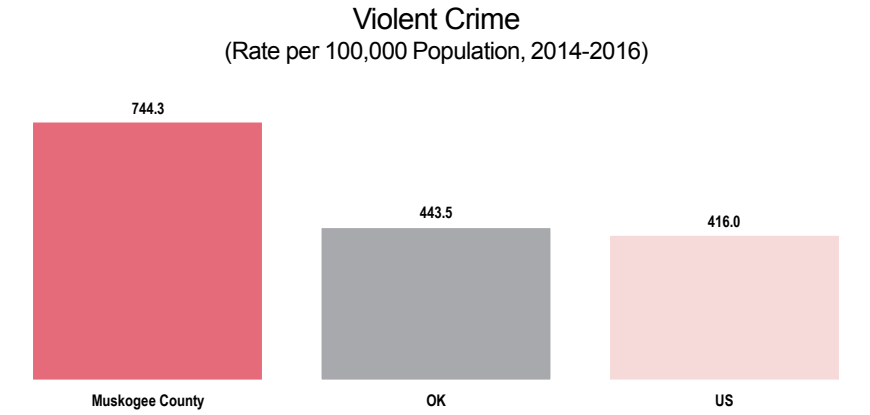
Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted March 2022.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

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

Violent Crime

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

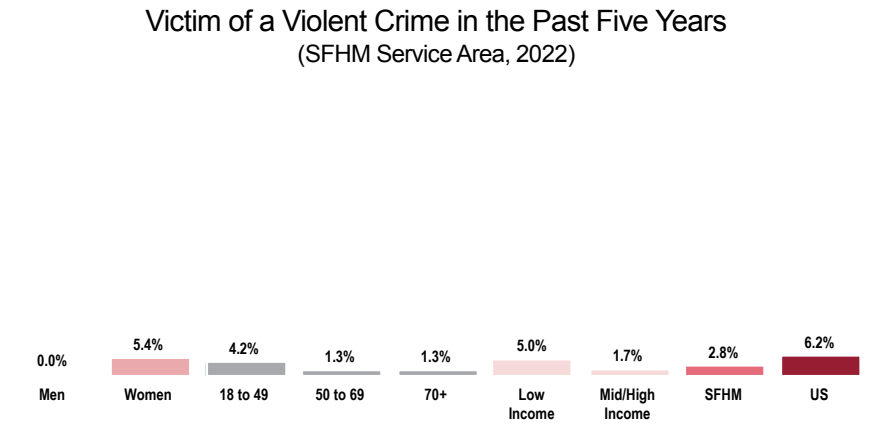
Note that the quality of crime data can vary widely from location to location, depending on the consistency and completeness of reporting among various jurisdictions.



Sources:
- Federal Bureau of Investigation, FBI Uniform Crime Reports.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved March 2022 via SparkMap (sparkmap.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.

VIOLENT CRIME EXPERIENCE ▶ *"Have you been the victim of a violent crime in your area in the past 5 years?"*



Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 38]

Notes:
- Asked of all respondents.

INTIMATE PARTNER VIOLENCE ▶ ***"The next questions are about different types of violence in relationships with an intimate partner. 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. Has an intimate partner ever hit, slapped, pushed, kicked, or hurt you in any way?"***

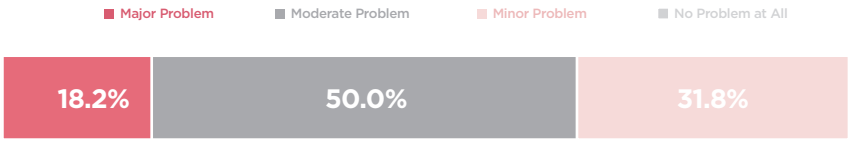
Have Ever Been Hit, Slapped, Pushed,
Kicked, or Hurt in Any Way by an Intimate Partner

Sources: ● 2022 PRC Community Health Survey, PRC, Inc. [Item 39]
● 2020 PRC National Health Survey, PRC, Inc.
Notes: ● Asked of all respondents.

Key Informant Input: Injury & Violence

The following chart outlines key informants' perceptions of the severity of Injury & Violence as a problem in the community:

Perceptions of Injury and Violence
as a Problem in the Community
(Key Informants, 2022)



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

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

Incidence/Prevalence

> Higher level of violence per capita in Muskogee than US average. – Physician
>
> Increase of arrests and Emergency Room visits. – Community Leader
>
> CDC states Muskogee County has high accidental deaths and violent injuries. – Public Health Representative

Diabetes

ABOUT DIABETES

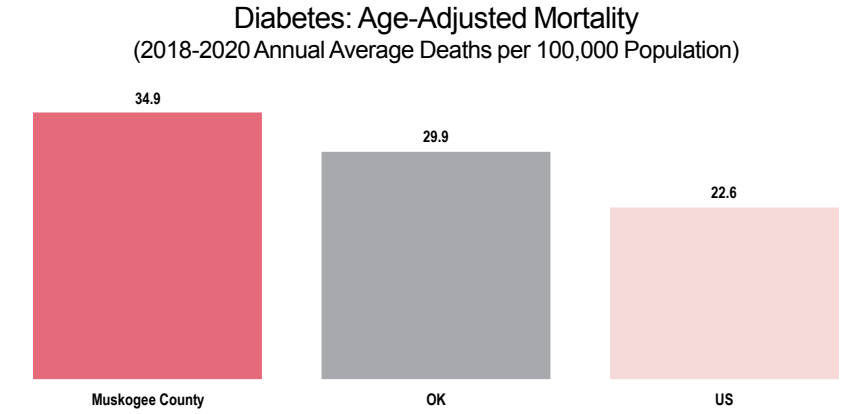
More than 30 million people in the United States have diabetes, and it's the seventh leading cause of death. ...Some racial/ethnic minorities are more likely to have diabetes. And many people with diabetes don't know they have it.

Poorly controlled or untreated diabetes can lead to leg or foot amputations, vision loss, and kidney damage. But interventions to help people manage diabetes can help reduce the risk of complications. In addition, strategies to help people who don't have diabetes eat healthier, get physical activity, and lose weight can help prevent new cases.

– Healthy People 2030 (https://health.gov/healthypeople)

Age-Adjusted Diabetes Deaths

Age-adjusted diabetes mortality for the area is shown in the following chart.



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 2022.
Notes: • The Healthy People 2030 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

Prevalence of Diabetes

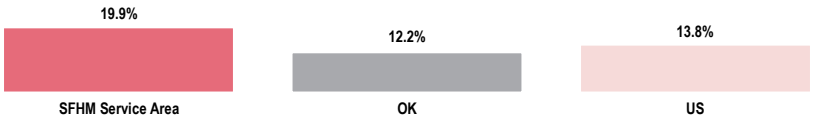
"Have you ever been told by a doctor, nurse, or other health professional that you have diabetes? (If female, add: not counting diabetes only occurring during pregnancy?)"

"Have you ever been told by a doctor, nurse, or other health professional that you have pre-diabetes or borderline diabetes? (If female, add: other than during pregnancy?)"

[Adults who do not have diabetes] ***"Have you had a test for high blood sugar or diabetes within the past three years?"***

Prevalence of Diabetes

Another 14.1% of adults have been diagnosed with "pre-diabetes" or "borderline" diabetes.

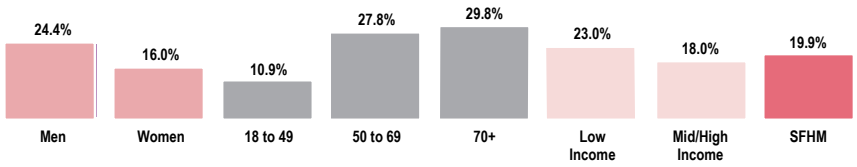


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 121]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.

Prevalence of Diabetes
(SFHM Service Area, 2022)

Note that among adults who have not been diagnosed with diabetes, 45.9% report having had their blood sugar level tested within the past three years.

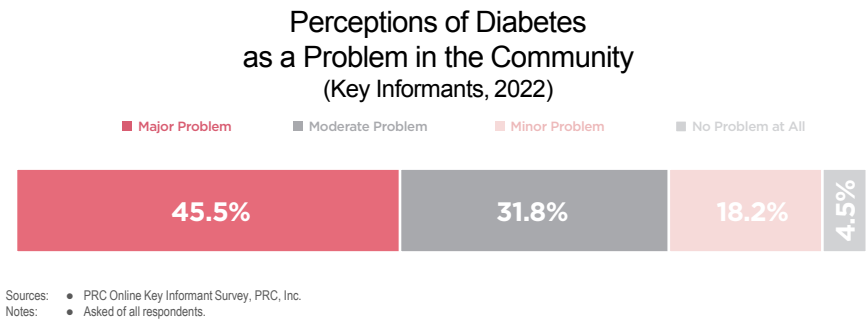


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Items 33, 121]

Notes:
- Asked of all respondents.
- Excludes gestational diabetes (occurring only during pregnancy).

Key Informant Input: Diabetes

The following chart outlines key informants' perceptions of the severity of Diabetes as a problem in the community:



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

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

Contributing Factors

> Cost of medication and supplies. Lack of diabetes education related to diet and exercise. Lack of prevention education. Lack of support groups. – Community Leader
>
> The expense and coverage for medical technologies that would make managing diabetes easier. People having information or education about the resources that could help them better manage the disease. If you lead a busy lifestyle, it can be more difficult and less convenient to make healthy food choices. – Public Health Representative
>
> Overweight population with poor eating habits, unwillingness to change. – Physician
>
> Lack of healthy dietary options, lack of education, lack of desire for self care which often is a reflection of despair brought on by socioeconomic disadvantages or generational rearing practices. Also there is a higher general distrust of healthcare workers by many in the community. – Physician

Access to Care/Services

> Access to care and follow through with changes necessary. – Community Leader

Access to Affordable Healthy Food

> Access to healthy food choices that are affordable. There is a lack of knowledge about healthy food options and ways to prepare these items for family meals. – Public Health Representative

Awareness/Education

> Education and resources. – Public Health Representative

Lifestyle

> Unhealthy lifestyle. Failure to test glucose levels and failure to follow dietary guidelines and physician advice. – Physician

Kidney Disease

ABOUT KIDNEY DISEASE

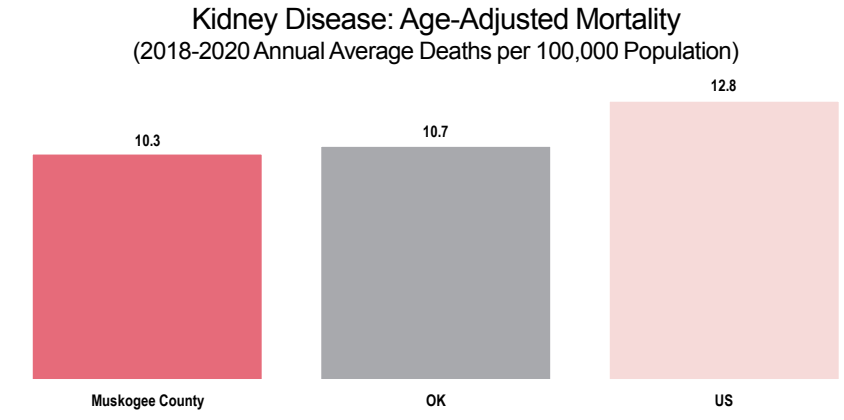
More than 1 in 7 adults in the United States may have chronic kidney disease (CKD), with higher rates in low-income and racial/ethnic minority groups. And most people with CKD don't know they have it. ...People with CKD are more likely to have heart disease and stroke — and to die early. Managing risk factors like diabetes and high blood pressure can help prevent or delay CKD. Strategies to make sure more people with CKD are diagnosed early can help people get the treatment they need.

Recommended tests can help identify people with CKD to make sure they get treatments and education that may help prevent or delay kidney failure and end-stage kidney disease (ESKD). In addition, strategies to make sure more people with ESKD get kidney transplants can increase survival rates and improve quality of life.

– Healthy People 2030 (https://health.gov/healthypeople)

Age-Adjusted Kidney Disease Deaths

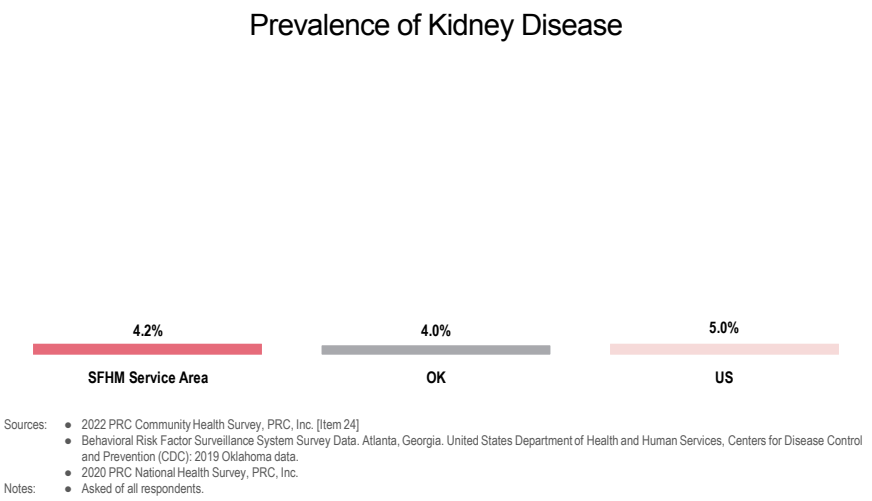
Age-adjusted kidney disease mortality is described in the following chart.



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 2022.

Prevalence of Kidney Disease

"Would you please tell me if you have ever suffered from or been diagnosed with kidney disease?"

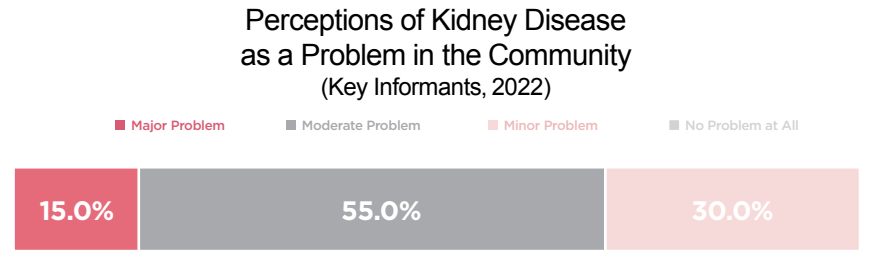


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 24]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.

Key Informant Input: Kidney Disease

The following chart outlines key informants' perceptions of the severity of Kidney Disease as a problem in the community:



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

Notes:
- Asked of all respondents.

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

Incidence/Prevalence

> Higher rates of uncontrolled diabetes and hypertension in this community. – Physician
>
> High percentage of patients with diabetes. – Physician

Potentially Disabling Conditions

Multiple Chronic Conditions

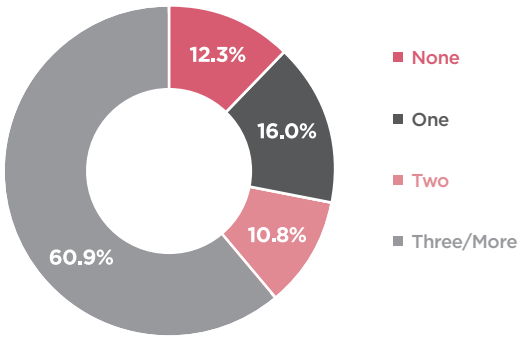
The following charts outline the prevalence of multiple chronic conditions among surveyed adults, taking into account all of the various conditions measured in the survey.

For the purposes of this assessment, chronic conditions include:

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

Multiple chronic conditions are concurrent conditions.

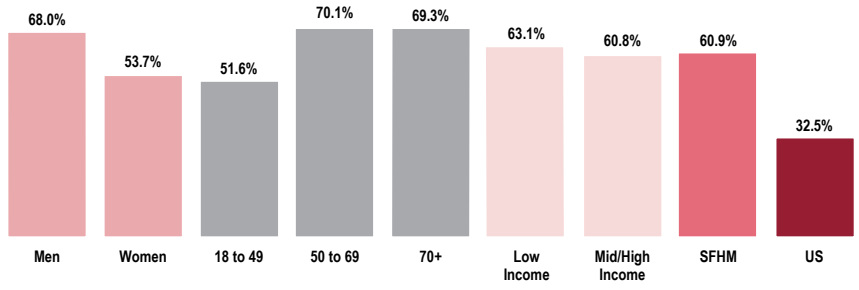
Number of Current Chronic Conditions
(SFHM Service Area, 2022)



Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 123]

Notes:
- Asked of all respondents.
- In this case, chronic conditions include lung disease, cancer, kidney disease, heart attack/angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, high-impact chronic pain, obesity, and/or diagnosed depression.

Currently Have Three or More Chronic Conditions
(SFHM Service Area, 2022)



Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 123]
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.
- In this case, chronic conditions include lung disease, cancer, kidney disease, heart attack/angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, high-impact chronic pain, obesity, and/or diagnosed depression.

Activity Limitations

ABOUT DISABILITY & HEALTH

Studies have found that people with disabilities are less likely to get preventive health care services they need to stay healthy. Strategies to make health care more affordable for people with disabilities are key to improving their health.

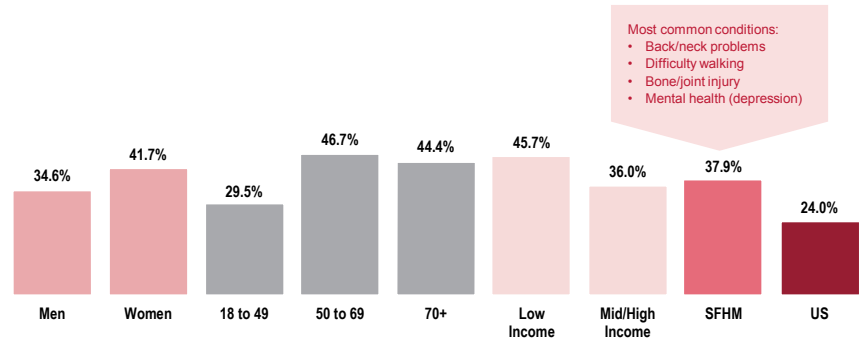
In addition, people with disabilities may have trouble finding a job, going to school, or getting around outside their homes. And they may experience daily stress related to these challenges. Efforts to make homes, schools, workplaces, and public places easier to access can help improve quality of life and overall well-being for people with disabilities.

– Healthy People 2030 (https://health.gov/healthypeople)

"Are you limited in any way in any activities because of physical, mental, or emotional problems?"

[Adults with activity limitations] ***"What is the major impairment or health problem that limits you?"***

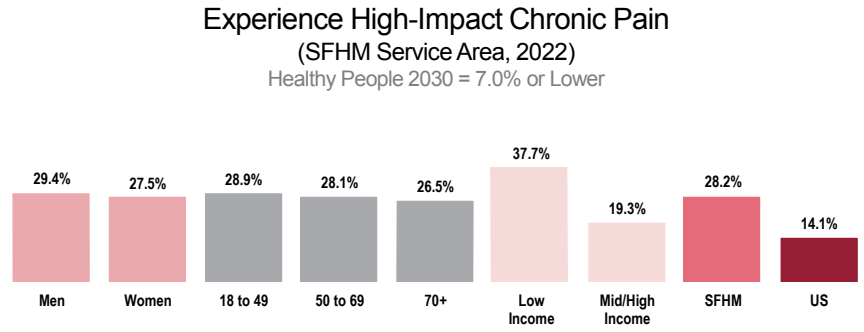
Limited in Activities in Some Way
Due to a Physical, Mental or Emotional Problem
(SFHM Service Area, 2022)



Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 96]
Notes: • Asked of all respondents.

High-Impact Chronic Pain

"Over the past six months, how often did physical pain limit your life or work activities? Would you say: never, some days, most days, or every day?" (Reported here among those responding "most days" or "every day.")

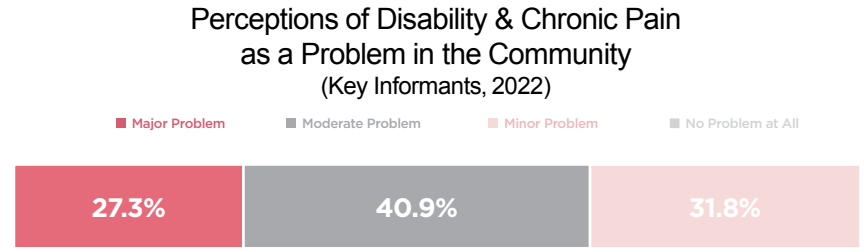


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 37]
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov [Objective MICH-8.1]

Notes:
- Asked of all respondents.
- High-impact chronic pain includes physical pain that limits life or work activities on "most days" or "every day" of the past six months.

Key Informant Input: Disability & Chronic Pain

The following chart outlines key informants' perceptions of the severity of Disability & Chronic Pain as a problem in the community:



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

Notes:
- Asked of all respondents.

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

Incidence/Prevalence

> There are a very high percentage of patients who fit these descriptions that health care providers see in this community. – Physician
>
> Diabetic neuropathy is widespread. There are a number of patients with chronic pain due to illness, cancer, or injury. – Physician
>
> The Muskogee area services a large amount of veterans who deal with disability and chronic pain. – Public Health Representative

Contributing Factors

> Increase in pain medication prescriptions and consumption as well as increase in disability funds. – Community Leader
>
> High risk of addiction, especially for pain medication. Obesity is a major problem also. – Physician
>
> I believe obesity is the primary cause of chronic disability and pain. If you chose 10 random people, sight unseen, I could almost guarantee that at least 7 or 8 will range from obese to morbidly obese and the same number will be on some form of pain medication.
>
> There are far too many middle age to older adults (50-65) that are already in wheelchairs. – Community Leader

Alzheimer's Disease

ABOUT DEMENTIA

Alzheimer's disease is the most common cause of dementia and the sixth leading cause of death in U.S. adults.1 Nearly 6 million people in the United States have Alzheimer's, and that number will increase as the population ages.

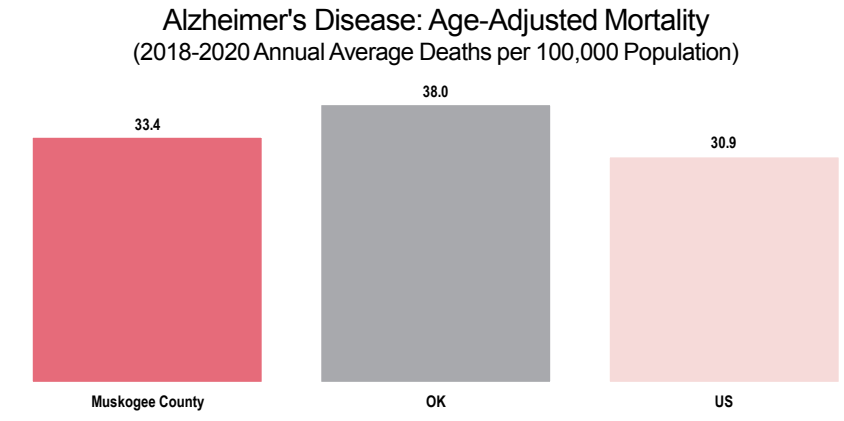
Dementia refers to a group of symptoms that cause problems with memory, thinking, and behavior. People with dementia are more likely to be hospitalized, and dementia is linked to high health care costs.

While there's no cure for Alzheimer's disease, early diagnosis and supportive care can improve quality of life. And efforts to make sure adults with symptoms of cognitive decline — including memory loss — are diagnosed early can help improve health outcomes in people with dementia. Interventions to address caregiving needs can also help improve health and well-being in people with dementia.

– Healthy People 2030 (https://health.gov/healthypeople)

Age-Adjusted Alzheimer's Disease Deaths

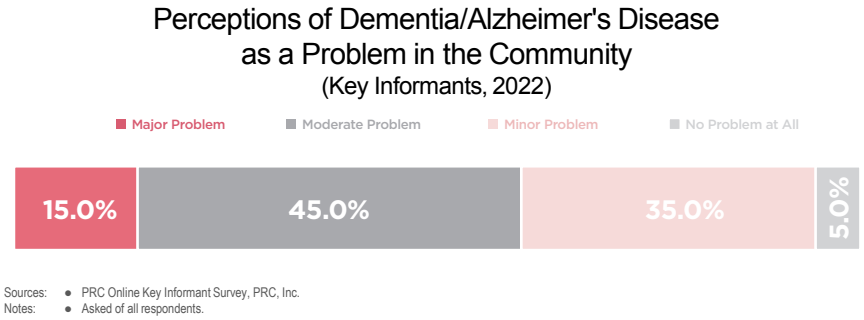
Age-adjusted Alzheimer's disease mortality is outlined in the following chart.



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 2022.

Key Informant Input: Dementia/Alzheimer's Disease

The following chart outlines key informants' perceptions of the severity of Dementia, Including Alzheimer's Disease as a problem in the community:



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

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

Aging Population

> Around 15% of the population of Muskogee is greater than 65 years old. – Public Health Representative

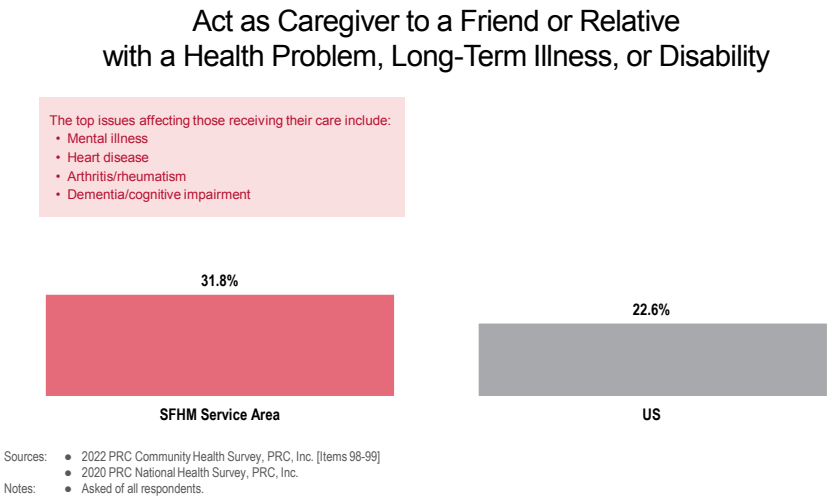
Incidence/Prevalence

> I believe there are a multitude of people who are suffering from this disease who are being taken care of by a spouse or relative in their homes until the caregivers can no longer manage the disease. I do not believe they have a support system once they are diagnosed. They are basically sent home to die. – Community Leader

Caregiving

"People may provide regular care or assistance to a friend or family member who has a health problem, long-term illness, or disability. During the past 30 days, did you provide any such care or assistance to a friend or family member?"

[Among those providing care] "What is the main health problem, long-term illness, or disability that the person you care for has?"



BIRTHS

ABOUT INFANT HEALTH

Keeping infants healthy starts with making sure women get high-quality care during pregnancy and improving women's health in general. After birth, strategies that focus on increasing breastfeeding rates and promoting vaccinations and developmental screenings are key to improving infants' health. Interventions that encourage safe sleep practices and correct use of car seats can also help keep infants safe.

The infant mortality rate in the United States is higher than in other high-income countries, and there are major disparities by race/ethnicity. Addressing social determinants of health is critical for reducing these disparities.

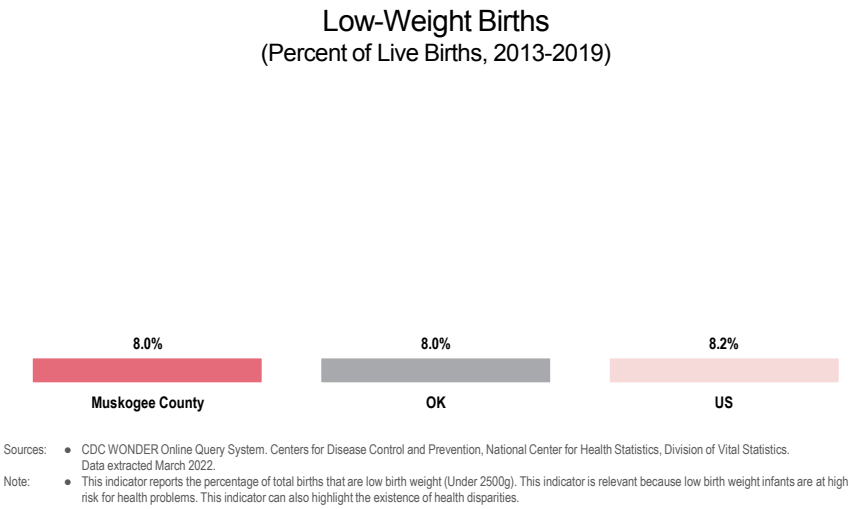
– Healthy People 2030 (https://health.gov/healthypeople)

Birth Outcomes & Risks

Low-Weight Births

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.

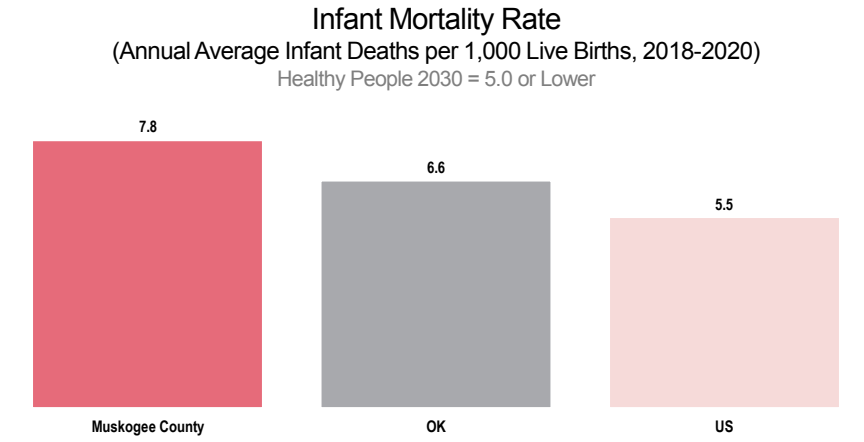
Largely a result of receiving poor or inadequate prenatal care, many low-weight births and the consequent health problems are preventable.



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted March 2022.
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

Infant mortality rates reflect deaths of children less than one year old per 1,000 live births. These rates are outlined in the following chart.



Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted March 2022.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

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.

Family Planning

ABOUT FAMILY PLANNING

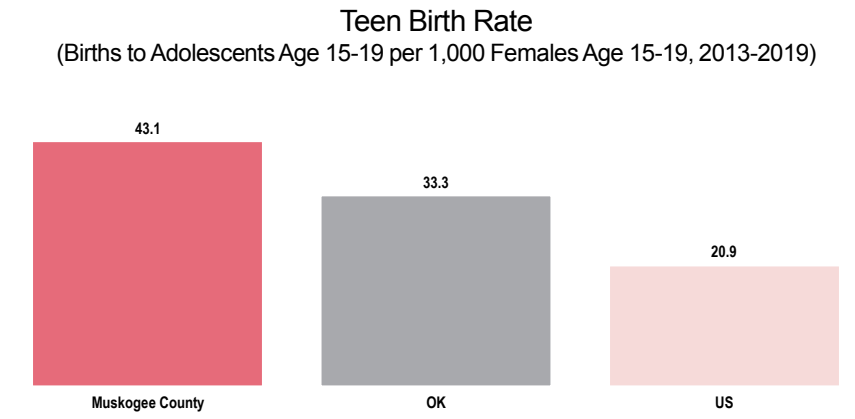
Nearly half of pregnancies in the United States are unintended, and unintended pregnancy is linked to many negative outcomes for both women and infants. ...Unintended pregnancy is linked to outcomes like preterm birth and postpartum depression. Interventions to increase use of birth control are critical for preventing unintended pregnancies. Birth control and family planning services can also help increase the length of time between pregnancies, which can improve health for women and their infants.

Adolescents are at especially high risk for unintended pregnancy. Although teen pregnancy and birth rates have gone down in recent years, close to 200,000 babies are born to teen mothers every year in the United States. Linking adolescents to youth-friendly health care services can help prevent pregnancy and sexually transmitted infections in this age group.

– Healthy People 2030 (https://health.gov/healthypeople)

Births to Adolescent Mothers

The following chart describes births to adolescent mothers under the age of 20 years.

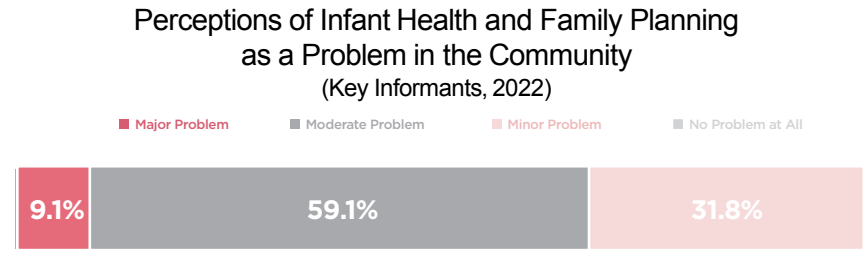


Sources:
- Centers for Disease Control and Prevention, National Vital Statistics System.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved December 2021 via SparkMap (sparkmap.org).

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

Key Informant Input: Infant Health & Family Planning

The following chart outlines key informants' perceptions of the severity of Infant Health and Family Planning as a problem in the community:



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

Notes:
- Asked of all respondents.

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

Teen Pregnancy

> High teen birth rate and high gravidity in this community. – Physician

Income/Poverty

> Lack of resources for community members who live below the poverty line. Thirty five percent of the population in the area are under the age of 18. – Public Health Representative

Contributing Factors

> Low birth weight and the mothers aren't receiving proper prenatal care. As well as a high teen pregnancy rate. – Public Health Representative

MODIFIABLE HEALTH RISKS

Nutrition

ABOUT NUTRITION & HEALTHY EATING

Many people in the United States don't eat a healthy diet. ...People who eat too many unhealthy foods — like foods high in saturated fat and added sugars — are at increased risk for obesity, heart disease, type 2 diabetes, and other health problems. Strategies and interventions to help people choose healthy foods can help reduce their risk of chronic diseases and improve their overall health.

Some people don't have the information they need to choose healthy foods. Other people don't have access to healthy foods or can't afford to buy enough food. Public health interventions that focus on helping everyone get healthy foods are key to reducing food insecurity and hunger and improving health.

– Healthy People 2030 (https://health.gov/healthypeople)

Daily Recommendation of Fruits/Vegetables

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

"Now I would like you to think about the foods you ate or drank yesterday. Include all the foods you ate, both at home and away from home. How many servings of fruit or fruit juices did you have yesterday?"

"How many servings of vegetables did you have yesterday?"

The questions above are used to calculate daily fruit/vegetable consumption for respondents. The proportion reporting having 5 or more servings per day is shown here.

Consume Five or More Servings of Fruits/Vegetables Per Day

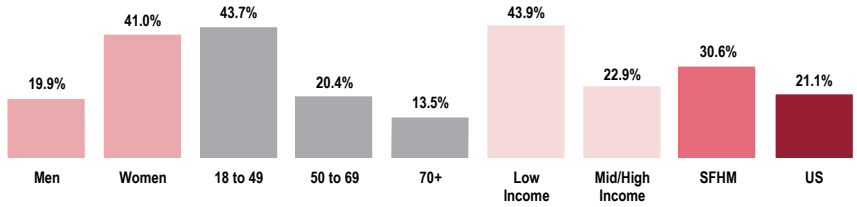
Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 125]
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.
- For this issue, respondents were asked to recall their food eaten on the prior day.

Access to Fresh Produce

"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?"

Find It "Very" or "Somewhat"
Difficult to Buy Affordable Fresh Produce
(SFHM Service Area, 2022)

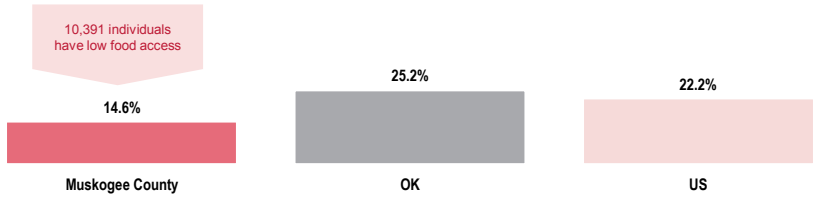


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 79]
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.

Low food access is defined as living more than ½ mile from the nearest supermarket, supercenter, or large grocery store. This related chart is based on US Department of Agriculture data.

Population With Low Food Access
(Percent of Population That Is Far From a Supermarket or Large Grocery Store, 2019)

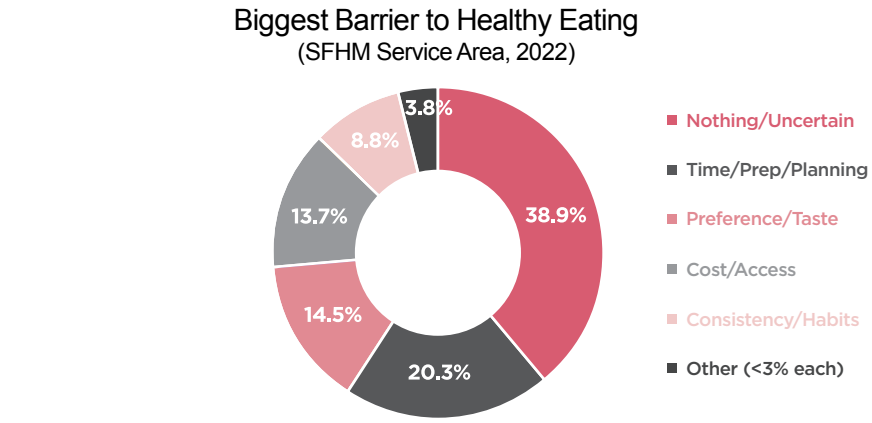


Sources:
- US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas (FARA).
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved March 2022 via SparkMap (sparkmap.org).

Notes:
- This indicator reports the percentage of the population with low food access. Low food access is defined as living more than ½ mile from the nearest supermarket, supercenter, or large grocery store. This indicator is relevant because it highlights populations and geographies facing food insecurity.

Barriers to Healthy Eating

"For you, what is the biggest barrier to healthy eating?"



Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 302]
Notes: • Asked of all respondents.

Physical Activity

ABOUT PHYSICAL ACTIVITY

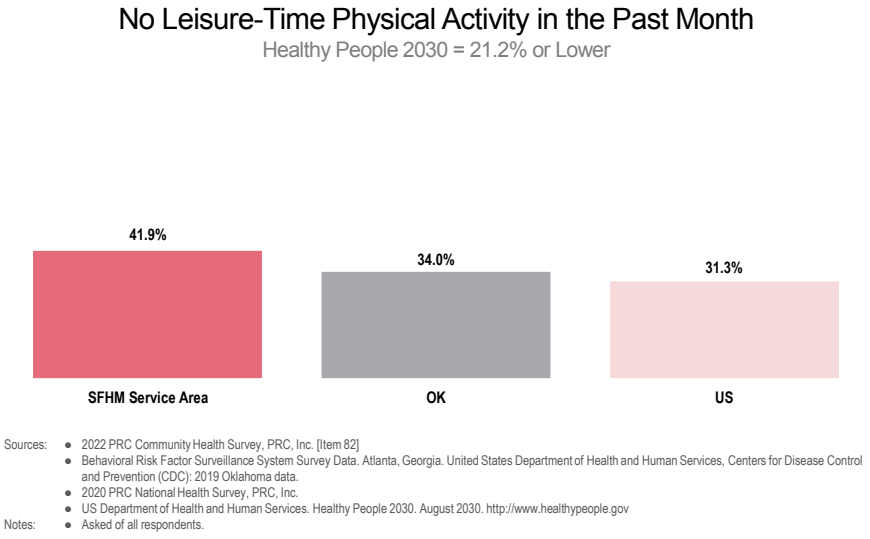
Physical activity can help prevent disease, disability, injury, and premature death. The Physical Activity Guidelines for Americans lays out how much physical activity children, adolescents, and adults need to get health benefits. Although most people don't get the recommended amount of physical activity, it can be especially hard for older adults and people with chronic diseases or disabilities.

Strategies that make it safer and easier to get active — like providing access to community facilities and programs — can help people get more physical activity. Strategies to promote physical activity at home, at school, and at childcare centers can also increase activity in children and adolescents.

– Healthy People 2030 (https://health.gov/healthypeople)

Leisure-Time Physical Activity

"During the past month, other than your regular job, did you participate in any physical activities or exercises, such as running, calisthenics, golf, gardening, or walking for exercise?"



Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 82]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

Notes:
- Asked of all respondents.

Meeting Physical Activity Recommendations

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*

To measure physical activity frequency, duration and intensity, respondents were asked:

"During the past month, what type of physical activity or exercise did you spend the most time doing?"

"And during the past month, how many times per week or per month did you take part in this activity?"

"And when you took part in this activity, for how many minutes or hours did you usually keep at it?"

Respondents could answer the above series for up to two types of physical activity. The specific activities identified (e.g., jogging, basketball, treadmill, etc.) determined the intensity values assigned to that respondent when calculating total aerobic physical activity hours/minutes.

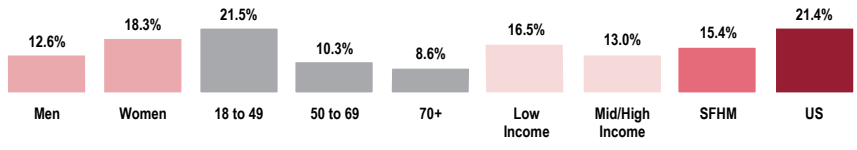
Respondents were also asked about strengthening exercises:

"During the past month, how many times per week or per month did you do physical activities or exercises to strengthen your muscles? Do not count aerobic activities like walking, running, or bicycling. Please include activities using your own body weight, such as yoga, sit-ups, or push-ups, and those using weight machines, free weights, or elastic bands."

"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, 75 minutes per week of vigorous physical activity, or an equivalent combination of both;
- Strengthening activity is at least 2 sessions per week of exercise designed to strengthen muscles.

Meets Physical Activity Recommendations
(SFHM Service Area, 2022)
Healthy People 2030 = 28.4% or Higher

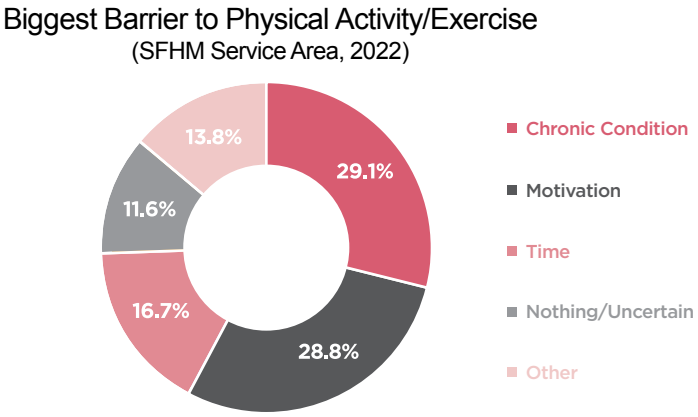


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 126]
- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

Notes:
- Asked of all respondents.
- Meeting both guidelines is defined as the number of persons age 18+ who report light or moderate aerobic activity for at least 150 minutes per week or who report vigorous physical activity 75 minutes per week or an equivalent combination of moderate and vigorous-intensity activity *and* report doing physical activities specifically designed to strengthen muscles at least twice per week.

Barriers to Physical Activity

"For you, what is the biggest barrier to physical activity?"



Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 303]
Notes: • Asked of all respondents.

Weight Status

ABOUT OVERWEIGHT & OBESITY

Obesity is linked to many serious health problems, including type 2 diabetes, heart disease, stroke, and some types of cancer. Some racial/ethnic groups are more likely to have obesity, which increases their risk of chronic diseases.

Culturally appropriate programs and policies that help people eat nutritious foods within their calorie needs can reduce overweight and obesity. Public health interventions that make it easier for people to be more physically active can also help them maintain a healthy weight.

– *Healthy People 2030 (https://health.gov/healthypeople)*

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^2). To estimate BMI using pounds and inches, use: [weight (pounds)/ height squared ($inches^2$)] x 703.

In this report, overweight is defined as a BMI of 25.0 to 29.9 kg/m^2 and obesity as a BMI ≥30 kg/m^2. The rationale behind these definitions is based on epidemiological data that show increases in mortality with BMIs above 25 kg/m^2. The increase in mortality, however, tends to be modest until a BMI of 30 kg/m^2 is reached. For persons with a BMI ≥30 kg/m^2, mortality rates from all causes, and especially from cardiovascular disease, are generally increased by 50 to 100 percent above that of persons with BMIs in the range of 20 to 25 kg/m^2.

– *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.*

Adult Weight Status

CLASSIFICATION OF OVERWEIGHT AND OBESITY BY BMI	BMI (kg/m^2)
Underweight	<18.5
Normal	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	≥30.0

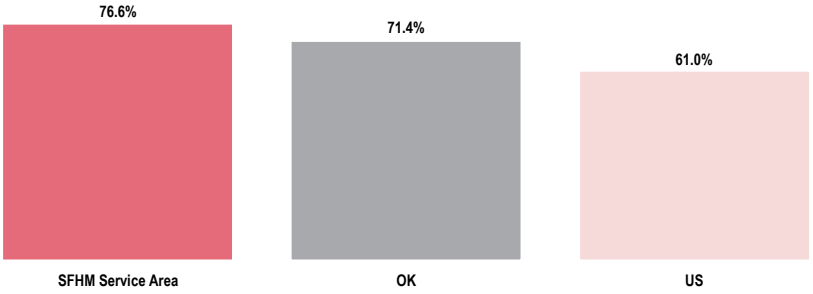
Source: Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.

"About how much do you weigh without shoes?"

"About how tall are you without shoes?"

Reported height and weight were used to calculate a Body Mass Index or BMI value (described above) for each respondent. This calculation allows us to examine the proportion of the population who is at a healthy weight, or who is overweight or obese (see table above).

Prevalence of Total Overweight (Overweight and Obese)

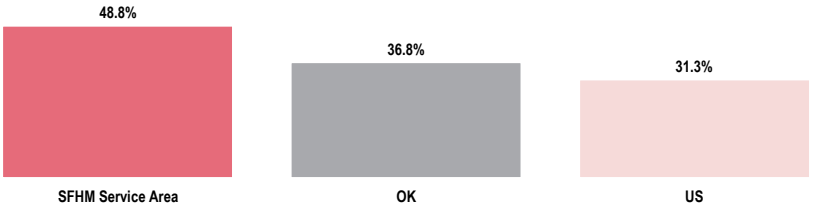


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 128]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.

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.

Prevalence of Obesity

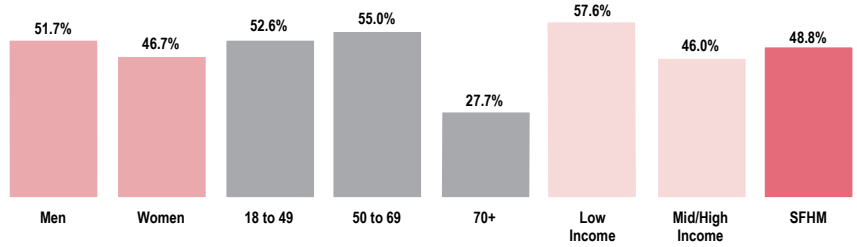
Healthy People 2030 = 36.0% or Lower



Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 128]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

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.

Prevalence of Obesity
(SFHM Service Area, 2022)
Healthy People 2030 = 36.0% or Lower



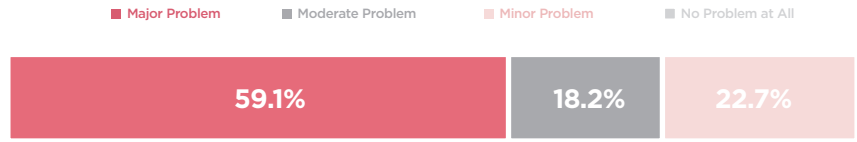
Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 128]
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

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.

Key Informant Input: Nutrition, Physical Activity & Weight

The following chart outlines key informants' perceptions of the severity of Nutrition, Physical Activity & Weight as a problem in the community:

Perceptions of Nutrition, Physical Activity, and Weight as a Problem in the Community
(Key Informants, 2022)



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

Notes:
- Asked of all respondents.

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

Contributing Factors

> Lack of resources that teach the community how to follow nutrition guidelines, how to source healthy food options, and how to prepare meals with healthy options. Lack of affordable facilities that allow community members to be physically active. – Public Health Representative
>
> The percentage of overweight and obese residents in the community. Not sure if it is education or lack of resources available or easily accessible for exercise, eating healthy, etc. – Community Leader
>
> Lack of exercise, obesity and unhealthy diet. A lot of fast foods restaurants. Not many restaurants which provide healthy food. – Physician
>
> Large population of sedentary people, accessibility to affordable healthy foods and no leisure leagues or activities. – Public Health Representative

> Busy lifestyles, convenience of unhealthy foods, little motivation to be healthy for health's sake, short term fixes to long term problems, lack of self discipline, society's "more is better" outlook on all things. – Public Health Representative
>
> Lifestyle of individuals. Lack of education in these areas. Poor incomes so cannot afford some food options. – Physician
>
> Low socioeconomic status of many, lack of education regarding healthy diets, lack of education regarding benefits of exercise, and overall lack of desire to work for a healthy lifestyle. – Physician
>
> Our community is composed of primarily older adults. This group of people tends to be the least healthy and the most ignored. They often cannot access, or there is no access to programs catering to their needs – nutrition, exercise. Often this is due to transportation or cost issues. – Community Leader

Awareness/Education

> Education and support systems. – Community Leader

Obesity

> Overweight sedentary population. – Physician
>
> Increase of obesity rates and acute and chronic disease associated with obesity both in adults and children. – Community Leader

Substance Abuse

ABOUT DRUG & ALCOHOL USE

More than 20 million adults and adolescents in the United States have had a substance use disorder in the past year. ...Substance use disorders can involve illicit drugs, prescription drugs, or alcohol. Opioid use disorders have become especially problematic in recent years. Substance use disorders are linked to many health problems, and overdoses can lead to emergency department visits and deaths.

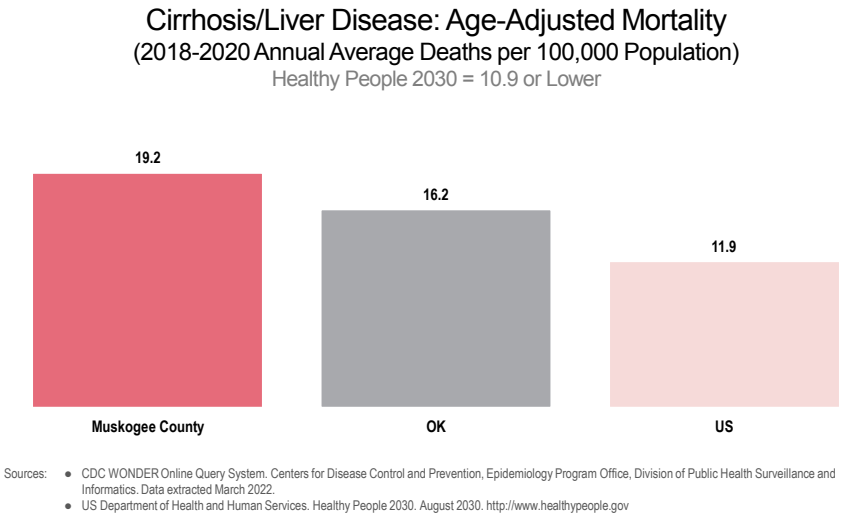
Effective treatments for substance use disorders are available, but very few people get the treatment they need. Strategies to prevent substance use — especially in adolescents — and help people get treatment can reduce drug and alcohol misuse, related health problems, and deaths.

– *Healthy People 2030 (https://health.gov/healthypeople)*

Alcohol

Age-Adjusted Cirrhosis/Liver Disease Deaths

Heavy alcohol use contributes to a significant share of liver disease, including cirrhosis. The following chart outlines age-adjusted mortality for cirrhosis/liver disease in the area.



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 2022.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

Excessive drinking includes heavy and/or binge drinkers:

- HEAVY DRINKERS ▶ men reporting 2+ alcoholic drinks per day or women reporting 1+ alcoholic drink per day in the month preceding the interview.
- BINGE DRINKERS ▶ men reporting 5+ alcoholic drinks or women reporting 4+ alcoholic drinks on any single occasion during the past month.

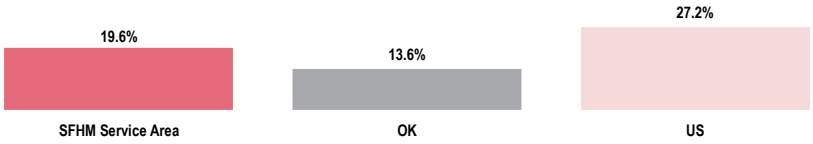
Excessive Drinking

"During the past 30 days, on how many days did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage, or liquor?"

"On the day(s) when you drank, about how many drinks did you have on the average?"

"Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 (if male)/4 (if female) or more drinks on an occasion?"

Excessive Drinkers



Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 136]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.

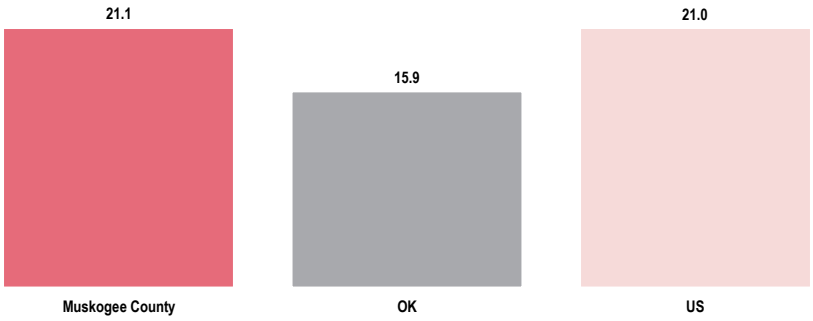
Notes:
- Asked of all respondents.
- Excessive drinking reflects the number of persons aged 18 years and over who drank more than two drinks per day on average (for men) or more than one drink per day on average (for women) OR who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.

Drugs

Age-Adjusted Unintentional Drug-Related Deaths

Unintentional drug-related deaths include all deaths, other than suicide, for which drugs are the underlying cause. A "drug" includes illicit or street drugs (e.g., heroin and cocaine), as well as legal prescription and over-the-counter drugs; alcohol is not included. The following chart outlines local age-adjusted mortality for unintentional drug-related deaths.

Unintentional Drug-Related Deaths: Age-Adjusted Mortality
(2018-2020 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 2022.

Illicit Drug Use

"During the past 30 days, have you used an illegal drug or taken a prescription drug that was not prescribed to you?"

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 2030 = 12.0% or Lower

Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 49]
- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

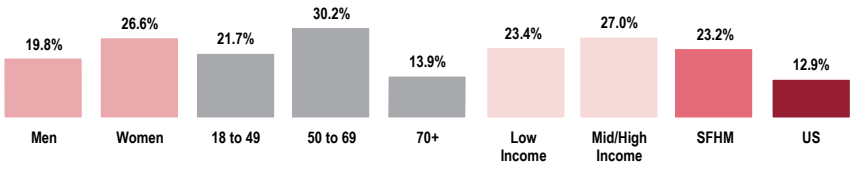
Notes:
- Asked of all respondents.

Use of Prescription Opioids

"Opiates or opioids are drugs that doctors prescribe to treat pain. Examples of prescription opiates include morphine, codeine, hydrocodone, oxycodone, methadone, and fentanyl. In the past year, have you used any of these prescription opiates?"

Opioids are a class of drugs used to treat pain. Examples presented to respondents include morphine, codeine, hydrocodone, oxycodone, methadone, and fentanyl. Common brand name opioids include Vicodin, Dilaudid, Percocet, OxyContin, and Demerol.

Used a Prescription Opioid in the Past Year
(SFHM Service Area, 2022)



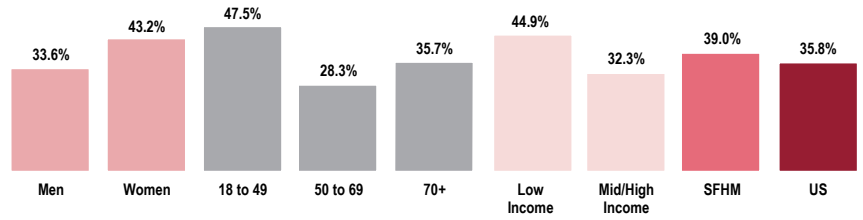
Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 50]
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.

Personal Impact From Substance Abuse

"To what degree has your life been negatively affected by your own or someone else's substance abuse issues, including alcohol, prescription, and other drugs? Would you say: a great deal, somewhat, a little, or not at all?"

Life Has Been Negatively Affected
by Substance Abuse (by Self or Someone Else)
(SFHM Service Area, 2022)



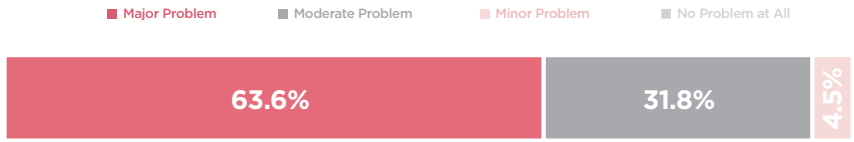
Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 52]
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.
- Includes response of "a great deal," "somewhat," and "a little."

Key Informant Input: Substance Abuse

The following chart outlines key informants' perceptions of the severity of Substance Abuse as a problem in the community:

Perceptions of Substance Abuse
as a Problem in the Community
(Key Informants, 2022)



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

Notes:
- Asked of all respondents.

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

Contributing Factors

> Lack of funds and or understanding the disease of addiction for community to want to create a rehabilitation center. There is still a stigma regarding addiction as a choice rather than an actual brain disease. Science has proven addiction as being a brain disease, but many still do not believe it is. – Physician
>
> Regulations, willingness to participate, growing homeless populations. – Other Health Provider
>
> Not sure that "Medical Marijuana" and the ease of availability, along with the lack of the general public understanding the consequences of using marijuana. Really more of poor / no legislation enacted early on has allowed anyone to grow and cultivate this "business." HUGE detriment to our community when there are grow shops and dispensaries everywhere. Does not help tourism or anything good. – Other Health Provider

Access to Care/Services

> Availability of various resources and appropriate treatment and follow through with patients. – Community Leader
>
> None that I know of other than DUI school which is court appointed. Need something to help before a person finds trouble with law. – Community Leader

Awareness/Education

> May be lack of awareness. – Physician

Alcohol/Drug Use

> In conversations with policemen and policewomen I have been told the underground market for substance abuse in our area is rampant. I have not personally experienced an encounter with someone who is a known substance abuser, but any substance abuse is bad. – Community Leader

Transportation

> Lack of public transportation and what we do have is limited to certain sites and unreasonable times available. – Other Health Provider

Tobacco Use

ABOUT TOBACCO USE

More than 16 million adults in the United States have a disease caused by smoking cigarettes, and smoking-related illnesses lead to half a million deaths each year.

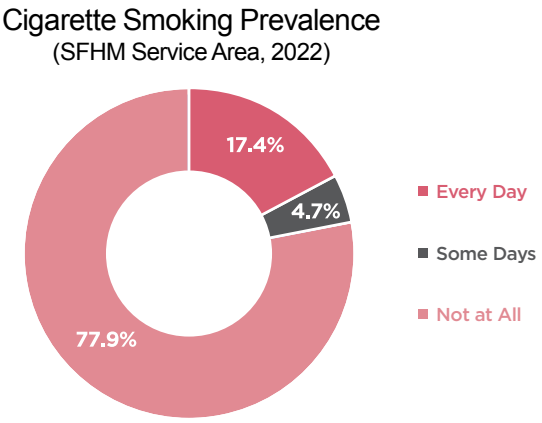
Most deaths and diseases from tobacco use in the United States are caused by cigarettes. Smoking harms nearly every organ in the body and increases the risk of heart disease, stroke, lung diseases, and many types of cancer. Although smoking is widespread, it's more common in certain groups, including men, American Indians/Alaska Natives, people with behavioral health conditions, LGBT people, and people with lower incomes and education levels.

Several evidence-based strategies can help prevent and reduce tobacco use and exposure to secondhand smoke. These include smoke-free policies, price increases, and health education campaigns that target large audiences. Methods like counseling and medication can also help people stop using tobacco.

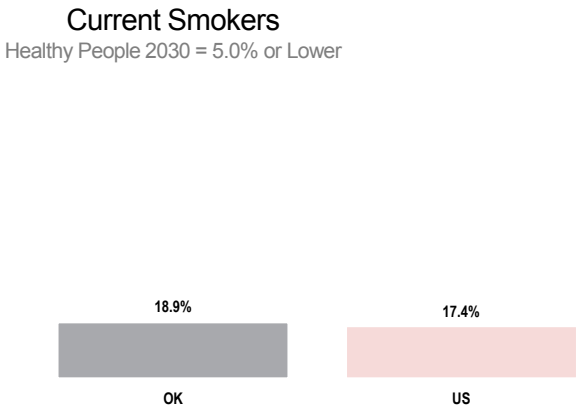
– *Healthy People 2030 (https://health.gov/healthypeople)*

Cigarette Smoking

"Do you now smoke cigarettes every day, some days, or not at all?" ("Current smokers" include those smoking "every day" or on "some days.")



Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 40]
Notes: • Asked of all respondents.



Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 40]
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
• 2020 PRC National Health Survey, PRC, Inc.
• US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov
Notes: • Asked of all respondents.
• Includes regular and occasional smokers (those who smoke cigarettes every day or on some days).

Environmental Tobacco Smoke

"In the past 30 days, has anyone, including yourself, smoked cigarettes, cigars or pipes anywhere in your home on an average of four or more days per week?"

The following chart details these responses among the total sample of respondents, as well as among only households with children (age 0-17).

Member of Household Smokes at Home

Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 43]
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.
- "Smokes at home" refers to someone smoking cigarettes, cigars, or a pipe in the home an average of four or more times in a week.

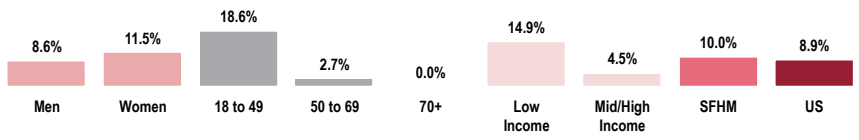
Use of Vaping Products

"The next questions are about electronic vaping products, such as electronic cigarettes, also known as e-cigarettes. These are battery-operated devices that simulate traditional cigarette smoking, but do not involve the burning of tobacco. The cartridge or liquid "e-juice" used in these devices produces vapor and comes in a variety of flavors. Have you ever used an electronic vaping product, such as an e-cigarette, even just one time in your entire life?"

"Do you now use electronic vaping products, such as e-cigarettes, "every day," "some days," or "not at all"?"

"Current use" includes use "every day" or on "some days."

Currently Use Vaping Products
(SFHM Service Area, 2022)

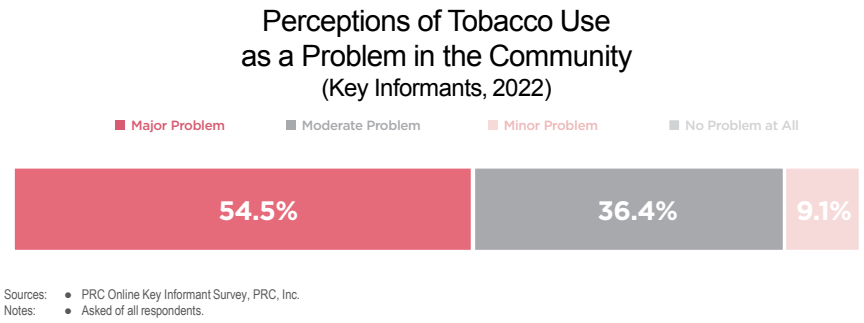


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 135]
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.
- Includes regular and occasional users (those who smoke e-cigarettes every day or on some days).

Key Informant Input: Tobacco Use

The following chart outlines key informants' perceptions of the severity of Tobacco Use as a problem in the community:



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

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

Contributing Factors

> It is the cheapest of the three. – Community Leader
>
> Tobacco is a problem everywhere; we are no different. Underage kids able to purchase cigarettes. Smoking allowed in parks and public events. – Other Health Provider
>
> Culture. – Other Health Provider
>
> Sedentary lifestyle. Learned habits. Emulated parents. – Physician

Teen/Young Adult Usage

> Teenager starting tobacco use at early age. – Physician
>
> High level of use, especially in younger generations. – Physician

Incidence/Prevalence

> High rate of tobacco abuse in the community. – Physician

Access to Care/Services

> No known services other than TV spots. – Community Leader

Impact on Quality of Life

> Increased diseases associated with smoking. – Community Leader

SEXUAL HEALTH

ABOUT HIV & SEXUALLY TRANSMITTED INFECTIONS

Although many sexually transmitted infections (STIs) are preventable, there are more than 20 million estimated new cases in the United States each year — and rates are increasing. In addition, more than 1.2 million people in the United States are living with HIV (human immunodeficiency virus).

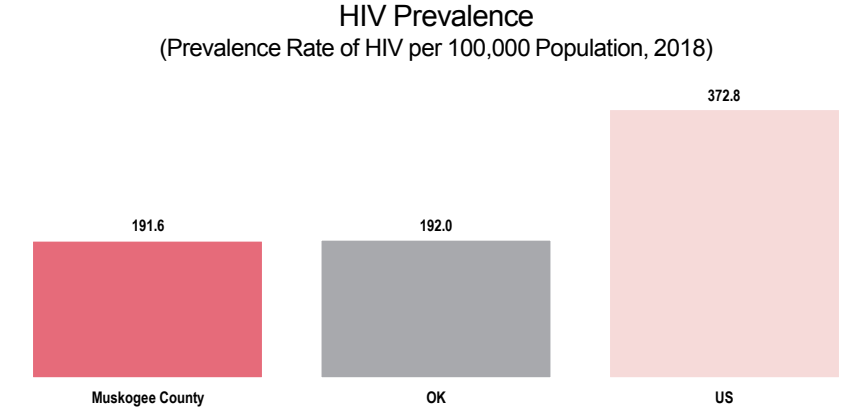
Adolescents, young adults, and men who have sex with men are at higher risk of getting STIs. And people who have an STI may be at higher risk of getting HIV. Promoting behaviors like condom use can help prevent STIs.

Strategies to increase screening and testing for STIs can assess people's risk of getting an STI and help people with STIs get treatment, improving their health and making it less likely that STIs will spread to others. Getting treated for an STI other than HIV can help prevent complications from the STI but doesn't prevent HIV from spreading.

– *Healthy People 2030 (https://health.gov/healthypeople)*

HIV

The following chart outlines prevalence (current cases, regardless of when they were diagnosed) of HIV per 100,000 population in the area.

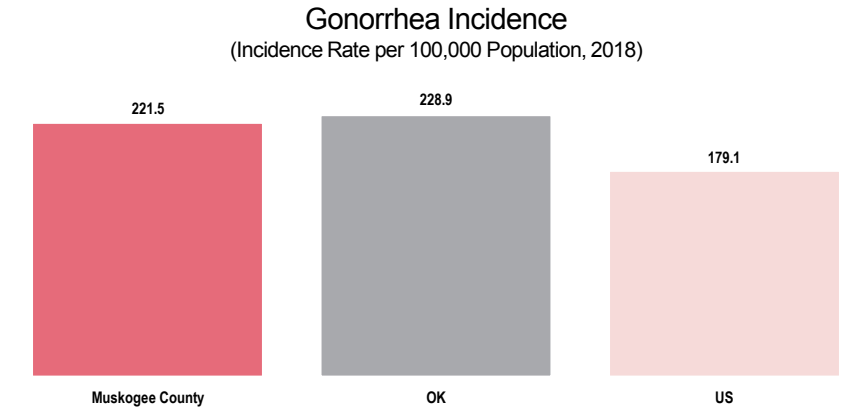


Sources:
- Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved March 2022 via SparkMap (sparkmap.org).

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.

Sexually Transmitted Infections (STIs)

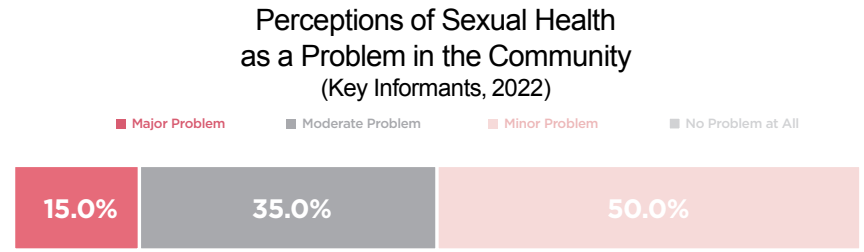
GONORRHEA ▶ Anyone who is sexually active can get gonorrhea. Gonorrhea can be cured with the right medication; left untreated, however, gonorrhea can cause serious health problems in both women and men.



Sources: ● Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
● Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved March 2022 via SparkMap (sparkmap.org).
Notes: ● This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

Key Informant Input: Sexual Health

The following chart outlines key informants' perceptions of the severity of Sexual Health as a problem in the community:



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

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

Incidence/Prevalence

> Increase in STDs and unwanted pregnancies. – Community Leader
>
> High teen birth rate, high STD rates, high rate of teen sexual encounters. – Physician

ACCESS TO HEALTH CARE

ABOUT HEALTH CARE ACCESS

Many people in the United States don't get the health care services they need. ...About 1 in 10 people in the United States don't have health insurance. People without insurance are less likely to have a primary care provider, and they may not be able to afford the health care services and medications they need. Strategies to increase insurance coverage rates are critical for making sure more people get important health care services, like preventive care and treatment for chronic illnesses.

Sometimes people don't get recommended health care services, like cancer screenings, because they don't have a primary care provider. Other times, it's because they live too far away from health care providers who offer them. Interventions to increase access to health care professionals and improve communication — in person or remotely — can help more people get the care they need.

– *Healthy People 2030 (https://health.gov/healthypeople)*

Lack of Health Insurance Coverage

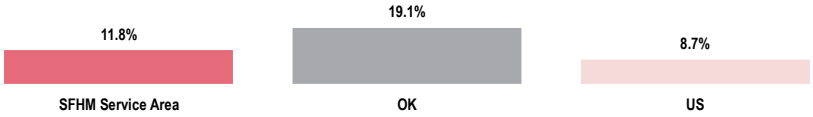
Survey respondents were asked a series of questions to determine their healthcare insurance coverage, if any, from either private or government-sponsored sources.

"Do you have any government-assisted healthcare coverage, such as Medicare, Medicaid (or another state-sponsored program), or VA/military benefits?"

"Do you currently have: health insurance you get through your own or someone else's employer or union; health insurance you purchase yourself; or, you do not have health insurance and pay for health care entirely on your own?"

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).

Lack of Health Care Insurance Coverage
(Adults Age 18-64)
Healthy People 2030 = 7.9% or Lower



Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 137]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

Notes:
- Asked of all respondents under the age of 65.

Difficulties Accessing Health Care

Barriers to Health Care Access

To better understand healthcare access barriers, survey participants were asked whether any of the following barriers to access prevented them from seeing a physician or obtaining a needed prescription in the past year.

"Was there a time in the past 12 months when you needed medical care, but had difficulty finding a doctor?"

"Was there a time in the past 12 months when you had difficulty getting an appointment to see a doctor?"

"Was there a time in the past 12 months when you needed to see a doctor, but could not because of the cost?"

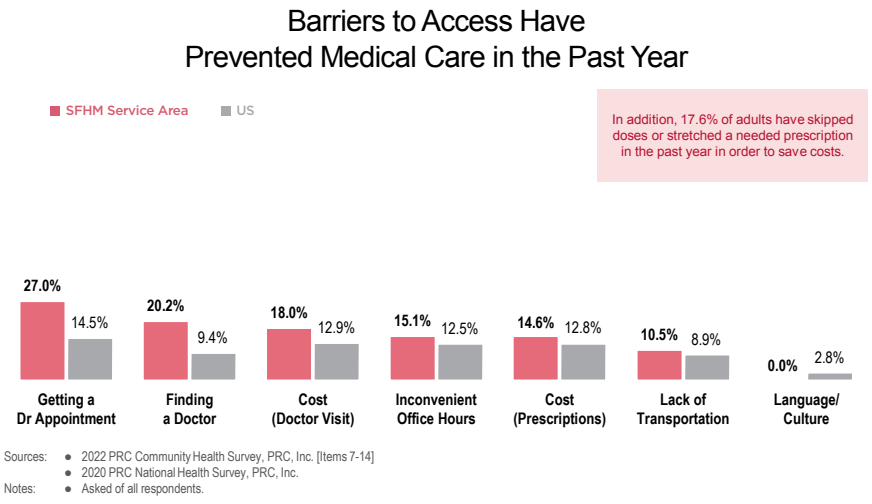
"Was there a time in the past 12 months when a lack of transportation made it difficult or prevented you from seeing a doctor or making a medical appointment?"

"Was there a time in the past 12 months when you were not able to see a doctor because the office hours were not convenient?"

"Was there a time in the past 12 months when you needed a prescription medicine, but did not get it because you could not afford it?"

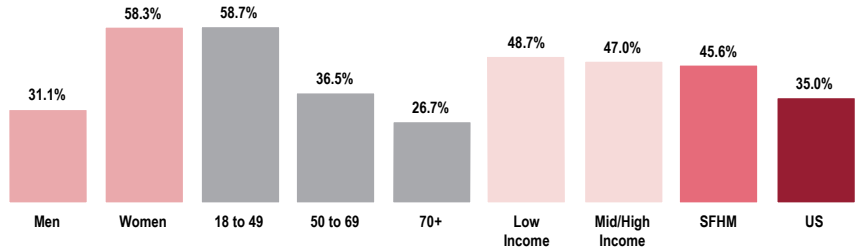
"Was there a time in the past 12 months when you were not able to see a doctor due to language or cultural differences?"

The percentages shown in the following chart reflect the total population, regardless of whether medical care was needed or sought.



The following charts reflect the composite percentage of the total population experiencing problems accessing healthcare in the past year (indicating one or more of the aforementioned barriers or any other problem not specifically asked), again regardless of whether they needed or sought care.

Experienced Difficulties or Delays of Some Kind in Receiving Needed Health Care in the Past Year
(SFHM Service Area, 2022)

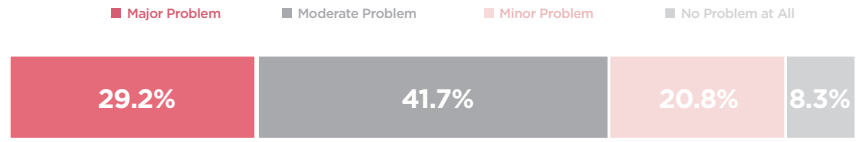


Sources: • 2022 PRC Community Health Survey, PRC, Inc. [Item 140]
Notes: • Asked of all respondents.
• Percentage represents the proportion of respondents experiencing one or more barriers to accessing health care in the past 12 months.

Key Informant Input: Access to Health Care Services

The following chart outlines key informants' perceptions of the severity of Access to Health Care Services as a problem in the communitv:

Perceptions of Access to Health Care Services as a Problem in the Community
(Key Informants, 2022)



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

Among thos

Access to Care/Services

> Sustained and sustainable services in Muskogee County. – Public Health Representative
>
> Appointments for anything take too long. – Community Leader
>
> Availability of primary health care providers. – Community Leader

Contributing Factors

> Lack of insurance coverage for part-time workers, workers who have been laid off during the pandemic, and other members of the community living below the poverty line. – Public Health Representative
>
> It can be difficult to get specialty care. I have a friend who cannot get approved to see a rheumatologist since her previous one retired. My children needed a pediatric GI and we had to travel to OKC and then the Mayo and Cincinnati. We had the resources to do that, but families who cannot make those trips suffer without proper care, often times leading to mental health issues. When physical needs are not met...whether it's getting enough food to eat, the correct medicine at the correct time, the specialty care you need...the entire community suffers one way or another because of the effects of unmet physical needs. I know not everyone has special cases like my family, but unmet health needs is a major problem for every community. – Public Health Representative

Primary Care Services

ABOUT PREVENTIVE CARE

Getting preventive care reduces the risk for diseases, disabilities, and death — yet millions of people in the United States don't get recommended preventive health care services.

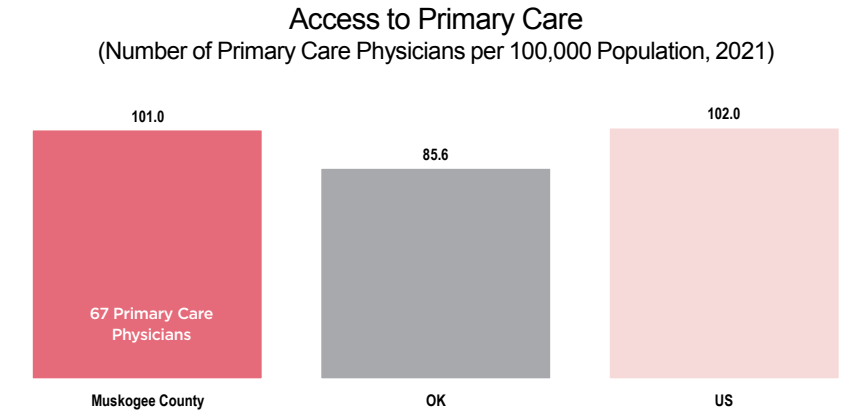
Children need regular well-child and dental visits to track their development and find health problems early, when they're usually easier to treat. Services like screenings, dental check-ups, and vaccinations are key to keeping people of all ages healthy. But for a variety of reasons, many people don't get the preventive care they need. Barriers include cost, not having a primary care provider, living too far from providers, and lack of awareness about recommended preventive services.

Teaching people about the importance of preventive care is key to making sure more people get recommended services. Law and policy changes can also help more people access these critical services.

– *Healthy People 2030 (https://health.gov/healthypeople)*

Access to Primary Care

This indicator is relevant because a shortage of health professionals contributes to access and health status issues.



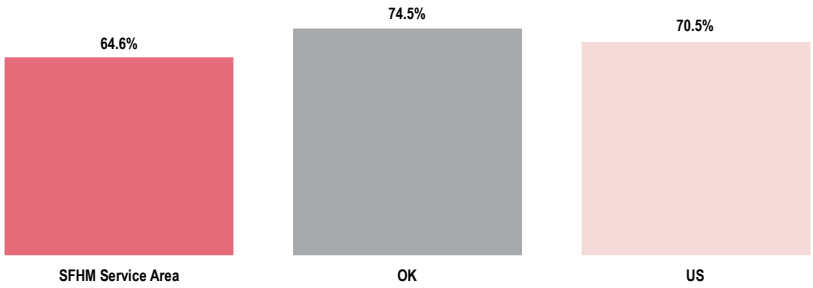
Sources:
- US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved March 2022 via SparkMap (sparkmap.org).

Notes:
- Doctors classified as "primary care physicians" by the AMA include: General Family Medicine MDs and DOs, General Practice MDs and DOs, General Internal Medicine MDs, and General Pediatrics MDs. Physicians age 75 and over and physicians practicing sub-specialties within the listed specialties are excluded. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

Utilization of Primary Care Services

"A routine checkup is a general physical exam, not an exam for a specific injury, illness or condition. About how long has it been since you last visited a doctor for a routine checkup?"

Have Visited a Physician for a Checkup in the Past Year



Sources:
- 2022 PRC Community Health Survey, PRC, 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): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.

Oral Health

ABOUT ORAL HEALTH

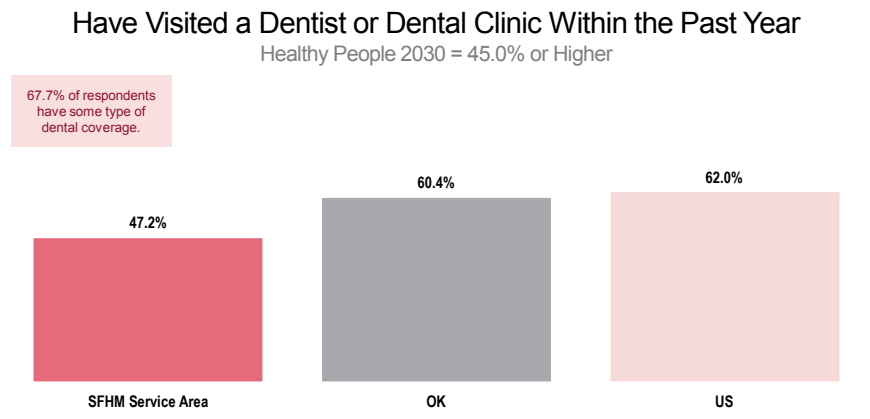
Tooth decay is the most common chronic disease in children and adults in the United States. ...Regular preventive dental care can catch problems early, when they're usually easier to treat. But many people don't get the care they need, often because they can't afford it. Untreated oral health problems can cause pain and disability and are linked to other diseases.

Strategies to help people access dental services can help prevent problems like tooth decay, gum disease, and tooth loss. Individual-level interventions like topical fluorides and community-level interventions like community water fluoridation can also help improve oral health. In addition, teaching people how to take care of their teeth and gums can help prevent oral health problems.

– *Healthy People 2030 (https://health.gov/healthypeople)*

Dental Care

"About how long has it been since you last visited a dentist or a dental clinic for any reason?"

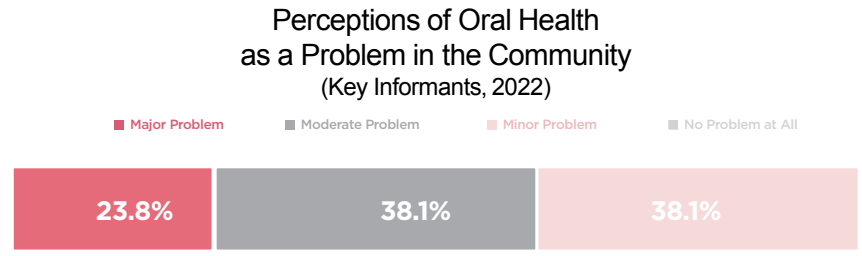


Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Items 20, 21]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Oklahoma data.
- 2020 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

Notes:
- Asked of all respondents.

Key Informant Input: Oral Health

The following chart outlines key informants' perceptions of the severity of Oral Health as a problem in the community:



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

Notes:
- Asked of all respondents.

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

Contributing Factors

> Poor access to dental care due to financial/insurance limitations. – Physician
>
> Many patients without resources for adequate dental care. High percentage of methamphetamine abuse compared to many communities, lack of educational resources regarding importance of dental care. – Physician

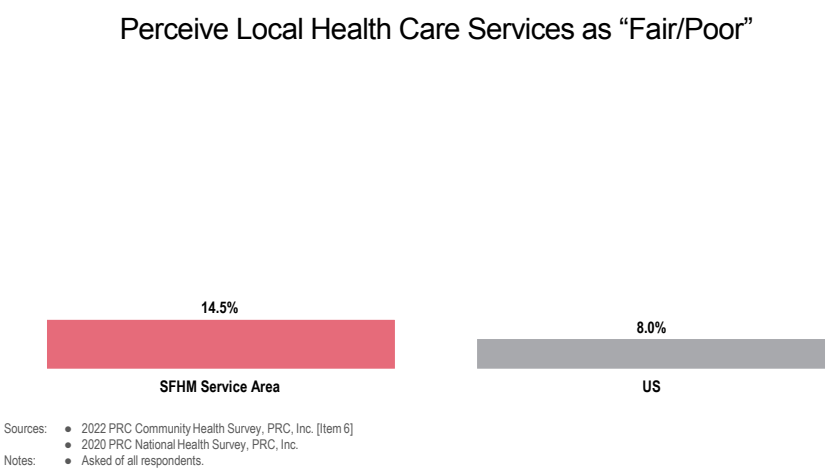
Tobacco Use

> Increased tobacco use along with smoking and chewing tobacco. – Physician

LOCAL RESOURCES

Perceptions of Local Health Care Services

"How would you rate the overall health care services available to you? Would you say: excellent, very good, good, fair, or poor?"



Sources:
- 2022 PRC Community Health Survey, PRC, Inc. [Item 6]
- 2020 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.

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 Health Care Services

- Cherokee Nation Health Clinic
- Good Shepherd Clinic
- Green Country Health Center
- Health Department
- Muskogee County Health Department
- Saint Francis Health System
- Saint Francis Hospital Muskogee
- Urgent Care
- VA

Cancer

- Churches
- Genesis Cancer Treatment
- Genesis Care
- Health Department
- MLK Center
- Saint Francis Cancer Center
- Saint Francis Health System
- Saint Francis Hospital
- Urgent Care
- Veterans Oncology Services
- Warren Clinic
- Women Who Care For Mammography

Chronic Kidney Disease

- Dialysis Center
- Doctor's Offices
- Saint Francis Health System

Coronavirus

- CDC
- Doctor's Offices
- Health Department
- Mayor
- MCHD
- MHD
- MLK Center
- OSDH
- Pharmacies
- Saint Francis Health System
- Tribal Health Services
- Urgent Care

Diabetes

- Cherokee Nation Health Clinic
- Doctor's Offices
- Ernie's Pharmacy
- Health Department
- Muskogee County Health Department
- OU Diabetic Clinic
- Saint Francis Health System

Disabilities

- Doctor's Offices
- Occupational Health Clinic
- Pain Management Clinic
- Saint Francis Health System

Infant Health and Family Planning

- Muskogee County Health Department

Heart Disease

- Doctor's Offices
- Saint Francis Health System
- SFHM
- State Anti-Smoking Campaign

Mental Health

- APS
- Gospel Rescue Mission
- Green Country Behavioral Health
- Green Country Mental Health

Nutrition, Physical Activity, and Weight

- CDC
- Child Nutrition Programs
- Farmer's Market
- Fitness Centers/Gyms
- OSDH
- Parks and Recreation
- Restaurants

Oral Health

- Dentist's Offices

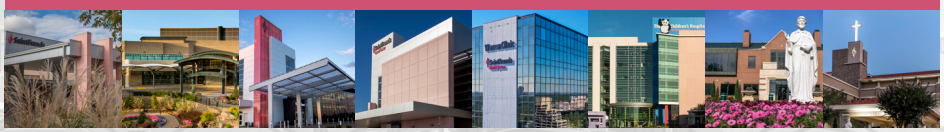
Sexual Health

- CDC
- OSDH

Tobacco Use

- 1-800-Quit-Now
- Cherokee Public Health
- Doctor's Offices
- Green Country Behavioral Health
- Green Country Mental Health
- Health Department
- Increases in Taxation
- Indian Health Nation
- Muskogee County Health Department
- Neighbors Building Neighborhoods
- Neighbors Helping Neighbors
- Oklahoma Help

APPENDIX



EVALUATION OF PAST ACTIVITIES

Community Benefit

Over the past three years, Saint Francis Health System has invested in improving the health of our community's most vulnerable populations. Our commitment to this goal is reflected in:

- Over $422 Million in community benefit.

Of Which;

- More than $251 Million was given through our charity care and other financial assistance programs.

Our work also reflects a focus on community health improvement, as described below.

2020 • 2021 • 2022

Addressing Significant Health Needs

Saint Francis Health System which includes, Saint Francis Hospital, Saint Francis Hospital Muskogee, Saint Francis Hospital South, Saint Francis Hospital Vinita and Laureate Psychiatric Clinic and Hospital conducted its last CHNA in 2019 and reviewed the health priorities identified through that assessment. Taking into account the top-identified needs — as well as hospital resources and overall alignment with the hospital's mission, goals and strategic priorities — it was determined at that time that Saint Francis Health System would focus on developing and/or supporting strategies and initiatives to improve:

- Access to Health Care Services
- Behavioral Health
- Chronic Disease and Stroke
- Lack of Health Insurance/Ability to Pay for Healthcare

Strategies for addressing these needs were outlined in Saint Francis Health System's Implementation Strategy. Pursuant to IRS requirements, the following sections provide an evaluation of the impact of the actions taken by the health system to address these significant health needs in its communities.

Evaluation of Impact

Priority Area: Access to Health Care Services	
Community Health Need	Improve access to primary care and specialty services.
Goal(s)	• Increase health education and preventative care provided in the community setting through partnerships with community organizations, faith-based organizations and other institutions; • Improve access to health care providers to match the increasing need for services in the region through recruitment of physicians and clinical staff, training and development of health professionals; and • Improve access to healthcare providers by developing virtual visit capabilities.

Strategy 1: COMMUNITY PARTNERSHIPS AND EVENTS	
Strategy Was Implemented?	Yes
Target Population(s)	All residents of eastern Oklahoma and the homeless population of Tulsa County
Partnering Organization(s)	Internal: Xavier Medical Clinic, Warren Clinic External: Tulsa Health Department, Muskogee Health Department, Craig County Health Department, John 3:16 Mission, Under the Bridge, Iron Gate, Night Light Tulsa, Catholic Charities of Eastern Oklahoma

Results/Impact	• Flu Vaccination Program:
	  • In FY2020, 248 vaccinations were given at no cost to the homeless population of Tulsa and at Saint Francis' charity clinic. Over the course of the flu campaign, Saint Francis gave 4,662 vaccines to residents of eastern Oklahoma.
	  • In FY2021, 101 vaccinations were given to the homeless population of Tulsa. Overall, Saint Francis gave 10,062 flu shots to residents of eastern Oklahoma
	  • In FY2022, 87 vaccinations were given to the homeless population of Tulsa, Overall, Saint Francis gave 5,849 flu shots to the residents of eastern Oklahoma
	• COVID-19 Vaccination Program:
	  • During the early stages of the pandemic, Saint Francis put out education and information to the public regarding the pandemic. The health system worked closely with the local health departments, local grocery stores in the disbursement of masks and was primary location for storing vaccines for Tulsa and Muskogee County as well as the surrounding communities.
	  • Saint Francis also established a COVID hotline for patients to call with questions, concerns or to schedule an appointment for testing. Over the course of the pandemic the hotline fielded 93,742 calls. Saint Francis was the first drive-thru testing site in Tulsa County, established another in Muskogee County, tested 285,560 patients and gave over 138,671 vaccinations.
	• The Center for Community Health was developed in partnership with the Tulsa Health Department to address the needs of patients who are complex or are high utilizers of healthcare services within Tulsa County. This program was revamped multiple times during the course of the 2019 CHNA implementation to better assist those who were identified and to make the program more effective.
	• In early FY2022, Saint Francis assisted Catholic Charities of Eastern Oklahoma in welcoming 850 Afghan refugees to Tulsa. Specifically, Saint Francis helped with the initial health screenings, donated medical supplies and personal items to support refugees, and helped provide ongoing health assessments of the refugees after their arrival in Tulsa.

Strategy 2: WORKFORCE RECRUITMENT	
Strategy Was Implemented?	Yes
Target Population(s)	Residents of eastern Oklahoma
Partnering Organization(s)	Internal: Warren Clinic External: Oklahoma Manpower Training Commission, OSUCHS
Results/Impact	• In FY2020 the Warren Clinic hired at total of 50 physicians and 25 mid-levels; During this time the Warren Clinic also lost 17 physicians and 30 mid-levels primarily because of the effect on patient volume during the onset of the COVID-19 pandemic. In total the Warren Clinic completed 1,012,285 patient visits in FY2020. • In FY2020 Saint Francis recruited 608 nurses to the system. • In FY2021 the Warren Clinic hired a total of 51 physicians and 33 mid-levels; During this time the Warren Clinic also lost 35 physicians and 17 mid-levels. In total the Warren Clinic completed 1,079,623 patient visits. • In FY2021 Saint Francis recruited 678 nurses to the system. • In FY2022 the Warren Clinic hired a total of 46 physicians and 43 mid-levels; During this time the Warren Clinic also lost 41 physicians 27 mid-levels. In total the Warren Clinic is annualizing to complete 1,131,939 patient visits. • In FY2022 Saint Francis is projecting to recruit a total of 745 nurses.

Strategy 3: TELEHEALTH OUTREACH

Strategy Was Implemented?	Yes
Target Population(s)	Residents of eastern Oklahoma
Partnering Organization(s)	Internal: Saint Francis Health System, Warren Clinic External: US Acute Care Solutions

Results/Impact	• Electronic Visits (E-Visits) – a condition specific online questionnaire that was developed to address patient's non-urgent healthcare needs without requiring a physician visit. (Rash, UTI, etc.)
	  ▪ In FY2020 Saint Francis implemented e-visits and started to enroll employed physicians into the program. A total of 5,935 E-Visits were completed during the year.
	  ▪ In FY2021, there were 8,024 e-visits completed.
	  ▪ In FY2022, the health system is annualizing to complete 7,713 e-visits and increased the number of specific conditions that are allowed to be completed by the questionnaire.
	• Virtual Visits (V-Visits) – Face to Face physician consultations that are being conducted virtually.
	  ▪ Due to the COVID-19 pandemic beginning in the second half of FY2020 and the Public Health Emergency resulting from the pandemic, Saint Francis was able to speed the implementation of its virtual visit capabilities. Commercially available applications such as Facetime, Google Duo and others were made available for virtual visits. In FY2020 Saint Francis conducted 49,164 v-visits.
	  ▪ In FY2021, there were 115,717 v-visits completed. During this time Saint Francis rolled out a 24/7 virtual urgent care option. This option includes a seamless transition from their primary care physician office to the urgent care encounter with all locally based Tulsa providers. Virtual care clinics were also implemented in Vinita and McAlester to allow patients to stay local while seeking specialty care consultations.
	  ▪ In FY2022, Saint Francis transitioned all v-visits to HIPAA compliant software through its EHR System EPIC. In FY2022 Saint Francis is annualizing to complete 78,293 v-visits
	• Saint Francis signed a contract with a remote monitoring vender and gave health monitoring kits to selected patients with a HF diagnosis for ongoing evaluation.

Priority Area: Behavioral Health	
Community Health Need	Improve access and treatment options for behavioral health patients.
Goal(s)	• Improve community access to behavioral health resources, services and education; • Improve access to effective treatments and services for mental health and substance abuse disorders in rural areas; and • Coordinate general and behavioral health to improve outcomes, reduce use of emergency and inpatient care and decrease costs.

Strategy 1: BEHAVIORAL HEALTH COMMUNITY EDUCATION	
Strategy Was Implemented?	Yes
Target Population(s)	Residents and providers of eastern Oklahoma
Partnering Organization(s)	Internal: Laureate Psychiatric Clinic and Hospital External:
Results/Impact	• In FY2020, Dr. John Otis gave a seminar at Laureate Psychiatric Clinic and Hospital on a step-by-step guide of how to use his cognitive behavioral therapy manual for chronic pain with patients. • The Zarrow Symposium at Laureate was held in FY2020 where behavioral health providers from eastern Oklahoma gather to discuss new treatments and protocols around mental health. • Saint Francis conducts major marketing campaigns directed to raising awareness of Mental Health within Tulsa and the surrounding counties. • In FY2022, Laureate begin using their licensed therapist to put together educational sessions and webinars to help educate others within the market about what is going on and how as behavioral health experts they can work to address those issues.

Strategy 2: BEHAVIORAL HEALTH CONTINUUM OF CARE	
Strategy Was Implemented?	Yes
Target Population(s)	Behavioral Health patients throughout the health system
Partnering Organization(s)	Internal: Saint Francis Hospital Vinita, Saint Francis Hospital Muskogee, Saint Francis Hospital, Saint Francis Hospital South and Laureate Psychiatric Clinic and Hospital External: Tulsa Mental Health Association
Results/Impact	• In FY2020 telehealth carts were deployed to SFH-S, SFH-M and SFH-V which gave Laureate physicians the ability to consult with patients at the different locations systemwide. • In order to bring consistency to the psychiatric services within the Saint Francis Health System, all behavioral health services and units on all campuses were consolidated under the Laureate leadership in FY2020. • In FY2022, the Clinical Assessment Department at Laureate gained responsibility for coordinating all behavioral health transfer requests and bed placements across the health system. • In FY2022, Saint Francis rolled out the behavioral health module in EPIC. This module will help with treatment planning and help staff conduct safety checks systemwide.

Strategy 3: BEHAVIORAL HEALTH INTEGRATION WITH PRIMARY CARE AND EMERGENCY SERVICES	
Strategy Was Implemented?	Yes
Target Population(s)	Residents of eastern Oklahoma
Partnering Organization(s)	Internal: Laureate Psychiatric Clinic and Hospital External: Crisis and Recovery Services of Oklahoma, OU School of Community Medicine, Healthy Minds
Results/Impact	• In FY2020 Laureate rolled out a Modified Agitation Severity Scale (MASS) and Behavioral Health Integrated Virtual Clinic (BHIV) to assist with faster response times and awareness of escalating agitation with patients as well as to help with the writing/distributing guidelines for the use of antipsychotic medication for the senior population. MASS generates a set of behaviors for nurses and technicians to be aware of when taking care of mental health patients. When a behavior is recognized, a physician-approved order set can be set in motion to address the behavior in the early stages with physician approval. • In order to help Warren Clinic primary care physicians manage their patients mood disorder medications, a pharmacists at Laureate was made available to help adjust those medications without requiring a psychiatric consult. • In FY2020, the decision was made to remove the embedded licensed clinical social worker (LCSW) in one of the Comprehensive Primary Care Plus offices and instead allow that LCSW to work with multiple offices and extend their reach while also improving their productivity. • In FY2022, Saint Francis Children's Hospital and Laureate worked alongside Crisis and Recovery Services of Oklahoma to establish a pediatric behavioral health urgent care in Tulsa County to help direct behavioral health patients to appropriate care settings. • In FY2022, Saint Francis Health System Board of Directors approved the expansion of Laureate to accommodate a renovation of the clinical assessment department, an observation unit and the addition of a 60 bed geropsychiatric unit. • In FY2022, the BHIV clinic was expanded to help address all behavioral health needs for Warren Clinic patients.

Priority Area: Chronic Disease and Stroke	
Community Health Need	Improving outcomes related to chronic diseases
Goal(s)	• Increase access to high-quality disease prevention and management for chronic diseases and stroke; • Improve access to key specialists in rural areas to improve treatment of chronic diseases and stroke; and • Improve access to high-quality, coordinated cancer care for enrolled Medicare beneficiaries.

Strategy 1: CHRONIC DISEASE OUTREACH PROGRAMS	
Strategy Was Implemented?	Yes
Target Population(s)	Warren Clinic CommunityCare patients
Partnering Organization(s)	Internal: Warren Clinic, Saint Francis Health System External: CommunityCare of Oklahoma, Cipher Health
Results/Impact	• In FY2020, order sets and protocols were standardized and made consistent with scientifically validated clinical practice guidelines across the health system. • In FY2020, Saint Francis Hospital's comprehensive stroke certification was affirmed. • Warren Clinic CommunityCare patients with diabetes receive direct mailings about how to manage their disorder appropriately, encourage the use of screenings and encourage testing. • Every fiscal year during the month of February, Heart month, Saint Francis encourages and markets, heart screening services at all hospital locations. • During the month of October, the health system also markets awareness of breast cancer and encourages residents to get screenings. • In FY2021, the health system rolled out Cipher Health to all hospital locations. Cipher health uses final coded DRGs to match patient cohorts of AMI, HF, COPD and PN. Every patient within the cohort is contacted by an automated phone system after discharge to help the system triage those who may be in need of additional medical care. Each patient receives four outreach calls over 30-days post-discharge.

Strategy 2: RURAL ACCESS TO CHRONIC DISEASE SERVICES	
Strategy Was Implemented?	Yes
Target Population(s)	Rural Oklahoma residents
Partnering Organization(s)	Internal: Saint Francis Hospital Muskogee External:
Results/Impact	• In FY2021, after the closure of a large independent physician practice in Muskogee, the Warren Clinic was able to recruit and retain two cardiologists and a rheumatologists down in Muskogee. • In FY2022, Saint Francis Hospital Muskogee was officially certified as a primary care stroke center. This allows patients from the area the ability to stay local if they end up having a stroke by recognizing SFH-M's commitment in establishing a consistent approach to care and improving outcomes.

Strategy 3: ONCOLOGY CARE MODEL	
Strategy Was Implemented?	Yes
Target Population(s)	Warren Clinic cancer patients
Partnering Organization(s)	Internal: Warren Clinic Medical Oncology, Saint Francis Hospice External:
Results/Impact	• Throughout the implementation of the 2019 CHNA, the Warren Clinic continued to participate and perform well in the Oncology Care advanced payment model. During this time additional oncologists have also been recruited to the Warren Clinic to help with patient demand. • In FY2021, Saint Francis piloted a palliative care program to provide another layer of support to patients being served by Warren Clinic medical oncologists. This program is run out of the Saint Francis cancer center and supported by Saint Francis' hospice team.

Priority Area: Lack of Health Insurance	
Community Health Need	Delivering health services to the uninsured or underinsured
Goal(s)	• Provide access to free primary care, prenatal healthcare, and other services for uninsured or medically underserved populations; • Improve access to healthcare for uninsured or underinsured community populations and improve awareness of available resources; and • Advocate for increased access at both the state and federal level.

Strategy 1: XAVIER CLINIC	
Strategy Was Implemented?	Yes
Target Population(s)	Low-income adults, primarily Spanish speaking
Partnering Organization(s)	Internal: Saint Francis Health System, Warren Clinic External:
Results/Impact	The Xavier Clinic is Saint Francis' free clinic in northeast Tulsa and provides primary care and prenatal care services. • In FY2020, the Xavier Clinic was officially brought under the operational control of the Warren Clinic and Dr. Rose Sloat was appointed as medical director. In FY2020 the Xavier clinic conducted 14,695 visits. • In FY2021 the Xavier clinic conducted 11,712 visits • In FY2022 annualized the Xavier Clinic is projected to conduct 10,613 visits.

Strategy 2: FINANCIAL AND ELIGIBILITY ASSISTANCE	
Strategy Was Implemented?	Yes
Target Population(s)	Low-income and uninsured residents of eastern Oklahoma
Partnering Organization(s)	Internal: Saint Francis Health System External: Med Data
Results/Impact	• Saint Francis' charity care policy in FY2020 and FY2021 was set at 225 percent of the federal poverty level. In FY2022 Saint Francis increased its charity care policy to 250 percent of the federal poverty level. At the same time, the self-pay discount was increased from 20 percent to 60 percent. • In FY2021, in preparation for Medicaid expansion, Saint Francis contracted with MedData to have staff onsite to meet with patients that present to the hospital as self-pay. MedData helps patients, if they qualify, to enroll in Medicaid. • In FY2022, MedData began assisting Saint Francis with patients that were presenting at ambulatory care locations and as the public health emergency comes to an end, will begin to meet with those currently enrolled in Medicaid to ensure they still qualify or to discuss other options that are available to them moving forward.

Strategy 3: MEDICAID EXPANSION AND MEDICAID CLINICS	
Strategy Was Implemented?	Yes
Target Population(s)	Low-income adults
Partnering Organization(s)	Internal: Saint Francis Health System External: WKWF, Zarrow Foundation, OHA, GKFF, ASJ, Fairness Project, Chickasaw Nation
Results/Impact	• In FY2020 Saint Francis Health System joined the Zarrow Foundation, the Chickasaw Nation, the Oklahoma Hospital Association, the George Kaiser Family Foundation, and the Ascension St. John Foundation in funding a political action organization called the Fairness Project to help organize a ballot initiative entitled Yes on 802 and get Medicaid expansion on a ballot so Oklahoman's can vote on whether to expand Medicaid. The campaign was success in getting the need amount of signatures to get the initiative on the ballot and on June 30, 2020 the initiative passed and effectively directed the Oklahoma legislature to make preparations to expand Medicaid by July 1, 2021. • In FY2022, Medicaid expansion took effect and provided health coverage for those low-income adults making up to 133 percent of the federal poverty level. • In response to the increased number of Medicaid beneficiaries, Saint Francis established two Medicaid clinics in the Tulsa area. One at the Xavier Clinic location and the other at the Broken Arrow Elm location. The Xavier Clinic Medicaid clinic opened on July 6, 2021 and the Elm location opened on March 28, 2022.