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# INTRODUCTION

# PROJECT OVERVIEW

# **Project Goals**

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 Cullman Regional Medical Center. 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.

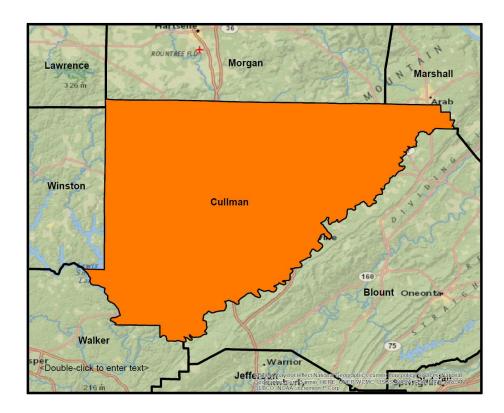
# Methodology

Quantitative data input for this assessment includes secondary research (vital statistics and other existing health-related data) that allows for comparison to benchmark data at the state and national levels.

Qualitative data input includes primary research among community stakeholders gathered through an Online Key Informant Survey.

#### Community Defined for This Assessment

The study area for this effort is Cullman County, Alabama. This community definition, determined based on the areas of residence of most recent patients of Cullman Regional Medical Center, is illustrated in the following map.





#### Online Key Informant Survey

To solicit input from community stakeholders (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 Cullman Regional Medical Center; this list included names and contact information for physicians, public health representatives, other health professionals, social service providers, and a variety of other community leaders. Potential participants were chosen because of their ability to identify primary concerns of the populations with whom they work, as well as of the community overall.

Key informants were contacted by email, introducing the purpose of the survey and providing a link to take the survey online; reminder emails were sent as needed to increase participation. In all, 20 community stakeholders took part in the Online Key Informant Survey, as outlined below:

ONLINE KEY INFORMANT SURVEY PARTICIPATION				
KEY INFORMANT TYPE NUMBER PARTICIPATING				
Physicians	4			
Public Health Representatives 1				
Other Health Providers	1			
Social Services Providers	4			
Community Leaders	10			

Final participation included representatives of the organizations outlined below.

- Alabama Department of Human Resources
- Alabama House of Representatives
- Brook's Place
- Cullman City Schools
- Cullman County Public Health
- Cullman EMS
- Cullman Regional
- Daystar Church
- Internal Medicine Associates of Cullman
- The Link of Cullman County
- Town of Berlin
- Town of Good Hope



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

- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension, SparkMap (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

#### Benchmark Data

#### Alabama and National Data

Where possible, state and national data are provided as an additional benchmark against which to compare local findings.

#### 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.

#### **Determining Significance**

For the purpose of this report, "significance" of secondary data indicators (which might be subject to reporting error) is determined by a 15% variation from the comparative measure.

#### Information Gaps

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

Cullman Regional Medical Center made its prior Community Health Needs Assessment (CHNA) report publicly available through its website; through that mechanism, the hospital requested from the public written comments and feedback regarding the CHNA and implementation strategy. At the time of this writing, Cullman Regional Medical Center 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. Cullman Regional Medical Center 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	6
Part V Section B Line 3b Demographics of the community	20
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	84
Part V Section B Line 3d How data was obtained	6
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	7
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)	88

# 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 Cullman County 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; 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 OPP	ORTUNITY IDENTIFIED THROUGH THIS ASSESSMENT
ACCESS TO HEALTH CARE SERVICES	<ul> <li>Lack of Heath Insurance</li> <li>Access to Primary Care Physicians</li> </ul>
CANCER	<ul><li>Leading Cause of Death</li><li>Lung Cancer Incidence</li></ul>
HEART DISEASE & STROKE	<ul> <li>Leading Cause of Death</li> <li>Stroke Deaths</li> <li>High Blood Pressure Prevalence</li> </ul>
INFANT HEALTH & FAMILY PLANNING	■ Teen Births
INJURY & VIOLENCE	<ul><li>Unintentional Injury Deaths</li><li>Motor Vehicle Crash Deaths</li></ul>
MENTAL HEALTH	<ul> <li>Suicide Deaths</li> <li>Mental Health Provider Ratio</li> <li>Key Informants: Mental health ranked as a top concern.</li> </ul>
NUTRITION, PHYSICAL ACTIVITY & WEIGHT	<ul> <li>Leisure-Time Physical Activity</li> <li>Access to Recreation/Fitness Facilities</li> <li>Key Informants: Nutrition, physical activity, and weight ranked as a top concern.</li> </ul>
ORAL HEALTH	<ul><li>Poor Dental Health</li><li>Access to Dentists</li></ul>
POTENTIALLY DISABLING CONDITIONS	Disability Prevalence

-continued on the following page-

AREAS OF OPPORTUNITY (continued)				
RESPIRATORY DISEASE	<ul><li>Lung Disease Deaths</li><li>COVID-19 Deaths</li></ul>			
SUBSTANCE ABUSE	<ul> <li>Key Informants: Substance abuse ranked as a top concern.</li> </ul>			
TOBACCO USE	<ul> <li>Cigarette Smoking Prevalence</li> <li>Key Informants: Tobacco use ranked as a top concern.</li> </ul>			

#### Community Feedback on Prioritization of Health Needs

Prioritization of the health needs identified in this assessment ("Areas of Opportunity" above) was determined based on a prioritization exercise conducted among community stakeholders (representing a cross-section of community-based agencies and organizations) in conjunction with the administration of the Online Key Informant Survey.

In this process, these key informants were asked to rate the severity of a variety of health issues in the community. Insofar as these health issues were identified through the data above and/or were identified as top concerns among key informants, their ranking of these issues informed the following priorities:

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

#### Hospital Implementation Strategy

Cullman Regional Medical Center 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 the prior CHNA can be found as an appendix to this report.

# Summary Tables: Comparisons With Benchmark Data

The following tables provide an overview of indicators in Cullman County, grouped by health topic.

#### Reading the Summary Tables

- In the following tables, Cullman County results are shown in the larger, gray column.
- The columns to the right of the Cullman County column provide comparisons between local data and any available state and national findings, and Healthy People 2030 objectives. Symbols indicate whether Cullman County compares favorably (⑤), unfavorably (⑥), or comparably (⑥) to these external data.

Note that blank table cells in the tables that follow signify that data are not available or are not reliable for that area and/or for that indicator

	CULLMAN COUNTY vs. BENCHMAR			NCHMARKS
SOCIAL DETERMINANTS	Cullman County	vs. AL	vs. US	vs. HP2030
Population in Poverty (%)	14.9	<i>≦</i> 16.7		8.0
Children in Poverty (%)	19.5	23.9	£ 18.5	8.0
Housing Exceeds 30% of Income	21.4	25.1	30.9	
No High School Diploma (% Age 25+)	18.5	13.8	12.0	
Linguistically Isolated Population (%)	0.6	1.3	4.3	
		better		worse

	<b>.</b>	CULLMAN	COUNTY vs. BE	NCHMARKS
OVERALL HEALTH	Cullman County	vs. AL	vs. US	vs. HP2030
"Fair/Poor" Overall Health (%)	23.5	会		
		22.7	18.6	
			益	
		better	similar	worse

		CULLMAN (	COUNTY vs. BEN	NCHMARKS
ACCESS TO HEALTH CARE	Cullman County	vs. AL	vs. US	vs. HP2030
Uninsured (% Adults 18-64)	17.2	<i>≦</i> 14.8	12.8	7.9
Uninsured (% Children 0-17)	3.4	3.3	5.6	7.9
Recent Primary Care Visit (%)	75.1	<i>€</i> 78.3	<i>€</i> 3 76.6	
Primary Care Doctors per 100,000	88.8	<i>∕</i> ≤ 87.0	102.3	
		better		worse

		CULLMAN COUNTY vs. BENCHMARKS		
CANCER	Cullman County	vs. AL	vs. US	vs. HP2030
Cancer (Age-Adjusted Death Rate)	162.2	<i>△</i> 167.3	<i>≅</i> 149.4	122.7
Prostate Cancer Incidence Rate	74.4	121.9	106.2	
Female Breast Cancer Incidence Rate	111.2	<i>≦</i> 121.4	126.8	
Lung Cancer Incidence Rate	71.9	<i>€</i> 3.7	57.3	
Colorectal Cancer Incidence Rate	39.3	<i>€</i> 2.8	<i>≦</i> 38.0	
Cancer Incidence Rate (All Sites)	431.3	<i>€</i> 3 450.8	448.6	
Mammogram in Past 2 Years (% Women 50-74)	74.2	<b>76.5</b>	<i>₹</i> 3 74.8	
		better	similar	worse

	Cullman County	CULLMAN	COUNTY vs. BEN	NCHMARKS
DIABETES		vs. AL	vs. US	vs. HP2030
Diabetes Prevalence (%)	11.5			
		12.7	10.1	
			Ê	
		better	similar	worse

		CULLMAN (	COUNTY vs. BEN	NCHMARKS
HEART DISEASE & STROKE	Cullman County	vs. AL	vs. US	vs. HP2030
Coronary Heart Disease (Age-Adjusted Death Rate)	89.4			会
		83.7	91.5	90.9
Stroke (Age-Adjusted Death Rate)	48.5	<del>4</del>		
		51.8	37.6	33.4
High Blood Pressure Prevalence (%)	41.5			
		41.9	32.6	27.7
			给	
		better	similar	worse

		CULLMAN	COUNTY vs. BEI	NCHMARKS
INFANT HEALTH & FAMILY PLANNING	T HEALTH & FAMILY PLANNING  County  County		vs. US	vs. HP2030
Infant Mortality Rate	5.5	8.3	<i>≦</i> 3 5.8	5.0
Births to Adolescents Age 15 to 19 (Rate per 1,000)	38.2	29.0	20.9	31.4
		better		worse

	<b>.</b>	CULLMAN	COUNTY vs. BEN	NCHMARKS
INJURY & VIOLENCE	Cullman County	vs. AL	vs. US	vs. HP2030
Unintentional Injury (Age-Adjusted Death Rate)	68.0	55.2	50.4	43.2
Motor Vehicle Crashes (Age-Adjusted Death Rate)	24.4	20.7	11.5	10.1
Homicide (Age-Adjusted Death Rate)	4.9	12.8	6.4	<i>€</i> 5.5
Violent Crime Rate	128.8	504.7	416.0	
		better		worse

		CULLMAN	COUNTY vs. BEN	ICHMARKS
MENTAL HEALTH	Cullman County	vs. AL	vs. US	vs. HP2030
Suicide (Age-Adjusted Death Rate)	21.5	16.2	13.8	12.8
Mental Health Providers per 100,000	99.0	51.3	124.9	
		better		worse

	Cullman	CULLMAN	COUNTY vs. BEN	ICHMARKS
NUTRITION, PHYSICAL ACTIVITY & WEIGHT	County	vs. AL	vs. US	vs. HP2030
Fast Food (Restaurants per 100,000	89.6			
		83.8	82.2	
Population With Low Food Access (%)	8.4			
		24.5	22.2	
No Leisure-Time Physical Activity (%)	27.8			
		26.7	22.0	21.2
Recreation/Fitness Facilities per 100,000	6.2			
		9.0	12.2	
Obese (%)	28.8	给		
		32.0	27.6	36.0

		CHLIMAN	COUNTY vs. BEN	ICHMARKS
	Cullman	CULLIVIAIN	COUNTY VS. DEI	NOTIVIARNO
ORAL HEALTH	County	vs. AL	vs. US	vs. HP2030
Dentists per 100,000	15.9			
		17.3	33.1	
Poor Dental Health (%)	19.0			
		17.7	13.5	
			给	
		better	similar	worse
	<b>.</b>	CULLMAN	COUNTY vs. BEN	ICHMARKS
POTENTIALLY DISABLING CONDITIONS	Cullman County	vs. AL	vs. US	vs. HP2030
Disability Prevalence (%)	17.7			
		16.3	12.6	
			会	
		better	similar	worse
		CULLMAN	COUNTY vs. BEN	NCHMARKS
RESPIRATORY DISEASE	Cullman County	vs. AL	vs. US	vs. HP2030
Lung Disease (Age-Adjusted Death Rate)	75.6			
		56.0	39.1	
Asthma Prevalence (%)	9.7		ớ	
		9.8	8.9	
COVID-19 (Age-Adjusted Death Rate)	436.2			
		396.5	297.1	

better

Ê

similar

worse

		CULLMAN	COUNTY vs. BEI	NCHMARKS
SEXUAL HEALTH	Cullman County	vs. AL	vs. US	vs. HP2030
HIV Prevalence Rate	92.8	330.4	<b>372.8</b>	
Chlamydia Incidence Rate	235.6	583.4	539.9	
Gonorrhea Incidence Rate	110.0	<b>261.4</b>	<b>179.1</b>	
		better	similar	worse
	0 11	CULLMAN	COUNTY vs. BEI	NCHMARKS
SUBSTANCE ABUSE	Cullman County	vs. AL	vs. US	vs. HP2030
Excessive Drinker (%)	15.4	<i>≦</i> ≒	19.2	
		better	similar	worse
	Cullman	CULLMAN	COUNTY vs. BEI	NCHMARKS
TOBACCO USE	County	vs. AL	vs. US	vs. HP2030
Current Smoker (%)	22.5	20.0	15.3	5.0
		better		worse



# COMMUNITY DESCRIPTION

# POPULATION CHARACTERISTICS

# **Total Population**

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)
Cullman County	82,853	734.78	113
Alabama	4,876,250	50,646.44	96
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 April 2022 via SparkMap (sparkmap.org).

#### Population Change 2010-2020

A significant positive or negative shift in total population over time impacts health care providers and the utilization of community resources. The following chart and map illustrate the changes that have occurred in Cullman County between the 2010 and 2020 US Censuses.

#### Change in Total Population (Percentage Change Between 2010 and 2020)

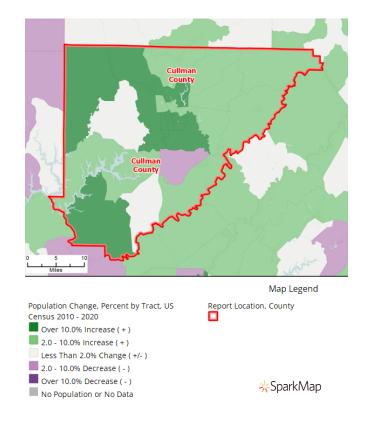




- US Census Bureau Decennial Census (2010-2020).
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

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





# 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.

#### Total Population by Age Groups (2015-2019)





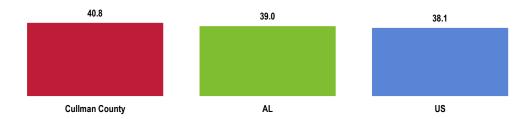
US Census Bureau American Community Survey 5-year estimates.
 Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).



# Median Age

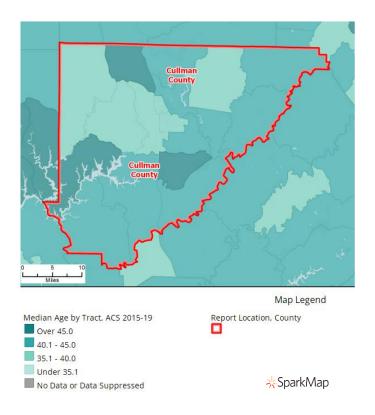
Note the median age of our population, relative to state and national medians.

# Median Age (2015-2019)



Sources:

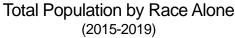
US Census Bureau American Community Survey 5-year estimates.
 Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

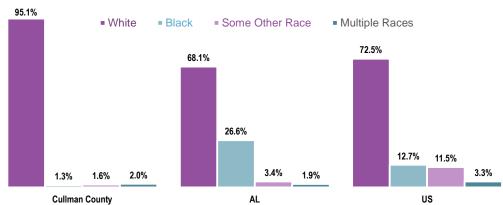




# Race & Ethnicity

The following charts illustrate the racial and ethnic makeup of our community. 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.





Sources:

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

# Hispanic Population (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 April 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.



# Linguistic Isolation

This indicator reports the percentage of the population age 5 years and older who live in a home in which: 1) no person age 14 years or older speaks only English; or 2) no person age 14 years or older speaks a non-English language but also speaks English "very well."

#### Linguistically Isolated Population (2015-2019)

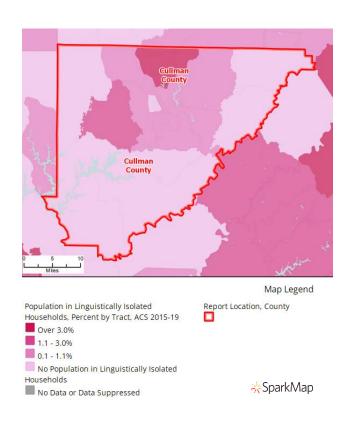
0.6%	1.3%	4.3%
Cullman County	AL	US

- Sources:

  US Census Bureau American Community Survey 5-year estimates.

  Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

This indicator reports the percentage of the population age 5+ who live in a home in which no person age 14+ speaks only English, or in which no person age 14+ speak a non-English language and speak English "very well."





## 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)

## Poverty

Poverty is considered a key driver of health status. This indicator is relevant because poverty creates barriers to accessing health services, healthy food, and other necessities that contribute to optimal health. The following chart and maps outline the proportion of our population below the federal poverty threshold, as well the percentage of children in Cullman County living in poverty, in comparison to state and national proportions.



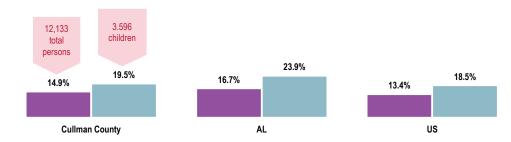
## Population in Poverty

#### (Populations Living Below the Poverty Level; 2015-2019)

Healthy People 2030 = 8.0% or Lower

■ Total Population

Children



- Sources:

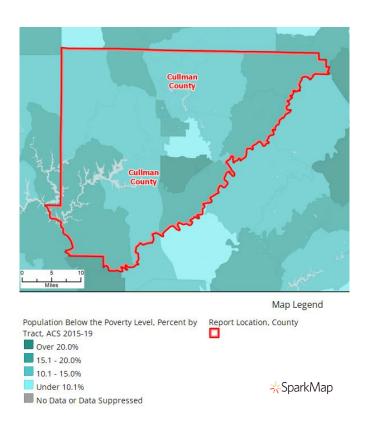
  US Census Bureau American Community Survey 5-year estimates.

  Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

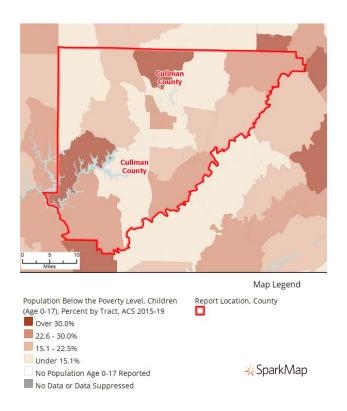
Notes:

US Department of Health and Human Services. Healthy People 2003. August 2030. http://www.healthypeople.gov

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.





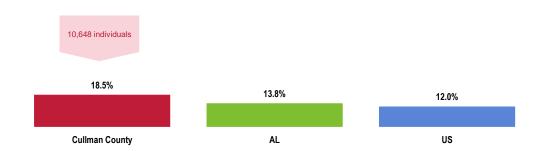




# Education

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

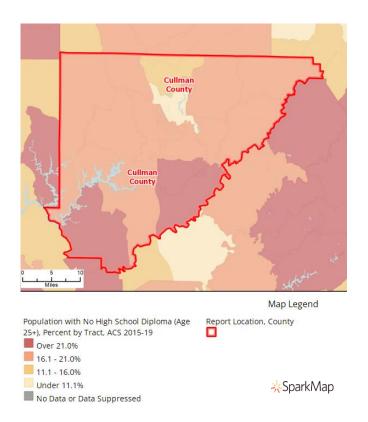
#### Population With No High School Diploma (Population Age 25+ Without a High School Diploma or Equivalent, 2015-2019)



US Census Bureau American Community Survey 5-year estimates.

Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).
 This indicator is relevant because educational attainment is linked to positive health outcomes.

Notes:



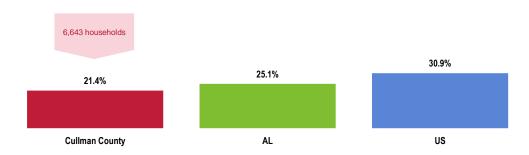


# **Housing Burden**

The following chart shows the housing burden in Cullman County. This serves as a measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels.

"Housing burden" reports the percentage of the households where housing costs (rent or mortgage costs) exceed 30% of total household income.

#### Housing Costs Exceed 30% of Household Income (2015-2019)



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

This indicator reports the percentage of the households where housing costs exceed 30% of total household income. This indicator provides information on the cost of monthly housing expenses for owners and renters. The information offers a measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels.





# **HEALTH STATUS**

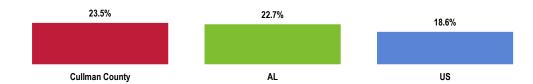
# **OVERALL HEALTH STATUS**

The CDC's Behavioral Risk Factor Survey, from which these data are derived, asked respondents:

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

The following indicator provides a relevant measure of overall health status in Cullman County, noting the prevalence of residents' "fair" or "poor" health evaluations. While this measure is self-reported and a subjective evaluation, it is an indicator which has proven to be highly predictive of health needs.

#### Adults With "Fair" or "Poor" Overall Health (2019)



- Sources: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).
     This indicator is relevant because it is a measure of general poor health status.

Notes:



## MENTAL HEALTH

#### ABOUT MENTAL HEALTH & MENTAL DISORDERS

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.

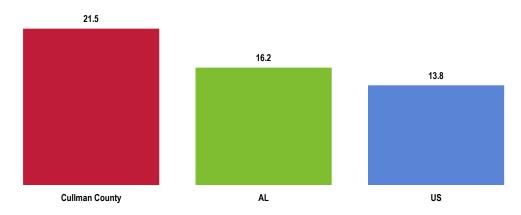
Healthy People 2030 (https://health.gov/healthypeople)

#### Suicide

The following reports the rate of death in Cullman County due to intentional self-harm (suicide), in comparison to statewide and national rates. Here, these rates are age-adjusted to account for age differences among populations in this comparison. This measure is relevant as an indicator of poor mental health.

#### Suicide: Age-Adjusted Mortality (2016-2020 Annual Average Deaths per 100,000 Population)

Healthy People 2030 = 12.8 or Lower



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

Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

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

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

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



Notes:

#### AGE-ADJUSTED DEATH RATES

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

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

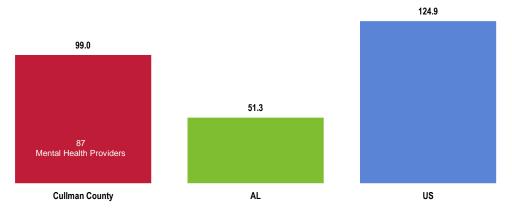
#### Mental Health Providers

The data below show the number of mental health care providers in Cullman County relative to the Cullman County population size (per 100,000 residents). This is compared to the rates found statewide and nationally.

#### 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 Cullman County and residents in Cullman County; it does not account for the potential demand for services from outside the area, nor the potential availability of providers in surrounding areas.

#### Access to Mental Health Providers (Number of Mental Health Providers per 100,000 Population, 2021)



Notes:

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



# Key Informant Input: Mental Health

Key informants' ratings of the severity of Mental Health as a concern in Cullman County are outlined below.

#### Perceptions of Mental Health as a Problem in the Community (Key Informants, 2022)

Major Problem

Moderate Problem

Minor Problem

No Problem At All

73.7%

26.3%

Sources:

PRC Online Key Informant Survey, PRC, Inc.

tes: • Asked of all respondents

#### **Top Concerns**

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

#### Access to Care/Services

I believe the absolute biggest challenge to people suffering with mental health issues today is actual access to some kind of help, i.e., pastoral/professional counseling, access to therapists and psychiatrists. This would lead them to better identify true major mental health conditions in people. Systemically, I believe there is a disconnect between educators/criminal justice in identifying mental health problems earlier on in juveniles so that they can be treated to avoid major issues down the road. Better access for homeless with mental health problems. – Social Services Provider

Limited access to specialty care and services. Four full-time and one part-time psychiatrist serve the county and surrounding areas 90+ thousand residents. – Physician

No inpatient care is available. - Physician

Access to affordable mental health care, residential placements when needed, and child-focused MH services are a significant barrier in the community. No local acute availability – for children in particular. ER is ill-equipped to handle emergency mental health needs for children and have significant barriers to accessing and locating acute placement needs for children and adults. – Social Services Provider

Inpatient psychiatric care for children; treatment for children on the autism spectrum- I have dealt with numerous cases needing these services and must travel outside the county to receive these specialized services. Many people simply cannot travel due to lack of transportation or work schedules. – Social Services Provider

Not enough resources to take care of mental patients. Not much in way of mental health facilities or treatment options. – Community Leader

Not much available support or resources available for those dealing with mental health issues. – Community Leader

There are little to no inpatient facilities for adolescents in our area. The schools are dealing with unprecedented mental health issues involving students. – Community Leader

#### **Contributing Factors**

Most mental health patients lack the resources to pay for counseling and possible pharma that is required to balance their mental health issues. Their families are ill equipped to help them with these services and as a result, lose patients and drop them off at the hospital for care. Our hospital lacks the staffing that is enough to help these patients. — Community Leader

Access to medical help and funding to help them. - Community Leader

Lack of monitoring and use of medication. - Community Leader

Mental health is an issue all over the United States. It IS NOT a problem for the police or sheriff's departments, it is a HEALTH issue. Challenges are lack of facilities that are qualified to help and house mentally capable of caring for themselves. One thing I think IS NOT a mental health issue is DRUGS. Drugs ARE NOT mental health problems, that is a whole other subject. — Community Leader



Access to care and intervention without social repercussion and stigma. – Physician Diagnosis, support, counseling, psychiatric care, legal issues. – Community Leader

#### Prevention/Screenings

Lack of curbing the "victim mentality" in early childhood development. – Other Health Provider





# DEATH, DISEASE & CHRONIC CONDITIONS

# 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.

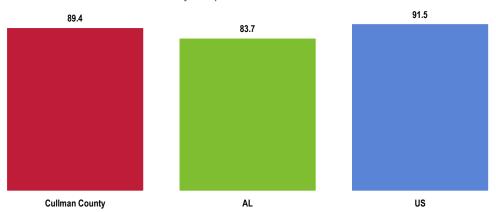
Healthy People 2030 (https://health.gov/healthypeople)

# **Coronary Heart Disease Deaths**

Coronary heart disease is a leading cause of death in Cullman County and throughout the United States. The chart that follows illustrates how our (age-adjusted) mortality rate compares to rates in Alabama and the US.

## Coronary Heart Disease: Age-Adjusted Mortality (2016-2020 Annual Average Deaths per 100,000 Population)

Healthy People 2030 = 90.9 or Lower



- Sources: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER.
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

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

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

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

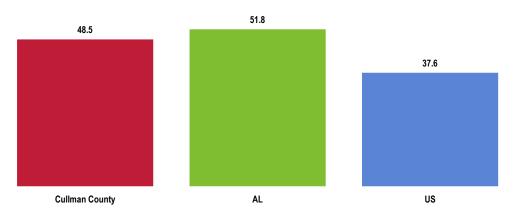


# Stroke Deaths

Stroke, a leading cause of death in Cullman County and throughout the nation, shares many of the same risk factors as heart disease. Outlined in the following chart is a comparison of stroke mortality locally, statewide, and nationally.

# Stroke: Age-Adjusted Mortality (2016-2020 Annual Average Deaths per 100,000 Population)

Healthy People 2030 = 33.4 or Lower



- Sources: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER.
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

 US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov
 Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10). Notes:

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

# **High Blood Pressure**

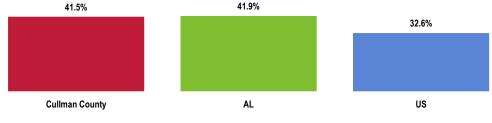
Uncontrolled high blood pressure (hypertension) can damage the body and lead to disability or heart attack and stroke. As can be seen in the following chart, a significant share of Cullman County adults have been told by a health professional at some point that their blood pressure was high.

## Prevalence of High Blood Pressure (2019)

Healthy People 2030 = 27.7% or Lower

The CDC's Behavioral Risk Factor Survey asked:

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





- Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse.
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

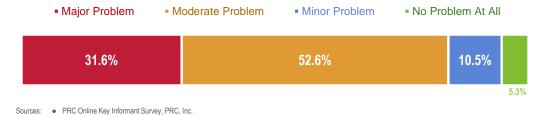
  - US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov
    This indicator is relevant because coronary heart disease is a leading cause of death in the US and is also related to high blood pressure, high cholesterol, and

Notes:

# Key Informant Input: Heart Disease & Stroke

Outlined below are key informants' levels of concern for *Heart Disease & Stroke* as an issue in Cullman County.

## Perceptions of Heart Disease and Stroke as a Problem in the Community (Key Informants, 2022)



## **Top Concerns**

Notes:

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

#### Access to Care/Services

Asked of all respondents.

Lack of specialized care available. – Other Health Provider
Stroke victims generally seek treatment in other cities. – Community Leader

#### Co-Occurrences

Our community is filled with overweight people. We have a large amount of diabetic and pre-diabetic patients in our community, some of whom do not know their disease even exists. – Community Leader

With rampant diabetes, poor diet, limited exercise, and common heart disease, stroke and heart attacks are very common in our community. – Physician

#### Incidence/Prevalence

I chose this due to the amount of personal interactions I have had with people that have had some sort of heart condition. – Social Services Provider

Vascular disease. - Physician

## **Contributing Factors**

Residents do not exercise or see cardiologist regularly. - Community Leader



# **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.

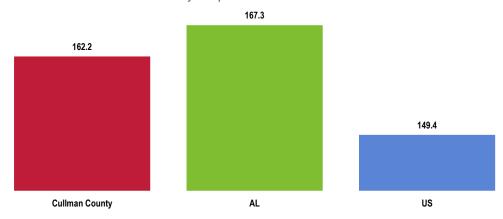
Healthy People 2030 (https://health.gov/healthypeople)

# Age-Adjusted Cancer Deaths

Cancer is a leading cause of death in Cullman County and throughout the United States. Age-adjusted cancer mortality rates are outlined below.

## Cancer: Age-Adjusted Mortality (2016-2020 Annual Average Deaths per 100,000 Population)

Healthy People 2030 = 122.7 or Lower



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

Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).
 US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

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

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



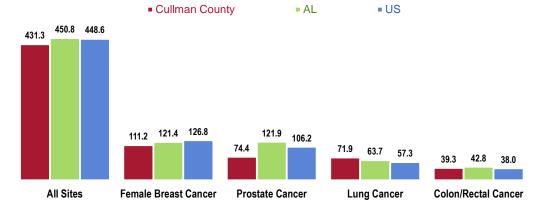
# Cancer Incidence

"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.

It is important to identify leading cancers by site in order to better address them through targeted intervention. The following chart illustrates Cullman County incidence rates for leading cancer sites, including female breast cancer, lung cancer, prostate cancer, and colon/rectum cancer.

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

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



- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 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 cancer separately to better target interventions.

#### ABOUT CANCER RISK

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

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



# **Mammograms**

#### FEMALE BREAST CANCER

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

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

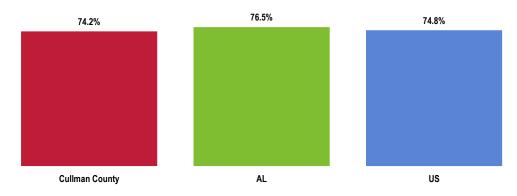
Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

The following indicator outlines the percentage of women age 50–74 who have received a mammogram in the past two years. Mammography is important as a preventive behavior for early detection and treatment of health problems. Low screening levels can highlight a lack of access to preventive care, a lack of health knowledge, or other barriers.

## Mammogram in Past Two Years

(Females Age 50-74; 2018)

Healthy People 2030 = 77.1% or Higher



Sources: • Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care.

- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

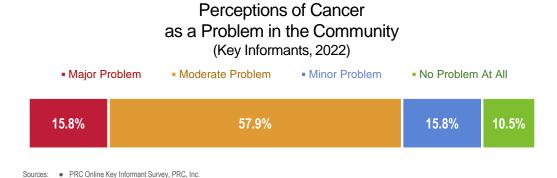
Notes: 

This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems.



# Key Informant Input: Cancer

Key informants' perceptions of Cancer as a local health concern are outlined below.



## **Top Concerns**

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

## **Contributing Factors**

We seem to have a high cancer rate, yet I think there is a lack of testing and therefore a lack of diagnosing cancer early. Also, we don't have many cancer treatment facilities. – Community Leader

#### Prevalence/Incidence

Many people have cancer. The cost is burdensome. The pain extends to the entire family. - Community Leader

#### Diagnosis/Treatment

Lack of diagnostics, treatment. – Community Leader



# 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.

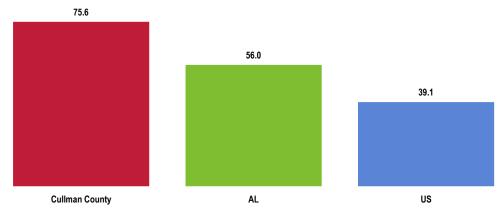
Healthy People 2030 (https://health.gov/healthypeople)

# Lung Disease Deaths (CLRD)

The mortality rate for lung disease in Cullman County is summarized below, in comparison with Alabama and national rates.

Note: Here, lung disease reflects chronic lower respiratory disease (CLRD) deaths and includes conditions such as emphysema, chronic bronchitis, and asthma.

# Lung Disease: Age-Adjusted Mortality (2016-2020 Annual Average Deaths per 100,000 Population)



Sources:

- Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).
   Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

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

This indicator is relevant because lung disease is a leading cause of death in the United States.



# Asthma Prevalence

The following chart shows the prevalence of asthma among Cullman County adults.

The CDC Behavioral Risk Factor Survey asked respondents:

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

## Prevalence of Asthma (2019)



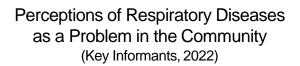
- Sources: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES.
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

Notes: Asked of all respondents.

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

# Key Informant Input: Respiratory Disease

The following outlines key informants' perceptions of Respiratory Disease in our community.





PRC Online Key Informant Survey, PRC, Inc.

Asked of all respondents.

# **Top Concerns**

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

#### Lack of Providers



Large numbers of patients with pulmonary diseases and limited access to specialty care and services. Two pulmonologists, only one of which is accepting patients for the county and surrounding areas 90+ thousand residents. - Physician

#### **Contributing Factors**

Smoking and pesticides. – Community Leader

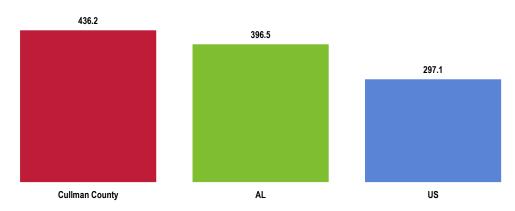
#### Tobacco Use

Large population of advanced COPD due to tobacco abuse. - Physician

## COVID-19

The county's COVID-19 mortality rate as of April 2022 is summarized below, in comparison with Alabama and national rates.

## COVID-19: Age-Adjusted Mortality (Deaths per 100,000 Population as of April 2022)



Notes:

- Sources: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER.
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).
  - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

# Key Informant Input: Coronavirus Disease/COVID-19

Key informants' levels of concern about Coronavirus Disease/COVID-19 in Cullman County is outlined below.

## Perceptions of Coronavirus Disease/COVID-19 as a Problem in the Community (Key Informants, 2022)



Moderate Problem

Minor Problem

No Problem At All

30.0% 30.0% 40.0%



PRC Online Key Informant Survey, PRC, Inc.

Asked of all respondents.

# **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

Unintentional injury is a leading cause of death. The chart that follows illustrates unintentional injury death rates for Cullman County, Alabama, and the US.

## Unintentional Injuries: Age-Adjusted Mortality (2016-2020 Annual Average Deaths per 100,000 Population)

Healthy People 2030 = 43.2 or Lower





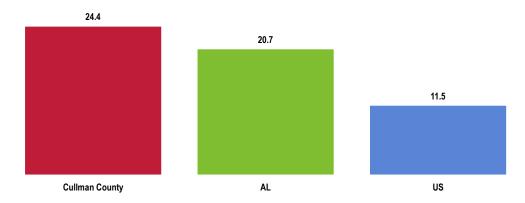
- Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER.
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov Notes:
  - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population

# Age-Adjusted Motor Vehicle Crash Deaths

Motor vehicle crashes contribute to a significant share of unintentional injury deaths in the community. Mortality rates for motor vehicle crash deaths are outlined below.

## Motor Vehicle Crashes: Age-Adjusted Mortality (2016-2020 Annual Average Deaths per 100,000 Population)

Healthy People 2030 = 10.1 or Lower



- Sources: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER.
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org),
- US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10). Notes:
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
  - This indicator is relevant because motor vehicle crash deaths are preventable, and they are a cause of premature death.

# Intentional Injury (Violence)

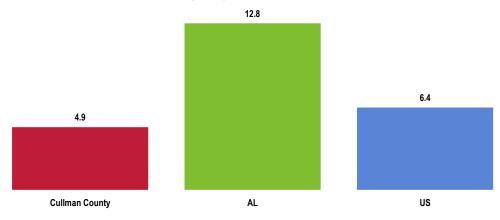
# Age-Adjusted Homicide Deaths

Homicide is a measure of community safety and a leading contributed to years of potential life lost. Homicide mortality rates for Cullman County, Alabama, and the US are shown in the following chart.

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

## Homicide: Age-Adjusted Mortality (2016-2020 Annual Average Deaths per 100,000 Population)

Healthy People 2030 = 5.5 or Lower



- - Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).
  - US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population

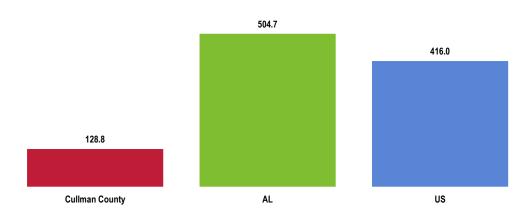
Violent crime is composed of four offenses (FBI Index offenses): murder and non-negligent manslaughter; forcible rape; robbery; and aggravated assault.

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

#### Violent Crime Rate

The following chart shows the rate of violent crime per 100,000 population in Cullman County, Alabama, and the US.





- Federal Bureau of Investigation, FBI Uniform Crime Reports.

  Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

  This indicator reports the rate of violent crime offenses reported by the sheriffs 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

# Key Informant Input: Injury & Violence

Key informants' perceptions of Injury & Violence in our community:

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

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

50.0%

45.0%

Notes:

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



# 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)

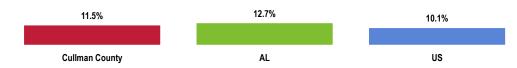
## Prevalence of Diabetes

Diabetes is a prevalent and long-lasting (chronic) health condition with a number of adverse health effects, and it may indicate an unhealthy lifestyle. The prevalence of diabetes among Cullman County adults age 20 and older is outlined below, compared to state and national prevalence levels.

Prevalence of Diabetes (Adults Age 20 and Older; 2019)

The CDC Behavioral Risk Factor Survey asked respondents:

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



Sources:

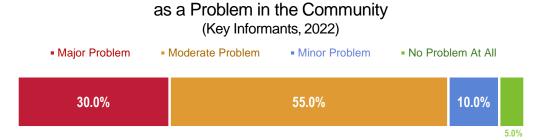
- Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

This indicator is relevant because diabetes is a prevalent problem in the US; it may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.



# Key Informant Input: Diabetes

The following are key informants' ratings of Diabetes as a health concern in Cullman County.



Perceptions of Diabetes

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

## **Top Concerns**

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

#### Awareness/Education

Information and support regarding healthy living habits in regards to diabetes. – Social Services Provider Lack of opportunities to learn healthy options to control diabetes. – Community Leader

#### Access to Affordable Healthy Food

Access to reliable, affordable food options to manage via diet, especially when other medical conditions limit the number of options available to the person. – Community Leader

#### Contributing Factors

Lack of insurance coverage for newer, more effective meds, no PCP due to insurance issues, noncompliance. – Physician

#### Education/Awareness

Lack of education and weight loss help. – Community Leader



# KIDNEY DISEASE

#### ABOUT KIDNEY DISEASE

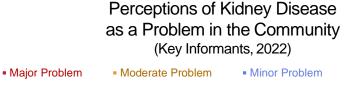
More than 1 in 7 adults in the United States may have chronic kidney disease (CKD), with higher rates in low-income and racial/ethnic minority groups. And most people with CKD don't know they have it. ...People with CKD are more likely to have heart disease and stroke — and to die early. Managing risk 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)

# Key Informant Input: Kidney Disease

The following are the perceptions of *Kidney Disease* as a community health issue among key informants taking part in an online survey.





No Problem At All

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

## **Top Concerns**

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

#### Co-Occurrences

There is a large population already on dialysis and will continue to worsen considering the high rate of diabetes in our community. – Physician

#### Lack of Specialty Care

Large numbers of patients with CKD and limited access to specialty care and services. Single nephrologist serves the county and surrounding areas 90+ thousand residents. – Physician



# POTENTIALLY DISABLING CONDITIONS

# Disability

#### **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)

The following represents the percentage of the total civilian, non-institutionalized population in Cullman County with a disability. This indicator is relevant because disabled individuals may comprise a vulnerable population that requires targeted services and outreach.

Population With Any Disability (Total Civilian Non-Institutionalized Population; 2015-2019)

Disability data come from the US Census Bureau's American Community Survey (ACS), Survey of Income and Program Participation (SIPP), and **Current Population** Survey (CPS). All three surveys ask about six disability types: hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, selfcare difficulty, and independent-living difficulty.

Respondents who report any one of the six disability types are considered to have a disability.



Sources: 

US Census Bureau, American Community Survey.

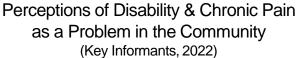
Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

Notes: • This indicator is relevant because disabled individuals comprise a vulnerable population that requires targeted services and outreach by providers.



# Key Informant Input: Disability & Chronic Pain

Key informants' perceptions of Disability & Chronic Pain are outlined below.





## **Top Concerns**

Asked of all respondents.

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

#### Addiction

I have been at the hospital's emergency room and witnessed a lady sitting in the waiting room crying to receive pain medication. The attendant said she was a regular visitor. Also, I hear people in the community talking about the crisis involving pain medication. - Community Leader

I think the pain medication problem contributes to the chronic pain problem. - Public Health Representative

#### Aging Population

Care for our elderly. - Community Leader

We have an aging population and with that comes back, hip, knee, and joint pain. - Community Leader

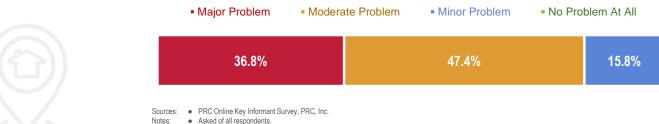
#### Contributing Factors

Large numbers of patients with disability from multiple problems, including chronic pain. Limited access to specialty care, support services and organizations. - Physician

# Key Informant Input: Dementia/Alzheimer's Disease

The following represents key informants' ratings of Dementia/Alzheimer's Disease as a community health concern.

# Perceptions of Dementia/Alzheimer's Disease as a Problem in the Community (Key Informants, 2022)





## **Top Concerns**

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

### **Contributing Factors**

The elderly seem to be living longer and with working children, may or may not have resources for daily care and companionship. Another issue would be access/paying for long-term care facilities that specialize in this type of health issue. – Community Leader

Lack of diagnosis, follow up, and care facilities. - Community Leader

There do not appear to be many services available to diagnose patients. Also, need help for family members and caregivers. – Community Leader

#### Lack of Providers

Limited professionals for treatment. - Community Leader

We have very little access to a neurologist. The one active neurologist that we do have in our community will only see MS patients. To see a neurologist, you have to make an appointment at least 6 months in advance. My husband has Parkinson's disease and getting care and guidance for his disease and treatment is almost impossible. We also need more physical and speech therapists to help handle stroke, Parkinson's and MS patients. – Community Leader

### Prevalence/Incidence

Many residents are dealing with dementia and Alzheimer's disease. Neurologists are in short supply. – Community Leader

#### Access to Care/Services

Limited access to specialty care, support services and organizations. - Physician





# BIRTHS

# **BIRTH OUTCOMES & RISKS**

#### 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)

# **Infant Mortality**

The following chart shows the number infant deaths per 1,000 live births in Cullman County. High infant mortality can highlight broader issues relating to health care access and maternal/child health.

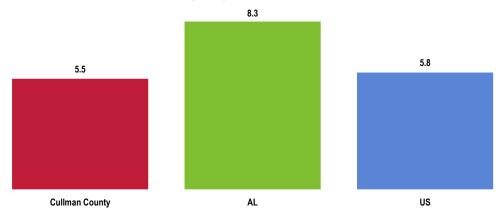
#### Infant mortality includes the death of a child before his/her first birthday, expressed as the number of such

deaths per 1,000 live

births.

# Infant Mortality Rate (Annual Average Infant Deaths per 1,000 Live Births, 2013-2019)

Healthy People 2030 = 5.0 or Lower



- Sources:

   Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER.

   Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).
  - 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.

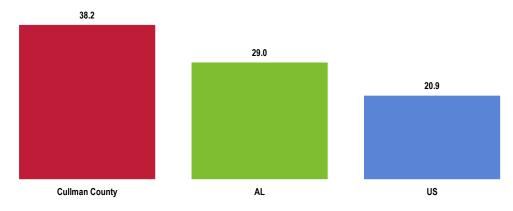
Healthy People 2030 (https://health.gov/healthypeople)

## Births to Adolescent Mothers

The following chart outlines the teen birth rate in Cullman County, compared to rates statewide and nationally. In many cases, teen parents have unique health and social needs. High rates of teen pregnancy might also indicate a prevalence of unsafe sexual behavior.

Here, teen births include births to women ages 15 to 19 years old, expressed as a rate per 1,000 female population in this age cohort.

## Teen Birth Rate (Births to Adolescents Age 15-19 per 1,000 Females Age 15-19, 2013-2019) Healthy People 2030 = 31.4 or Lower



Notes:

- Sources: Centers for Disease Control and Prevention, National Vital Statistics System
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).
  - US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

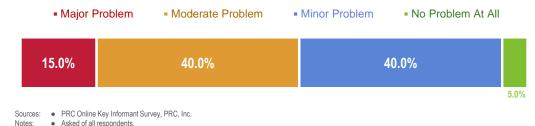
• This indicator is relevant because in many cases, teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate the prevalence of unsafe sex practices.



# Key Informant Input: Infant Health & Family Planning

Key informants' perceptions of *Infant Health & Family Planning* as a community health issue are outlined below.

# Perceptions of Infant Health and Family Planning as a Problem in the Community (Key Informants, 2022)



## **Top Concerns**

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

### **Unplanned Pregnancy**

Throughout my personal and professional life I have encountered many teens and adults that are dealing with unplanned pregnancies. I have watched it be one of the best things that ever happened to someone, and I have also watched it completely wreck the lives of others. I believe better awareness and prevention could and would help the situation. – Social Services Provider

#### Access to Care/Services

Most travel out of town for care. - Community Leader

#### **Contributing Factors**

I think there is a lack of family planning and a lack of pediatricians. – Community Leader





# 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.

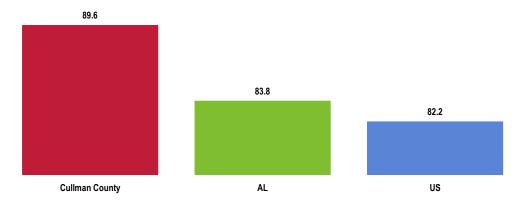
Some people don't have the information they need to choose healthy foods. Other people don't have access to healthy foods or can't afford to buy enough food. Public health interventions that focus on helping everyone get healthy foods are key to reducing food insecurity and hunger and improving health.

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

# Food Environment: Fast Food

The following shows the number of fast-food restaurants in Cullman County, expressed as a rate per 100,000 residents. This indicator provides a measure of healthy food access and environmental influences on nutrition.

# Fast Food Restaurants (Number of Fast Food Restaurants per 100,000 Population, 2019)



Sources:

- US Census Bureau, County Business Patterns. Additional data analysis by CARES.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

• This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.



Here, fast food restaurants are defined

as limited-service establishments primarily engaged in providing food services (except

snack and nonalcoholic beverage bars) where

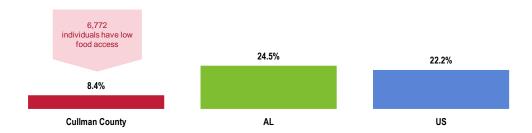
patrons generally order or select items and pay before eating.

# Access to Healthful Food

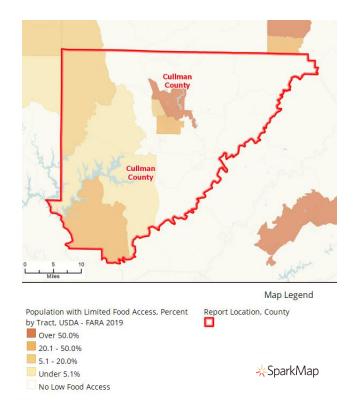
Low food access is defined as living more than 1/2 mile from the nearest supermarket, supercenter, or large grocery store.

The following chart shows US Department of Agriculture data determining the percentage of Cullman County residents found to have low food access, meaning that they do not live near a supermarket or large grocery store.

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



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





# 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

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

Below is the percentage of Cullman County adults age 20 and older who report no leisure-time physical activity in the past month. This measure is important as an indicator of risk for significant health issues such as obesity or poor cardiovascular health.

## No Leisure-Time Physical Activity in the Past Month (Adults Age 20+, 2019)

Healthy People 2030 = 21.2% or Lower

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



- Sources: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES.
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension, Retrieved April 2022 via SparkMap (sparkmap.org)

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

This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as obesity and poor cardiovascular health.



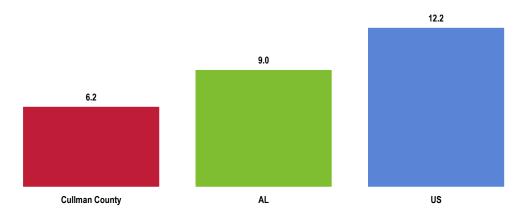
# Access to Physical Activity

The following chart shows the number of recreation/fitness facilities for every 100,000 population in Cullman County. This is relevant as an indicator of the built environment's support for physical activity and other healthy behaviors.

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

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

## Population With Recreation & Fitness Facility Access (Number of Recreation & Fitness Facilities per 100,000 Population, 2019)



Sources:

US Census Bureau, County Business Patterns. Additional data analysis by CARES.
Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).

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



# **WEIGHT STATUS**

#### ABOUT OVERWEIGHT & OBESITY

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 (m²). To estimate BMI using pounds and inches, use: [weight (pounds)/height squared (inches²)] x 703.

In this report, overweight is defined as a BMI of 25.0 to 29.9 kg/m² and obesity as a BMI  $\geq$ 30 kg/m². The rationale behind these definitions is based on epidemiological data that show increases in mortality with BMIs above 25 kg/m². The increase in mortality, however, tends to be modest until a BMI of 30 kg/m² is reached. For persons with a BMI  $\geq$ 30 kg/m², 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/m².

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.

CLASSIFICATION OF OVERWEIGHT AND OBESITY BY BMI	BMI (kg/m²)
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.



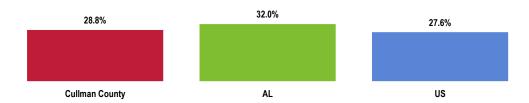
# Obesity

"Obese" includes respondents with a BMI value ≥30.0.

Outlined below is the percentage of Cullman County adults age 20 and older who are obese, indicating that they might lead an unhealthy lifestyle and be at risk for adverse health issues.

## Prevalence of Obesity (Adults Age 20+ With a Body Mass Index ≥ 30.0, 2019)

Healthy People 2030 = 36.0% or Lower



- Sources: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org)
     US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

• 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.

• This indicator is relevant because excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

# **Key Informant Input:** Nutrition, Physical Activity & Weight

Key informants' ratings of Nutrition, Physical Activity & Weight as a community health issue are illustrated below.

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

Major Problem

Moderate Problem

Minor Problem

No Problem At All

40.0% 40.0% 10.0% 10.0%

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

Asked of all respondents.



## **Top Concerns**

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

### Contributing Factors

Education, cost effective healthy options, available restaurants with healthy options for busy families. – Community Leader

Lack of personal desire to be fit. Lack of knowledge of how to eat healthy. Lack of money to buy healthy foods. – Community Leader

Large numbers of patients with obesity and related illnesses and limited access to specialty care and services. No dietary, nutrition, and counseling referral resources in the county. – Physician

#### Access to Affordable Healthy Food

I think food cost. I also think the convenience of cheap and fast unhealthy foods makes that more appealing. – Public Health Representative

I believe the biggest challenge with this is access to affordable locally grown food, i.e. farmers markets, nutrition assistance programs, etc. – Social Services Provider

#### Awareness/Education

In the past, people were taught the food pyramid that included the recommended largest portions to be bread. I have to wonder if that is the diabetes pyramid. People are not taught to eat a well-balanced diet based on their individual health needs. – Community Leader

#### Lifestyle

Eating control and no exercise. - Community Leader

#### Co-Occurrences

Lots of obesity and poor nutrition. – Physician



# 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)

# **Excessive Alcohol Use**

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.

The following illustrates the prevalence of excessive drinkers in Cullman County, as well as statewide and nationally. Excessive drinking is linked to significant health issues, such as cirrhosis, certain cancers, and untreated mental/behavioral health issues.

## **Excessive Drinkers** (2018)





- Sources: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse.
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org),

Notes:

• This indicator reports the percentage of adults aged 18 and older who self-report heavy alcohol consumption (defined as more than two drinks per day on average for men and one drink per day on average for women). This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs



# Key Informant Input: Substance Abuse

Note the following perceptions regarding *Substance Abuse* in the community among key informants taking part in an online survey.

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



## **Top Concerns**

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

#### Access to Care/Services

Asked of all respondents

Treatment centers are expensive and difficult to run, so not many centers are available. If they are available, the patient has to put his/her entire life on hold for a period of time to get effective treatment. – Community Leader Availability of long-term and inpatient facilities for patients truly dedicated to resolving their issues and the funding to support such facilities. – Community Leader

Availability of resources, treatment centers beyond 12-step programs. - Physician

#### **Contributing Factors**

The patient's desire to get help. Lack of a facility that can provide needed treatment. No funding. – Physician Drug addiction is a huge problem all throughout this community. Finances and bed availability are the biggest issues we face. Personal drug counseling is also being stretched thin. – Social Services Provider

#### Denial/Stigma

Public opinion is a great barrier. Denial of problems and the need for intervention are large problems. – Community Leader

#### Opioid Addiction

Opioid addiction is all around. – Community Leader

#### Affordable Care/Services

Cost. I think more people would be interested in treatment if they could afford it. - Public Health Representative

#### Disease Management

Patients that are non-participatory in their care or are pre-contemplative regarding getting off illicit substances. – Physician

#### Easy Access

Access to drugs readily available. - Community Leader

#### **Funding**

Funding. - Physician

#### Law Enforcement

Lack of accountability with the court system. - Other Health Provider



## Most Problematic Substances

Note below which substances key informants (who rated this as a "major problem") identified as causing the most problems in Cullman County.

# SUBSTANCES VIEWED AS MOST PROBLEMATIC IN THE COMMUNITY

(Among Key Informants Rating Substance Abuse as a "Major Problem")

ALCOHOL	41.7%
METHAMPHETAMINE OR OTHER AMPHETAMINES	33.3%
HEROIN OR OTHER OPIOIDS	16.7%
CLUB DRUGS (e.g., MDMA, GHB, ECSTASY, MOLLY)	8.3%



# **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 Prevalence

Tobacco use is linked to the two major leading causes of death: cancer and cardiovascular disease. Note below the prevalence of cigarette smoking in our community.

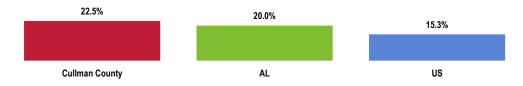
## **Current Smokers** (2019)

Healthy People 2030 = 5.0% or Lower

The CDC Behavioral Risk Factor Surveillance Survey asked respondents:

"Do you now smoke cigarettes every day, some days, or not at all?"

"Current smokers" are defined as those who smoke every day or on some days.



- Sources: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse.
  - Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved April 2022 via SparkMap (sparkmap.org).
  - US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov

Notes: • Includes regular and occasional smokers (those who smoke cigarettes every day or on some days).

. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease



# Key Informant Input: Tobacco Use

Below are key informants' ratings of Tobacco Use as a community health concern.

## Perceptions of Tobacco Use as a Problem in the Community (Key Informants, 2022)



## **Top Concerns**

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

#### Incidence/Prevalence

I have personally been affected by tobacco use and have seen it throughout my whole life. I have watched numerous people that I know personally and professionally be diagnosed with tobacco-related medical conditions. A major problem today is the use of vapes by teenagers, which contain a higher amount of nicotine than cigarettes. – Social Services Provider

There are very few adult clients that I see that do not smoke. I see numerous kids either as victim clients or through juvenile court who vape. – Social Services Provider

Young people, as well as older adults, continue to use tobacco. New stores are popping up to sell tobacco and vaping supplies. – Community Leader

High smoking rates. - Physician

#### Impact on Quality of Life

Number of cancer cases related to tobacco use. - Community Leader

Large population of smokers with advanced COPD. - Physician

It causes cancer, respiratory issues. - Community Leader

#### Parental Influence

There are many issues with tobacco that children learn early on at home from their parents, so they continue that behavior or have turned to vaping, which is worse in my opinion. – Community Leader

#### **Contributing Factors**

Easily accessible. Highly addictive. Misconception that vaping is better than smoking cigarettes. Generational habit. – Public Health Representative



## 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).

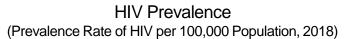
Adolescents, young adults, and men who have sex with men are at higher risk of getting STIs. And people who have an STI may be at higher risk of getting HIV. Promoting behaviors like condom use can help prevent STIs.

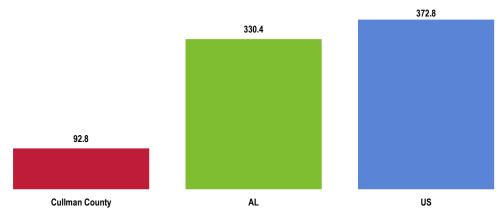
Strategies to increase screening and testing for STIs can assess people's risk of getting an STI and help people with STIs get treatment, improving their health and making it less likely that STIs will spread to others. Getting treated for an STI other than HIV can help prevent complications from the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

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

### HIV

The following chart outlines the prevalence of HIV in our community, expressed as a rate per 100,000 population.





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 April 2022 via SparkMap (sparkmap.org).

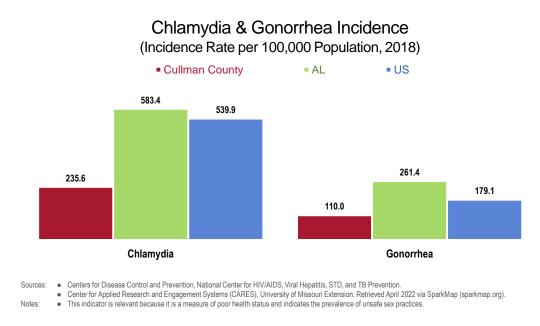
This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the



# Sexually Transmitted Infections (STIs)

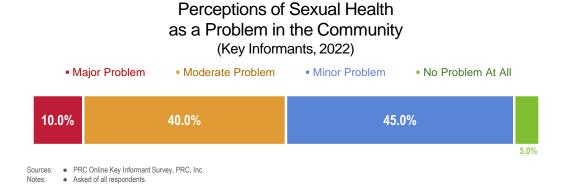
### Chlamydia & Gonorrhea

Chlamydia and gonorrhea are reportable health conditions that might indicate unsafe sexual practices in the community. Incidence rates for these sexually transmitted diseases are shown in the following chart.



# Key Informant Input: Sexual Health

Key informants' ratings of Sexual Health as a community health concern are shown in the following chart.





## **Top Concerns**

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

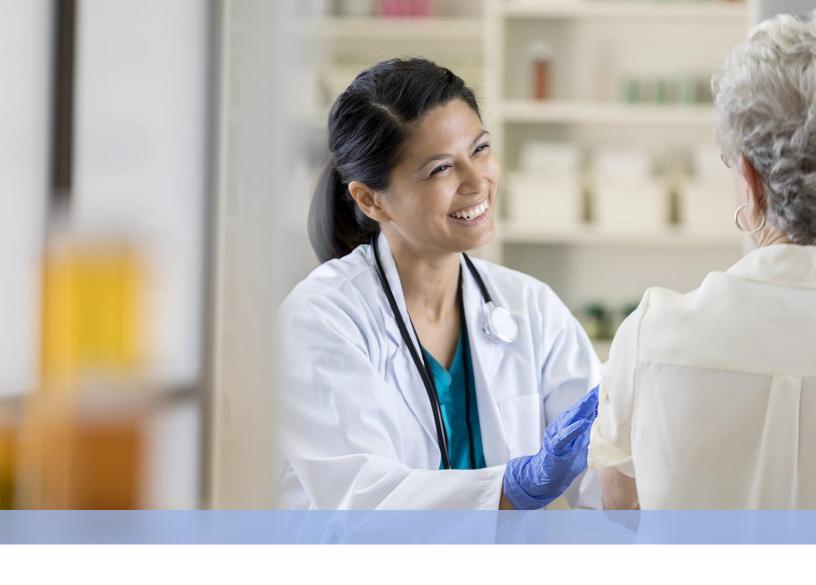
### Incidence/Prevalence

Very high number of sexually transmitted diseases. – Community Leader

### **Contributing Factors**

Multiple sexually transmitted infections. Lack of education on resources for testing/treatment options. – Public Health Representative





# ACCESS TO HEALTH CARE

## BARRIERS TO HEALTH CARE ACCESS

### 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

Health insurance coverage is a critical component of health care access and a key driver of health status. The following chart shows the latest figures for the prevalence of uninsured adults (age 18 to 64 years) in Cullman County.

### Uninsured Population (2019)

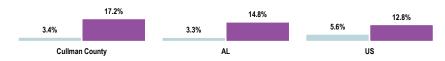
Healthy People 2030 Target = 7.9%

■ Children (0-17) ■ Adults (18-64)



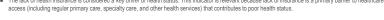
Here, lack of health insurance coverage

reflects respondents age 18 to 64 (thus, excluding the Medicare population)



Sources:

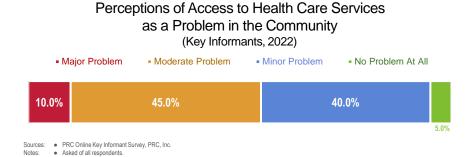
US Census Bureau, Small Area Health Insurance Estimates. & American Community Survey 5-year estimates.
Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension, Retrieved April 2022 via SparkMap (sparkmap.org).
US Department of Health and Human Services. Healthy People 2030. August 2030. http://www.healthypeople.gov
The lack of health insurance is considered a *key driver* of health status. This indicator is relevant because lack of insurance is a primary barrier to healthcare





# Key Informant Input: Access to Health Care Services

Key informants' ratings of *Access to Health Care Services* as a problem in Cullman County is outlined below.



### **Top Concerns**

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

### **Contributing Factors**

From my professional standpoint, I work with a lot of people that are considered low income or disabled. I believe that for a majority of those people it simply comes down to money. They do not have the financial resources that they need to access good quality healthcare. While some of them may qualify for Medicare/Medicaid/Marketplace, they either do not know how to apply, or they THINK they are not eligible. I believe that it would benefit the community to make it more easily aware to them of just what they might be able to qualify for. Cullman even has a nonprofit clinic that I would say a majority of the community, especially the rural community, do not know exists. AWARENESS is what I would say we could improve on the most. – Social Services Provider Lack of knowledge about services that are available, but primarily lack of insurance or access to Medicaid. – Community Leader



## 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.

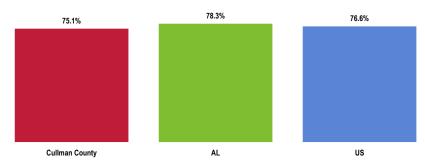
Teaching people about the importance of preventive care is key to making sure more people get recommended services. Law and policy changes can also help more people access these critical services.

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

# **Primary Care Visits**

The following chart reports the percentage of Cullman County adults who have had at least one visit to a doctor for a routine checkup in the past year.

### Primary Care Visit in the Past Year (2019)



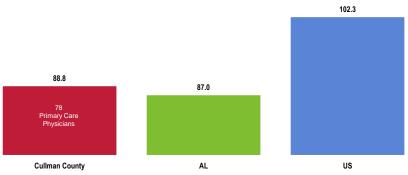


# Access to Primary Care

The following indicator outlines the number of primary care physicians per 100,000 population in Cullman County. Having adequate primary care practitioners contributes to access to preventive care.

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.

## Access to Primary Care (Number of Primary Care Physicians per 100,000 Population, 2021)



- 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 April 2022 via SparkMap (sparkmap.org).

Doctors dassified as "primary care physicians" by the AMA includer. 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.



## **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)

## **Access to Dentists**

The following chart outlines the number of dentists for every 100,000 residents in Cullman County.

This indicator includes all dentists — qualified as having a doctorate in dental surgery (DDS) or dental medicine (DMD), who are licensed by the state to practice dentistry and who are practicing within the scope of that license.

### Access to Dentists (Number of Dentists per 100,000 Population, 2021)



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 April 2022 via SparkMap (sparkmap.org).

This indicator reports the number of dentists per 100,000 population. This indicator includes all dentists, qualified as having a doctorate in dental surgery (DDS) or dental medicine (DMD), who are licensed by the state to practice dentistry and who are practicing within the scope of that license.



### Poor Dental Health

The following chart shows the percentage of Cullman County adults age 18 and older who have lost all of their natural teeth due to tooth decay or disease. This indicator can signify a lack of access to dental care and/or other barriers to the use of dental services.

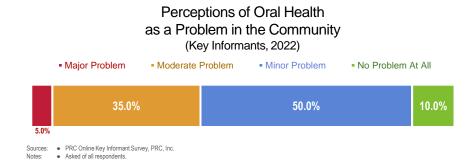
> Adults With Poor Dental Health (Loss of All Natural Teeth by Decay or Disease, 2018)



- - disease, or infection. This indicator is relevant because it indicates lack of access to dental care and/or social barriers to utilization of dental services.

# Key Informant Input: Oral Health

Key informants' perceptions of Oral Health are outlined below.



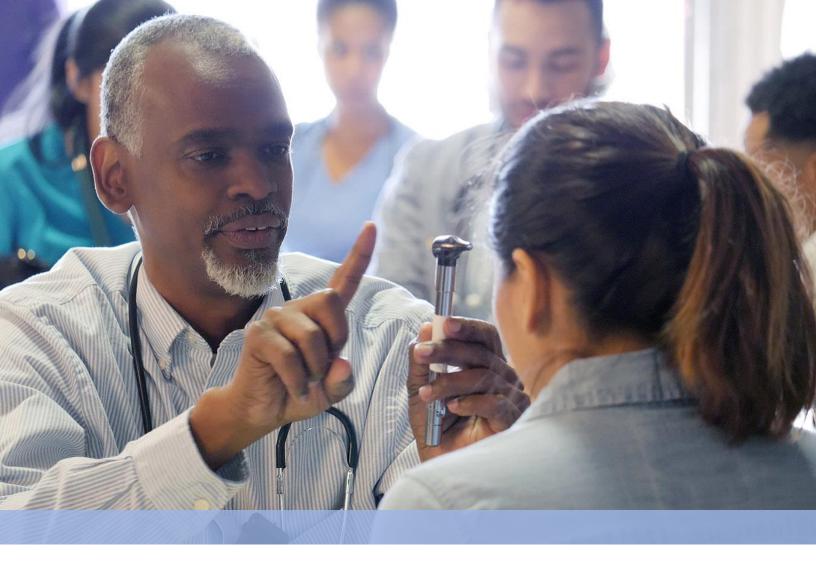
## **Top Concerns**

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

### Affordable Care/Services

Restricted access to dentist due to the cost of proper dental care. Rising insurance costs also play a huge part. – Social Services Provider





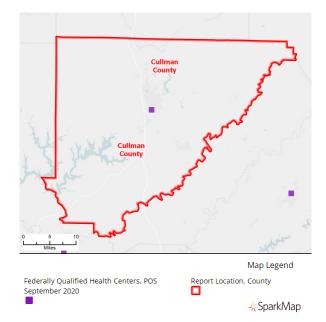
# LOCAL RESOURCES

# **HEALTH CARE RESOURCES & FACILITIES**

# Federally Qualified Health Centers (FQHCs)

The following map details Federally Qualified Health Centers (FQHCs) within Cullman County.

FQHCs are community assets that provide health care to vulnerable populations; they receive federal funding to promote access to ambulatory care in areas designated as medically underserved.





# 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

Cullman Area Mental Health
Cullman Regional Medical Center
First Source for Women
Good Samaritan Health Clinic
Hospice of Cullman County
The Link of Cullman County
Wallace State Community College Dental
Program

#### Cancer

Cullman Regional Medical Center Doctor's Offices Good Samaritan Health Clinic

### Dementia/Alzheimer's Disease

Cullman Primary Care
Cullman Regional Medical Center
Doctor's Offices
Hanceville Nursing Home
Morningside/The Neighborhood
Westminster Assisted Living

#### **Diabetes**

Cullman Regional Medical Center Dietician Doctor's Offices Good Samaritan Health Clinic

#### **Disability & Chronic Pain**

Cullman Pain and Wellness
Cullman Regional Medical Center

#### **Heart Disease & Stroke**

Cullman Regional Medical Center Doctor's Offices Good Samaritan Health Clinic Weight Watchers

### Infant Health & Family Planning

Cullman Health Department Cullman Primary Care First Source for Women Good Samaritan Health Clinic

### **Kidney Disease**

Cullman Regional Medical Center Doctor's Offices Good Samaritan Health Clinic

### **Mental Health**

Churches
Counselors
Cullman Area Mental Health
Cullman Primary Care
Cullman Regional Medical Center
Doctor's Offices
Good Samaritan Health Clinic
Haven Counseling
Hospitals
Integrated Behavioral Health
Mental Health Department
The Reid House
Therapists

### Nutrition, Physical Activity, & Weight

Wellstone

AG Center
Cullman Aquatic Center
Cullman Regional Medical Center
Doctor's Offices
Farmer's Coop
Farmer's Market
Fitness Centers/Gyms
Food Banks
Gardens



Good Samaritan Health Clinic Professional Weight Loss WIC

### **Oral Health**

Wallace State Community College Dental Program

### **Respiratory Disease**

Cullman Regional Medical Center Doctor's Offices Good Samaritan Health Clinic

### Sexual Health

1917 Clinic UAB

Churches

Doctor's Offices

Health Department

School System

Thrive Clinics

### **Substance Abuse**

AA/NA

Alabama Adult and Teen Challenge

Counselors

CREAA

Cullman Area Mental Health

Doctor's Offices

**Emergency Department** 

Foundry Farm

Living Free

Oasis Men and Women's House

Parkside

Restoring Women Outreach

Suboxone Clinic

The Foundry

### **Tobacco Use**

1-800-QUIT-NOW

Cullman Juvenile Probation

Cullman Regional Medical Center

Doctor's Offices

VAPE Court





# **APPENDIX**

## **EVALUATION OF PAST ACTIVITIES**

### **Priority Area: Heart Disease**

Goal: Reduce mortality rate for heart disease in Cullman County

**STRATEGY 1:** Continue to operate the Community Paramedic Program through Cullman Emergency Medical Services and multidisciplinary Readmissions Team with a targeted focus on congestive heart failure (CHF), including use of a dedicated Case Manager and conducting regular meetings with area nursing homes, home health and hospice agencies, and assisted living facilities to improve coordination of care.

Strategy was implemented - Yes, this was implemented

**Target population** – In hospital CHF patients, without a primary care physicians and social support network, that were at high risk for readmission or had a history of readmissions.

Partnering organization – CEMS, nursing homes, home health/hospice agencies, assisted living facilities

**Results/Impact** – With patients who were receptive to this program it was very successful. Patients in the program saw a noticeable reduction in re-admission rate.

**STRATEGY 2:** Continue to provide free health screenings at community events at locations throughout Cullman County, including targeting low income and minority populations, and referrals to an appropriate physician for follow-up care.

**Strategy was implemented** – No, due to COVID-related limitations. Community events were canceled as part of COVID precautions.

**STRATEGY 3:** Expand interventional cardiology coverage through recruitment of an additional interventional cardiologist.

**Strategy was implemented** – No new interventional cardiologists have been added to Cullman Regional's Medical Staff, however efforts to recruit are ongoing.

Target Population – Hospital's service area

Partnering organization - n/a

**Results/Impact** – The hospital was able to continue performing diagnostic heart catheterizations but refers to other healthcare facilities outside of Cullman for interventional cardiology.

**STRATEGY 4:** Improve screening and early detection of heart disease through promotion of CRMC's new diagnostic tests, including calcium scoring and CT angiography.

**Strategy was implemented** – Yes, calcium scoring and CT angiography are now performed at the Imaging Center and these services have been promoted to referring physicians in the hospital's services area.

Target Population - Hospital's service area

Partnering organization - Diagnostic Imaging department, Cardiovascular Services department

**Results/Impact –** Patients now have convenient access to these important diagnostic tests.



**STRATEGY 5:** Continue use of CRMC's Team focused on heart failure, providing specific education and tools/toolkits to heart failure patients and tracking specific heart failure statistics. Continue to expand heart failure education at patient discharge.

**Strategy was implemented** – Yes. Patients with new diagnosis of CHF are given a CHF kit that consisted of a large canvas bag, digital scale, blood pressure kit, medication organizer, reading material on healthy choices when grocery shopping and eating out.

Target population – New diagnosed CHF patients

Partnering organization - American Heart Association

**Results/Impact** - Reduction of readmits on patients that received the kits. No readmits within a year of patients receiving the kit.

STRATEGY 6: Continue to partner with the American Heart Association related to multiple initiatives.

**Strategy was implemented** – Yes, Cullman Regional has supported and participated in several AHA projects including the Annual Heart Walk and multiple social media campaigns. In 2020 the hospital was recognized as a GOLD recipient of the AHA Workplace Health Solutions award.

Target population - hospital patients, employees and residents in Cullman Regional service area

Partnering organizations - AHA, Cardiovascular Services department, Marketing department

Results/Impact – Increased awareness about heart health (78,000 reached)

**STRATEGY 7:** Recruit additional general cardiologists and physician extenders.

Strategy was implemented - Yes, the hospital recruited and added one cardiologist in July 2021.

Target population - Cullman Regional service area

Partnering organization - Physician Services department

**Results/Impact** – Adding another cardiologist allowed the hospital to provide care for more patients and expand cardiology physician care services to a second clinic located in an adjacent community.



# Priority Area: Access to Care/Continuity of Care Goal: Improve access to care and continuity of care for Cullman County residents.

**STRATEGY 1:** Continue to operate and grow the Community Paramedic Program through Cullman Emergency Medical Services, with a re-centered focus on patients discharged to home as the most vulnerable population of patients.

**Strategy was implemented** – No, due to staffing shortages the hospital has not been able to implement this plan to its fullest.

**STRATEGY 2:** Recruit additional primary care and specialty physicians to serve the unmet needs of the community.

**Strategy was implemented** – Yes, since April 2020 Cullman Regional has recruited and added seven primary care physicians to its employed physician group.

Target population - Cullman Regional service area

Partnering organization - Physician Service department

**Results/Impact** - Adding primary care physicians allowed the hospital to provide care for more patients and expand primary care services to a second clinic located in an adjacent community.

**STRATEGY 3:** Continue to use/expand use of multidisciplinary Readmissions Team and participate in the North Alabama Readmission Coalition, including incorporating best practices and partnering with nursing homes, home health and hospice agencies, and assisted living facilities to improve care coordination.

**Strategy was implemented** – Yes. Cullman Regional implemented an ER Express program to expedite care when patients were transported by EMS from one of these facilities to our ER. We put a plan in place to make sure medical records were returned to the facility in a timely fashion so the patients' information could be updated and improve continuity of care. Our ER team also worked with our EMS partners to transfer custody of the patient in a timely manner facilitating the return of EMS units to service.

Target population – Patients transferred from nursing homes and like facilities

Partnering organizations – EMS services, nursing homes, home health and hospice agencies, and assisted living facilities within a four-county area

**Results/Impact** - The results of this program were increased EMS transports into our ER, better communication, coordination and continuity of care for the patients.

**STRATEGY 4:** Continue to partner with and build patient bridge to Good Samaritan Health Clinic, including the provision of a nurse practitioner and other financial support, promoting awareness in community among local physicians, and working to minimize patient paperwork and facilitate the application process.

**Strategy was implemented** – Yes, Cullman regional continues to pay salary for Good Samaritan nurse practitioner and allows clinic to use the hospital's charity application process. Additionally, Cullman Regional's Chief Nursing Officer serves on the Good Samaritan Board of Directors.

Target population – Uninsured adults residing in Cullman County

Partnering organization - Good Samaritan Clinic, Cullman Regional

Results/Impact - In 2021, Good Samaritan had 2,437 patient visits and accepted 158 new patients.



**STRATEGY 5:** Continue to provide free health screenings at community events at locations throughout Cullman County, including targeting low income and minority populations, and referrals to an appropriate physician for follow-up care. (Heart Disease Action #2)

**Strategy was implemented** - No, due to COVID-related limitations. Community events were canceled as part of COVID precautions.

**STRATEGY 6:** Continue to assist individuals in health insurance enrollment, including contracting with a Medicaid eligibility provider.

**Strategy was implemented** – Yes, Cullman Regional has a dedicated, onsite contract employee in the hospital's Business Office who assists patients with health insurance enrollment and Medicaid eligibility.

Target population – uninsured patients

Partnering organizations - Business Office department, contract vendor

**Results/Impact** – Since 2019, an average of 313 patients per year have become eligible for Medicaid as a result of the screening process.

**STRATEGY 7:** Continue to operate a physician referral line and continue to enhance physician information, including scheduling online physician appointments, available on CRMC's website.

**Strategy was implemented** – Not fully. The physician referral line services have continued and the hospital has posted physician profiles for employed physicians on its website. The hospital engaged a vendor to enable online scheduling, but that process has not been completed. Expected completion is by the end of 2022.

**STRATEGY 8:** Continue to provide nurse navigators for indigent cancer patients.

**Strategy was implemented** – No, but through administrative support Cullman Regional does continue to connect patients with appropriate community resources.

**STRATEGY 9:** Continue to partner with and serve as a sponsor of The Link of Cullman County.

**Strategy was implemented** – Yes, Cullman Regional has continued its support of The Link through sponsorships.

Target population -Underserved population in Cullman County

Partnering organizations - The Link, Cullman Regional Marketing department

**Results/Impact** – The hospital's support of The Link means it can provide its programs and services to more people in need.

STRATEGY 10: Make primary care telehealth services available to the community.

**Strategy was implemented** – Yes, Cullman Regional established telehealth access for multiple employed providers including each primary care, psychiatry, registered dietitian, and some physician specialists.

Target population - patients of employed providers

**Results/Impacts** – Providing telehealth visits has encouraged more patients to seek medical care when COVID restrictions were in place and continues to be a good option for some patients.



### **Priority Area: Obesity**

Goal: Reduce the proportion of Cullman County residents that are obese.

**STRATEGY 1:** Continue to work toward changing negative health behaviors through community health education/outreach.

**Strategy was implemented** – Yes, with some exceptions due to COVID-related limitations. Cullman Regional partnered with Yutaka, Thompson Tractor, Daikin, and American Trim to provide corporate health screening and education programs through the hospital's Mobile Unit.

Target population - Cullman County residents

Partnering organizations – Laboratory Services department, Nursing department, multiple local employers and fitness centers

**Results/Impact** – Efforts to reach community through local employers have been well received and allowed hospital to reach almost 1,000 employees. As COVID precautions are lifted, the hospital will evaluate community outreach opportunities.

**STRATEGY 2:** Continue to partner with North Alabama Agriplex to promote healthy lifestyles, including offering nutrition education, healthy cooking classes (using the mobile kitchen), and supporting use of healthy produce.

**Strategy was implemented -** No, due to COVID-related limitations. This initiative relied on community events to provide education and information. Community events were canceled as part of COVID precautions.

**STRATEGY 3:** Develop and implement an employee campaign with the goal of weight reduction, including offering prizes.

**Strategy was implemented** - Yes, all employees on the hospital's medical plan were required to complete wellness screenings annually including lab work and waist circumference measurements. The program also included an online component to log exercise and healthy habits which allowed employees to qualify for gift cards/prizes.

Target population - Employees with hospital insurance

Partner organizations - Employee Health

**Results/Impact** - The initial wellness program did not achieve desired results. The hospital replaced it with a new self-guided program called Healthy Life which provides information and education about healthy lifestyle choices and weight loss. Certain co-pays are waived for participating employees.



### **Priority Area: Diabetes**

Goal: Reduce the proportion of Cullman County residents that are diabetic.

**STRATEGY 1:** See Obesity Implementation Strategy.

**STRATEGY 2:** Enhance diabetic education opportunities throughout the community, including to wound care patients.

**Strategy was implemented** – Yes, Cullman Regional hired an endocrinologist who collaborates with the hospital's Wound Care Clinic and provides physician care to diabetic patients. The hospital also hired a registered dietitian who is completing training to become a Certified Diabetes Educator.

Target population - diabetes patients

Partnering organizations - Cullman Regional Metabolic and Surgical Clinic, Wound Care Clinic

**Results/Impact** – More clinical providers specializing in diabetes care enables the hospital to better educate and care for the diabetic and pre-diabetic population in Cullman County.

**STRATEGY 3:** Investigate opportunities for case management staff to assist with providing diabetic supplies to indigent patients, including referring eligible patients to the Good Samaritan Health Clinic.

**Strategy was implemented** – Yes, Case Management works with staff dietitians and nutritionists as well as supporting organizations including local pharmacies to provide free supplies for patients who need them. The Case Management team also makes frequent referrals to the Good Samaritan Clinic.

Target population - indigent diabetic patients

**Partnering organizations** – Case Management department, Food and Nutrition department, local pharmacies

**Results/Impact** – Partnering organizations have been supportive of the hospital's efforts enabling the initiative to successfully support these patients by providing necessary supplies

STRATEGY 4: Investigate the feasibility of offering free diabetic education services.

**Strategy was implemented** – Yes, nurses provide diabetic education to patients as part of their discharge instructions.

Target population - diabetic patients

Partnering organizations -

**Results/Impact** – Diabetic patients receive important education on their disease, treatment and needed follow up at discharge.



### **Priority Area: Substance Abuse/Mental Health**

Goal: Improve access to services for Cullman County residents with substance abuse/mental health issues.

**STRATEGY 1:** Recruit a psychiatrist to oversee behavioral health services, including an outpatient behavioral health clinic and providing inpatient consults.

**Strategy was implemented** -Yes, Cullman Regional has recruited and added two psychiatrists to its employed physician group since August 2021.

Target population - Cullman Regional service area

Partnering organization - Physician Services department

**Results/Impact** - Adding psychiatrists allowed the hospital to provide care for more patients needing behavioral health treatment and expand mental health services to a second clinic located in an adjacent community.

STRATEGY 2: Develop and operate an outpatient behavioral health facility.

**Strategy was implemented** -Yes, Cullman Regional opened an outpatient behavioral health clinic in 2021.

Target population - Cullman Regional service area

Partnering organization - Physician Services department

Results/Impact - Cullman residents have local access to mental health treatment and counseling

STRATEGY 3: Investigate the feasibility of hiring additional behavioral health providers.

**Strategy was implemented** – Yes, after bringing on a full-time psychiatrist in 2021, Cullman Regional determined that it was best to add an additional part-time psychiatrist with experience in adolescent behavioral health to best meet the community needs.

Target population - Cullman Regional service area

Partnering organization - Physician Services department

Results/Impact - Expanded

**STRATEGY 4**: Develop protocols, written by the psychiatrist, for CRMC's Emergency Department (ED) to assist ED physicians and staff in treating behavioral health patients in the most appropriate manner.

Strategy was implemented - This is in progress.

Target Population - behavioral health patients in the ED

**Partnering organization –** Cullman Regional Medical Group staff psychiatrist, Emergency Department

**Results/Impact** - The hospital ED established a standing order set to "medically clear" behavioral health patients. The order set was a collaborative project developed between ED Physicians and the Psychiatrist. Once a patient is "medically cleared" the ED then consults with the Psychiatrist regarding appropriate treatment options and/or medication regimens. The Psychiatrist can also assist the ED with helping to determine if a patient will benefit from outpatient/inpatient treatment.



**STRATEGY 5:** Purchase and operate a transport van to be used to transport behavioral health patients to facilities that offer appropriate treatment.

**Strategy was implemented –** Yes, a transport van purchased in 2019 and has been used to transfer multiple patients.

Target Population - behavioral health patients

Partnering organization - n/a

Results/Impact - Improved access to mental health services

**STRATEGY 6:** Remodel CRMC's ED to include behavioral health seclusion rooms that can be used to house patients waiting for inpatient treatment.

Strategy was implemented - Yes, nine secured holding rooms opened in May 2022.

Target Population - behavioral health patients in the ED

Partnering organization - Plant Operations department, Emergency Department

**Results/Impact** – The remodeled unit was designed to be anti-ligature and safer for behavioral health patients. The rooms provide privacy and dignity with each pod having its on restroom. There is also a shower in this area for daily use. This area is designed to treat all patient populations.

**STRATEGY 7:** Work together with WellStone Behavioral Health and the court system to develop a system to treat opioid and alcohol abuse.

**Strategy was implemented** – Yes, Cullman Regional embedded a licensed counselor in the ED to provide appropriate support for behavioral health patients and coordinate care transitions with WellStone and other facilities when needed.

Target population – behavioral health patients

Partnering organization – Wellstone and other behavioral health facilities

Results/Impacts – ED patients have access to well-coordinated care by qualified behavioral health providers

