

Community Health Needs Assessment



Casey County Hospital

Fiscal Year Ending June 30, 2022

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INTRODUCTION

The 2010 passage of the *Patient Protection and Affordable Care Act* (PPACA) ushered in new reporting requirements for health care organizations. Per IRC Section 501(r), private, nonprofit hospitals must:

- Conduct a community health needs assessment (CHNA) at least once every three years on a facility-by-facility basis.
- Identify action plans and strategies to address community needs identified in the assessment and report needs not being address (with reasons why such needs are not being addressed).
- Report CHNA results to the public.

This CHNA, which describes both a process and a document, is intended to document Casey County Hospital’s compliance with IRC Section 501(r). Health needs of the community have been identified and prioritized so that Casey County Hospital may adopt an implementation strategy to address specific needs of the community.

The CHNA process involved:

- An evaluation of the Implementation Strategy for needs assessment completed in 2019.
- Collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, health care resources.
- Interviews with key informants who represent a) broad interests of the community, b) population of need, or c) persons with specialized knowledge in public health.

This document is a summary of all the available evidence collected during community health needs assessments conducted in tax year 2021. It will serve as a compliance document as well as a resource until the next assessment cycle. Both the process and document serve as prioritizing the community's health needs and will aid in planning to meet those needs.

Community Health Needs (CHNA) Process

Community health improvement efforts are most successful when they are grounded in collective impact, where structured collaborative efforts yield substantial impact on a large-scale social problem. Collective impact focuses on cooperation, collaboration, and partnership to help achieve common priorities and inform partners’ investment strategies.

Hospital facilities must take into account input from people who represent the broad interests of its community, including those with special knowledge of or expertise in public health.

Casey County Hospital engaged FORVIS, LLP to conduct a formal community health needs assessment (CHNA). FORVIS, LLP is among the nation’s top 10 professional services firms with more than 5,500 employees who serve clients in all 50 states as well as across the globe. FORVIS serves more than 1,000 hospitals and health care systems across the nation.

This CHNA was conducted March-June 2022.

Based on current literature and other guidance from the treasury and the IRS, the following steps were conducted as part of the Hospital's community health needs assessment:

- An evaluation of the impact of actions taken to address the significant health needs identified in the prior community health needs assessment was completed and an implementation strategy scorecard was prepared to understand the effectiveness of the Hospital's current strategies and programs.
- The "community" served by the Hospital was defined by utilizing inpatient and outpatient regarding patient origin. This process is further described in Community Served by the Hospital.
- Population demographics and socioeconomic characteristics of the community were gathered and reported utilizing various third parties. The health status of the community was then reviewed. Information on the leading causes of death and morbidity information was analyzed in conjunction with health outcomes and factors reported for the community by CountyHealthrankings.org. Health factors with significant opportunity for improvement were noted.
- Community input was provided through key informant interviews. Results and findings are described in the Key Informant section of this report.
- Information gathered in the steps above was analyzed and reviewed to identify health issues of uninsured persons, low-income persons, minority groups, and the community as a whole. Health needs were ranked utilizing a method that weighs: 1) the size of the problem, 2) the seriousness of the problem, 3) the prevalence of the problems, and 4) Alignment of the problem with the Hospital's goals and resources (The Hospital's ability to address the issues).
- An inventory of health care facilities and other community resources potentially available to significant health needs identified through the CHNA was prepared and collaborative efforts were identified.

General Description of Hospital

Casey County Hospital is a critical access facility with 24 licensed beds and is located in Liberty, Kentucky. The Hospital underwent a complete rebuild and renovation in 2008 and is a very modern facility. Among the services offered are a long-term (swing bed) program, radiology, physical and respiratory therapy, and inpatient dialysis. The Hospital operates two rural health clinics – Casey County Primary Care and Casey County Family Practice – as well as a program for senior adults, Casey County IOP (Intensive Outpatient Program). The medical staff consists of an Internal Medicine Physician, two Family Practice Physicians, three Family Practice Nurse Practitioners, and a full-time Radiologist. The Hospital also has a cardiology clinic. The Emergency Room has five private rooms, and CTs and X-rays read by a Radiologist.

Casey County Hospital contracts with the Inspire Medical group. Inspire Medical is a physician-owned Emergency Department Management and Staffing Group with a solid network of Kentucky physicians committed to staffing physicians for emergency rooms in rural Kentucky hospitals.

Mission Statement:

Casey County Hospital has as its primary goal the provision of quality hospital services to the citizens of Casey County and the surrounding areas. Through its Quality Improvement, Utilization Review and Risk Management Programs, we pledge to assure a consistently acceptable level and quality of service in the Hospital and Rural Health Clinics and to reduce the risk of injury to patients, visitors and employees. Organizational performance will be constantly reviewed and improved by effective processes, functions and services measured through continuous efforts by Quality Team(s) and activities such as staff, patient and community education.

Prior Health Needs Identified

At the completion of the 2019 CHNA, four major health needs were identified. These represented the areas where focus was most needed to improve the health of the community served by the hospital.

1. High cost of health care/deductibles
2. Obesity
3. Lack of health knowledge
4. Healthy behaviors/lifestyle changes

Updates on Strategies and Accomplishments

The following demonstrates the measures of success that Casey County Hospital has reached in addressing the four identified community health needs.

High Cost of Health Care/Deductibles

Goal 1 – To provide economic relief for needy patients/families

- A. Explore a partnership with Med Assist (www.gomedassist.com) to offer qualifying patients and/or families assistance with health care costs.
 - We were unable to partner with Med Assist; however, we did put other economic relief strategies into place to assist those in financial need. A partnership was established with Bernard Health Care where a representative was onsite to assist patients/families who were uninsured to apply for health insurance through Kynect. We also promoted community and virtual Kynect visits and/or campaigns in 2019, 2020, 2021 and 2022.
- B. Offer payment structure plans to patients in accordance with financial assistance policy.
 - Patients who lack insurance coverage, or are underinsured, are offered the opportunity to apply for financial assistance through various means, including the Disproportionate Share Program (DSH). A financial assistance application and other financial forms are available on the hospital's website, along with personnel who will assist the patient/family in applying.

Goal 2 – Promote prevention to lower costs of acute care

- A. Discharge patients to Primary Care Physician (PCP) in our network to ensure coverage.
 - The number of inpatients has been down this period due to the Covid-19 pandemic. A large number of those who have been patients see Dr. Housam Haddad, Medical Director at Casey County Hospital and Casey County Primary Care, so they follow up with him.
- B. Focus annual health fair on preventative education for community.
 - We offered some new health care information at our 2019 Health Fair, including an interactive giant inflatable colon presented by the Kentucky Cancer Program along with Lake Cumberland District Health Department; a new Home Health agency in the area; and a new gym. Due to the Covid-19 pandemic, we were unable to have our annual Health Fair in 2020 and 2021.

Obesity

Goal 1 – Partner with community agencies to combat this widespread health issue

- A. Work with agencies within our region to promote events and activities geared toward reducing obesity levels.
 - We have promoted various events/activities within the area to combat obesity by distributing and/or posting flyers, announcements, etc. These have included 5K runs/walks by various groups, organizations, churches, school clubs, etc.; the City of Liberty’s Trail Town; and the Casey County Public Library’s programs.

Goal 2 – Provide community education

- A. Provide educational materials on the effects of obesity to our providers to distribute to patients.
 - We partnered with the Casey County Health Department and Lake Cumberland District Health Department to distribute educational health materials on weight loss and obesity to patients at Casey County Primary Care and Casey County Family Practice.

Lack of Health Knowledge

Goal 1 – Provide preventative health care education

- A. Offer patients informative and educational materials on chronic diseases, such as diabetes, high blood pressure, heart disease, etc.
 - Partnering with Casey County Health Department and Lake Cumberland District Health Department again, we offer patients at Casey County Primary Care and Casey County Family Practice educational materials on smoking/vaping, diabetes, heart disease, and high blood pressure. In March 2022, we also distributed promotional bags provided by LCDHD at both CCPC and CCFP regarding diabetes management. We also signed a letter of support for LCDHD in March 2022 to assist them in providing upcoming diabetes management classes to the public. Casey County Hospital hosted these classes at its facility in September 2019.

- B. Work with other community health agencies to host informational workshops on how to provide basic health care knowledge, including mental health services.
 - Due to the Covid-19 pandemic, we were unable to host any workshops onsite; however, we did partner with other agencies and participate in virtual events. In November 2020, we worked with the Lake Cumberland District Health Department to offer a six-month program at various churches regarding basic health care information to the Hispanic community. In March 2021, we participated in the Lake Cumberland Community Action Agency’s Virtual Resource Fair. We are currently at work updating promotional materials for our IOP (Intensive Outpatient Program), which is a comprehensive mental health program for those 65 and older.

Goal 2 – Obesity management education

- A. As obesity leads to the risk of developing many other health dangers, focus on providing monthly or quarterly events to encourage residents to manage their weight and reduce health risks.
 - We were unable to host any onsite events due to the Covid-19 pandemic. Instead, we promoted any type of virtual event that any of our partnering agencies were hosting.

Healthy Behaviors/Lifestyle Changes

Goal 1 – Partner with local school system on smoking/vaping prevention

- A. Promote smoking cessation classes.
 - We worked with both the Lake Cumberland District Health Department and the Casey County School System/Casey County Youth Coalition to publicize and promote their programs aimed at smoking cessation in both October 2020 and January 2022.
- B. Provide educational materials on harmful effects of smoking and/or vaping.
 - Educational materials on the harmful effects of smoking/vaping are distributed at both Casey County Primary Care and Casey County Family Practice. We also participated in the school system’s Truth or Consequences program in November 2019, where students are exposed to various scenarios involving the effects of smoking/vaping, along with drugs and alcohol.

Goal 2 – Publicize successes

- A. Use media to promote positive instances of changes to better lifestyle influences and healthy behaviors.
 - At our 2019 Health Fair, we conducted live radio interviews with medical providers and people in the community, sharing information about materials available at the Health Fair and the benefits of healthy behaviors which lead to better lifestyles.

Summary of 2022 Needs Assessment Findings

The following health needs were identified based on the information gathered and analyzed through the community health needs assessment conducted by the Hospital. These needs have been prioritized based on information gathered through the community health needs assessment.

These identified community health needs are discussed in greater detail later in this report.

Identified Community Health Needs

1. Obesity
2. Healthy behaviors/lifestyle changes
3. Lack of mental health providers

COMMUNITY DETAILS

Community Served by the Hospital

The Hospital is located in Liberty, Kentucky, in Casey County, and is an hour and a half south of Lexington. The Hospital is located off US Highway 127. The Hospital serves residents in and around the city of Liberty.

Definition of Community

A community is defined as the geographic area from which a significant number of the patients utilizing hospital services reside. While the community health needs assessment considers other types of health care providers, the Hospital is the single largest provider of acute care services. The utilization of Casey County Hospital services provides the clearest definition of the community.

Based on the patient origin of acute care discharges from July 1, 2020, through June 30, 2021, management has identified the community to include the corresponding cities listed in the exhibit below.

Casey County Hospital

Summary of Inpatient Discharges and Outpatient Visits by Zip Code

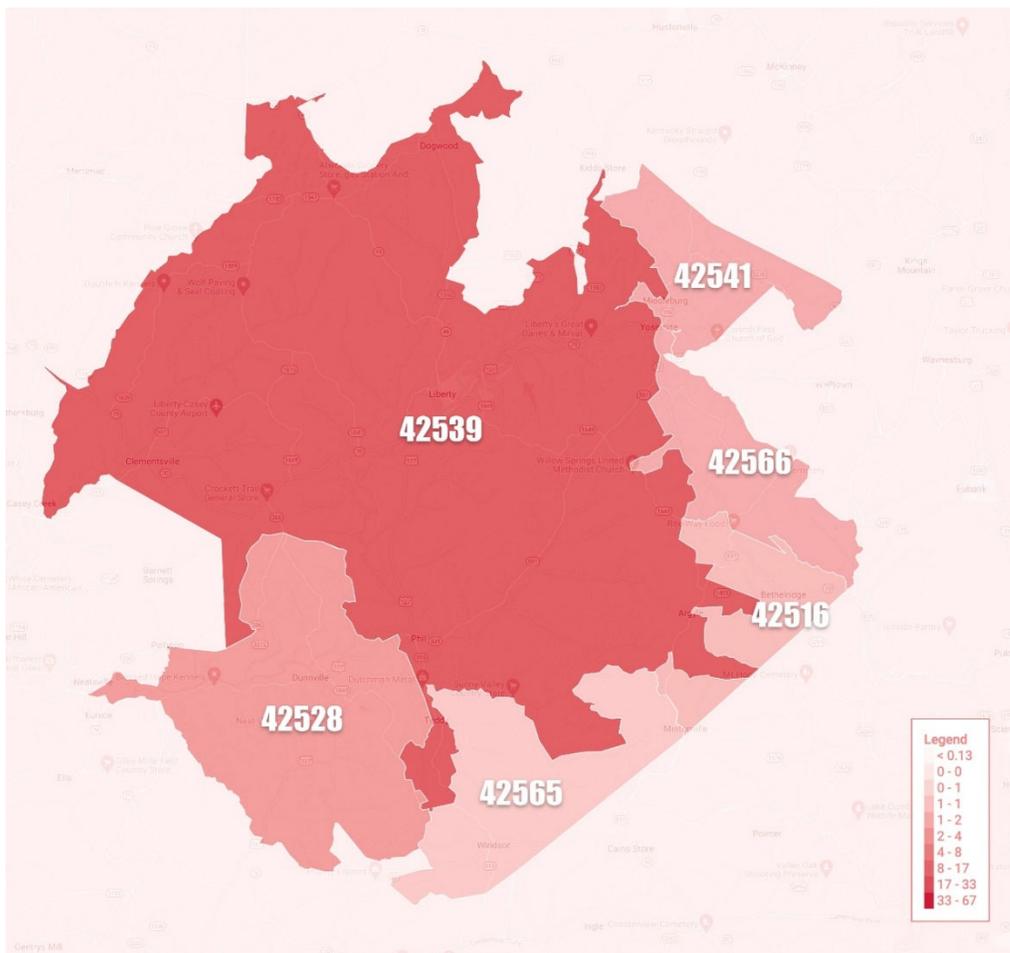
7/1/2020 to 6/30/2021

Zip Codes	City	Inpatient	Outpatient	Total	Percent of Total
42539	Liberty	253	14,098	14,351	61.96
42566	Yosemite	5	652	657	2.83
42528	Dunnville	35	1,389	1,424	6.14
42541	Middleburg	10	783	793	3.42
42516	Bethelridge	8	277	285	1.23
42565	Windsor	4	280	284	1.22
Total Community		315	17,479	17,794	76.84
Others outside Casey County		75	5,289	5,364	23.16
TOTAL		390	22,768	23,158	100.00

Source: Casey County Hospital FY2021

Discharge Data

The following map geographically illustrates the Hospital's community by showing the community zip codes shaded by number of inpatient discharges. The map displays the Hospital's geographic relationship to the community, as well as significant roads and highways. The community health needs assessment will utilize this for statistical and data purposes.



Community Population and Demographics

The U.S. Census Bureau has compiled population and demographic data based on the American Community Survey 2015-2019, 5-year data estimates. The following tables show the total population of the community, breakout of the community between male and female population, age, race/ethnicity, and Hispanic population.

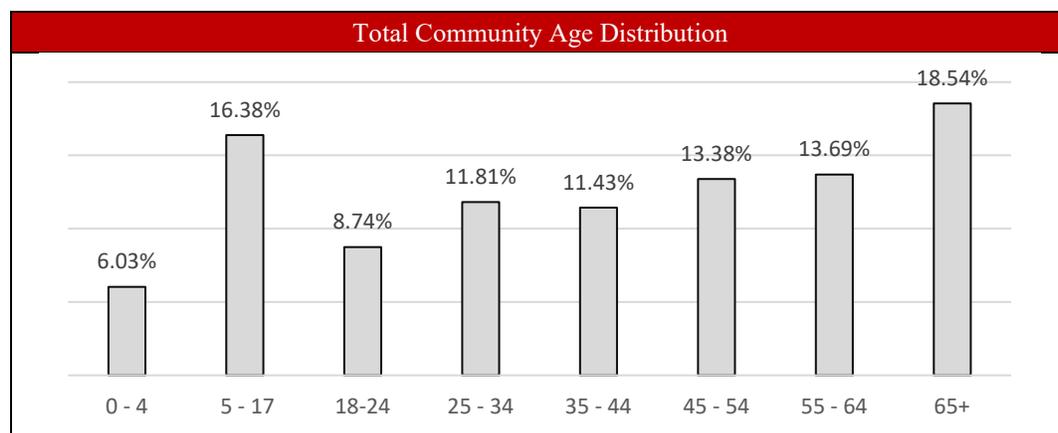
Demographic Snapshot: Casey County Hospital

Demographic Characteristics			
Total Population		Population by Gender	
Area	Population	Male	Female
Casey County	15,885	48.78	51.22
Pulaski County	64,350	48.78	51.32
Taylor County	25,571	48.99	51.01
Total Community	105,806	48.76	51.24
Kentucky	4,449,052	49.24	50.76
United States	324,697,795	49.24	50.76

Source: US Census Bureau, American Community Survey. 2019.

Age Group	Casey County Percent	Pulaski County	Taylor County	Total Community	Kentucky Percent	United States Percent
0 - 4	5.92	5.93	6.35	6.03	6.17	6.09
5 - 17	16.76	16.35	16.22	16.38	16.51	16.53
18-24	8.03	7.55	12.17	8.74	9.45	9.44
25 - 34	10.94	11.76	12.48	11.81	12.98	13.87
35 - 44	12.04	11.79	10.12	11.43	12.44	12.62
45 - 54	13.14	14.01	11.93	13.38	13.14	12.96
55 - 64	13.25	13.95	13.30	13.69	13.33	12.86
65+	19.91	18.66	17.41	18.54	15.96	15.64

Source: US Census Bureau, American Community Survey. 2019.



The total community’s age distribution is comparable to state and national averages. Nearly half (45.6 percent) of the population is 45 years or older. The largest age group is 65 years and older (18.54 percent). The next largest group is 5-17 (16.38 percent).

Population, race and ethnicity are important factors when reviewing a community’s health and quality of life. The tables below illustrate different categories such as White, Black, Asian, Hispanic, and others.

The tables below provide details into total populations by various races and ethnicities.

Race Alone Population (Percent)							
	White	Black	Asian	Native American or Alaska Native	Native Hawaiian or Pacific Islander	Some Other Race	Multiple Races
Casey County	97.06	0.79	0.24	0.32	0.00	0.26	1.32
Total Community	95.21	1.69	0.79	0.26	0.00	0.31	1.73
Kentucky	86.95	8.07	1.47	0.21	0.07	0.98	2.25
United States	72.49	12.70	5.52	0.85	0.18	4.94	3.32

Source: US Census Bureau, American Community Survey. 2015-2019. Source geography: Tract

*May not total due to rounding.

Ethnicity Alone Population (Percent)		
	Hispanic or Latino Population	Non-Hispanic Population
Casey County	2.93	97.07
Total Community	2.54	97.46
Kentucky	3.66	96.34
United States	18.01	81.99

Source: US Census Bureau, American Community Survey. 2015-2019. Source geography: Tract

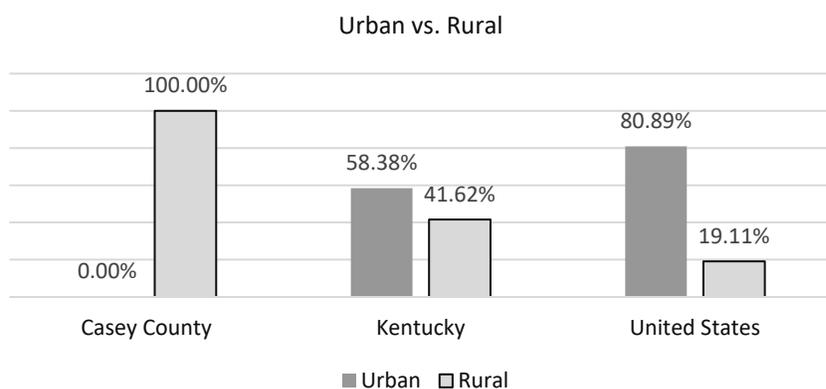
Race and Ethnicity Combined Population								
	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian	Non-Hispanic Native American or Alaska Native	Non-Hispanic Native Hawaiian or Pacific Islander	Non-Hispanic Other Race	Non-Hispanic Multiple Races	Hispanic or Latino
Casey County	94.64%	0.79%	0.15%	0.32%	0.00%	0.00%	1.16%	2.93%
Kentucky	84.55%	7.96%	1.46%	0.18%	0.06%	0.14%	1.99%	3.66%
United States	60.70%	12.31%	5.45%	0.67%	0.17%	0.24%	2.45%	18.01%

Source: US Census Bureau, American Community Survey. 2019 *May not total due to rounding.

The following table and graph show the percentage of individuals that live in rural and urban areas. Urban is defined as densely developed territories that encompass residential, commercial, and other nonresidential land uses. Rural areas are all areas that are not classified as urban. This information helps explain how access to care can sometimes be limited for those living in rural areas.

Urban vs. Rural Population		
	Percent Urban	Percent Rural
Casey County	0.00%	100.00%
Kentucky	58.38%	41.62%
United States	80.89%	19.11%

Source: US Census Bureau, Decennial Census. 2010. Source geography: Tract



Language

Language barriers contribute to patient and provider communication and can result in poor health outcomes. A national study in the *Journal of General Internal Medicine* showed that individuals with Limited-English Proficiency (LEP) who don't receive additional services (such as an interpreter) were less likely to be aware of medical implications and were less satisfied overall about their medical care.

The table below reports the percentage of the population aged 5 and older who speak a language other than English at home and speak English less than "very well" by race alone in the report area.

Limited English Proficiency by Race						
	White	Black or African American	Native American or Alaska Native	Asian	Native Hawaiian or Pacific Islander	Other Races
Casey County	1.50%	0.12%	0.00%	0.00%	0.00%	0.00%
Kentucky	1.26%	0.28%	0.01%	0.57%	0.02%	0.50%
United States	5.75%	0.54%	0.09%	2.49%	0.03%	2.62%

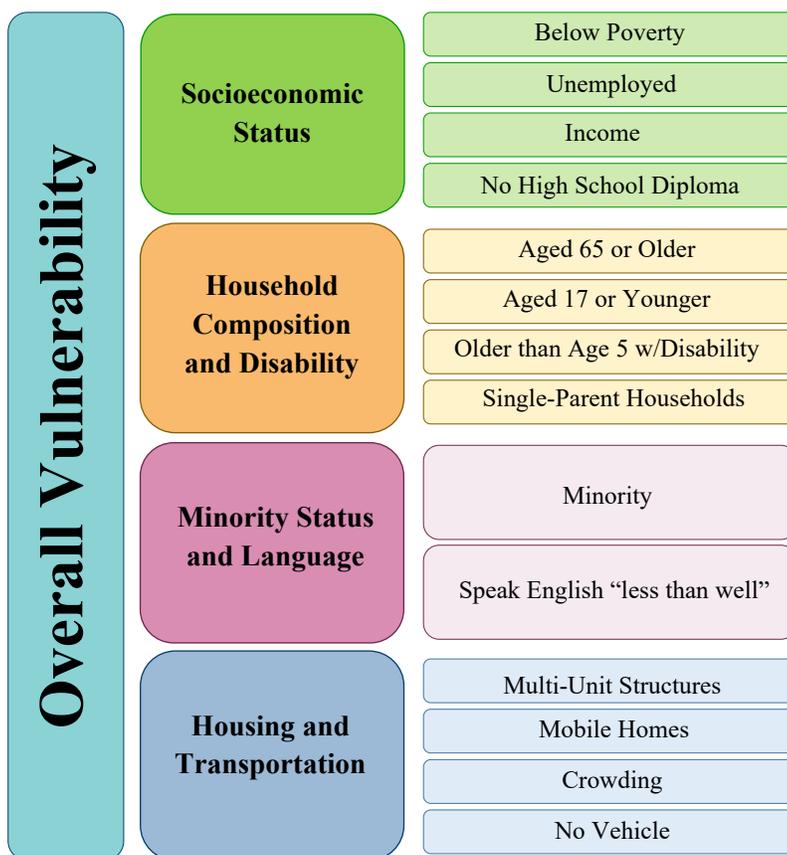
Source: US Census Bureau, American Community Survey. 2015-19. Source geography: Tract



SOCIOECONOMIC CHARACTERISTICS OF THE COMMUNITY

The socioeconomic characteristics of a geographic area influence the way residents access health care services and perceive the need for health care services within society. Vulnerable populations often experience high rates of chronic illness and poor health outcomes, leading to health disparities between various demographic groups.

The CDC has developed the Social Vulnerability Index (SVI). The helps public health officials identify and meet the needs of socially vulnerable populations.



The CDC ranks county’s social vulnerability index. Possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability). Casey County has a moderate to high level of vulnerability, and is lower than many other surrounding counties.

The following table displays the SVI scores for Casey County and nearby counties.

County/Region	SVI Score	Level of Vulnerability
Adair County	0.7121	Moderate to High level of vulnerability
Boyle County	0.4315	Low to Moderate level of vulnerability
Casey County	0.7656	High level of vulnerability
Lincoln County	0.7083	Moderate to High level of vulnerability
Marion County	0.9057	High level of vulnerability
Pulaski County	0.7420	Moderate to High level of vulnerability
Russell County	0.8634	High level of vulnerability
Taylor County	0.7210	Moderate to High level of vulnerability
Washington County	0.5127	Moderate to High level of vulnerability

Source: <https://svi.cdc.gov/map.html>, 2018

The SVI instrument identifies critical health issues, however, some of the factors are not used in the remainder of this assessment because they are designed for emergency planners and are not applicable to general health and quality of life. The Composition & Disability measure is not examined in this report.

The following information and exhibits include important factors such as household per capita income, employment rates, uninsured population, poverty, and educational attainment for the community. These standard measures will be used to compare the socioeconomic status of the community to the state of Kentucky and the United States.

The SVI instrument identifies critical health issues, however, some of the factors are not used in the remainder of this assessment because they are designed for emergency planners and are not applicable to general health and quality of life. The Composition & Disability measure is not examined in this report.

Additional Important Factors

The following information and exhibits include important factors such as median household income, employment rates, uninsured population, poverty, and educational attainment for the community. These standard measures will be used to compare the socioeconomic status of the community to the state of Kentucky and the United States.

Income and Employment

The table below displays the average and median household income for the community. This is an important determinant in an individual's health. People with above-average income typically have health insurance, reliable transportation, and the financial means to pay out-of-pocket expenses. In addition, those with higher income are more likely to practice healthy lifestyle choices such as exercising, eating nutritional foods, and abstaining from tobacco use.

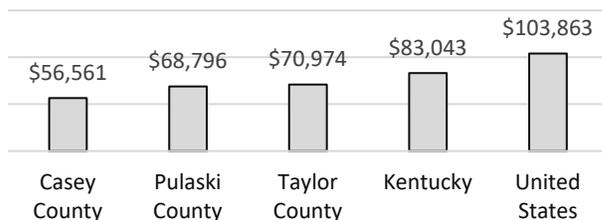
Source: <https://www.cdc.gov/socialdeterminants/>

The table shows the income of the householder and all other individuals 15 years old and over in the household, whether they are related to the householder or not. Because many households consist of only one person, average household income is usually less than average family income.

Household Income			
	Total Family Households	Average Family Income (\$)	Median Family Income (\$)
Casey County	3,919	\$56,561	\$42,474
Pulaski County	16,771	\$68,796	\$53,373
Taylor County	6,624	\$70,974	\$56,689
Total Community	27,314	\$67,568	No data
Kentucky	1,1315,835	\$83,043	\$64,684
United States	79,114,031	\$103,863	\$77,263

Source: US Census Bureau, American Community Survey, 2015-2019, Source geography: Tract

Average Income Comparison



As the data demonstrates, the community’s average household income is significantly lower than the state and national income averages.

Casey County is supported by major industries including health care, education, and manufacturing. The table below lists the top occupation types for the county.

Employment by Occupation Type	
Educational services, health care and social assistance	29.1%
Manufacturing	19.6%
Construction	8.5%
Retail Trade	8.0%
Agriculture, Forestry, Fishing, and Hunting	5.7%
Transportation and warehousing and utilities	5.7%
Arts, entertainment, recreation, accommodations, and food	5.4%
Other services except public administration	4.6%
Finance and insurance, real estate	4.0%
Wholesale Trade	2.8%
Public administration	1.7%

Source: Census Bureau, 2020 ACS 5-Year Estimates via <https://data.census.gov/cedsci/profile?g=0500000US21045>



Unemployment Rate

The tables below display the average annual resident unemployment rates for Casey County, Kentucky, and the United States. Total unemployment in the report area for the current month equals 277, or 4.1 percent of the civilian noninstitutionalized population age 16 and older (nonseasonally adjusted). This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

Unemployment Rate				
Area	Labor Force	Number Employed	Number Unemployed	Unemployment Rate
Casey County	6,815	6,538	277	4.1%
Kentucky	2,042,942	1,951,788	91,154	4.5%
United States	164,035,520	156,751,332	7,284,189	4.4%

Source: US Department of Labor, Bureau of Labor Statistics. 2022 - January. Source geography: County

Average Monthly Unemployment Rate (percentages)													
	Jan. 2021	Feb. 2021	Mar. 2021	Apr. 2021	May 2021	Jun. 2021	Jul. 2021	Aug. 2021	Sep. 2021	Oct. 2021	Nov. 2021	Dec. 2021	Jan. 2022
Casey County	4.7	4.4	4.8	3.3	3.4	4.8	4.3	3.4	3.4	3.4	2.7	3.3	4.1
Kentucky	5.3	5.2	5.1	4.3	4.4	5.7	5.2	4.5	4.4	4.3	3.8	3.9	4.5
United States	6.8	6.6	6.2	5.8	5.5	6.1	5.7	5.3	4.6	4.3	3.9	3.7	4.4

Source: US Department of Labor, Bureau of Labor Statistics. 2022 - January. Source geography: County

Poverty

The following table displays the percentage of total population below 100 percent Federal Poverty Level (FPL) for Casey County, the state of Kentucky, and the United States. The FPL is a measurement of the minimum amount of income that is needed for individuals and families to pay for essentials. The guidelines are used to establish eligibility for Medicaid and other federal programs.

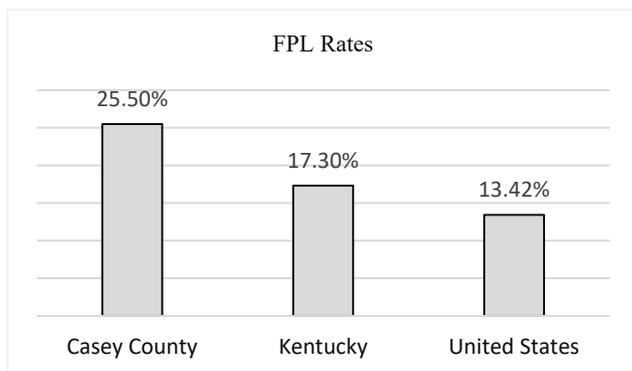
Poverty is a key driver of health status and is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

People living in chronic poverty have elevated health risks that can lead to unsafe conditions and diseases. Conditions might include drinking contaminated water or living in unsanitary housing with poor ventilation.

Low-income residents may delay or avoid pursuing medical attention until issues reach a critical stage, creating a greater demand on the community’s medical resources. This may include dependence on emergency rooms for what should be routine primary care. In addition, uninsured or low-income individuals’ inability to pay for services places strain on the community’s medical system. These individuals have limited transportation options and lack the ability to travel outside their local community for medical services.

Population below 100% FPL (Federal Poverty Line)			
	Population for whom Poverty Status is Determined	Population below FPL	Percent below FPL
Casey County	15,455	3,936	25.5
Kentucky	4309501	747,010	17.3
United States	316,715,051	42,510,843	13.4

Source: US Census Bureau, American Community Survey. 2016-19



Insurance - Uninsured

The following table reports the percentage of the total civilian noninstitutionalized population without health insurance coverage for Casey County, Kentucky, and the United States. This indicator is relevant because lack of insurance is a primary barrier to health care access including regular primary care, specialty care and other health services that contributes to poor health status. The lack of health insurance is considered a key driver of health status.

Health insurance is a major factor in personal health status. Uninsured adults have limited access to preventive services and specialty care, may receive poorer quality of care, and often experience worse health outcomes than those with insurance.

Casey County has 6.49 percent of the total civilian non-institutionalized population without health insurance. This rate is higher than the state average (5.70 percent), and lower than the national average (8.84 percent).

Uninsured Population			
	Population for whom Insurance Status is Determined	Uninsured Population	Uninsured Population Percent
Casey County	15,511	1,928	6.49
Kentucky	4,366,510	248,714	5.70
United States	319,706,872	28,248,613	8.84

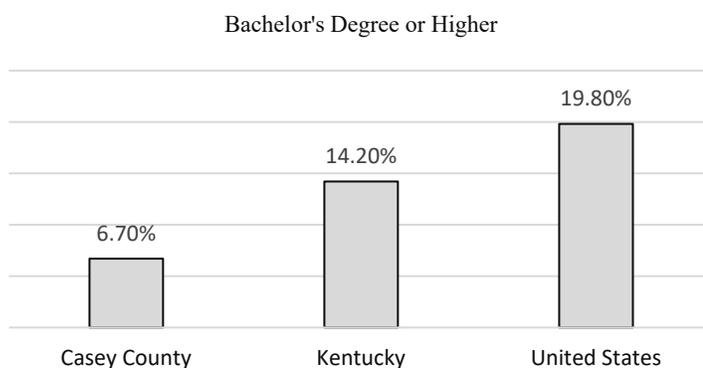
Source: US Census Bureau, American Community Survey. 2015-2019.

Education

The following table shows educational attainment with a High School diploma or higher for Casey County, the state of Kentucky, and the United States. This is relevant because educational attainment has been linked to positive health outcomes.

Educational Attainment – Population Age 25 and Older				
	Percent with High School Diploma	Percent with Some College	Percent with Associates’ Degree	Percent with Bachelor’s Degree or Higher
Casey County	40.6	16.0	6.70	6.70
Kentucky	39.2	20.8	8.30	14.2
United States	27.0	20.4	8.50	19.8

Source: US Census Bureau, American Community Survey. 2015-19. Source geography: County



Transportation

Transportation is a critical social determinant of health. The American Hospital Association says that each year, more than 3.5 million people do not receive adequate medical care due to transportation issues. These issues may include access to vehicles, long distances to needed services, and costs associated with travel. Transportation issues can be worse in rural communities where individuals may live long distances from providers.

Households with No Motor Vehicle		
	Households with no Motor Vehicle	Percent Households with no Motor Vehicle
Casey County	374	6.13
Kentucky	125,609	7.24
United States	10,395,713	8.61

Source: US Census Bureau, American Community Survey. 2015-19. Source geography: Tract

PHYSICAL ENVIRONMENT OF THE COMMUNITY

A community’s health is affected greatly by its physical environment. A safe, clean environment that provides access to healthy food and recreational opportunities is important to maintaining and improving community health. This section will examine some of the elements that relate to various needs mentioned throughout the report.

Food Access/Food Deserts

The table below reports the percentage of the population living in census tracts designated as food deserts. A food desert is defined as a low-income census tract where a substantial number or share of residents has low access to a supermarket or large grocery store. This is relevant because it highlights populations and geographies facing food insecurity.

Population with Low Food Access				
	Food Desert Census Tracts	Other Census Tracts	Food Desert Population	Other Population
Casey County	2	3	4,537	11,418
Kentucky	153	957	571,751	1,449,466
United States	9,293	63,238	9,074,974	81,328,997

Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2019.

SNAP Food Stores

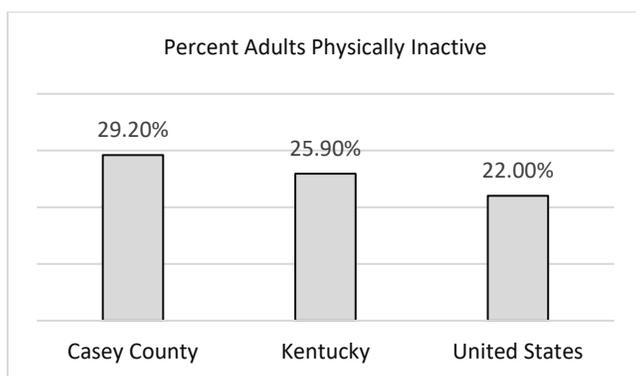
Certain food stores are authorized by SNAP (Supplemental Nutrition Assistance Program). These include grocery stores as well as supercenters, specialty food stores, and convenience stores that are authorized to accept SNAP benefits. Casey County has 16.8 percent retailers per 10,000 population, which is greater than the state or federal rate.

SNAP Authorized Food Stores		
	Total SNAP-Authorized Retailers	SNAP-Authorized Retailers Rate per 10,000 population
Casey County	26	16.18
Kentucky	4,509	10.07
United States	248,526	7.47

Data Source: US Department of Agriculture, Food and Nutrition Service, USDA - SNAP Retailer Locator. Additional data analysis by CARES. 2021.

Recreation and Fitness Access

The graph below shows the percent of adults 20 years or older who are physically inactive for Casey County compared to Kentucky and the United States. 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.



Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2019

Within Casey County, 29.2 percent of adults aged 20 and older report having no active leisure time physical activity. This is slightly higher than state and national levels. Behaviors are important determinants of health and may lead to critical issues such as obesity and poor cardiovascular conditions.

CLINICAL CARE OF THE COMMUNITY

A lack of access to care presents barriers to good health. The supply and accessibility of facilities and physicians, the rate of uninsurance, financial hardship, transportation barriers, cultural competency, and coverage limitations affect access.

Rates of morbidity, mortality, and emergency hospitalizations can be reduced if community residents access services such as health screenings, routine tests, and vaccinations. Prevention indicators can call attention to a lack of access or knowledge regarding one or more health issues and can inform program interventions.

Preventable Hospital Events

This indicator below reports the preventable hospitalization rate among Medicare beneficiaries for the latest reporting period. Preventable hospitalizations include hospital admissions for one or more of the following conditions: diabetes with short-term complications, diabetes with long-term complications, uncontrolled diabetes without complications, diabetes with lower extremity amputation, chronic obstructive pulmonary disease, asthma, hypertension, heart failure, bacterial pneumonia, or urinary tract infection. Rates are presented per 100,000 beneficiaries.

Preventable Hospital Events		
	Total Medicare Beneficiaries	Preventable Hospitalizations, Rate per 100,000
Casey County	3,861	6,587
Kentucky	885,190	3,801
United States	57,235,207	2,865

Data Source: Centers for Medicare and Medicaid Services, Mapping Medicare Disparities Tool. 2020. Source geography: County 57,235,207



HEALTH STATUS OF THE COMMUNITY

This section of the assessment reviews the health status of the Community with comparisons to the State of Kentucky. This in-depth assessment of the mortality and morbidity data, health outcomes, health factors, and mental health indicators of the county residents that make up the community will enable the Hospital to identify priority health issues related to the health status of its residents.

Good health can be defined as a state of physical, mental, and social well-being, rather than the absence of disease or infirmity. According to *Healthy People 2020*, the national health objectives released by the U.S. Department of Health and Human Services, individual health is closely linked to community health. Community health, which includes both the physical and social environment in which individuals live, work and play, is profoundly affected by the collective behaviors, attitudes, and beliefs of everyone who lives in the community. Healthy people are among a community's most essential resources.

Numerous factors have a significant impact on an individual's health status: lifestyle and behavior, human biology, environmental and socioeconomic conditions, as well as access to adequate and appropriate health care and medical services.

The interrelationship among lifestyle/behavior, personal health attitude and poor health status is gaining recognition and acceptance by both the general public and health care providers.

Some examples of lifestyle/behavior and related health care problems include the following:

Lifestyle		Primary Disease Factors
Smoking		Lung cancer Cardiovascular disease Emphysema Chronic Bronchitis
Alcohol/drug abuse		Cirrhosis of Liver Motor vehicle crashes Unintentional injuries Malnutrition Suicide Homicide Mental Illness
Poor Nutrition		Obesity Digestive disease Depression
Driving at excessive speeds		Trauma Motor vehicle crashes
Lack of exercise		Cardiovascular disease Depression
Overstressed		Mental illness Alcohol/drug abuse Cardiovascular disease

Studies by the American Society of Internal Medicine conclude that up to 70 percent of an individual’s health status is directly attributable to personal lifestyle decisions and attitudes. Persons who do not smoke, who drink in moderation (if at all), use automobile seat belts (car seats for infants and small children), maintain a nutritious low-fat, high-fiber diet, reduce excess stress in daily living, and exercise regularly have a significantly greater potential of avoiding debilitating diseases, infirmities, and premature death.

Health problems should be examined in terms of morbidity as well as mortality. Morbidity is defined as the incidence of illness or injury and mortality is defined as the incidence of death. However, law does not require reporting the incidence of a particular disease, except when the public health is potentially endangered. More than 50 infectious diseases in Kentucky must be reported to county health departments. Except for Acquired Immune Deficiency Syndrome (AIDS), most of these reportable diseases currently result in comparatively few deaths.

Due to limited morbidity data, this health status report relies heavily on death and death rate statistics for leading causes in death in the community, along with the state of Kentucky. Such information provides useful indicators of health status trends and permits an assessment of the impact of changes in health services on a resident population during an established period of time. Community attention and health care resources may then be directed to those areas of greatest impact and concern.

Leading Causes of Death

The following table reflects the leading causes of death for the community. It compares the rates to the state of Kentucky and US average rates, per hundred thousand. Figures represent a 2016-2020 five-year average.

Selected Causes of Resident Deaths: Number and Crude Rate						
	Casey County		Kentucky		United States	
	Total	Rate	Total	Rate	Total	Rate
Cancer	46	288.7	50,799	227.8	2,998,371	183.5
Coronary Heart Disease	98	123.0	27,978	125.4	1,838,830	112.5
Drug Poisoning	28	35.1	8,126	36.4	389,651	23.9
Homicide	*N/A	*N/A	1,524	6.8	101,419	6.2
Lung Disease	102	128.0	17,140	76.8	783,919	48.0
Motor Vehicle Accident	20	25.1	3,926	17.6	139,691	11.9
Stroke	43	54.0	10,935	49.0	746,604	45.7
Suicide	26	32.6	3,883	17.4	233,972	14.3
Unintentional Injury	65	81.6	16,580	74.3	872,432	53.4

**Data is suppressed due to insufficient source data.*

Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2016-2020.

Health Outcomes and Factors

An analysis of various health outcomes and factors for a particular community can, if improved, help make that community a healthier place to live, learn, work, and play. A better understanding of the factors that affect the health of the community will assist with how to improve the community’s habits, culture, and environment. This portion of the community health needs assessment utilizes information from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.

The County Health Rankings model is grounded in the belief that programs and policies implemented at the local, state, and federal levels have an impact on the variety of factors that, in turn, determine the health outcomes for communities across the nation. The model provides a ranking method that ranks all 50 states and the counties within each state, based on the measurement of two types of health outcomes for each county: how long people live (mortality) and how healthy people feel (morbidity). These outcomes are the result of a collection of health factors and are influenced by programs and policies at the local, state, and federal levels.

Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, *e.g.*, 1 or 2, are considered to be the “healthiest.”

Counties are ranked relative to the health of other counties in the same state on the following summary measures:

- Health Outcomes - rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures.
- Health Factors - rankings are based on weighted scores of four types of factors:
 - Health behaviors (six measures)
 - Clinical care (five measures)
 - Social and economic (seven measures)
 - Physical environment (four measures)

A more detailed discussion about the ranking system, data sources and measures, data quality, and calculating scores and ranks can be found at the website for County Health Rankings (www.countyhealthrankings.org).

As part of the analysis of the needs assessment for the community, data from Casey County will be used to compare the relative health status of the county to the state of Kentucky as well as to a national benchmark. The current year information is compared to the health outcomes reported on the prior community health needs assessment and the change in measures is indicated. A better understanding of the factors that affect the health of the community will assist with how to improve the community’s habits, culture, and environment.

Health Outcomes - rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures. The tables on the following page show how changes in the counties included in the community’s mortality and morbidity outcomes have mostly increased from the prior community health needs assessment.

County Health Rankings - Health Outcomes					
	Casey County 2018	Casey County 2021	Increase/Decrease	Kentucky 2021	Top U.S. Performers 2021
Mortality					
Premature death - Years of potential life lost before age 75 per 100,000 population (age-adjusted)	11,400	10,800	↓	9,500	5,400
Morbidity					
Poor or fair health - Percent of adults reporting fair or poor health (age-adjusted)	26%	31.0%	↑	22.0%	14%
Poor physical health days - Average number of physically unhealthy days reported in past 30 days (age-adjusted)	5.5	6.4	↑	4.6	3.4
Poor mental health days - Average number of mentally unhealthy days reported in past 30 days (age adjusted)	5.0	6.0	↑	5.0	3.8
Low birth weight - Percent of live births with low birth weight (<2500 grams)	9.0%	8.0%	↓	9.0%	6.0%

Source: Countyhealthrankings.org

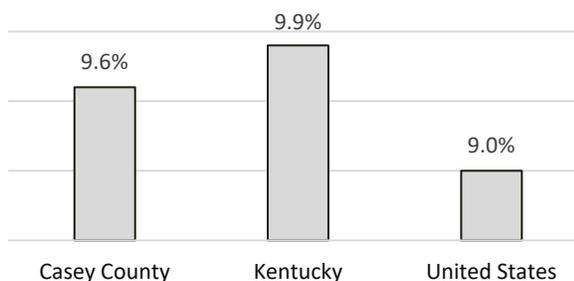
A number of different health factors shape a community’s health outcomes. The County Health Rankings model includes four types of health factors: health behaviors, clinical care, social and economic, and the physical environment. See Appendix for County Health Rankings.

The following exhibits show a more detailed view of certain health outcomes and factors for the community, Kentucky, and the United States.

Diabetes

The following table and chart display the percentage of adults aged 18 and older who have ever been told by a doctor that they have diabetes. This is relevant because diabetes is a prevalent problem in the U.S.; it may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

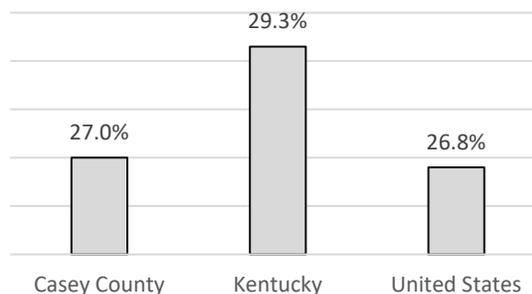
Population with Diagnosed Diabetes	
	Diagnosed Diabetes Percent
Casey County	9.6
Kentucky	9.9
United States	9.0
https://www.countyhealthrankings.org/app/Kentucky/2021/county/snapshots/095/print	



Heart Disease (Adult)

The following table has data on Medicare beneficiaries with ischemic heart disease based on administrative claims. This is relevant because coronary heart disease is a leading cause of death in the U.S. and is also related to high blood pressure, high cholesterol, and heart attacks.

Population with Heart Disease		
	Beneficiaries with Heart Disease	Beneficiaries with Heart Disease Percent
Casey County	779	27.0
Kentucky	168,882	29.3
United States	8,979,902	26.8

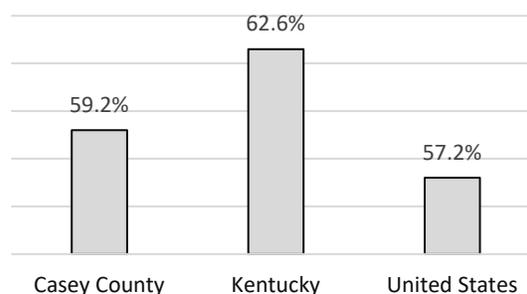


Data Source: Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File. 2018.

High Blood Pressure (Medicare)

The following table and chart report the number and percentage of the Medicare fee-for-service population with hypertension (high blood pressure). Data are based upon Medicare administrative enrollment and claims data for Medicare beneficiaries enrolled in the fee-for-service program.

High Blood Pressure (Medicare Population)		
	Beneficiaries with High Blood Pressure	Beneficiaries with High Blood Pressure Percent
Casey County	1,706	59.2
Kentucky	360,358	62.6
United States	19,162,770	57.2



Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor

Obesity

The following table and chart display the percentage of adults aged 20 and older self-reporting having a Body Mass Index (BMI) greater than 30.0 (obese). Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

The adult obesity rate for Casey County is slightly higher than the state and national rates.

Population with Obesity			
	Survey Population Age 20 and older	Population with BMI> 30.0 (Obese)	Percent with BMI> 30.0 (Obese)*
Casey County	12,143	2,793	37.0
Kentucky	3,348,426	1,048,676	36.0
United States	243,082,729	67,624,774	30.0

Data Source: County Health Rankings, 2022

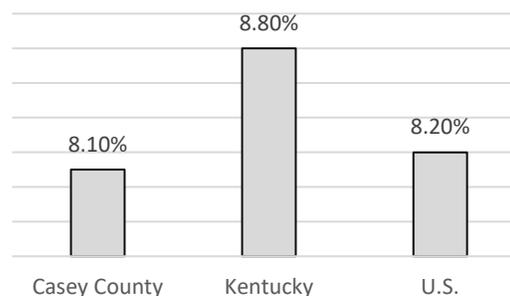
via <https://www.countyhealthrankings.org/app/kentucky/2022/rankings/casey/county/outcomes/overall/snapshot>

Low Birth Weight

The table and chart below display the percentage of total births that are low birth weight (Under 2500g). Low births are live births where the infant weighed less than 2,500 grams (approximately 5 lbs.)

This is relevant because low birth weight infants are at high risk for health problems. This can also highlight the existence of health disparities.

Low Birth Rates			
	Total Live Births	Low Weight Births	Percent Low Weight Births
Casey County	1,348	106	8.1
Kentucky	769,930	67,820	8.8
U.S.	54,416,819	4,440,508	8.2



Source: University of Wisconsin Population Health Institute, County Health Rankings, 2013-2019. Source geography: County

COVID-19

The table below displays the number of confirmed COVID-19 cases and deaths per 100,000 population. This is relevant because the entire nation endured a state of emergency and was forced to shut down.

COVID-19 Rates			
	Total Confirmed Cases	Total Deaths	Death Rate per 100,000
Casey County	1,941	26	355.68
Kentucky	763,779	7,915	271.85
U.S.	77,046,396	917,397	281.18

Data Source: Community Commons via Johns Hopkins University. Accessed via ESRI. Additional data analysis by CARES. 2022.

KEY INFORMANT INTERVIEWS

In the Patient Protection and Affordable Care Act (PPACA) passed in March 2010, nonprofit hospitals were mandated to conduct a community-based needs assessment every three years. As a part of the process, each hospital is required to solicit input from those who represent the broad interests of the community served by the hospital as well as those who have special knowledge or expertise around public health and underserved populations.

Interviews were held with various professionals representing a cross-section of industries and organizations within the community's population. Individuals chosen for these included:

- Steven Brown, Compliance Officer, Casey County Bank
- Jelaine Harlow, Health Educator, Casey County Health Department
- Jessica Hogue, Teacher, Casey County Middle School
- Melissa Richards, Finance Office, Casey County Court
- Marty Shackelford, Minister, Westside Christian Church
- Chad Weddle, Sheriff, Casey County
- Jarad Wilson, Physician, Casey County Family Practice
- Ronald Wright, Chairman, Casey County Hospital

The main objective of the interviews was to receive feedback on community health and wellness attributes, strengths, and challenges. Topics included questions about 1) Health and quality of life, 2) Underserved and underrepresented populations, 3) Barriers, and 4) COVID-19.

A consensus was reached that some of the needs identified in the previous community assessment would remain as a focus, while new ones should be added.

Poverty and mental health issues were cited most often as critical health concerns. The mental health category included areas such as suicide, depression, and anxiety.

Several respondents emphasized the community's culture of cooperation, working together to improve the community.

Interview results highlighted positive community aspects and ongoing challenges for certain population groups.

Key Informant General Observations and Comments

There was a clear consensus among respondents regarding community strengths. There were many references to a program called CORE (formerly known as Bridges Out of Poverty), which helps move people out of poverty. The program uses volunteers who serve as mentors for individuals and families, helping them learn finance principles and secure essentials such as a driver’s license and insurance.

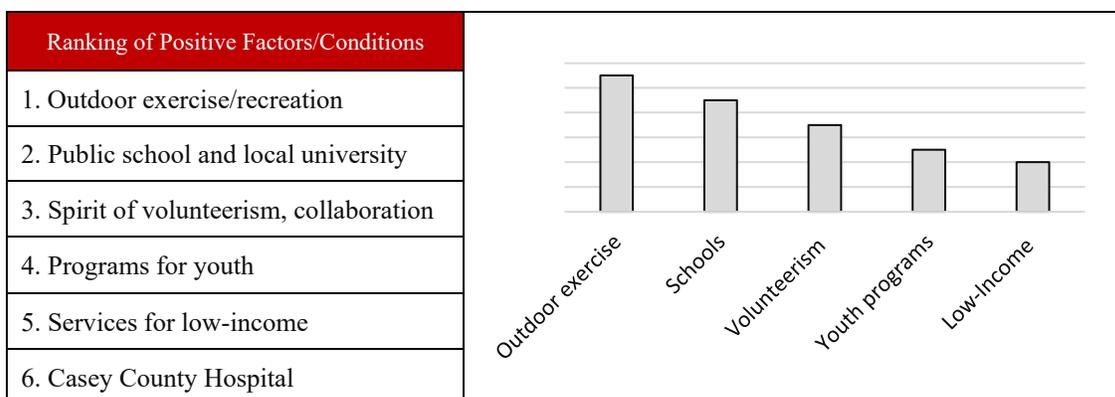
Positive Factors and Conditions

Respondents were asked to list specific factors and conditions that are positive about the community’s health and quality of life.

There were multiple references to the Central Kentucky “Ag Center” as one of the community’s most positive aspects, with its walking trails and other activities. In addition, there is a nearby river and lake that provide outdoor recreation, and numerous walking/hiking trails that are free to the public.

Other positive aspects mentioned include the public school system and overall spirit of collaboration and volunteerism. There are after-school and summer programs and feeding services, so kids don’t go hungry.

The community has thrift stores and services that provide clothes/food to low-income individuals.



Interview comments:

“Our local hospital makes a huge difference, offering access so people don’t have to drive to other communities to get help.”

Negative Factors and Conditions

Respondents were asked to list specific factors and conditions that negatively impact the community’s health and quality of life.

Two major themes that emerged were 1) drug/alcohol abuse and 2) a shortage of workers. Related to the drug and alcohol epidemic, poverty and mental illness were cited as ongoing community challenges. Respondents felt that addictions and related issues had led to many children in the community being displaced; some now being raised by their grandparents.

A shortage of affordable housing options was a concern of most. It was noted that there are low-income housing facilities, but they are full and have a waiting list. In addition, housing costs (including rentals) have escalated and are now out of reach for many people.



Interview comments:

“We have a dentist, but affordable dental care is difficult here. People are struggling to get good dental help.”

“We are lacking family-sized homes. Houses on the market are sold quickly. There aren’t many new homes being built, and we’re looking at a lot of older homes.”

“Casey has a limited job market - those living in smaller communities are forced to travel.”

“There is some abuse and neglect and domestic violence, but it is not talked about. Also, if they have no primary care physician, it is usually not detected.”

“We have more problems today than we did 25 years ago because of new people moving here to get away from urban areas, some bring problems like drugs.”

“Housing is not the greatest, there are many run-down residences. Low-income folks cannot afford the high utilities.”

Recommendations for Improvement

As a result of the interviews, the following suggestions were provided to help improve the community’s health and quality.

- Provide assistance to the elderly dealing with COVID-related depression, especially in nursing homes.
- Increase public communication about successes and good things that are occurring in the community.
- Increase awareness on issues like alcohol through more advertising and public outreach.
- Hire someone to coordinate a community Teen Alcohol program.
- Provide a city taxi for free transportation to help people with employment.
- Develop a community resource board to facilitate sharing of ideas on critical issues.

COVID-19

Key Informants were asked to describe how the COVID-19 pandemic has impacted the community.

Many emphasized the devastating loss of jobs and workers, especially for small businesses.

Another theme was the toll the pandemic has had on mental health. As one respondent said, “Mental health has been brushed under the carpet. COVID made it worse.”

Several described a community divided on the pandemic response. “There has been a division of people who don’t agree on masks and vaccinations. There have been disagreements that have caused a division,” one individual responded. Another remarked, “People are judgmental regarding the vaccine, this has caused a lot of controversy.”

Underserved Populations

Key Informants were asked to describe how or if there are certain demographic groups within the community that may lack access to affordable health care services or essential resources.

Several responses emphasized how certain people can’t afford additional health plans. “Since Medicare is not accepted by all providers, people are forced to drive a long way off to accept their plan,” an individual remarked.

Language barriers were described as a hindrance in health services. As one person said, “We have many who don’t speak English and don’t access many of the services available. These are the ones who really need help and fall under the radar.”

Interviews revealed how certain community members in poverty lack the ability to get services, in part because of their distrust of the system. For some, there is a lack of knowledge or awareness of what is available. One respondent said, “The healthcare facilities in Casey grade very high. The problem is not with the facilities, but with the underserved who don’t understand how to access those facilities.”

Another respondent expressed concern related to housing. “Housing is an issue for certain underserved groups. It’s not affordable or even available at all.”

How Barriers Are Being Addressed

Stakeholders provided input on ways the community is responding to barriers faced by underserved individuals and groups in the community

- The most common barriers noted were lack of education/awareness in the community, general resistance to change/lack of initiative on the part of the residents, and the high cost of healthcare.
- Stakeholders noted that the Hospital, Health Department and other local agencies offer educational opportunities on preventative care and general wellness, and that increasing these offerings would benefit community members.
- COVID was noted as a barrier that prevented community members from seeking healthcare.

Feedback on Casey County Hospital

Key Informants were asked to grade the Hospital’s efforts to address community needs and improve health quality. Most gave the Hospital high marks, with an A or A-.

“The hospital gets an A+. They are amazing, personal care and efficiency. We are in very good shape for a community our size.”

“A, they do a great job putting on seminars and at community events.”

“I’d give them A-, they have improved so much, done much better job than past years. They collaborate with other groups and schools to address mental health and help senior citizens.”

“I give them a B+ for their work in the school system, providing a counselor to assist students with mental health.”

“They get a B. The administration is trying to reach out to uninsured, but there are still some without coverage who feel they are not treated as good as those with insurance.”

Those interviewed were asked to comment on the Hospital’s effort to address community health concerns. Respondents praised the Hospital and noted its significance in the community.

Health Issues of Vulnerable Populations

According to Dignity Health’s Community Need Index, the Hospital’s community has a moderate to high level of need. The CNI score is an average of five different barrier scores that measure socioeconomic indicators of each community (income, cultural, education, insurance, and housing).

Review the CNI map and scoring legend on page 44 of this report for more details.

INFORMATION GAPS

This assessment was designed to provide a comprehensive and broad picture of the health in the overall community served by the Hospital; however, there may be several medical conditions that are not specifically addressed in this report due to various factors, including but not limited to, publicly available information or limited community input.

In addition, certain population groups might not be identifiable or might not be represented in numbers sufficient for independent analysis. Examples include homeless, institutionalized persons, undocumented residents and members of certain ethnic groups who do not speak English or Spanish. Efforts were made to obtain input from these specific populations through key stakeholder interviews.

PRIORITIZATION OF IDENTIFIED HEALTH NEEDS

Priority setting is a required step in the community benefit planning process. The IRS regulations indicate that the Community Health Needs Assessment must provide a prioritized description of the community health needs identified through the CHNA, and include a description of the process and criteria used in prioritizing the health needs.

Using findings obtained through the collection of primary and secondary data, the Hospital completed an analysis of these to identify community health needs. The following data was analyzed to identify health needs for the community:

Leading Causes of Death

Leading causes of death and death rates for the community were compared to U.S. adjusted death rates. Causes of death in which the county rate compared unfavorably to the U.S. adjusted death rate resulted in a health need for the Hospital.

Health Outcomes and Factors

An analysis of the County Health Rankings health outcomes and factors data was prepared for each county within the Hospital community. County rates and measurements for health behaviors, clinical care, social and economic factors, and the physical environment were compared to state benchmarks. County rankings in which the county rate compared unfavorably (by greater than 30 percent of the national benchmark) resulted in an identified health need.

Primary Data

Health needs identified through key informant interviews were included as health needs. Needs for vulnerable populations were separately reported on the analysis in order to facilitate the prioritization process.

Health Needs of Vulnerable Populations

Health needs of vulnerable populations were included for ranking purposes.

Ranking Process

To facilitate prioritization of identified health needs, a ranking process was used. Health needs were ranked based on the following four factors. Each factor received a score between 0 and 5, with a total maximum score of 20 (indicating the greatest health need).

- 1) **How many people are affected by the issue or size of the issue?** For this factor, ratings were based on the percentage of the community who are impacted by the identified need. The following scale was utilized.
 - i. >25% of the community = 5
 - ii. >15% and <25% = 4
 - iii. >10% and <15% = 3
 - iv. >5% and <10% = 2
 - v. <5% = 1
- 2) **What are the consequences of not addressing this problem?** Identified health needs, which have a high death rate or have a high impact on chronic diseases, received a higher rating.
- 3) **Prevalence of common themes.** The rating for this factor was determined by how many sources of data (Leading Causes of Death, Primary Causes for Inpatient Hospitalization, Health Outcomes and Factors, Primary Data, Interviews) identified the need.

- 4) **Alignment with Hospital goals and resources.** The rating for this factor was determined by whether the need fits within the Hospital’s strategic plan, as well as the Hospital’s ability to address the need. Rating of one (least) through five (greatest) was given to the need, based on management assessment.

Each need was ranked based on the prioritization metrics. As a result, the following summary of needs is identified in the table below.

Casey County Hospital Prioritization of Health Needs					
Health Problem or Issue	How Many People Are Affected by the Issue?	What Are the Consequences of Not Addressing This Problem?	Prevalence of Common Themes	Alignment with hospital's resources	Total Score
Obesity	5	5	4	5	19
Healthy Behaviors/Lifestyle Changes	4	4	5	5	18
Lack of Mental Health Providers	4	5	5	4	18
High Cost of Health Care/Deductibles	5	4	5	3	17
Lack of Health Knowledge	4	4	4	5	17
Lack of Primary Care Physicians	5	4	3	4	16
Adult Smoking	4	4	4	4	16
High Blood Pressure	4	4	3	4	15
Substance Abuse	3	4	4	4	15
Physical Inactivity/Access to Parks	4	4	3	4	15
Cancer	3	4	3	4	14
Poverty/Children in Poverty	4	4	3	3	14
Uninsured	3	4	3	4	14
Heart Disease	3	4	3	3	13
Transportation	3	3	3	3	12
Lung Disease	3	3	2	3	11
Preventable Hospital Stays	3	3	1	2	9
Vehicle Accident/Alcohol Impaired Driving	2	3	2	1	8
Excessive Drinking	2	3	2	1	8
Stroke	2	2	2	2	8
Mammography Screenings	1	2	1	3	7
Teen Birth Rate	1	2	1	1	5
Sexually Transmitted Infections	1	2	1	1	5
Lack of Dentists	1	2	1	1	5
Unintentional Injury	1	2	1	1	5

Management’s Prioritization Process

For the health needs prioritization process, the Hospital engaged a hospital leadership team to review the most significant health needs reported on the prior CHNA as well as information from the COVID-19 Mortality table using the following criteria:

- Current area of hospital focus.
- Established relationships with community partners to address the health need.
- Organizational capacity and existing infrastructure to address the health need.

Based on the criteria outlined above, any health need that scored an 18 or more (out of a possible 20) was identified as a priority area that will be addressed through Casey County Hospital’s Implementation Strategy for fiscal year 2022-2024. Those priority areas included:

1. Obesity
2. Healthy behaviors/lifestyle changes
3. Lack of mental health providers

HEALTH CARE RESOURCES

The availability of health resources is a critical component to the health of a community’s residents and a measure of the soundness of the area’s health care delivery system. An adequate number of health care facilities and health care providers is vital for sustaining a community’s health status. Fewer health care facilities and health care providers can impact the timely delivery of services.

A limited supply of health resources, especially providers, results in the limited capacity of the health care delivery system to absorb charity and indigent care as there are fewer providers upon which to distribute the burden of indigent care. This section addresses the availability of health care resources to the residents in the community.

Hospitals and Health Centers

The Hospital has 24 beds and is the only critical access hospital located in the community. Residents of the community also take advantage of services provided by hospitals in neighboring counties.

The table below summarizes nearby hospital services available:

Summary of Hospitals					
Facility	Address	County	Miles from Casey County, KY	Beds*	Facility Type
Casey County Hospital	187 Wolford Ave Liberty, KY 42539	Casey	0.0	24	Critical Access
Russell County Hospital	153 Dowell Road Russell Springs, KY 42642	Russell	19.4	25	Critical Access
Fort Logan Hospital	124 Portman Avenue Stanford, KY 40484	Lincoln	21.0	25	Acute and General
Lake Cumberland Regional Hospital	305 Langdon Street Somerset, KY 42501	Pulaski	23.6	258	Acute and General
Ephraim McDowell Reg Med Center	217 South Third St Danville, KY 40422	Boyle	24.3	170	Acute and General
Spring View Hospital	320 Loretto Rd. Lebanon, KY 40333	Marlon	25.2	75	Acute and General

* Includes sub provider beds, excludes skilled nursing facility beds. *Source: US Hospital Finder - <http://www.ushospitalfinder.com/>*

Other Health Care Facilities and Providers

Hospital services are not the only health services available to members of the Hospital’s community. The following table provides a listing of community health centers and health clinics in Casey County, as reported by the Health Resources & Services Administration. This list is not meant to be exhaustive.

Summary of Other Health Care Facilities				
Facility	Address	County	Miles from Casey County	Facility Type
Liberty Healthy Kids Clinic	75 College St Liberty, KY	Casey	-	Health Clinic
Casey County Middle Healthy Kids Clinic	1673 E Ky 70 Liberty, KY	Casey	-	Health Clinic
Casey County High Healthy Kids Clinic	1841 E Ky 70 Liberty, KY	Casey	-	Health Clinic
Walnut Hill Healthy Kids Clinic	2834 S US 127 Liberty, KY	Casey	-	Health Clinic
Jones Park Healthy Kids Clinic	6296 E Ky 70 Liberty, KY	Casey	-	Health Clinic
My Lyfe Dunnville	10739 S US 127 Dunnville, KY	Casey	-	Health Clinic

Source: Health Resources and Services Administration - <http://findahealthcenter.hrsa.gov/#>

Health Department

The community is served by the Lake Cumberland District Health Department, which offers a large array of services to patients, including assessments and screenings, as well as education and wellness resources for children, personal, teen, and in the workplace in order to help individuals take a proactive approach toward healthy living.

The Lake Cumberland District Health Department focuses on public and preventative health. The Health Department offers on-site clinics and off-site programs. The Health Department encourages the communities it serves to adopt health-focused policies and initiatives. The organization’s mission is to, “...prevent illness and injury, promote good health practices and assure a safe environment.” While pursuing that mission, the Lake Cumberland District Health Department aspires toward excellence by endeavoring to practice according to the most contemporary and cutting-edge public health practice models and standards.

For more information on the Lake Cumberland District Health Department, visit www.lchd.org.

APPENDICES

Analysis of Data

Analysis of Health Status: Leading Causes of Death (2021)					
	U.S. Crude Rates	Kentucky Crude Rates	(A) Country Crude Rates	(B) 10% Increase of Kentucky Crude Rates	If County Rate Greater than 10% over Kentucky Rate, (A)>(B), then “Health Need”
Casey County					
Heart Disease	112.1	67.0	85.4	73.7	Health Need
Cancer	184.0	139.6	176.7	153.6	Health Need
Lung Disease	48.4	46.0	79.4	50.6	Health Need
Stroke	44.7	34.8	51.6	38.3	Health Need

Crude rate is shown per 100,000 residents. Refer to “Leading Causes of Resident Death” table for more information.

Analysis of Health Outcomes and Factors (2021)					
	U.S. Crude Rates	Kentucky Crude Rates	(A) Country Crude Rates	(B) 10% Increase of Kentucky Crude Rates	If County Rate Greater than 10% over Kentucky Rate, (A)>(B), then “Health Need”
Casey County					
Adult Smoking	16.0%	15.0%	19.0%	16.5%	Health Need
Adult Obesity	26.0%	22.0%	31.0%	24.2%	Health Need
Food Environment Index	8.7	8.4	8.0	7.6	
Physical Inactivity	19.0%	15.0%	21.00%	16.5%	Health Need
Access to Exercise Opportunities	91.0%	90.0%	73.0%	81.0%	Health Need
Excessive Drinking	15.0%	21.0%	20.0%	23.1%	
Alcohol-Impaired Driving	11.0%	34.0%	15.0%	37.4%	
Sexually Transmitted Infections	161	519	159	571	
Teen Birth Rate	12	18	28	20	Health Need
Uninsured	6.0%	9.0%	15.0%	9.9%	Health Need
Primary Care Physicians	1030	1210	2000	1331	Health Need
Dentists	1210	1220	2000	1342	Health Need
Mental Health Providers	270	270	1000	291	Health Need
Preventable Hospital Stays	2565	2617	3914	2879	Health Need
Mammography Screening	51.0%	41.0%	39.0%	36.9%	
Children in Poverty	11%	11%	16%	12%	Health Need
Children in Single-Parent Households	21.0%	21.0%	31.0%	23.1%	Health Need
Violent Crime Rate	326	3226	5	3549	

Key Informant Interview Questions/Topics

A. Health and Quality of Life

1. How would you rate your personal health and quality of life?
2. Overall, how would you rate the health and quality of life of your community?
3. Do you feel the health and quality of life has improved, declined, or stayed about the same over the last three years?
4. Following up, what are some specific factors or conditions that are positive about our community's health and quality? In other words, what is going well?
5. What are some specific factors or conditions that are negatively impacting your community's health and quality? (i.e., drugs, mental illness, lack of healthcare, lack of jobs, housing, etc.)
6. What are some changes or actions that might address these and help improve the health and quality of life?
7. Has the COVID-19 pandemic created difficulties for you? How or what ways?
8. How do you think the pandemic has impacted your overall community?

B. Underserved Populations

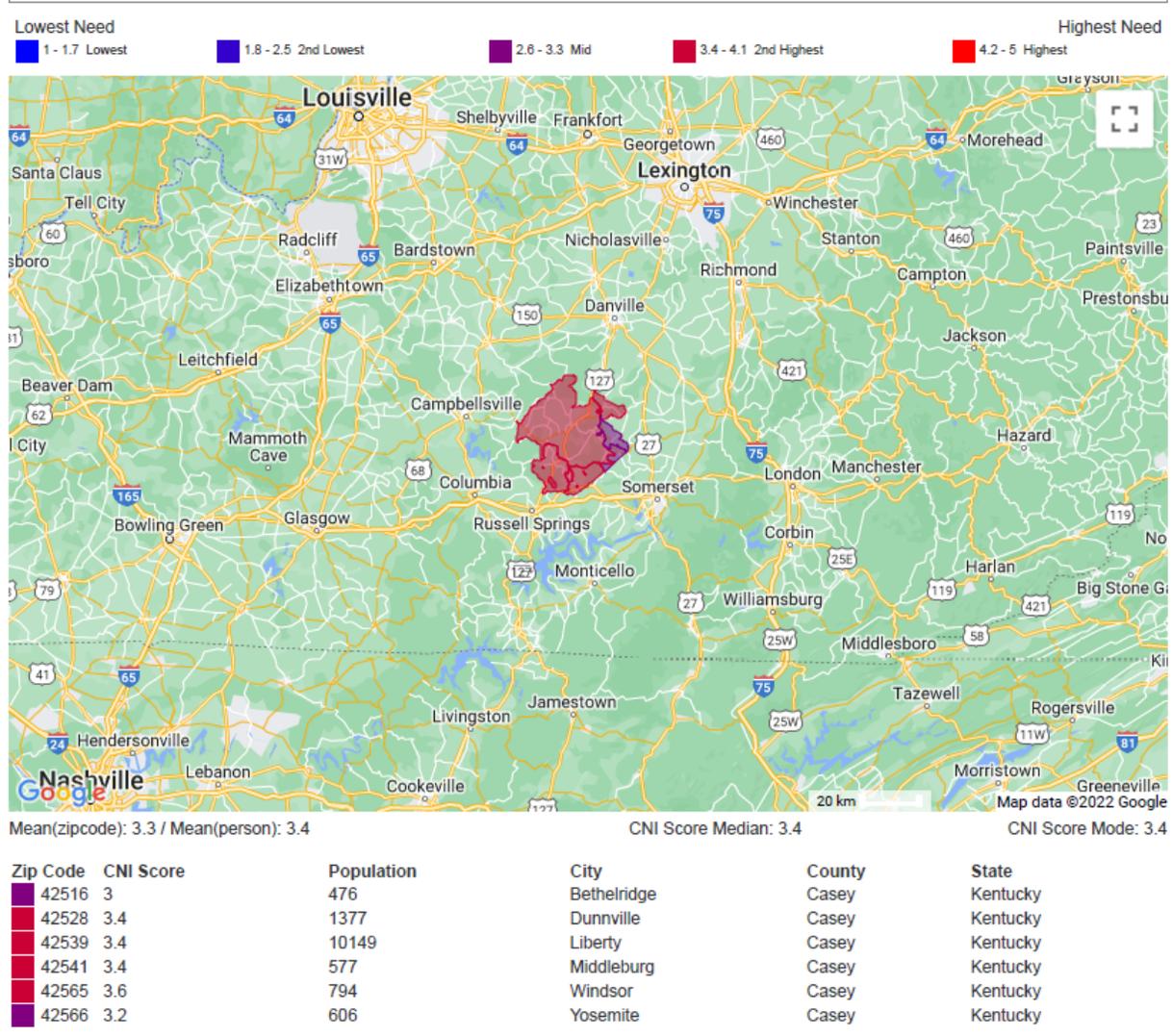
1. Are there certain demographic groups in your community that may lack the resources to access or afford adequate health care services?
2. Why? What are the biggest barriers for these members of your community?
3. How are those barriers being addressed? What is being done?

C. Casey County Hospital

1. What grade would you give the hospital on their contribution to the community's health and quality of life?
2. What role have they played in addressing some of the major health concerns in your community?
3. Are you aware of the ways they assist people with high barriers, underserved populations?

DIGNITY HEALTH COMMUNITY NEED INDEX REPORT

Map of Community Needs Index Scores for CHNA Community based on Dignity Health’s Community Need Index (CNI).



Source: <http://cni.dignityhealth.org/printout.asp>, 2022

County Health Rankings

Health Behaviors	Casey County 2018	Casey County 2021		Kentucky 2021	Top US Performers 2021
Adult Smoking - Percent of adults that report smoking at least 100 cigarettes and that they currently smoke	25.0%	29.0%	↑	24.0%	16.0%
Adult Obesity - Percent of adults that report a BMI >= 30	37.0%	29.0%	↓	35.0%	26.0%
Food Environment Index[^] - Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	7.8	7.0	↓	6.9	8.7
Physical Inactivity - Percent of adults aged 20 and over reporting no leisure time physical activity	32.0%	32.0%	—	29.0%	19.0%
Access to Exercise Opportunities[^] - Percentage of population with adequate access to locations for physical activity	26.0%	nd		71.0%	91.0%
Excessive Drinking - Percent of adults that report excessive drinking in the past 30 days	13.0%	15.0%	↑	17.0%	15.0%
Alcohol-Impaired Driving Deaths - % of motor vehicle crash deaths with alcohol involvement	43.0%	60.0%	↑	25.0%	11.0%
Sexually Transmitted Infections - Chlamydia rate per 100K population	169.9	165.1	↓	436.4	161.2
Teen Births - female population, ages 15-19	58	48	↓	31.0	12.0
Clinical Care	Casey County 2018	Casey County 2021		Kentucky 2021	Top US Performers 2021
Uninsured Adults - Percent of population under age 65 without health insurance	12.7%	8.0%	↓	7.0%	6.0%
Primary Care Physicians - Number of population for every one primary care physician	15,810	15,890	↑	1,540	1,030
Dentists - Number of population for every one dentist	7,910	8,080	↑	1,490	1,210
Mental Health Providers - Number of population for every one mental health provider	1,440	950	↓	420	270
Mammography Screening[^] - Percent of female Medicare enrollees that receive mammography screening	43.0%	29.0%	↓	40.0%	51.0%
Social and Economic Factors	Casey County 2018	Casey County 2021		Kentucky 2021	Top US Performers 2021
High School Graduation[^] - Percent of ninth grade cohort that graduates in 4 years	93.0%	98.0%	↑	91.0%	95.0%
Some College[^] - Percent of adults aged 25-44 years with some post-secondary education	46.0%	39.0%	↓	62.0%	73.0%
Unemployment - Percent of population age 16+ unemployed but seeking work	4.6%	4.2%	↓	4.3%	2.6%
Children in Poverty - Percent of children under age 18 in poverty	37.0%	33.0%	↓	21.0%	10.0%
Income Inequality - Ratio of household income at the 80th percentile to income at the 20th percentile	5.2	5.4	↑	5.0	3.7
Children in Single-Parent Households - Percent of children that live in household headed by single parent	22.0%	24.0%	↑	26.0%	14.0%

CASEY COUNTY HOSPITAL – 2022 CHNA

Social Associations [^] - Number of membership associations per 10,000 population	5.7	5.7	—	10.6	18.2
Violent Crime Rate - Violent crime rate per 100,000 population (age-adjusted)	44	35	↓	222	63
Injury Deaths - Number of deaths due to injury per 100,000 population	100	123	↑	96	59
Physical Environment	Casey County 2018	Casey County 2021		Kentucky 2021	Top US Performers 2021
Air Pollution - particulate matter days -Average daily measure of fine particulate matter in micrograms per cubic meter	9.8	8.7	↓	8.7	5.2
Severe Housing Problems - Percentage of household with at least 1 of 4 housing problems: overcrowding, high housing costs or lack of kitchen or plumbing facilities	11.0%	9.0%	↓	14.0%	9.0%
Driving Alone to Work - Percentage of workforce that drives alone to work	82.0%	80.0%	↓	82.0%	72.0%
Long Commute, Driving Alone - Among workers who commute in their car alone, the percentage that commute more than 30 minutes	42.0%	44.0%	↑	31.0%	16.0%

[^]Opposite indicator signifying that an increase is a positive outcome, and a decrease is a negative outcome.

Source: <https://www.countyhealthrankings.org/app/Kentucky/2021/county/snapshots/095/print>