2019

Rockcastle County

Community Health Needs Assessment









Message from Rockcastle Regional

Dear Community:

On behalf of our local board of directors, physicians, and employees, I would like to extend our sincere thanks for the opportunity to care for you, your friends, and your family for the past 60 years! We look forward to continue serving you in the years ahead.

Our mission at Rockcastle Regional Hospital and Respiratory Care Center (RHRCC) is to be a family-oriented team of healthcare professionals dedicated to delivering the highest quality of care to those we serve. We do so by providing comprehensive, evidence-based, cost-effective health care services and education.

We collaborate with others to coordinate and improve the health of our community, and commit our skills and resources to benefit the whole person through all stages of life. RHRCC strives to be the health care provider and employer of choice in our area.

To support the fulfillment of our mission and vision as a nonprofit hospital, as well as meet the requirements enacted by the 2010 Patient Protection and Affordable Care Act, Rockcastle Regional Hospital and Respiratory Care Center has conducted a Community Health Needs Assessment (CHNA). A CHNA is essentially a review of current health activities, resources, initiatives, gaps and limitations to identify areas of improvement.

We are pleased to present you with the results of our 2019 CHNA. We invite your feedback and comments on our current CHNA, as your input will help guide and impact our next CHNA.

Stephen A. Estes
President and CEO
Rockcastle Regional Hospital and Respiratory Care Center





Table of Contents

Description of the Organization	1
About the Community Needs Assessment	3
Evaluation of Prior Implementation	5
Patient Origin & Migration Trends	7
Rockcastle County Overview	. 8
Social Economic Factors	. 11
Community Health Services & Resources	. 18
Health Status	. 22
Environment	. 32
The Process	. 39
The Survey	. 40
Survey Results	. 41
Summary Primary Data	. 48
Health Needs Identified	
Priorities & Planning	51
Steering Committee	. 53
Acknowledgements	. 54
3	



Description of the Organization

Rockcastle Regional Hospital and Respiratory Care Center has been providing quality healthcare to Rockcastle and surrounding counties for more than 60 years. Starting as an acute-care facility in 1956, the hospital has adapted as healthcare needs have changed. In 1980, Rockcastle Regional opened its first long-term care unit with 32 beds and added 28 more beds just 12 years later. In 2006, Rockcastle Regional grew by 19 beds. We expanded again by 14 beds in 2009 to meet the growing demand for quality ventilator care. In 2016, we added new ventilator beds bringing the total to 143 and making our hospital the largest freestanding ventilator facility in the country.

The Respiratory Care Center facility offers comfortable, professional, long-term care for 143 ventilatordependent patients, mostly from Kentucky. Today, in addition to inpatient, outpatient, and home health care services, we are the only facility in the state that specializes in caring for ventilator-dependent adults and children.

Our Mission

Rockcastle Regional Hospital and Respiratory Care Center is a family-oriented team of healthcare professionals dedicated to delivering the highest quality of care to those we serve.

Our Vision

Rockcastle Regional Hospital and Respiratory Care Center's vision is to be the hospital of choice for healthcare in Rockcastle County and surrounding areas and to be the facility of choice nationwide in ventilator care.

Our Values

Our work will be guided by our commitment to quality of care, patient safety, service excellence, cleanliness, and the health of our community.

Rockcastle Regional Hospital & Respiratory Care Center Services:

Inpatient

- Outpatient
- Cancer care

Laboratory

Cardiology

Dental

- Infusions services
- Diagnostic imaging
 Dialysis Medical Nutrition Therapy
- Emergency

- Home health

- Pediatric services
- Psychiatry
- Retail pharmacy
- Quick Care
- Rehabilitation (including cardiac and pulmonary rehab)
 Surgery
- Therapy

The hospital also has a fully equipped fitness center and a wellness & education center, where community fitness and education classes take place.

Rockcastle Regional has experienced sustained and continued growth through the years. In 2016, we completed a 67,000 square foot construction project. The project added a dialysis clinic, a 2,200 square foot resident rehabilitation center, six beds that accommodate bariatric patients, a dedicated resident dining facility, a larger chapel dedicated to residents, and a new employee child development center.

The organization is a ten-time Kentucky Hospital Association Quality Award Winner, was recognized with the Women's Choice Award as an America's Best Emergency Care Hospital in 2015 and 2016, 2018, the Studer Group Excellence in Patient Care in 2013 and 2017, Louisville Worksite Wellness Platinum Award in 2015, 2016 and 2018, 2019 Excellence in Patient Care award winner within the Employee Engagement Achievement category, and received the 2019 KHIE "Making a Difference" Award.

RHRCC also has won multiple awards for community outreach in recent years. The hospital connected with 33,826 community members with 958 programs and outreach efforts in 2018, and generated a community prevention/education/health promotion benefit of \$211,435.

RHRCC was named Best Place to Work by the Kentucky Chamber of Commerce and the Kentucky Society for Human Resource Management's (KYSHRM) for four years in a row.

In 2019, RHRCC added thirteen physicians to the team-for a total of 191 physicians, consulting physicians, and telehealth on staff. Many of the visiting physicians are employed by the University of Kentucky HealthCare, as Rockcastle Regional Hospital has affiliations with UK entities such as Markey Cancer Center and the Gill Heart Institute. The hospital also has a service agreement with Baptist Health Lexington.

Physicians are on staff who specialize in the following:

- Adolescent Medicine & Psychology Allergy/immunology
- Dentistry
- Gastroenterology
- Internal medicine
- Nerve study
- Oncology
- Pathology/cytopathology
- Pediatric urology
- **Podiatry**
- Radiology
- Teleradiology

- Endocrinology
- General Surgery
- Interventional cardiology
- Neurology
- Orthopedic surgery
- Pediatric cardiology
- **Pediatrics**
- Psychiatry
- Rheumatology
- Urological surgery

- Cardiology
- Family medicine
- Gynecology
- Nephrology
- Neurosurgery
- Pain Management
- Pediatric Interventional Cardiology
- Plastic and reconstructive surgery
- Pulmonology
- Sleep medicine
- Urology



Amy Parsons, DMD

About the Community Needs Assessment

This Community Health Needs Assessment was conducted by the Southern Kentucky Area Health Education Center (So. KY AHEC). The So. KY AHEC is an organization funded primarily by state and federal governments with a mission of improving health in a 15-county area of southern Kentucky that includes Rockcastle County. Though it is hosted by Rockcastle Regional Hospital in Mt. Vernon, the So. KY AHEC has a separate mission and scope of work outside of the hospital.

The So. KY AHEC coordinates student clinical rotations, provides continuing medical education, provides health education, and health career promotion to school children, and performs work related to community health improvement.

The last community needs assessment was completed in 2016.

Project Overview

In 2010, Congress enacted the Patient Protection and Affordable Care Act that requires non-profit 501(c)3 hospitals to conduct a Community Health Needs Assessment (CHNA) and adopt an implementation strategy every three years. This CHNA is a systematic, data-driven approach to determining the health status, behaviors and needs of residents in the service area of Rockcastle Regional Hospital and Respiratory Care Center (RHRCC).

A CHNA 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.

In 2019, RHRCC partnered with the Rockcastle Healthy Community Coalition (a group composed of residents, civic groups, and other community leaders) to form a steering committee. The committee's goal was to determine the significant unmet needs of the community, consistent with the IRS requirements. So. KY AHEC also reviewed and analyzed data from multiple sources including: the Kentucky Hospital Association, United States Census Data, University of Wisconsin Population Health Institute's County Health Rankings Data, and other available needs assessments and reports.

The CHNA provides a foundation for the organization's efforts to guide community benefit planning to improve the health status of the community served.

Rockcastle Regional Hospital & Respiratory Care Center, Inc. serves the residents of Rockcastle and surrounding counties in rural, southern Kentucky. While the hospital values and recognizes all the communities it serves, for purpose of the CHNA, the community is defined as the service area of Rockcastle County. The residents of Rockcastle County account for approximately 71% of inpatient cases, 71.92% of emergency department patients, and 49.37% of outpatients.

Rockcastle Regional, So. KY AHEC, the Cumberland Valley District Health Department, community-based organizations, and other key informants gathered as a steering committee to understand and address unmet needs of the county. With input from the committee, the So. KY AHEC then drove the research process and from that work completed this assessment.

Primary data was collected through a health needs assessment survey, key informant interviews and community forums provided a perspective on what the community sees as primary health needs and possible solutions. Secondary data from local, state, and federal sources was compiled from information on disease prevalence, health indicators, health equity, and mortality.

Prioritized Areas

Based on the data collected, the RHRCC steering committee conducted a prioritization exercise to determine the top-ranked priority areas for the county. Members identified current resources and possible barriers to resources that residents may experience.

The RHRCC CHNA Steering Committee selected the following priority areas for action:

- 1. Cancer Care & Prevention
- 2. Mental Health & Substance Abuse
- 3. Education Services/Navigating the Healthcare System
- 4. Diabetes/Obesity

A plan for addressing these prioritized areas will be outlined in RHRCC's Implementation Strategy. The implementation strategy will be made available in the same manner as the CHNA.

This report will be disseminated throughout the community and made available on the hospital's Web site: http://rockcastleregional.org/

This CHNA will serve as a tool toward reaching three basic goals:

1. To improve residents' health status, increase their life spans, and elevate their overall quality of life. A healthy community is not only one where its residents suffer little from physical and mental illness, but also one where its residents enjoy a improved quality of life.

2. To reduce the health disparities among residents.

By gathering demographic information along with health status and behavior data, it will be possible to identify population segments that are most at-risk for various diseases and injuries. Intervention plans aimed at targeting these individuals may then be developed to combat some of the socioeconomic factors which have historically had a negative impact on residents' health.

3. To increase accessibility to preventive services for all community residents.

More accessible preventive services will prove beneficial in accomplishing the first goal (improving health status, increasing life spans, and elevating the quality of life), as well as lowering the costs associated with caring for late-stage diseases resulting from a lack of preventive care.

Evaluation of Prior Implementation

Rockcastle Regional's strategic priorities developed as a result of the 2016 Community Health Needs Assessment focused on three areas. Below is a summary of progress made in each of those areas.

Priority One: Cancer Care and Prevention

One of the issues of most concern to the community is cancer care and prevention, and we continue to address it on many fronts, including treatment, education and screening. We increased our capacity to provide an array of services that address cancer.

- Recruited a full-time community based medical oncologist in August 2017.
- Attained Commission on Cancer Accreditation from the American College of Surgeons, a key step to improving clinical patient outcomes. The commission sets standards to ensure quality, multidisciplinary, and comprehensive cancer care delivery.
- Now offer 3-D digital mammography, giving us the added capability of performing stereotactic guided breast biopsies on-site.
- Ongoing implementation of additional strategic prevention & screening programs, increase value through tracking and monitoring outcomes from those programs.
- Added patient navigation services.
- Added survivorship clinic with survivorship care planning.
- Began professional development / provider education for clinical staff.
- Establishment of a Certified Tobacco Treatment Specialist embedded into the cancer care practice
- Growing the low dose CT program by:
 - Strategic marketing / community educational programs to create awareness of eligibility
 - Implemented a new protocol for clinical follow-up/management of positive LDCT's; establishment of the Lung Screening Program
 - Implemented a low dose CT navigator to track all positive exams
 - Implemented a follow up process for improved compliance with return annual screens







Justin Williams, MD

Priority Two: Health Education

Though Rockcastle Regional is known for its robust health education activity, feedback generated from this assessment revealed many concerns such as obesity, heart disease and oral health, that might be addressed with increased education.

- Rockcastle Regional continues to promote and facilitate exercise through the availability of our fitness center, classes at our wellness center and events such as the Countywide Stride run/walk series.
- Address diabetes through education, such as Prevent T2, a program developed by the Centers for Disease
 Control that helps people with prediabetes prevent or delay the development of type 2 diabetes. Rockcastle
 clinicians who have become trained lifestyle coaches will lead yearlong classes for those with prediabetes.
 Support group have been established, a diabetes support group "Live, Learn, Share" and a weight loss
 support group that meet weekly.
- Continue to offer free or reduced-price health screenings as a part of certain health promotional events. The organizational goal for the number of community contacts in 2017 is 29,000, compared to the 2014 goal of 12,650.
- Continues to implement "best practices" in tobacco prevention and cessation through education in the Rockcastle County School system.
- As of 2019, Rockcastle Regional opened a new dental facility that strives to educate the patients thoroughly on oral health and preventative care.

PRIORITY

Priority Three: Mental Health and Substance Abuse

Mental health care and substance abuse issues emerged as top concern during the assessment process. We grouped them together because substance abuse ultimately involves mental health services if treatment is sought. Both have long been identified as priorities in our community, but both present a challenge to us in terms of addressing comprehensively.

In 2018, RHRCC began a focused initiative to improve staff's ability to appropriately address behavioral health needs of the community. The initiative centered on improving patient access to care; assessment of patients experiencing suicidal thoughts or behaviors; staff, patient, and community education; and overall organizational functions related to the care of behavioral health patients.

- As of 2019, we have one licensed professional counselor, one certified social worker, one licensed certified social worker, and as of August 2019 a full-time psychiatrist. Provide assessment and treatment for mental health disorders and medication management services. A nurse practitioner joins the practice once per week, who can also help with medication management, anxiety, depression, and childhood trauma.
- Participation in UNITE (Unlawful Narcotics, Investigations, Treatment, and Education) coalition meeting and events. Sponsor Annual UNITE Dinner.
- Hospital staff members participate as Chairs of the local ASAP (Area Substance Abuse Policy) Board.
- Provide clinicians with the latest in continuing education related to mental health and substance abuse.
- Rockcastle Regional and the Kentucky Hospital Association are partnering with the Cabinet for Health and
 Family Services as part of the Kentucky Opioid Response Effort (KORE) to launch the Kentucky Statewide
 Opioid Response Stewardship (KY SOS) program. This initiative will provide a mechanism for hospitals to
 demonstrate their actions and commitments to their patients and communities to combat the state's opioid
 epidemic.

KY SOS will focus on reducing the overprescribing and improving safe opioid use throughout the commonwealth. Additionally, this project will provide a voluntary certification opportunity for Kentucky hospitals that demonstrates their progress.

3

Patient Origin & Migration Trends

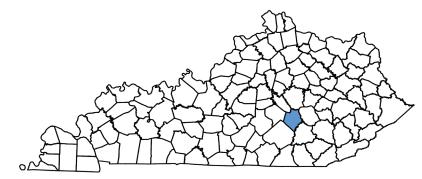
This assessment focuses on Rockcastle Regional Hospital's acute care and outpatient services. Though the hospital occasionally serves patients from other counties, the vast majority (71%) percent of inpatients are residents of Rockcastle County.

Of the 1,655 times Rockcastle County residents were admitted to hospitals in 2018, 36.43%, or 603, were at Rockcastle Regional Hospital. The complete list is as follows:

2018 Kentucky Patient Origin Report Kentucky Hospital Association Total Discharges of Rockcastle County Residents by facility January 1, 2018 - December 31, 2018 Acute Adult. Pediatric and Normal Newborn

Facility	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
Rockcastle Regional Hospital & Respiratory Care Center	178	131	149	145	603
UK Chandler Medical Center	86	80	102	97	365
Baptist Health Lexington	49	41	40	42	172
Baptist Health Richmond	26	24	18	18	86
Saint Joseph Hospital London	11	26	15	13	65
Lake Cumberland Regional	19	20	14	22	75
Saint Joseph East	16	16	17	20	69
Saint Joseph Hospital	16	11	18	18	63
Ephraim McDowell Fort Logan Hospital	9	8	4	6	27
Saint Joseph Berea	17	9	11	8	45
UK Healthcare Good Samaritan Hospital	10	10	8	9	37
Ephraim McDowell Regional	6	6	5	7	24
Baptist Health Corbin	1	1	3	1	6
Clark Regional Medical Center	0	2	1	0	3
Georgetown Community Hospital	1	0	0	1	2
Hazard ARH Regional Medical Center	1	1	0	2	4
AdventHealth Manchester	0	0	0	2	2
Kings Daughter Medical Center	2	0	0	0	2
Baptist Health Louisville	0	0	0	1	1
Casey County Hospital	0	0	1	0	1
Norton Childrens Hospital	1	0	0	0	1
Norton Womens & Childrens Hospital	0	1	0	0	1
Taylor Regional Hospital	0	1	0	0	1

Rockcastle County Overview



Founded in 1810 and named for the Rockcastle River which runs through it.

Rockcastle Regional Hospital & Respiratory Care Center is located in Mount Vernon, Kentucky, in Rockcastle County. Created out of Knox, Lincoln, Madison, and Pulaski counties it was the 52nd Kentucky County in order of formation. Isaac Lindsey, who came here with a hunting party in 1767, observed a lone rock which resembled an ancient castle. From this, the river was named, later the county. The county is nestled in the foothills of southeastern Kentucky with Interstate 75 bisecting the county from North to South.

Mount Vernon is located 54 miles south of Lexington (second largest city in Kentucky) 129 miles south of Louisville (largest city in Kentucky), 133 miles south of Cincinnati, Ohio and 119 miles north of Knoxville, Tennessee. Interstate 75 brings tourism travelers to the county of Rockcastle. The interstate also brings travelers to RHRCC who fall ill or are in accidents while passing through the area.

Two pioneer trails, Boone's Trace and the Wilderness Road, intersect in Rockcastle at Mt. Vernon, which became the fork in the trail as Daniel Boone made his way from North Carolina to Boonesboro (rockcastlecountyky.com). There are three incorporated towns located within the county: Mt. Vernon (the county seat), Brodhead, and Livingston. (http://www.rockcastlecountyky.com/about.html)



Population

Kentucky: 4,340,343 United States: 316,027,641 United States: 3,531,932.26



Land Area

Kentucky: 39,483.74



Population Density

Kentucky: 111.01 United States: 88.93

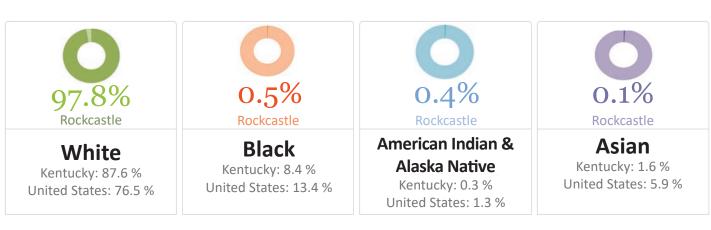
Rockcastle Population by Age Groups

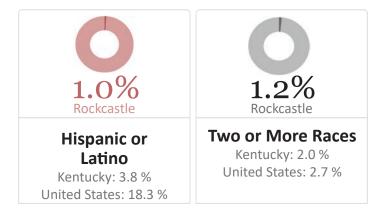
An estimated 18.2% percent of the population in Rockcastle County is age 65 or older according to the U.S. Census Bureau July 2018 estimates. An estimated total of 3,048 older adults resided in the area during this time period. The number of persons age 65 or older is relevant because this population has unique health needs which should be considered separately from other age groups.



Population by Race

While there are similarities between Rockcastle's age demographics and the state, there is very little racial or ethnic diversity in Rockcastle County.





Data Source: U.S. Census Bureau July 2018 estimates.

Families with Children

According to the most recent American Community Survey estimates, 29.82% of all occupied households in the report area are family households with one or more child(ren) under the age of 18. Twenty eight percent 28.4% of all households have one or more people 65 years and over. Four hundred and seventy one 471 grandparents lived with their grandchildren under 18 years old, of those grandparents, 72.2% were responsible for basic needs of those grandchildren. As defined by the US Census Bureau, a family household is any housing unit in which the householder is living with one or more individuals related to him or her by birth, marriage, or adoption. A non-family household is any household occupied by the householder alone, or by the householder and one or more unrelated individuals.



Households

Kentucky: 1,724,514 United States: 118,825,921



Family Households

Kentucky: 1,136,917 United States: 78,298,703



Families with Children (under age 18)

Kentucky: 469,118 United States: 33,552,189



Percent Families with Children (under age 18)

Kentucky: 27.20 % United States: 28.23 %

Population with Any Disability

This indicator reports the percentage of the total civilian non-institutionalized population with a disability. This is relevant because disabled individuals comprise a vulnerable population that requires targeted services and outreach by providers.



Population

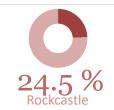
Kentucky: 4,340,343 United States: 316,027,641



4,041
Rockcastle

Population with a Disability

Kentucky: 751,563 United States: 37,792,082



Percent Population with a Disability

Kentucky: 17.3 % United States: 12.6 %

Data Source: 2013-2017 American Community Survey 5-Year Estimates

Social Economic Factors

Social Determinants of Health

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

- Healthy People 2020 www.healthypeople.gov

Social Economic Factors

Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Without a network of support and a safe community, families cannot thrive. Ensuring access to social and economic resources provides a foundation for a healthy community. Rockcastle County is relatively poor. It is identified as a "distressed" county by the Appalachian Regional Commission (ARC). ARC designated distressed counties are considered the most economically depressed. They rank in the worst 10 percent of the nation's counties. The ARC uses an index-based county economic classification system to identify and monitor the economic status of Appalachian counties. The system involves the creation of a national index of county economic status through a comparison of each county's averages for three economic indicators—three-year average unemployment rate, per capita market income, and poverty rate—with national averages. The resulting values are summed and averaged to create a composite index value for each county. Each county in the nation is then ranked, based on its composite index value, with higher values indicating higher levels of distress. Poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status, unemployment rate, per capita market income, and poverty rate—with national averages. The resulting values are summed and averaged to create a composite index value for each county. Each county in the nation is then ranked, based on its composite index value, with higher values indicating higher levels of distress.



Population

Kentucky: 4,287,887 United States: 331,048,563



Population in Poverty

Kentucky: 783,586 United States: 45,650,345



21 %
Rockcastle

Percent Population in Poverty

Kentucky: 18.3 % United States: 14.6 %

Data Source: 2013-2017 American Community Survey 5-Year Estimates

Education and Health Literacy

Education and literacy are closely related, and literacy has been identified as the single best predictor of a person's health status. Limited health literacy has been associated with poor health outcomes in a number of studies. These run the gamut from increased hospitalizations and higher use of emergency departments to lower use of preventive services (e.g. mammography). Poor health literacy is also linked to poorer outcomes with diabetes, asthma, hypertension and heart failure among others. Along with decreased knowledge of health conditions and how to care for themselves, studies have shown that people with low health literacy have increased difficulty with proper use of medications.

High School Graduation Rate (EdFacts)

Within the report area, 98% of students are receiving their high school diploma within four years. This indicator is relevant because research suggests education is one the strongest predictors of health (Freudenberg Ruglis, 2007).



Rockcastle Graduation Rate is: 98 %

Kentucky Graduation Rate is: 89.7 %
The National Graduation Rate is: 84.6%

Data Source(s): The 2019 County Health Rankings data from 2016-2017, Education Week Research Center analysis of NCES data, 2019, State by State 2016-17 Graduation Rates

The Rockcastle County school system consists of one high school, one middle school, three elementary schools, an area technology center, and an adult education center. In recent years, the district has routinely scored above the state average in standardized testing, and several county schools have won awards such as Roundstone Elementary's National Title I Distinguished School Award (and five consecutive Commonwealth Pacesetter Awards).



Population Age 18-24

Kentucky: 425,585 United States: 31,131,484



Rockcastle

Population Age 18-24
Less than high school
graduate

Kentucky: 54,221 United States: 4,169,856



Percent Population
Age 18-24 less than high
school graduate

Kentucky: 12.7 % United States: 13.4 %



Population with Associates Level Degree or Higher

Nearly eighteen percent 17.99% of the population aged 25 and older, or 2,122 have obtained an Associates level degree or higher. This indicator is relevant because educational attainment has been linked to positive health outcomes.



Total Population Over Age 25

Kentucky: 2,986,199 United States: 216,271,644



Rockcastle

Total with Associate's

Degree or Higher

Kentucky: 930,628

United States: 84,805,084



Percent with Associate's Degree or Higher

Kentucky: 31.16 % United States: 39.21 %

Data Source: 2013-2017 American Community Survey 5-Year Estimates, Educational Attainment

Although there is not a brick-and-mortar institute of higher learning inside Rockcastle County, Somerset Community College (SCC) has campuses in Somerset and London, each of which are within commuting distance. Berea College and Eastern Kentucky University (EKU) are 17 and 28 miles, respectively, from Mt. Vernon. Dual credit courses through SCC and EKU are available to Rockcastle County High School students.

Rockcastle Regional offers an online Medicaid Nurse Aide class that creates a pathway to becoming a state-registered nursing assistant. Rockcastle Area Technology Center and Rockcastle Regional Hospital and Respiratory Care Center recently formed Kentucky's first Tech Ready Apprentices for Careers in Kentucky (TRACK) Youth Apprenticeship in Certified Nursing Assistant (CNA).

During their senior year of school, these students will continue to work for Rockcastle Regional, receive instruction at Rockcastle Area Technology Center, and work to obtain their CNA certification. Additionally, these students will obtain on-the-job training in a multitude of competencies while at the hospital. The culmination of this program is a Journeyperson Certification and a continued position at the hospital after graduating from Rockcastle County High School.

Tourism and Entertainment

The county has a robust tourism and entertainment sector. Renfro Valley, a small community within a mile of downtown Mt. Vernon, is known as "Kentucky's Country Music Capital" and is home to the Renfro Valley Entertainment Center and the Kentucky Music Hall of Fame. The entertainment center features some of the country's most famous country, gospel, and bluegrass acts and is a destination for thousands every year. The Kentucky Music Hall of Fame honors the commonwealth's finest music professionals and features a museum that attracts tourists from all over the nation.

Rockcastle County is home to Lake Linville, a 344 acre lake conveniently located just off of I-75 exit 62, and is a perfect destination to spend your days and nights enjoying a little recreation and relaxation. The Lake Linville Marina is situated 1/2 mile north on Lake Linville Road, and provides a boat ramp, dock, pontoon rentals, and camping. Open Bass Tournaments are also held regularly.

The community of Livingston is a "Kentucky Trail Town." The Kentucky Trail Town Program is designed to help connect communities to trail systems and develop the locations as tourist destinations. It guides travelers to trails, food, lodging, campgrounds, museums, entertainment and other services. Livingston is a great example of a Trail Town with its proximity to the Daniel Boone National Forest and the Sheltowee Trace which is the combination of hiking trails, horseback riding and the Rockcastle River.

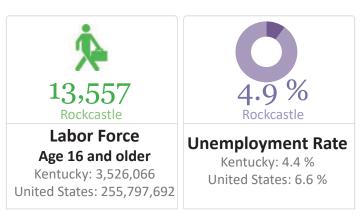
Anglin Falls, located in John B. Stephenson Memorial Forest, is a rich wooded ravine is open to the public for hiking, bird watching and nature studying. www.rockcastletourism.com/things-to-do/outdoor-fun/

Employment

Local residents say one of the county's greatest needs is having more, better-paying jobs. This is significant because studies show that those with higher incomes are more likely to be healthier than those with lower incomes. The two largest employers are Rockcastle Regional Hospital and Rockcastle County Schools. A good portion of the economy is driven by small businesses and the service industry. A data processing center called SourceHOV is a major local employer.

Unemployment Rate

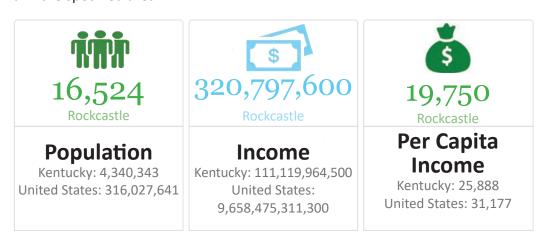
Total unemployment in the report area is estimated at 4.9% of the civilian non-institutionalized population age 16 and older (non-seasonally adjusted). This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.



Data Source: 2013-2017 American Community Survey 5-Year Estimates, Employment Status 2019 United States Department of Labor Bureau of Labor stats

Income - Per Capita

The per capita income for the report area is \$19,750. This includes all reported income from wages and salaries as well as income from self-employment, interest or dividends, public assistance, retirement, and other sources. The per capita income in this report area is the average (mean) income computed for every man, woman, and child in the specified area.



Data Source: 2013-2017 American Community Survey 5-Year Estimates, Aggregate Household Income & Per capita Income In The Past 12 Months (In 2017 Inflation-Adjusted Dollars)

Income - Public Assistance Income

Public assistance income includes general assistance and Temporary Assistance to Needy Families (TANF). Separate payments received for hospital or other medical care (vendor payments) are excluded. This does not include Supplemental Security Income (SSI) or noncash benefits such as Food Stamps.



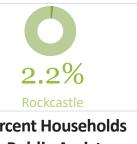
Households

Kentucky: 1,724,514 United States: 118,825,921



Households with **Public Assistance**

Kentucky: 36,864 United States: 3,041,626



Percent Households with Public Assistance

Kentucky: 2.1 % United States: 2.55 %

Data Source: 2013-2017 American Community Survey 5-Year Estimates, Public Assistance Income Past 12 Months For Households

Population Receiving SNAP Benefits (ACS)

Supplemental Nutrition Assistance Program (SNAP) benefits is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.



Households

Kentucky: 1,724,514 United States: 118,825,921



Households **Receiving SNAP**

Kentucky: 286,281 United States: 15,811,787



Rockcastle

Percent Households with SNAP

Kentucky: 16.6 % United States: 13.3 %

Data Source: 2013-2017 American Community Survey 5-Year Estimates, Public Assistance Income or food Stamps/SNAP

Insurance - Population Receiving Medicaid

Population with insurance enrolled in Medicaid (or other means-tested public health insurance).



Rockcastle

Population

Kentucky: 4,340,343 United States: 316,027,641



Population Insured

Kentucky: 3,998,992 United States: 282,850,495



Population Receiving Medicaid

Kentucky: 1,045,679 United States: 61,856,728



Rockcastle

Percent Population Receiving Medicaid

Kentucky: 24.1 % United States: 19.6 %

Data Source: 2013-2017 American Community Survey 5-Year Estimates, Health Insurance Coverage In The United States

Barriers for Rural Health

Like most counties in Kentucky, Rockcastle's economy historically has been agriculturally based. This has changed significantly in recent years, 2012 US Agriculture Census data reveals there are 677 farm operations on 90.856 acres- which represents 44.8% of total county land. Kentucky's average farm operations make up 51.6% of the state's total land area, and US farm operations make up 40.5% of total land area in the country (cedik.ca.uky.edu). One thousand five hundred and ten 1,510 people directly receive income from farm operations in the county this accounts for approximately 29% of Rockcastle's total employment. This is significant from the standpoint of health and health care because rural communities, which also tend to be farming communities, face unique barriers to good health.

The National Rural Health Association cites some of the differences in rural and non-rural health.

- Extreme distances, weather, geography, systemic health care workforce shortages and the hospital closure crisis make access to care the prevailing concern for rural patients.
- Rural Americans are older and sicker than their urban counterparts, suffering higher rates of chronic disease such as heart disease and diabetes.
- According to a January 2017 Center for Disease Control study, a higher percentage of rural Americans die prematurely.
- The opioid crisis is catastrophic in rural America. In fact, the rate of overdose deaths in non-metro counties is 45% higher than in metro counties.
- In an emergency, rural patients must travel twice as far as urban residents to the closest hospital. As a result, 60% of trauma deaths occur in rural America, even though only 20% of Americans live in rural areas.
- In most rural communities, the hospital is the first or second largest employer, but only if the community still has a hospital. 88 rural hospitals have closed since 2010, and 674 (1/3 of all rural hospitals) are vulnerable to closure.
- Rural residents make up about 20% of the U.S. population but 23% of Medicare beneficiaries. Those 60 million rural Americans are scattered over 95% of the landmass in the U.S.
- Health care in rural America is critical to the communities overall wellbeing. It can comprise as much as 20% of the rural economy.
- 200,000 jobs were lost annually in rural America during the Great Recession, and 19% of rural Americans, including 25% of rural children, are still living in poverty.
- 44% of rural hospitals operate at a loss and 30% operate below a -3% margin. Rural hospitals have absorbed a combined \$318 million in cuts under sequestration, resulting in a loss of 7, 129 community health care jobs and a \$769 million loss.

Data Source: www.ruralhealthweb.org/NRHA/media/Emerge NRHA/Advocacy/Government%20affairs/2018/WhoWeAre-S18.pdf

44% of rural hospitals operate at a loss and 30% operate below a -3% margin

Personal Doctor or Health Care Provider

Seventeen 17.7% percent of Kentucky adults don't use a regular doctor or they do not have at least one person who they think of as their personal doctor or health care provider. Access to regular primary care is important to preventing major health issues and emergency department visits. Routine visits with your primary care provider not only help with your comfort level, but they also build a health history. Your provider will have access to your health history, as well as your family health history, this is essential for prevention of diseases and helps your doctor catch early symptoms of serious conditions.

Percent of Adults Reporting Not Having a Personal Doctor



Rockcastle County: 10%

Kentucky: 17.7%

United States: 22.5%

Data Source: www.kff.org/other/state-indicator, www.kentuckyhealthfacts.org

Lack of Social or Emotional Support

This indicator reports the percentage of adults aged 18 and older who self-report that they receive insufficient social and emotional support all or most of the time. This is relevant because social and emotional support is critical for navigating the challenges of daily life as well as for good mental health. Social and emotional support is also linked to educational achievement and economic stability.



Total Population Age 18

Kentucky: 3,294,652 United States: 232,556,016



3,013
Rockcastle

Population without Adequate Social/ Emotional Support

Kentucky: 36,864 United States: 3,041,626 0

23%

Rockcastle

Percentage without Adequate Social/ Emotional Support

Kentucky: 2.1 % United States: 2.55 %

Data Source: 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. 2006-12. Source geography: County



Community Health Services & Resources

In addition to Rockcastle Regional Hospital, other local organizations whose missions are related to health and well-being include:

Rockcastle Health and Rehabilitation, a 104-bed nursing home in Brodhead, Kentucky, serves the entire county. Its clinical team includes a full-time registered dietitian, respiratory therapist, dedicated wound care nurse, mental health counselor, nurse practitioner and clinical support staff. Clinical services for its residents include a 24-hour on-call physician, geriatric/psychiatric nurse practitioner, physical, occupational and speech therapies, wound care, cardiac care, diabetic care, hospice care, therapeutic recreation, psychosocial intervention, behavior health program management, and podiatry, dental and optometry services.

Cumberland Valley District Health Department is located in Mt. Vernon on Richmond Street.

It provides the following services:

- Preventative health care screenings
- Women, Infant and Children (WIC) Program
- Folic Acid counseling and supplementation
- Phenylketonuria (PKU) screening

- Chronic disease screening
- Sexually transmitted disease diagnosis, treatment and follow-up Diabetes self-management education and support group
- Immunizations
- Phenylketonuria (PKU) screening
- Preconception care/counseling
- Medical nutrition therapy
- HIV testing & counseling services
- Cancer screening Family planning

Rockcastle County has two adult day care facilities which are both located within the city limits of Mt. Vernon. Rockcastle Senior Citizens and Adult Day Health provides meals, personal care, wound care, recreational activities, and Meals on Wheels for homebound residents. Similar services, not including Meals on Wheels are provided by Wayne Stewart Adult Health.

The Kentucky Cabinet for Health and Family Services has three offices in Rockcastle County: The Office of Family Support, The Office of Protection and Permanency, and Child Support Enforcement. Each of these offices provide a wide range of services including child/adult abuse and neglect, assistance with food stamps, welfare, Kentucky Medicaid, and child support enforcement.

The Rockcastle County School Health Services provides first aid care to students and employees who become sick or injured at school. Health Services also maintains the health records required by the Department of Education and does health screenings for the students (http.rockcastle.kyschools.us). There is one BSN prepared district nurse for Rockcastle County. Each school within the county has either a LPN or CMA under the supervision of the principal and district school nurse. The district RN oversees the health services provided by nursing staff, advises the health assistants, monitors the students' health records, helps with vision, hearing, and scoliosis screening, and provides mini-health lessons as needed.

The Rockcastle County School system has a school services agreement with Rockcastle Regional Hospital to pilot a program for medical services. This program was mutually created between the school district and hospital in an attempt to increase access to medical care, bridge the gap of services for students, provide convenient method for parents to have their children assessed by a practitioner, and decrease student absences.

RockPeds utilizes the technology of telemedicine to provide health services to Rockcastle County High School students. They are able to diagnose and treat common illnesses while the student stays at school. RockPeds is open to all students, as long as their permission paperwork (which includes medical history) is filled out and submitted by a parent or guardian. The student's insurance is billed, just as would be the case if seen in-office. RockPeds is available throughout the school day, so as long as the nurse is available, they are able to see the student. The program is still new, as the first patient was in October 2019, and as of the beginning of December, RockPeds served 80-100 students.

Some of the community's major health concerns are substance abuse and mental illness. There are no inpatient facilities in Rockcastle County for the treatment of psychiatric-related conditions. The following is a breakdown of where Rockcastle Countians received inpatient care in 2018 for psychiatric-related conditions:

Psychiatric Care Discharges by Facility

Facility	Age 0-17	Age 18+	Grand Total
Baptist Health Corbin	8	16	24
Bourbon Community Hospital	1	5	6
Ephraim McDowell Regional Medical Center	0	10	10
Frankfort Regional Medical Center	0	1	1
Hazard ARH Regional Medical Center	0	25	25
Lake Cumberland Regional Hospital	0	11	11
Our Lady of Peace	1	2	3
Ridge Behavioral Health System	7	8	15
Rivendell Behavioral Health System	1	0	1
Rockcastle Regional Hospital	0	5	5
Southeastern KY Medical Center	0	2	2
St. Elizabeth Florence	0	1	1
The Brook Hospital	1	0	1
UK Healthcare Good Samaritan Hospital	4	2	6

Data Source: 2018 KHA Kentucky Patient Origin report Psychiatry Facility Profile Jan. 1, 2018 - Dec. 31, 2018

Access to Mental Health Providers

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.



Population

Kentucky: 4,436,497 United States: 317,105,555



Rockcastle

Mental Health Providers

Kentucky: 9,014 United States: 643,219



Rockcastle

Ratio Mental Health Providers

Kentucky: 492.2 United States: 493



Mental Health Care Providers Rate

Kentucky: 203.2 United States: 202.8

Data Source: University of Wisconsin Population Health Institute, County Health Rankings. 2017. Source geography: County

Cumberland River Comprehensive Care Center (CRCCC) is a community based not-for-profit organization providing services in mental health, developmental delay, intellectual disabilities and chemical dependency for eight Southeastern Kentucky counties. CRCCC provides outpatient substance abuse and mental health services for residents of Rockcastle County of all ages. It is one of 14 regional comprehensive care centers established by the Kentucky legislature to provide mental, substance abuse, and mental retardation-related services. Rockcastle is one of eight counties served by CRCCC. Services can be provided in a variety of settings from individual, couple, marital, family or group counseling for mental health and substance abuse issues to referral services for in-patient hospitalization. CRCCC offers sessions with counselors, as well as with a peer support specialist if needed, and a variety of opportunities for adults and children with developmental delay/intellectual disabilities.

The facility accepts private insurance, worker's compensation, Medicaid, and Medicare is accepted. CRCCC also has a sliding fee scale available to those without third party payment. On staff are two part-time psychiatrists, a nurse practitioner certified in mental health, a psychiatric nurse, licensed mental health professionals as well as several certified counselors. Among other programs offered are court approved DUI classes, a therapeutic rehabilitation day program for individuals with mental health needs as well an adult day training program for individuals with developmental delays. Case management is offered for qualifying individuals to assist with the negotiation of community resources. Children and their families are provided services in both the school and clinic settings. Regionally, crisis stabilization residential services and inpatient substance abuse services are available through the referral process. Also available is a 24 hour crisis hotline which is able to respond in emergency situations.

There are a several faith-based recovery programs available throughout the county. These 12 step programs address a variety of addictions.

Another option for the treatment of substance abuse involves Operation UNITE, an acronym for the Unlawful Narcotics Investigations, Treatment, and Education, Inc. It is a non-profit corporation that serves the 32 counties of the Fifth Congressional District, including Rockcastle. In addition to law enforcement and education components, Operation UNITE also coordinates in patient treatment for substance abusers. Those meeting eligibility requirements may call UNITE and request treatment. If they qualify, they are referred to one of 20 treatment facilities (most in Kentucky), for what is typically a 90-day inpatient program, and UNITE assumes the cost of the treatment. *(operationunite.org)* There is one Alcoholics Anonymous meeting hosted weekly at a local church.

The Christian Appalachian Project is an interdenominational, non-profit Christian organization committed to serving people in need in Appalachia by providing physical, spiritual and emotional support through a wide variety of programs and services.

The organization has facilities in Rockcastle County and serves the county in a variety of ways:

- Housing: helps keep families warm, safe, and dry. Provides a more healthful environment for them to live in. Elderly Housing: focusing on ages 60+ and things like ramps, windows, insulation.
- Elderly services: provides socialization for the elderly as well as home visits, transportation to the doctor, grocery, etc.; helps them maintain independence.
- Prescription assistance: helps low-income people of all ages afford their medication.
- Emergency Assistance: help people whose homes have burned, utilities being shut off, etc.
- In-home respite: helps keep families intact and not have to rely on nursing homes, provides mental/physical respite for caregivers.
- Family life child development: health and wellness is included in preschool curriculum, nutritious meals provided according to federal guidelines, home visitors work with children that may have developmental delays.
- Counseling: mental health and well-being.
- Grateful Bread: a food pantry that provides food to low income households and community awareness/education
- Grateful Thread: gently used clothing store has low cost clothes for all ages.
- Family advocacy: small farms & gardens helps people plan/afford/start gardens and grow/preserve their own nutritious food.

Emergency services are provided by the Rockcastle County Emergency Medical Service (EMS), a private, non-profit organization that offers both Basic Life Support (BLS) and Advanced life Support (ALS) and makes between 3,000 and 3,500 runs annually. Many of those runs are related to respiratory distress and cardiac events, mostly in patients over the age of 50. It has been estimated that 50% percent of the EMS's trauma runs result from traffic accidents on Interstate 75.

White House Clinic-Mt. Vernon is a division of White House Clinics, which is a 501(c)3 non-profit corporation. Its clinics are Federally Qualified Health Care Centers which receive federal funding to offset costs for uninsured and low-income patients. Their physicians are supported by nurse practitioners, physician assistants, licensed clinical social workers, and other health care professionals. White House Clinics offer on-site dental, pharmacy services, laboratory services, mammography services, and x-ray services.

Lifeline Home Health, in partnership with Rockcastle Regional Hospital, and Cumberland Valley Home Health, a part of the Cumberland Valley District Health Department, are the two home health agencies in Rockcastle County. Both provide homecare – which might include a range of services from respite to palliative care – by nurses, therapists, social workers, and home health aides. They serve the entire county.

Other services offered in Rockcastle County are:

- Four dentists' offices. There is also an office that specializes in partials and dentures. A mobile dental clinic typically visits all of the county's schools each year, primarily providing cleaning and cavity-screening services, with other services such as fillings also available.
- One eye clinic housing two part-time optometrists.
- Three retail pharmacies in Mt. Vernon and one pharmacy in Brodhead.
- Three durable medical equipment providers.
- Brodhead Community Mission has emergency funds to assist individuals in need and food pantry.
- Low or no-cost transportation to get healthcare services may be provided by Rural Transit Enterprises Coordinated, Inc. (RTEC), a non-profit corporation headquartered in Mt. Vernon which provides community transit services to a 12-county area.
- Daniel Boone Action, offers a range of services to address needs of county residents, including heating assistance, emergency food & shelter, and tenant-based rental assistance.



Health Status

General

This section of the assessment reviews the health status of Rockcastle County residents. Comparisons are provided with the state of Kentucky and the United States. This in-depth assessment of the mortality and morbidity data, health outcomes, health factors, and mental health indicators of residents that make up the community will enable RHRCC to identify priority health issues related to the health status of its residents.

According to the University of Wisconsin Population Health Institutes' 2019 County Health Rankings, Rockcastle County was the 96th healthiest of Kentucky's 120 counties (countyhealthrankings.org). The county's ranking have declined since 2010, the first year the Rankings were published, when it was ranked 76th. The Rankings are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play. The County Health Rankings measure the health of nearly all counties in the nation and rank them within states. The Rankings are compiled using county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientifically-informed weights.

The population of Rockcastle County, like that of many Kentucky counties suffers from relatively poor health. Risk factors such as smoking, obesity, heart disease and diabetes on the average occur at higher rates in Rockcastle County than in the nation as a whole, often these are higher than the statewide average (see graphics below).

Tobacco Usage - Current Smokers

In the report area an estimated 3,144 or 24% of adults age 18 or older self-report currently smoking cigarettes some days or every day. This indicator is relevant because tobacco is the leading cause of preventable death in the US. On average, smokers die 10 years earlier than non-smokers.



Data Source: CDC Smoking and Tobacco Use February 2019

Tobacco use has real economic impacts for individuals and communities. Each year, more than 8,000 Kentuckians die of illnesses caused by tobacco use. Some die of lung cancer, while others fall victim to cardiovascular disease. Annually, Medicaid and Medicare costs exceed an estimated 1.2 billion for treatment of Kentuckians suffering from smoking-related disease and conditions. This equals \$300 for each of the four million people living in Kentucky. (Kentucky Department of Public Health 2020)

Diabetes (Adult)

This indicator reports the percentage of adults aged 20 and older who have ever been told by a doctor that they have diabetes. This indicator 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 Age 20+

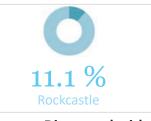
Kentucky: 3,311,660 United States: 243,852,590



Diagnosed with Diabetes

Rockcastle

Kentucky: 417,120 United States: 25,204,602



Percent Diagnosed with Diabetes (Age-Adjusted)

Kentucky: 11.3 % United States: 9.32 %

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2016. Source geography: County. Note: This indicator is compared to the state average.

Heart Disease (Adult)

Nine hundred ninety-four (994), or 8% of adults aged 18 and older have ever been told by a doctor that they have coronary heart disease or angina. This indicator 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 Age 18+

Kentucky: 3,286,020 United States: 236,406,904



994

Rockcastle

Diagnosed with Heart Disease

Kentucky: 194,665 United States: 10,407,185



Rockcastle

Percent Diagnosed with Heart Disease

Kentucky: 5.9 % United States: 4.4 %

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County

Cancer Incidence - All Sites

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of cancer (all sites) adjusted to 2000 U.S. 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.



Kentucky: 509,668 United States: 16,478,834



59

Rockcastle

New Cases (Annual Average)

Kentucky: 25,988 United States: 797,246



574.7
Rockcastle

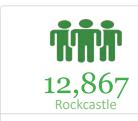
Cancer Incidence Rate (Per 100,000 Pop.)

Kentucky: 509.9 United States: 483.8

Data Source: State Cancer Profiles. 2011-15. Source geography: County Note: This indicator is compared to the state average.

Obesity

Thirty-three point four percent (33.4%) of adults aged 20 and older self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese) in the report area. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.



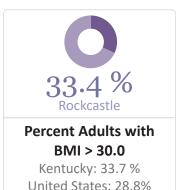
Total Population Age 20+

Kentucky: 3,309,802 United States: 241,290,773



Adults with BMI > 30.0 (Obese)

Kentucky: 1,120,106 United States: 69,953,947



Data Source: Centers for Disease Control & Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2016.

Dental Health

Good oral health is the result of positive forces in a complex range of issues from environmental, socio-cultural and behavioral factors to education and health service access. Though integral to personal well-being, oral health receives less attention and less funding than general physical health. Dental care is not covered by most public and private health insurance plans. With the exception of government employee plans and children's Medicaid programs, dental insurance coverage requires a separate policy. Only basic children's dental services are mandatory for Medicaid. Adult care is optional for state Medicaid programs. Dental care, other than hospital emergency care, is not covered by Medicare or TriCare, the basic military insurance.

The percentage of adults age 18 and older who self-report that six or more of their permanent teeth have been removed due to tooth decay, gum disease, or infection. This is relevant because it indicates lack of access to dental care and/or social barriers to utilization of dental services.



Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2006-10. Source geography: County

Access to Dentists

Across the United States, shortages of dental professionals are common. The scope of dental practice is limited by state dental licensure boards, which are only gradually expanding the type of oral health services permitted for delivery by non-dentists. As this happens, the oral health workforce expands and more services become available to more people, generally at lower costs. This indicator reports the number of dentists per 100,000 population. This indicator includes all dentists - qualified as having a doctorate in dental surgery (D.D.S.) or dental medicine (D.M.D.), who are licensed by the state to practice dentistry and who are practicing within the scope of that license.



Total Population

Kentucky: 4,425,092 United States: 321,418,820



Dentists

Kentucky: 2,736 United States: 210,832



Dentists - Rate per 100,000 Population

Kentucky: 61.8 United States: 65.6

Data Source: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2015. Source geography: County

Poor General Health

Within the report area 28.3% of adults age 18 and older self-report having poor or fair health in response to the question "Would you say that in general your health is excellent, very good, good, fair, or poor?" This is relevant because it is a measure of general poor health status.



Total Population Age 18+

Kentucky: 3,294,652 United States: 232,556,016



3,707
Rockcastle

Population Poor or Fair Health

Kentucky: 724,823 United States: 37,766,703 0

27.6 %

Rockcastle

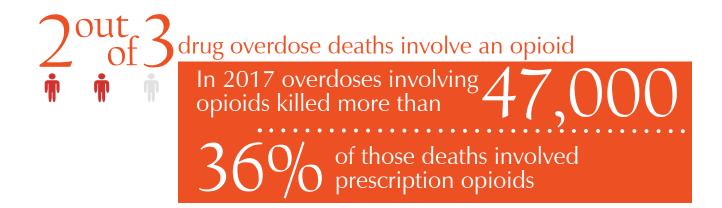
Age-Adjusted Percentage

Kentucky: 21.1 % United States: 15.7 %

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2006-12. Source geography: County

Substance Abuse, Social and Mental Health Issues

The National Institute on Drug Abuse ranks Kentucky among the top 10 states with the highest opioid related overdose deaths.



Data Source: (Hedegaard H, Miniño AM, Warner M. Drug overdose deaths in the United States, 1999–2017. NCHS Data Brief, no 329. Hyattsville, MD: National Center for Health Statistics. 2018). (Scholl L, Seth P, Kariisa M, Wilson N, Baldwin G. Drug and Opioid-Involved Overdose Deaths – United States, 2013-2017. Morb Mortal Wkly Rep. ePub: 21 Dec. 2018).

According to the Kentucky Office of Drug Control Policy, there were six drug overdose deaths in Rockcastle County in 2018. Out of the total overdose death cases in the Commonwealth, 26% of the deaths were in residents between the ages of 35 and 44 and 25% among ages 25-34. (KY Office of Drug Control Policy 2018 Overdose Fatality Report)



Fighting Opiod Abuse

RHRCC has partnered with the Kentucky Hospital Association (KHA) and Cabinet for Family Services as part of the Kentucky Opioid Response Effort (KORE) to launch the Kentucky Statewide Opioid Stewardship (KY SOS) Program. Opioid stewardship involves a coordinated effort to reduce opioid-related harm by developing alternative means to manage pain and ensure opioid prescribing and patient monitoring aligns with evidence-based guidelines.

As a member of KY SOS, Rockcastle Regional receives:

- Resources and education on opioid stewardship
- Access to clinical advisors and subject matter experts who can assist with improvement questions and provide recommendations
- Access to the Kentucky Quality Counts data system to track progress on applicable measures
- Support and coordination from KHA

RHRCC follows the Best Practice Guidelines. The CDC Guidelines addresses patient-centered clinical practices including conducting thorough assessments, considering all possible treatments, closely monitoring risks, and safely discontinuing opioids.

The three main focus areas in the CDC Guidelines include:

- 1. Determining when to initiate or continue opioids for chronic pain
 - Selection of non-pharmacologic therapy, nonopioid pharmacologic therapy, opioid therapy
 - Establishment of treatment goals
 - Discussion of risks and benefits of therapy with patients
- 2. Opioid selection, dosage, duration, follow-up, and discontinuation
 - Selection of immediate-release or extended-release and long-acting opioids
 - Dosage considerations
 - Duration of treatment
 - Considerations for follow-up and discontinuation of opioid therapy
- 3. Assessing risk and addressing harms of opioid use
 - Evaluation of risk factors for opioid-related harms and ways to mitigate patient risk
 - Review of prescription drug monitoring program (PDMP) data
 - Use of urine drug testing
 - Considerations for co-prescribing benzodiazepines
 - Arrangement of treatment for opioid use disorder

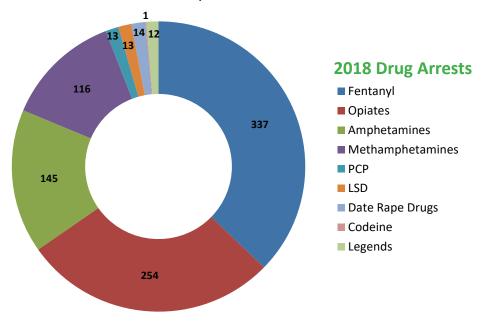
Calculating the total daily dose of opioids helps identify patients who may benefit from closer monitoring, reduction or tapering of opioids, prescribing of naloxone, or other measures to reduce risk of overdose.

In 2012 Kentucky mandated clinicians to review prescription drug monitoring program (PDMP) data and implemented pain clinic regulation. MME (morphine milligram equivalents) per capita decreased in 62% of counties, from 2010 to 2015.

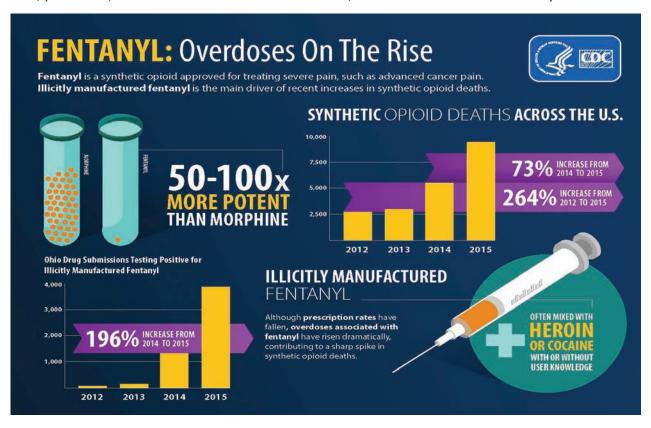


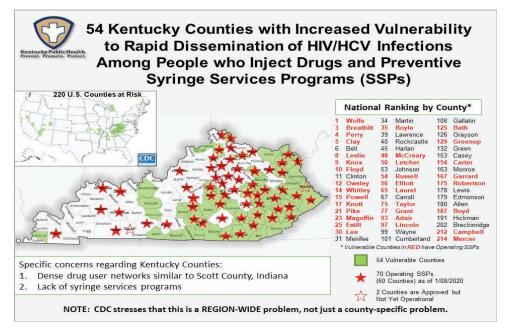
Drug Arrests and Justice System Interventions

Rockcastle's 2017 drug arrest rate of 4,434 per 100,000 of the population was the 8th highest of the state's 120 counties and more than the state's average, according to kentuckyhealthfacts.org. Kentucky State Police report that 905 drug arrests were made in Rockcastle County in 2018.



Often an arrest creates a pathway to drug treatment. Rockcastle County Drug Court is a program that manages non-violent drug offenders. Instead of spending time in jail, eligible participants complete a substance abuse program supervised by a judge. Drug Court graduates are more likely to return to productive lives and stay gainfully employed, pay child support and meet other obligations. Drug Court seeks to intervene and break the cycle of substance abuse, addiction and crime by coordinating the efforts of the judiciary, prosecution, defense bar, probation, law enforcement and mental health, social services and treatment providers.





Community Outbreak of HIV Infection Linked to Injection Drug Use of Oxymorphone — Indiana, 2015

MMWRMay 1, 2015 / 64(16);443-444

An Indiana town near Louisville recently had an HIV outbreak among people who inject drugs. Austin, Indiana now has HIV rates comparable to those in sub-Saharan Africa. This HIV outbreak involves a rural population, historically at low risk for HIV, in which HIV infection spread rapidly within a large network of persons who injected prescription opioids. The Indiana public health response includes implementing programs to contain the spread of HIV and Hepatitis C virus, curb injection drug use, and concurrently build social resilience in the community. The outbreak highlights the vulnerability of many rural, resource-poor populations to drug use, misuse, and addiction, in the context of a high prevalence of unaddressed comorbid conditions. The outbreak also demonstrates the importance of timely HIV and Hepatitis C surveillance activities and rapid response to interrupt disease transmission. Finally, the outbreak points to the need for expanded mental health and substance use treatment programs in medically underserved rural areas.

Nearly half of Kentucky's counties are at risk of an HIV outbreak. Recently the CDC analyzed every county in the United States to determine how vulnerable others might be to an HIV outbreak like the one in Indiana. Of the 220 counties across the US identified as highly vulnerable, 54 are in Kentucky (see map above). Kentucky also had among the highest rates of Hepatitis C in the nation for several years. This is foretelling, because most of these new Hepatitis C infections are from people who inject drugs and share needles, cookers and other contaminated equipment. Hepatitis C rates like those in Kentucky are seen as the canary in the coal mine for an HIV outbreak.



Mental Health

According to the National Alliance on Mental Illness (NAMI), one in five adults in the US experience a mental illness in a given year and 20% of youth ages 13-18 live with a mental health condition. Six hundred Kentuckians die by suicide annually, and the majority of those have an underlying mental illness. Rockcastle Countians report six days in the last 30 days when mental health, including stress, depression, and problems with emotions, was not good, compared to a statewide average of five days, according to kentuckyhealthfacts. org.

of U.S. adults experienced mental illness in 2018 (47.6 million people). This represents 1 in 5 adults.

Data Source: https://www.nami.org/Learn-More/Mental-Health-By-the-Numbers



As a community hospital, RHRCC staff are at the front line of identifying suicide ideation in patients. All staff are trained in taking the steps necessary to assist these patients to receive the care and support that best fits their situation. In 2018, RHRCC began a focused initiative to improve staff's ability to appropriately address the behavioral health needs of the community.

The initiative centered on improving patient access to care; assessment of patients experiencing suicidal thoughts or behaviors; staff, patient, and community education; and overall organizational functions related to the care of behavioral health patients.

One of the most important steps the RHRCC took to improve this access was to bring on a full-time psychiatrist to the team.

County Health Rankings

The County Health Rankings measure the health of nearly all counties in the nation and ranks them within states. The rankings are compiled using county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientifically-informed weights. The annual rankings provide a revealing snapshot of how health is influenced by where we live, learn, work, and play.

Data Source: https://www.countyhealthrankings.org/app/kentucky/2019/rankings/rockcastle/county/outcomes/overall/snapshot

Health Rankings	Rockcastle County	Error Margin	Top U.S. Performers	Kentucky	Rank (of 120)		
Health Outcomes							
Length of Life							
Premature death	11,500	9,500-13,500	5,400	9,700			
Quality of Life							
Poor or fair health	21%	21-22%	12%	21%			
Poor physical health days	5	4.7-5.2	3	4.8			
Poor mental health days	4.5	4.3-4.8	3.1	4.8			
Low birthweight	12%	10-14%	6%	9%			
Health Factors			•		70		
Health Behaviors					50		
Adult smoking	24%	23-25%	14%	24%			
Adult obesity	34%	28-40%	26%	34%			
Food environment index	7.9		8.7	6.9			
Physical inactivity	36%	29-42%	19%	27%			
Access to exercise opportunities	31%		91%	71%			
Excessive drinking	13%	12-14%	13%	16%			
Alcohol-impaired driving deaths	8%	2-20%	13%	27%			
Sexually transmitted infections	106.2		152.8	413.2			
Teen births	42	35-49	14	36			
Clinical Care							
Uninsured	6%	5-7%	6%	6%			
Primary care physicians	2,410:1		1,050:1	1,520:1			
Dentists	8,350:1		1,260:1	1,530:1			
Mental health providers	8,350:1		310:01:00	490:01:00			
Preventable hospital stays	8,181		2,765	6,168			
Mammography screening	40%		49%	38%			
Flu vaccinations	22%		52%	43%			
Social & Economic Factors							
High school graduation	98%		96%	90%			
Some college	46%	39-53%	73%	61%			
Unemployment	5.80%		2.90%	4.90%			
Children in poverty	29%	20-37%	11%	22%			

Environment

It is often said that individuals are responsible for their own health, but research suggests that health behavior changes are not easily accomplished in the face of a culture and environment that do not support good health. For example, environmental factors such as the availability of safe-sidewalks to encourage walking and the existence of smoke-free laws to discourage smoking have long been known to have a positive influence on community and individual health. Though many public establishments to do not allow indoor smoking, no smoke free laws exist in Rockcastle County. Secondhand smoke damages the DNA, blood vessels lung tissue, causing cancer, heart and lung disease.

The 2006 U.S. Surgeon General's Report, The Health Consequences of Involuntary Exposure to Tobacco Smoke, concluded that (1) secondhand smoke exposure causes disease and premature death in children and adults who do not smoke; (2) children exposed to secondhand smoke are at an increased risk for sudden infant death syndrome (SIDS), acute respiratory problems, ear infections, and asthma attacks, and that smoking by parents causes respiratory symptoms and slows lung growth in their children; (3) exposure of adults to secondhand smoke has immediate adverse effects on the cardiovascular system and causes coronary heart disease and lung cancer; (4) there is no risk-free level of exposure to secondhand smoke; and (5) establishing smokefree workplaces is the only effective way to ensure that secondhand smoke exposure does not occur in the workplace, because ventilation and other air cleaning technologies cannot completely control for exposure of nonsmokers to secondhand smoke.









Secondhand smoke and the **harmful** chemicals in it are known causes of Sudden Infant Death Syndrome, RESPIRATORY INFECTIONS, ear infections, and asthma attacks in infants and children.

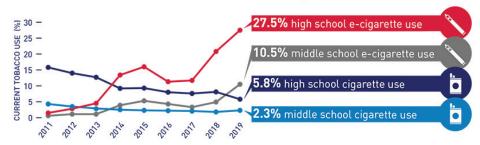
They are also known causes of HEART DISEASE, stroke, and lung cancer in adult nonsmokers.

In 2011, a study sponsored by the Cumberland Valley District Health Department assessed the air quality in 10 public venues in the county and found that workers and patrons are exposed to harmful levels of secondhand smoke. The average level of indoor air pollutions in Rockcastle's public venues was 4.2 times higher than the outdoor standard and 8.2 times greater than Lexington, Kentucky's average levels after the implementation of their some-free laws. (Hahn 2011)

As more and more businesses and workplaces elect to go smoke free, the industry continues to develop products to circumvent the efforts. Since entering the U.S. marketplace in 2007, e-cigarette, or vaping, products have evolved into a diverse class of inhaled aerosol devices. Earlier generations of these products were disposable, resembled conventional cigarettes in shape, and were designed to deliver nicotine to the user. Newer generations (like Juul) are rechargeable, look like USB flash drives, and can be charged in the USB port of a computer. These products come in a variety of flavors that appeal to youth and appear to deliver nicotine more effectively and at higher doses. In addition to nicotine, these devices can be used to deliver various substances, including tetrahydrocannabinol (THC, the psychoactive ingredient in marijuana) and other elicit drugs. (King, et. al The EVALI and Youth Vaping Epidemics-Implications for Public Health New England Journal of Medicine January 2020)

E-cigarettes have become the most commonly used tobacco product among middle and high school students. The 2019, National Youth Tobacco Survey indicated that more than 5.2 million young people in the US reported current use e-cigarette products, including 27.5% of high school students and 10.5% of middle school students. Between 2017 and 2018 alone, the number of youth who used e-cigarettes went up by 1.5 million. A 2016 Surgeon General's report called e-cigarette use by youth an "epidemic" concluding that youth use of nicotine in any form, including e-cigarettes, is unsafe, causes addiction, and can harm the developing adolescent brain.

Current e-cigarette use has INCREASED DRAMATICALLY, while current cigarette use has dropped, UNDERMINING PROGRESS toward reducing overall tobacco use

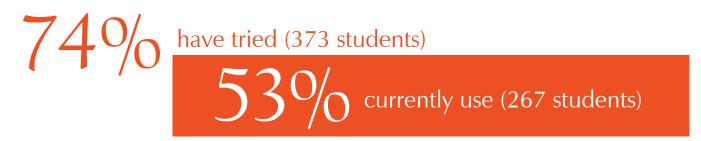


National Youth Tobacco Survey graphic

Kentucky's 2018 Kentucky Incentives for Prevention Survey findings mirrors these nationwide results. E-cigarettes have now surpassed alcohol as the most widely used substance among young people in the state. The Cumberland River District (includes Rockcastle County) reported past 30 day usage jumped 15.5% percentage points from 12.5% in 2016 to 28% in 2018. This is above the state reported average of 23.2%. (Kentucky Incentives for Prevention State & Regional Data Report 2018)

Similar trends in use have been observed locally by parents and school personnel.

In 2019 a sample of 504 Rockcastle County High School students in grades 9-12 (61% of total enrolled) completed a survey regarding e-cigarette usage. Response rates of the students indicated a low perception of risk, stating: "Better alternative to cigarettes & other drugs; Great way to quit smoking." Although 198 respondents consider them unhealthy or bad, they still like to use.



Students indicated a preference for flavored products "anything, but tobacco" JUUL – flavors, Fruit, specifically mango & blueberry Blue flavors, mint/menthol CBD oil, desserts, & made up flavors like unicorn milk, zombie blood, midnight madness.

Social Media and other forms of advertising make e-cigarette use look harmless for young people. RHRCC Wellness Coordinator, Morgan Bray, says "most of students know that regular cigarettes cause disease and even death. However, most of them don't know that nicotine in e-cigarettes can harm brain development, or that e-cigarettes can be dangerous to youth for other reasons, too." Bray, a Certified Tobacco Treatment Specialist, works directly with school personnel in efforts to curb this alarming trend. Since 2019, she has been conducting classes providing factual information to both middle and high school students.

In a recent statement released by the Kentucky Department of Public Health (DPH), the Secretary of the Cabinet for Health and Family Services said,

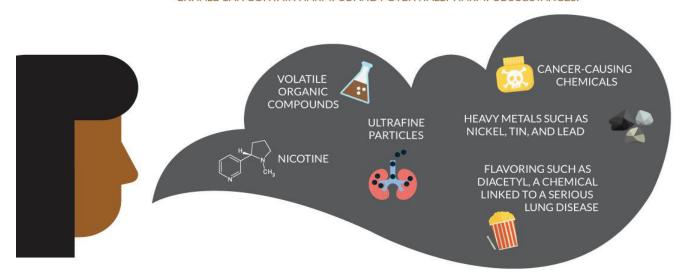
"It is of critical importance that we keep these devices out of the hands of young people. While we already know the negative outcomes of smoking, the short and long term effects of e-cigarettes is relatively unknown. What we do know is that these products contain nicotine, often at high levels, which is highly addictive and habit-forming, and may lead to a lifetime of use. What we are also finding anecdotally is that young people are more likely to use black market products, illicit drugs or other harmful substances which are often a contributing factor to the acute respiratory illnesses we are seeing associated with these devices."

Since August 1, 2019, the Centers for Disease Control and Prevention (CDC), has worked with federal and state partners to address a multistate outbreak of e-cigarette, or vaping, product use—associated lung injury (EVALI). As of January 14, 2020, there have been 60 confirmed deaths and at least 2,711 confirmed and probable cases of vaping-related illnesses in 50 states plus the U.S. Virgin Islands and Puerto Rico. Most of the cases have occurred in youth and young adults. This may be because young people are more likely to use e-cigarettes than older adults. Some adults have used e-cigarettes to attempt to quit smoking. However, e-cigarettes are not currently approved by the FDA as an aid to quit smoking. Furthermore, youth are more likely than adults to use e-cigarettes.

Kentucky DPH continues to monitor and investigate EVALI reports by working closely with healthcare providers, local health departments, CDC and the Food and Drug Administration (FDA).

WHAT IS IN E-CIGARETTE AEROSOL?

THE E-CIGARETTE AEROSOL THAT USERS BREATHE FROM THE DEVICE AND EXHALE CAN CONTAIN HARMFUL AND POTENTIALLY HARMFUL SUBSTANCES:



E-cigarette or Vaping Product Use-Associated Lung Injury (EVALI) in Kentucky

Cases Reported for Investigation Confirmed Cases: 8

Confirmed Cases: 8
Probable Cases: 13
Ruled Out Cases: 12
Deaths: 1*

*This death is also included in the probable case count.



Ruled out cases were reported to DPH but determined not to include a documented history of vaping or otherwise did not meet the case definition. *Updated: Monday, Feb. 3, 2020, at 9:30 a.m.*

Data Source: US Department of Health and Human Services. E-cigarette Use Among Youth and Young Adults: A Report of the Surgeon Generalpdf icon [PDF – 8.47MB]. Atlanta, GA: US Department of Health and Human Services, CDC; 2016. Accessed July 27, 2018.2. Cullen KA, Gentzke AS, Sawdey MD, et al. e-Cigarette use among youth in the United States, 2019. JAMA 2019 November 5 (Epub ahead of print). 3. National Academies of Sciences, Engineering, and Medicine. Health effects of marijuana: an evidence review and research agenda. Washington, DC: National Academies Press, 2017. Outbreak of lung injury associated with the use of e-cigarette, or vaping, products. Atlanta: Centers for Disease Control and Prevention, December 31, 2019 5. Creamer MR, Wang TW, Babb S, et al. Tobacco product use and cessation indicators among adults — United States, 2018. MMWR Morb Mortal Wkly Rep 2019;68:1013-1019.

Food Environment - Fast Food Restaurants

This indicator reports the number of fast food restaurants per 100,000 population. 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. This is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.



Total Population

Kentucky: 4,339,367 United States: 308,745,538



Rockcastle

Number of Establishments

Kentucky: 3,179 United States: 237,922



64.49

Establishments Rate per 100,000 Population

Kentucky: 73.26 United States: 77.06

Data Source: US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2016. Source geography: ZCTA

Food Access - Grocery Stores

This indicator reports the number of grocery stores per 100,000 population. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods, fresh fruits and vegetables, and fresh and prepared meats, fish, and poultry. Included are delicatessen-type establishments. Convenience stores and large general merchandise stores that also retail food, such as supercenters and warehouse club stores are excluded. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.



Total Population

Kentucky: 4,339,367 United States: 308,745,538



Number of Establishments

Kentucky: 796 United States: 65,399



Establishments Rate per 100,000 Population

Kentucky: 18.34 United States: 21.18

Data Source: US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2016. Source geography: ZCTA

Food Access - Modified Retail Food Environment Index

This indicator reports the percentage of population living in census tracts with no or low access to healthy retail food stores. Figures are based on the CDC Modified Retail Food Environment Index. For this indicator, low food access tracts are considered those with index scores of 10.0 or less.



Total Population

Kentucky: 4,339,367 United States: 308,745,538



Percent Population with No Food Outlet

Kentucky: 1.04 % United States: 0.9 %



Percent Population No Healthy Food Outlet

Kentucky: 23.64 % United States: 18.63 %



Percent Population Low Healthy Food Access

Kentucky: 23.26 % United States: 30.89 %



Percent Population Moderate Healthy Food Access

Kentucky: 47.02 % United States: 43.28 %



Percent Population High Healthy Food Access

Kentucky: 5.04 % United States: 5.02 %

Data Source: Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity, and Obesity 2011.

Source geography: Tract

The Rockcastle Farmer's Market has grown and is now getting their own facility. The facility will be centrally located, accept WIC, and help the community have increased access to fresh fruits and vegetables, especially low-income families.

Community Injury Profile

The CDC reports the #1 cause of death amongst 1-44 year olds is unintentional injuries. According to the Kentucky Injury and Prevention Research Center's 2015 Community Injury Profiles report, Rockcastle County's crude rate per 100,000 of injury-related emergency department visits in 2014 was 14,091 compared to 10,644 for the state as a whole (safekentucky.org). *Data Source: Kentucky Community Injury Profiles, 2010-2014. Kentucky Injury Prevention and Research Center; 2015*

Fitness-Related Recreational Facilities

Many local residents say there are inadequate fitness-related recreational facilities. There are smaller parks offering some opportunity for socializing and exercise, but no government-sponsored parks and recreation system. The Rockcastle Healthy Community Coalition has made efforts to develop more opportunities for physical activity through events such as Longest Day of Play and have supplied signage for existing walking trails.

Rockcastle Regional offers the best in fitness equipment and qualified staff in it's state-of-the-art Fitness Center. Equipped with over 22 weight lifting machines and 21 aerobic exercisers, the Wellness Center is able to provide for a wide variety of needs. The Fitness Center is open to the community for a monthly membership fee.

Other features include:

- Premium Cybex equipment for optimum results.
- Open layout to accommodate our athletic population.
- State-of-the-art shock absorbing flooring.
- Centrally located for easy access on the second floor of the Outpatient Services Center.

There are volunteer-driven youth sports leagues available to young residents. A nine-hole golf course and swimming pool are accessible to members of the local country club. In the southern portion of the county, the city of Livingston, is near several outdoor attractions – the Rockcastle River, Red Hill Horse Camp, several historic hiking trails and the Sheltowee Trace, as well as the Daniel Boone National Forest. The town has a trailhead with a visitor center that provides information about trails, attractions and local businesses related to outdoor adventure.



Clinical Care

Like many rural communities, Rockcastle County is a designated Health Professional Shortage Area (HPSA) by the Health Resources and Services Administration (HRSA). HSPAs have shortages of primary, mental, and/or mental health providers and may be geographic (county or service area), demographic (low income population), or institutional (comprehensive health center, federally qualified health center or other public facility). Medically underserved area /populations are areas or populations designated by HRSA as having: too few primary care providers, high infant mortality rate, high poverty and/or high elderly population.

A lack of access to care presents barriers to good health. The supply and accessibility of facilities and physicians, the rate of un-insurance, 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.

Access to Primary Care

Research shows that the availability of health insurance has a significant effect on access to care. The safety net of community clinics and public hospitals doesn't fully substitute for the access to care that insurance provides, according to the Kaiser Family Foundation. The uninsured are more likely to forgo needed care and are less likely to receive preventive care and services for major health conditions and chronic diseases. Those with insurance have better physical and mental health and a lower mortality rate.

According to kentuckyhealthfacts.org, the percentage of adults age 18-64 not covered by health insurance in Rockcastle County during 2017 was 6% which is the same as the state percentage. It is interesting to note that this number has decreased from 10% three years ago.

This indicator reports the number of primary care physicians per 100,000 population. Doctors classified as "primary care physicians" by the AMA include: General Family Medicine MDs and DOs, General Practice MDs and DOs, General Internal Medicine MDs and General Pediatrics MDs. Physicians age 75 and over and physicians practicing sub-specialties within the listed specialties are excluded. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.



Total Population (2014)

Kentucky: 4,413,457 United States: 318,857,056



/ Rockcastle

Primary Care Physician (2014)

Kentucky: 3,264 United States: 279,871



Primary Care Physicians, Rate per 100,000 Population

> Kentucky: 74 United States: 87.8

Data Source: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2014. Source geography: County

The Process

The Process

To collect primary data from the community, as required, a steering committee composed of community partners was formed to develop a plan and review the data.

The committee consisted of representatives from a cross-section of the community including the following organizations or demographic groups:

- Rockcastle Regional Hospital and Respiratory Care Center
- Cumberland Valley District Health Department
- Rockcastle County Cooperative Extension Office
- Daniel Boone Community Action
- Rockcastle County Schools

- EKU Public Health
- Citizens at-large

The committee held its initial meeting in September of 2019, when it reviewed and revised the previous survey from 2016. The resulting survey was then distributed through mass mailing and was also made available through a link on the RHRCC website.

Although the survey is not scientifically valid, it provided a way to gather more qualitative data and give the hospital and community a sense of what most concerns the community in terms of health and health care.

The survey was designed to:

- Understand the community's need for services and concerns about the delivery of health care.
- Provide a sense of the community's health and well-being.
- Determine which healthcare services are more likely to be used locally and which services are most often sought outside of the county.
- Solicit suggestions and help identify any gaps in services.

487 Surveys were completed by residents of Rockcastle County.

Answers and input were tabulated by the Southern KY AHEC staff and an Eastern Kentucky University Public Health Intern.

In addition to the surveys, a forum discussion was held in each of the county's three largest towns: Mt. Vernon, Brodhead, and Livingston. A cross-section of individuals from each community were sought to take part in the discussions to ensure fair representation. Among those present at the discussions were small business owners, city officials, nurses, teachers, local first responders, and parents. Efforts were made to include a representative sampling of demographic groups.

To encourage objective discussion, So AHEC partnered with EKU Public Health to facilitate and record comments for the three groups. The interview guide was seven questions to explore strengths, needs, and opportunities (details of the findings are in this report).

Once surveys were tabulated and the focus group discussions were complete, the steering committee reassembled and was presented with the findings. Considering RHRCC's Mission, Vision and Values and the community assessment data the committee was asked to rank the community's most important health problems and needs as well as provide suggestions for hospital priorities.

After the steering committee's ranking, additional tabulation and analysis, a description and summary of the primary data uncovered as a part of the Community Health Needs Assessment was prepared.

The Survey



2019 Community Health Needs Assessment Survey



At Rockcastle Regional Hospital and Respiratory Care Center, we want to deliver the best care we possibly can. To better understand the needs of our community, we are asking you to complete this survey and send back to us in the postage-paid envelope. Or you can complete the survey online at: http://rockcastleregional.org/chna

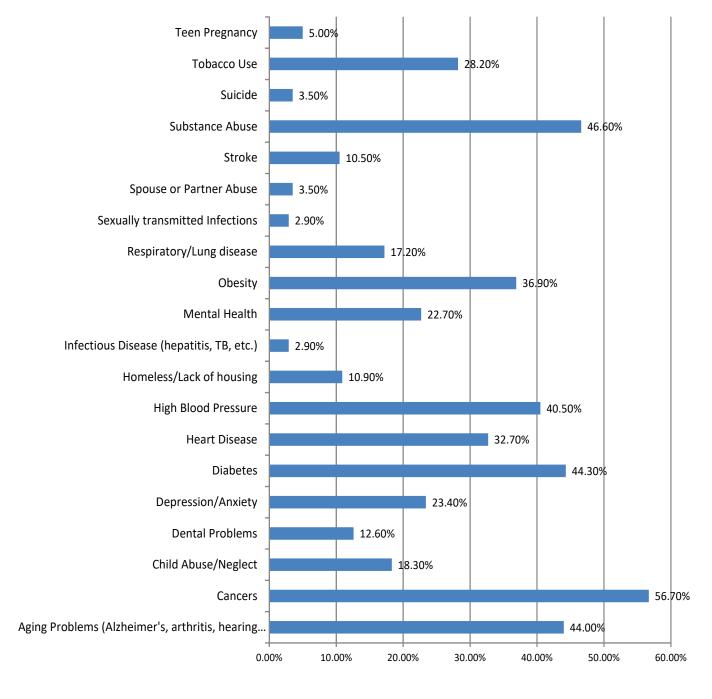
in the postage paid envelope. Of you can complete th	ic survey offine at. http://rockeastieregional.org/cfina				
Gender Age □ Female □ 18-25 □ 26-39 □ 65+ □ Male □ 40-54 □ 55-64	If over 50, have you had a colonoscopy? Yes No If no, why not?				
Are you a veteran? ☐ Yes ☐ No	If you're a woman over 45, have you had a mammogram?				
Of the list below, what are the most important health problems	If no, why not?				
in your community? (select up to five) Aging problems (Alzheimer's, arthritis, hearing loss, etc.) Cancers Child Abuse/Neglect Dental Problems Depression/Anxiety Diabetes Heart Disease High Blood Pressure Homeless/Lack of Housing Infectious Disease Mental Health	Have you or a family member used Rockcastle Regional Cancer treatment services? Yes No If no, why not? (check all that apply) Have no need Limited access to specialized surgery Limited access to radiation Transportation Unaware that cancer care is available Do you use any tobacco products (including electronic cigarettes				
☐ Obesity ☐ Respiratory/Lung Disease ☐ Sexually Transmitted Infections	and/or vapor pens)?				
Spouse/Partner Abuse Stroke					
☐ Substance Abuse ☐ Suicide	Are you exposed to secondhand smoke at home or in the				
☐ Teen Pregnancy ☐ Tobacco Use	workplace?				
Do people in our county have difficulty getting the following? Access to safe walking & physical activity: Yes No Don't know Child Care: Yes No Don't know Dental Care: Yes No Don't know Emergency Medical Care/911 service: Yes No Don't know	Have you or a family member been affected by drug abuse? Yes No Which of the following do you think is the most serious drug				
Drug/Alcohol Treatment:	problem in Rockcastle County? ☐ Alcohol ☐ Tobacco ☐ Cocaine ☐ Marijuana ☐ Heroin ☐ Methamphetamine ☐ Prescription Drugs ☐ Other:				
Mental Health Services:	How many times a year do you use the following services? 0-1 2-5 5-10 10+ Family Doctor: Emergency Room: Quick Care: Clinic (i.e White House Clinic): Specialist:				
How do you rate your personal health? ☐ Very Unhealthy ☐ Unhealthy ☐ Healthy ☐ Very Healthy	Alternative Therapy: Dental: Mental Health Counselling:				
Have you been told by a doctor, nurse, or other health professional that you have one or more of the following chronic illnesses? (check all that apply) Overweight/obesity High Blood Pressure Asthma Arthritis At Risk for Stroke/Heart Attack Diabetes	Do you use services at Rockcastle Regional Hospital? If yes, how satisfied were you? ☐ Satisfied ☐ Dissatisfied Comment:				
☐ Hearing/Vision Loss ☐ Lung Disease ☐ Other:	What other healthcare services are needed locally to better address the health problems in Rockcastle County for the next				
Do you have health insurance? Yes No	two years?				
If no, why not? Cannot afford it Do not need	If Rockcastle Regional provided services you need, would you				
☐ My employer doesn't offer it ☐ Never signed up	use them or still go elsewhere? Yes No, I'd still go elsewhere				
Thank you!					

Survey Results

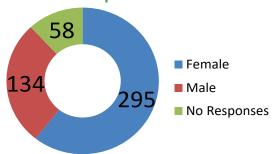
Given a listing of health concerns, respondents were asked to select up to five of the greatest health issues facing Rockcastle County (see graphic below). Substance abuse was one of the top five problems, along with cancer, diabetes, aging, and high blood pressure.

Results: What are the most important health problems in your community?

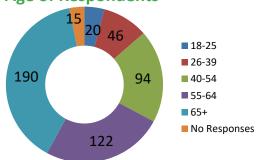
(474 responded to this question)



Gender of Respondents

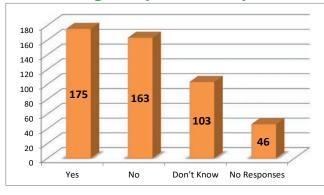


Age of Respondents

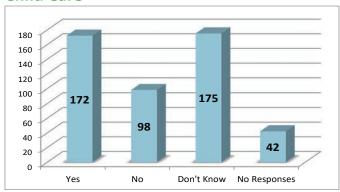


Do people in our county have difficulty getting access to the following?

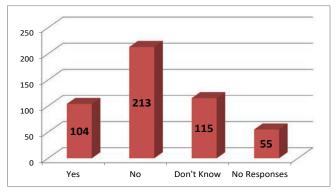
Safe Walking & Physical Activity



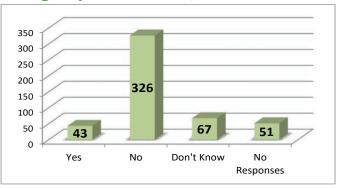
Child Care



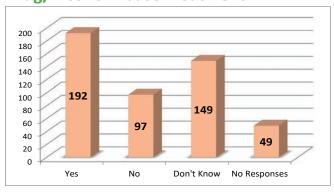
Dental Care



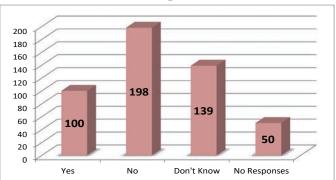
Emergency Medical Care/911 Services



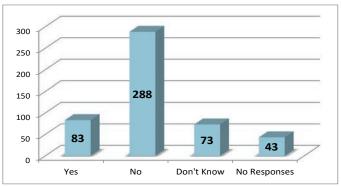
Drug/Alcohol Abuse Treatment



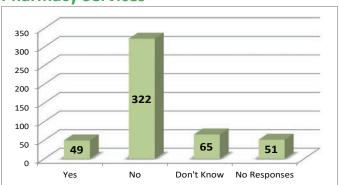
Health Education Programs



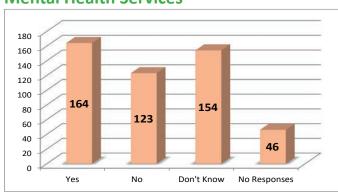
Medical Care



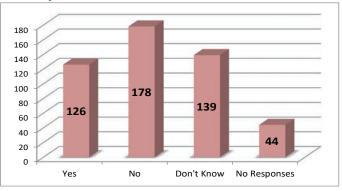
Pharmacy Services



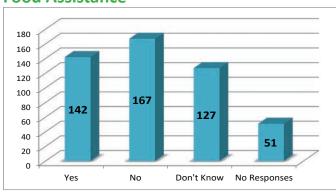
Mental Health Services



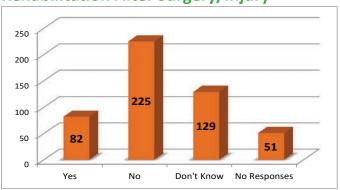
Transportation to Health Care



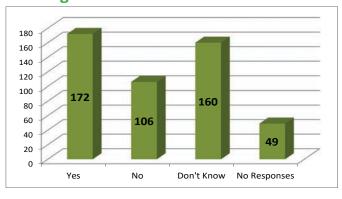
Food Assistance



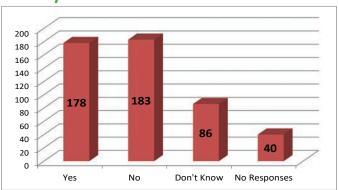
Rehabilitation After Surgery/Injury



Housing



Healthy Water



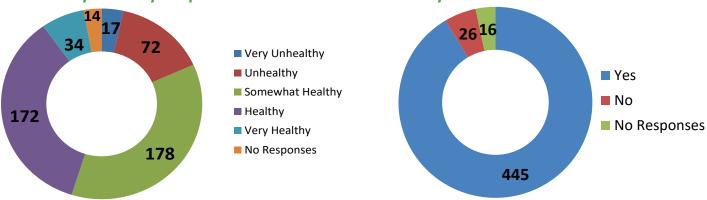
How would you rate your personal health?

287

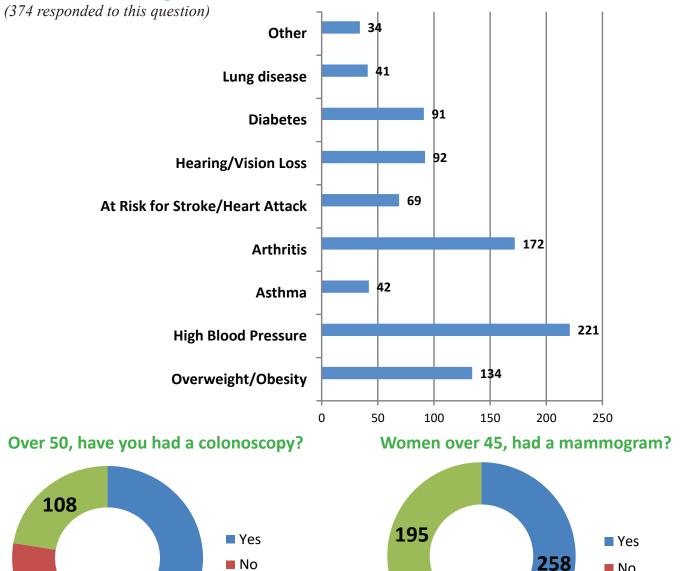
■ No Responses

87

Do you have health insurance?



Have you been told by a doctor, nurse, or other health professional that you have one or more the following chronic illnesses?

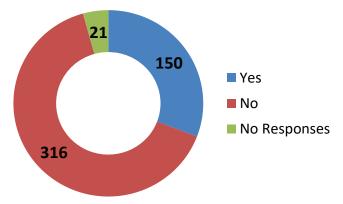


34

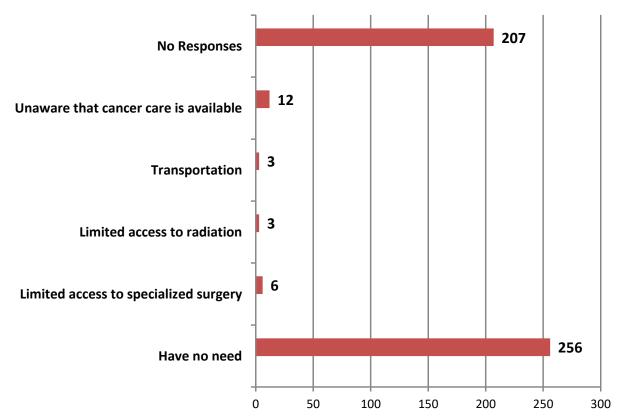
■ No

No Responses

Have you or a family member used Rockcastle Regional Cancer treatment services?

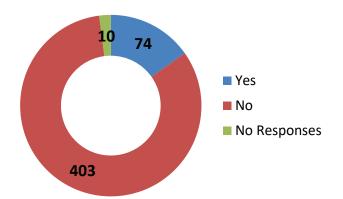


If you have not used Rockcastle Regional Cancer treatment services, why not?

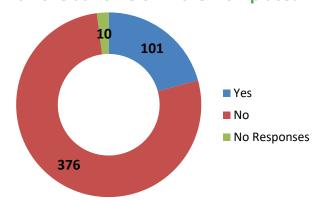


Do you use any tobacco products?

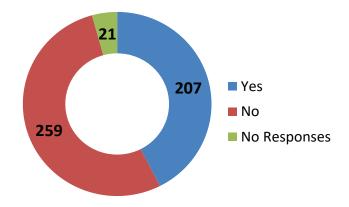
(including electronic cigarettes and/or vapor pens)



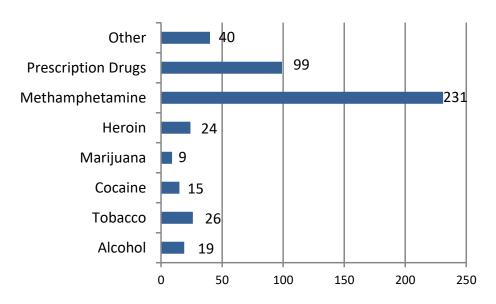
Are you exposed to secondhand smoke at home or in the workplace?



Have you or a family member been affected by drug abuse?



Which of the following do you think is the most serious drug problem in Rockcastle County?

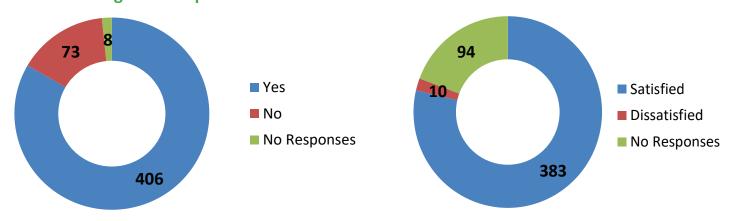


How many times a year do you use the following services?

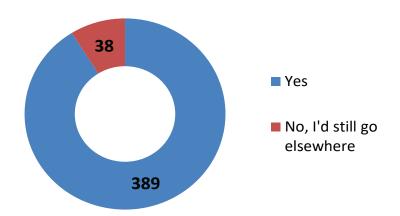
	0-1	2-5	5-10	10+
Family Doctor	93	268	89	22
Emergency Room	367	53	4	0
Quick Care	289	105	12	2
Clinic (i.e. White House Clinic)	318	49	16	6
Specialist	230	142	22	4
Alternative Therapy	342	21	5	1
Dental	220	181	2	1
Mental Health Counselling	346	12	5	13

Do you use services at Rockcastle Regional Hospital?

If yes, how satisfied were you?



If Rockcastle Regional provided services you need, would you use them or still go elsewhere?



When asked for recommendations on what the hospital should consider in planning for the next three years, the top items were:

- Increase mental health services: drug treatment/behavioral health.
- Indoor and outdoor wellness facility open to the public free of charge.
- Services for the aging population such as more assisted living facilities and nursing homes.
- More specialists, surgeons, and family physicians-specifically OBGYN & Dermatology.

MT. VERNON

LIVINGSTON

Summary Primary Data

To gather Rockcastle County resident feedback, Southern KY AHEC (SoAHEC) facilitated the process of primary data collection through community surveys, forums, and key informant interviews. Throughout the process, SoAHEC and the community steering committee made it a priority to get input from populations that are often not engaged in conversations about their health needs or gaps in service.

EKU Public Health provided students to conduct a series of three community forums during the month of October 2019. A forum was held in each of the county's largest cities: Mount Vernon, Brodhead, and Livingston. In order to ensure a fair representation of the county population, an effort was made to encourage a variety of individuals and organizations to take part in the discussions. Among those collectively present were: local health department personnel, long-time residents, small business owners, representatives from community organizations, city officials, teachers, first responders, members of the faith community, and parents.

COMMUNITY FORUMS

Mt. Vernon Forum

Biggest health Issues: Drug use, predominance of sedentary lifestyles, tobacco use (specifically e-cigarettes and young people), public's lack of knowledge about resources that are available in the community, "class gaps"-some members of the working class are either unable to afford insurance or the high deductibles associated with their insurance.

What RHRCC can do: Support of Farmers Market through healthy cooking classes and providing "healthy food vouchers," increased education about services that are already available (i.e. county resource directory online, phone, or hard copies available throughout community), and expanding hospital gym use especially for first responders.

Brodhead Forum

Biggest health issues: Limited transportation (RTEC not available to everyone) to appointments, time it takes to be seen once at an appointment, lack of knowledge about resources available in the community, lack of access to safe exercise/complete streets and sidewalks/clean accessible parks, aging population/mobility issues, lack of fresh food/produce.

What RHRCC can do: Help in the development of a comprehensive community resource list, increase offerings of fitness classes (especially for older adults or people that struggle to do weight bearing exercise), provide "healthy cooking classes," provide assistance with transportation, provide programs for seniors with increased social engagement and education on a variety of topics (i.e. organizing medications).

Livingston Forum

Biggest Health Issues: Drug use and effect on families (i.e., grandparent/great grandparents raising grandchildren), tobacco use (Juuls specifically), public unaware of resources that are available, "class gap" in affordability-working class individuals cannot afford care, transportation (to appointments, groceries, etc), incomplete streets/sidewalks.

What RHRCC can do: More senior services (help with social aspects), Quick Care-type clinic for services such as vaccines or physicals, pharmacy in Livingston, Increase education about resources already available in the community.

Key Informant Interviews

In order to further examine needs that surfaced in focus group discussions, members of the steering committee provided contact information for potential key informant interviews to be conducted. Eastern Kentucky University Public Health Masters Candidate, Beth Vanover, interviewed six individuals. A summary of their responses highlighting comments, identifying the strengths of the community, challenges/barriers, and opportunities for improving the community's health are below.

6 Interviews THE SUMMARY

Overall the health and quality of life status has improved considerably over the past several years, mostly because the community better understands that behavior change impacts their wellbeing, which has translated to decreased rates of smoking. Businesses have gone smoke-free, as a result of public health infrastructure and policy.

RHRCC and the local health department were both recognized as providing good quality services and programs that have made a strong impact on the community. The hospital's expansion of specialty services and increasing availability of other services/programs (i.e., Diabetes Education, Healthy Community Coalition) has really worked to improve the health of the community. There are several positive things about Rockcastle County that promote health and wellbeing, including the increased emphasis on outdoor activities; local churches; Rockcastle being a Trail Town designation; the hospital led County-wide Stride; and the support for the new farmers market facility from the community, social leaders, and local government.

Although the county has made strides over the past 10 years, it was indicated Rockcastle has a long way to go, especially with issues such as chronic disease and health behavior. Some of the specific health issues noted were: Access to care (emphasis on need for patient assistance in navigating the system & limited transportation) COPD, cancer, cardiovascular disease, diabetes, inactivity, lack of access to safe walking and biking, unhealthy eating, tobacco use, drug abuse and the multiple number of associated issues.

What needs to be done to address these issues? Consensus was that solutions should be intentional and evidence based. Some of the proposed solutions included: implementation of early interventions/prevention education, public transportation, county-wide indoor air ordinance, syringe exchange services, navigation services available for outpatient, resource list/data-base available to public.

Which specific populations (groups) in Rockcastle County are you most concerned about, and why? Key informants identified the aging population and children. It was agreed that adequate supports and services should be in place to help people age healthily, and these could include home health services.

Children's perceived preference for sedentary activities (i.e., video games) and limited access to safe access to exercise was voiced by those interviewed. Also, there was particular concern for children because of the risk of Adverse Childhood Experiences (ACEs). Due to substance abuse problems, many children are being raised by a family members other than their biological parent (often grandparents). It was recommended there be more social programs that help improve parenting by providing support/education for both parents and grandparents about the critical brain development happening in children and how their experiences shape their wellbeing and future.

Significant barriers to improving health and quality of life in Rockcastle County were identified by those interviewed. These barriers included: generational poverty, limited access to safe exercise, resistance to change, lack of knowledge about resources available, and a limited knowledge of how to navigate those resources.

Health Needs Identified

After 10 weeks of survey distribution and collection, the steering committee met for the second time on February 18, 2020 to review results of the community survey, focus group, and key informant interviews as well as county specific secondary health data. Members identified current resources and barriers to the access of those resources.

Considering RHRCC's Mission, Vision, and the provided assessment data, the committee identified three areas and the hospital board selected a fourth additional area to address in the next three years:

Cancer

Move toward provision of radiation services

1

Education Services/Navigating the System Provision of resources available within RHRCC

Provision of resources available within RHRCC and the community



Mental Health/Substance Abuse

Evidence based educational programs across the lifespan



Diabetes and Obesity





Kacey Scoggin Nicely, APRN

Conclusion

Rockcastle County has a strong sense of community with citizens and organizations dedicated to improve health outcomes. Through community input and a prioritization process, several areas of need were identified. The focus of this report is the priority areas that RHRCC will use for guidance in planning its implementation strategy over the next three years. The health needs priorities are: cancer; education services/ navigating the healthcare system; mental health/ substance abuse; and diabetes & obesity.

Additional review may be needed in order to develop and achieve the most impactful approach. RHRCC's implementation strategy will be developed and made available over the next three years; periodic evaluation of goals/objectives for each identified priority will be conducted to assure that progress is on track per the implementation plan.

We invite community feedback to the report, as your input will help guide our impact and our next CHNA. Please send your comments to info@rockcastleregional.org or call: (800)278-2195



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Acknowledgements

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Kelly Sears Owens, Center Director of the Southern Kentucky Area Health Education Center.

Graphic Designer

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Special thanks to:

Eastern Kentucky University Public Health Dr. Laurel Schwartz Beth Vanover, EKU Student Trystan Collett, EKU Student Ashley Shofner, EKU Student **Rockcastle Tourism** Sherry Spragens, AHEC Melissa Brock, Administrative Assistant to CEO Jana Bray, Community Relations Susan Turley, Community Relations Debbie Martin, Health Information Christy Phillips, Health Information Maleigha Amyx, Information Systems Morgan Bray, Wellness and all of the outstanding members of the Rockcastle County Healthy Community Coalition!

