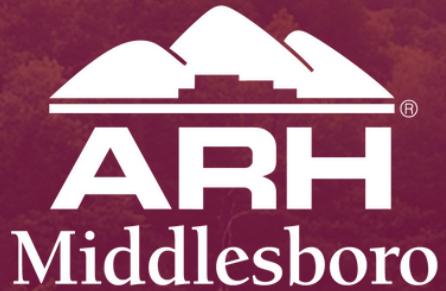


COMMUNITY HEALTH NEEDS ASSESSMENT

2025-2027



Acknowledgements

This Community Health Needs Assessment (CHNA) report was prepared for Middlesboro ARH by Team Up: A Public Health Academic Practice Collaborative at the University of Kentucky College of Public Health. Team Up works with a variety of health organizations across Kentucky and Appalachia to bridge the gap between academia and practice by forming, encouraging, and sustaining collaborative partnerships. Team Up members Dr. Angela Carman and Mary Elizabeth Pendergrass, MPH contributed to the information in this final report. If you have questions about the assessment process or data collection methodology, contact Mary Elizabeth Pendergrass, Team Up Public Health Policy & Practice Apprentice: mepe242@uky.edu .

This CHNA report was commissioned and directed by Appalachian Regional Healthcare's Community Development Department. The Community Development Department exists to further the mission of ARH by creating new educational programs, funding opportunities, partnerships and coalitions that better the health and well-being of Appalachians. This department organizes awareness events, educational classes, free health screenings, health-related sponsorships, support groups, presentations, and more each year and tracks all these programs in community benefit.



Letter to the Community Member

Dear Community Members, Partners, and Stakeholders,

I am honored to present the 2025-2027 Community Health Needs Assessment (CHNA) report for Appalachian Regional Healthcare (ARH).

As the leading healthcare provider in Eastern Kentucky and southern West Virginia, ARH remains deeply committed to improving the health and well-being of our communities. Understanding the most pressing health challenges in our region is critical to our mission, and this report reflects our dedication to addressing these challenges through collaboration, innovation, and action.

This CHNA is the result of extensive research, data collection, and direct community engagement. Through surveys, focus groups, and partnerships with local organizations, we have identified key health priorities affecting individuals and families. These insights drive our strategic initiatives, ensuring that we provide accessible, high-quality care tailored to the evolving needs of our population.

Rural communities face unique healthcare challenges, particularly in access to services. ARH is committed to expanding medical services, removing barriers to care, and ensuring every community has equal access to quality healthcare.

This report highlights critical health concerns and outlines our strategies for 2025-2027. Real change happens when we work together. We are grateful to everyone who contributed to this assessment—your voices and perspectives are essential in shaping a healthier, better future.

I encourage you to explore this report and join us in our mission to make a lasting impact on the health of our region. Together, we can build a stronger, healthier future — one where every rural community has the access and care it deserves.

Sincerely,



Hollie Harris, MHA
President and CEO Appalachian Regional Healthcare, Inc.



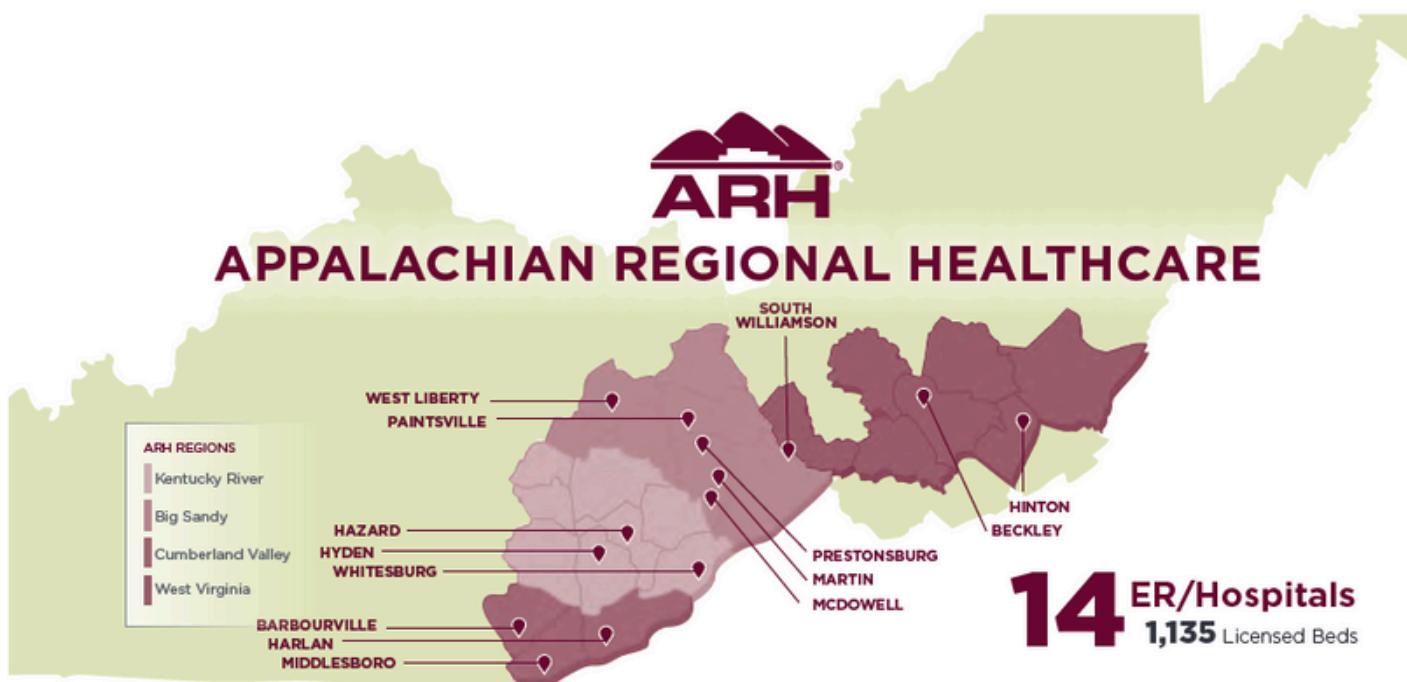
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Introduction

Appalachian Regional Healthcare (ARH) is a not-for-profit health system operating 14 hospitals in Barbourville, Hazard, Harlan, Hyden, Martin, McDowell, Middlesboro, Paintsville, Prestonsburg, West Liberty, Whitesburg, and South Williamson in Kentucky and Beckley and Hinton in West Virginia, as well as multi-specialty physician practices, home health agencies, home medical equipment stores, retail pharmacies, and medical spas. ARH employs around 6,700 people with an annual payroll and benefits of \$474 million generated into our local economies. ARH also has a network of more than 1,300 providers on staff across its multi-state system. ARH is the largest provider of care, the single largest employer in southeastern Kentucky, and the third-largest private employer in southern West Virginia.

ARH has always responded to the changing demands of rural healthcare. From building and acquiring new facilities, investing in medical technology, providing health education and support, and creating innovative community partnerships, we continue to meet the health needs of our Appalachian communities. As an ARH hospital, Middlesboro ARH is committed to these same goals for our service area. This CHNA report will outline the facility's efforts in meeting health improvement objectives from the last CHNA cycle, assessing current health needs, and creating new implementation plans for 2025-2027.



ARH Mission

To improve health and promote well-being of all people in Central Appalachia in partnership with our communities.

ARH Vision

ARH will be the premier destination for quality care, a driver of advancement and development, and a leader in health for the communities we serve.

ARH Values

- Trust
- Innovation
- Collaboration
- Compassion
- Service

Culture Statement

At Appalachian Regional Healthcare our culture is defined by who we are – our history, our family, our traditions, and our story. A culture that embodies the resilient spirit of Appalachia.

SERVICE is our foundation; we honor our communities everyday by delivering healthcare that changes lives and an environment that promotes well-being for all.

TRUST is our core; every action is rooted in honesty, empathy, and integrity; fostering connections with one another, with our patients, and with our communities.

COMPASSION drives our purpose; It's not just treating people but how we treat each other that sets us apart. Enriching the collective strength of our team by bringing together a global workforce to provide local care.

COLLABORATION is our strength; we are one family taking care of all families. Committed to fostering an inclusive team full of unique perspectives, experiences, and talents at every level that enhances our service.

INNOVATION is our compass; we adapt the way we work and advance the way we care. Providing unique solutions to exceed the healthcare needs of the patients of our region.

Community Health Needs Assessment Process

Introduction to CHNA

Provisions in the Affordable Care Act (ACA) of 2010 require tax-exempt (non-profit) hospitals to conduct a Community Health Needs Assessment (CHNA) and develop a CHNA Implementation Plan at least every three years. The regulations for the CHNA include defining the hospital's service area, compiling demographics and analysis of health indicators; taking into account input from the broader community as served by the hospital facility.

The ACA requires that the CHNA must be made available to the public and must include input from individuals with special knowledge or expertise in public health. Accordingly, ARH contracted with experts from the UK College of Public Health to ensure equitable stakeholder representation and public health expertise throughout the CHNA process and final report.

Process

The Community Health Needs Assessment is a cyclical process that involves creating community steering committees, collecting primary and secondary health data, creating community profiles, prioritizing the greatest health needs for a geographical area, and creating a plan to meet those needs.



Over a three-year span, hospital facilities work to create healthier communities through programs and initiatives as guided by the CHNA. Prior to the start of a new CHNA cycle, facilities track and report on implementation successes (new health and wellness programs created, health care access improved, community members engaged, etc.).

Primary Data

Collecting primary data, or new data collected directly from the community, is a key part of the CHNA process. This type of data provides two valuable contributions:

1. Self-reported data about the health needs and strengths of community members
2. More engagement of the community in the process

Perhaps as important as a thorough data set, gathering local data provides opportunities for the community to be engaged through the community health needs assessment process and to ensure that the community members' voices are heard. Engagement at this stage can lead to stronger community support and involvement throughout the community health improvement efforts.

Primary data was collected in this CHNA through community surveys, focus groups, and key informant interviews.

Method	Description
Community Surveys	A traditional approach to gathering community input. Can include: written, telephone, web-based, or in-person.
Focus Groups	A traditional approach to gathering community input. Can include: written, telephone, web-based, or in-person.
Key Informant Interviews	In-depth one-on-one discussions to gather input from representative community members. Can be done with key community leaders or residents representing specific sub-populations.

Secondary Data

Secondary data is data that is collected by other entities and provides information on health status and demographics. Examples include vital statistics, censuses, reports from government agencies (such as the CDC), or information collected through studies and other organizations (such as County Health Rankings).

Steering Committees

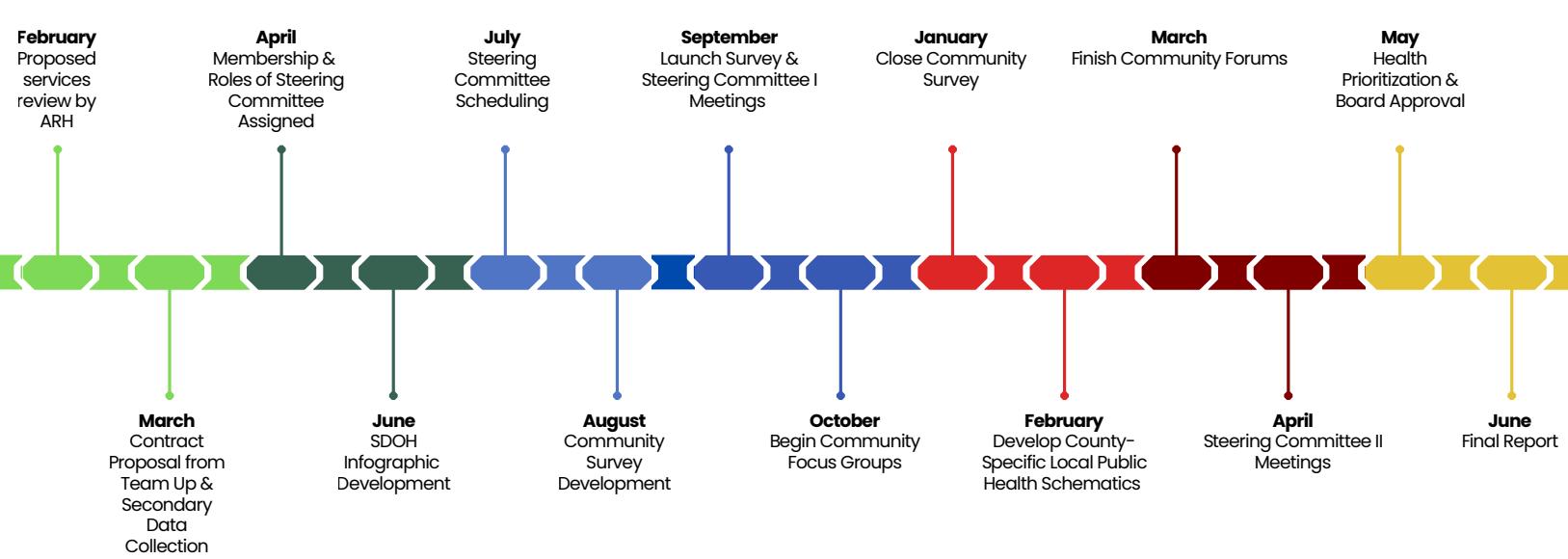
Community Health Needs Assessment (CHNA) steering committees are groups of key stakeholders assembled to guide the planning, development, and implementation of the CHNA process for non-profit hospitals. These committees typically include representatives from public health agencies, local government, community organizations, healthcare providers, academic institutions, and members of the community, especially those who serve or represent medically underserved, low-income, or minority populations.

CHNA Timeline

Appalachian Regional Healthcare collaborated with Team Up at the University of Kentucky (UK) College of Public Health in the Summer of 2024 to begin conducting the 2025-2027 Community Health Needs Assessment (CHNA) for Bell County. See the CHNA process timeline below.

CHNA Timeline

2024



2025

2022-2024 Implementation Successes

During the 2022 CHNA process, the Bell County Steering Committee identified the following health needs:

- 1. Specialty Care**
- 2. Preventative Medicine**
- 3. Obesity, obesity-related illnesses and food insecurity**
- 4. Mental Health**

Middlesboro ARH set goals and strategies to address each of the identified health needs. See these as well as successes in the following pages.



Goal 1



Increase access to healthcare so community members do not have to travel for services

Since 2022, Middlesboro ARH has **increased access to healthcare in our community** by:

- **Recruiting providers**, opening **new specialty clinics, investing in facilities, and improving services** since 2022 to increase healthcare access for community members. Projects completed in this time frame include:
 - Development of pre-admission testing program to decrease surgery no-show rate and patient travel
 - Opening of a new Urology service line in 2022 in partnership with Dr. Joe Pazona (Virtucare) and Brandon Williams, APRN, offering both telehealth and in-person visits
 - The opening of a specialty pharmacy, providing easier access for patients in need of specialty medications, services, and cost reduction programs
 - The opening of a new ARH Wound Care Center in the facility, which includes hyperbaric therapy in May 2024
 - Implemented minimally invasive robotic surgery with a new DaVinci robot. Six Providers have been trained on robotic surgery, and since inception in April 2024 and through February 2025, 156 cases have been successfully performed since the inception of this program
- Recruitment/ employment of **many new providers**, including:
 - Hematologist/Oncologist Dr. Nagaishwarya Moka started July 2023
 - Dr. Himachal Veligandia (Dr. V.), Cardiologist, started in October 2022
 - Podiatrist Dr. Richard Calhoun started August 2023
 - OB/GYN Dr. Stephanie Hutchison started May 2024
 - General Surgeon Dr. Vincent Almagno started September 2024
- Hosted **nurse trainings in Trauma and Pediatric Emergencies** for all ER staff in an effort to become Pediatric Emergency Ready
- Implemented **“Quick Draw” laboratory sites**, or offsite laboratory phlebotomy stations primarily located in physician offices, so patients can receive lab draws and other testing services without having to travel to a hospital facility
- Contracted with the Cumberland River RHOAR Center (a 100- bed women's inpatient drug treatment program) to provide well women care along with MOUD therapy

Goal 2



Educate the community about disease prevention and offer opportunities for free or low-cost preventative services

Since 2022, Middlesboro ARH has **educated our community about prevention** by:

Providing health education and disease prevention for in-school youth.

- Middlesboro ARH partnered with KEDC's THRIVE program to provide student health fairs in Bell County schools over the past two years. **Six student health fair events** have been held in which ARH staff have educated students about hands-only CPR, the dangers of smoking and vaping, substance use disorder, drug prevention, and more
- Middlesboro ARH brought **Love Your Lungs**, an interactive educational program about smoking, vaping, and respiratory issues to Bell County schools in 2024. Attendees walked through a 12-ft high inflatable lung, participated in a physical activity exercise, and learned about the dangers of smoking with educational lung displays. (December 2023 and June 2024)
- The facility provided blood pressure and pulse oximetry screenings to Middlesboro Middle and Elementary school students during Summer Adventure Week. (June 2024)
- In September 2022 provided all Middlesboro High School teachers with a "**Stop the Bleed**" Kit and "Stop the Bleed" training
- In an effort to **increase youth literacy**, Middlesboro ARH partnered with a local downtown business, Cosmic Café, for a **children's reading program**. Middlesboro ARH Leadership Staff read to children Sunday evenings from April 16th through June 25th. Free children's books were also provided

Providing education about healthy lifestyles and disease prevention.

- The facility created a **Walk-N-Talk** program where participants can walk with ARH providers as they discuss disease prevention or relevant health topics. Dr. Robert Thomas discussed Colon Cancer in March 2023, and Dr. Misty Hendrickson discussed smoking cessation in June 2023
- Middlesboro ARH **Peer Support Coach**, April Wallace, met **14 times** with different groups in the community to **educate about substance use disorder** and the role peer recovery coaches can play in recovery
- The facility annually hosts the **AHEC Summer Scrubs Camp for students** interested in healthcare careers. Along with career demonstrations, students also learn how to recognize a stroke, perform hands-only CPR, tie a tourniquet, and more

- Middlesboro ARH Stroke Coordinators have provided education at 5 events, including:
 - Brain Protector programs in local schools, reaching 202 students
 - Stroke education programs to homemakers, nursing students, and general community reaching 262 attendees

Providing opportunities for free or low-cost preventative screenings.

- In October 2022, 2023, and 2024, Middlesboro ARH offered a **\$50 mammogram** special that covers the screening mammogram and radiologist's reading. This program allows women to self-schedule mammograms without a physician's order, and is an affordable option for women without insurance.
- In 2023 and 2024, Middlesboro ARH hosted **Lung Cancer Screening Saturday** events, in which those that qualify for a low-dose CT scan can receive one on a Saturday outside of typical business hours
- In 2022, The facility hosted an open **Community Health Fair** at the Middlesboro Mall. **Free screenings** included glucose and A1C, blood pressures, cholesterol testing, and more
- Middlesboro **partnered with Kentucky Cancer Link** to provide free colon cancer screening FIT Kits (fecal immunochemical tests) to those qualifying at the a "Walk-N-Talk" with Dr. Robert Thomas
- Middlesboro ARH provides **hundreds of free Kindergarten Readiness physicals** and **free sports physicals** for all ages each year in the community
- Stroke Coordinators at Middlesboro ARH have provided **Stroke Risk Assessments** at **5 community events** throughout 2022-2024

Goal 3



Address obesity and its health consequences through work on root causes; food insecurity, physical inactivity, and lack of knowledge on healthy nutrition

Since 2022, Middlesboro ARH has **addressed obesity and its root causes** in our community by:

- Hosting Hike with Hollie, a hike for employees led by our system CEO and hospital leadership – 11/1/22
- Providing free gym memberships to all ARH employees as of December 2022

- Hosting health education and awareness events in partnership with Pineville Crossfit
- Partnered with LMU-DCOM 3rd year core rotation students to use land behind the Hospital POB for a community garden. Fresh fruits and vegetables are being distributed to patients at 3 of our clinics
- Updated cafeteria menus to reflect a more health-conscious menu, often with plant-based options and lean protein meals
- Middlesboro ARH Hospital leadership staff have volunteered at the Cooperative Christian Ministry (CCM) monthly food give-a-way, helping to fill food boxes and load the food boxes into cars

Goal 4



Improve the mental health of our community members and reduce stigma associated with seeking treatment

Since 2022, Middlesboro ARH has **improved the mental health of our community members** by:

- Actively partnering with Crater of Hope and other community organizations on implementation of a Harm Reduction Program (aka a needle exchange program) and in completing the Recovery Ready Community application
- Working with Lincoln Memorial University to extend our 3 year HRSA mental health grant by another year
- Working to extend the Mosaic Grant to Middlesboro ARH in order to provide 2 full-time peer support specialists in our Emergency Department
- Middlesboro ARH CEO attends and participates in the Cumberland River Quick Response Team (QRT) monthly meetings, as well as those held for Crater of Hope, a community partner of Unite Bell County
- Implemented Overdose Survivors Outreach Program, providing community follow ups to overdose survivors and extra support in hopes of linking those Overdose Survivors to treatment, and other community resources
- Grown outpatient behavioral health services through ARH Cumberland Valley Medical and Surgical Associates and Middlesboro Womens and Family Health Clinic (1,553 behavioral health visits 2022-2024)

Community Served by Middlesboro ARH

Middlesboro ARH defined its service area for this Community Health Needs Assessment by reviewing inpatient hospital discharge data for county of residence. From January 2022-September 2024, the majority of hospital discharges were residents of Bell County (72.8%).

Secondary data for Bell County are presented in this section. Data are presented at the County, State, and National level (where possible). These data come from a variety of sources listed below each table, and serve as indicators for social, economic, and health conditions in Bell County. An infographic containing data on the Social Determinants of Health can be located in Appendix A.

Population

Population	Bell Co	Kentucky	US Overall
Population, 2024	23,051	4,588,372	340,110,988
Percent of Population Under 18 Years	22.1%	22.5%	21.7%
Percent of Population 65 Years+	20.2%	17.8%	17.7%
Percent of Population White	93.8%	86.7%	75.3%
Percent of Population Non-Hispanic Black	3.0%	8.8%	13.7%
Percent of Population American Indian & Alaska Native	0.3%	0.3%	1.3%
Percent of Population Asian	0.5%	1.8%	6.4%
Percent of Population Native Hawaiian/Other Pacific Islander	0.1%	0.1%	0.3%
Percent of Population Hispanic or Latino	1.2%	5.0%	19.5%
Two or More Races	2.2%	2.3%	3.1%
Percent of Population Female	50.5%	50.4%	50.5%

Source: US Census, 2024 QuickFacts

Social and Economic Factors

Social and Economic Factors	Bell Co	Kentucky	US Overall
Percent Completed High School	79%	89%	89%
Bachelor's Degree or Higher	14%	27%	35%
Percent Unemployed	5.6%	4.2%	3.6%
Percent of People in Poverty	28.9%	16.4%	11.1%
Children in Poverty	38%	20%	16%
Number of Children in Single Parent Households	35%	25%	25%
Median Household Income	\$35,600	\$61,100	\$77,700
Violent Crime Rate (per 100,000)	171.6	225.6	255.2
Child Care Cost Burden	30%	25%	28%
Food Insecurity Rate	22%	16%	14%

Source: US Census, 2024 QuickFacts, County Health Rankings (2025), U.S. News and World Report

Health Behaviors

Health Behaviors	Bell Co	Kentucky	US Overall
Percent Adult Smoking	25%	18%	13%
Percent Adults with Obesity	44%	38%	34%
Percent of Physically Inactive Adults	32%	25%	23%
Adults (>65) with all Teeth Lost	25.8%		12.6%
Percent of Adults Receiving Flu Vaccination in the Last Year	29%	46%	48%
Teen Birth Rate (per 1,000)	42	24	16
Sexually Transmitted Infections per 100,000	309.7	406.8	495.0
Percent Excessive Drinking	14%	15%	19%
Number of Child Victims of Substantiated Abuse	77	17,917	-
Births to Mother who Smoked During Pregnancy	25.5%	12.6%	5%
Percent Driving Deaths with Alcohol Involvement	31%	26%	26%
Suicides Per 100,000 Population	19	18	14

Source: County Health Rankings (2025), CDC Places: Local Data for Better Health, KIDS Count Data Center (2020-2022) (2013)

Health Outcomes

Health Outcomes	Bell Co	Kentucky	US Overall
Life Expectancy (years)	67.3	73	77
Percent Adults with Diabetes	14%	13%	10%
Percent Adults with Hypertension	40.8%	-	29.6%
Adults with current Asthma	12.1%	-	9.9%
Percent Fair to Poor Health	28%	20%	17%
Avg Number of Physically Unhealthy Days	5.9	4.5	3.9
Avg Number of Mentally Unhealthy Days	6	5.0	5.1
Percent Low Birth Weight	10%	9%	8%
Percent with a Disability, under Age 65	22%	13%	9%

Source: US Census, 2024 QuickFacts, County Health Rankings (2025), CDC Places Local Data for Better Health

Access to Care

Access to Care	Bell Co	Kentucky	US Overall
Primary Care Physicians	1,990:1	1,600:1	1,330:1
Mental Health Providers	1,670:1	320:1	300:1
Dentists	1,390:1	1,500:1	1,360:1
Preventable Hospital Stays per 100,000	4,664	3,336	2,666
Mammography Screening Rates	29%	43%	44%
Percent Uninsured	7%	7%	10%

Source: County Health Rankings (2025)

Physical Environment

Physical Environment	Bell Co	Kentucky	US Overall
Severe Housing Problems	14%	13%	17%
Severe Housing Cost Burden	13%	12%	15%
Driving Alone to Work	73%	78%	70%
Long Commute to Work – Driving Alone	35%	31%	37%
Broadband Access	77%	87%	90%
Access to Parks	59%	29%	51%
Homeownership	61%	68%	65%
Air Pollution – Particulate Matter	7.4	8.0	7.3

Source: County Health Rankings (2025)

Invasive Cancer Incidence Rates

Age-Adjusted Rate	Bell Co	Kentucky	US Overall
Total all sites (2017-2021)	489.9	513.7	444.4
Lung and Bronchus	105.9	84.5	53.1
Breast (Female)	85.0	129.2	129.8
Colon and Rectum	53.6	45.9	36.4
Urinary Bladder	13.5	21.7	18.8
Kidney and Renal Pelvis	17.7	21.4	17.3
Melanoma of the Skin	21.1	28.2	22.7

Source: National Cancer Institute: State Cancer Profiles

Hospital Utilization Data

The following data demonstrates the county of residence and payer mix of Middlesboro ARH inpatient hospital discharges from January 2022- September 2024.

Inpatient Hospital Discharges- Patient Origin

Patient County	Inpatient Discharges	% of Total
Bell-KY	2,524	72.8%
Claiborne-TN	529	15.2%
Lee-VA	206	5.9%
Harlan-KY	90	2.6%
Knox-KY	75	2.2%
Whitley-KY	14	0.4%
Perry-KY	13	0.4%
Leslie-KY	6	0.2%
Laurel-KY	4	0.1%
Clay-KY	3	0.1%
Wise-VA	2	0.1%
Johnson-KY	1	0.0%
Jackson-KY	1	0.0%
Martin-KY	1	0.0%
Total	3,469	100%

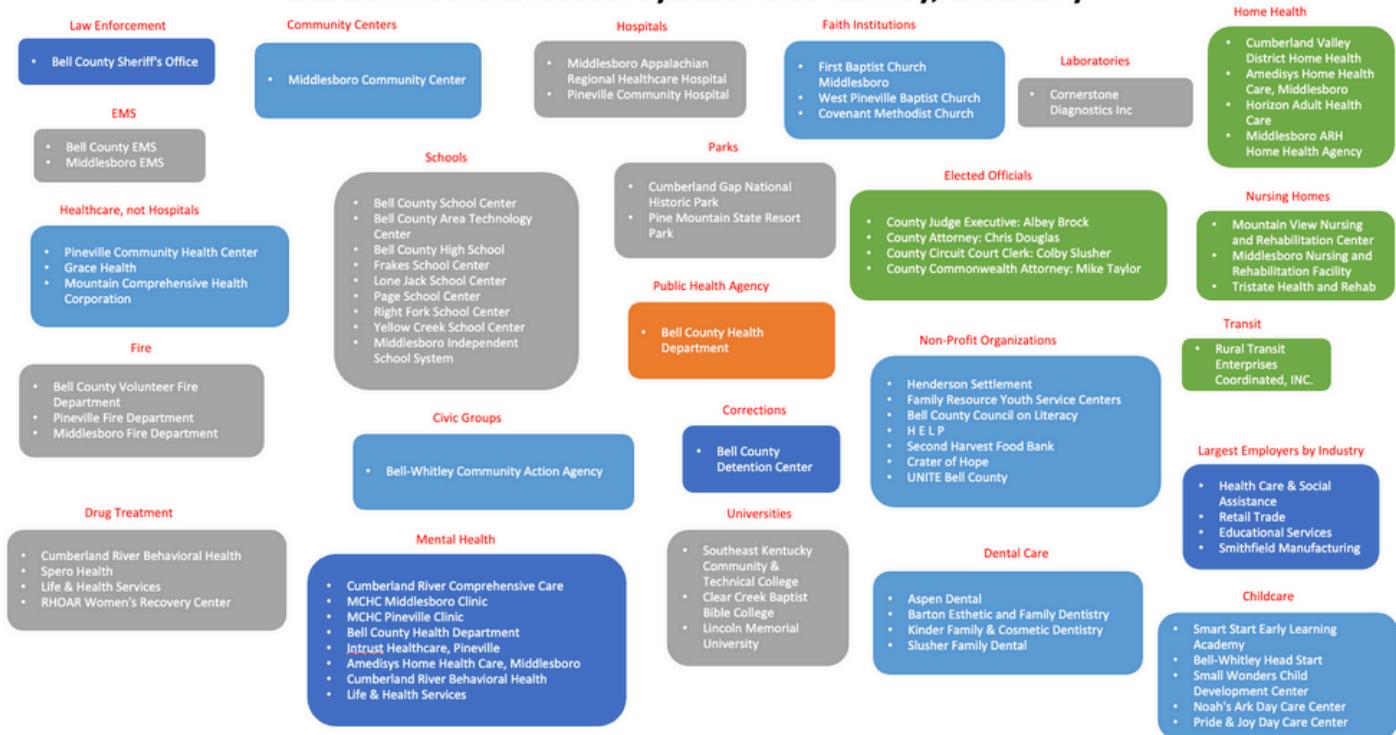
Inpatient Hospital Discharges- Payer Mix

Payer Type	Inpatient Discharges	% of Total
Medicare (Excluding Medicare Managed Care)	784	22.6%
WellCare of Kentucky Medicaid Managed Care	738	21.3%
Medicare Managed Care	715	20.6%
Commercial- Anthem Health Plans of KY PPO Plan	234	6.7%
Out of State Medicaid	229	6.6%
Commercial- Anthem Health Plans of KY HMO Plan	152	4.4%
United Healthcare Medicaid Managed Care	85	2.5%
Humana Medicaid Managed Care	82	2.4%
Anthem Medicaid Managed Care	78	2.2%
Self Pay	62	1.8%
In State Medicaid	57	1.6%
Passport Medicaid Managed Care	56	1.6%
Tricare (Champus)	50	1.4%
Aetna Better Health of KY Medicaid Managed Care	47	1.4%
Other Facility	25	0.7%
Commercial- United Healthcare POS Plan	20	0.6%
Commercial-Other	19	0.5%
Commercial- Humana PPO Plan	10	0.3%
Commercial- Aetna Health HMO Plan	9	0.3%
Commercial- Cigna Health & Life FFS Plan	7	0.2%
Black Lung	4	0.1%
Auto Insurance	3	0.1%
Workers Compensation	2	0.1%
Commercial- Aetna Health PPO Plan	1	0.0%
Total	3,469	100%

Organizing Community Partners

Collaboration among organizations is an essential component of the CHNA process and community health improvement plan. One tool that can be utilized to map organizations that may influence health in the community is the Local Public Health Schematic. The Team Up team collaborated with local residents and members of the Steering Committee to produce a local public health schematic, custom to Bell County. An overview of this schematic can be seen below, see Appendix B for a larger font version.

The Local Public Health System: Bell County, Kentucky



Bell County CHNA Steering Committee

Community Health Needs Assessment (CHNA) steering committees typically include representatives from public health agencies, local government, community organizations, healthcare providers, academic institutions, and members of the community, especially those who serve or represent medically underserved, low-income, or minority populations. The steering committee plays an essential role in the CHNA process by providing expert input, aiding in community survey and focus group data collection, interpreting community results, and formulating an effective implementation plan.

Steering committee members were recruited by Middlesboro ARH leadership in late summer of 2024. On October 14, 2024, the group gathered to discuss the CHNA process, provide their view of health needs for clients they serve, and plan survey dissemination and focus groups. On April 9, 2025 and after months of data collection, the Steering Committee met again for their final meeting (image below). The group reviewed data and collaboratively recommended priority health needs for Middlesboro ARH to address.

Steering Committee Members

Name	Organization Represented
Rebecca Akers	ARH Providers
Tanisha Brummet	Bell County Health Department
Catherine Burkhardt	Recovery Community Advocate / Unite
Joey Cruse	Unite Coalition
Whitley Gatliff	ARH
Elizabeth Gilbert	Bell County Housing Authority
Danielle Harmon	ARH
Rebecca Johnson	SKCTC Vice President
Christina Jones	DRCC
Teresa Mink	Air Evac LifeTeam
Leigha Sproles	Bell County Schools
Robin Wilson	Assistant Professor, LMU; RN

Community Focus Groups

After the initial steering committee meeting, 3 focus groups were held to gain valuable feedback from community members and residents. Community members were asked questions regarding health challenges, barriers to accessing healthcare, health behaviors, and community highlights. Discussion in focus groups is fairly free flowing and open-ended, with Team Up staff noting recurring themes and the most pressing issues brought forth by participants.

Middlesboro ARH hosted forums with:

- Bell County High School Students
- Bell County Teachers & Mental Health Staff
- Middlesboro ARH Medical Staff

Sample Focus Group Discussion Questions

“What are your community’s biggest health challenges?”

“Why do you think people in your community don’t go to the doctor?”

“Are there barriers to accessing healthcare in your community?”

“What health behaviors do you see in your community that concern you?”

“What other concerns do you have?”

Focus Group Results

A qualitative thematic analysis was performed utilizing community forum responses. Recurring challenges and themes were isolated by each forum question (see table 2) and the resulting key findings are presented below:

* QUESTION 1: COMMUNITY HEALTH CHALLENGES

Finding 1.1: Mental Health & Substance Use

- Drug use
- Alcohol use
- Vaping
- Parents purchasing vapes for children
- Behavioral issues
- Mental health issues increasing
- Community ramifications of SUD

Finding 1.2: Obesity & Nutrition

- Obesity
- Low access to healthy food, easy access to unhealthy food, no accessible exercise
- Community not walkable

"It's hard to tell them not to vape if the vape is keeping them from doing something worse. It's hard for me to fuss at a kid for vaping when at least they aren't shooting up."

* QUESTION 2: BARRIERS TO HEALTHCARE

Finding 2.1: Financial & SDOH Barriers

- Cost of care
- Lack of transportation
- Distance to travel to doctor
- Poverty
- Lack of living wage jobs and affordable housing

Finding 2.1: Resource Shortages

- Lack of mental health care, especially for children
- Applied Behavioral Therapy
- Lack of specialists
 - OBGYN
 - Cardiologist
- Lack of dentists accepting Medicaid

Focus Group Results

* QUESTION 3: HEALTH BEHAVIORS

Finding 3.1: Normalized Unhealthy Behaviors

- Laying in tanning bed
- Lack of personal hygiene
- Fast food consumption
- Generational Substance use
- Vaping

"If kids are raised by wolves, don't be surprised when they begin to howl."

Finding 3.2: Contextual Barriers to Healthy Behaviors

- Brain drain
- Mental health challenges:
 - Dangers of the internet
 - Social media
- Grandparents raising grandchildren
- Parents and guardians only take children to the doctor when something is seriously wrong

* QUESTION 4: ADDITIONAL CONCERNs

Finding 4.1: Additional Resources Needed

- More health department programming
- ABA therapy
- Mental health services of all types
- Testing & services within the community to prevent excess travel
- Social connection

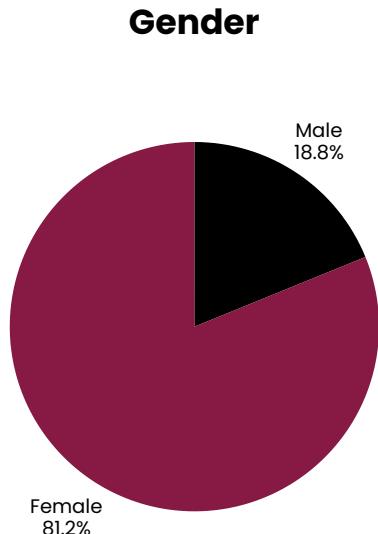
"Children can't stay clean when people in their homes aren't clean. Kids are under so much stress and it comes from the environments they live in. It falls on the kids to break the cycle when their parents aren't."

Community Survey Results

The community survey was developed and distributed online and via paper at various community events from October 2024–January 2025. Responses are anonymous. For the full survey instrument, see Appendix C.

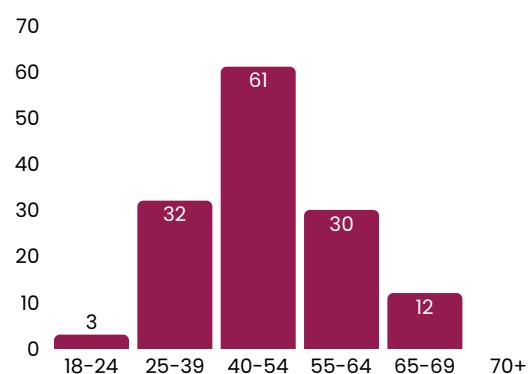
Respondent Demographics

n=138

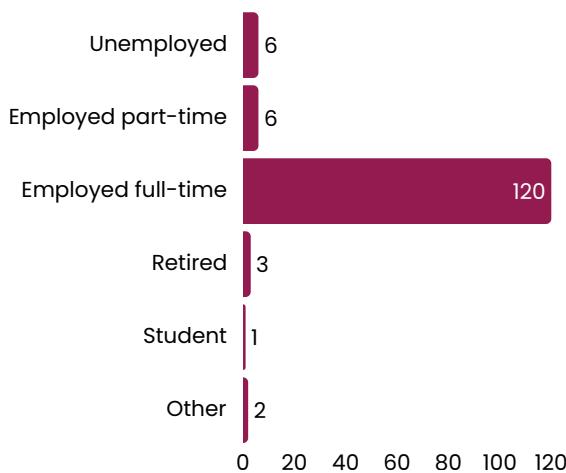


Education

12% High School
4% Technical School
83% College or Above
1% Other

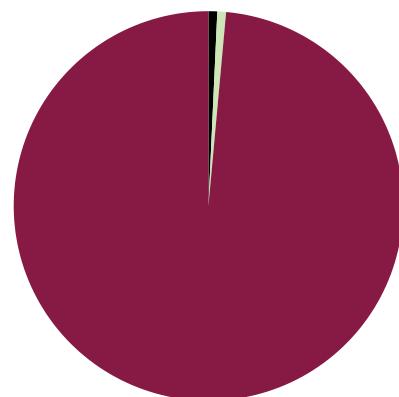


Employment Status



Race/ Ethnicity

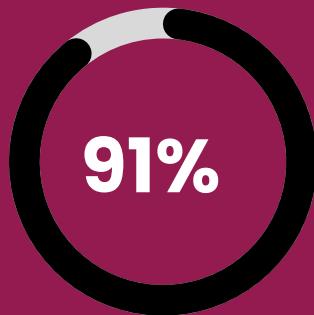
- African American/ Black
- Asian/ Pacific Islander
- White/ Caucasian



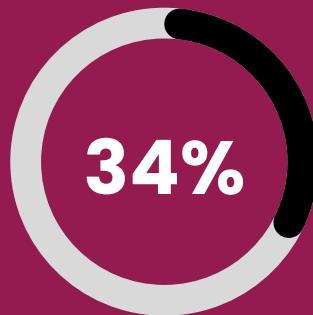
Community Survey Results



Are satisfied with the ability to access healthcare services in Bell County.

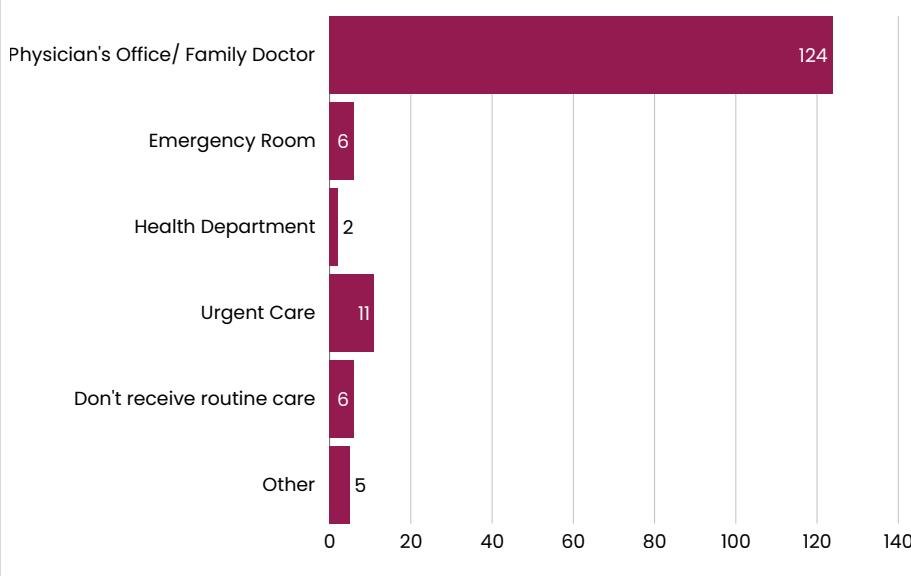


Regularly receive preventive services such as vaccinations, screenings, and checkups.



Have delayed healthcare due to lack of money or insurance.

Where do you go to receive routine healthcare?

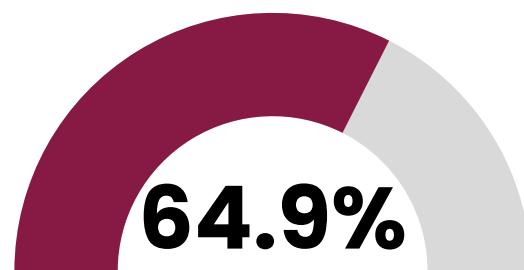
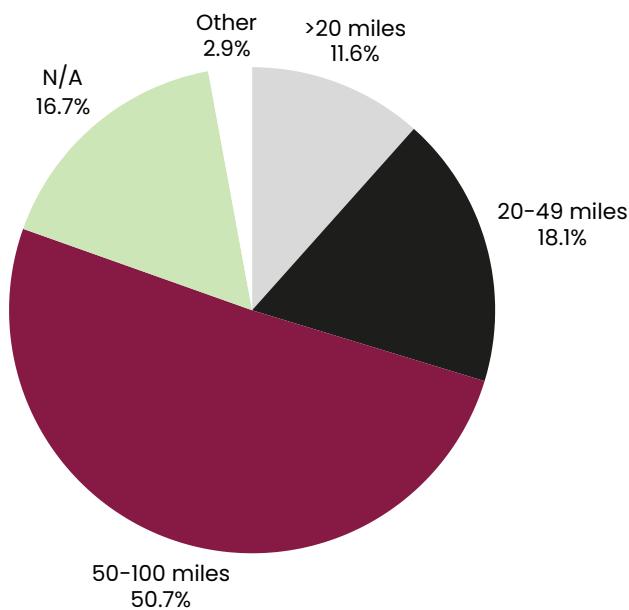


Top 5 barriers to receiving routine healthcare:

1. No barriers
2. Only visit the doctor when something is seriously wrong
3. Cannot take off work
4. Cannot afford it
5. Months long wait times & Physician hours of operation

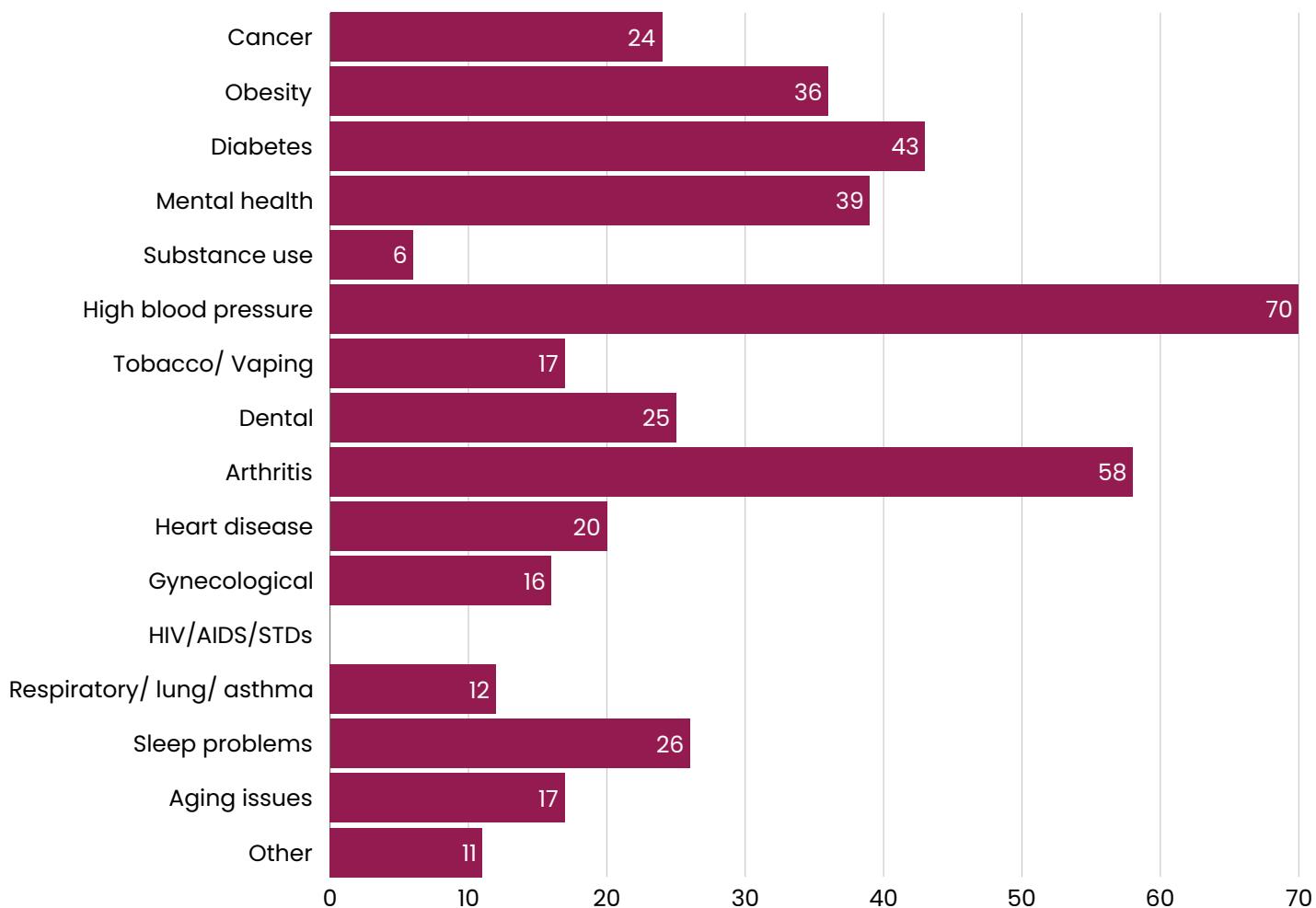
Community Survey Results

How far do you or your household travel to see a specialist?



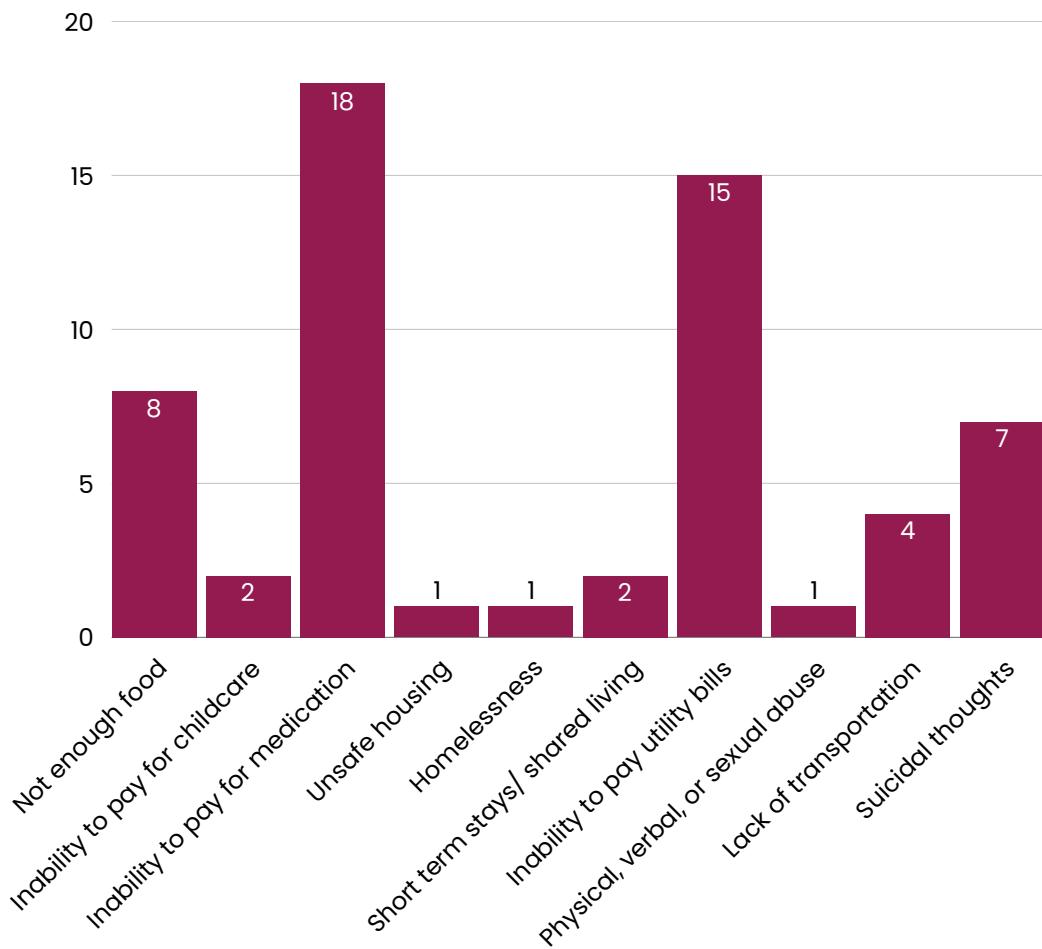
Are satisfied with the availability of mental health services in Bell County.

Top 3 health challenges you/ your household face:



Community Survey Results

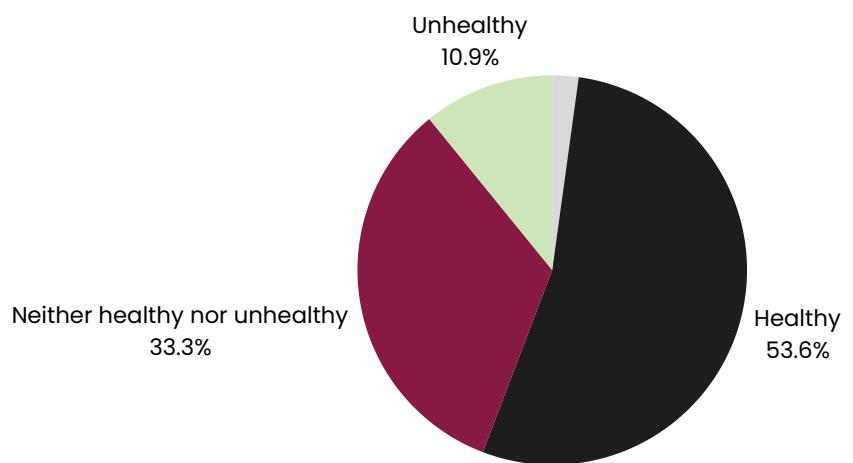
Have you or your household faced any of these issues in the past year?



How would you rate your overall health?

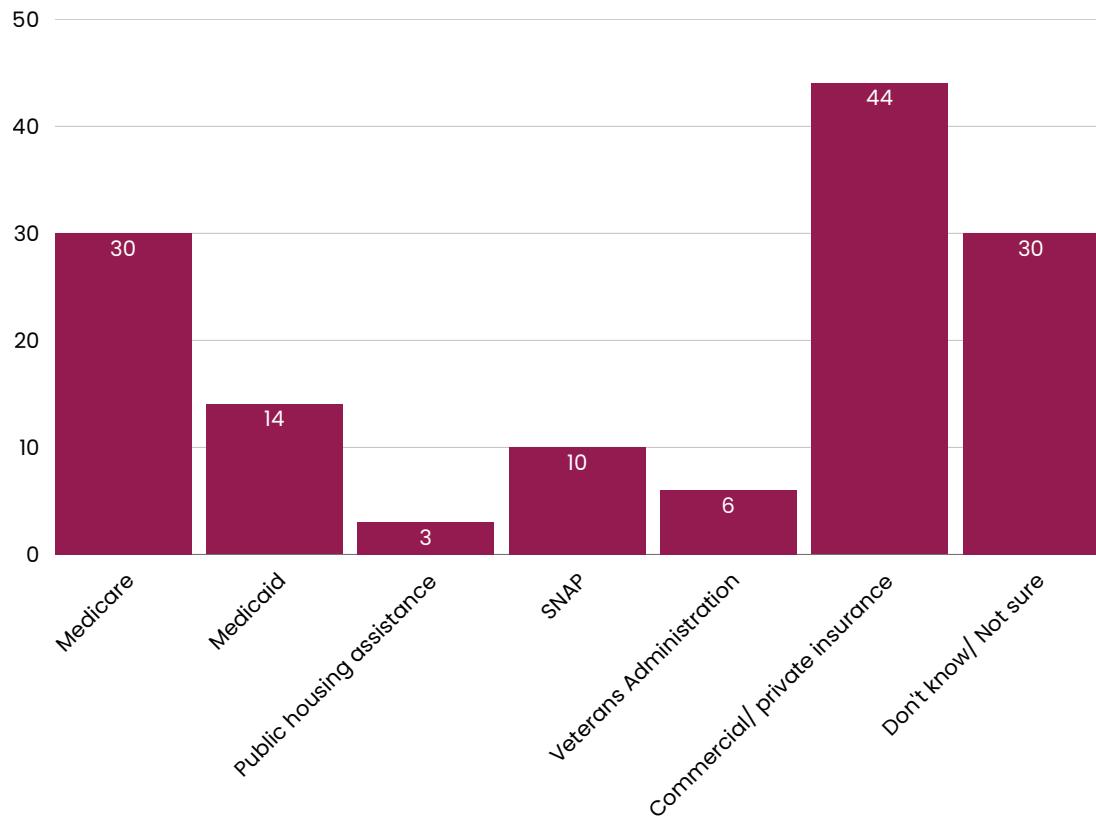
Top 3 risky behaviors you see in your community:

1. Drug use (125)
2. Tobacco/ Vaping (69)
3. Poor eating habits (59)

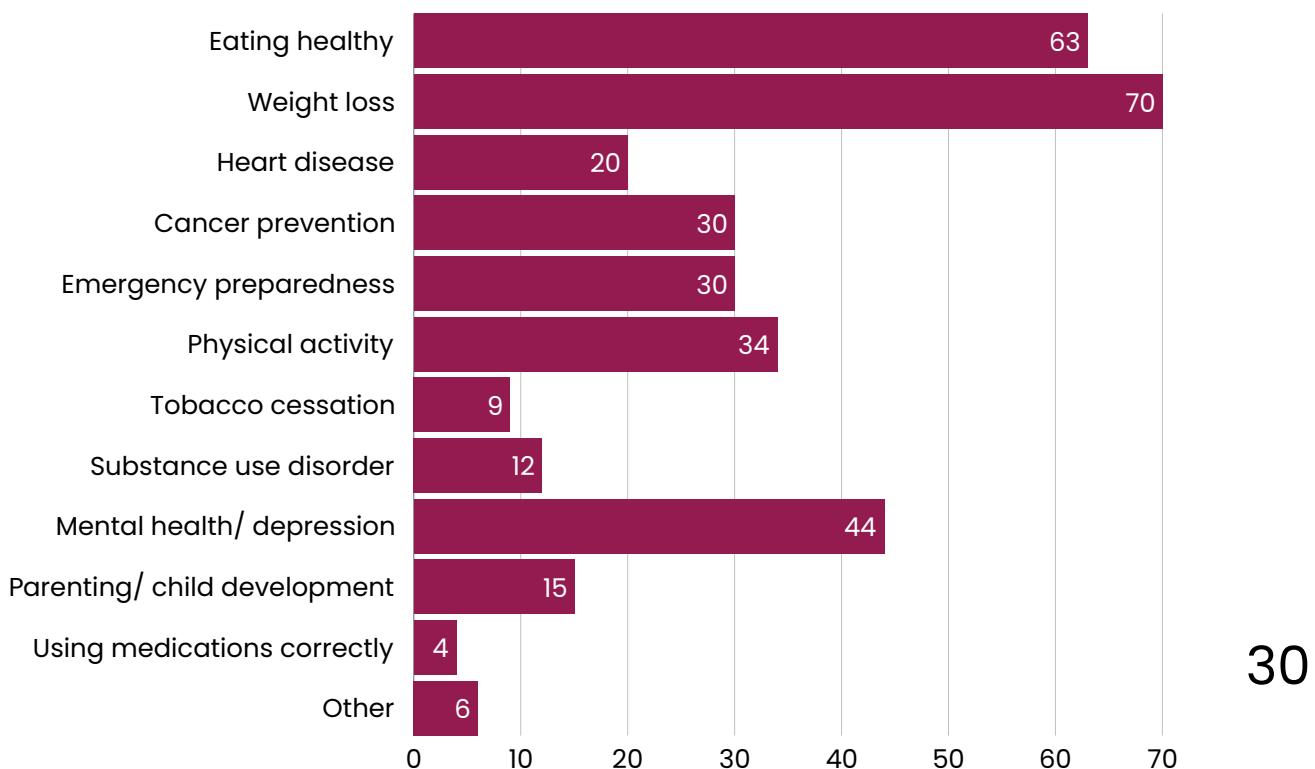


Community Survey Results

Are you or members of your household currently eligible for any of the following services?

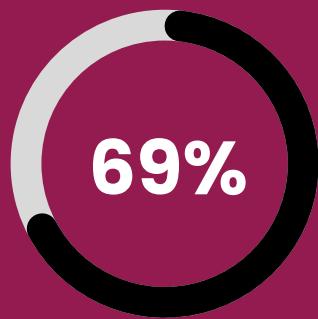
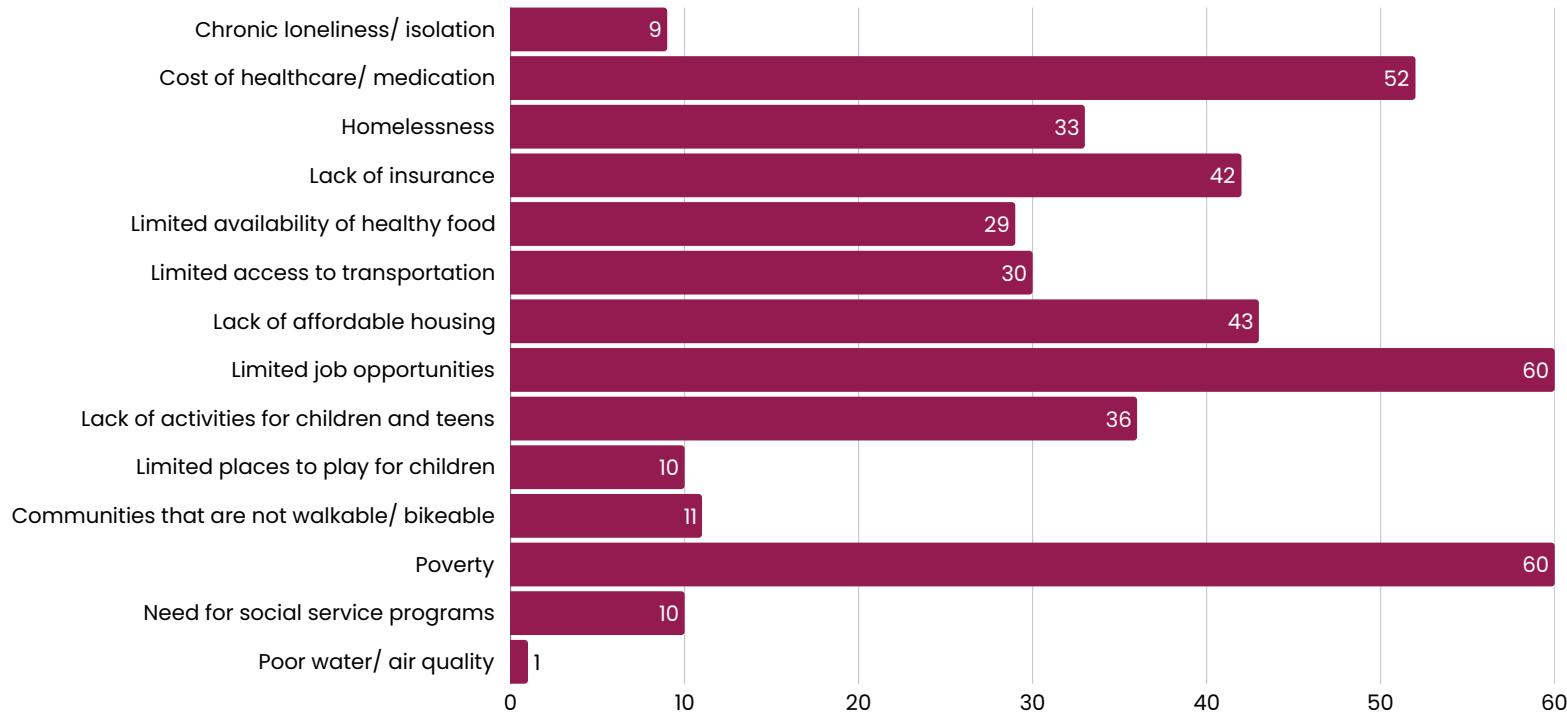


Health related topics respondents are interested in learning more about:

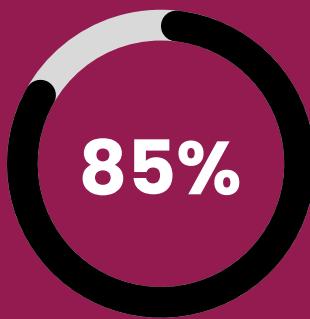


Community Survey Results

Most important problems related to quality of life & environment in Bell County:



Have had a dental exam in the past year.



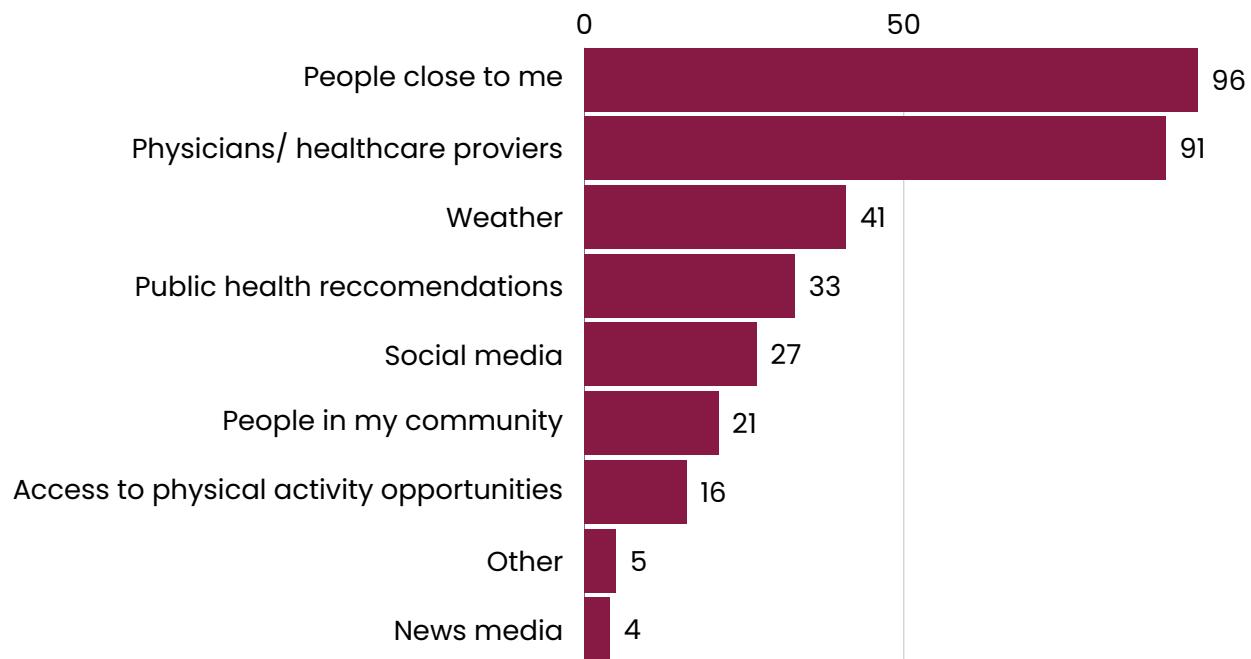
Have had a routine checkup in the past year.



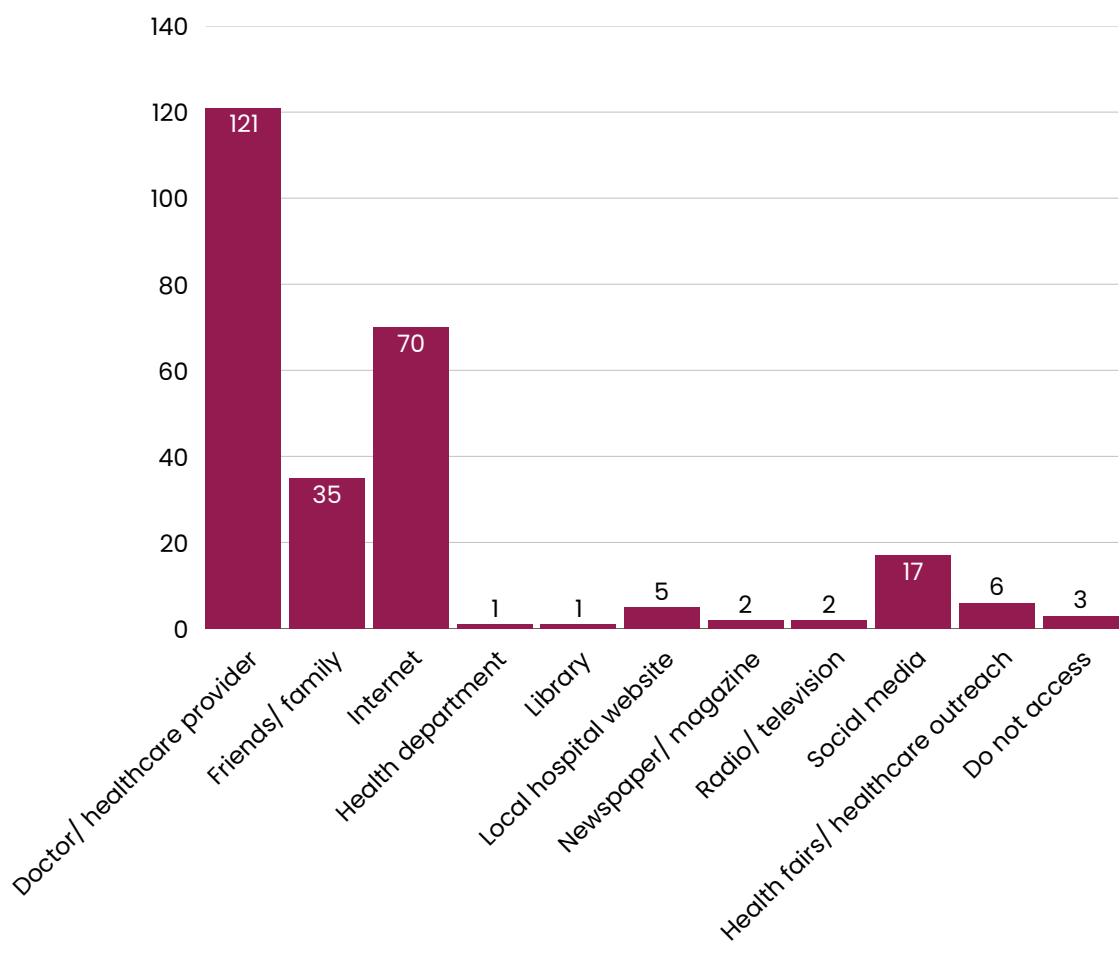
Believe mental illness is a medical condition.

Community Survey Results

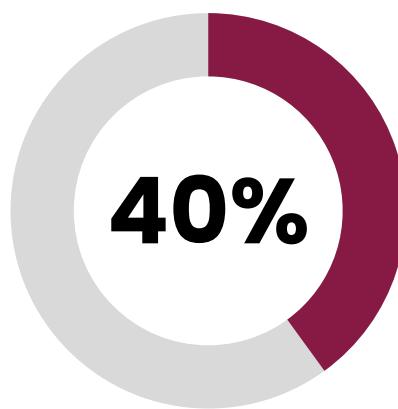
What factors influence your health choices?



Where do you get most of your healthcare information?

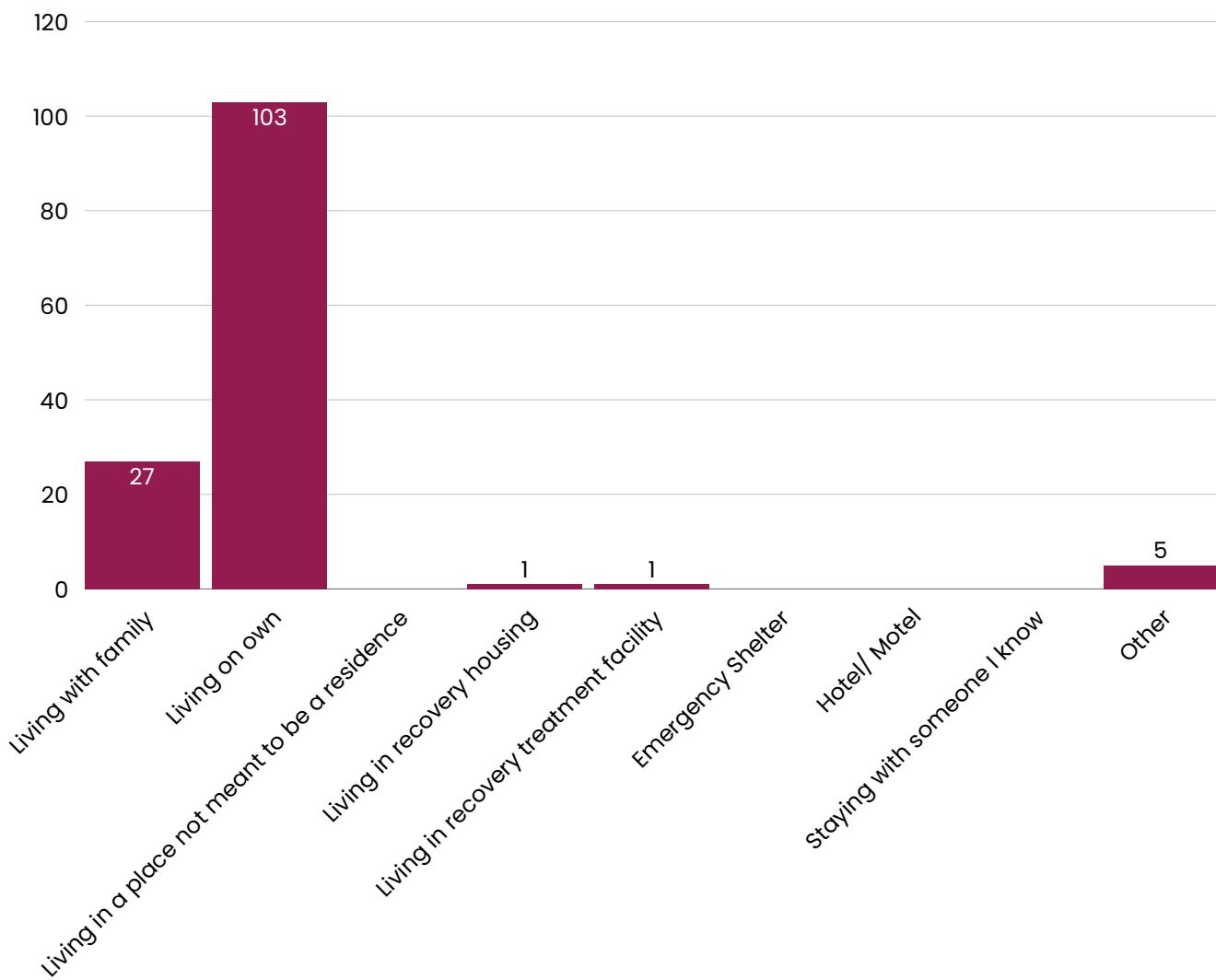


Community Survey Results



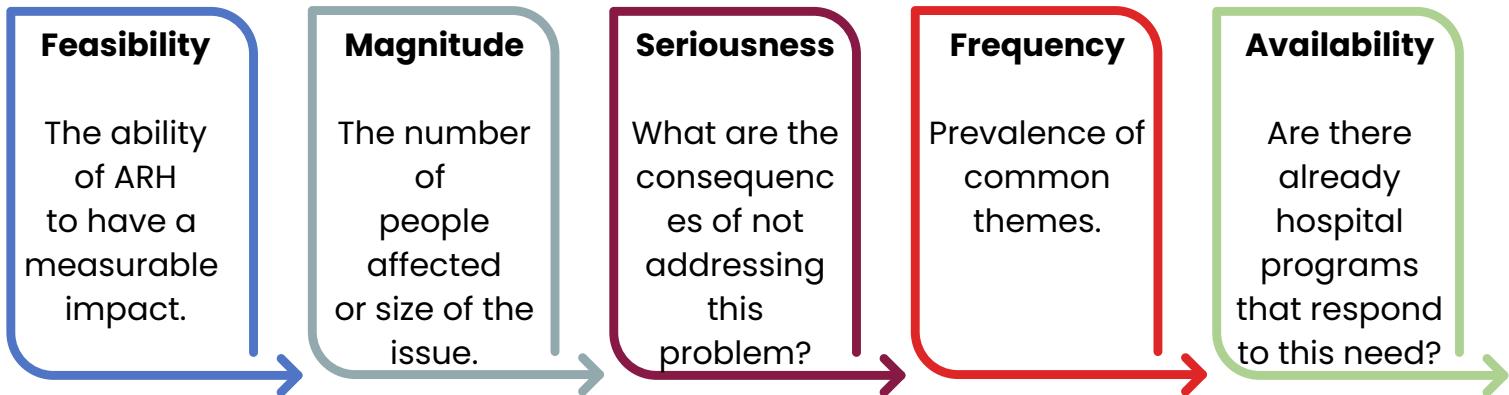
Have been told by a healthcare professional that they have high cholesterol.

What is your current living situation?



Health Needs Prioritization

After primary and secondary data were presented to the CHNA Steering Committee, the group set to prioritizing the top needs using the criteria below.



Through this process, the Steering Committee synthesized and identified the top 4 health needs facing their community to be:

- 1. Nutrition education and food access**
- 2. Substance use, tobacco, and vaping**
- 3. Transportation**
- 4. Mental health**

Implementation Plan

Middlesboro ARH leadership collaborated with the Community Development Department to define the following goals and strategies to address the identified health needs.

Goal: Promote nutritional health and improve access to healthy foods

Key Strategies

- Partner with UK Cooperative Extension Service and Sodexo to host cooking classes in-facility and throughout our community
- Create an in-facility food pantry program, which distributes food boxes to patients that screen as food insecure
- Expand in-school programming to include education about nutrition, especially on sugary and overly-caffeinated drinks
- Educate about/provide screenings related to obesity-related diseases – heart disease, stroke, type 2 diabetes
- Promote healthy nutrition with grocers in our community by cohosting events and providing education, testing, and healthy recipe distribution in stores

Goal: Combat addiction (encompassing substance use disorder, tobacco, vaping, and alcohol) with multifaceted approaches

Key Strategies

- Continue to grow Peer Support Program. Peer support coaches are people who have been successful in the SUD recovery process and can help others that are still in active addiction. Peer Support coaches often respond to overdoses in the ED, refer people to treatment, provide resources for social needs, educate the community on SUD and overdose awareness, and more
- Educate students and parents/caregivers about the dangers of alcohol, tobacco, nicotine, vaping, and illicit substances through targeted programming
 - Education in local school systems in partnership with Kentucky Cancer Program and Public Health Departments (i.e. ARH Love Your Lungs Program or Catch My Breath)
 - Educate parents and caregivers about the dangers of nicotine on young brains
 - Host alcohol awareness events throughout the community

Key Strategies

- Provide overdose awareness and education, along with trainings on Narcan and Naloxone, throughout the community
- Partner with community organizations, councils and boards that support addiction prevention and treatment (Unite, Crater of Hope), partnering to host events where possible.

Goal: Reduce transportation barriers to accessing healthcare

Key Strategies

- Provide primary care in outlying communities with use of ARH Mobile Clinic
- Connect patients with transportation barriers with community resources
 - Provide gas cards as available to ARH patients
 - Provide referrals for medical taxi services and Bluegrass Transit
- Explore the expansion of telehealth services
- Increase knowledge of services and specialties available at Middlesboro ARH, reducing patient travel to larger hospitals

Goal: Address mental health issues through increased services, community education, and reduction of stigma

Key Strategies

- Grow outpatient behavioral health services, including:
 - Recruitment of therapist
 - Expansion of MOUD services
- Provide mental health programming targeting youth and parents/caregivers, such as:
 - Suicide prevention and warning signs
 - Anxiety coping strategies
 - Internet safety
 - Youth Mental Health First Aid
 - Targeted programs for grandparents raising grandchildren/ relative care

Key Strategies

- Provide Mental Health First Aid trainings on-site for staff and community
- Provide resources and mental health services for staff to include:
 - Online counseling services
 - “Code Chill” that includes a green room and employee garden as a space for breaks and stress relief.
- Provide mental health related community screenings and events

Communication and Distribution Plan

Nonprofit hospitals are required by the IRS to both communicate about and publicly distribute their Community Health Needs Assessments (CHNAs) and related Implementation Strategies (IS) to ensure transparency, community engagement, and compliance with federal regulations. To meet best practices and go beyond minimum requirements, ARH will focus on accessibility, outreach, and engagement. Here's how:

- Posting prominently on our ARH website
- Sharing with community partners
- Sharing with members of the steering committee and focus group participants
- Presenting implementation plans in area coalitions, councils, and boards
- Promoting on social media and hospital communications
- Incorporating CHNA in grant proposals and reports
- Providing progress reports and annual updates to the IRS and ARH Board of Trustees

Appendix A

Social Determinants of Health Infographic

BELL COUNTY, KENTUCKY

POPULATION: 23,317

HEALTHY PEOPLE 2030 GOALS AND SOCIAL DETERMINANTS OF HEALTH METRICS

ECONOMIC STABILITY: HELP PEOPLE EARN STEADY INCOMES THAT ALLOW THEM TO MEET THEIR HEALTH NEEDS



1	Idle Youth: Bell County 8.6% Kentucky 3% United States 2.4%
2	Poverty Rate: Bell County 30.4% Kentucky 16.5% United States 11.5%
3	Population 16+ in Labor Force: Bell County 40.9% Kentucky 59.2 % United States 63%
4	Single Parent Households: Bell County 32.20% Kentucky 31%
5	Households Spending at Least 30% Of Income on Housing: Bell County 26% Kentucky 23.9% United States 22.8%
6	Population Without Access to Large Grocery Store: Bell County 14% Kentucky 19.8% United States 21.7%
7	Children Living in Food Insecure Households: Bell County 21.5% Kentucky 15.2% United States 16%

EDUCATION ACCESS AND QUALITY: INCREASE EDUCATIONAL OPPORTUNITIES AND HELP CHILDREN AND ADOLESCENT DO WELL IN SCHOOL



1	Students Graduating High School in 4 Years: Bell County 91.6% Kentucky 91.4%
2	High School Graduates Enrolled in Post-Secondary Education Within 6 Months of Graduation: Bell County 45.51% Kentucky 45.33%
3	8 th Grade Students with Proficient or Distinguished on Reading State Assessment: Bell County 56% Kentucky 45%
4	8th Grade Students with Proficient or Distinguished on Math State Assessment: Bell County 32% Kentucky 37%
5	Kindergarteners Ready to Learn: Bell County 23% Kentucky 44%
6	Students with an Individualized Education Plan (IEP): Bell County 19% Kentucky 15%
7	4th Grade Students with Proficient or Distinguished on Reading State Assessment: Bell County 29% Kentucky 47%
8	4 th Grade Students with Proficient or Distinguished on Math State Assessment: Bell County 47% Kentucky 42%

HEALTH CARE ACCESS AND QUALITY: INCREASE ACCESS TO COMPREHENSIVE HIGH QUALITY HEALTH CARE SERVICES



1	Adults with Recent Doctor Visit for Routine Checkup: Bell County 72.7% United States 71.8%
2	Children Under 19 with Health Insurance Coverage: Bell County 96.5% Kentucky 96.1%
3	Number of TBI Emergency Department Cases: Bell County 10 Kentucky 11,249
4	Adults With Recent Preventative Care Visit: Bell County 79.4% Kentucky 80.7% United States 74.6%
5	Lung and Bronchus Incidence per 100,000 Population: Bell County 88.1 Kentucky 84.4 United States 54
6	Mammography Use Among Women Aged 50-74: Bell County 64.6% United States 77.8%
7	STIs per 100,000: Bell County 272.4 Kentucky 410.3 United States 495.5
8	Colon and Rectum Cancer Incidence per 100,000: Bell County 53.0 Kentucky 194.4 United States 156.6

9	Children Enrolled in Medicaid or KY Children's Health Insurance Program Who Received Dental Services in Kentucky: Bell County 50% Kentucky 51%
10	Population Under 65 Without Health Insurance: Bell County 7.7% Kentucky 6.7% United States 9.3%
11	Population With Limited English Proficiency: Bell County 0-3% Kentucky 2.1% United States 9%

NEIGHBORHOOD AND BUILT ENVIRONMENT: CREATE NEIGHBORHOODS AND ENVIRONMENTS THAT PROMOTE HEALTH AND SAFETY



1	Violent Crime Rate per 100,000 Population: Bell County 171.6 Kentucky 225.6 United States 204.5
2	Population with Access to Broadband: Bell County 96.7% Kentucky 97% United States 96.7%
3	Percent of County Using SNAP: Bell County 32.8% Kentucky 16.3
4	Air Quality Hazard: Bell County 0.40 Kentucky 0.44 United States 0.34
5	Vehicle Crash Fatality Rate per 100,000: Bell County 15.1 Kentucky 51.5 United States 17.5
6	Population Within ½ Mile of Walkable Destinations: Bell County 20.1% Kentucky 33.9% United States 34%
7	Walkability Index Score: Bell County 5.1 Kentucky 7.2 United States 6.1
8	Asthma Prevalence Among Adults 18+: Bell County 12.8% Kentucky 11.5% United States 9.7%
9	Adult Smoking Rate: Bell County 33.8% Kentucky 23.9% United States 24.3%
10	Deaf and Hard of Hearing Population: Bell County 3,653 Kentucky 705,533
11	Prevalence of People with Disabilities: Bell County 25.4% Kentucky 21.1%

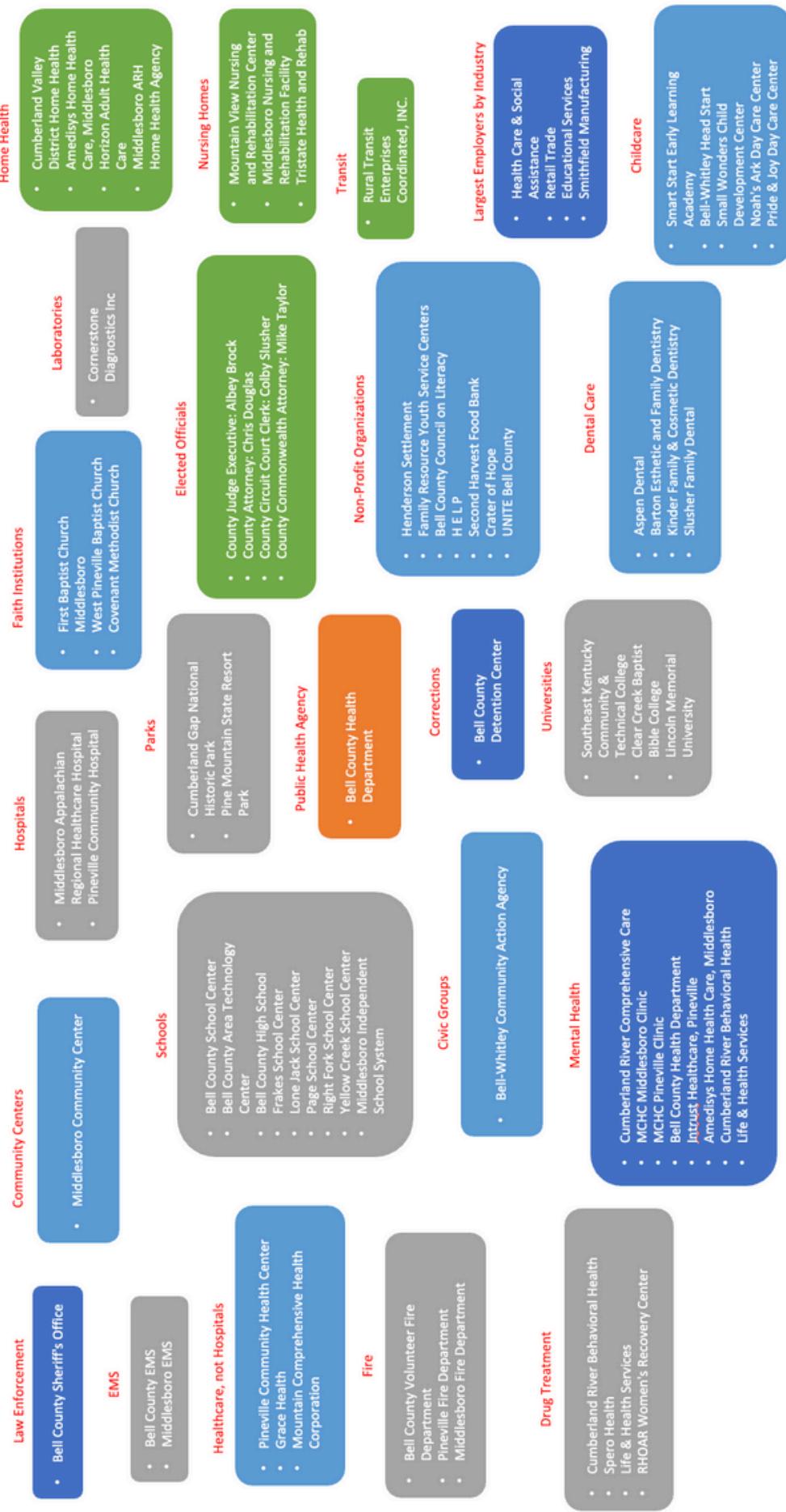
SOCIAL AND COMMUNITY CONTEXT: INCREASE SOCIAL AND COMMUNITY SUPPORT



1	Youth Incarcerated in the Juvenile Justice System per 1,000 Youth: Bell County 27 Kentucky 13.2
2	Census Self- Response Rate: Bell County 58.4% Kentucky 63.5% United States 65.8%
3	Households With a Computer: Bell County 84.4% Kentucky 90.2% United States 93.1%



The Local Public Health System: Bell County, Kentucky



Appendix C

Survey Instrument



Appalachian Regional Healthcare

ARH 2024 CHNA Survey

Please take 10-15 minutes to complete this survey. Please do not include your name anywhere. All responses will remain anonymous.

Q1. Please select the ARH facility closest to your home:

- ARH Our Lady of the Way Hospital, Floyd Co. KY (1)
- Highlands ARH Regional Medical Center, Floyd Co. KY (2)
- McDowell ARH Hospital, Floyd Co. KY (3)
- Morgan County ARH Hospital, Morgan Co. KY (4)
- Paintsville ARH Hospital, Johnson Co. KY (5)
- Tug Valley ARH Regional Medical Center, Pike Co. KY (6)
- Barbourville ARH Hospital, Knox Co. (7)
- Harlan ARH Hospital, Harlan Co. KY (8)
- Middlesboro ARH Hospital, Bell Co, KY (9)
- Hazard ARH Regional Medical Center, Perry Co. KY (10)
- Mary Breckinridge ARH Hospital, Leslie Co. KY (11)
- Whitesburg ARH Hospital, Letcher Co. KY (12)
- Beckley ARH Hospital, Raleigh Co. WV (13)
- Summers County ARH, Summers Co. WV (14)

Q2. Are you satisfied with the ability to access healthcare services in your County?

- Yes
- No

Q3. Do you regularly receive preventative services such as vaccinations, screenings, and annual checkups?

- Yes
- No

Q4. Where do you go to receive routine healthcare? Select all that apply.

- Physician's office/my family doctor
- Emergency room
- Health department
- Urgent care
- I do not receive routine healthcare
- Other. Please specify below:

Q5. Are there barriers that keep you from receiving routine healthcare? Select all that apply.

- No insurance
- I only visit the doctor when something is seriously wrong
- Lack of child care
- Physician hours of operation (inconvenient times)
- Fear/anxiety
- Poor physician attitudes or communication
- No transportation
- Cannot take off work
- Cannot afford it
- Months long wait times
- No barriers
- Other. Please specify here: _____

Q6. How far do you or anyone in your household travel to see a specialist?

- Less than 20 miles
- 20-49 miles
- 50-100 miles
- I do not receive routine healthcare
- Other: _____

Q7. Please select the TOP THREE **health challenges** you or anyone in your household face. Select only three.

<input type="checkbox"/> Cancer	<input type="checkbox"/> Arthritis/joint pain
<input type="checkbox"/> Obesity	<input type="checkbox"/> Heart disease and stroke
<input type="checkbox"/> Diabetes	<input type="checkbox"/> Gynecological issues
<input type="checkbox"/> Mental health issues	<input type="checkbox"/> HIV/AIDS/STDs
<input type="checkbox"/> Substance use disorder (alcohol/drugs)	<input type="checkbox"/> Respiratory/lung disease/asthma
<input type="checkbox"/> High blood pressure	<input type="checkbox"/> Sleep problems
<input type="checkbox"/> Tobacco use/vaping	<input type="checkbox"/> Aging issues
<input type="checkbox"/> Dental issues	<input type="checkbox"/> Other. Please specify below: _____

Q8. Have you or anyone in your household faced any of these issues in the past year?

<input type="checkbox"/> Not enough food to feed your family	friends/others
<input type="checkbox"/> Inability to pay for childcare	<input type="checkbox"/> Inability to pay utility bills
<input type="checkbox"/> Inability to pay for medications	<input type="checkbox"/> Physical, verbal, or sexual abuse
<input type="checkbox"/> Unsafe housing	<input type="checkbox"/> Lack of transportation
<input type="checkbox"/> Homelessness	<input type="checkbox"/> Suicidal thoughts
<input type="checkbox"/> Shared Living / Short term stays with	<input type="checkbox"/> None of the above

Q9. Please select the TOP THREE **risky behaviors related to personal choices** you see most in your community. Select only three.

<input type="checkbox"/> Excessive alcohol use	<input type="checkbox"/> Drug use
<input type="checkbox"/> Poor eating habits	<input type="checkbox"/> Distracted driving
<input type="checkbox"/> Lack of exercise	<input type="checkbox"/> Domestic violence
<input type="checkbox"/> Child abuse and neglect	<input type="checkbox"/> Other. Please specify below: _____
<input type="checkbox"/> Tobacco or vaping use	_____
<input type="checkbox"/> Unsafe sex	_____

Q10. Have you or someone in your household delayed healthcare because of lack of money and/or insurance?

- Yes
- No

Q11. Are you or members of your household currently eligible for any of the following services? Select all that apply.

- Medicare
- Medicaid
- Public Housing Assistance
- SNAP (Food stamp program)
- VA
- Commercial/private insurance

Q12. How would you rate your **overall health**?

- Very healthy / In excellent health
- Healthy
- Neither healthy nor unhealthy / Fair
- Unhealthy
- Very unhealthy

Q13. Are you satisfied with the availability of mental health services in your area (example: counselors, psychiatrists, etc.)?

- Yes
- No

If no, why? _____

Q14. What could be done in your County to better meet your health needs?

Q15. Which health related topics would you be interested in learning more about? Select all that apply.

- Eating healthy
- Weight loss
- Heart disease
- Cancer prevention
- Emergency preparedness
- Physical activity
- Tobacco cessation
- Substance use disorder (alcohol and/or drugs)
- Mental health/Depression
- Parenting / Child development
- Using my medications correctly
- Other. Please specify below:

Q16. From the following list, which do you think are the 3 most important problems related to quality of life and environment in your county? Please choose ONLY 3

- Chronic loneliness or isolation
- Cost of health care and/or medications
- Homelessness
- Lack of health insurance or poor coverage
- Limited ability to get healthy food or enough food
- Limited access to transportation
- Lack of affordable housing
- Limited job opportunities
- Lack of activities for children and teens
- Limited places to play for children
- Communities that are not walkable/bikeable
- Poverty
- Need for social service programs
- Poor water or air quality

Q17. Have you had a dental exam in the past year?

- Yes
- No

Q18. Have you had a routine checkup in the past year?

- Yes
- No

Q19. Do you believe mental illness is a medical condition?

- Yes
- No

Q20. Have you been told by a healthcare professional that you have high cholesterol?

- Yes
- No

Q21. Have you or anyone in your household used ARH hospital services in the past 12 months?

- Yes
- No

Q22. If you used a hospital other than ARH in the past 12 months, why? Select all that apply.

- Service I needed was not available
- My doctor referred me to another hospital
- My insurance required me to go somewhere else
- I prefer larger hospitals
- Other. Please specify below:

Q23. How would you rank ARH on a scale of 1 to 10, where 1 is *not very good* and 10 is *very good*?

good? Please circle a number below.

1 2 3 4 5 6 7 8 9 10

Q24. What factors influence your health choices? Select all that apply.

- People close to me (friends, family, spouse)
- People in my community
- Listening to physicians and other healthcare providers
- Public health recommendations/guidelines (example: CDC)
- Social media (Facebook, Instagram, etc.)
- Whether or not I have access to physical activity opportunities
- Weather (seasons: Spring, Summer, Fall, Winter)
- News media
- Other

Q25. Where do you get most of your healthcare information? Select all that apply.

- Doctor/healthcare provider
- Friends/family
- Internet
- Health department
- Library
- Local hospital website
- Newspaper/magazines
- Radio/television
- Social media (Facebook, Instagram, etc.)
- Health fairs or other healthcare outreach
- I do not access health information

Q26. What is your current living situation?

- Living with family (parent(s), guardian, grandparents or other relatives)
- Living on your own (apartment or house)
- Living in a place not meant to be a residence (outside, tent, homeless camp, car, abandoned building)
- Living in recovery housing
- Living in a recovery treatment facility
- Staying in an emergency shelter or transitional living program
- Living in a hotel or motel
- Staying with someone I know

Q27. What is your age?

- 18 - 24
- 25 - 39
- 40 - 54
- 55 - 64
- 65 - 69
- 70 or older

Q28. What is your gender?

- Male
- Female
- Other _____
- Prefer not to answer

Q29. What ethnic group do you identify with?

<input type="checkbox"/> African American/Black	<input type="checkbox"/> Native American
<input type="checkbox"/> Asian/Pacific Islander	<input type="checkbox"/> White/Caucasian
<input type="checkbox"/> Hispanic/Latino	<input type="checkbox"/> Other. Please specify below:

Q30. What is the highest level of education you have completed?

- High School
- Technical school
- College or above
- Other. Please specify below:

Q31. What is your current employment status?

- Unemployed
- Employed part-time
- Employed full-time
- Retired
- Student
- Other. Please specify below:

THANK YOU!

We would like to extend our most sincere gratitude to the Bell County community for your input and contributions to this Community Health Needs Assessment process. Because of your participation in this process, we were able to not only understand the health challenges that Bell County residents face, but also the complex systems and context you operate within. With this information, we are able to create a more effective and comprehensive implementation plan to address these issues. Thanks to your dedication, we are able to work towards improving your selected health priority issues to create lasting, positive change.



A Public Health Academic Practice Collaborative

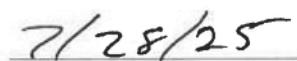


Approval

This Community Health Needs Assessment and attached Implementation Plan was approved by the ARH Board of Trustees on May 9, 2025.



Bob Chairperson Signature



Date