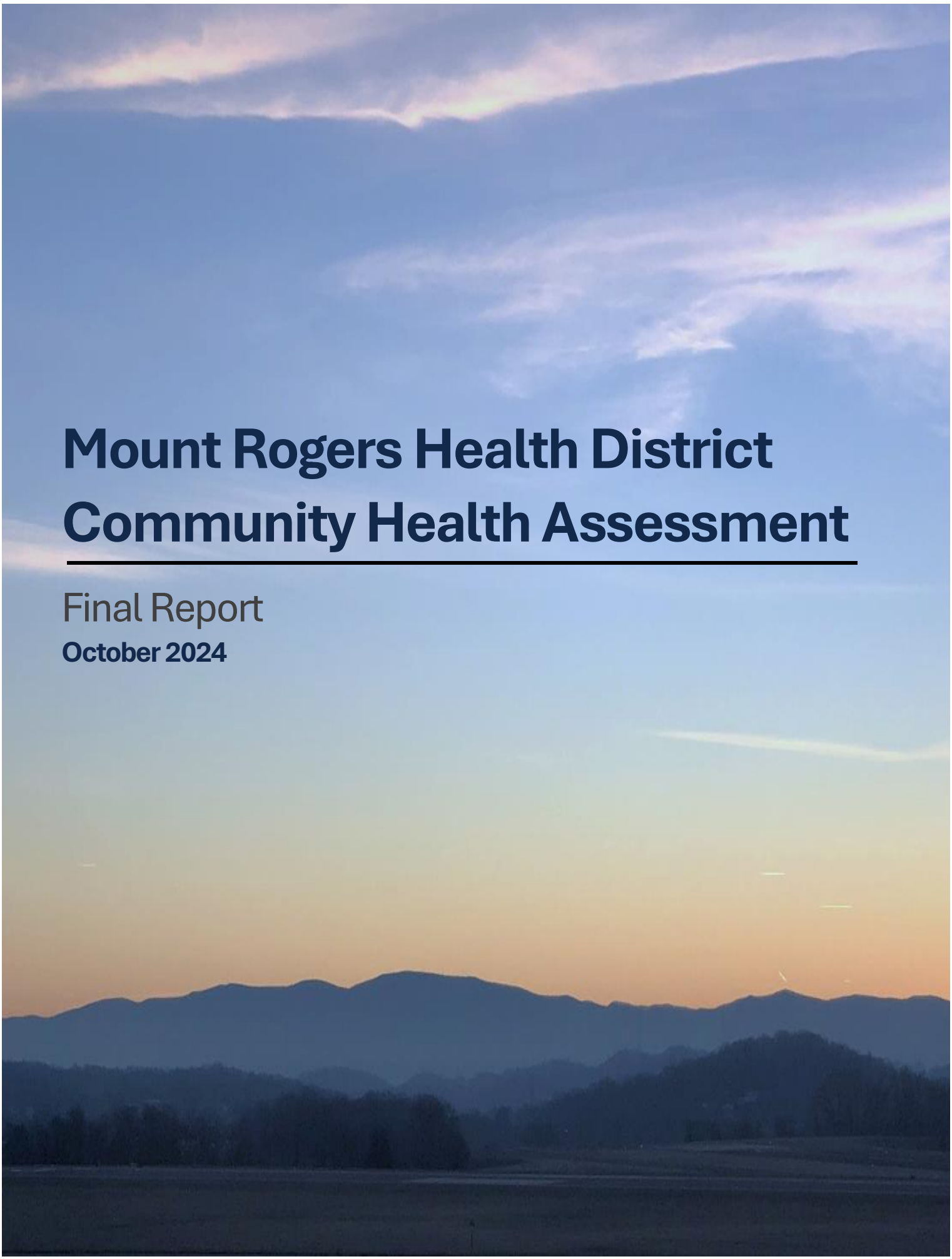

Mount Rogers Health District Community Health Assessment

Final Report

October 2024

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Executive Summary

The Community Health Assessment (CHA) was conducted by the Mount Rogers Health District (MRHD) of the Virginia Department of Health to identify the key health status, needs, and challenges within the health district. The health district is comprised of 8 localities: Bland County, Carroll County, Galax City, Grayson County, Smyth County, Washington County, Wythe County, and Bristol City. The assessment sought to gather comprehensive data through community engagement, surveys, focus groups, and secondary research. The process aimed to inform future policy, service provision, and funding priorities to better serve the residents of the MRHD.

The last CHA was performed within the health district was in 2019. A CHA was started in May 2022, and was planned to conclude by the spring of 2023. However, unforeseen circumstances, including multiple staff changes and a natural disaster altered this plan. The disruptions that resulted from staffing turnover predominately impacted the pacing with primary data collection not starting until February of 2024. A natural disaster further disrupted the assessment process, preventing the completion of planned focus groups and shifting immediate priorities to disaster recovery. This report summarizes the available data, discusses the impact of confounding factors impacting data collection and the natural disaster, and outlines recommendations for future needs assessments as the district shifts its focus to disaster recovery efforts.

Purpose of the Assessment

The primary goal of this CHA was to:

- Identify critical needs within the community.
- Provide insights to guide strategic planning for community health improvement and resilience.
- Foster partnerships between stakeholders to address community challenges effectively.

The assessment was conducted with the following objectives:

- To engage residents in identifying their needs and priorities.
- To assess the availability of services and resources.
- To identify gaps and opportunities for improvement.

Methodology Overview

Data Collection Process

The CHA utilized a combination of quantitative and qualitative methods to gather data, which included the following Data:

- **Community Surveys:** Surveys were advertised throughout the health district for all residents 18 and older.
- **Secondary Data:** Reviewed existing data from local, state, and federal sources including but not limited to, census data, public health records, local government reports. It is important to note that at the same time of this assessment, several other organizations were conducting parallel needs assessments within the same communities.

Canceled Focus Groups and Data Collection Challenges

Unfortunately, the planned focus groups, which were intended to capture in-depth qualitative insights from residents, could not be conducted due to delays in scheduling and Hurricane Helene. As the disaster caused widespread displacement across the health district, the priorities shifted to recovery. Many of the communities and district leadership believed it would be tone deaf to attempt to convene groups or engage in further data collection as the communities focus on long-term recovery.

Key Findings

Below are the top 5 health concerns identified through the CHA. It should be noted that there is a great likelihood that in the aftermath of Hurricane Helene, the top concerns may be different in the short-term, however, there is also a likelihood that the identified challenges will be exacerbated during recovery from the disaster.

1. Cost of Healthcare

The high cost of healthcare was the top concern across the district. These findings were supported by both the community survey and secondary data. According to data from the 2021 Behavioral Risk Factor Surveillance System, the percentage of the population living in poor or fair health ranges are higher than the state average. This is compounded by the rate of poverty within the district with between 11%-22% of the population living in poverty depending on the locality (U.S. Census Bureau, 2023). These populations face significant barriers to accessing affordable healthcare in an area already underserved, leading many to delay or avoid necessary treatments.

2. Mental Health Disorders

Mental health challenges, such as anxiety and depression emerged as the second most critical concern. In the Mount Rogers Health District nearly 19% of adults report frequent mental health distress (County Health Rankings & Roadmaps, 2024). Additionally, the region is designated as a Mental Health Professional Shortage Area (HPSA) by the U.S. Health Resources & Services Administration (HRSA), underscoring the lack of mental health services (HRSA, n.d.). Long wait times and a shortage of providers in rural areas like Bland and Grayson Counties make it difficult for residents to access timely mental health care.

3. Substance Use Disorder

Southwest Virginia continues to struggle with high rates of substance use disorder, particularly opioid addiction. Data from the Virginia Department of Behavioral Health and Developmental Services (DBHDS) indicates that opioid overdose rates in Washington and Smyth Counties are among the highest in the state (DBHDS, 2022). In 2022, Bland County reported an opioid-related overdose death rate of 48.1 per 100,000 people, well above the state average of 24.5 per 100,000 (Virginia Department of Health [VDH], 2023). Similarly, Bristol City and Galax have seen an increase in emergency department visits related to substance use, driven by a lack of accessible treatment and recovery services (DBHDS, 2022).

4. Access to Dental Care

Limited access to dental care is a growing concern, particularly in rural areas like Bland, Grayson, and Carroll Counties, where dental provider shortages are prevalent. According to the Virginia Department of Health, these counties have been designated as Dental Health Professional Shortage Areas (DHPSA), with fewer than one dentist per 5,000 residents in some parts (VDH, 2021). This shortage is compounded by low rates of dental insurance coverage, particularly for low-income and elderly populations. Residents in rural areas often travel long distances to receive dental care if they are able to access care at all. Untreated dental issues, which disproportionately affect children and seniors, are a growing concern and contribute to broader public health challenges (American Dental Association, 2020).

5. Obesity

High rates of obesity are prevalent across Southwest Virginia, with obesity rates exceeding at or above 36% in all localities within the health district (County Health Rankings & Roadmaps, 2024). Obesity contributes to a rise in chronic diseases such as diabetes, hypertension, and heart disease, all of which are increasingly common in the region. Factors such as limited access to healthy food options—particularly in "food desert" areas like parts of Grayson and Bland Counties—along with a lack of safe, accessible spaces for physical activity, contribute to this issue (U.S. Department of Agriculture [USDA], 2019).

Introduction

Background

The MRHD, which includes the Virginia counties of Washington, Smyth, Bland, Wythe, Carroll, and Grayson, and the cites of Bristol and Galax. Collectively the localities that comprise the health district are characterized by a predominantly rural and aging population. With an average population density of fewer than 100 people per square mile in many areas, geographic isolation presents significant challenges in accessing healthcare services (U.S. Census Bureau, 2020). The region has a median age of approximately 45.3 years, notably higher than the state median age of 38.4 years, indicating an older-than-average population (U.S. Census Bureau, 2020). The aging demographic is critical as it correlates with increased healthcare needs, particularly for chronic diseases and long-term care.

Economically, the district struggles with higher unemployment rates and lower household incomes. In 2022, the unemployment rate in Galax City was 6.5%, which exceeds the state average of 2.8% (Virginia Works, 2024). Furthermore, several counties in the district, such as Bland and Grayson, have been designated as economically distressed areas by the Appalachian Regional Commission, which means they rank in the bottom 10% of U.S. counties in terms of per capita market income, poverty rates, and unemployment (Appalachian Regional Commission, 2022).

Healthcare access remains a significant challenge. While over 90% of Virginians statewide have health insurance coverage, counties such as Wythe and Smyth have uninsured rates of 12% and 11%, respectively, which are above the state average of 8.7% (U.S. Census Bureau, 2020). The limited availability of healthcare providers further exacerbates these issues, with the region being designated a Health Professional Shortage Area (HPSA) for both primary care and dental services (Health Resources & Services Administration [HRSA], n.d.). This shortage often forces residents to travel long distances to seek care, creating additional financial and logistical burdens, particularly for lower-income families.

Moreover, the district faces a rising burden of non-communicable diseases. According to the Virginia Department of Health, heart disease and chronic lower respiratory diseases are the leading causes of death in this area, with rates significantly higher than the state average (Virginia Department of Health [VDH], 2021). For instance, Washington County has a heart disease mortality rate of 252 per 100,000 people, compared to the state average of 199 per 100,000 (CDC, 2021). Respiratory conditions such as chronic obstructive pulmonary disease (COPD) are also prevalent, especially among the region's aging population and those with a history of tobacco use.

Public safety and health-related behaviors further complicate the district's health landscape. Tobacco use is notably high in this region, with an estimated 20% of adults identifying as current smokers, compared to 13% statewide (County Health Rankings & Roadmaps, 2024). This high rate of tobacco use is linked to increased incidences of lung disease and cancer. Furthermore, the region has reported a significant rise in opioid-related crimes and overdoses. According to VDH, Bland County has an opioid overdose rate of 32.1 per 100,000 people, surpassing the state average of 21.9 per 100,000 (VDH, 2023). These public safety issues are compounded by limited access to mental health and substance abuse services, further stressing the region's healthcare infrastructure.

In education, fewer than 15% of the population in counties such as Smyth and Grayson hold a bachelor's degree, compared to 38% statewide (U.S. Census Bureau, 2020). This lower educational attainment is linked to limited employment opportunities and reduced health literacy, which can impede efforts to improve health outcomes.

Overall, the region faces interconnected challenges related to healthcare access, economic distress, chronic diseases, and public health behaviors, all of which underscore the need for targeted public health interventions and comprehensive healthcare planning. The purpose of this Community Health Needs Assessment (CHNA) is to evaluate the most pressing health issues affecting the residents of the health district. By identifying the district's key health challenges, this assessment aims to inform the development of targeted interventions, programs, and policies that will improve health outcomes and address disparities in healthcare access and quality.

This CHNA is a critical step in building a collaborative framework for addressing these health concerns. It provides local healthcare providers, community organizations, policymakers, and residents with a data-driven understanding of the district's health landscape and identifies opportunities for improvement. Furthermore, this assessment will guide strategic planning for resource allocation, public health initiatives, and community engagement efforts over the next three years.

Methodology

Survey Development and Distribution

The community health assessment (CHA) process began with an initial survey launched in May 2022. Due to staff turnover, the details surrounding the development of this survey was unclear. The survey remained open for over a year, concluding with 133 responses from across the district. To support community engagement, a series of "kick-off" meetings were also held in four localities (Bristol, Wythe, Bland, and Grayson), which appeared to function as focus groups. However, progress stalled shortly thereafter.

The late spring of 2023, recognizing the importance of completing the CHA to inform strategic planning—of particular importance as the last assessments were completed in 2019—the health district leadership secured funding to hire an external consulting group. In July 2023, a new district director was hired, and in November 2023, with no substantial progress made on the CHA, the health director brought on a contractor to work internally to expedite the process. The CHA Coordinator, in conjunction with the health director and the population health team formed an ad hoc advisory team reaching out to subject matter experts as needed.

The advisory team determined that a revised survey was needed as the low response rate would limit generalizability. Therefore, a new survey was developed and launched in mid-February 2023. As part of survey collecting, interviews occurred with residents across the district organically. The survey remained open until May 2023, ultimately yielding 1,641 responses.

Focus Groups

While collecting survey responses it was brought to the advisory committee's attention that several other community organizations were conducting or had just completed independent needs assessments within the community. A frequent complaint voiced during data collection, was the frustration and fatigue community members felt when constantly being asked to discuss perceived needs. We aimed to be mindful of the community's current sentiments and avoided scheduling focus groups until the fall of 2023 prevent contributing to assessment fatigue or cause further disengagement. Additionally, it was also anticipated that by the fall the district would have received state incentive funding which could be used to help boost community participation in the focus groups.

The focus groups were originally planned to begin in early October 2023, with incentives in place to enhance community engagement. However, in late September, Hurricane Helene struck, significantly disrupting the health district and delaying planned activities. In response to this challenge, the CHA team decided to forgo the originally planned focus groups and instead proceed with the data already collected. The survey data was complemented by secondary data sources, including needs assessments conducted by other organizations within the community. This data was utilized to complete the CHA, ensuring a comprehensive understanding of the district's health needs as they were prior to Hurricane Helene.

Data Analysis

The analysis of the survey data began in June 2023, following the survey's closure. This data, along with secondary data sources, was analyzed to identify key community health priorities and inform future strategic planning for the district.

Community Profile

Demographics

The MRHD is a predominantly rural population in the southwest portion of Virginia bordering portions of Tennessee, North Carolina, and West Virginia. According to the U.S. Census Bureau, as of 2020, the district's total population is approximately 186,722 people. The racial and ethnic composition is predominantly White (over 92% across all counties), with small percentages of Black or African American (ranging from 2% to 6%), and Hispanic or Latino (approximately 1% to 3%) populations (U.S. Census Bureau, 2020).

The region has an aging population, with approximately 20% of residents aged 65 or older, compared to the national average of 16.5%, and the Virginia average of 16.0% (U.S. Census Bureau, 2020). This demographic shift poses unique healthcare challenges, particularly in managing chronic diseases and providing adequate geriatric care.

Economic Conditions

The region faces significant economic challenges, with a higher-than-average poverty rate and lower household incomes. The median household income across the district is lower than the state average of $80,615, with counties such as Smyth County reporting a median income of $45,061, and Bland County at $43,348 (U.S. Census Bureau, 2020). Poverty levels are also concerning, with 19.7% of Smyth County's population living below the federal poverty line, compared to 10.2% for Virginia overall (U.S. Census Bureau, 2020).

Unemployment rates have historically been higher than the state average, particularly in manufacturing-dependent communities. For example, Galax City's economy is heavily reliant on industries that have seen steady declines, contributing to its unemployment rate of 6.5% as of 2022 (Virginia Works, 2022).

Health and Well-being

The region struggles with various public health challenges, including higher-than-average rates of chronic diseases, mental health disorders, and substance use. According to the Centers for Disease Control and Prevention (CDC), heart disease and cancer are the leading causes of death in the region, with both conditions having higher mortality rates than state averages (Centers for Disease Control and Prevention [CDC], 2021). The area also has elevated rates of obesity, diabetes, and hypertension, with counties like Smyth (40%), Wythe (40%) and Galax (40%) having adult obesity rates far exceeding the state and national average of 34% (County Health Rankings & Roadmaps, 2024).

Mental health issues are also a concern, with high rates of depression and suicide. Nearly 22% of adults in the region report experiencing frequent poor mental health days, according to the County Health Rankings & Roadmaps (2022). The region's designation as a Mental Health Professional Shortage Area (HRSA, n.d.) exacerbates access issues for mental health care, with residents facing long wait times for services.

Substance use, particularly opioid addiction, remains a critical public health crisis in the region. Opioid overdose death rates in Smyth County were 41.5 per 100,000 in 2022, compared to the state average of 16.4 per 100,000 (Virginia Department of Health [VDH], 2022).

Education

Educational attainment in the region lags behind state averages. According to the U.S. Census Bureau, approximately 14% to 18% of residents in counties such as Grayson, Bland, and Smyth do not have a high school diploma, compared to the state average of 10% (U.S. Census Bureau, 2020). Furthermore, only around 10% to 15% of adults in these counties hold a bachelor's degree or higher, compared to 38% of adults in Virginia (U.S. Census Bureau, 2020).

The quality of public education varies, with some rural school districts facing budgetary constraints that limit their ability to provide adequate resources for students. These challenges are compounded by the area's geographic isolation, which can hinder access to higher education and vocational training opportunities.

Housing and Living Conditions

The region's housing stock consists primarily of older homes, many of which are in need of repair. According to the U.S. Census Bureau, approximately 30% of homes in Smyth, Bland, and Grayson counties were built before 1960, leading to issues such as aging infrastructure and higher costs for heating and cooling (U.S. Census Bureau, 2020).

Housing affordability is a growing concern, with about 15% to 20% of households spending more than 30% of their income on housing costs, meeting the federal definition of being housing cost-burdened (U.S. Department of Housing and Urban Development [HUD], 2020). In Grayson County and the City of Galax, affordable housing options are limited, further straining low-income residents.

The district also has areas designated as "food deserts" by the U.S. Department of Agriculture, particularly in rural parts of Grayson and Bland Counties (USDA, 2019). These areas lack access to grocery stores or supermarkets that provide healthy, affordable food options, contributing to higher rates of diet-related diseases such as obesity and diabetes.

Public Safety

Public safety concerns in the region are generally centered on substance use and crime related to drug activity. According to the Virginia State Police, crime rates in rural areas such as Bland and Grayson Counties are lower than the state average. However, opioid-related crimes have surged in places like Bristol City and Smyth County, where the opioid epidemic has contributed to an increase in drug possession, trafficking, and associated crimes (Virginia State Police, 2021).

Additionally, emergency medical services (EMS) are often stretched thin in these rural communities due to the vast geography and limited resources. According to the CDC, residents in rural areas like Bland and Grayson counties experience longer emergency response times compared to more urban regions (CDC, 2020).

Assessment of Community Needs

Identified Needs

The following areas were identified as the top 5 areas of need within the health district:

1. Cost of Healthcare
2. Mental Health Disorders
3. Substance Use Disorder
4. Access to Dental Care
5. Obesity

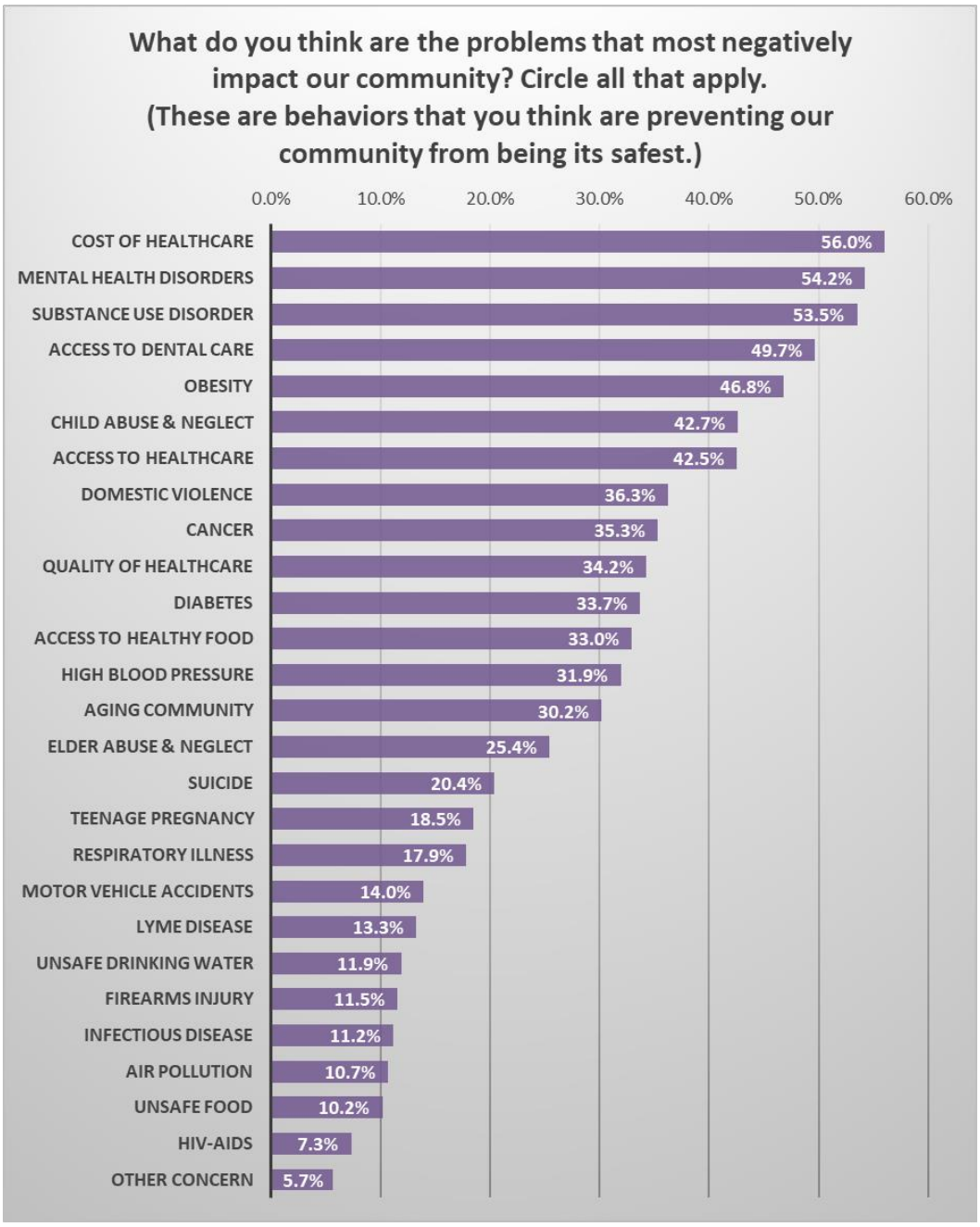
These needs were identified and confirmed through analysis of the community health assessment survey results and the secondary community data. A discussion of the analysis findings is provided below.

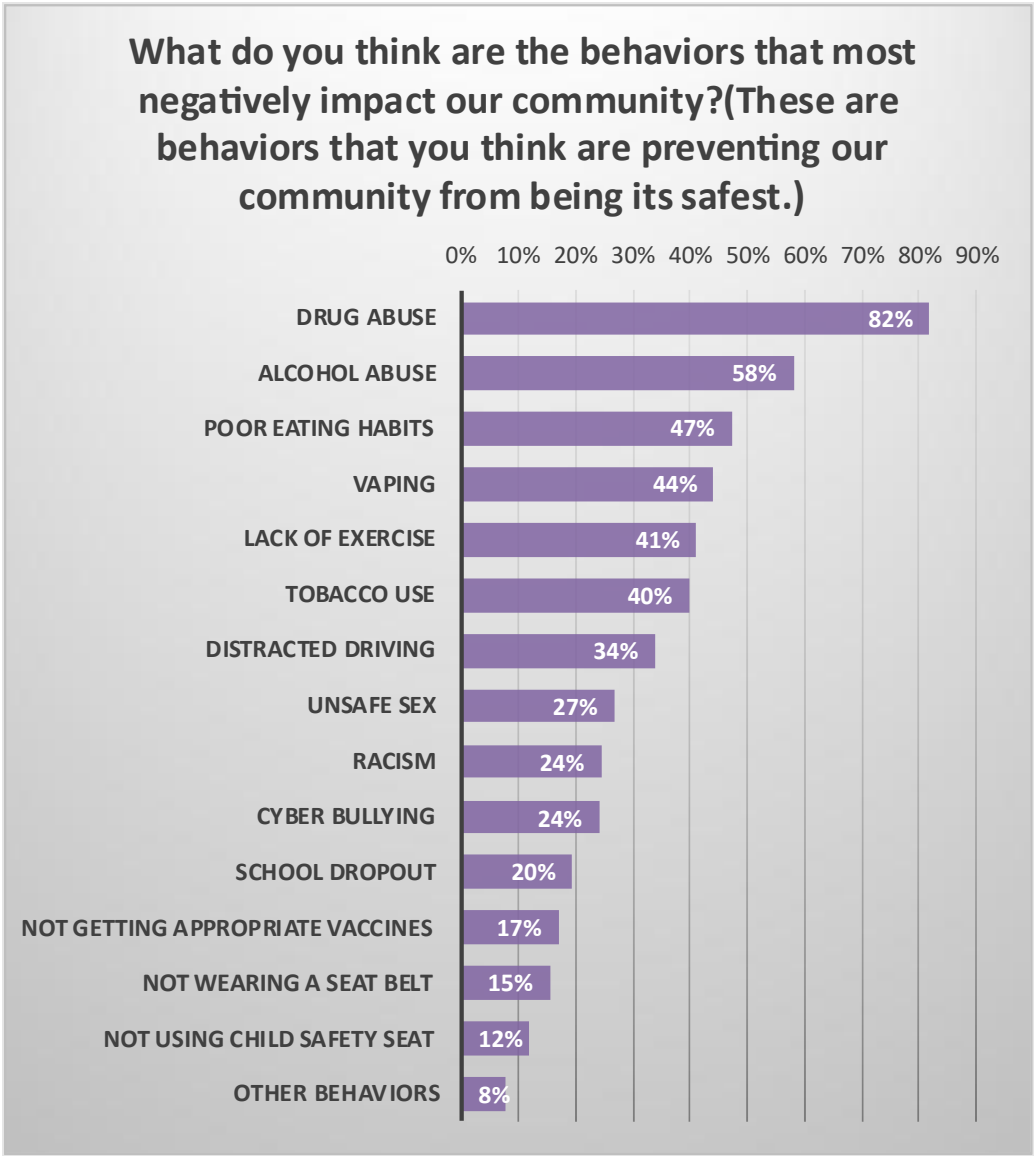
MRHD CHA Survey

The MRHD community health needs assessment survey was released on February 16, 2024, and remained open for responses through May 31, 2024. The survey could be completed online (by computer, phone, or tablet) or on paper. The survey was open to any resident within the MRHD 18 years old or older.

A total of 1641 surveys were submitted, roughly 1.1% of the total district population 18 years old and older. Participation was analyzed down to the locality level with response rates ranging from .6% to 2.6%. Respondents were predominately female (71.84%) which is a higher percentage than the population (49%). The racial profile of respondents was notably white (93%), however, this matches the racial profile of the district's population (93%). Reported household income levels of participants ranged from less than $10,000 to more than $200,000, with 40.75% of respondents reporting a household income of less than $50,000 annually. Additional demographic data can be found in the appendices.

Survey respondents were asked a question asking about what problems negatively impact their communities as well as what behaviors negatively impact the community. More than half of all respondents the cost of healthcare, mental health disorders, and substance use disorders as problems that negatively impact the community. The perceptions of the community were further reinforced with the identification of drug abuse, alcohol abuse, and poor eating habits as the top behaviors that are negatively impacting the community.


What do you think are the problems that most negatively impact our community? Circle all that apply. (These are behaviors that you think are preventing our community from being its safest.)
0.0%
10.0%
20.0%
30.0%
40.0%
50.0%
60.0%
COST OF HEALTHCARE 56.0%
MENTAL HEALTH DISORDERS 54.2%
SUBSTANCE USE DISORDER 53.5%
ACCESS TO DENTAL CARE 49.7%
OBESITY 46.8%
CHILD ABUSE & NEGLECT 42.7%
ACCESS TO HEALTHCARE 42.5%
DOMESTIC VIOLENCE 36.3%
CANCER 35.3%
QUALITY OF HEALTHCARE 34.2%
DIABETES 33.7%
ACCESS TO HEALTHY FOOD 33.0%
HIGH BLOOD PRESSURE 31.9%
AGING COMMUNITY 30.2%
ELDER ABUSE & NEGLECT 25.4%
SUICIDE 20.4%
TEENAGE PREGNANCY 18.5%
RESPIRATORY ILLNESS 17.9%
MOTOR VEHICLE ACCIDENTS 14.0%
LYME DISEASE 13.3%
UNSAFE DRINKING WATER 11.9%
FIREARMS INJURY 11.5%
INFECTIOUS DISEASE 11.2%
AIR POLLUTION 10.7%
UNSAFE FOOD 10.2%
HIV-AIDS 7.3%
OTHER CONCERN 5.7%



Additionally, questions were asked within the survey related to access to healthcare and its associated costs. Lack of providers frequently means residents are traveling to receive care. This statement is supported by 15% percent of respondents who reported a travel time of 45 minutes or more to receive well care. There do appear to more options available for sick care as only roughly 9% of respondents reported a travel time of more than 45 for sick care. However, 50% of respondents that needed care from a specialist report traveling 45 minutes or longer, with 28% reporting travel times greater than an hour.

Travel Time for Well Care	Percentage
Less than 15 minutes	31.50%
15 - 30 minutes	37.78%
30 -45 minutes	16.01%
45 - 60 minutes	7.91%
More than 60 minutes	6.80%

Travel Time for Sick Care	Percentage
Less than 15 minutes	33.46%
15 - 30 minutes	41.44%
30 -45 minutes	16.47%
45 - 60 minutes	5.56%
More than 60 minutes	3.07%
Travel Time for Specialist	**Percentage**
Less than 15 minutes	10.30%
15 - 30 minutes	19.36%
30 -45 minutes	20.23%
45 - 60 minutes	21.75%
More than 60 minutes	28.35%

Of those respondents that needed to see or speak to a health care provider, 20% said they were unable to do so within 48 hours of contact. 43% of respondent reported having to wait 2 months or more to see a specialist for care. 37% of respondents receiving medical care reported medical cost that exceeded $1000 in the last year, with 19% reporting they either did not take a medication or took medication improperly due to the cost.

Can you see or speak to a health care provider within 48 hours of contact?	Percentage
Yes	80%
No	**20%**
In the last year have you had to wait 2 months or more to see a specialist?	**Percentage**
Yes	**43%**
No	57%
Have you had medical cost over $1000 in the last year?	**Percentage**
Yes	**37%**
No	**63%**
Have you not taken or taken a medication improperly due to cost?	**Percentage**
Yes	**19%**
No	81%

Secondary Community Needs Survey

The following is a summary of top needs as identified through secondarily through a systematic review of community needs assessments conducted by other community organizations within the district. Findings are organized into themes.

Health

Access to Care: Healthcare access is a significant challenge across the region, particularly for low-income and rural residents. Limited access to primary care, specialty services, mental health, and dental care is worsened by transportation barriers and financial constraints (People Inc., 2021; Wellspring Foundation, 2021; Rooftop of Virginia Community Action Program, 2022; Ballad Health, 2024).

Mental Health and Substance Abuse: Mental health challenges and substance abuse, especially opioid addiction, are prevalent. There is a dire need for more mental health services and substance abuse treatment programs (Carilion New River Valley Medical Center, 2024; Twin County Regional Hospital, 2022; Rooftop of Virginia Community Action Program, 2022; Ballad Health, 2024).

Chronic Diseases: The region experiences high rates of chronic diseases such as hypertension, diabetes, and obesity. Prevention, education, and disease management programs are urgently needed to improve health outcomes (People Inc., 2021; Ballad Health, 2024; Mount Rogers Regional Partnership, 2023).

Nutrition and Food Access: Food insecurity remains an issue for many low-income households in the region. There is a need for improved food distribution programs and support for food banks, (People Inc., 2021; Healthy Appalachia Institute, 2023; Rooftop of Virginia Community Action Program, 2022).

Aging Population

Senior Services: With an aging population, there is a growing demand for services that support seniors, including transportation, home health care, and access to affordable medications. Providing expanded services for seniors will be essential to ensure their health and well-being (People Inc., 2021; Carilion New River Valley Medical Center, 2024; Rooftop of Virginia Community Action Program, 2022; Ballad Health, 2024).

Economic Opportunities and Job Creation

Employment: A lack of high-paying, stable jobs is a significant issue in the region. Although there are opportunities in manufacturing, healthcare, and retail, many residents lack access to well-paying jobs with benefits. Workforce development and job creation efforts are critical (People Inc., 2021; Virginia Office of Intermodal Planning and Investment, 2015; Rooftop of Virginia Community Action Program, 2022; Smyth County Community Hospital, 2024).

Poverty: High poverty rates, particularly in rural counties, impact residents' ability to meet basic needs such as food, housing, and healthcare. Efforts to address poverty and provide social support services are essential (People Inc., 2021; Wellspring Foundation, 2021).

Housing

Affordable and Safe Housing: There is a significant lack of affordable and quality housing in the region. Many homes are older and require costly repairs, and affordable rental options are limited (People Inc., 2021; Twin County Regional Hospital, 2022; Rooftop of Virginia Community Action Program, 2022; Mount Rogers Regional Partnership, 2023).

Transportation

Public Transportation: Limited transportation options make accessing essential services such as healthcare and employment difficult, particularly in rural areas. Expanding public transportation and non-emergency medical transport is critical (People Inc., 2021; Virginia Office of Intermodal Planning and Investment, 2015; Rooftop of Virginia Community Action Program, 2022; Mount Rogers Regional Partnership, 2023).

Healthcare Access: A common barrier to healthcare access is the lack of transportation to medical appointments, particularly for the elderly and disabled (Virginia Office of Intermodal Planning and Investment, 2015; Rooftop of Virginia Community Action Program, 2022; Mount Rogers Regional Partnership, 2023).

Education and Workforce Development

Education Access and Workforce Training: Low educational attainment and limited access to workforce training in healthcare and skilled trades hinder job opportunities. Improving educational programs and job training will help residents access better employment (Carilion New River Valley Medical Center, 2024; Virginia Office of Intermodal Planning and Investment, 2015; Mount Rogers Regional Partnership, 2023; Rooftop of Virginia Community Action Program, 2022).

Youth Engagement: The region needs programs to engage youth in education and job readiness, as well as to provide recreational opportunities. Expanding early childhood education and youth engagement programs is critical for future workforce development (People Inc., 2021; Ballad Health, 2024).

Recommendations

In light of the findings from the 2024 MRHD CHA, the following recommendations outline the next steps for effectively addressing the district's health challenges:

1. Develop a Community Health Improvement Plan (CHIP) Advisory Committee:

    - Establish a diverse advisory committee made up of key stakeholders, including local healthcare providers, community leaders, government officials, nonprofit organizations, and residents. This committee should represent the voices of the most affected communities and foster collaboration among all involved parties.

    - Ensure the advisory committee includes representation from each of the eight localities within the district to ensure all geographic areas are considered in the planning process.

2. Adopt the MAPP 2.0 Process for Strategic Planning:

    - Guide the newly established advisory committee through the Mobilizing for Action through Planning and Partnerships (MAPP) 2.0 framework. This process includes conducting visioning sessions, engaging in community-driven planning, and systematically identifying key health issues while promoting stakeholder engagement.

    - Utilize MAPP 2.0 to identify priority areas, set clear objectives, and ensure that community-driven solutions are central to the health improvement plan.

3. Identify and Leverage Community Assets and Resources:

    - Conduct a comprehensive inventory of existing community assets, resources, and services to assess gaps, redundancies, and opportunities for improved coordination. This should include identifying health providers, nonprofit organizations, public services, and community support networks that could play a role in addressing health challenges.

    - Evaluate resource redundancy, ensuring a more efficient use of existing infrastructure, while also exploring opportunities to expand or enhance underutilized assets.

4. Develop Methods to Address Root Causes of Health Challenges:

    - Collaborate with the advisory committee to identify interventions that address the root causes of the district's top health concerns, such as poverty, transportation barriers, healthcare provider shortages, and food insecurity.

    - Focus on strategies that promote long-term, sustainable solutions, such as increasing local access to healthcare providers, addressing socioeconomic factors contributing to poor health outcomes, and improving health literacy across the community.

    - Consider equity in all interventions to ensure that underserved and vulnerable populations are prioritized.

5. Establish Metrics to Measure Progress:

    - Develop clear, measurable indicators to assess the progress of health interventions over time. These metrics should be tied to both short- and long-term goals, with regular evaluation built into the process to allow for adjustments as necessary.

    - Use data collection tools such as community surveys, healthcare utilization rates, and health outcome statistics to monitor the effectiveness of implemented strategies. Establish a feedback loop to keep the advisory committee, community members, and stakeholders informed of progress and challenges.

By following this structured approach, MRHD can create a more coordinated and effective response to its health challenges, ensuring that interventions are rooted in community needs and leading to meaningful, measurable improvements over time.

Conclusion

The 2024 Community Health Assessment of the Mount Rogers Health District highlights several critical health challenges, including the cost of healthcare, mental health disorders, substance use disorder, access to dental care, and high obesity rates. These issues are exacerbated by geographic isolation, limited access to healthcare providers, and economic distress, compounded further by the impact of Hurricane Helene.

Addressing these concerns requires a multi-faceted approach that combines increased access to healthcare, enhanced mental health and substance use services, improved dental care access, and targeted interventions to reduce obesity and chronic diseases. Building stronger healthcare infrastructure and community resilience in the wake of the recent natural disaster is also critical. Collaborative efforts between local governments, healthcare providers, nonprofit organizations, and the community will be key in successfully implementing these recommendations.

By taking the outlined steps, MRHD can foster improved health outcomes, reduce disparities, and create a healthier, more resilient community for all residents.

Appendices

Survey Instrument

Mount Rogers Health District Community Health Needs Survey

You must be 18 years or older to participate in this survey.

The Virginia Department of Health's Mount Rogers Health District serves Bland, Bristol, Carroll, Galax, Grayson, Smyth, Washington, and Wythe.

We want to learn about health issues in our community. Your input is an important part of this process. The details you share will help us make our community healthier. Please complete this short survey. The survey only takes 5 minutes or less.

All answers will be kept confidential.

If you have questions about the survey, please contact Brianne Kilbourne by phone at 276-247-9671 or email at brianne.kilbourne@vdh.virginia.gov.

Community Health Concerns

1. What do you think are the behaviors that most negatively impact our community? **Circle all that apply.** (These are behaviors that you think are preventing our community from being it's safest.)
   a. Alcohol Abuse
   b. Cyber Bullying
   c. Distracted Driving
   d. Dropping Out of School
   e. Drug Abuse
   f. Lack of Physical Activity or Exercise
   g. Not Getting Appropriate Vaccines
   h. Not Using a Child Safety Seat
   i. Not Wearing a Seat Belt
   j. Poor Eating Habits
   k. Racism
   l. Tobacco Use
   m. Unsafe or Unprotected Sex
   n. Vaping
   o. Other (Briefly describe the behavior below.

      _____

Community Health Concerns

2. What do you think are the problems that most negatively impact our community? (These are problems that you think are preventing our community from being it's healthiest.)
   a. Access to Dental Care
   b. Access to Healthcare
   c. Access to Healthy Foods
   d. Aging Community
   e. Air Pollution
   f. Cancer
   g. Child Abuse or Neglect
   h. Cost of Healthcare
   i. Diabetes
   j. Domestic Violence
   k. Elder Abuse or Neglect
   l. Firearm Injuries or Deaths
   m. High Blood Pressure
   n. HIV/AIDS
   o. Infectious Diseases (e.g., Tuberculosis, Hepatitis, Gonorrhea, Chlamydia)
   p. Lyme Disease
   q. Mental Health Disorders
   r. Motor Vehicle Accidents
   s. Obesity
   t. Quality of Healthcare
   u. Respiratory Illnesses (e.g., Influenza, COVID-19, RSV)
   v. Substance Use Disorders
   w. Suicide
   x. Teen Pregnancy
   y. Unsafe Drinking Water
   z. Unsafe Foods
   aa. Other (Briefly describe the concern below.)

   _____

Health Care Information

3. In general, how would you describe your overall health? (This includes physical, mental, and social well-being.)
   a. Excellent
   b. Very Good
   c. Fair
   d. Poor
   e. Not Sure
   f. Prefer not to answer

4. Have you been treated for or told by a doctor you have a long term or chronic illness in the last year?
   a. Yes b. No c. Unsure

5. What type of health insurance do you currently have?
    a. No Health Insurance
    b. Private Health Insurance through employer or family member's employer
    c. Private Health Insurance purchased through the Health Insurance (ACA) Marketplace
    d. Medicaid
    e. Medicare and/or Medigap
    f. TRICARE

6. About how long has it been since you last visited a healthcare provider for a routine check-up (e.g., wellness visit)? *This can include physician assistants, nurse practitioners, or doctors.*
    a. With the past year (Less than 12 months ago)
    b. Within the past 2 years (More than 1 year but less than 2 years ago)
    c. Within the past 5 years (More than 2 years but less than 5 years ago)
    d. 5 or more years ago
    e. Not sure
    f. Never
    g. Do not want to answer

7. Where do you go for your routine check-ups (e.g., wellness visits)? *Choose all that apply.*
    a. Doctor's Office
    b. Urgent Care/Walk-in Practice
    c. Local Free Clinic
    d. VA (Veterans Affairs) Clinic
    e. Emergency Department
    f. Homeopathic providers
    g. I do not seek medical care unless I am sick or injured.

8. Where do you go for your care when you are sick or injured? *Choose all that apply.*
    a. My Doctor's Office
    b. Urgent Care/Walk-in Practice
    c. Local Free Clinic
    d. VA (Veterans Affairs) Clinic
    e. Emergency Department
    f. Seek Homeopathic/herbal treatment options

Local Health Department

9. Have you received any services from the health department in the last 3 years?
    a. Yes
    b. No

10. If you said no to receiving services, please go to question 11.
    If you said yes to receiving services, please select the services you received from the health department. *Choose all that apply.*
    a. Cancer Screenings
    b. Child Health Services
    c. Communicable Disease Services (e.g., TB screening, COVID-19 testing)
    d. Comprehensive Harm Reduction
    e. Environmental Health
    f. Family Planning or Gynecology Services
    g. Immunizations
    h. STI Testing and/or Treatment
    i. Vital Records
    j. WIC
    k. Other (Briefly describe the service in the textbox below.)
    _____

Access To Health Care Services

11. The last time you needed medical care, were you able to see a doctor or nurse on the same day or the next day (virtually or in person)?
    a. Yes b. No c. Not Applicable

12. The last time you needed an appointment with a specialist, did you have to wait more than 2 months for the appointment?
    a. Yes b. No c. Not Applicable

13. In the last year have you been unable to fill a prescription medication or been unable to take the medication as prescribed because you could not afford the cost?
    a. Yes b. No c. Not Applicable

14. Have you had out-of-pocket medical expenses of more than $1,000 in the past year?
    a. Yes b. No c. Not Applicable

15. Do you have to travel outside of Virginia to see your preferred healthcare provider?
    a. Yes b. No c. Not Applicable

16. On average, how long does it take you to travel to your preferred medical provider for routine care (e.g., wellness visits)?
    a. Less than 15 minutes
    b. 15 - 30 minutes
    c. 30 - 45 minutes
    d. 45 - 60 minutes

e. More than 60 minutes
f. Not applicable

17. On average, how long does it take you to travel to your preferred medical provider for specialist care?
    a. Less than 15 minutes
    b. 15 - 30 minutes
    c. 30 - 45 minutes
    d. 45 - 60 minutes
    e. More than 60 minutes
    f. Not applicable

18. On average, how long does it take you to travel to your preferred medical provider for sick care?
    a. Less than 15 minutes
    b. 15 - 30 minutes
    c. 30 - 45 minutes
    d. 45 - 60 minutes
    e. More than 60 minutes
    f. Not applicable

Individual Health Behaviors

19. In the last month, have you used tobacco products? *This includes both smoking and smokeless.*
    a. Yes b. No c. Unsure

20. In the last month, have you used vaping products?
    a. Yes b. No c. Unsure

21. **In a typical week**, do you get the recommended 150 minutes (2.5 hours) of physical activity?
    a. Yes b. No c. Unsure

22. **In a typical week,** on average, how many hours of sleep do you get each night?
    a. Less than 4 hours
    b. 5-7 hours
    c. 8-10 hours
    d. More than 10 hours

23. **For Women:** In the last month, have you had more than 4 alcoholic drinks on a single occasion?
    For Men: In the last month, have you had more than 5 alcoholic drinks on a single occasion?
    a. Yes b. No c. Unsure

24. When someone has symptoms similar to COVID-19, do you think it is important they be tested?
    a. Yes b. No c. Unsure

25. In the last year, have you tested positive for COVID-19? *This can include at-home tests, testing done at your provider, or testing done at work/school.*
    a. Yes b. No c. Unsure

26. Do you think it is important to be vaccinated against COVID-19?
    a. Yes b. No c. Unsure

27. In the last year, did you get a vaccine or shot to protect yourself against COVID-19?
    a. Yes b. No c. Unsure
28. Have you ever received a vaccine or shot to protect yourself against COVID-19?
    a. Yes b. No c. Unsure

29. In the last year, did you get a flu shot?
    a. Yes b. No c. Unsure

Demographic Information

30. In what county or city do you live?
    a. Bland County
    b. Bristol City
    c. Carroll County
    d. Galax City
    e. Grayson County
    f. Smyth County
    g. Washington County
    h. Wythe County

31. What is your zip code? _____

32. What is your age? _____

33. What is your race? Choose all that apply.
    a. American Indian or Alaska Native
    b. Asian
    c. Black or African American
    d. Native Hawaiian or Other Pacific Islander
    e. White
    f. Some other race

34. What is your ethnicity?
    a. Hispanic or Latino b. Not Hispanic or Latino c. Prefer not to Answer
35. What is the highest level of education you have completed?
    a. Middle School
    b. Some high school, No GED
    c. Some high school with a GED
    d. High School Graduate
    e. Some College

f. Associate's Degree
g. Bachelor's Degree
h. Master's Degree
i. Doctorate

Demographic Information

36. How many people, including yourself, live in your household? _____

37. What is your annual household income from all sources?
    a. Less than $10,000
    b. $10,000 - $14,999
    c. $15,000 - $19,999
    d. $20,000 - $24,999
    e. $25,000 - $34,999
    f. $35,000 - $49.999
    g. $50,000 - $74,999
    h. $75,000 - $99,999
    i. $100,000 - $149,999
    j. $150,000 - $199,999
    k. $200,000 or more
    l. Do not know/Unsure
    m. Prefer not to answer

38. Do you speak a language other than English at home?
    a. Yes b. No

39. If you answered no to question 38, move to question 41.
    If you speak another language at home, what language do you speak? _____

40. How well do you speak English?
    a. Very Well
    b. Well
    c. Now Well
    d. Not At All

41. What is the sex you were assigned at birth?
    a. Female b. Male

42. With what gender do you currently identify?
    a. Male
    b. Female
    c. Nonbinary
    d. Transgender

e. Prefer to Self-Describe
f. Prefer not to Answer

43. Would you be interested in participating in a focus group to let us know more about our community needs?
    a. Yes b. No

44. Please share anything else you would like us to know about your community's health.

Contact Information

Only complete if you would like to participate in a focus group. This document is not attached to your survey.

Name: _____

Phone Number: _____

Email Address: _____

In what county or city do you live?
a. Bland County
b. Bristol City
c. Carroll County
d. Galax City
e. Grayson County
f. Smyth County
g. Washington County
h. Wythe County

Detailed Data Tables

Community Needs Survey Results

Response Rate

Within the Mount Rogers Health Districts there are 56 communities as designated by zip code. Survey collection successfully collect at least 1 response from every zip code.

Locations	District Population 18 and older	Survey Count	Overall Response Rate
Bristol	13,724	76	0.6%
Bland	5,328	47	0.9%
Wythe	22,692	162	0.7%
Galax	5,318	138	2.6%
Washington	43,964	321	0.7%
Smyth	23,953	321	1.3%
Carroll	23,710	275	1.2%
Grayson	12,874	260	2.0%
No Location Provided		41	
District-wide	151,563	1641	1.1%

Locations	Survey Count	% of Total Responses	% of District Population 18 and older
Bristol	76	4.6%	9%
Bland	47	2.9%	4%
Wythe	162	9.9%	15%
Galax	138	8.4%	4%
Washington	321	19.6%	29%
Smyth	321	19.6%	16%
Carroll	275	16.8%	16%
Grayson	260	15.8%	8%
No Location Provided	41	2.5%	
District-wide	1641		100%

Survey Demographics

Age

Age Group	Percentage
18 - 24	4.70%
25 - 29	6.03%
30 - 39	13.83%
40 - 49	14.53%
50 - 59	17.32%
60 - 69	16.12%
70 - 79	15.93%
80 - 89	10.09%
90 - 99	1.46%
Total	100.00%

Sex /Gender

Sex	Percentage
Female	71.84%
Male	28.16%
Total	100.00%
Gender Indentity	**Percentage**
Female	70.77%
Male	28.16%
Nonbinary	0.25%
Prefer not to Answer	0.50%
Prefer to Self-Describe	0.13%
Transgender	0.19%
Total	100.00%

Race and Ethnicity

Race	Percentage
Singular Race	98.30%
Biracial	1.63%
Multiracial	0.06%
Total	100.00%
Single Race	**Percentage**
Native	1%
Asian	0%
African American	3%
Islander	0%
White	93%
Other	1%
Biracial	2%
Multiracial	0%
Total	100%

Education

Education	Percentage
Middle School	1.77%
Some high school, No GED	6.45%
Some high school with a GED	5.06%
High School Graduate	18.28%
Some College	19.73%
Associate's Degree	13.47%
Bachelor's Degree	19.48%
Master's Degree	12.78%
Doctorate	2.97%
Total	100.00%

Income

Income	Percentage
Less than $10,000	6.36%
$10,000 - $14,999	5.85%
$15,000 - $19,999	5.46%
$20,000 - $24,999	6.30%
$25,000 - $34,999	5.91%
$35,000 - $49,999	10.86%
$50,000 - $74,999	13.88%
$75,000 - $99,999	12.28%
$100,000 - $149,999	11.38%
$150,000 - $199,999	3.47%
$200,000 or more	3.15%
Do not know/Unsure	3.86%
Prefer not to answer	11.25%
Total	100.00%

Population Data

Population Demographics: US Census Bureau, 2023 Quick Facts

Race	MRHD	Bland County	Carroll County	Grayson County	Smyth County	Washington County	Wythe County	Bristol City	Galax City
Total population (Count)	**186,722**	6,270	29,155	15,333	29,800	53,935	28,290	17,219	6,720
One Race	**96%**	97%	96%	96%	96%	97%	96%	94%	94%
White	**92%**	94%	93%	88%	94%	94%	92%	86%	78%
Black or African American	**2%**	3%	1%	6%	1%	1%	2%	6%	5%
American Indian and Alaska Native	**0%**	0%	0%	0%	0%	0%	0%	0%	0%
Asian	**0%**	0%	0%	0%	0%	1%	0%	1%	1%
Native Hawaiian and Other Pacific Islander	**0%**	0%	0%	0%	0%	0%	0%	0%	0%
Some Other Race	**1%**	0%	2%	2%	1%	1%	1%	1%	9%
Two or More Races	**4%**	3%	4%	4%	4%	3%	4%	6%	6%
Ethnicity									
Hispanic or Latino (of any race)	**3%**	1%	4%	4%	2%	2%	1%	3%	16%
Not Hispanic or Latino	**97%**	99%	96%	96%	98%	98%	99%	97%	84%

2023 Census Facts	Virginia	Carroll	Wythe	Bland	Smyth	Washington	Bristol	Galax	Grayson
Population estimates, July 1, 2023, (V2023)	8,715,698	29,239	28,104	6,179	29,216	54,050	16,807	6,717	15,285
Population estimates base, April 1, 2020, (V2023)	8,631,373	29,158	28,291	6,273	29,801	53,936	17,219	6,725	15,336
Population, percent change - April 1, 2020 (estimates base) to July 1, 2023, (V2023)	1.00%	0.30%	-0.70%	-1.50%	-2.00%	0.20%	-2.40%	-0.10%	-0.30%
Population, Census, April 1, 2020	8,631,393	29,155	28,290	6,270	29,800	53,935	17,219	6,720	15,333
Population, Census, April 1, 2010	8,001,024	30,042	29,235	6,824	32,208	54,876	17,835	7,042	15,533
Persons under 5 years, percent	5.60%	4.40%	4.90%	3.20%	4.80%	4.20%	5.10%	6.90%	3.90%
Persons under 18 years, percent	21.60%	17.70%	19.40%	14.20%	19.30%	17.60%	19.90%	25.40%	16.60%
Persons 65 years and over, percent	17.20%	26.70%	22.70%	25.50%	22.90%	25.10%	23.50%	18.80%	26.30%
Female persons, percent	50.60%	50.10%	50.90%	44.80%	50.40%	50.30%	51.80%	55.50%	47.40%
White alone, percent	68.30%	96.60%	94.50%	93.70%	95.60%	96.30%	87.40%	77.10%	91.20%
Veterans, 2018-2022	654,068	1,953	1,723	323	1,734	3,803	1,003	531	1,009
Foreign born persons, percent, 2018-2022	12.60%	1.80%	1.10%	0.30%	1.50%	1.50%	1.20%	7.80%	1.90%
Housing Units, July 1, 2023, (V2023)	3,717,677	16,736	14,054	3,217	15,066	25,620	X	X	8,995
Owner-occupied housing unit rate, 2018-2022	66.90%	78.40%	75.30%	85.20%	68.40%	75.20%	63.00%	70.60%	80.80%
Median value of owner-occupied housing units, 2018-2022	$339,800	$139,200	$157,100	$132,500	$120,600	$181,000	$154,900	$109,300	$129,100
Median selected monthly owner costs -with a mortgage, 2018-2022	$2,014	$1,046	$1,148	$1,150	$1,055	$1,254	$1,146	$1,070	$999
Median selected monthly owner costs -without a mortgage, 2018-2022	$546	$316	$342	$338	$347	$371	$398	$337	$303
Median gross rent, 2018-2022	$1,440	$643	$668	$705	$691	$796	$784	$660	$703
Building Permits, 2023	36,096	77	35	14	24	100	X	X	39
Households, 2018-2022	3,289,776	12,141	12,424	2,235	12,651	22,013	7,299	2,618	6,148
Persons per household, 2018-2022	2.55	2.38	2.26	2.37	2.3	2.38	2.29	2.42	2.34
Living in same house 1 year ago, percent of persons age 1 year+, 2018-2022	86.00%	91.80%	90.80%	86.00%	88.40%	90.70%	86.60%	86.70%	92.30%
Language other than English spoken at home, percent of persons age 5 years+, 2018-2022	16.70%	3.50%	1.80%	1.70%	2.30%	2.80%	2.70%	16.90%	3.80%
Households with a computer, percent, 2018-2022	94.00%	85.30%	88.40%	79.00%	86.70%	88.30%	85.20%	89.00%	84.80%
Households with a broadband Internet subscription, percent, 2018-2022	88.70%	77.50%	80.00%	63.60%	77.70%	79.10%	75.10%	83.20%	77.90%
High school graduate or higher, percent of persons age 25 years+, 2018-2022	91.10%	83.00%	90.10%	92.00%	84.70%	89.20%	86.20%	80.20%	83.00%
Bachelor's degree or higher, percent of persons age 25 years+, 2018-2022	41.00%	15.90%	20.10%	16.40%	17.50%	24.60%	22.80%	17.50%	14.10%
With a disability, under age 65 years, percent, 2018-2022	8.30%	12.60%	15.30%	10.80%	17.10%	16.40%	15.70%	11.00%	14.90%
Persons without health insurance, under age 65 years, percent	7.60%	9.90%	7.20%	6.70%	7.90%	7.30%	17.90%	16.60%	7.20%
Mean travel time to work (minutes), workers age 16 years+, 2018-2022	27.9	26.6	24.8	24	22.5	24.2	19.1	22	26.4
Median household income (in 2022 dollars), 2018-2022	$87,249	$49,113	$53,921	$59,901	$45,061	$59,116	$45,250	$44,612	$43,348
Per capita income in past 12 months (in 2022 dollars), 2018-2022	$47,210	$27,972	$31,810	$27,904	$26,660	$33,900	$30,419	$29,802	$26,270
Persons in poverty, percent	10.20%	15.80%	15.70%	13.40%	19.70%	11.30%	17.00%	22.40%	19.30%
Population per square mile, 2020	218.6	61.4	61.2	17.5	66	96.1	1,337.80	815.9	34.7

Unemployment Rate: Virginia Works, August 2024

Unemployment	Virginia	Bland	Carroll	Grayson	Smyth	Washington	Wythe	Bristol	Galax
Unemployment Rate	2.8%	3.5%	5.5%	4.3%	3.8%	3.5%	4.1%	4.2%	6.5%

County Health Rankings & Roadmaps: 2024 Heath Data

Health Factors	Virginia	Bland	Carroll	Grayson	Smyth	Washington	Wythe	Bristol	Galax
Adult Obesity Rate	34%	36%	37%	37%	40%	37%	40%	39%	40%
Smoking	13%	19%	21%	22%	22%	18%	19%	20%	21%
Uninsured	8%	8%	12%	9%	9%	8%	8%	8%	13%
Population Living in Poverty	10.2%	13.4%	15.8%	19.3%	19.7%	11.3%	15.7%	17.0%	22.4%

References

American Dental Association. (2020). State of oral health in rural areas. https://www.ada.org

Appalachian Regional Commission. (2022). Economic status designations. https://www.arc.gov

Ballad Health. (2024). Johnston Memorial Hospital 2024 community health needs assessment. https://www.balladhealth.org/

Carilion New River Valley Medical Center. (2024). 2024 New River Valley community health assessment final report. https://www.carilionclinic.org/

Centers for Disease Control and Prevention (CDC). (2021). Heart disease mortality by county. https://www.cdc.gov/nchs/fastats/heart-disease.htm

Centers for Disease Control and Prevention (CDC). (2020). Rural emergency services report. https://www.cdc.gov

Centers for Disease Control and Prevention (CDC). (2021). Leading causes of death by state and county. https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm

County Health Rankings & Roadmaps. (2022). Health rankings by county. Robert Wood Johnson Foundation. https://www.countyhealthrankings.org

Health Resources & Services Administration (HRSA). (n.d.). Shortage areas by county. https://data.hrsa.gov/topics/health-workforce/shortage-areas

Healthy Appalachia Institute. (2023). Blueprint for health improvement and health-enabled prosperity 2023-2024. https://www.healthyappalachia.org/

Mount Rogers Regional Partnership. (2023). 2023 Regional needs assessment. https://www.mountrogers.org/

People Incorporated. (2021). 2021 community needs assessment: Southwest Virginia. https://www.peopleinc.net/

Rooftop of Virginia Community Action Program. (2022). 2022 Community Needs Assessment: Carroll and Grayson counties and the City of Galax. https://www.rooftopofvirginia.org/

Smyth County Community Hospital. (2024). Smyth County community health needs assessment 2024. https://www.balladhealth.org/

Twin County Regional Hospital. (2022). Community health needs assessment: Carroll, Grayson, and Galax counties. https://www.tcrh.org/

U.S. Bureau of Labor Statistics. (2022). Local area unemployment statistics. https://www.bls.gov/lau

U.S. Census Bureau. (2020). QuickFacts. https://www.census.gov/quickfacts

U.S. Census Bureau. (2020). Poverty by county in Virginia, 2020. https://www.census.gov/data/tables/2020/demo/income-poverty.html

U.S. Department of Agriculture. (2019). Food deserts by county, Virginia. https://www.ers.usda.gov

U.S. Department of Housing and Urban Development (HUD). (2020). Cost burdened households in rural areas. https://www.hud.gov

Virginia Department of Behavioral Health and Developmental Services (DBHDS). (2022). Substance use disorder treatment access. https://www.dbhds.virginia.gov

Virginia Department of Health. (2021). Dental health professional shortage areas. https://www.vdh.virginia.gov

Virginia Department of Health. (2023). Overdose Deaths. https://www.vdh.virginia.gov/drug-overdose-data/overdose-deaths/

Virginia Office of Intermodal Planning and Investment. (2015). Bristol regional needs profile VMTP 2025 needs assessment. https://www.vtrans.org/

Virginia State Police. (2021). Crime in Virginia report. https://www.vsp.virginia.gov

Virginia Works. (2024). Current Local Area Unemployment Statistics (LAUS) - August 2024. https://virginiaworks.com/Local-Area-Unemployment-Statistics-LAUS

Wellspring Foundation. (2021). Southwest Virginia community health needs assessment. https://www.wellspringva.org/