New River Valley Community Health Needs Assessment

FINAL REPORT

JULY 28, 2016

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Disclaimer

This document has been produced to benefit the community. Carilion Clinic encourages use of this report for planning purposes and is interested in learning of its utilization. Comments and questions are welcome and can be submitted to Amy Michals (almichals@carilionclinic.org), Carilion Clinic Community Outreach Planning Analyst.

Members of the Project Management team reviewed all documents prior to publication and provided critical edits. Every effort has been made to ensure the accuracy of the information presented in this report; however, accuracy cannot be guaranteed. Members of the New River Valley Community Health Assessment Team cannot accept responsibility for any consequences that result from the use of any information presented in this report.

Acknowledgements

Success of the New River Valley Community Health Needs Assessment (NRVCHNA) was due to the strong leadership and participation of its Project Management Team, the Community Health Assessment Team, and members of the PATH Coalition. Thank you to all of the community members who participated in the Community Health Survey and focus groups.

Members of these teams included:

Project Management Team

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Community Health Assessment Team (CHAT)

Carilion Clinic's CHNAs are community-driven projects and success is highly dependent on the involvement of citizens, health and human service agencies, businesses, and community leaders. Community stakeholder collaborations known as "Community Health Assessment Teams" (CHAT) lead the CHNA projects. The CHATs consists of health and human service agency leaders, persons with special knowledge of or expertise in public health, the local health department, and leaders, representatives, or members of medically underserved populations, low-income persons, minority populations, and populations with chronic disease.

CHAT Members

Name	Organization
Anthony Akers	Pulaski County
Betsy Albee	Carilion New River Valley Medical Center
Maggie Bassett	Radford University School of Nursing
Scott Blankenship	Carilion New River Valley Medical Center
Aaron Boush	Carilion Clinic
Michelle Brauns	Community Health Center of the New River Valley
Joshua Clark	Carilion New River Valley Medical Center
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Tammy Holbrook	Carilion New River Valley Medical Center
Tina King	New River Valley Agency on Aging
Keli Lichty	New River Valley Child Advocacy, Resources, Education, and Services
Joanna MacQueen	Southwest Virginia Legal Aid Society
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Karen Myers	Carilion New River Valley Medical Center
Holly Neel	Carilion New River Valley Medical Center
Laura Nelson	Virginia Tech Institute for Policy and Governance
Angie Nichols	New River Community Action
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Molly O'Dell	New River Health District
Linda Pearce	New River Valley Interfaith Health and Wellness Network
Trina Porterfield-Pifer	New River Community Action Head Start
Pam Ray	Virginia Tech/ New River Health Department
Shannon Showalter	Carilion New River Valley Medical Center
Carissa South	Council of Community Services
Tracy Stewart	Carilion New River Valley Medical Center
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Mike Wade	New River Valley Community Services
Sophie Wenzel	Virginia Tech Center for Public Health Practice and Research

Executive Summary

Many and varied organizations are involved in the essential work of improving and maintaining the health of any given community. It is important to assess the health concerns of each community periodically to ensure that current needs are being addressed. A Community Health Needs Assessment (CHNA) every three years will uncover issues, indicate where improvement goals are needed, and track and promote progress in key areas, so that there is demonstrated, ongoing improvement. The work of conducting this CHNA and the public availability of its findings is intended to enable the community to plan effectively the vital work of maintaining and improving health.

This report contains the findings of the 2016 New River Valley Community Health Needs Assessment (NRVCHNA), including data on the target population and service area, as well as primary and secondary data.

Method

Carilion Clinic and PATH partnered to conduct the 2016 NRVCHNA. PATH (Partnership for Access to Healthcare) is a community health collaboration formed in 1995 to maximize access to healthcare for New River Valley residents.

A 34-member Community Health Assessment Team (CHAT) oversaw the planning activities. The service area included those living in the counties of Floyd, Montgomery, Pulaski and Wythe and the City of Radford. The target population included the low-income, uninsured and/or underinsured, and those living with chronic illness.

Beginning in April of 2016, primary data collection included a Community Health Survey, focus groups with key stakeholders and providers, and focus groups with target populations. Secondary data was collected including demographic and socioeconomic indicators, as well as health indicators addressing access to care, health status, prevention, wellness, risky behaviors and the social environment.

Findings

The findings of the Community Health Needs Assessment revealed a very diverse population in regards to overall health, access to medical care, financial standing and educational attainment. The New River Valley serves as a cultural hub with a large population of college students and professionals. In addition, the New River Valley has pockets of wealth and areas that are poorer and unhealthier when compared to Virginia as a whole. Poverty rates were higher, academic attainment rates vary greatly across the region, and transportation continues to be a significant barrier for many to access the care and support they need, impacting the social determinants of health. Much of the New River Valley is classified as a Medically Underserved Area (MUA). Health statistics revealed higher death rates and prevention quality indicators for preventable, chronic diseases. Teen pregnancy rates in the Pulaski and Wythe Counties continue to be significantly above rates in Virginia.   The rate of child abuse and neglect varies

throughout the service area, but has been identified as an issue. Rates also vary greatly for suicide deaths, drug and poison deaths and prescription opioid deaths in these areas. Out of 133 localities in Virginia, Montgomery, Floyd, Wythe, Pulaski and Radford ranked 46, 47, 73, 85 and 101 respectively in health outcomes according to County Health Rankings, where one is the best and 133 is the worst.

Many of the respondents to the Community Health Survey and focus group participants, whether insured or uninsured, noted that the cost of services keeps them from accessing preventive care and services. Often individuals self-treat or delay treatment due to cost. Access to affordable oral health services for uninsured and low-income adults continues to be a major need in the service area. Respondents reported suffering from depression and anxiety. Stakeholders cited poor health literacy among the target population including limited basic health knowledge, no value placed on preventive care and chronic disease management, and little awareness of existing resources in the community. The New River Valley is rich in resources for underserved populations but respondents stated that strengthening coordination of care could significantly improve current access to services.

Response

In June 2016, the CHAT participated in a prioritization activity to determine the greatest needs in the service area based on the primary and secondary data collected during the assessment period. The top ten priority areas that emerged from these findings include:

1. Lack of reliable transportation
2. Access to mental health counseling / substance abuse
3. High prevalence of obesity / overweight individuals
4. High prevalence of substance abuse (alcohol, illegal & prescription drugs)
5. Child abuse / neglect
6. Access to primary care
7. Access to adult dental care
8. Improved coordination of care across the health and human sector
9. Lack of knowledge of community resources
10. High uninsured population

The CHAT participated in strategic planning on July 29, 2016. It reviewed the top priorities and compared data from the 2016 NRVCHNA to the 2013 NRVCHNA, as well as the 2015 Giles Community Health Needs Assessment, analyzed existing resources and community work around these priority needs, and determined community level strategies to work on over the next three years.

Carilion Clinic will work in the fall of 2016 to develop an implementation strategy. Carilion Clinic, many of the CHAT members, and PATH will continue to collaborate to actively address community health need in the New River Valley.

Target population

The target populations for Carilion's CHNA projects consist of the following groups: low-income individuals, uninsured and under-insured individuals, those that face barriers to accessing care and available resources, and users of existing health care safety net organizations. Populations are examined across the different life cycles including women of child-bearing age, adults, and elderly as well as across various race and ethnic groups.

Service Area

The service areas for each CHNA are determined by at least 70% of unique patient origin of the Carilion Clinic hospital in each respective market. There is a focus placed on areas that are considered Medically Underserved Areas (MUAs), Health Professional Shortage Areas (HPSA), and Food Deserts.

Carilion New River Valley Medical Center (CNRV) is located in Radford, Virginia. In fiscal year 2015, CNRV served 49,464 unique patients. Patient origin data revealed that 77.33% of patients served by CNRV lived in the following localities:

- Montgomery County (30.00%)
- Pulaski County (18.70%)
- Radford City (13.80%)
- Wythe County (7.63%)
- Floyd County (7.20%)
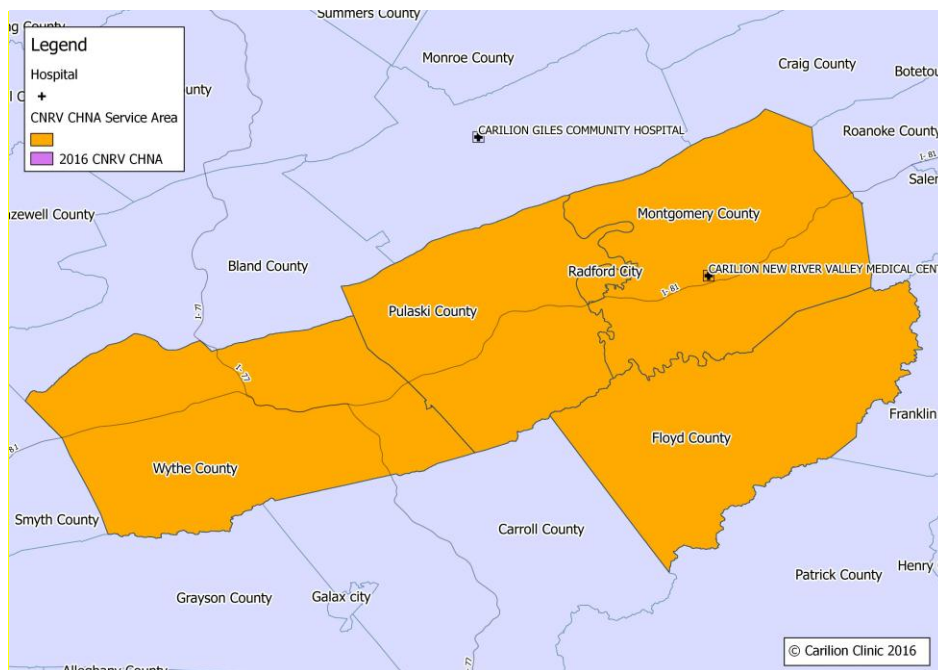
Community Health Improvement Process

Carilion Clinic's Community Health Improvement Process was adapted from Associates in Process Improvement's the Model for Improvement and the Plan-Do-Study-Act (PDSA) cycle developed by Walter Shewhart[1]. It consists of five distinct steps: (1) conducting the CHNA; (2) strategic planning; (3) creating the implementation strategy; (4) program implementation; and (5) evaluation. This cycle is repeated every three years to comply with IRS requirements. Each step in the process is explained below. Please see Appendix 1 for the Carilion Clinic Community Health Improvement Process diagram.

Step 1: Conduct CHNA

The first step of conducting a CHNA is to create a Gantt chart. This tool is a timeline that documents the upcoming tasks needed to conduct the CHNA, who is responsible for each task, start and end dates, and the completion percentage. The Gantt Chart for the 2016 NRVCHNA can be found in Appendix 2.

The CHAT leads the CHNA and oversees primary and secondary data collection. Primary data includes a Community Health Survey (CHS), target population focus groups, and a stakeholder survey.

Community Health Survey (CHS)

The CHS consists of forty questions for adults about access and barriers to healthcare, general health questions, and demographic information. The survey mirrors Healthy People 2020 goals, as well as many other national health surveys that do not collect health care data at the county or zip code level. This survey is not a scientific survey and uses oversampling techniques of the target population. See Appendix 3 for Carilion Clinic's CHS. A Data Collection and Tracking Committee provides recommendations for future improvements on the CHS with input from the CHAT and community members. An incentive for completing the CHNA was provided to encourage participation in the CHS.

Target Population Focus Groups

Focus groups are conducted with the target population. The goal of the focus groups is to identify barriers to care and gaps in services for primary care, dental and mental health/substance abuse services for the population. There is at least one focus group representing each lifecycle (parents of children and adolescents, women of child-bearing age, adults, and elderly) living in MUAs if applicable. Focus groups targeting special populations will be determined by the CHAT if needed.

For each focus group, there is a maximum of fifteen participants. A facilitator and scribe(s) conduct the focus group meeting and the audio of the meetings are recorded and later transcribed. Snacks and beverages are provided for participants. Consent forms must be signed prior to each meeting (to inform participants regarding format and to ensure

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[1]Science of Improvement: How to Improve. (2014). Institute for Healthcare Improvement. Retrieved from http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementHowtoImprove.aspx

confidentiality). The groups are held in convenient, neutral locations and/or in sites where participants already congregate.

The script for the focus groups is simple and consists of five open-ended questions:

1. In one or two words, how would you describe good health?
2. What do you, or your family and friends, do when you need a check-up or are sick?
3. What do you, or your family and friends, do when you have a toothache or need your teeth cleaned?
4. What do you, or your family and friends, do when you need to talk to someone about your nerves/stress/depression or need help with alcohol or drug addiction?
5. Is there anything else you would like to tell us about your health or the health of others in the New River Valley?

Data is analyzed and themes are identified using the focus group transcripts.

Stakeholder Survey
The final primary research as part of the CHNA is a stakeholder survey. This survey is administered to any stakeholders identified by the CHAT or Carilion Clinic. (See Appendix 4 for the stakeholder survey tool.)

Secondary Data Collection
Secondary data is collected as part of the CHNA. Data is benchmarked with Healthy People 2020 and other national best measures and trends are analyzed. Carilion uses the data metrics suggested by the Catholic Health Association.

Prioritization
After all primary and secondary data collection is complete, the CHAT reviews all data and participates in a prioritization activity. This consists of each CHAT member picking the ten most pertinent community needs and ranking them on a scale of one to ten, with one being the most pertinent. Then, only for those top ten, the CHAT members rate the feasibility and potential impact of the needs on a scale of one to five, with one being the most feasible and having the most impact. (Please see Appendix 7: Community Health Needs Assessment Prioritization Worksheet.) This data is combined and overall ranking and feasibility and potential impact scores are determined.

CHNA Report
The last step of the CHNA is publishing and analyzing the primary and secondary data into a final CHNA report. These reports must be published in the same fiscal year as the CHNA and made widely available to the community. Carilion publishes the CHNAs on its website at www.carilionclinic.org/about/chna and has print copies available through the Community Outreach department. CHAT members and partner organizations may also publish data on their websites.

Step 2: Strategic Planning

After the completion of the CHNA and the identification of the priority areas (needs), the CHAT enters the strategic planning phase of the process. During strategic planning, the CHAT first reviews data for the top priorities, comparing data from the current needs assessment to results from the prior needs assessment conducted three years earlier. CHAT members then identify and analyze existing community resources and initiatives addressing the priority issues. Analysis of existing work and resources is completed using a SWOT analysis, identifying areas of strength and weakness and factors that could create opportunities for success or threaten success in solving community health needs. Through this process, CHAT members identify alignment opportunities between organizations, identify system changes that are likely to lead to improvement, and select new or existing evidence-based strategies for the community that are most likely to succeed in addressing the needs.

Step 3: Implementation Strategy

After the CHNA is completed, Carilion Clinic develops a written implementation strategy that specifies what health needs were identified in the CHNA, what needs the organization plans to address, and what needs the organization does not plan to address and reasons for each.

Included in the document are expected outcomes for each community issue being addressed, proposed evidence-based interventions with goals and objectives that will be tracked over time (both process measures and outcome measures). The document must be formally approved by the organization's Board of Directors and filed on the organization's 990 tax return. Carilion Clinic will integrate the implementation strategy with existing organizational and community plans and host an event in the community to present the CHNA results and the corresponding implementation strategy.

Step 4: Program Implementation

Carilion Clinic Community Outreach and the CHAT will establish and monitor new community health programs implemented to respond to the community health needs identified in the CHNA. New programs will be piloted on a small scale first and will be continually assessed and improved using the PDSA cycle. The goal of the PDSA cycle is to make small, sustained improvements over time. Relevant data is collected and analyzed for each program. After successful implementation of the pilot, the program can be implemented on a larger scale throughout Carilion Clinic or to other organizations in the community. The PDSA cycle is on-going for existing community health improvement programs.

Step 5: Evaluation

Community health programs and metrics associated with the expected outcome in the implementation strategy will be monitored by Carilion Clinic Community Outreach.

Progress will be reported bi-annually to Carilion Clinic's Board of Directors for each community health need identified in the last CHNA cycle for each community. In addition, the Board will be informed of community grant awards given by Carilion Clinic to fund health safety net programs in the community. Decisions on the funding of health safety net programs will be based on available resources and the impact on addressing a documented community health need identified in the CHNA. For more information, please see https://www.carilionclinic.org/about/community-outreach.

Finally, Carilion Clinic will update progress made on each community health need identified in the most recent CHNA cycle annually on the organization's 990 tax form.

Community Collaboration and Collective Impact

Carilion Clinic fosters community development in its CHNA process and Community Health Improvement Process by using the Strive Collective Impact Model for the CHAT. This evidence-based model focuses on "the commitment of a group of important players from different sectors to a common agenda for solving a specific social problem(s)[2]" and has been proven to lead to large-scale changes. It focuses on relationship building between organizations and the progress towards shared strategies.

Collective impact focuses on four conditions for success:

1. A Shared Community Vision: a broad set of cross-sector community partners come together in an accountable way to implement a vision for a healthier community and communicate that vision effectively.
2. Evidence-based Decision Making: The integration of professional expertise and data to make decisions about how to prioritize a community's efforts to improve health outcomes.
3. Collaborative Action: the process by which networks of appropriate cross-sector services/providers use data to continually identify, adopt, and scale practices that improve health outcomes.
4. Investment & Sustainability: There is broad community ownership for building civic infrastructure and resources are committed to sustain the work of the partnership to improve health outcomes.

Collective Impact also suggests having a neutral anchor institution to serve as the convening body for the CHAT. The role of the anchor institution is to listen to/support the community as a convener in identifying and aligning around the community's shared aspirations. The anchor

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[2]Kania, J., & Kramer, M. (2011).Collective Impact.Stanford Social Innovation Review. Retrieved from http://www.ssireview.org/images/articles/2011_WI_Feature_Kania.pdf

institution pulls together and staffs a coalition of key organizations and individuals to achieve that change including: (1) organize meetings of the full partnership; (2) facilitate work groups to guide the development and implementation of specific activities; (3) manage and strengthen relationships with individuals and organizations; (4) engage a broad spectrum of stakeholders in developing community change strategies and mobilizing the community's resources to implement them; (5) build public will and catalyze action; (6) create a policy agenda; (7) use data to inform all decisions[3].

Carilion Clinic has partnered with the PATH Coalition to serve as the anchor institution for the CHAT. Increasing access to healthcare for all residents in the New River Valley is the mission of PATH.

New River Valley Partnership for Access to Health Care

Since 1995 the New River Valley Partnership for Access to Health Care (PATH) has served as a collaborative community-focused alliance of 50+ Health and Human Service organizations, other community organizations and businesses. This partnership resulted from discussions and review of statistics from a 1994 New River Valley Health and Human Services Needs Assessment which indicated that the number one concern of residents in the New River Health District or Planning District Four – a 1,400 square mile multi-jurisdictional rural, urban and suburban region of Southwest Virginia including the localities of Floyd, Giles, Montgomery and Pulaski counties and the city of Radford – was lack of affordable health care. The mission of PATH is to maximize access to health care for all residents of the New River Valley. CNRV partnered with PATH to serve as the CHAT for the 2016 NRVCHNA.

[3]Kania, J., & Kramer, M. (2011).Collective Impact.Stanford Social Innovation Review. Retrieved from http://www.ssireview.org/images/articles/2011_WI_Feature_Kania.pdf

Description of the community

The New River Valley is nestled among the Blue Ridge and Alleghany Mountains and boasts picturesque views of rural Southwest Virginia. One of the oldest rivers in America, the New River, runs through this region. With the exception of Montgomery County, the counties in this region are geographically and demographically similar. Montgomery County, home to Virginia Tech and the towns of Blacksburg and Christiansburg, is a culturally and economically diverse area and the hub of the New River Valley. Radford City is also quite culturally diverse due to the presence of Radford University. The New River Valley has seen remarkable growth in the last couple of decades and continues to grow, especially in Montgomery County.

Carilion New River Valley Medical Center is wholly owned by Carilion Clinic, a not-for-profit healthcare organization based in Roanoke, Virginia. Through a comprehensive network of hospitals, primary and specialty physician practices and other complementary services, quality care is provided close to home for more than 870,000 Virginians. With an enduring commitment to the health of the region, care is advanced through medical education and research, and assistance is provided to help the community to stay healthy. Carilion Clinic employs 685 physicians representing more than 70 specialties who provide care at 241 practice sites.

Carilion Clinic New River Valley Campus

To advance education of health professionals, Jefferson College of Health Sciences, within Carilion Medical Center, is a professional health sciences college offering Associate's, Bachelor's, and Master's degree programs. During fiscal year 2015, 800 undergraduate and 262 graduate students were enrolled.

The Virginia Tech Carilion School of Medicine enrolled 165 students and there were 706 appointed faculty members during fiscal year 2015. Carilion Clinic and Virginia Tech Carilion School of Medicine provide graduate medical education to 260 medical residents and fellows. There are 13 accredited residency programs (Carilion / OMNEE Emergency Medicine Dermatology, General Hospital Dentistry, Emergency Medicine, Family Medicine, Internal Medicine, Neurosurgery, Obstetrics/Gynecology, Pediatrics, Plastic Surgery, Podiatry, Psychiatry and Surgery) and 11 accredited fellowship programs (Addiction Psychology, Adult Joint Reconstruction, Cardiovascular Disease, Child and Adolescent Psychiatry, Gastroenterology, Geriatric Medicine, Geriatric Psychiatry, Hospice and Palliative Care, Infectious Disease, Interventional Cardiology, and Pulmonary Critical Care).

Advanced Clinical Technology and programs include CyberKnife Stereotactic Radiosurgery, DaVinci Robotic Surgical System, 60 bed neonatal intensive care unit, hybrid operating room, Carilion Clinic Children's Hospital, Cancer Center, Spine Center, and comprehensive

cardiothoracic, vascular and orthopedic surgery programs. Carilion Roanoke Memorial Hospital serves as a Level One Trauma Center with EMS services that include three EMS helicopters, six first-response vehicles and 38 Advanced Life Support Ambulances.

An additional benefit to the community is Carilion Clinic's economic contribution to the region. As the area's largest employer, jobs are provided for more than 12,100 residents of the region. Research conducted at the Virginia Tech Carilion Research Institute (VTCRI) creates a bridge between basic science research at Virginia Tech and clinical expertise at Carilion Clinic and increases translational research opportunities for both partners. Research conducted by scientists at the institute is aimed at understanding the molecular basis for health and disease, and development of diagnostic tools, treatments, and therapies that will contribute to the prevention and solution of existing and emerging problems in contemporary medicine. Research areas of emphasis which presently align with areas of strength and active research at Virginia Tech include inflammation, infectious disease, neuroscience, and cardiovascular science and cardiology.

Primary Data and Community Engagement

Stakeholder Survey Results

During the CHNA process, community stakeholders and providers were encouraged to complete the stakeholder survey (see Appendix 4: Stakeholder Survey for the survey tool). This survey was completed online, in print, and administered to stakeholders during various meetings. When this survey was physically administered at meetings, the project management team used this tool to spark conservation about community health need in the service area. (Please see Appendix 5: 2016 Stakeholder Survey Locations for a complete list of locations where the survey was administered.) In total, 57 participants completed the stakeholder survey. Thirty six (36) surveys were completed during stakeholder meetings, and 21 surveys were completed online or returned on paper.

Needs and Barriers

Stakeholders were asked to respond to the following questions addressing the health needs and barriers in the New River Valley.

- ***What are the most important issues (needs) that impact health in the New River Valley?***
- ***What are the barriers to health for the populations you serve in the New River Valley?***

A total of 273 responses from 57 individuals were collected addressing the "Needs and Barriers" and 32 categories were identified:

What are the most issues (needs and barriers) that impact health in the New River Valley?	%	Number of Responses
Transportation	11.36%	31
Access to affordable services	10.26%	28
Low-income	8.79%	24
Substance and alcohol abuse	8.79%	24
Health literacy/ educational attainment and opportunities	8.42%	23
Over-reliance on emergency assistance	7.33%	20
Mental Health	7.33%	20
Lack of health insurance	5.86%	16
Chronic disease management	3.66%	10
Dental care	3.30%	9
Nutrition/exercise/ healthy habits	3.30%	9
Obesity	2.93%	8
Affordability and use of preventive services	2.93%	8
Specialty care (access and affordability)	2.56%	7
Tobacco use	2.20%	6
Non-compliance	1.83%	5
Lack of access to quality resources	1.47%	4
Lack of information about resources	0.73%	2
Food insecurity	0.73%	2
Adequate behavioral health training for responders	0.73%	2
Lyme disease	0.73%	2
Hepatitis C	0.73%	2
Poor built environment/lack of walkability	0.73%	2
Lack of access to fresh local foods	0.37%	1
Cost of medications	0.37%	1
Inadequate healthcare	0.37%	1
Preventing falls	0.37%	1
Neglect	0.37%	1
PTSD - public safety	0.37%	1
Scope of services/government stipulations on grant/funding use	0.37%	1
Stigma - hospice/end of life care	0.37%	1
Lack of coordination of care	0.37%	1

To determine which "Needs and Barriers" categories were identified most often by the focus groups, the responses for each category are presented as a percentage of the total responses.

What are the most important issues (needs and barriers) that impact health in the New River Valley?

Legend:
- Transportation
- Access to affordable services
- Low-income
- Substance and alcohol abuse
- Health literacy / educational attainment and opportunities
- Over-reliance on emergency assistance
- Mental Health
- Lack of health insurance
- Chronic disease management
- Dental care
- Nutrition/exercise/ healthy habits
- Obesity
- Affordability and use of preventive services
- Specialty care (access and affordability)
- Tobacco use
- Other
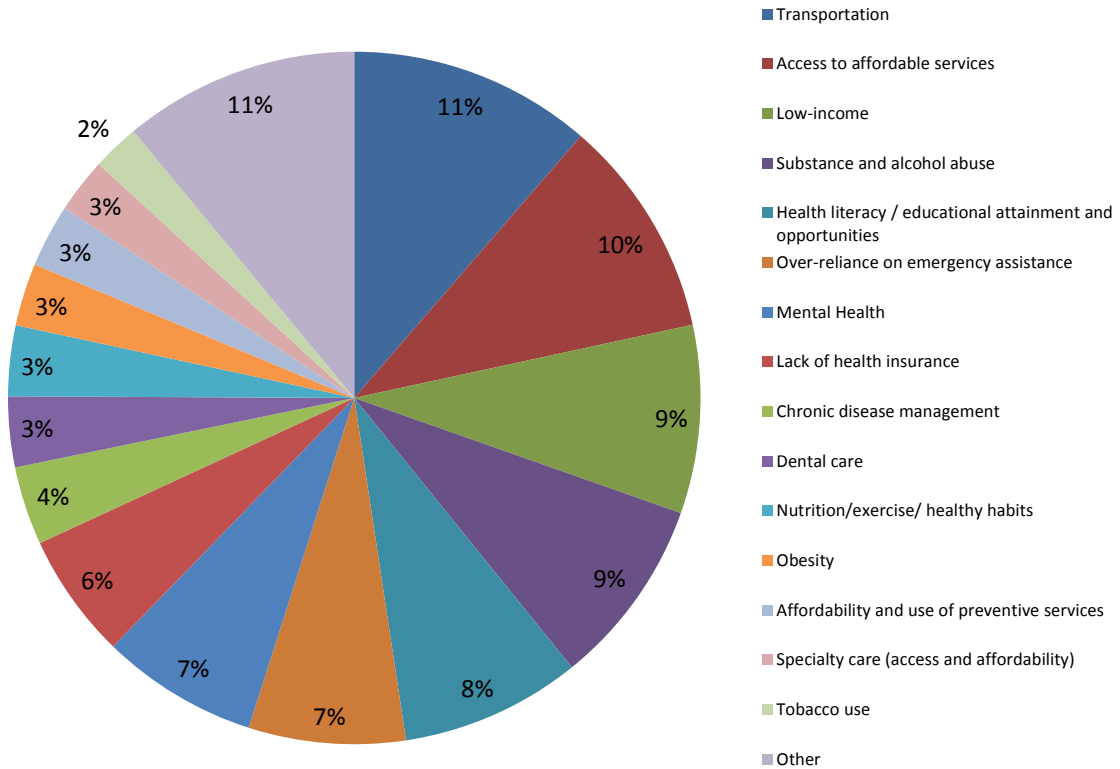
Localities with the Greatest Unmet Need

In addition to the "Needs and Barriers" that impact health, participants were asked:

- ***Is there one locality/neighborhood with greatest unmet need in the New River Valley?***

The majority of respondents agreed that there is unmet need throughout the New River Valley. Of the 45 responses, the following localities/neighborhoods were identified:

Localities with the Greatest Unmet Need

A bar chart showing percentages from 0.00% to 25.00% for various localities:
- Trailer parks/subsidized housing: ~22%
- West End of Radford: ~11%
- Shawsville/Elliston: ~11%
- Merrimac: ~9%
- Pulaski County: ~9%
- Town of Pulaski: ~7%
- Far Southwest VA: ~4.5%
- All assisted living facilities: ~4.5%
- Rustic Village: ~4.5%
- All rural areas of Floyd County: ~4.5%
- Montgomery County: ~2%
- Lantern Ridge: ~2%
- The Bluffs: ~2%
- Allegheny Rd: ~2%
- Pepper's Ferry: ~2%
- Low-income, off-campus communities: ~2%

Populations with the Greatest Unmet Need

Next participants were asked:

- ***Is there one population with greatest unmet need in the New River Valley?***

The top response from participants identified senior citizens as having the greatest unmet need, followed by the low-income population.

Is there one population group with the greatest unmet need?	Number of Responses	%
Senior citizens	8	22.86%
Poor/low-income	7	20.00%
International students	3	8.57%
Medicaid gap population	2	5.71%
Young adults	2	5.71%
Children under 17	2	5.71%
Uninsured	2	5.71%
Pre "school" age	1	2.86%
Age 50-65	1	2.86%
Adults	1	2.86%
People with high school education or less	1	2.86%
Freshman	1	2.86%
Campus workers	1	2.86%
Developmentally delayed children	1	2.86%
Immigrants	1	2.86%
Underinsured	1	2.86%

Population Group with Greatest Unmet Need

	Senior citizens	Low-income	International students	Medicaid gap population	Young adults	Children under 17	Uninsured	Other
%	22.86%	20.00%	8.57%	5.71%	5.71%	5.71%	5.71%	25.71%
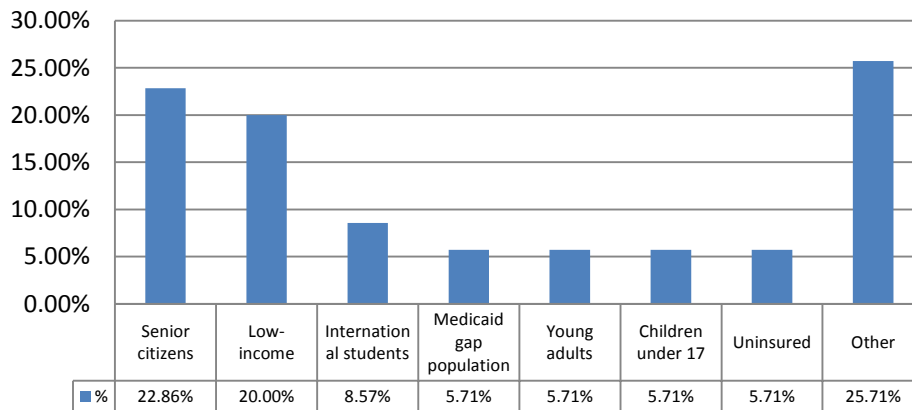
Resources

Stakeholder survey participants were asked to respond to the following question addressing the available resources in the New River Valley.

- ***What are the resources for health for the populations you serve in the New River Valley***?

A total of 62 responses were collected addressing the "Resources" and 14 categories identified, including:
- Community Resources
- Community Resources- Access to Food
- Community Resources- Information and Referral
- Cost & Insurance Status
- Education
- Education & Outreach
- Information & Referral
- Prescriptions
- Public Health
- Services- Behavioral Health
- Services- Dental
- Services- Health System
- Services- Healthcare Services
- Services- Community Resources

The complete list of community resources, as identified by community stakeholders, can be found in Appendix 6: Community Resources.

Initiatives and Changes

Stakeholder survey participants were asked to respond to the following question:

- ***If we could make one change as a community to meet the needs and reduce the barriers to health in the New River Valley, what would that be***?

A total of 49 responses were collected addressing the "Initiatives and Changes" and 18 categories identified.

If we could make one change to meet the needs of the community and reduce the barriers to health what would it be?	%	Number of Responses
Education	16.33%	8
Improved access through medical outreach/ virtual health/ community paramedicine	14.29%	7
Urgent care that will take the uninsured	10.20%	5
Preventive care	10.20%	5
Access to and emphasis on mental health care	10.20%	5
Resource mapping, education and referrals	8.16%	4
Free and reduced cost healthcare	4.08%	2
Care coordination	4.08%	2
Access to insurance/Medicaid expansion	4.08%	2
Universal single payer system	2.04%	1
Political change - more legislators who care about the low income population	2.04%	1
More providers	2.04%	1
Jobs	2.04%	1
Incentives for specialty care in the area	2.04%	1
Improved access to transportation	2.04%	1
Fall Prevention	2.04%	1
Environmental changes to increase activity and provide access to fresh foods	2.04%	1
Access to substance abuse intervention services	2.04%	1

To determine which "Changes and Initiatives" categories were identified most often by the participants, the responses for each category are presented as a percentage of the total responses.

If we could make one change to meet the needs of the community and reduce the barriers to health what would it be?

Legend:
- Education
- Improved access through medical outreach/ virtual health/ community paramedicine
- Urgent Care that will take the uninsured
- Preventive care
- Access to and emphasis on mental health care
- Resource mapping, education and referrals
- Free and reduced cost healthcare
- Care coordination
- Access to insurance/Medicaid expansion
- Other

Pie chart values: 17%, 14%, 10%, 10%, 10%, 8%, 4%, 4%, 4%, 19%
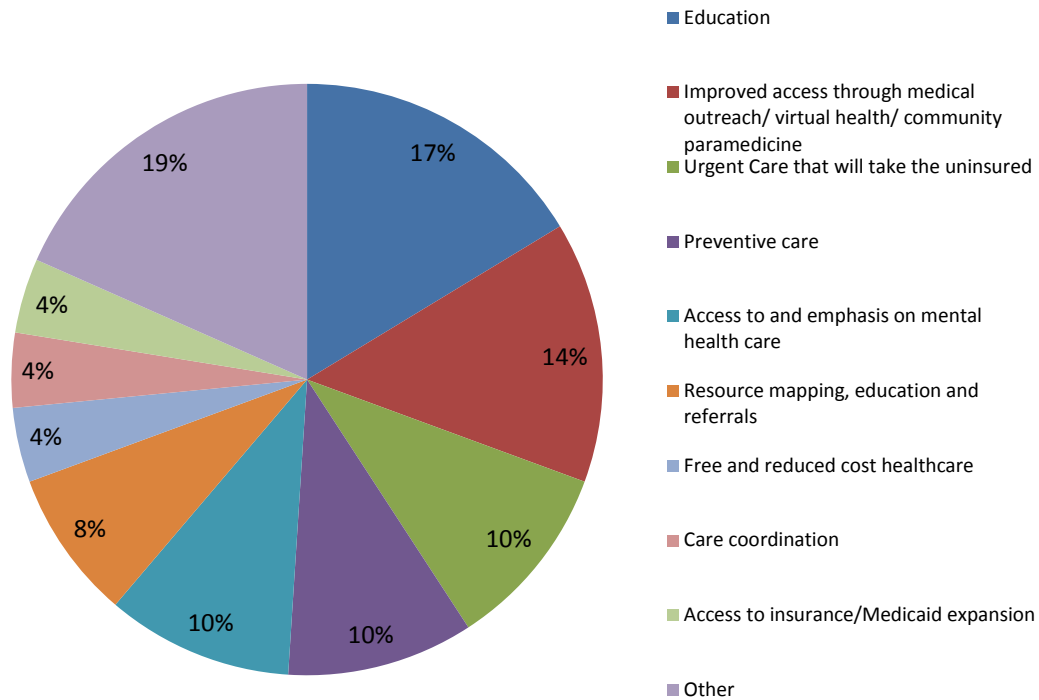
Participants recommended improved education and improving medical access through a combination of medical outreach, virtual medicine and community paramedicine.

Target Population Focus Group Results

Five focus group meetings with target populations living in the New River Valley were conducted from May 9 through June 2, 2016 to address the healthcare needs for, and address barriers to, affordable comprehensive services including primary care, oral health, and mental health and substance abuse services.

The CHAT identified participants for the focus group meetings by reviewing programs and organizations in the New River Valley that offer services to the uninsured and under-insured, the low-income, minority, and chronically ill groups across the lifecycles and special populations. All attempts were made to conduct focus groups at sites where existing, intact groups already met and/or at sites that served the target population.

Focus Group Locations:

Organization	Children	Women of Childbearing Age	Adults	Seniors	Site/Group
New River Valley Agency on Aging				✓	Christiansburg Friendship Café
New River Valley Agency on Aging				✓	Meadowbrook Friendship Café
New River Valley Agency on Aging				✓	Pulaski Friendship Café
NRV CARES	✓	✓	✓		Parenting Class
New River Valley Community Services		✓	✓	✓	Stepping Stones
Radford Head Start	✓	✓	✓		Policy Council

New River Valley Agency on Aging: Friendship Café Groups
The New River Valley Agency on Aging exists to support and enhance the lives of older adults, their families, and caregiver, through advocacy, information and services. New River Valley Agency on Aging hosts Friendship Cafés in their communities, which are fun, social gathering places for older adults to meet, eat and enjoy! For more information, visit the website at http://www.nrvaoa.org/index.html.

Three focus groups were conducted with three different Friendship Café groups throughout the New River Valley.

NRV CARES
NRV CARES is a private, non-profit organization dedicated to protecting children from abuse and strengthening families through education, advocacy and community partnerships. For more information, visit the website at http://www.nrvcares.org/.

A focus group was conducted with an NRV CARES parenting class.

New River Valley Community Services
New River Valley Community Services (NRVCS) offers an array of programs for both children and adults who are living with mental illness, developmental disabilities and/or substance use disorders. For more information, visit the website at http://www.nrvcs.org/.

A focus group was conducted with members of the Stepping Stones class.

New River Community Action: Head Start
New River Community Action's (NRCA) Head Start mission is to build on the unique strengths of children and families; through positive engagement, health education and quality preschool experience. NRVA's Head Start prepares children for lifelong success through school readiness by partnering with families to support goals in the home and school environment. For more information, visit the website at http://www.swva.net/nrca/headstart.html.

A focus group meeting was held with parents participating in "Policy Council Meeting."

Focus Group Demographics

A total of 37 individuals participated in the focus group meetings. Of the participants, 68% were Caucasian, 12% were African American, and 20% gave no answer.

Race/Ethnicity of Focus Group Participants
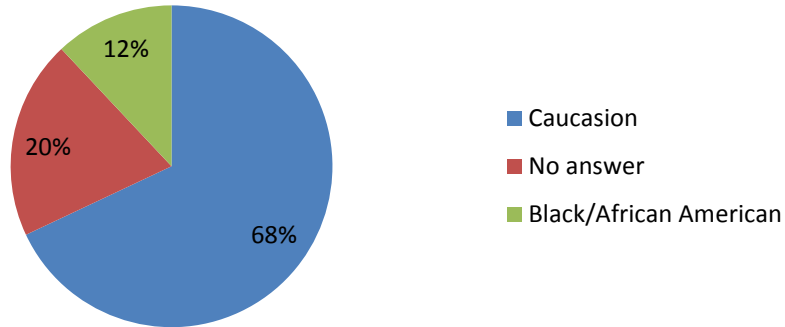
The majority of participants were women (64%) with the remaining 16% men and 20% giving no answer.

Focus Group Participant Gender
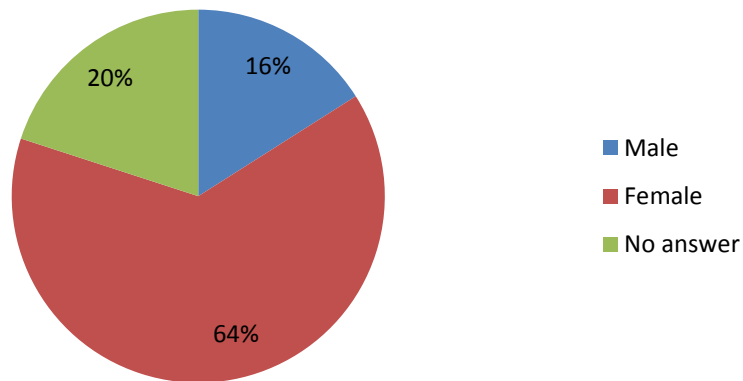
Only 7% of focus group participants reported having no health insurance compared to Medicare (31%) and Medicaid (18%). More participants had no dental insurance (9%) compared to those having dental insurance (7%).

Focus Group Insurance Type

Medicare — 31%
Medicaid — 18%
Medicare supplement — 13%
No answer — 13%
No dental insurance — 9%
No health insurance — 7%
Dental insurance — 7%
Employer provided insurance — 2%

- Medicare
- Medicaid
- Medicare supplement
- No answer
- No dental insurance
- No health insurance
- Dental insurance
- Employer provided insurance
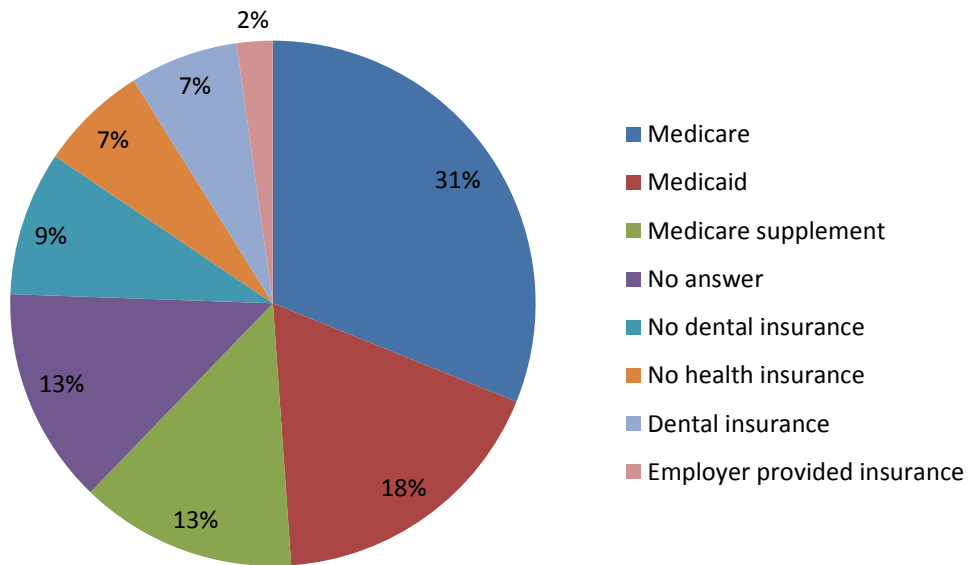
Eight percent (8%) of focus group participants had less than a high school education, 8% had some high school, 44% had a high school diploma, 8% had an Associate's degree, 8% had a Bachelor's degree, 0% had a Master's degree, and 24% did not answer the question.

Highest Education Level Completed

High school diploma — 44%
No answer — 24%
Less than high school — 8%
Some high school — 8%
Associates — 8%
Bachelors — 8%
Masters/PhD — 0%

- High school diploma
- No answer
- Less than high school
- Some high school
- Associates
- Bachelors
- Masters/PhD
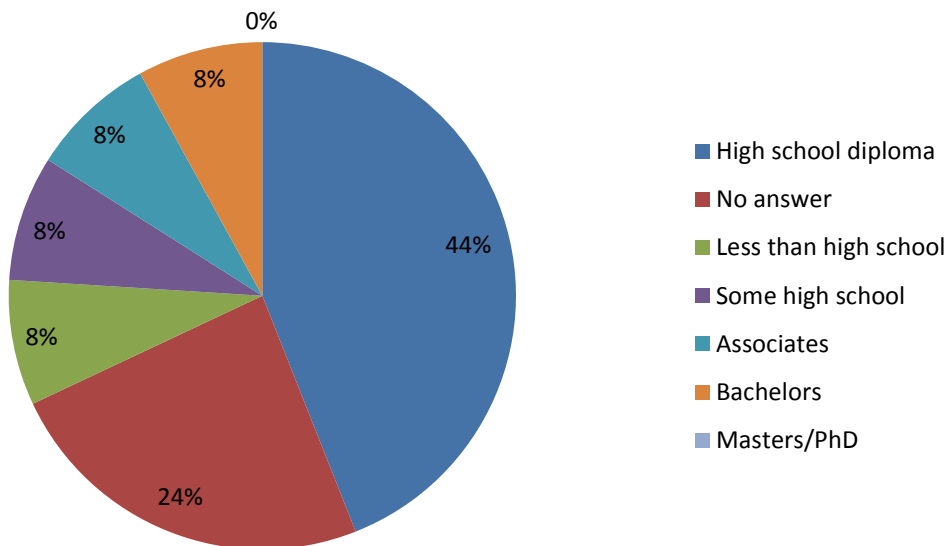
Focus Group Results

At the beginning of each meeting, participants were asked "What is good health?". Responses addressed participants' perceptions of health status, wellness and prevention, social networks, and access to services. A word cloud was created to show results from this question. The more a term was used, the larger that word is in the cloud.
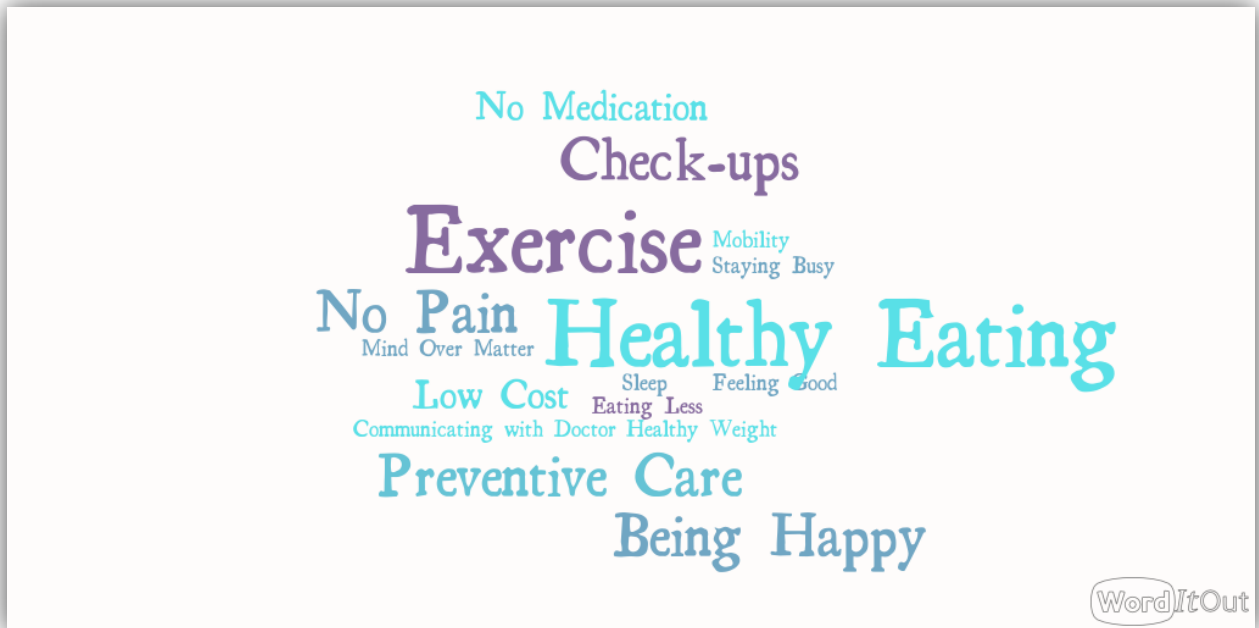
Participants were then asked "What do you, or your family and friends, do when you need a check-up or are sick?" Thirty three percent (33%) of participants identified they use the doctor's office, followed by the home remedies (22%), call doctor/nurse (9%) and waiting it out (9%).

What do you, or your family or friends, do when you need a check up or are sick?
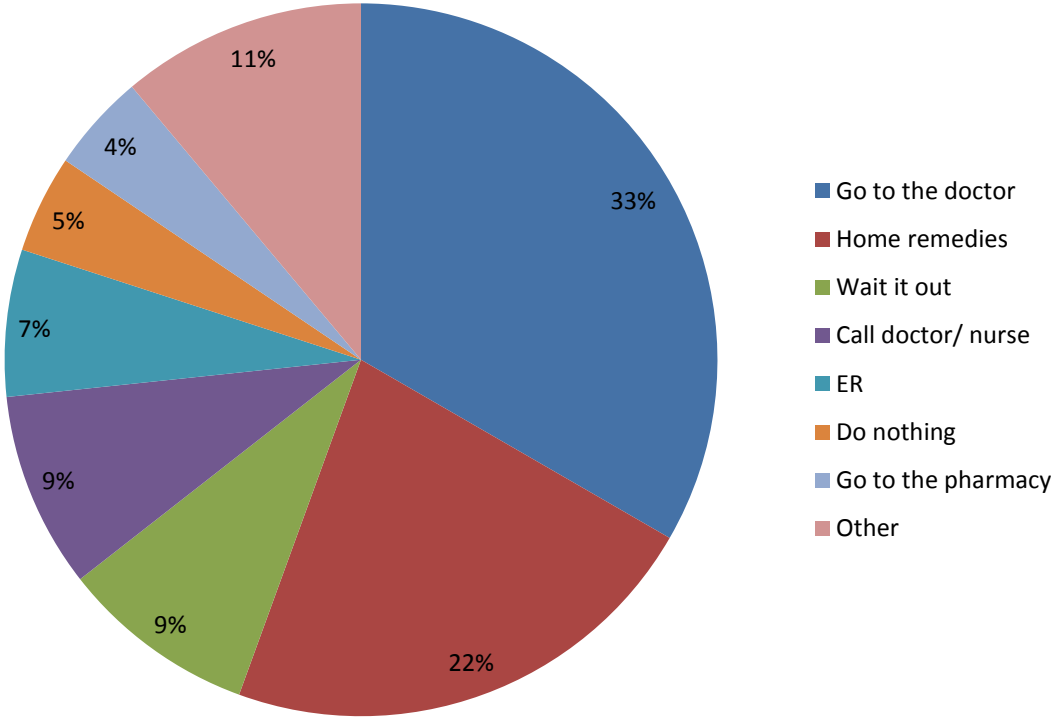
Total responses: 45	Total participants: 37

Medical care barriers identified during the focus group included cost (53%), transportation (16%), no insurance (11%), expensive vision care (5%), Medicaid is not enough (5%), no dialysis in Pulaski (5%) and long ER wait times (5%).

Medical Care Barriers

Legend	
■ Cost	
■ Transportation	
■ No insurance	
■ Vision care expensive	
■ Medicaid is not enough	
■ No dialysis in Pulaski	
■ Long ER wait times	

Pie chart values: 53%, 16%, 11%, 5%, 5%, 5%, 5%
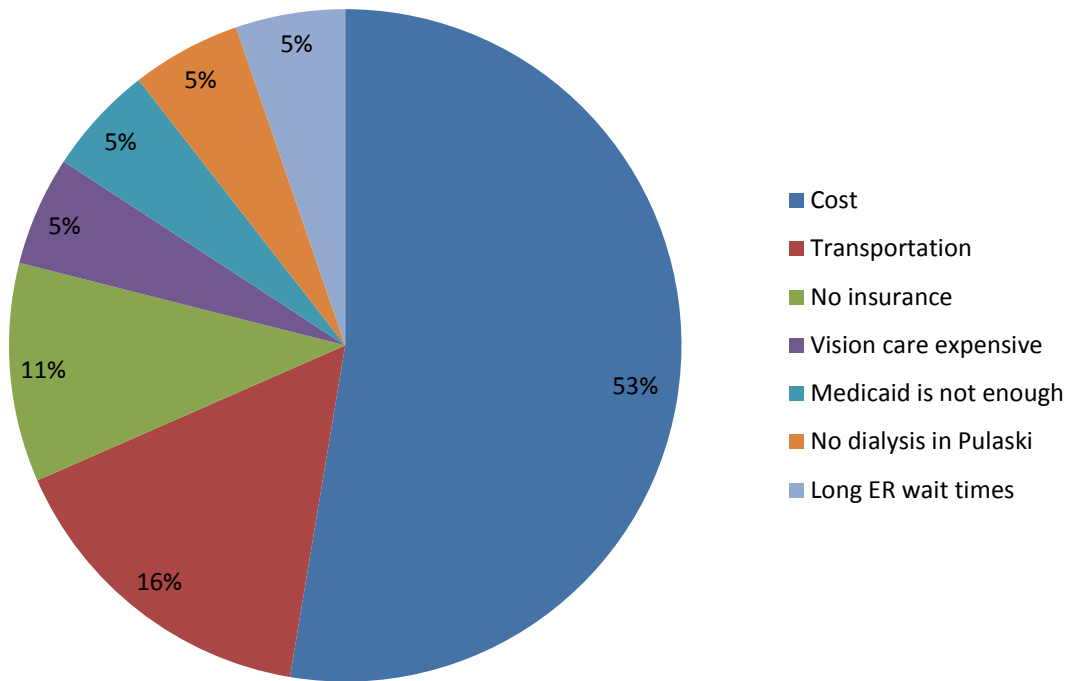
Number of responses: 19	Number of participants: 37

Next, participants were asked, "What do you, or your family and friends, do when you have a toothache or need your teeth cleaned?" The top responses were self-care/home remedies (37%), endure the pain and suffer (15%), take over-the-counter drugs (15%) and go to the dentist (15%).

What do you, or your family and friends, do when you have a toothache?

■ Self-care/home remedies	
■ Endure the pain/suffer	
■ Take over-the-counter drugs	
■ Dentist	
■ Free Clinic (Christiansburg FQHC)	
■ Wythville Dental College	
■ Hospital/ER	
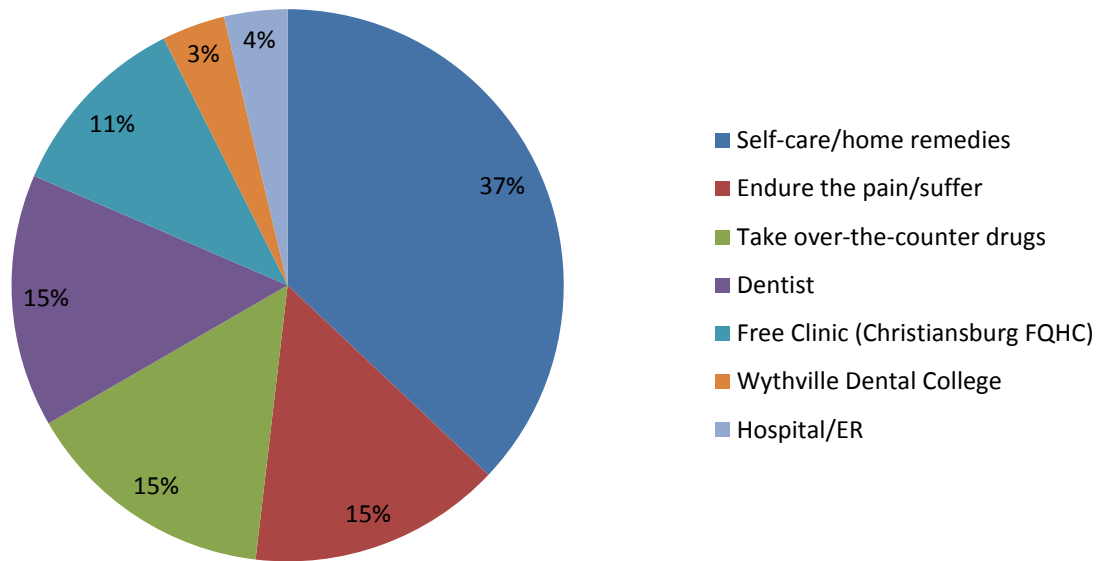
Number of responses: 27	Number of participants: 37

Dental care barriers included cost (29%), transportation (18%), accessibility (11%), fear (11%), and distance to a clinic (11%).

Dental Care Barriers

Legend:
- Finding good dentists
- Cost
- Transportation
- Accessibility
- Fear
- Scheduling
- No teeth
- Insurance
- Distance to a clinic
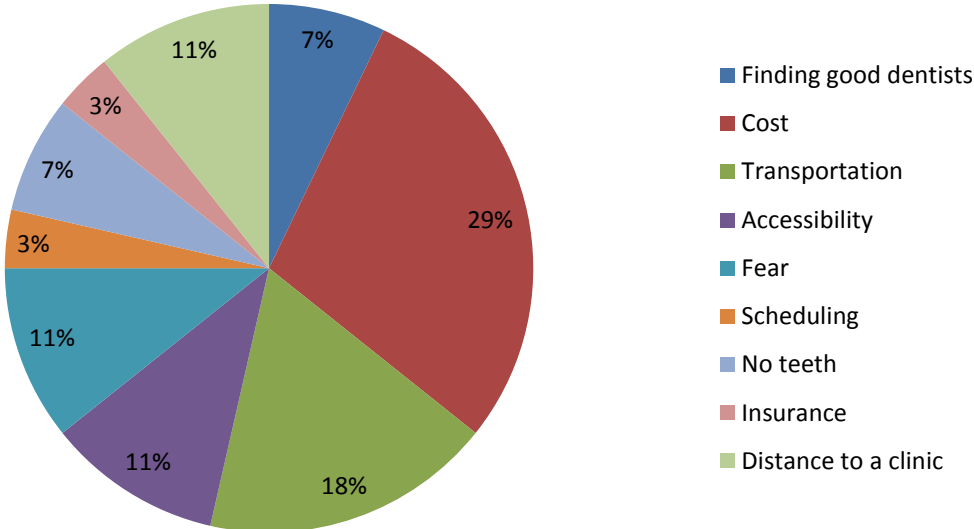
Number of responses: 28	Number of participants: 37

Participants were asked, "What do you, or your family and friends, do when you need to talk to someone about mental health or substance abuse issues?" The top responses were pray or talk to clergy (15%), talk to family and friends (15%), hold it in/isolate (13%) and talk to your doctor (13%).

What do you, or your family and friends, do when you need to talk with someone about your nerves/stress/drepression or need help with an alcohol or drug addiction?

Legend:
- Pray/ church/ clergy
- Family/ friends
- Hold it in/isolate
- Talk to your doctor
- Psychiatrist
- Counselor
- Take medicine
- Other

Pie chart values: 15%, 15%, 12%, 12%, 10%, 8%, 5%, 23%
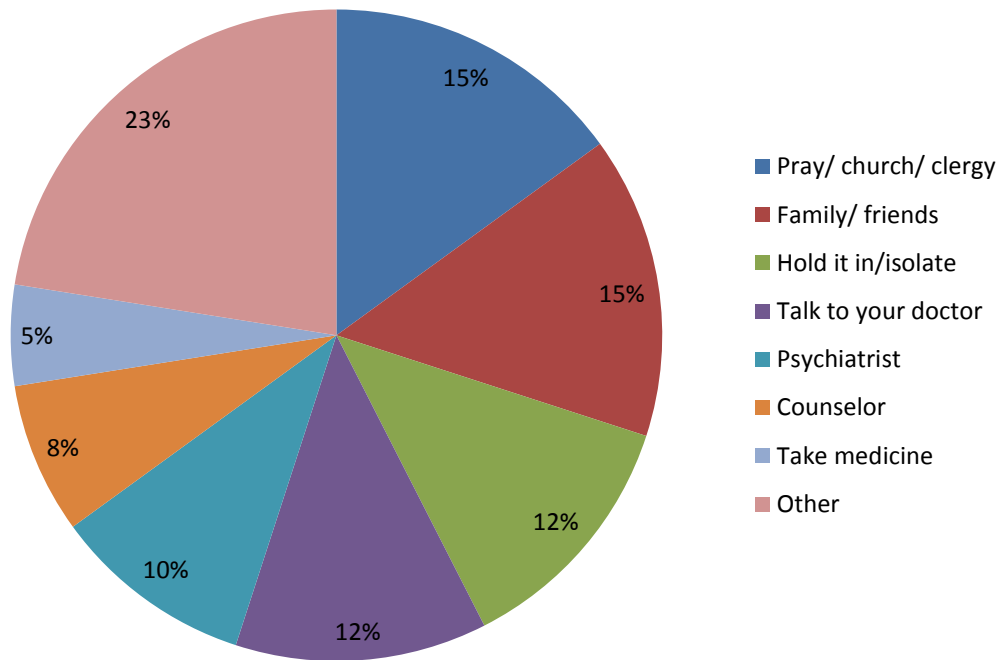
Number of responses: 40	Number of participants: 37

Mental health barriers included insurance (34%), fear of losing kids (22%), judgment (11%), privacy (11%), denial (11%) and being put on medicine (11%).

Mental Health Barriers
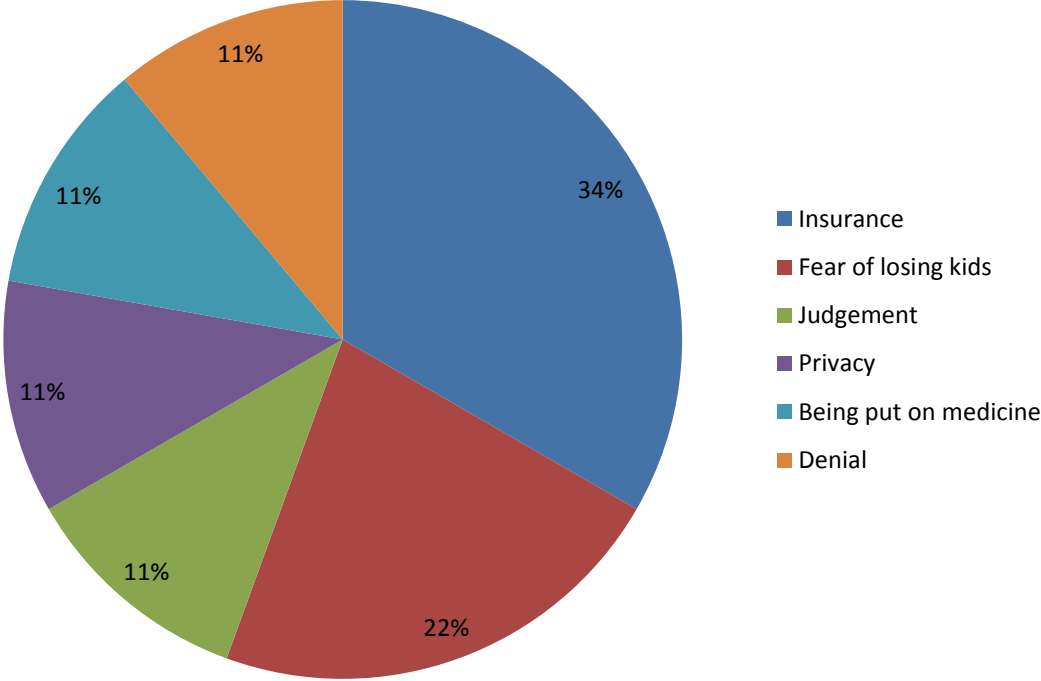
Number of responses: 9		Number of participants: 37

Finally, participants were asked, "Is there anything else we need to know about the health care need in the community?" The top responses indicated technology (67%) and other bills (33%).

Other Barriers to Health

Legend:
- ■ Other bills
- ■ Technology
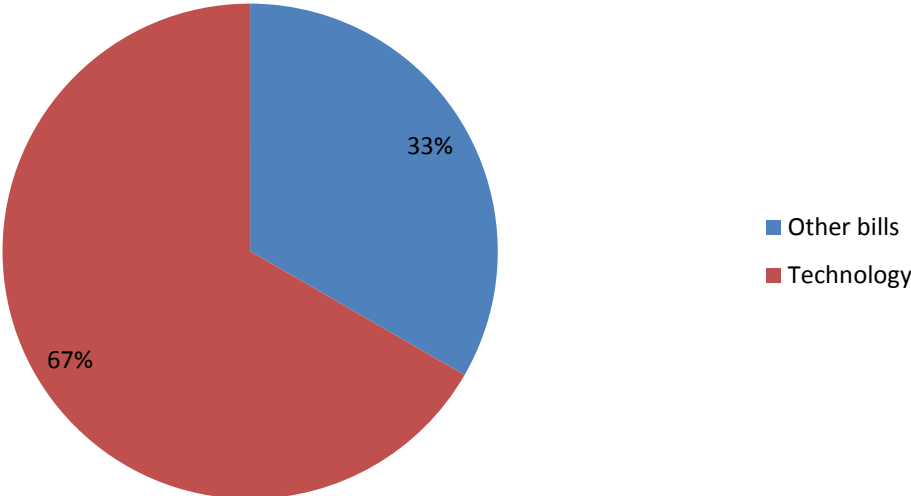
Number of responses: 3	Number of participants: 37

New River Valley Community Health Survey

Methodology

A Community Health Survey was conducted as a part of the 2016 NRVCHNA. This survey was used to gauge the health of the community and identify potential areas to target improvements. Input and oversight of survey development was provided by the Community Health Assessment Team (CHAT) and PATH's Steering Committee.

The survey was developed using community survey samples from the following:
- National Association of County and City Health Officials' Mobilizing for Action through Planning and Partnerships Community Themes and Strengths Assessments;
- YMCA's Community Healthy Living Index;
- Center for Disease Control's Behavioral Risk Factor Surveillance System;
- Center for Disease Control's National Health Interview Survey;
- Center for Disease Control's Youth Risk Behavior Surveillance System (YRBSS);
- Community Health Surveys from Montgomery and Giles County, Virginia;
- Martin County Community Health Assessment, Martin County, North Carolina; and
- Roanoke Community Health Needs Assessment, 2012.

A 40-question survey was developed that asked questions about an individual's access to medical, dental and mental health care. The survey also asked questions about chronic illness, healthy and risky behaviors, insurance status, and basic demographic information. Both an English and Spanish version of the survey was available. (The survey tool is included in Appendix 3: Community Health Survey).

Populations targeted for the survey were residents 18 years of age and older and included:

- General Population
  - All residents in the CHNA service area, including City of Radford and the counties of Floyd, Montgomery, Pulaski and Wythe
- Target Populations
  - Low-income and/or uninsured residents; minority populations; and residents living with chronic illness

A nonprobability sampling method, which does not involve random selection of respondents, was used.[4] This method is often used for social research. Although surveys were made available to all residents living in the New River Valley, oversampling of the target populations occurred through targeted outreach efforts. Oversampling methodologies involve data

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[4] Research Methods- Knowledge Base, Nonprobability Sampling, Web Center for Social Research Methods, www.socialresearchmethods.net/kb/sampnon/php

collection for particular subgroups of the population that may be underrepresented in a random sample survey.

The CHAT identified target populations, collection sites and mode(s) of distribution of the surveys. Surveys were distributed beginning April through June 2016. Over 40 organizations, agencies, and community members assisted in the distribution of the surveys. In total, 493 surveys were collected.

The survey was distributed via the following methods:

- Survey Monkey link (www.surveymonkey/com/r/2016CHNA)
- Phone line 888-964-6620
- Flyers and posters distributed throughout the community with survey URL and phone line information
- Paper surveys (collected by volunteers and/or staff of partner agencies)

A drawing for a $50 Kroger gift card was offered as an incentive to those who completed the survey (one survey per person).

Outreach strategies for survey distribution included:

- Face-to-face survey interviews at sites/agencies that serve the target populations using volunteers and/or staff
- Flyer and poster distributed at sites/agencies that serve the general community and target populations
- Survey URL posted on partner agency websites

Surveys were analyzed and reported using Survey Monkey and Microsoft Excel. All responses were entered into Survey Monkey either directly by the respondents or by Carilion Direct who entered responses from paper or phone surveys.

Survey Results

Access and Barriers to Healthcare

Please select the county or city you live in from the box below:

Please select the county or city you live in from the box below:		
Answer Options	Response Percent	Response Count
Floyd County	6.9%	34
Montgomery County	52.1%	257
Pulaski County	28.2%	139
Radford City	9.7%	48
Wythe County	3.0%	15
answered question		**493**
skipped question		**0**

City or County

- Floyd County
- Montgomery County
- Pulaski County
- Radford City
- Wythe County
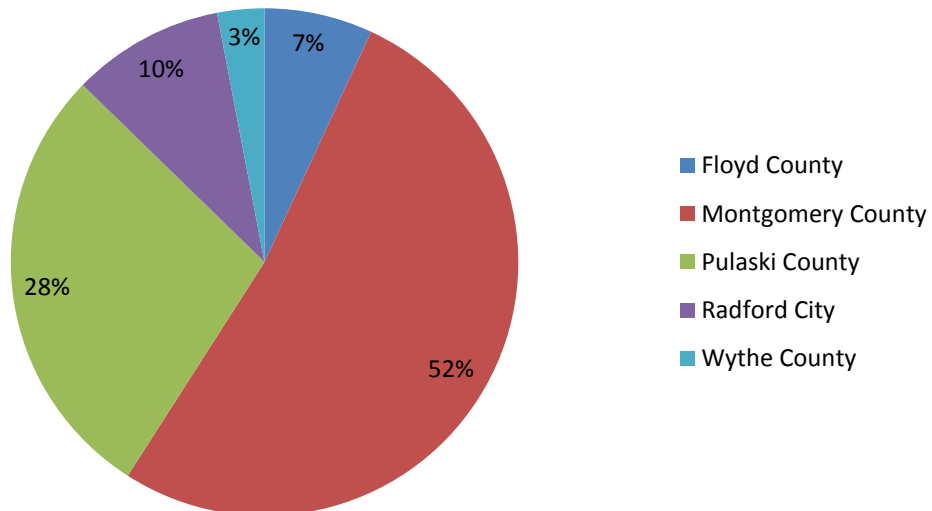
Question 1: Is there a specific doctor's office, health center, or other place that you usually go if you are sick or need advice about your health?

Answer Options	Response Percent	Response Count
Yes	87.8%	425
No	12.2%	59
answered question		484
skipped question		9

Is there a specific doctor's office, health center, or other place that you usually go if you are sick or need advice about your health?
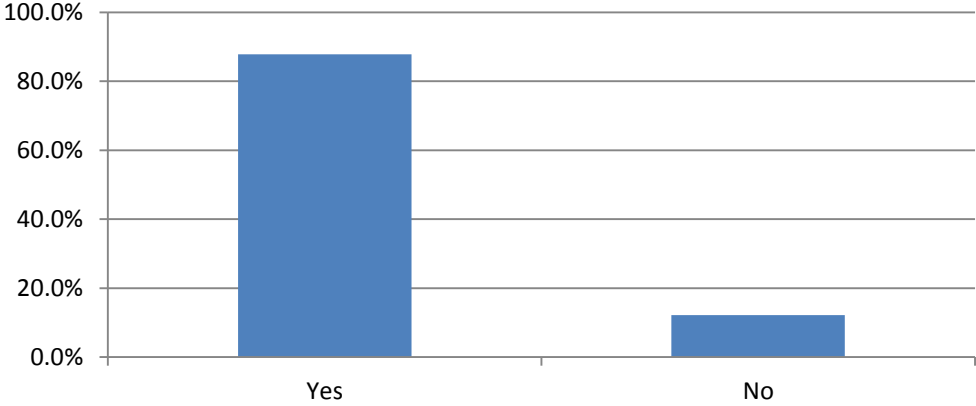
When thinking about the specific doctor's office, health center, or other place that you usually go if you are sick or need advice about your health:

Answer Options	Yes	No	Response Count
Is this where you would go for new health problems?	96.4%	3.6%	412
Is this where you would go for preventive health care, such as general check-ups, examinations, and immunizations (shots)?	95.6%	4.4%	412
Is this where you would go for referrals to other health professions when needed?	94.4%	5.6%	408
answered question			415
skipped question			78

When thinking about the specific doctor's office, health center, or other place that you usually go if you are sick or need advice about your health:

	Is this where you would go for new health problems?	Is this where you would go for preventive health care, such as general check-ups, examinations, and immunizations (shots)?	Is this where you would go for referrals to other health professions when needed?
No	3.6%	4.4%	5.6%
Yes	96.4%	95.6%	94.4%
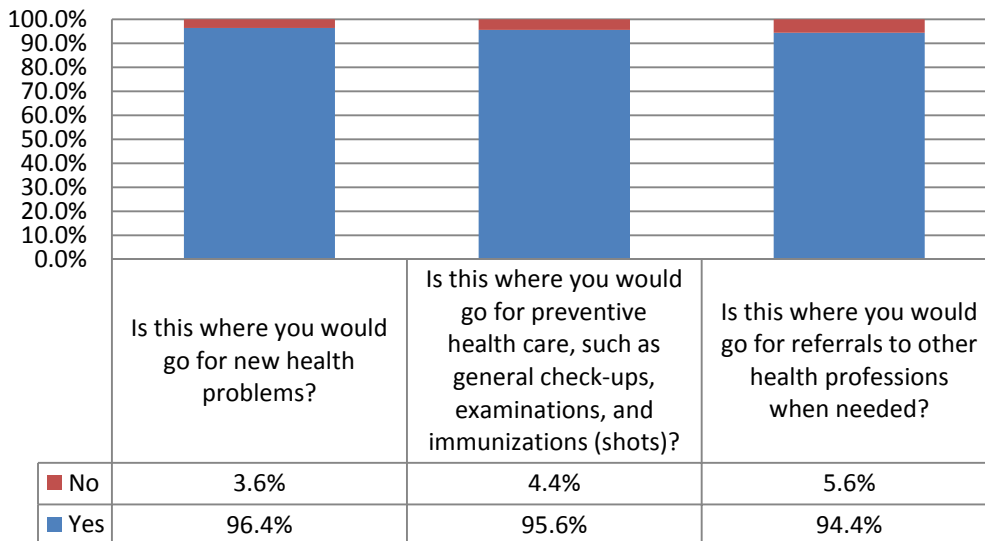
Question 2: Do you use medical care services?

Answer Options	Response Percent	Response Count
Yes	85.9%	407
No	14.1%	67
answered question		474
skipped question		19

Do you use medical care services?
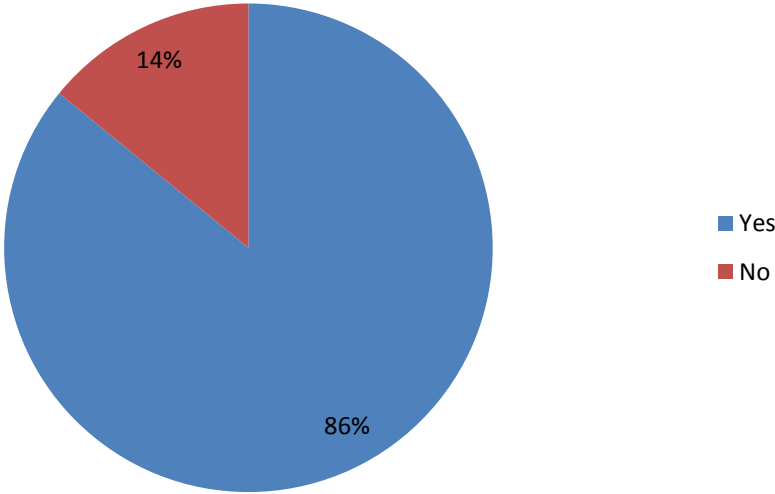
Where do you go for medical care? (Check all that apply)

Answer Options	Response Percent	Response Count
Doctor's Office	65.0%	267
Carilion Clinic Family Medicine	45.3%	186
Emergency Room	28.0%	115
Urgent Care / Walk in Clinic	27.5%	113
LewisGale Medical Center	16.3%	67
Community Health Center of the New River Valley	10.2%	42
Other (please specify)	4.9%	20
Health Department	4.1%	17
Pharmacy Clinic	1.9%	8
Tri-Area Community Health Care	1.2%	5
Pulaski Free Clinic	1.0%	4
Salem VA Medical Center	1.0%	4
	answered question	411
	skipped question	82

Where do you go for medical care?

	Doctor's Office	Carilion Clinic Family Medicine	Emergency Room	Urgent Care / Walk in Clinic	LewisGale Medical Center	Community Health Center of the New River Valley	Other (please specify)	Health Department	Pharmacy Clinic	Tri-Area Community Health Care	Pulaski Free Clinic	Salem VA Medical Center
%	65.0%	45.3%	28.0%	27.5%	16.3%	10.2%	4.9%	4.1%	1.9%	1.2%	1.0%	1.0%
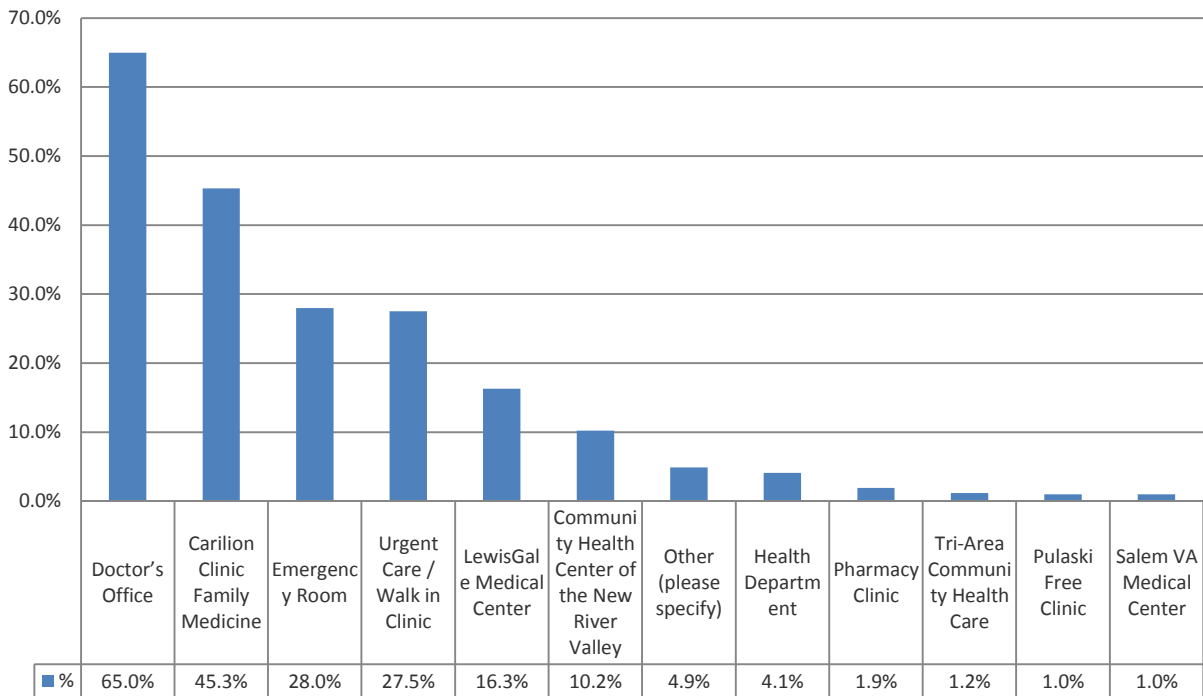
Question 3: Do you use dental care services?

Answer Options	Response Percent	Response Count
Yes	79.2%	380
No	20.8%	100
answered question		480
skipped question		13

Do you use dental care services?
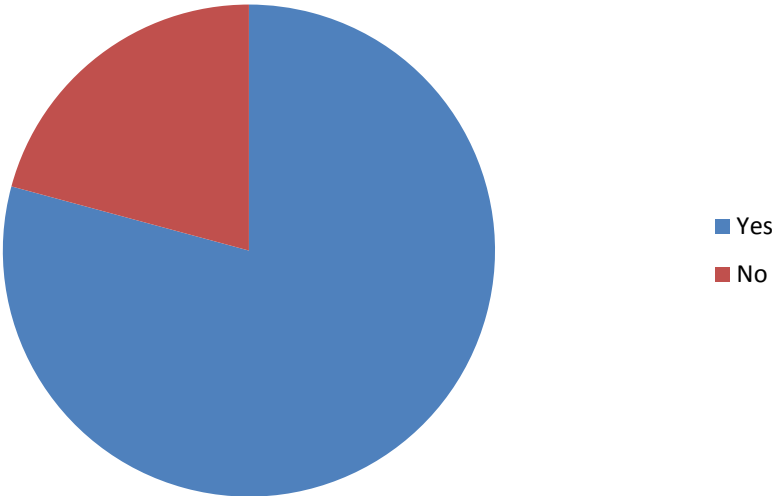
- Yes
- No

Where do you go for dental care? (Check all that apply)

Where do you go for dental care? (Check all that apply)		
Answer Options	Response Percent	Response Count
Dentist's office	85.8%	325
Community Health Center of the New River Valley	6.9%	26
Other (please specify)	6.1%	23
Kool Smiles	4.5%	17
Carilion Dental Clinic	0.5%	2
Pulaski Free Clinic	0.5%	2
Urgent Care / Walk in Clinic	0.5%	2
Dental Aid Partners	0.3%	1
Emergency Room	0.3%	1
Monroe Health Center	0.3%	1
Wytheville Community College Dental Hygiene Clinic	0.3%	1
Commonwealth Dental	0.0%	0
Craig County Dental Clinic	0.0%	0
Mission of Mercy Project	0.0%	0
Salem VA Medical Center	0.0%	0
	answered question	379
	skipped question	114

Where do you go for dental care?

	Dentist's office	Community Health Center of the New River Valley	Other (please specify)	Kool Smiles	Carilion Dental Clinic	Pulaski Free Clinic	Urgent Care / Walk in Clinic	Dental Aid Partners	Emergency Room	Monroe Health Center	Wytheville Community College Dental Hygiene Clinic
%	85.8%	6.9%	6.1%	4.5%	0.5%	0.5%	0.5%	0.3%	0.3%	0.3%	0.3%
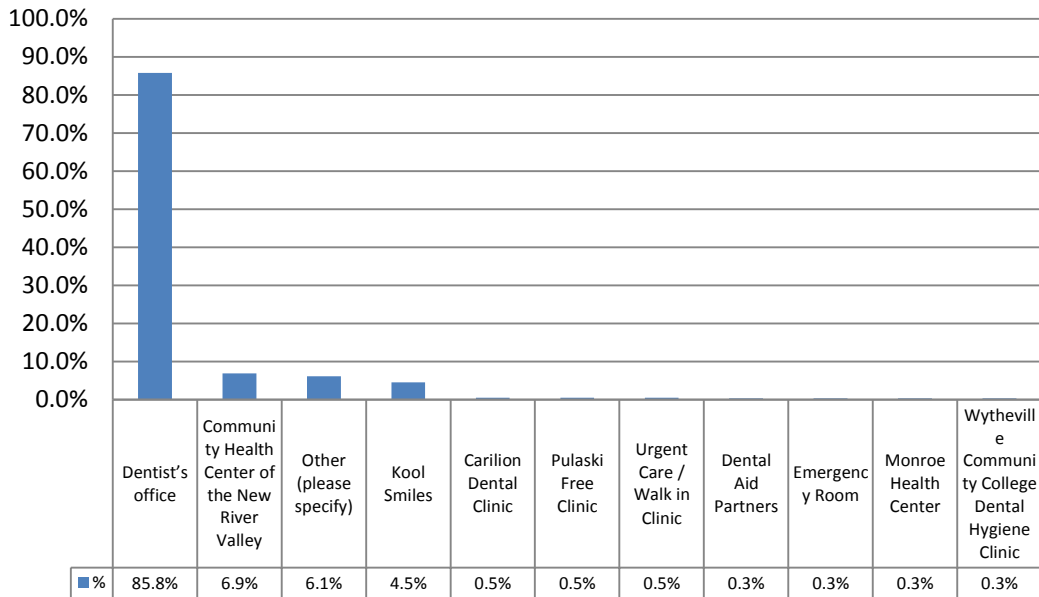
Question 4: Do you use mental health, alcohol abuse, or drug abuse services?

Do you use mental health, alcohol abuse, or drug abuse services?		
Answer Options	Response Percent	Response Count
Yes	15.0%	72
No	85.0%	407
answered question		479
skipped question		14

Do you use mental health, alcohol abuse, or drug abuse services?
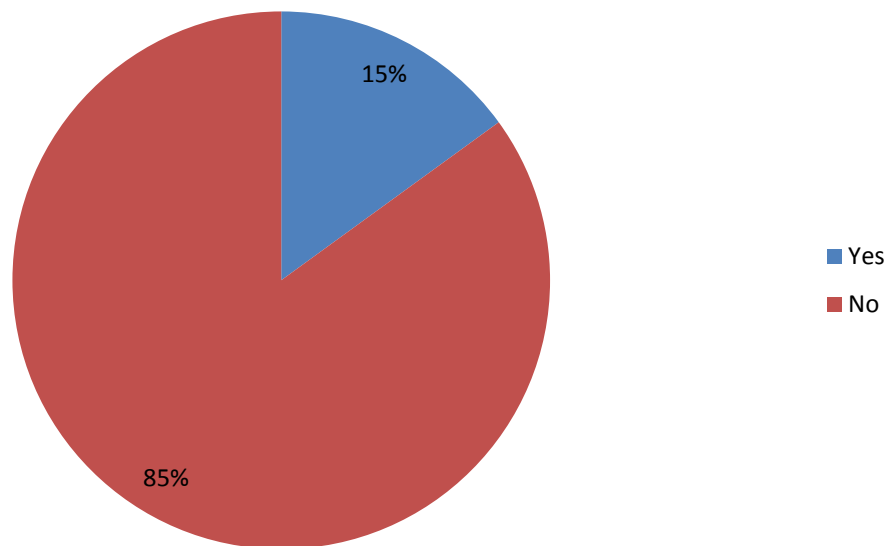
Where do you go for mental health, alcohol abuse, or drug abuse services? (Check all that apply)

Where do you go for mental health, alcohol abuse, or drug abuse services? (Check all that apply)		
Answer Options	Response Percent	Response Count
Doctor/Counselor's Office	54.8%	40
New River Valley Community Services	20.5%	15
Community Health Center of the New River Valley	17.8%	13
Other (please specify)	15.1%	11
Access Services	4.1%	3
Emergency Room	2.7%	2
Catawba Hospital	1.4%	1
Salem VA Medical Center	1.4%	1
Blue Ridge Behavioral Healthcare	0.0%	0
Connect	0.0%	0
Craig County Health Center	0.0%	0
Monroe Health Center	0.0%	0
Respond	0.0%	0
Urgent Care / Walk in Clinic	0.0%	0
	answered question	73
	skipped question	420

Where do you go for mental health, alcohol abuse, or drug abuse services?

	Doctor/Counselor's Office	New River Valley Community Services	Community Health Center of the New River Valley	Other (please specify)	Access Services	Emergency Room	Catawba Hospital	Salem VA Medical Center
%	54.8%	20.5%	17.8%	15.1%	4.1%	2.7%	1.4%	1.4%
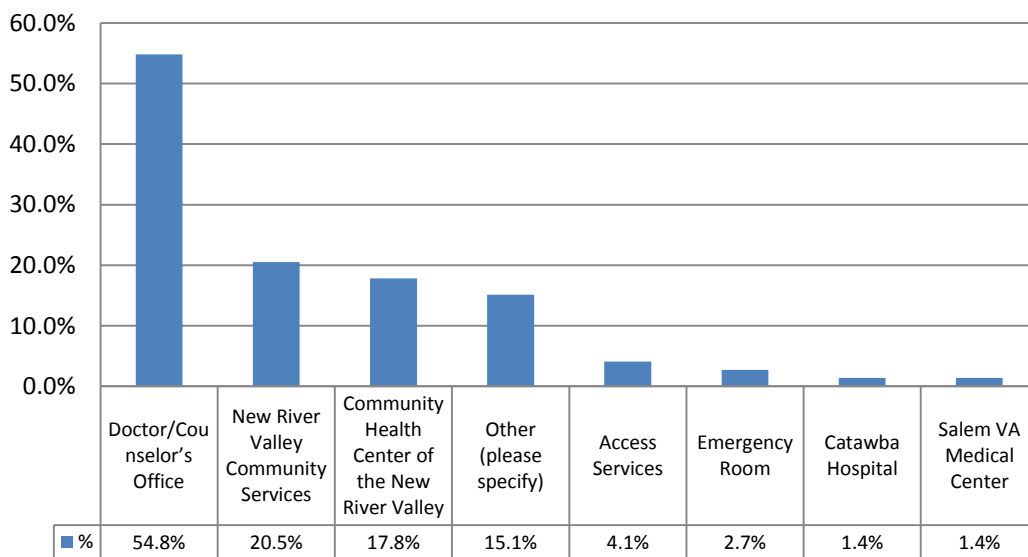
Question 5: What do you think are the five most important issues that affect health in our community? (Please check five)

Answer Options	Response Percent	Response Count
Alcohol and illegal drug use	52.7%	248
Overweight / obesity	50.7%	239
Mental health problems	35.9%	169
Lack of exercise	26.5%	125
Prescription drug abuse	26.1%	123
Access to healthy foods	25.1%	118
Poor eating habits	22.5%	106
Tobacco use / smoking	22.1%	104
Cancers	21.9%	103
Stress	21.7%	102
Child abuse / neglect	21.2%	100
Aging problems	21.0%	99
Diabetes	21.0%	99
Heart disease and stroke	19.5%	92
Cell phone use / texting and driving / distracted driving	15.5%	73
Dental problems	12.7%	60
High blood pressure	12.1%	57
Domestic violence	10.0%	47
Environmental health (ex. water quality, air quality, pesticides, etc.)	9.1%	43
Accidents in the home (ex. falls, burns, cuts)	6.6%	31
Bullying	5.5%	26
Unsafe sex	4.2%	20
Suicide	3.8%	18
Teenage pregnancy	3.6%	17
Not getting "shots" to prevent disease	3.4%	16
Not using seat belts / child safety seats / helmets	2.8%	13
Sexual assault	2.5%	12
Other (please specify)	2.3%	11
HIV / AIDS	2.1%	10
Lung disease	1.5%	7
Neighborhood safety	1.5%	7
Gang activity	1.1%	5
Infant death	0.8%	4
Homicide	0.6%	3
	answered question	471
	skipped question	22

Question 6: Which health care services are hard to get in our community? (Check all that apply)

Answer Options	Response Percent	Response Count
Mental health / counseling	33.9%	151
Adult dental care	29.9%	133
Substance abuse services – drug and alcohol	23.6%	105
Alternative therapy (ex. herbal, acupuncture, massage)	22.2%	99
Eldercare	20.9%	93
Programs to stop using tobacco products	20.9%	93
Specialty care (ex. heart doctor)	14.4%	64
Urgent care / walk in clinic	13.7%	61
None	11.9%	53
Child dental care	11.7%	52
Domestic violence services	11.5%	51
Medication / medical supplies	10.3%	46
Dermatology	9.9%	44
Vision care	9.4%	42
Cancer care	9.2%	41
End of life / hospice / palliative care	7.9%	35
Family doctor	7.9%	35
Family planning / birth control	7.9%	35
Women's health services	7.4%	33
Preventive care (ex. yearly check-ups)	6.1%	27
Other (please specify)	5.8%	26
Emergency room care	4.7%	21
Lab work	3.8%	17
Physical therapy	3.4%	15
Ambulance services	2.7%	12
Chiropractic care	2.5%	11
X-rays / mammograms	2.5%	11
Inpatient hospital	2.2%	10
Immunizations	1.3%	6
answered question		445
skipped question		48

Question 7: What do you feel prevents you from getting the healthcare you need? (Check all that apply)

Answer Options	Response Percent	Response Count
Cost	40.8%	179
I can get the healthcare I need	36.0%	158
High co-pay	23.9%	105
Lack of evening and weekend services	22.1%	97
Long waits for appointments	20.5%	90
No health Insurance	9.6%	42
Afraid to have check-ups	7.1%	31
Don't know what types of services are available	6.8%	30
Other (please specify)	6.8%	30
Location of offices	6.4%	28
No transportation	5.5%	24
Can't find providers that accept my Medicaid insurance	4.6%	20
Have no regular source of healthcare	4.3%	19
Childcare	4.1%	18
Can't find providers that accept my Medicare insurance	3.4%	15
Don't trust doctors / clinics	3.0%	13
Don't like accepting government assistance	2.1%	9
Language services	0.5%	2
answered question		439
skipped question		54

General Health Questions

Question 8: Please check one of the following for each statement:

Answer Options	Yes %	No %	Not Applicable %	Response Count
I have had an eye exam within the past 12 months.	61.89%	37.67%	0.44%	454
I have had a mental health / substance abuse visit within the past 12 months.	18.22%	61.78%	20.00%	450
I have had a dental exam within the past 12 months.	67.63%	31.93%	0.44%	451
I have been to the emergency room in the past 12 months.	24.94%	73.29%	1.77%	453
I have been to the emergency room for an injury in the past 12 months (e.g. motor vehicle crash, fall, poisoning, burn, cut, etc.).	8.41%	88.27%	3.32%	452
Have you been a victim of domestic violence or abuse in the past 12 months?	3.75%	92.49%	3.75%	453
My doctor has told me that I have a long-term or chronic illness.	32.51%	64.80%	2.69%	446
I take the medicine my doctor tells me to take to control my chronic illness.	39.56%	25.11%	35.33%	450
I can afford medicine needed for my health conditions.	60.09%	19.73%	20.18%	446
I am over 21 years of age and have had a pap smear in the past three years (if male or under 21, please check not applicable).	53.85%	21.76%	24.40%	455
I am over 40 years of age and have had a mammogram in the past 12 months (if male or under 40, please check not applicable).	27.11%	23.33%	49.56%	450
I am over 50 years of age and have had a colonoscopy in the past 10 years (if under 50, please check not applicable).	28.92%	19.65%	51.43%	453
Does your neighborhood support physical activity? (e.g. parks, sidewalks, bike lanes, etc.)	61.06%	37.17%	1.77%	452
Does your neighborhood support healthy eating? (e.g. community gardens, farmers' markets, etc.)	65.03%	33.41%	1.56%	449
In the area that you live, is it easy to get affordable fresh fruits and vegetables?	75.94%	23.40%	0.66%	453
Have there been times in the past 12 months when you did not have enough money to buy the food that you or your family needed?	24.39%	74.28%	1.33%	451
			answered question	455
			skipped question	38

Question 9: Where do you get the food that you eat at home? (Check all that apply)

Answer Options	Response Percent	Response Count
Grocery store	98.2%	445
Take-out / fast food / restaurant	40.6%	184
Farmers' Market	31.6%	143
Home Garden	25.2%	114
Dollar store	15.7%	71
Food bank / food kitchen / food pantry	8.2%	37
Corner store / convenience store / gas station	6.4%	29
Other (please specify)	6.2%	28
I regularly receive food from family, friends, neighbors, or my church	5.3%	24
Community Garden	2.6%	12
Back-pack or summer food programs	1.5%	7
I do not eat at home	0.9%	4
Meals on Wheels	0.7%	3
	answered question	453
	skipped question	40

Question 10: During the past 7 days, how many times did you eat fruit or vegetables (fresh or frozen)? Do not count fruit or vegetable juice. (Please check one)

Answer Options	Response Percent	Response Count
I did not eat fruit or vegetables during the past 7 days	3.1%	14
1 - 3 times during the past 7 days	23.4%	104
4 - 6 times during the past 7 days	23.8%	106
1 time per day	9.2%	41
2 times per day	19.1%	85
3 times per day	14.2%	63
4 or more times per day	7.2%	32
answered question		445
skipped question		48

During the past 7 days, how many times did you eat fruit or vegetables (fresh or frozen)? Do not count fruit or vegetable juice.

	I did not eat fruit or vegetables during the…	1 – 3 times during the past 7 days	4 – 6 times during the past 7 days	1 time per day	2 times per day	3 times per day	4 or more times per day
■ Response Percent	3.1%	23.4%	23.8%	9.2%	19.1%	14.2%	7.2%
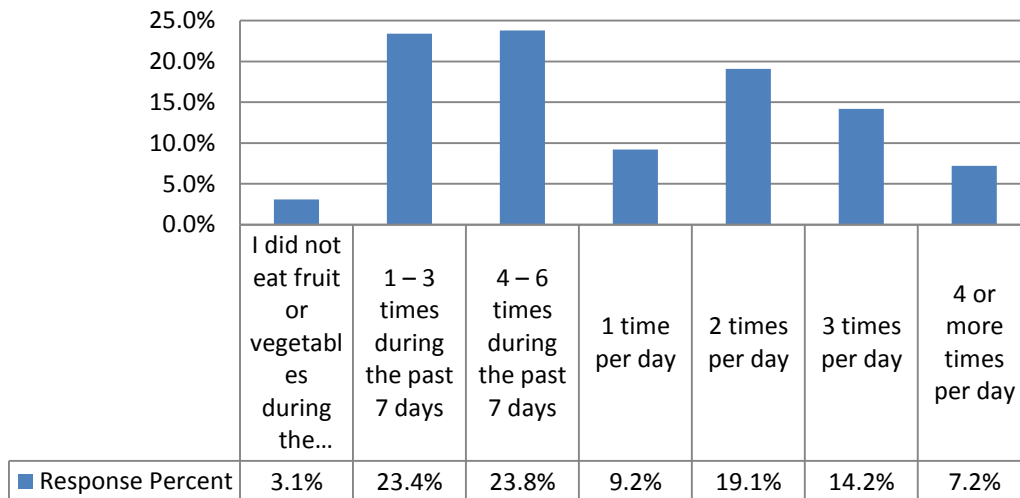
Question 11: Have you been told by a doctor that you have… (Check all that apply)

Answer Options	Response Percent	Response Count
Depression or anxiety	33.0%	140
Obesity / overweight	30.4%	129
High blood pressure	25.0%	106
I have no health problems	22.6%	96
High cholesterol	18.9%	80
Other (please specify)	16.0%	68
Asthma	12.3%	52
Mental health problems	10.6%	45
High blood sugar or diabetes	10.1%	43
Heart disease	5.9%	25
Cancer	4.2%	18
COPD / chronic bronchitis / Emphysema	4.0%	17
Drug or alcohol problems	3.3%	14
Stroke / cerebrovascular disease	1.4%	6
HIV / AIDS	0.5%	2
Cerebral palsy	0.0%	0
answered question		424
skipped question		69

Question 12: How long has it been since you last visited a doctor for a routine checkup?
(Please check one)

Answer Options	Response Percent	Response Count
Within the past year (1 to 12 months ago)	73.8%	327
Within the past 5 years (2 to 5 years ago)	9.9%	44
Within the past 2 years (1 to 2 years ago)	8.4%	37
5 or more years ago	7.9%	35
answered question		443
skipped question		50

How long has it been since you last visited a doctor for a routine checkup?

- Within the past year (1 to 12 months ago)
- Within the past 5 years (2 to 5 years ago)
- Within the past 2 years (1 to 2 years ago)
- 5 or more years ago
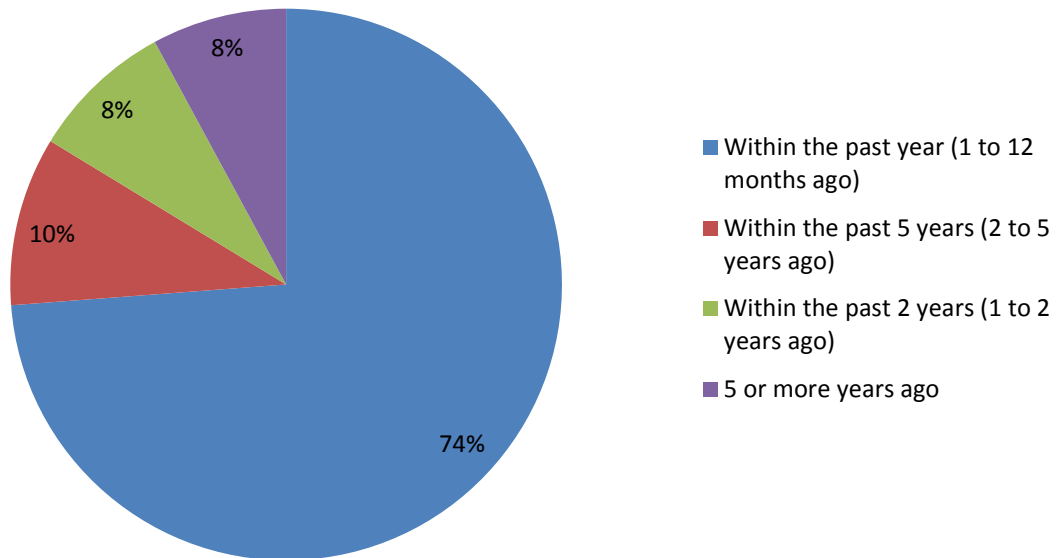
Question 13: How long has it been since you last visited a dentist or a dental clinic for any reason? Include visits to dental specialists, such as orthodontists. (Please check one)

How long has it been since you last visited a dentist or a dental clinic for any reason? Include visits to dental specialists, such as orthodontists. (Please check one)		
Answer Options	Response Percent	Response Count
Within the past year (1 to 12 months ago)	67.2%	297
Within the past 5 years (2 to 5 years ago)	13.1%	58
Within the past 2 years (1 to 2 years ago)	8.1%	36
5 or more years ago	11.5%	51
answered question		442
skipped question		51

How long has it been since you last visited a dentist or a dental clinic for any reason? Include visits to dental specialists, such as orthodontists. (Please check one)

- Within the past year (1 to 12 months ago)
- Within the past 5 years (2 to 5 years ago)
- Within the past 2 years (1 to 2 years ago)
- 5 or more years ago
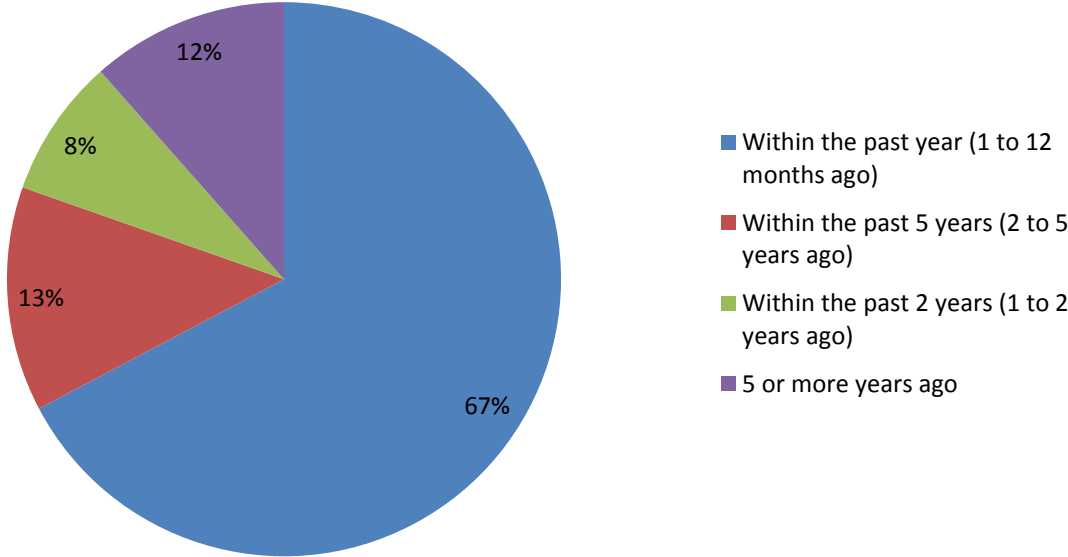
Question 14: In the past 7 days, on how many days were you physically active for a total of at least 30 minutes? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard for some of the time.)

In the past 7 days, on how many days were you physically active for a total of at least 30 minutes? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard for some of the time.)		
Answer Options	Response Percent	Response Count
0 days	10.2%	45
1 days	11.8%	52
2 days	14.7%	65
3 days	17.9%	79
4 days	14.0%	62
5 days	12.4%	55
6 days	5.7%	25
7 days	13.3%	59
answered question		442
skipped question		51

In the past 7 days, on how many days were you physically active for a total of at least 30 minutes? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard for…

	0 days	1 days	2 days	3 days	4 days	5 days	6 days	7 days
■ Response Percent	10.2%	11.8%	14.7%	17.9%	14.0%	12.4%	5.7%	13.3%
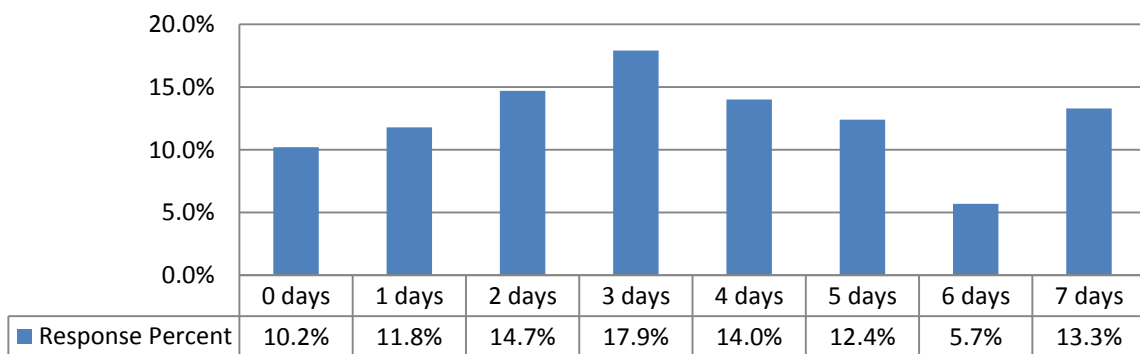
Question 15: Other than your regular job, what physical activity or exercises do you participate in? (Check all that apply)

Answer Options	Response Percent	Response Count
Walking	76.7%	306
Gardening	33.1%	132
Hiking	21.1%	84
Weight training	17.0%	68
Running	15.3%	61
Group exercise classes	14.3%	57
Yoga / pilates	12.5%	50
Bicycling	12.0%	48
Swimming	11.8%	47
Canoeing / kayaking	8.8%	35
Dancing	7.8%	31
Other	6.3%	25
Individual sports	4.5%	18
Hunting	4.3%	17
Horseback riding	2.8%	11
Team sports	2.8%	11
answered question		399
skipped question		94

Question 16: In the past 7 days, how many times did all, or most, of your family living in your house eat a meal together?

In the past 7 days, how many times did all, or most, of your family living in your house eat a meal together?		
Answer Options	Response Percent	Response Count
Never	3.8%	17
1-2 times	11.3%	50
3-4 times	16.7%	74
5-6 times	16.9%	75
7 times	13.3%	59
More than 7 times	21.2%	94
Not applicable / I live alone	16.7%	74
	answered question	443
	skipped question	50

In the past 7 days, how many times did all, or most, of your family living in your house eat a meal together?

	Never	1-2 times	3-4 times	5-6 times	7 times	More than 7 times	Not applicable / I live alone
%	3.8%	11.3%	16.7%	16.9%	13.3%	21.2%	16.7%
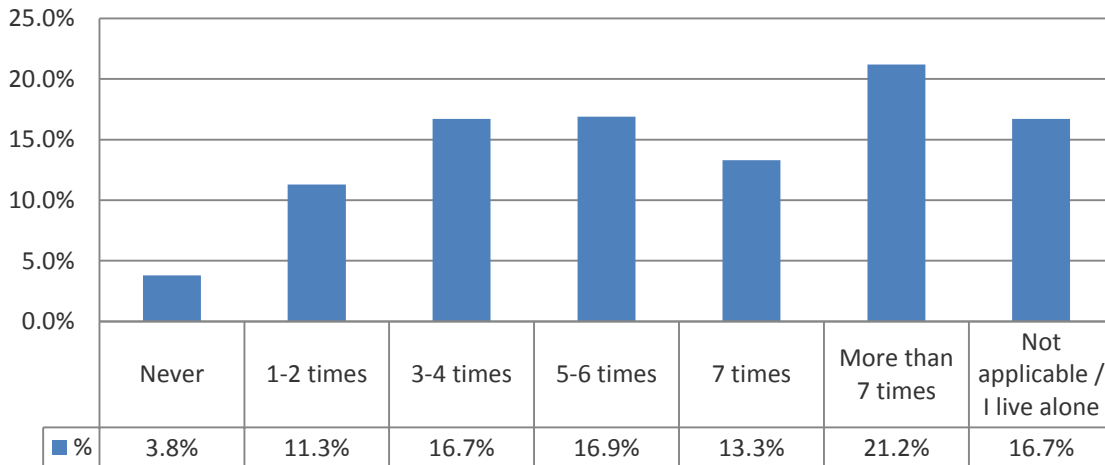
Question 17: Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

Answer Options	Response Count
Average	5.6
answered question	380
skipped question	113

Question 18: Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

Answer Options	Response Count
Average	6.5
answered question	381
skipped question	112

Question 19: During the last 30 days, how many days did you miss work or school due to pain or illness (physical or mental)?

Answer Options	Response Count
Average	1.0
answered question	344
skipped question	149

Question 20: During the past 30 days: (Check all that apply)

Answer Options	Response Percent	Response Count
I have had 5 or more alcoholic drinks (if male) or 4 or more alcoholic drinks (if female) during one occasion.	55.2%	85
I have used tobacco products (cigarettes, smokeless tobacco, e-cigarettes, etc.)	53.9%	83
I have taken prescription drugs to get high	1.9%	3
I have used marijuana	11.0%	17
I have used other illegal drugs (e.g. cocaine, heroin, ecstasy, crack, LSD, etc.)	0.6%	1
	answered question	154
	skipped question	339

During the past 30 days:

	I have had 5 or more alcoholic drinks (if male) or 4 or more alcoholic drinks (if female) during one occasion.	I have used tobacco products (cigarettes, smokeless tobacco, e-cigarettes, etc.)	I have taken prescription drugs to get high	I have used marijuana	I have used other illegal drugs (e.g. cocaine, heroin, ecstasy, crack, LSD, etc.)
%	55.2%	53.9%	1.9%	11.0%	0.6%
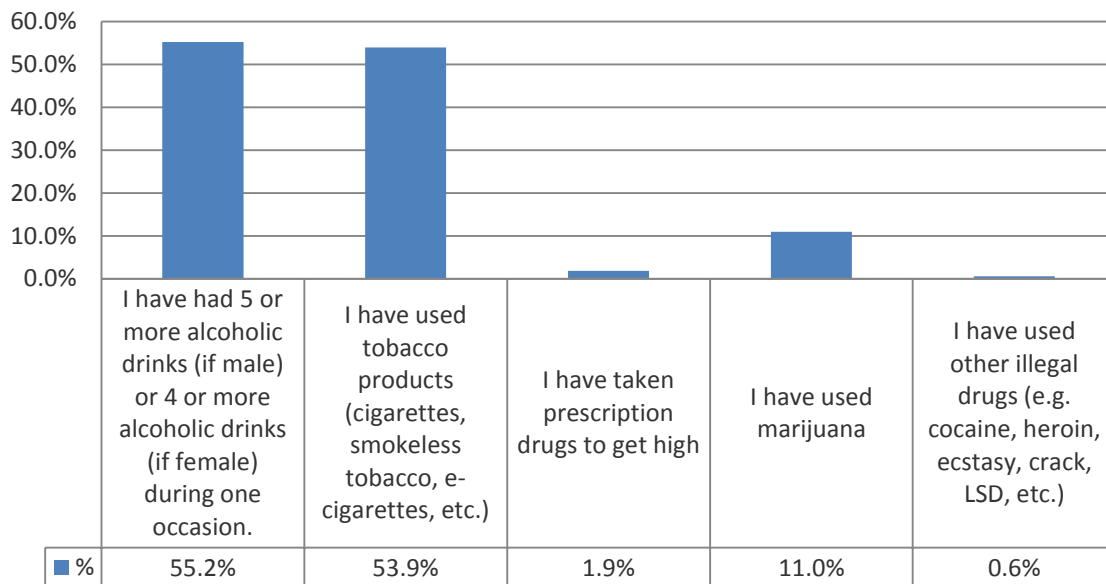
Question 21: Have you ever used heroin?

Answer Options	Response Percent	Response Count
Yes	0.9%	4
No	99.1%	439
answered question		443
skipped question		50

Have you ever used heroin?

	Yes	No
■ %	0.9%	99.1%
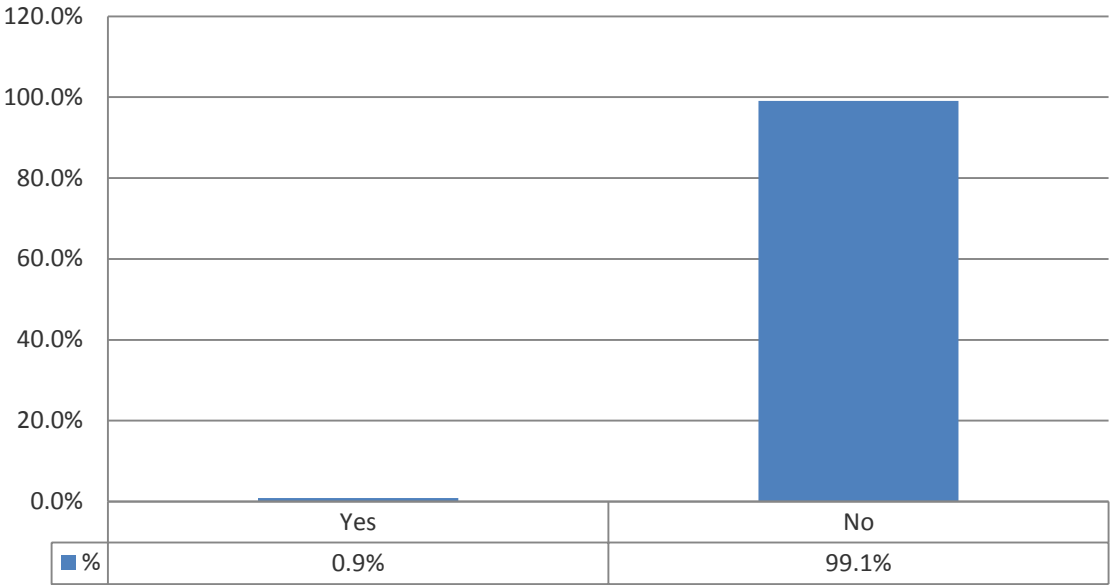
Question 22: How many vehicles are owned, leased, or available for regular use by you and those who currently live in your household? Please be sure to include motorcycles, mopeds and RVs.

Answer Options	Response Count
Average Vehicles	2.1
answered question	426
skipped question	67

Question 23: If you do not drive, what mode of transportation do you use typically use?

Answer Options	Response Percent	Response Count
Not applicable- I drive	85.5%	282
Friends / Family drive me	8.5%	28
Bike or walk	7.3%	24
Public transit (i.e. bus, shuttle, similar)	6.1%	20
Other (please specify)	2.1%	7
Taxi	0.6%	2
RADAR / CORTRAN	0.0%	0
answered question		330
skipped question		163

If you do not drive, what mode of transportation do you use typically use?

	Not applicable- I drive	Friends / Family drive me	Bike or walk	Public transit (i.e. bus, shuttle, similar)	Other (please specify)	Taxi	RADAR / CORTRAN
%	85.5%	8.5%	7.3%	6.1%	2.1%	0.6%	0.0%
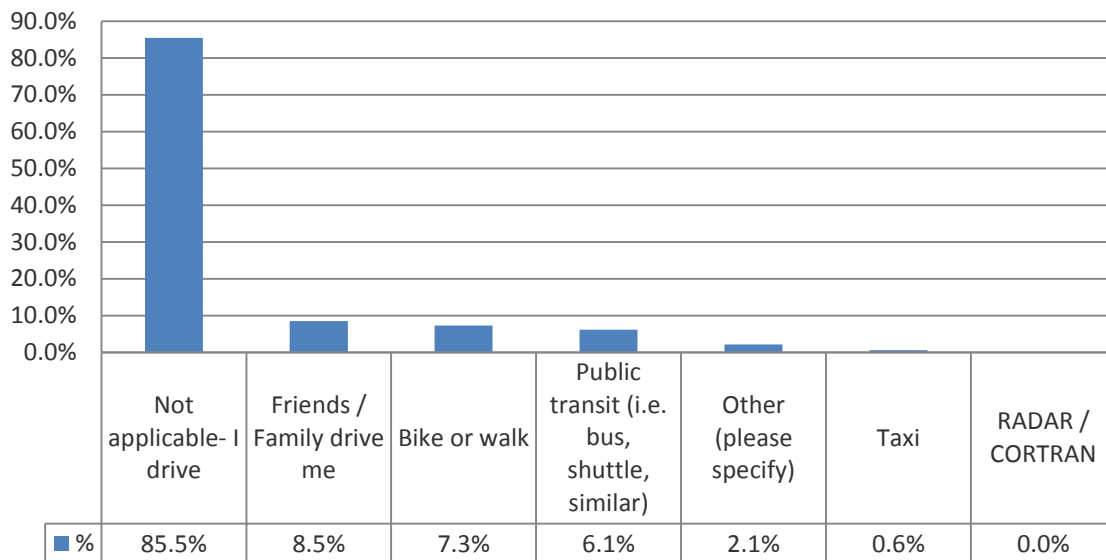
Question 24: What types of information help you learn the best about your health? (Check all that apply)

Answer Options	Response Percent	Response Count
I learn best by talking with my health professional (i.e. doctor, nurse, care coordinator, etc.)	66.2%	288
Internet or web information	60.5%	263
Reading materials (i.e. brochure, newspaper, magazine, books)	41.8%	182
My Chart / patient portal	26.7%	116
Classroom presentations, live presentations, or hands on demonstrations	22.3%	97
Pictures, diagrams, illustrations or photographs	22.3%	97
Group activity / support group	17.7%	77
Video presentation (i.e. video tape, DVD, movie, television)	13.1%	57
Other (please specify)	2.5%	11
answered question		435
skipped question		58

What types of information help you learn the best about your health?

	I learn best by talking with my health professional (i.e. doctor, nurse, care coordinator, etc.)	Internet or web information	Reading materials (i.e. brochure, newspaper, magazine, books)	My Chart / patient portal	Classroom presentations, live presentations, or hands on demonstrations	Pictures, diagrams, illustrations or photographs	Group activity / support group	Video presentation (i.e. video tape, DVD, movie, television)	Other (please specify)
%	66.2%	60.5%	41.8%	26.7%	22.3%	22.3%	17.7%	13.1%	2.5%

Demographic Information and Health Insurance

Question 25: Which of the following describes your current type of health insurance? (Check all that apply)

Answer Options	Response Percent	Response Count
COBRA	0.0%	0
Dental Insurance	32.0%	139
Employer Provided Insurance	57.0%	248
Government (VA, Champus)	2.1%	9
Health Savings / Spending Account	8.7%	38
Individual / Private Insurance / Market Place / Obamacare	12.0%	52
Medicaid	8.7%	38
Medicare	15.4%	67
Medicare Supplement	7.8%	34
No Dental Insurance	14.3%	62
No Health Insurance	9.0%	39
answered question		435
skipped question		58

Question 26: If you have no health insurance, why don't you have insurance? (Check all that apply)

Answer Options	Response Percent	Response Count
Not applicable- I have health insurance	84.5%	224
Too expensive / cost	12.1%	32
Unemployed / no job	3.4%	9
Not available at my job	2.3%	6
I don't understand ACA / Obamacare Options	1.1%	3
Other (please specify)	0.4%	1
Student	0.0%	0
	answered question	265
	skipped question	228

If you have no health insurance, why don't you have insurance?

	Not applicable- I have health insurance	Too expensive / cost	Unemployed / no job	Not available at my job	I don't understand ACA / Obamacare Options	Other (please specify)	Student
%	84.5%	12.1%	3.4%	2.3%	1.1%	0.4%	0.0%
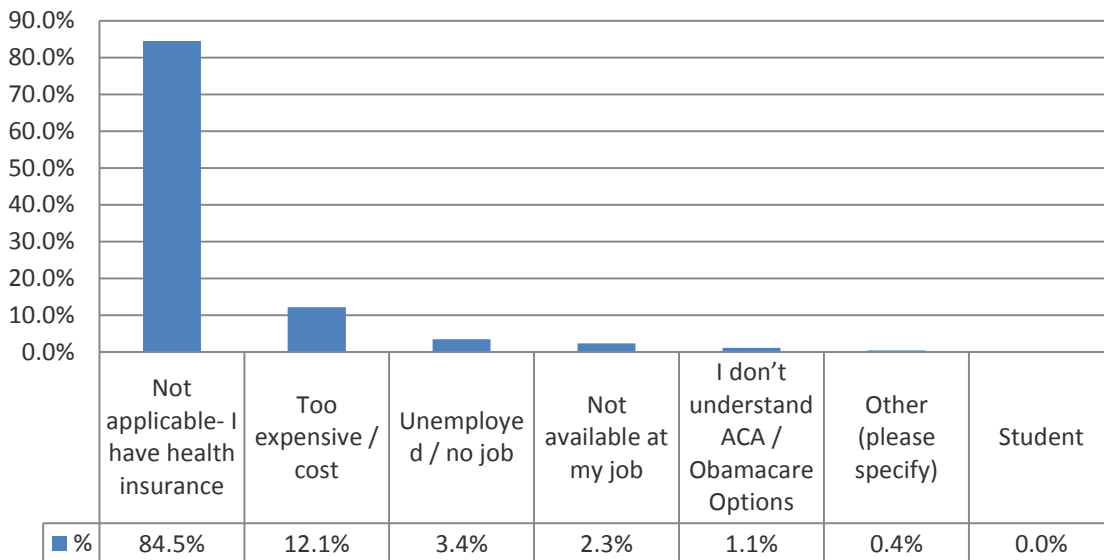
Question 27: What is your ZIP code?

Location	Answer Options	Response Count	Response Percent
Christiansburg, Montgomery CO.	24073	107	23.7%
Blacksburg, Montgomery CO.	24060	106	23.5%
Pulaski, Pulaski CO.	24301	61	13.5%
Radford, Radford CITY	24141	46	10.2%
Dublin, Pulaski CO.	24084	43	9.5%
Floyd, Floyd CO.	24091	16	3.5%
Riner, Montgomery CO.	24149	11	2.4%
Draper, Pulaski CO.	24324	11	2.4%
Elliston, Montgomery CO.	24087	9	2.0%
Wytheville, Wythe CO.	24382	8	1.8%
Willis, Floyd CO.	24380	7	1.6%
Shawsville, Montgomery CO.	24162	6	1.3%
Check, Floyd CO.	24072	4	0.9%
Copper Hill, Floyd CO.	24079	3	0.7%
Max Meadows, Wythe CO.	24360	3	0.7%
Hiwassee, Pulaski CO.	24347	2	0.4%
Roanoke, Roanoke CITY	24016	1	0.2%
Roanoke, Roanoke CITY	24031	1	0.2%
Parrott, Pulaski CO.	24132	1	0.2%
Pearisburg, Giles CO.	24134	1	0.2%
Pilot, Montgomery CO.	24138	1	0.2%
Radford, Radford CITY	24143	1	0.2%
Laurel Fork, Carroll CO.	24352	1	0.2%
Rural Retreat, Wythe CO.	24368	1	0.2%
answered question		451	
skipped question		42	

Question 28: What is your street address (optional)?

Results are not public and will be used for community health improvement initiatives

Question 29: What is your age?

Answer Options	Response Count
Average Age	44
answered question	426
skipped question	67

Question 30: What is your gender?

Answer Options	Response Percent	Response Count
Male	20.0%	88
Female	80.0%	353
Transgender	0.0%	0
	answered question	441
	skipped question	52

What is your gender?
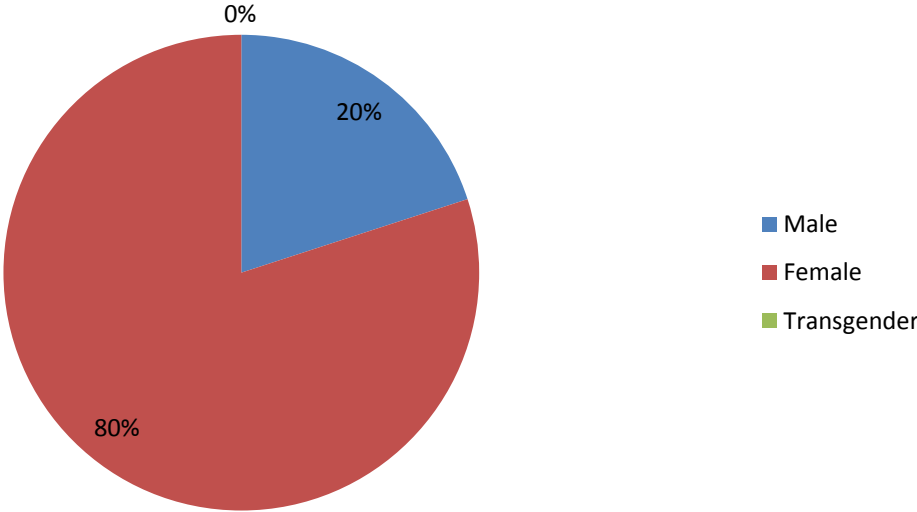
Question 31 and Question 32:What is your height, weight, and BMI calculation

What is your height?	
Answer Options	Response Average
Feet	5
Inches	5
What is your weight?	
Answer Options	Response Average
Pounds	182.28
BMI	Response Average
BMI	30.30

Question 33: How many people live in your home (including yourself)?

Answer Options	Response Average	Response Count
Number who are 0 - 17 years of age:	1.19	318
Number who are 18 - 64 years of age :	1.86	402
Number who are 65 years of age or older:	.37	238
answered question		435
skipped question		58

Question 34:   What is your highest education level completed?

Answer Options	Response Percent	Response Count
Less than high school	0.7%	3
Some high school	3.7%	16
High school diploma	29.8%	130
Associates	19.5%	85
Bachelors	23.2%	101
Masters / PhD	23.2%	101
answered question		436
skipped question		57

What is your highest education level completed?
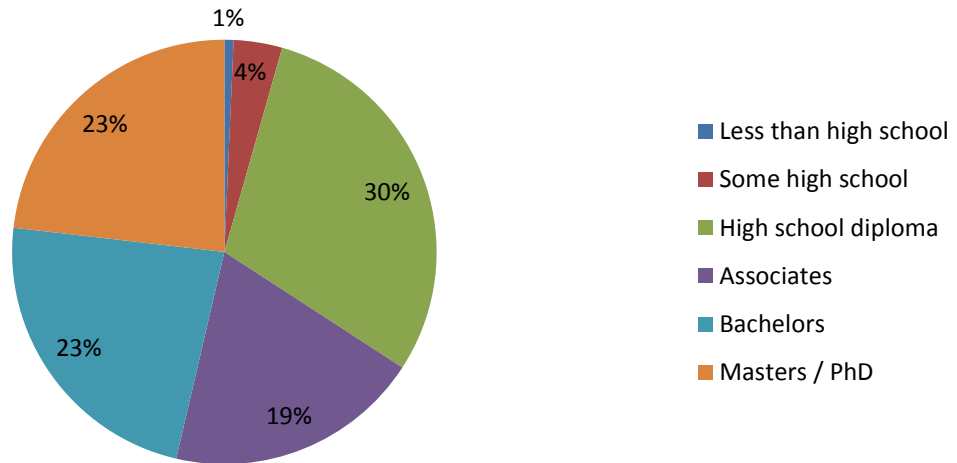
Question 35: What is your primary language?

Answer Options	Response Percent	Response Count
English	99.1%	420
Spanish	0.5%	2
Other (please specify)	0.5%	2
answered question		424
skipped question		69

What is your primary language?

.5% .5%

99%

- English
- Spanish
- Other (please specify)
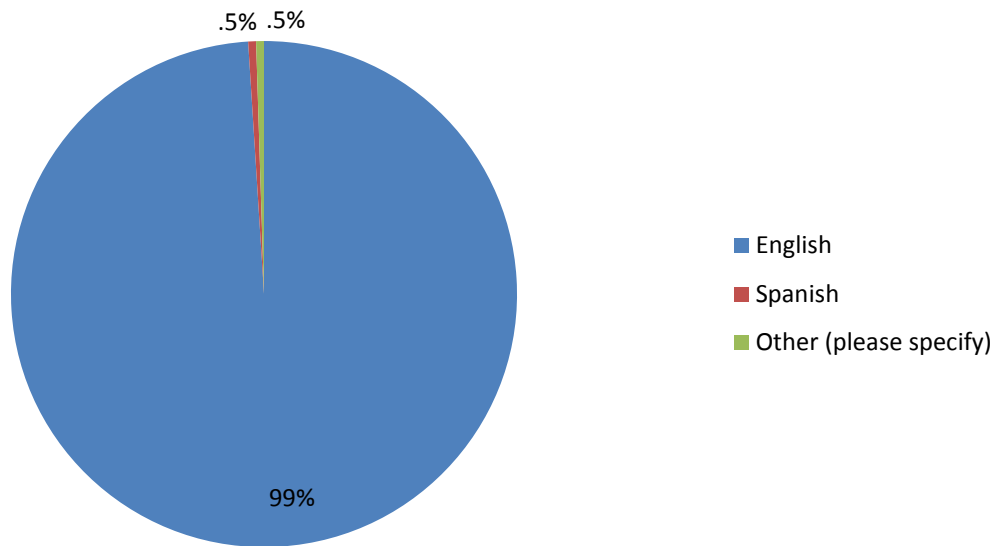
Question 36: What ethnicity do you identify with? (Check all that apply)

Answer Options	Response Percent	Response Count
American Indian / Alaskan Native	0.9%	4
Asian	1.1%	5
Black / African American	3.9%	17
Latino	1.4%	6
Native Hawaiian / Pacific Islander	0.2%	1
White	90.9%	398
More than one race	1.6%	7
Decline to answer	1.1%	5
Other (please specify)	0.7%	3
	answered question	438
	skipped question	55

What ethnicity do you identify with? (Check all that apply)

- American Indian / Alaskan Native
- Asian
- Black / African American
- Latino
- Native Hawaiian / Pacific Islander
- White
- More than one race
- Decline to answer
- Other (please specify)
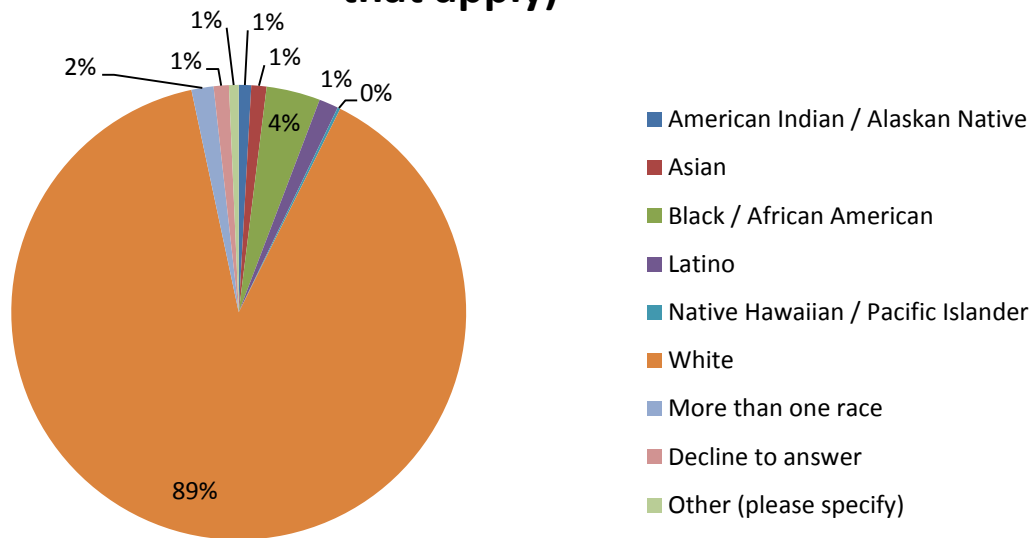
Question 37: What is your marital status?

Answer Options	Response Percent	Response Count
Married	50.4%	213
Single	26.0%	110
Divorced	12.5%	53
Widowed	6.6%	28
Domestic Partnership	4.5%	19
	answered question	423
	skipped question	70

What is your marital status?
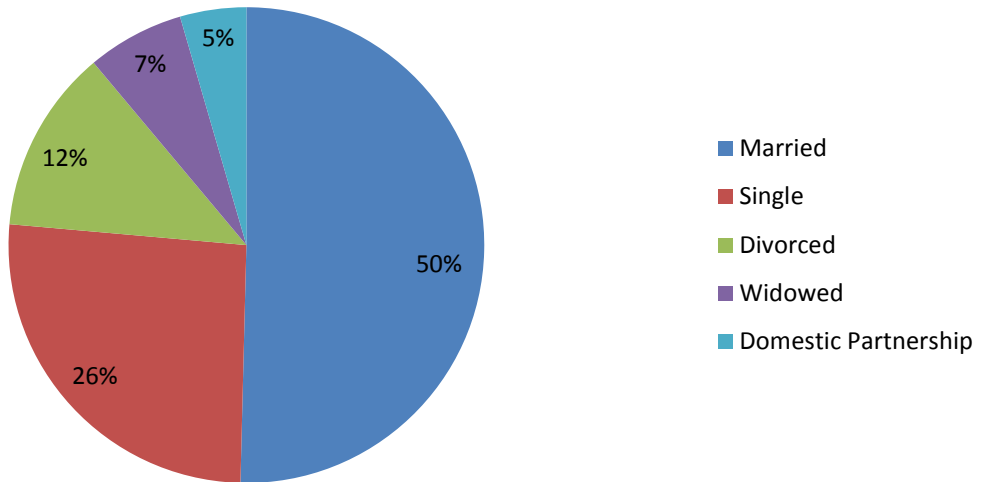
Question 38: What is your yearly household income?

Answer Options	Response Percent	Response Count
$0 - $10,000	11.6%	48
$10,001 - $20,000	12.0%	50
$20,001 - $30,000	10.6%	44
$30,001 - $40,000	10.1%	42
$40,001 - $50,000	11.1%	46
$50,001 - $60,000	9.6%	40
$60,001 - $70,000	8.7%	36
$70,001 - $100,000	16.6%	69
$100,001 and above	9.6%	40
answered question		415
skipped question		78

What is your yearly household income?

	$0 – $10,000	$10,001 – $20,000	$20,001 – $30,000	$30,001 – $40,000	$40,001 – $50,000	$50,001 – $60,000	$60,001 – $70,000	$70,001 – $100,000	$100,001 and above
Response Percent	11.6%	12.0%	10.6%	10.1%	11.1%	9.6%	8.7%	16.6%	9.6%
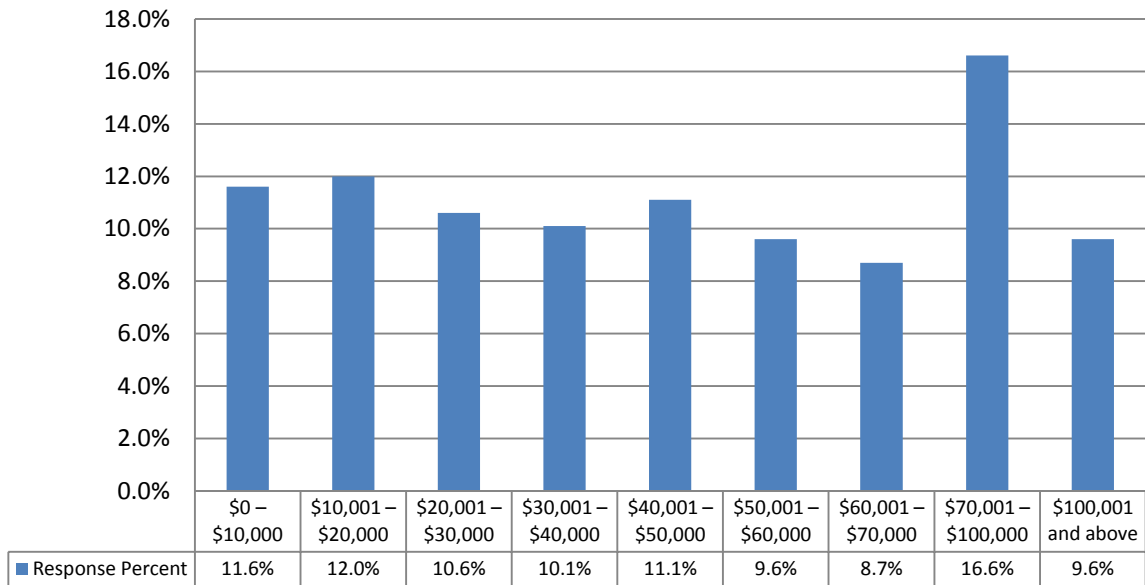
Question 39: What is your current employment status?

Answer Options	Response Percent	Response Count
Full-time	62.2%	265
Part-time	11.3%	48
Unemployed	7.0%	30
Self-employed	2.6%	11
Retired	12.4%	53
Homemaker	4.5%	19
answered question		426
skipped question		67

What is your current employment status?
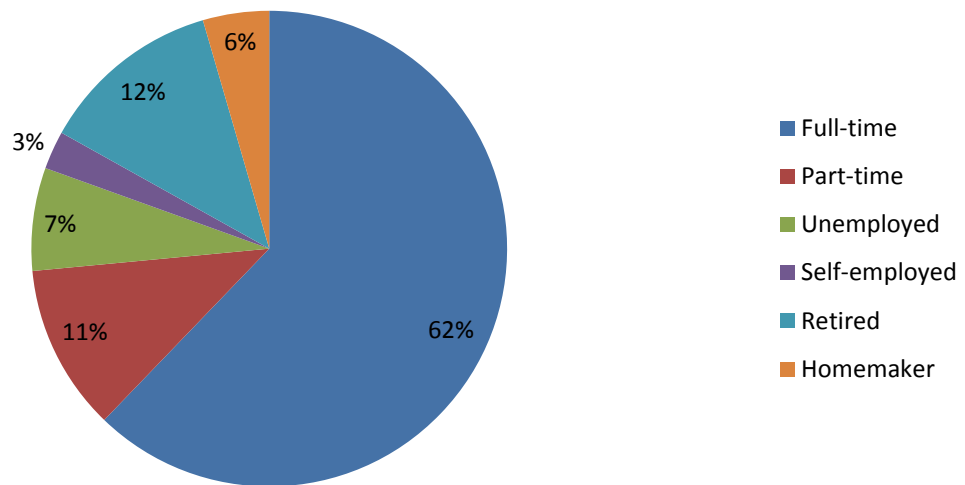
Secondary Data

Demographics and Socioeconomic Status

Social Determinants of Health

In the same way a person's DNA is the cornerstone of their individuality, social determinants of health shape wellbeing for billions of humans across the globe. The Center for Disease Control defines social determinants of health as "the circumstances, in which people are born, grow up, live, work, and age, as well as the systems put in place to deal with illness[5]". These circumstances change over time as a person grows and moves around the living world. For this reason, social determinants of health are often used to identify at-risk populations and analyze what determinants impact their lives more than people not considered to be at-risk[6].

Individuals don't have complete control over social determinants of health. In fact, they are heavily influenced by large-scale processes like politics, economic change, and culture[6]. These forces also have power in deciding what health care systems are operational in a geographic area. Higher-income areas are commonly buzzing with private care physicians and health services while the lower-income areas depend heavily on charity and government-subsidized services as treatment. This keeps social mobilization from occurring, and the poor areas become sicker as the rich areas see improvement in health issues[6].

Healthy People 2020 has identified five main social determinants of health that need to be addressed in some way. Economic stability, education, social and community context, health and health care, and neighborhood and built environment have been named as the focus for governmental and organizational health systems and wellbeing improvement by the year 2020 in the United States[7]. These five overarching topics include several subcategories that serve to direct specific actions and policy across the nation. Once the social determinants of health are identified in any context, the next important step is to devise a strategy for addressing the determinants and, ultimately, minimizing the negative impact that they have on the nation's most at-risk groups. No single strategy has been identified as the best or most effective for this task, but trial and error by social groups and government bodies has already brought much needed change to some of the needs areas[8].

A central task in analyzing social determinants of health is the process of discovering health disparities between subgroups in the same geographical area[8]. Health disparities are

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[5]Centers for Disease Control and Prevention. (2015). Social Determinants of Health.
Retrieved from http://www.cdc.gov/socialdeterminants/
[6]World Health Organization. (n.d.-a) Social Determinants of Health: Key Concepts.
Retrieved from http://www.who.int/social_determinants/thecommission/finalreport/key_concepts/en/
[7]Healthy People 2020.(2015-a).Social Determinants of Health. Retrieved from
[8]Robert Wood Johnson Foundation.(n.d.).Social Determinants of Health.

differences in physical and mental health or wellbeing that stem from differences in factors like race, ethnicity, and socioeconomic status[9]. When connections can be drawn between certain population subgroups, income levels, and the burden that illness places on the community, social disparities emerge as the problems that can be fixed. Social determinants of health provide the context needed to identify what issues need to be addressed and where improvement efforts should begin.

Population, gender, race and age

From 2010 to 2020, the U.S. Census Bureau projects the largest population growth occurring in Montgomery County (12.87%). Pulaski County is the only county in this region that is projected to experience a decline in the population (-0.73%). In comparison, Virginia will experience a 13.1% increase in its population and there will be a 10.6% increase in the United States as a whole. There were 192,142 residents who lived in the City of Radford and the Counties of Floyd, Montgomery, Pulaski and Wythe in 2014.

Total Population by Geographic Location

(U.S. Census Bureau, 2010-2014 5-Year American Community Survey, Table S0101. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

Geography	Total Population
Virginia	8,185,131
Floyd County	15,452
Montgomery County	95,808
Pulaski County	34,630
Radford City	16,993
Wythe County	29,259

Population projections for 2010 to 2040 predict continued growth in the MSA especially in Montgomery County, but a general decrease in growth rate for the other cities and counties.

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from – http://www.rwjf.org/en/our-topics/topics/social-determinants-of-health.html
[9]Robert Wood Johnson Foundation.(n.d.).Social Determinants of Health.
from – http://www.rwjf.org/en/our-topics/topics/social-determinants-of-health.html

Population Change Estimates, 2010 – 2040

(U.S. Census Bureau, Virginia Employment Commission. (2015). Community Profiles. Retrieved from http://data.virginialmi.com/gsipub/index.asp?docid=342)

Geography	2010	% Change	2020	% Change	2030	% Change	2040	% Change
Virginia	8,001,024	13.02	8,811,512	10.13	9,645,281	9.46	10,530,229	9.17
Floyd County	15,279	10.13	15,902	4.08	16,311	2.57	16,645	2.05
Montgomery County	94,392	12.87	105,293	11.55	116,278	10.43	127338	9.51
Pulaski County	34,872	-0.73%	35,655	2.25	36,580	2.59	37,436	2.34
Radford City	16,408	3.46	17,392	6.00	18,392	5.75	19,318	5.03
Wythe County	29,235	5.93	30,030	2.72	30,581	1.83	31,035	1.48

The median age in the City of Radford and Montgomery County are much lower than the region. The rest of the region has a median age higher than the state average.

Median Age by Geographic Location

(U.S. Census Bureau, 2010-20145-Year American Community Survey, Table S0101. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

Geography	Median Age (years)
Virginia	37.6
Floyd County	44.7
Montgomery County	27.0
Pulaski County	44.8
Radford City	21.9
Wythe County	43.5

Estimates of Population by Lifecycle, 5-Year Estimates, 2010 - 2014

(U.S. Census Bureau, 2010-2014 5-Year American Community Survey, Table S0101. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

	Under 5	5-14 years	15-17 years	18-64 years	Over 65 years
Virginia	6.2%	12.7%	3.8%	64.3%	13.0%
Floyd County	5.1%	12.3%	3.5%	60.1%	19.0%
Montgomery County	4.4%	8.8%	2.8%	73.6%	10.4%
Pulaski County	4.9%	10.6%	3.4%	61.5%	19.6%
Radford City	2.9%	7.8%	2.6%	78.7%	7.9%
Wythe County	5.0%	11.6%	4.0%	70.0%	18.4%

Race and Ethnicity, 5-Year Estimate, 2010-2014

(U.S. Census Bureau, 2010-2014 5-Year American Community Survey, Table DP05. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

	White	Black	American Indian and Alaskan Native	Asian	Native Hawaiian and Other Pacific Islander	Some other race	Two or more races	Hispanic or Latino Origin	Not Hispanic or Latino
Floyd County	95.8%	2.1%	0.1%	1.1%	0.0%	0.1%	0.8%	2.7%	97.3%
Montgomery County	87.2%	4.2%	0.2%	6.0%	0.0%	0.7%	1.6%	2.9%	97.1%
Pulaski County	92.1%	6.0%	0.0%	0.2%	0.0%	0.2%	1.4%	1.4%	98.6%
Radford City	85.7%	8.8%	0.0%	1.7%	0.1%	0.9%	2.8%	2.8%	97.2%
Wythe County	95.0%	3.7%	0.1%	0.6%	0.0%	0.3%	0.2%	1.1%	98.9%
Virginia	69.3%	19.3%	0.3%	5.8%	0.1%	2.2%	3.1%	8.4%	91.6%

The Public Schools in the New River Valley are seeing limited change in minority populations. The Hispanic population has seen small increases in size. This could present a challenge in the classroom where more and more children have limited English proficiency. We have included data for race distribution in public schools in the New River Valley for school years 2012-2013, 2013-2014, and 2014-2015.

Floyd County Public Schools Race/Ethnicity, 2013-2016

(Virginia Department of Education (2016). Fall Membership Reports. Retrieved from http://bi.vita.virginia.gov/doe_bi/rdPage.aspx?rdReport=Main&subRptName=Fallmembership.)

School Year	School Type	Hispanic	American Indian/ Alaskan Native	Asian	Black, not of Hispanic origin	White	Native Hawaiian / Other	2 or more
2013-2014								
	Elementary Schools	6.98%	0.00%	0.54%	1.09%	89.55%	0.00%	3.05%
	Middle Schools	2.83%	0.00%	0.00%	2.02%	91.72%	0.00%	3.43%
	High Schools	2.49%	0.33%	0.17%	1.50%	94.52%	0.00%	1.00%
	District Grand Total	4.07%	0.10%	0.30%	1.44%	91.57%	0.00%	2.53%
2014-2015								
	Elementary Schools	6.98%	0.00%	0.56%	0.79%	88.59%	0.00%	3.16%
	Middle Schools	4.17%	0.21%	0.42%	2.08%	89.58%	0.00%	3.54%
	High Schools	3.04%	0.16%	0.00%	1.44%	93.44%	0.00%	1.92%
	District Grand Total	5.03%	0.10%	0.35%	1.31%	90.35%	0.00%	2.86%
2015-2016								
	Elementary Schools	6.98%	0.12%	0.58%	1.16%	87.19%	0.00%	3.96%
	Middle Schools	3.61%	0.20%	0.40%	2.01%	91.37%	0.00%	2.41%
	High Schools	3.24%	0.15%	0.00%	0.92%	93.07%	0.00%	2.62%
	District Grand Total	4.94%	0.15%	0.35%	1.30%	90.13%	0.00%	3.14%

Montgomery County Public Schools Race/Ethnicity, 2013-2016

(Virginia Department of Education (2016). Fall Membership Reports. Retrieved from
http://bi.vita.virginia.gov/doe_bi/rdPage.aspx?rdReport=Main&subRptName=Fallmembership.)

School Year	School Type	Hispanic	American Indian/ Alaskan Native	Asian	Black, not of Hispanic origin	White	Native Hawaiian / Other	2 or more
2013-2014								
	Elementary Schools	4.46%	0.14%	4.21%	4.77%	83.16%	0.09%	3.17%
	Middle Schools	3.18%	0.18%	3.69%	4.29%	85.07%	0.10%	3.59%
	High Schools	3.66%	0.34%	2.67%	5.13%	85.00%	0.03%	3.18%
	District Grand Total	3.92%	0.21%	3.62%	4.77%	84.16%	0.05%	3.27%
2014-2015								
	Elementary Schools	4.64%	0.14%	4.82%	4.69%	82.32%	0.02%	3.37%
	Middle Schools	3.55%	0.19%	3.37%	4.26%	84.99%	0.10%	3.65%
	High Schools	3.41%	0.24%	2.90%	4.91%	85.35%	0.03%	3.17%
	District Grand Total	4.01%	0.18%	3.90%	4.66%	83.86%	0.02%	3.37%
2015-2016								
	Elementary Schools	5.32%	0.11%	4.56%	4.81%	81.51%	0.02%	3.66%
	Middle Schools	4.38%	0.10%	3.61%	4.38%	83.53%	0.00%	4.00%
	High Schools	2.45%	0.13%	3.02%	4.74%	86.02%	0.07%	3.56%
	District Grand Total	4.22%	0.12%	3.87%	4.69%	83.37%	0.03%	3.70%

Pulaski County Public Schools Race/Ethnicity, 2013-2016

(Virginia Department of Education (2016). Fall Membership Reports. Retrieved from
http://bi.vita.virginia.gov/doe_bi/rdPage.aspx?rdReport=Main&subRptName=Fallmembership.)

School Year	School Type	Hispanic	American Indian/ Alaskan Native	Asian	Black, not of Hispanic origin	White	Native Hawaiian / Other	2 or more
2013-2014								
	Elementary Schools	2.71%	0.26%	0.41%	5.16%	85.64%	0.10%	5.72%
	Middle Schools	2.16%	0.69%	0.20%	7.65%	85.88%	0.00%	3.43%
	High Schools	1.46%	0.07%	0.36%	6.33%	89.88%	0.07%	1.82%
	District Grand Total	2.18%	0.30%	0.34%	6.11%	87.04%	0.07%	3.95%
2014-2015								
	Elementary Schools	3.28%	0.25%	0.45%	5.45%	84.70%	0.05%	5.81%
	Middle Schools	2.77%	0.96%	0.21%	6.07%	85.73%	0.00%	4.26%
	High Schools	2.29%	0.07%	0.36%	6.07%	88.36%	0.07%	2.79%
	District Grand Total	2.85%	0.35%	0.37%	5.79%	86.11%	0.05%	4.49%
2015-2016								
	Elementary Schools	3.45%	0.16%	0.52%	5.54%	84.81%	0.05%	6.11%
	Middle Schools	3.43%	0.55%	0.55%	5.86%	84.40%	0.00%	5.20%
	High Schools	2.60%	0.35%	0.42%	6.26%	87.48%	0.00%	2.88%
	District Grand Total	3.16%	0.31%	0.50%	5.85%	85.33%	0.02%	4.83%

Radford City Public Schools Race/Ethnicity, 2013-2016

(Virginia Department of Education (2016). Fall Membership Reports. Retrieved from
http://bi.vita.virginia.gov/doe_bi/rdPage.aspx?rdReport=Main&subRptName=Fallmembership.)

School Year	School Type	Hispanic	American Indian/ Alaskan Native	Asian	Black, not of Hispanic origin	White	Native Hawaiian/ Other	2 or more
2013-2014								
	Elementary Schools	2.79%	0.00%	1.26%	9.62%	79.78%	0.00%	6.56%
	Middle Schools	4.13%	0.00%	0.52%	7.75%	79.59%	0.00%	8.01%
	High Schools	1.92%	0.00%	2.14%	8.97%	79.49%	0.21%	7.26%
	District Grand Total	2.86%	0.00%	1.34%	8.97%	79.64%	0.06%	7.12%
2014-2015								
	Elementary Schools	3.63%	0.00%	1.21%	9.83%	76.58%	0.00%	8.75%
	Middle Schools	3.97%	0.00%	0.79%	9.52%	78.57%	0.00%	7.14%
	High Schools	3.88%	0.00%	1.63%	8.78%	79.39%	0.20%	6.12%
	District Grand Total	3.79%	0.00%	1.24%	9.44%	77.90%	0.06%	7.57%
2015-2016								
	Elementary Schools	4.63%	0.00%	1.09%	9.81%	75.89%	0.00%	8.58%
	Middle Schools	3.16%	0.00%	1.32%	8.42%	80.00%	0.00%	7.11%
	High Schools	3.64%	0.00%	1.62%	7.68%	80.81%	0.20%	6.06%
	District Grand Total	3.98%	0.00%	1.31%	8.83%	78.37%	0.06%	7.46%

Wythe County Public Schools Race/Ethnicity, 2013-2016

(Virginia Department of Education (2016). Fall Membership Reports. Retrieved from
http://bi.vita.virginia.gov/doe_bi/rdPage.aspx?rdReport=Main&subRptName=Fallmembership.)

School Year	School Type	Hispanic	American Indian/ Alaskan Native	Asian	Black, not of Hispanic origin	White	Native Hawaiian/ Other	2 or more
2013-2014								
	Elementary Schools	1.34%	0.05%	0.57%	4.63%	92.07%	0.26%	1.08%
	Middle Schools	1.83%	0.10%	0.38%	4.52%	91.35%	0.00%	1.83%
	High Schools	1.77%	0.40%	0.40%	4.91%	91.31%	0.16%	1.05%
	District Grand Total	1.59%	0.17%	0.47%	4.69%	91.67%	0.17%	1.25%
2014-2015								
	Elementary Schools	1.36%	0.05%	0.58%	4.61%	92.03%	0.26%	1.10%
	Middle Schools	1.77%	0.10%	0.39%	5.71%	90.05%	0.10%	1.87%
	High Schools	1.74%	0.24%	0.24%	4.82%	91.86%	0.00%	1.11%
	District Grand Total	1.58%	0.12%	0.43%	4.94%	91.50%	0.14%	1.29%
2015-2016								
	Elementary Schools	1.58%	0.05%	0.65%	4.35%	91.20%	0.33%	1.85%
	Middle Schools	1.88%	0.00%	0.42%	5.44%	90.79%	0.10%	1.36%
	High Schools	1.68%	0.23%	0.23%	4.73%	91.31%	0.00%	1.83%
	District Grand Total	1.68%	0.10%	0.46%	4.72%	91.14%	0.17%	1.73%

Population 5 years and over whom speak a language other than English at home, 5-Year Estimate, 2010-2014

(U.S. Census Bureau, 2010-2014 5-Year American Community Survey, Table S1601. Retrieved from
http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

Locality	#	%
Floyd County	534	3.60%
Montgomery County	9977	10.90%
Pulaski County	611	1.90%
Radford City	979	5.90%
Wythe County	546	2.00%
Virginia	1,164,892	15.20%

Academic Attainment

There is a direct link between educational attainment, health literacy, and positive health outcomes. According to the Virginia Health Equity report, Virginians who don't attend, or complete, high school are more likely to die of heart disease, cancer and a dozen other leading causes of death than those who earn a diploma.

Academic Attainment for Population 25 and Over, 5-Year Estimate, 2010-2014

(U.S. Census Bureau, 2010-2014 5-Year American Community Survey, Table S1501. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

	Percent high school graduate or higher	Percent bachelor's degree or higher
Floyd County	83.70%	16.70%
Montgomery County	90.40%	44.30%
Pulaski County	82.70%	16.40%
Radford City	87.90%	34.90%
Wythe County	82.30%	15.20%
Virginia	87.90%	35.80%

New River Valley Attainment for Population 25 and Over, 2010-2014
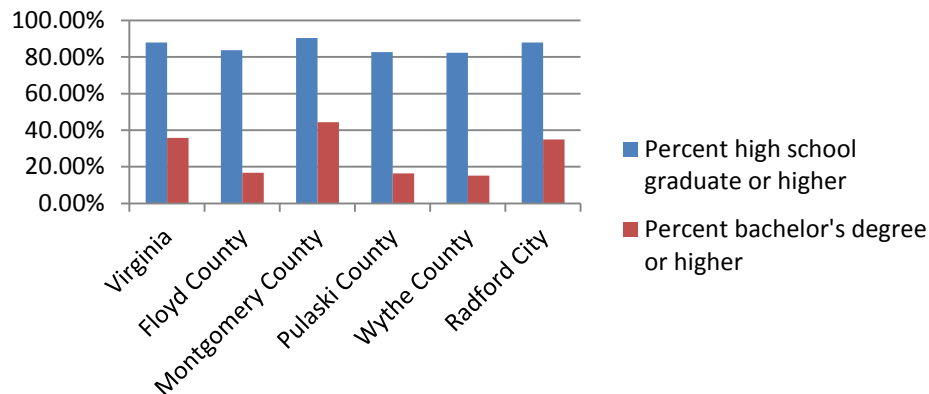
On Time Graduation Rates, NRV Localities

(Virginia Department of Education, Virginia Cohort Reports, Retrieved from
http://www.doe.virginia.gov/statistics_reports/graduation_completion/cohort_reports/.)

MSA Localities	2013	2014	2015
Floyd County	93.90%	91.60%	92.60%
Montgomery County	90.60%	87.60%	87.60%
Pulaski County	87.50%	89.40%	90.20%
Radford City	95.10%	93.20%	96.70%
Wythe County	86.70%	88.30%	90.50%
Virginia	90.10%	89.90%	90.50%

On Time Graduation Rates, Floyd County High Schools

(Virginia Department of Education, Virginia Cohort Reports, Retrieved from
http://www.doe.virginia.gov/statistics_reports/graduation_completion/cohort_reports/.)

	2013	2014	2015
Floyd County High	93.90%	91.60%	92.60%
Virginia	90.10%	89.90%	90.50%

On Time Graduation Rates, Montgomery County High Schools

(Virginia Department of Education, Virginia Cohort Reports, Retrieved from
http://www.doe.virginia.gov/statistics_reports/graduation_completion/cohort_reports/.)

	2013	2014	2015
Auburn High	92.1%	92.9%	89.9%
Blacksburg High	92.9%	93.6%	93.6%
Christiansburg High	88.7%	82.5%	82.5%
Eastern Montgomery High	87.8%	81.8%	81.8%
Virginia	90.1%	90.5%	90.5%

On Time Graduation Rates, Pulaski County High Schools

(Virginia Department of Education, Virginia Cohort Reports, Retrieved from
http://www.doe.virginia.gov/statistics_reports/graduation_completion/cohort_reports/.)

	2013	2014	2015
Pulaski County High	87.50%	89.40%	90.20%
Virginia	90.10%	89.90%	90.50%

On Time Graduation Rates, Radford City High Schools

(Virginia Department of Education, Virginia Cohort Reports, Retrieved from
http://www.doe.virginia.gov/statistics_reports/graduation_completion/cohort_reports/.)

	2013	2014	2015
Radford City High	95.10%	93.20%	96.70%
Virginia	90.10%	89.90%	90.50%

On Time Graduation Rates, Wythe County High Schools

(Virginia Department of Education, Virginia Cohort Reports, Retrieved from
http://www.doe.virginia.gov/statistics_reports/graduation_completion/cohort_reports/.)

	2013	2014	2015
Fort Chiswell High	85.30%	84.30%	84.30%
George Wythe High	88.40%	91.20%	94.10%
Rural Retreat High	86.20%	90.00%	94.10%
Virginia	90.10%	89.90%	90.50%

Dropout rates in these localities were highly variable from year to year with consistent decreases from year to year in Pulaski County only.

Dropout Rates, New River Valley Localities

(Virginia Department of Education, Annual Dropout Statistics, Retrieved from
http://doe.virginia.gov/statistics_reports/graduation_completion/index.shtml)

Geography	2013	2014	2015
Floyd County	3.70%	5.00%	4.40%
Montgomery County	6.80%	9.80%	7.00%
Pulaski County	8.60%	6.80%	4.90%
Radford City	1.90%	3.90%	0.80%
Wythe County	9.60%	9.50%	5.40%
Virginia	6.50%	5.40%	5.20%

Dropout Rates, Floyd County High Schools

(Virginia Department of Education, Virginia Cohort Reports, Retrieved from
http://www.doe.virginia.gov/statistics_reports/graduation_completion/cohort_reports/.)

	2013	2014	2015
Floyd County High	3.70%	5.00%	4.40%
Virginia	6.50%	5.40%	5.20%

Dropout Rates, Montgomery County High Schools

(Virginia Department of Education, Virginia Cohort Reports, Retrieved from
http://www.doe.virginia.gov/statistics_reports/graduation_completion/cohort_reports/.)

	2013	2014	2015
Auburn High	5.90%	4.10%	6.70%
Blacksburg High	5.30%	4.80%	2.50%
Christiansburg High	7.40%	10.40%	9.40%
Eastern Montgomery High	8.50%	14.50%	14.30%
Virginia	6.50%	5.40%	5.20%

Dropout Rates, Pulaski County High Schools

(Virginia Department of Education, Virginia Cohort Reports, Retrieved from
http://www.doe.virginia.gov/statistics_reports/graduation_completion/cohort_reports/.)

	2013	2014	2015
Pulaski County High	8.60%	6.80%	4.90%
Virginia	6.50%	5.40%	5.20%

Dropout Rates, Radford City High Schools

(Virginia Department of Education, Virginia Cohort Reports, Retrieved from
http://www.doe.virginia.gov/statistics_reports/graduation_completion/cohort_reports/.)

	2013	2014	2015
Radford City High	1.90%	3.90%	0.80%
Virginia	6.50%	5.40%	5.20%

Dropout Rates, Wythe County High Schools

(Virginia Department of Education, Virginia Cohort Reports, Retrieved from
http://www.doe.virginia.gov/statistics_reports/graduation_completion/cohort_reports/.)

	2013	2014	2015
Fort Chiswell High	12.10%	11.60%	9.30%
George Wythe High	8.30%	7.90%	4.20%
Rural Retreat High	8.50%	8.90%	1.50%
Virginia	6.50%	5.40%	5.20%

The New River and adjoining Roanoke Valleys boast several institutions of higher learning. Virginia Tech, the largest land grant university in Virginia with nationally recognized research programs, is located in neighboring Montgomery County as is the Edward Via College of Osteopathic Medicine. Radford University, located in the independent City of Radford in the New River Valley, is a state university and is the site of the Waldron College of Health and Human Services which houses the School of Nursing, School of Social Work, Communication Sciences and Disorders, and the Occupational Therapy program, as well as the Speech and Hearing Clinic, Child Advocacy Center, and FAMIS Outreach program. In addition, Radford University's Department of Psychology offers graduate degrees in clinical psychology and counseling. There are also two community colleges in the surveyed localities. New River Community College is located in Dublin, Virginia and Wytheville Community College is located in Wytheville, Virginia.

Roanoke College and Hollins University are located within the Roanoke MSA. The city of Roanoke is home to Virginia Western Community College and Carilion Clinic's Medical Education Programs including the Virginia Tech Carilion (VTC) School of Medicine and Research Institute, eleven residency programs and twelve fellowships. Additionally, the Jefferson College of Health Sciences offers sixteen different degree programs (Associates, Bachelors, Masters) in nursing and allied health that are part of the Carilion Clinic education system in the city.

Income and Poverty Status

In the New River Valley, median household incomes are much lower than the median income statewide and Radford City has the lowest in the valley. Floyd County has the highest median incomes in the area closely followed by Montgomery and Pulaski Counties.[10]

Median Household Income, 5-Year Estimates, 2009-2013 & 2010-2014

(U.S. Census Bureau, 2009-2013 & 2010-2014 5-Year American Community Survey, Table S1903. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

Location	Median Income 2009-2013	Median Income 2010-2014
Floyd County	44,618	47,543
Montgomery County	45,543	44,810
Pulaski County	44,312	45,635
Radford City	30,714	30,284
Wythe County	41,275	40,185
Virginia	63,907	64,792

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[10] U.S. Census Bureau, 2009-2013 & 2010-2014 5-Year American Community Survey

The Federal Poverty Guidelines (FPL) is used to determine eligibility for many local, state, and federal assistance programs. It is based on an individual's or family's annual cash income before taxes. Updated yearly by the Census Bureau, the 2014, 2015, and 2016 guidelines are provided below as a reference.[11]

2014 Federal Poverty Guidelines for the 48 Contiguous States and the District of Columbia	
Persons in Family/Household	Poverty Guideline
1	11,490
2	15,510
3	19,530
4	23,550
5	27,570
6	31,590
7	35,610
8	39,630
For families/household with more than eight persons, add $4,020 for each additional person.	

(Federal Register. 2014 Poverty Guidelines for the 48 Contiguous States and the District of Columbia. Vol. 79, No. 14, January 22, 2014, pp.3593-3594. Retrieved from https://federalregister.gov/a/2014-01303)

2015 Federal Poverty Guidelines for the 48 Contiguous States and the District of Columbia	
Persons in Family/Household	Poverty Guideline
1	11,770
2	15,930
3	20,090
4	24,250
5	28,410
6	32,570
7	36,730
8	40,890
For families/household with more than eight persons, add $4,160 for each additional person.	

(Federal Register. 2015 Poverty Guidelines for the 48 Contiguous States and the District of Columbia. Vol. 80, No. 15, January 22, 2015, pp. 3236-3237. Retrieved from https://federalregister.gov/a/2015-01120)

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[11] http://aspe.hhs.gov/poverty/13poverty.cfm

2016 Federal Poverty Guidelines for the 48 Contiguous States and the District of Columbia	
Persons in Family/Household	Poverty Guideline
1	11880
2	16020
3	20160
4	24300
5	28440
6	32580
7	36730
8	40890
For families/household with more than eight persons, add $4,160 for each additional person.	

(Federal Register. 2016 Poverty Guidelines for the 48 Contiguous States and the District of Columbia. Vol. 81, No. 16, January 25, 2016, pp. 4036-4037. Retrieved from https://federalregister.gov/a/2016-01450)

The guidelines reflect 100% of the FPL. To calculate 200% of the FPL, multiply the listed income level by two.

In the City of Radford, 58.0% of residents for whom poverty was determined live below 200% of the FPL as compared to 27.0% in Virginia and 34.5% in the United States. Even more startling is that the lowest rate of people living below 200% of poverty is 32.7% in Floyd County with similar rates in Montgomery (42.4%), Pulaski (35.4%) and Wythe (39.3%)[12]

Number of Residents Living in Poverty, 2010-2014

(U.S. Census Bureau, 2010-2014 5-Year American Community Survey, Table C17002. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

	Below 100% FPL		100-199% FPL		200% FPL and above		Total	
	#	%	#	%	#	%	#	%
United States	47,755,606	15.59%	58,017,801	18.95%	200,452,987	65.46%	306,226,394	100%
Virginia	914,237	11.52%	1,227,921	15.47%	5,797,174	73.02%	7,939,332	100%
Floyd County	1,623	10.56%	3399	22.11%	10,353	67.34%	15375	100%
Montgomery County	22,046	25.56%	14,542	16.86%	49,651	57.57%	86239	100%
Pulaski County	4,567	13.61%	7,309	21.78%	21,689	64.62%	33,565	100%
Radford City	5,553	39.61%	2,572	18.35%	5,895	42.05%	14,020	100%
Wythe County	4,379	15.12%	6,698	23.13%	17,882	61.75%	28,959	100%

[12] US Census Bureau, American Community Survey 5-year Estimates, 2010-2014

Percent of Residents Living in Poverty

In Pulaski County, a disproportionate number of children less than 6 years of age (%) and 6-17 years of age (%) live below 200% of FPL.

Ratio of Income by Poverty Status by Age

(American Community Survey 5-Year Estimates, U.S. Census Bureau, ,Table B17024, 2010-2014. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

< 6 years of age						
	Below 100% FPL		100-199% FPL		200% FPL & over	
	#	%	#	%	#	%
United States	5859390	24.71%	5469940	23.07%	12379706	52.22%
Virginia	106060	17.44%	119773	19.69%	382384	62.87%
Floyd County	50	5.54%	424	47.45%	428	47.45%
Montgomery County	1292	24.88%	931	17.93%	2970	57.19%
Radford City	63	10.29%	225	36.76%	324	52.94%
Pulaski County	447	23.60%	683	36.06%	764	40.34%
Wythe County	337	20.65%	500	30.64%	795	48.71%

6-17 years						
	Below 100% FPL		100-199% FPL		200% FPL & over	
	#	%	#	%	#	%
United States	10048005	20.54%	10739094	21.95%	28141750	57.52%
Virginia	173299	14.11%	224375	18.26%	830912	67.63%
Floyd County	227	9.82%	629	27.21%	1456	62.98%
Montgomery County	1498	15.23%	1607	16.34%	6732	68.44%
Radford City	282	17.28%	328	20.10%	1022	62.62%
Pulaski County	665	15.03%	1303	29.45%	2456	55.52%
Wythe County	840	19.54%	867	20.17%	2591	60.28%

18-64 years						
	Below 100% FPL		100-199% FPL		200% FPL & over	
	#	%	#	%	#	%
United States	27921991	14.56%	32653021	17.03%	131142250	68.40%
Virginia	555771	10.97%	688952	13.60%	3822885	75.44%
Floyd County	949	10.20%	1658	17.83%	6693	71.97%
Montgomery County	18746	30.46%	9853	16.01%	32952	53.54%
Radford City	4990	47.65%	1742	16.63%	3741	35.72%
Pulaski County	3047	14.75%	3420	16.56%	14187	68.69%
Wythe County	2578	14.49%	3570	20.06%	11647	65.45%

65 years & >						
	Below 100% FPL		100-199% FPL		200% FPL & over	
	#	%	#	%	#	%
United States	3926219	9.38%	9155746	21.87%	28789282	68.76%
Virginia	79107	7.64%	194821	18.82%	760993	73.53%
Floyd County	397	13.88%	688	24.05%	1776	62.08%
Montgomery County	510	5.28%	2151	22.27%	6997	72.45%
Radford City	218	16.73%	277	21.26%	808	62.01%
Pulaski County	408	6.19%	1903	28.86%	4282	64.95%
Wythe County	624	11.92%	1761	33.65%	2849	54.43%

In the city of Radford more whites live in poverty (40%) as compared to Virginia (9.2%). More African Americans live in poverty in Radford City (38.3%), Montgomery County (54.30%), and Floyd County (61.2%) as compared to the statewide averages (20.1%), as well.[13]

Poverty Status in the Past 12 Months by Race/Ethnicity, 2010-2014
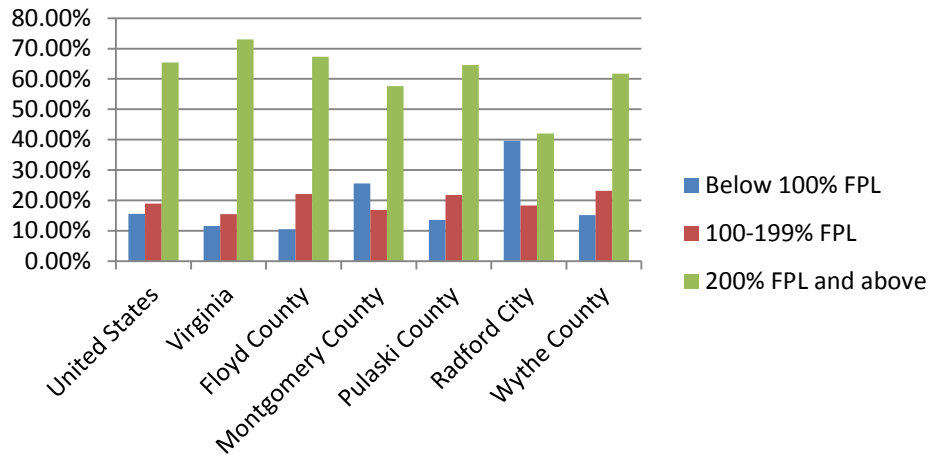
(U.S. Census Bureau, 2010-2014 5-Year American Community Survey, Table S1701. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

Geography	White			Black/African American		
	Population	Number in Poverty	Percent	Population	Number in Poverty	Percent
Virginia	5520140	505667	9.20%	1501394	301972	20.10%
Floyd County	14743	1429	9.70%	312	191	61.20%
Montgomery County	75664	17373	23%	3429	1861	54.30%
Pulaski County	30954	4072	13%	1990	425	21.40%
Radford City	12297	4940	40%	1064	408	38.30%
Wythe County	27538	4090	14.90%	1058	260	24.60%

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[13] US Census Bureau, American Community Survey, 1-year estimates, 2010

Geography	American Indian/Alaskan Native			Asian			Native Hawaiian and Other Pacific Islander		
	Population	Number in Poverty	Percent	Population	Number in Poverty	Percent	Population	Number in Poverty	Percent
Virginia	22245	3094	13.90%	467627	38712	8.30%	4966	544	11.00%
Floyd County	22	3	13.60%	170	0	0.00%	0	0	0.00%
Montgomery County	236	37	15.70%	4880	1707	35.00%	23	0	0.00%
Pulaski County	11	0	0.00%	33	11	33.00%	0	0	0.00%
Radford City	0	0	0.00%	212	25	12.00%	0	0	0.00%
Wythe County	20	0	0.00%	187	0	0.00%	0	0	0.00%

Geography	Some Other Race			Two or More Races		
	Population	Number in Poverty	Percent	Population	Number in Poverty	Percent
Virginia	175067	30181	17.20%	247893	34067	13.70%
Floyd County	10	0	0.00%	118	0	0.00%
Montgomery County	584	458	78.00%	1423	610	43.00%
Pulaski County	84	38	45.00%	493	21	4.30%
Radford City	109	67	61.50%	338	113	33.40%
Wythe County	97	16	16.50%	59	13	22.00%

The Department of Social Services works to promote self-sufficiency while providing support and protection to the citizens of the city through the delivery and coordination of community based social services. Services include financial assistance programs including aid to families with dependent children-foster care; emergency assistance and energy assistance; Medicaid and FAMIS (Family Access to Medical Insurance Security) enrollment; Supplemental Nutrition Assistance Program (SNAP) and the Temporary Assistance for Needy Families (TANF); and state and local hospitalization. Other support programs include adult and child protective services; prevention services for families; foster care and adoption services; and child care development.

Number of TANF Recipients for Fiscal Year, 2013-2015

(Virginia Department of Social Services.Local Departments of Social Services Profile Report. Local Agency Caseload & Expenditure, SFY 2013-2015. Retrieved from http://www.dss.virginia.gov/geninfo/reports/agency_wide/ldss_profile.cgi.)

Geography	2013	2014	2015
Floyd County	329	254	185
Montgomery County	1570	1421	1129
Pulaski County	866	814	654
Wythe County	540	525	497
Radford City	402	427	322

Number of TANF Recipients for New River Valley MSA for Fiscal Year 2013-2015
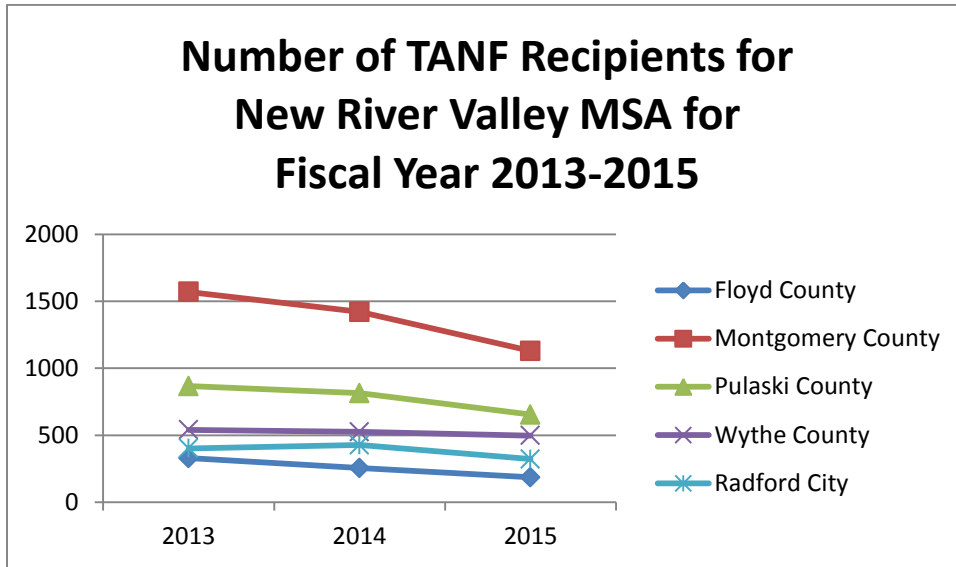
Number of SNAP Recipients for Fiscal Year, 2013-2015

(Virginia Department of Social Services.Local Departments of Social Services Profile Report. Local Agency Caseload & Expenditure, SFY 2013-2015. Retrieved from http://www.dss.virginia.gov/geninfo/reports/agency_wide/ldss_profile.cgi.)

Geography	2013	2014	2015
Floyd County	3085	2879	2646
Montgomery County	11861	11199	10381
Pulaski County	8521	8309	7764
Wythe County	6643	6373	5967
Radford City	2788	2756	2609

Number of SNAP Recipients for New River Valley MSA for Fiscal Year 2013-2015
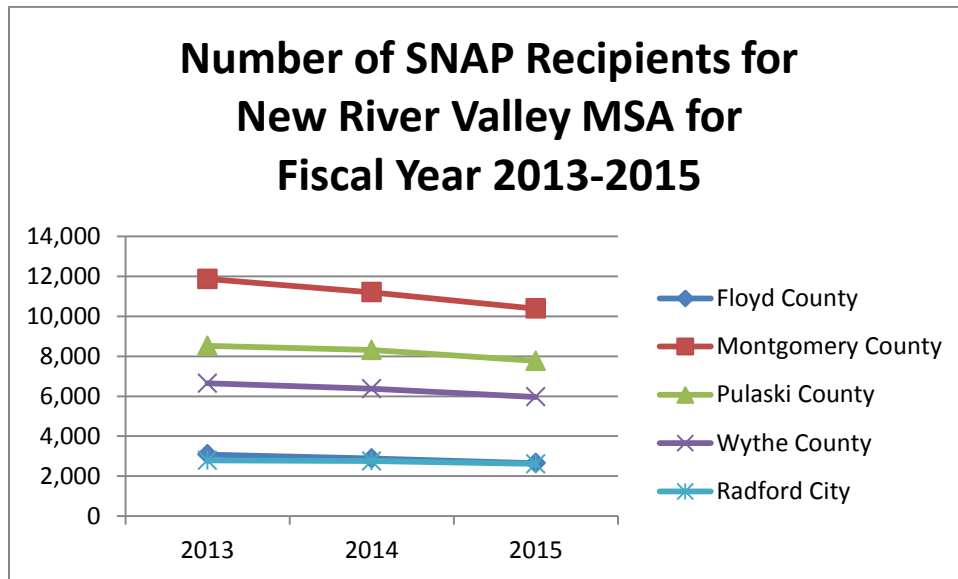
Pulaski County has the highest rate of children and adolescents that are eligible for the Free and Reduced Lunch Program at 53.67%, as compared to 41.2% for Virginia school districts as a whole.[14] Nearly half of students in Floyd and Wythe Counties are also eligible for the Free and Reduced Lunch Program.

Students Eligible for Free and Reduced Lunch Program, 2013-2016

(Virginia Department of Education, Office of School Nutrition Programs. Free and Reduced Price Eligibility Report, Division Level. Retrieved from http://www.doe.virginia.gov/support/nutrition/statistics/.)

Locality	% Eligible for Free or Reduced Lunch 2013	% Eligible for Free or Reduced Lunch 2014	% Eligible for Free or Reduced Lunch 2015	% Eligible for Free or Reduced Lunch 2016
Floyd County	45.94%	47.05%	47.51%	47.97%
Montgomery County	38.27%	37.52%	37.39%	36.14%
Pulaski County (see note 1)	49.94%	50.54%	50.92%	53.67%
Radford City	38.92%	42.23%	43.86%	42.80%
Wythe County	50.79%	49.19%	48.52%	48.42%
Virginia	40.10%	41.19%	41.95%	41.20%

Note 1. This School is operating under the USDA Community Eligibility Provision (CEP). The free eligible is a calculated number based on the USDA guidance.

The elementary, middle and high schools with the greatest number of children eligible for free and reduced lunches are located in Pulaski County.

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[14] Virginia Department of Education, Office of School Nutrition Program, National School Lunch Program Free & Reduced Price Eligibility Report, October 31, 2011

Floyd County Public Schools Free and Reduced Lunch Eligibility, 2014-2015

(Virginia Department of Education, Office of School Nutrition Programs. Free and Reduced Price Eligibility Report, School/Site Level. Retrieved from http://www.doe.virginia.gov/support/nutrition/statistics/.)

	SNAP Membership	Free Lunch Eligible	%Free Lunch Eligible	Reduced Lunch Eligible	%Reduced Lunch Eligible	Total F/R Lunch Eligible	% Total F/R Lunch Eligible
Elementary Schools							
Check	295	99	35.56%	29	9.83%	128	43.39%
Floyd County	549	217	39.53%	72	13.11%	289	52.64%
Indian Valley	165	63	38.18%	21	12.73%	84	50.91%
Willis	250	112	44.89%	33	13.20%	145	58.00%
High Schools							
Floyd County	791	239	30.21%	89	11.25%	328	41.47%

Floyd County Public Schools Free and Reduced Lunch Eligibility, 2015-2016

(Virginia Department of Education, Office of School Nutrition Programs. Free and Reduced Price Eligibility Report, School/Site Level. Retrieved from http://www.doe.virginia.gov/support/nutrition/statistics/.)

	SNAP Membership	Free Lunch Eligible	%Free Lunch Eligible	Reduced Lunch Eligible	%Reduced Lunch Eligible	Total F/R Lunch Eligible	% Total F/R Lunch Eligible
Elementary Schools							
Check	290	110	37.93%	36	12.41%	146	50.34%
Floyd County	556	240	43.17%	59	10.61%	299	53.78%
Indian Valley	153	47	30.72%	25	16.34%	72	47.06%
Willis	241	112	46.47%	31	12.86%	143	59.34%
High Schools							
Floyd County	809	228	28.18%	95	11.74%	323	39.93%

Montgomery County Public Schools Free and Reduced Lunch Eligibility, 2014-2015

(Virginia Department of Education, Office of School Nutrition Programs. Free and Reduced Price Eligibility Report, School/Site Level. Retrieved from http://www.doe.virginia.gov/support/nutrition/statistics/.)

Schools	SNAP Membership	Free Lunch Eligible	%Free Lunch Eligible	Reduced Lunch Eligble	%Reduced Lunch Eligible	Total F/R Lunch Eligible	% Total F/R Lunch Eligible
Auburn	530	211	39.81%	41	7.74%	252	47.55%
Bel View	286	125	43.71%	18	5.29%	143	50.00%
Christiansburg	391	159	40.66%	37	9.46%	196	50.13%
Eastern Montgomery	525	289	55.05%	55	10.48%	344	65.52%
Falling Branch	506	196	38.74%	44	8.70%	240	47.43%
Gilbert Linkous	363	62	17.08%	17	4.68%	79	21.76%
Harding Aveue	301	43	14.29%	10	3.32%	53	17.61%
Kipps	361	53	14.68%	20	5.54%	73	20.22%
Margaret Beeks	455	130	28.57%	16	3.52%	146	32.09%
Prices Fork	413	188	45.52%	40	9.69%	228	55.21%
Middle Schools:							
Auburn	279	69	24.73%	30	10.75%	99	35.48%
Blacksburg	834	131	15.71%	33	3.96%	164	19.66%
Christiansburg	790	261	33.04%	65	8.23%	326	41.27%
Shawsville	232	131	56.47%	15	6.47%	146	62.93%
High Schools:							
Auburn	391	115	29.41%	34	8.70%	149	38.11%
Blacksburg	1136	147	12.94%	48	4.23%	195	17.17%
Christiansburg	1046	321	30.69%	72	6.88%	393	37.57%
Eastern Montgomery	444	140	31.53%	30	6.76%	170	38.29%
Independence	56	42	75.00%	5	8.93%	47	83.93%

Montgomery County Public Schools Free and Reduced Lunch Eligibility, 2015-2016

(Virginia Department of Education, Office of School Nutrition Programs. Free and Reduced Price Eligibility Report, School/Site Level. Retrieved from http://www.doe.virginia.gov/support/nutrition/statistics/.)

	SNAP Membership	Free Lunch Eligible	%Free Lunch Eligible	Reduced Lunch Eligible	%Reduced Lunch Eligible	Total F/R Lunch Eligible	% Total F/R Lunch Eligible
Elementary Schools							
Auburn	565	223	39.47%	49	8.67%	272	48.14%
Bel View	273	117	42.86%	17	6.23%	134	49.08%
Christiansburg	379	139	36.68%	35	9.23%	174	45.91%
Eastern Montgomery	519	287	55.30%	53	10.21%	340	65.51%
Falling Branch	507	170	33.53%	44	8.68%	214	42.21%
Gilbert Linkous	368	60	16.30%	11	2.99%	71	19.29%
Harding Avenue	326	57	17.48%	11	3.37%	68	20.86%
Kipps	419	55	13.13%	8	1.91%	63	15.04%
Margaret Beeks	442	102	23.08%	31	7.01%	133	30.09%
Prices Fork	435	209	48.05%	20	4.60%	229	52.64%
Middle Schools							
Auburn	283	70	24.73%	30	10.60%	100	35.34%
Blacksburg	812	121	14.90%	24	2.96%	145	17.86%
Christiansburg	756	257	33.99%	57	7.54%	314	41.53%
Shawsville	213	112	52.58%	19	8.92%	131	61.50%
High Schools							
Auburn	404	103	25.50%	32	7.92%	135	33.42%
Blacksburg	1189	165	13.88%	37	3.11%	202	16.99%
Christiansburg	1048	288	27.48%	76	7.25%	364	34.73%
Eastern Montgomery	295	138	46.78%	33	11.19%	171	57.97%
Central	66	52	78.79%	2	3.03%	54	81.82%

Pulaski County Public Schools Free and Reduced Lunch Eligibility, 2014-2015

(Virginia Department of Education, Office of School Nutrition Programs. Free and Reduced Price Eligibility Report, School/Site Level. Retrieved from http://www.doe.virginia.gov/support/nutrition/statistics/.)

	SNAP Membership	Free Lunch Eligible	%Free Lunch Eligible	Reduced Lunch Eligible	%Reduced Lunch Eligible	Total F/R Lunch Eligible	% Total F/R Lunch Eligible
Elementary Schools							
Critzer	459	295	64.27%	31	6.75%	326	71.02%
Dublin	486	211	43.42%	31	6.38%	242	49.79%
Pulaski	541	282	52.13%	53	9.80%	335	61.92%
Riverlawn	437	191	43.71%	35	8.01%	226	51.72%
Snowville	168	53	31.55%	21	12.50%	74	44.05%
Middle Schools							
Pulaski	401	216	53.87%	35	8.73%	251	62.59%
Dublin	529	192	36.29%	42	7.94%	234	44.23%
High Schools							
Pulaski Sr.	1385	491	35.45%	79	5.70%	570	41.16%

Pulaski County Public Schools Free and Reduced Lunch Eligibility, 2015-2016

(Virginia Department of Education, Office of School Nutrition Programs. Free and Reduced Price Eligibility Report, School/Site Level. Retrieved from http://www.doe.virginia.gov/support/nutrition/statistics/.)

Schools	SNAP Membership	Free Lunch Eligible	%Free Lunch Eligible	Reduced Lunch Eligble	%Reduced Lunch Eligible	Total F/R Lunch Eligible	% Total F/R Lunch Eligible
Critzer	427	347	81.26%	0	0.00%	347	81.26%
Dublin	473	202	42.71%	44	9.30%	246	52.01%
Pulaski	398	192	48.24%	36	9.05%	228	57.29%
Riverlawn	433	192	44.34%	33	7.62%	225	51.96%
Snowville	158	58	36.71%	10	6.33%	68	43.04%
Middle Schools:							
Pulaski	398	192	48.24%	36	9.05%	228	57.29%
Dublin	498	174	34.94%	36	7.23%	210	42.17%
High Schools:							
Pulaski Sr.	1402	496	35.38%	66	4.71%	562	40.09%

Radford City Public Schools Free and Reduced Lunch Eligibility, 2014-2015

(Virginia Department of Education, Office of School Nutrition Programs. Free and Reduced Price Eligibility Report, School/Site Level. Retrieved from http://www.doe.virginia.gov/support/nutrition/statistics/.)

	SNAP Membership	Free Lunch Eligible	%Free Lunch Eligible	Reduced Lunch Eligible	%Reduced Lunch Eligible	Total F/R Lunch Eligible	% Total F/R Lunch Eligible
Elementary Schools							
Belle Heath	504	191	37.90%	27	5.36%	218	43.25%
Mcharg	404	167	41.34%	36	8.91%	203	50.25%
Middle Schools							
John N. Dalton	263	96	36.50%	25	9.51%	121	46.01%
High Schools							
Radford	491	151	30.75%	36	7.33%	187	38.09%

Radford City Public Schools Free and Reduced Lunch Eligibility, 2015-2016

(Virginia Department of Education, Office of School Nutrition Programs. Free and Reduced Price Eligibility Report, School/Site Level. Retrieved from http://www.doe.virginia.gov/support/nutrition/statistics/.)

	SNAP Membership	Free Lunch Eligible	%Free Lunch Eligible	Reduced Lunch Eligible	%Reduced Lunch Eligible	Total F/R Lunch Eligible	% Total F/R Lunch Eligible
Elementary Schools							
Belle Heath	500	183	36.60%	27	5.40%	210	42.00%
Mcharg	412	189	45.875	40	9.71%	229	55.58%
Middle Schools							
John N. Dalton	254	82	32.28%	20	7.87%	102	40.16%
High Schools							
Radford	493	138	27.99%	31	6.29%	169	34.28%

Wythe County Public Schools Free and Reduced Lunch Eligibility, 2014-2015

(Virginia Department of Education, Office of School Nutrition Programs. Free and Reduced Price Eligibility Report, School/Site Level. Retrieved from http://www.doe.virginia.gov/support/nutrition/statistics/.)

	SNAP Membership	Free Lunch Eligible	%Free Lunch Eligible	Reduced Lunch Eligible	%Reduced Lunch Eligible	Total F/R Lunch Eligible	% Total F/R Lunch Eligible
Elementary Schools							
Jackson Memorial	226	101	44.69%	24	10.62%	125	55.31%
Max Meadows	268	112	41.79%	23	8.58%	135	50.37%
Rural Retreat	396	183	46.21%	21	5.30%	204	51.52%
Sheffey	272	108	39.71%	45	16.54%	153	56.25%
Speedwell	131	49	37.40%	14	10.69%	63	49.09%
Spiller	685	307	44.82%	47	6.86%	354	51.68%
Middle Schools							
Fort Chiswell	373	133	35.66%	46	12.33%	179	47.99%
Rural Retreat	258	99	38.37%	23	8.91%	122	47.29%
Scott Memorial	375	161	42.93%	35	9.33%	196	52.27%
High Schools							
Fort Chiswell	485	157	32.37%	54	11.13%	211	43.51%
George Wythe	450	174	38.67%	32	7.11%	206	45.78%
Rural Retreat	316	91	28.80%	16	5.06%	107	33.86%

Wythe County Public Schools Free and Reduced Lunch Eligibility, 2015-2016

(Virginia Department of Education, Office of School Nutrition Programs. Free and Reduced Price Eligibility Report, School/Site Level. Retrieved from http://www.doe.virginia.gov/support/nutrition/statistics/.)

	SNAP Membership	Free Lunch Eligible	%Free Lunch Eligible	Reduced Lunch Eligible	%Reduced Lunch Eligible	Total F/R Lunch Eligible	% Total F/R Lunch Eligible
Elementary Schools							
Jackson Memorial	212	93	43.87%	25	11.79%	118	55.66%
Max Meadows	252	114	45.24%	25	9.92%	139	55.16%
Rural Retreat	393	178	45.29%	18	4.58%	196	49.87%
Sheffey	261	115	44.06%	28	10.73%	143	54.79%
Speedwell	141	60	42.55%	12	8.51%	72	51.06%
Spiller	676	297	43.93%	42	6.21%	339	50.15%
Middle Schools							
Fort Chiswell	359	146	40.67%	29	8.08%	175	48.75%
Rural Retreat	271	108	39.85%	21	7.75%	129	47.60%
Scott Memorial	312	130	41.67%	17	5.45%	147	47.12%
High Schools							
Fort Chiswell	506	155	30.63%	54	10.67%	209	41.30%
George Wythe	461	196	42.52%	33	7.16%	229	49.67%
Rural Retreat	342	90	26.32%	41	11.99%	131	38.30%

Households and Marital Status

In Radford City, of the population 15 years of age and older, fewer were married, fewer were divorced, and more had never married as compared to all localities in the New River Valley and the state as a whole.[15]

Marital Status, Population 15 years and over, 2010-2014, Percentage

(U.S. Census Bureau, 2010-2014 5-Year American Community Survey, Table S1201. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

Geography	Now Married (except separated)	Widowed	Divorced	Separated	Never Married
Virginia	50.40%	5.60%	10.00%	2.50%	31.50%
Floyd County	56.70%	7.50%	13.80%	0.50%	21.50%
Montgomery County	38.90%	4.10%	7.50%	1.90%	47.60%
Pulaski County	53.80%	8.50%	12.90%	3.00%	21.80%
Radford City	24.70%	3.70%	7.10%	1.30%	63.10%
Wythe County	53.00%	8.20%	13.30%	3.50%	22.00%

More children less than 18 years of age who live with their own parents live in single parent families in the city of Radford than any other locality in the MSA. Of these children, the majority are African American or Hispanic.

Percent of Children Living in Single Parent Households, 2010, by Race/Ethnicity

(U.S. Census Bureau, 2010 Census Summary File 1, Table P31, P31A, P31B, P31H. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

Geography	Total Child Population	White	African American	Hispanic or Latino
Virginia	23.97%	17.73%	44.70%	24.03%
Floyd County	20.76%	20.32%	43.90%	24.32%
Montgomery County	22.46%	21.18%	47.97%	27.29%
Pulaski County	26.28%	24.39%	41.87%	27.04%
Radford City	33.61%	29.58%	55.66%	50.00%
Wythe County	24.68%	23.53%	46.77%	21.15%

*Note: Refers to population of children (< 18 years) living in their own parents' households. Excludes minors who are heads of households, spouses, or other relatives (e.g., grandchildren) living in the household as well as children living in institutionalized settings. Hispanic origin is not mutually exclusive of race.

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[15] US Census Bureau, American Community Survey, 5-year Estimate, Table S1201, 2006-2010

There highest number of families (13.4%) living below 100% of poverty in the service area, live in Radford City. But, when looking at families with children, Radford City is surpassed by Pulaski, Montgomery and Wythe Counties. When looking at female head of household families with children less than 18 years of age living below 100% FPL, Montgomery and Pulaski Counties had the highest rates.[16]

Families Living in Poverty

(U.S. Census Bureau, 2009-2013 and 2010-2014 5-Year American Community Survey, Table S1702. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

Geography	Percent 2009-2013	Percent 2010-2014	Percent Change
Virginia	8.00%	8.20%	2.50%
Floyd County	9.50%	6.80%	-28.40%
Montgomery County	9.50%	9.30%	-2.10%
Pulaski County	9.80%	10.10%	3.10%
Radford City	13.40%	12.40%	-7.50%
Wythe County	9.90%	10.10%	2.00%

Families Living in Poverty with Related Children Under 18 Years

(U.S. Census Bureau, 2009-2013 and 2010-2014 5-Year American Community Survey, Table S1702. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

Geography	Percent 2009-2013	Percent 2010-2014	Percent Change
Virginia	12.60%	13.00%	3.17%
Floyd County	13.00%	8.00%	-38.36%
Montgomery County	16.50%	16.30%	-1.21%
Pulaski County	16.50%	18.60%	12.73%
Radford City	15.50%	15.40%	-0.65%
Wythe County	18.10%	17.20%	-4.97%

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[16] US Census Bureau American Community Survey 5-year estimates 2006-2010

Female Head of Household with Related Children Under 18 Years Living in Poverty

(U.S. Census Bureau, 2009-2013 and 2010-2014 5-Year American Community Survey, Table S1702. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

Geography	2009-2013	2010-2014	Percent Change
Virginia	33.20%	34.40%	3.61%
Floyd County	53.60%	32.00%	-40.30%
Montgomery County	46.80%	45.40%	-2.99%
Pulaski County	41.70%	43.50%	4.32%
Radford City	29.70%	37.50%	26.26%
Wythe County	39.10%	37.60%	-3.84%

In all of the New River Valley, except Floyd and Montgomery Counties, more grandparents are responsible for their grandchildren as compared to the statewide average.[17]

Percent of Grandparents Living with Grandchildren who are Responsible for their Grandchildren with No Parent of the Grandchild Present

(U.S. Census Bureau, 2009-2013 and 2010-2014 5-Year American Community Survey, Table S1002. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

Geography	2009-2013	2010-2014	Percent Change
Virginia	13.00%	12.60%	-3.08%
Floyd County	0.00%	0.00%	0.00%
Montgomery County	7.40%	11.70%	58.11%
Pulaski County	46.00%	39.10%	-15.00%
Radford City	25.00%	22.50%	-10.00%
Wythe County	24.50%	25.00%	2.04%

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[17] US Census Bureau, American Community Survey 5-year Estimates, 2006-2010

Employment Status

Many areas in the New River Valley were hard hit by the recession with increased unemployment rates from 2008 to 2011. Those rates have since started to decline. The city of Radford and Wythe County both have the highest unemployment rates (5.4 % - 5.6%), higher than the national unemployment rates (5.3%).

Unemployment Rates for New River Valley, Virginia, and U.S. 2013-2015
(Virginia Employment Commission, Local Area Unemployment Statistics, Retrieved from
https://data.virginialmi.com/gsipub/index.asp?docid=342)

Geography	2013	2014	2015
Floyd County	5.40%	4.60%	4.00%
Montgomery County	5.60%	5.10%	4.30%
Pulaski County	7.50%	6.10%	5.00%
Radford City	7.50%	6.70%	5.60%
Wythe County	7.80%	6.40%	5.40%
Virginia	5.70%	5.20%	4.40%
United States	7.40%	6.20%	5.30%
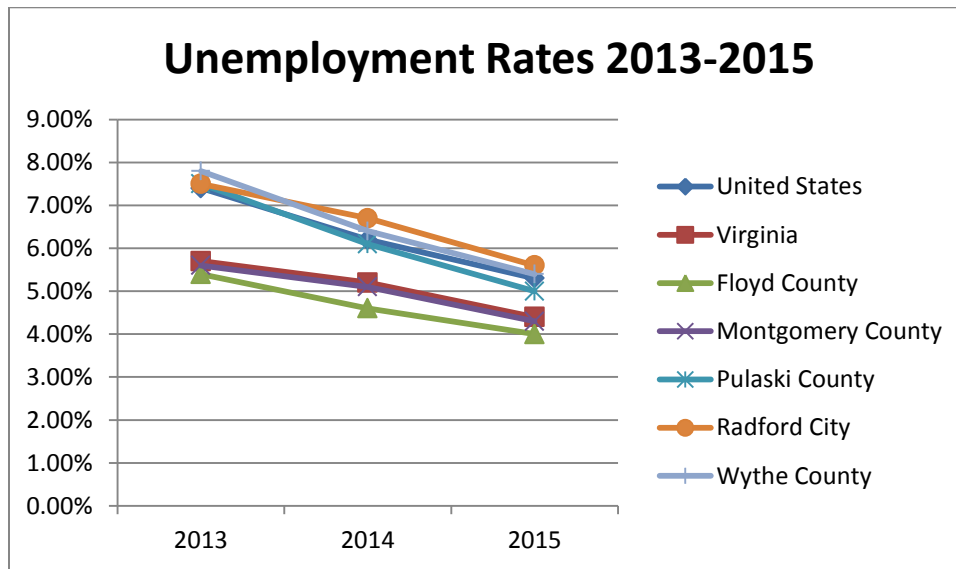
Transportation

With the exception of Wythe County at 8.2% and Pulaski County at 6.7%, the New River Valley has relatively low numbers of residents living in housing without an available vehicle compared to the state average (6.4%).

Occupied Housing Units with No Vehicles Available, 2010-2014

(U.S. Census Bureau, 2010-2014 5-Year American Community Survey, Table DP04. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

	#Occupied housing units with no vehicles available	%Occupied housing units with no vehicles available
Virginia	194153	6.40%
Floyd County	252	4.10%
Montgomery County	2075	6.00%
Pulaski County	1015	6.70%
Radford City	290	5.40%
Wythe County	980	8.20%

Access to health care

Access to health services is one of Healthy People 2020's Leading Health Indicators and its goal is to improve access to comprehensive, quality health care services. Objectives related to this goal include:

- Increase the proportion of persons with a usual primary care provider (AHS-3)
- Increase the number of practicing primary care providers (AHS-4)
- Increase the proportion of persons who have a specific source of ongoing care (AHS-5)
- Reduce the proportion of individuals who are unable to obtain or delay in obtaining necessary medical care, dental care, or prescription medicines (AHS-6)[18]

Disparities in access to health services directly affect quality of life and are impacted by having health insurance and ongoing sources of primary care. Individuals who have a medical home tend to receive preventive health care services, are better able to manage chronic disease conditions, and have fewer emergency room visits for primary care services.[19]

Health staffing shortages and designations

Floyd Service area, Montgomery County, Low Income Pulaski County, Radford City and Wythe South are all designated Medically Underserved Areas (MUA). Health Professional Shortage Areas (HPSA) are present in the portions of the New River Valley for Primary Care, Dental, and Mental Health providers and are outlined in the following table.

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[18] US Department of Health & Human Services, Healthy People 2020, Topics and Objectives, www.healthypeople.gov

[19] Closing the Divide: How Medical Homes Promote Equity in Health Care: Results from the Commonwealth Fund 2006 Health Care Quality Survey, Volume 62, June 27, 2007

MSA Health Professional Shortage Areas

(Find Shortage Areas: HPSA by State & Country.(2014).U.S. Department of Health and Human Services: Health Resources and Services Administration. Retrieved from http://hpsafind.hrsa.gov/HPSASearch.aspx and Find Shortage Areas: MUA/P by State & County. (2014). U.S. Department of Health and Human Services: Health Resources and Services Administration. Retrieved from http://muafind.hrsa.gov/index.aspx.)

Geography	MUA	Primary Care HPSA	Dental HPSA	Mental Health HPSA
Floyd County	Floyd Service Area	Floyd County	Floyd County	Low income – New River Valley Service Area (Floyd)
Montgomery County	Montgomery County	Free Clinic of the New River Valley Inc.	Low Income – Montgomery County (Montgomery); Free Clinic of the New River Valley, Inc.	Low Income – Montgomery County (Montgomery); Free Clinic of the New River Valley, Inc.
Pulaski County	Low income – Pulaski County	None	Low Income – Pulaski County/Radford City (Pulaski)	Low Income – New River Valley Service Area (Pulaski)
Radford City	Radford City	None	Low Income – Pulaski County/Radford City (Radford)	Low Income – New River Valley Service Area (Radford)
Wythe County	Wythe South	None	None	Mount Rogers Service Area (Wythe)

Health Services Professionals

There is a direct relationship between the number of primary care providers in a community and improved health outcomes. Having an adequate supply of primary care providers is a measure of access to care and can be determined by calculating the ratio of the population to one full-time equivalent (FTE) provider. It is important to note that this information may at times under- or over-estimate the number of providers in the area; does not take into account patient satisfaction, how care is provided and utilization of services by the patients; and finally this measure does not reflect how care is coordinated within a community.[20]

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[20] County Health Rankings, 2012 Data and Methods, http://www.countyhealthrankings.org/health-factors/access-care accessed 8/18/12

Primary Care Providers Population Ratio, 2011

(HRSA Area Resource File. (2011). Retrieved from
http://www.countyhealthrankings.org/app/virginia/2014/measure/factors/4/map

Geography	#PCP	PCP Rate	PCP Ratio
Virginia	6021	74	1345:1
Floyd County	5	33	2076:1
Montgomery County	57	60	1655:1
Pulaski County	21	61	1648:1
Radford City	13	79	1263:1
Wythe County	17	58	1718:1

Primary Care Providers Population Ratio, 2012

(HRSA Area Resource File. (2012). Retrieved from
http://www.countyhealthrankings.org/app/virginia/2015/downloads)

Geography	#PCP	PCP Rate	PCP Ratio
Virginia	6091	74	1344:1
Floyd County	4	26	3848:1
Montgomery County	61	64	1561:1
Pulaski County	21	60	1654:1
Radford City	12	72	1390:1
Wythe County	18	62	1625:1

Primary Care Providers Population Ratio, 2013

(HRSA Area Resource File. (2013). Retrieved from
http://www.countyhealthrankings.org/app/virginia/2016/measure/factors/4/map

Geography	#PCP	PCP Rate	PCP Ratio
Virginia	6216	75	1329:1
Floyd County	5	32	3106:1
Montgomery County	67	70	1436:1
Pulaski County	20	58	1725:1
Radford City	11	64	1562:1
Wythe County	16	55	1834:1

Mental Health Providers Population Ratio, 2013

(HRSA Area Resource File. (2013). Retrieved from
http://www.countyhealthrankings.org/app/virginia/2014/measure/factors/4/map)

Geography	#MHP	MHP Rate	MHP Ratio
Virginia	8025	100	998:1
Floyd County	8	52	1924:1
Montgomery County	104	109	915:1
Pulaski County	4	12	8684:1
Radford City	21	126	795:1
Wythe County	45	154	650:1

Mental Health Providers Population Ratio, 2014

HRSA Area Resource File. (2014). Retrieved from
http://www.countyhealthrankings.org/app/virginia/2015/measure/factors/4/map

Geography	#MHP	MHP Rate	MHP Ratio
Virginia	11406	138	724:1
Floyd County	7	45	2218:1
Montgomery County	160	166	601:1
Pulaski County	11	32	3137:1
Radford City	26	151	661:1
Wythe County	60	204	489:1

Mental Health Providers Population Ratio, 2015

HRSA Area Resource File. (2015). Retrieved from
http://www.countyhealthrankings.org/app/virginia/2016/measure/factors/4/map

Geography	#MHP	MHP Rate	MHP Ratio
Virginia	12162	146	685:1
Floyd County	9	58	1731:1
Montgomery County	173	178	562:1
Pulaski County	12	35	2860:1
Radford City	25	142	706:1
Wythe County	56	192	520:1

Dentist Population Ratio, 2012

(HRSA Area Resource File. (2012). Retrieved from
http://www.countyhealthrankings.org/app/virginia/2014/measure/factors/4/map)

Geography	#Dentists	Dentist Rate	Dentist Ratio
Virginia	4951	60	1653:1
Floyd County	2	13	7695:1
Montgomery County	36	38	2644:1
Pulaski County	9	26	3860:1
Radford City	10	60	1669:1
Wythe County	11	38	2659:1

Dentist Population Ratio, 2013

(HRSA Area Resource File. (2013). Retrieved from
http://www.countyhealthrankings.org/app/virginia/2015/measure/factors/4/map)

Geography	#Dentists	Dentist Rate	Dentist Ratio
Virginia	5127	62	1611:1
Floyd County	2	13	7764:1
Montgomery County	37	38	2600:1
Pulaski County	9	26	3834:1
Radford City	10	58	1718:1
Wythe County	11	37	2668:1

Dentist Population Ratio, 2014

(HRSA Area Resource File. (2014). Retrieved from
http://www.countyhealthrankings.org/app/virginia/2016/measure/factors/4/map)

Geography	#Dentists	Dentist Rate	Dentist Ratio
Virginia	5303	64	1570:1
Floyd County	2	13	7789:1
Montgomery County	38	39	2559:1
Pulaski County	9	26	3814:1
Radford City	9	51	1961:1
Wythe County	10	34	2912:1

Source of Primary Care and Cost of Services

Primary care services are the center of modern health care systems. According to Healthy People 2020, there are three main steps in accessing primary health care services. First, an individual needs to enter the health care system. This may happen in several different ways. For example, entry can occur as a new patient in a private practice or community health center or as an emergency room patient. Next, the individual needs to access location where the health care services they need are provided. This could be through a referral, a discharge from the hospital to another location, or from independent research. Finally, the individual needs to find a health care provider in the location they have chosen that they trust with their wellbeing and are able to communicate with. This is often the lengthiest part of the process, as doctors often have long wait times for appointments. Cultural differences and language barriers also contribute to the complicated process. Once these three steps are completed, a patient is defined as having successfully accessed the health system[21].

Currently, one in fifteen American citizens depend on government-provided primary health services. This reliance on community health services has forced public health to grow rapidly in order to accommodate the nearly 22 million patients that utilize health centers today[22]. The wide range of services provided by primary care professionals makes it a cornerstone of the entire U.S. health care system. In order to make sure the services rendered to patients are high-quality and utilize new technology, access to primary care needs the support of a hefty budget[42]. The transition to electronic medical records has already occurred in nearly 90 percent of federally qualified health centers. This technological innovation has made it easier and faster to integrate new patients into health centers everywhere[41].

Improving the accessibility of primary care health services in this country is an expensive and somewhat lengthy process; but, the benefits of Americans having a primary care health professional to monitor their wellbeing outweigh the cost.

Having a usual source of care and cost of services greatly impacts an individual's ability to access primary care especially the low-income and uninsured populations living in a community. In the Service Area, more persons living in the Floyd County (27.5%) and Pulaski County (23.3%) reported that they could not see a doctor due to cost than in other localities in the service area or in Virginia as a whole.

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[21]Healthy People 2020. (2015). Access To Health Services. Retrieved from
http://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services
[22]Health Resources and Services Administration.(n.d.). Health Center Program: What Is
A Health Center? Retrieved from http://bphc.hrsa.gov/about/what-is-a-health-center/index.html

Percent of People Who Could Not See a Doctor Due to Cost, 2006-2012

(Behavioral Risk Factor Surveillance System (2006-2012. Retrieved from
http://www.countyhealthrankings.org/app/virginia/2015/downloads)

Geography	% Couldn't Access
Virginia	11.50%
Floyd County	27.50%
Montgomery County	9.10%
Pulaski County	23.30%
Radford City	n/a
Wythe County	17.60%

Insurance Status

Health Insurance Status, 2010-2014

(American Community Survey 5-Year Estimates, U.S. Census Bureau, 2010-2014, Table S2701)

Insurance Type	Virginia		Floyd County		Montgomery County		Radford City	
	#	%	#	%	#	%	#	%
Medicaid	865073	10.90%	2116	13.80%	7759	8.10%	1726	10.00%
Medicare	1180282	14.80%	3243	21.10%	11475	12.00%	1668	9.90%
Private	5944729	74.60%	10461	68.00%	77596	81.50%	13027	77.40%
Direct-Purchase	1042552	13.10%	2882	18.70%	17398	18.30%	2565	15.80%
Employer Based	4799029	60.20%	7900	51.40%	61518	64.60%	10653	63.30%
Uninsured	968444	12.10%	1940	12.60%	8457	8.90%	1615	9.60%

Health Insurance Status Cont., 2010-2014

(American Community Survey 5-Year Estimates, U.S. Census Bureau, 2010-2014, Table S2701)

Insurance Type	Pulaski County		Wythe County	
	#	%	#	%
Medicaid	4736	14.00%	4624	16.00%
Medicare	7846	23.30%	6584	22.70%
Private	22996	68.20%	18333	63.20%
Direct-Purchase	4424	13.10%	3905	13.50%
Employer Based	19222	57.00%	14902	51.40%
Uninsured	4021	11.90%	4157	14.30%

Less Than 200% FPL Health Insurance Status by Age, Virginia

(U.S Census Bureau, American Community Survey 3-Year Estimates, 2011-2013, Table B27010. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

2013	< 18 Years		18-64		65+		All Ages	
With health insurance	573569	90.74%	774657	61.42%	269020	98.60%	1617246	74.66%
Employer-based health insurance	161325	25.52%	392888	31.15%	60121	22.04%	614334	28.36%
Direct-purchase health insurance	33268	5.26%	119231	9.45%	94883	34.78%	247382	11.42%
Medicare	11901	1.88%	96393	7.64%	265435	97.29%	373729	17.25%
Medicaid	369825	58.51%	218111	17.29%	57610	21.12%	645546	29.80%
No health insurance	58519	9.26%	486662	38.58%	3810	1.40%	548991	25.34%
Total Number < 200% FPL	632088		1261319		272830		2166237	

Less Than 200% FPL Health Insurance Status by Age, Floyd County

(U.S Census Bureau, American Community Survey 3-Year Estimates, 2011-2013, Table B27010. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

	< 18 Years		18-64		65+		All Ages	
	#	%	#	%	#	%	#	%
With health insurance	1330	100.00%	1619	62.10%	1084	99.91%	4033	80.31%
Employer-based health insurance	n/a – data not available	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Direct-purchase health insurance	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Medicare	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Medicaid	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
No health insurance	0	0.00%	988	37.98%	1	0.09%	989	19.69%
Total Number < 200% FPL	1330		2607		1085		5022	

Less Than 200% FPL Health Insurance Status by Age, Montgomery County

(U.S Census Bureau, American Community Survey 3-Year Estimates, 2011-2013, Table B27010. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

	< 18 Years		18-64		65+		All Ages	
	#	%	#	%	#	%	#	%
With health insurance	5611	94.51%	24225	81.84%	2483	100.00%	30825	84.29%
Employer-based health insurance	2027	34.14%	16683	56.36%	1146	46.15%	19856	54.30%
Direct-purchase health insurance	431	7.26%	5279	17.84%	1079	43.46%	6789	18.56%
Medicare	0	0.00%	1358	4.59%	2266	91.26%	3624	9.91%
Medicaid	3359	56.58%	2301	7.77%	336	13.53%	5996	16.40%
No health insurance	326	5.49%	5374	18.16%	0	0.00%	5745	15.71%
Total Number < 200% FPL	5937		29599		2483		36469	

Less Than 200% FPL Health Insurance Status by Age, Pulaski County

(U.S Census Bureau, American Community Survey 3-Year Estimates, 2011-2013, Table B27010. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

	< 18 Years		18-64		65+		All Ages	
	#	%	#	%	#	%	#	%
With health insurance	3286	96.17%	4060	55.75%	2335	100.00%	9681	74.27%
Employer-based health insurance	1322	38.69%	1699	23.33%	623	26.68%	3644	27.96%
Direct-purchase health insurance	190	5.56%	489	6.72%	921	39.44%	1600	12.28%
Medicare	0	0.00%	886	12.17%	2335	100.00%	3221	24.71%
Medicaid	1777	52.00%	1539	21.13%	462	19.79%	3778	28.99%
No health insurance	131	3.83%	3222	44.25%	0	0.00%	3353	25.73%
Total Number < 200% FPL	3417		7282		2335		13034	

Less Than 200% FPL Health Insurance Status by Age, Radford City

(U.S Census Bureau, American Community Survey 3-Year Estimates, 2011-2013, Table B27010. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

	< 18 Years		18-64		65+		All Ages	
	#	%	#	%	#	%	#	%
With health insurance	884	98.44%	5588	83.68%	495	100.00%	6967	86.32%
Employer-based health insurance	n/a – data not available	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Direct-purchase health insurance	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Medicare	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Medicaid	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
No health insurance	88	9.80%	1090	16.32%	0	0.00%	1178	14.60%
Total Number < 200% FPL	898		6678		494		8071	

Less Than 200% FPL Health Insurance Status by Age, Wythe County

(U.S Census Bureau, American Community Survey 3-Year Estimates, 2011-2013, Table B27010. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none)

	< 18 Years		18-64		65+		All Ages	
	#	%	#	%	#	%	#	%
With health insurance	2320	94.19%	3974	62.38%	2204	100.00%	8498	76.99%
Employer-based health insurance	590	23.95%	1917	30.09%	289	13.11%	2796	25.33%
Direct-purchase health insurance	133	5.40%	362	5.68%	786	35.66%	1281	11.61%
Medicare	19	0.77%	663	10.41%	2204	100.00%	2886	26.15%
Medicaid	1603	65.08%	1483	23.28%	582	26.41%	3668	33.23%
No health insurance	143	5.81%	2397	37.62%	0	0.00%	2540	23.01%
Total Number < 200% FPL	2463		6371		2204		11038	

Health status of the population

Percent of Adults Reporting Fair to Poor Health and the Number of Poor Physical Health Days in the Past Month, 2006-2012

(Behavioral Risk Factor Surveillance System. (2006-2012). Retrieved from http://www.countyhealthrankings.org/app/virginia/2015/downloads)

	Poor or Fair Health	Poor Physical Health Days
Geography	% Poor or Fair Health	Physically Unhealthy Days
Virginia	14	3.2
Floyd County	14	3.2
Montgomery County	12	3.4
Pulaski County	24	5.1
Radford City	n/a	n/a
Wythe County	27	5.1

Percent of Adults Reporting Fair to Poor Health and the Number of Poor Physical Health Days in the Past Month, 2014

(Behavioral Risk Factor Surveillance System. (2014). Retrieved from http://www.countyhealthrankings.org/app/virginia/2016/downloads)

	Poor or Fair Health	Poor Physical Health Days
Geography	% Poor or Fair Health	Physically Unhealthy Days
Virginia	17	3.5
Floyd County	15	3.4
Montgomery County	17	3.8
Pulaski County	15	3.6
Radford City	23	4.7
Wythe County	17	3.8

Death Rates

New River Valley Area Deaths Age-Adjusted Rates per 100,000

(Statistical Reports and Tables (2015). Virginia Department of Health: Division of Health Statistics. Retrieved from
http://www.vdh.virginia.gov/healthstats/stats.htm#pop)

Total Deaths Per 100,000 Population
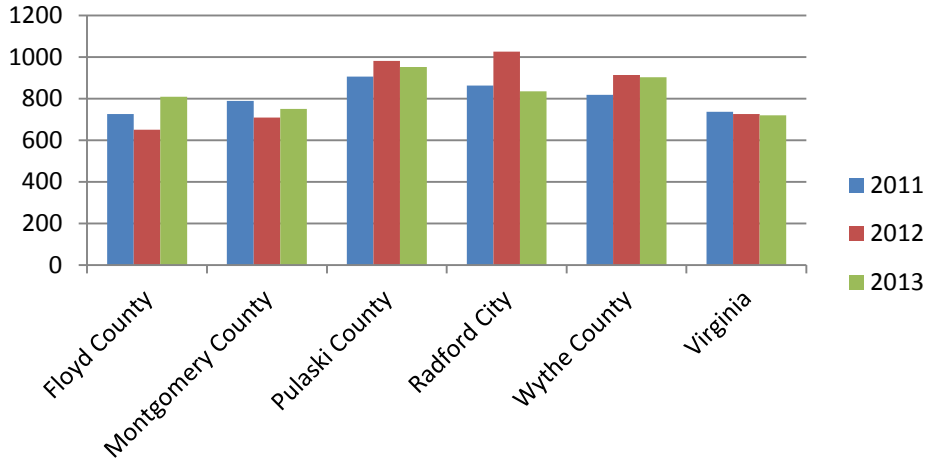
Geography	2011	2012	2013
Floyd County	725.6	650.9	809.4
Montgomery County	788.4	708.1	750.6
Pulaski County	906.1	981.7	951.9
Radford City	863	1025	835.3
Wythe County	818.3	913.2	902.6
Virginia	735.8	724.9	720.1

(Statistical Reports and Tables (2015). Virginia Department of Health: Division of Health Statistics. Retrieved from
http://www.vdh.virginia.gov/healthstats/stats.htm#pop)

Malignant Neoplasms Deaths Per 100,000 Population
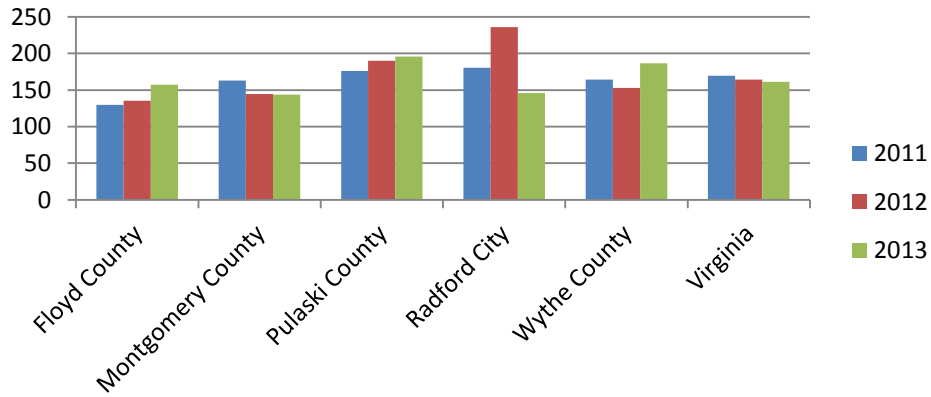
Geography	2011	2012	2013
Floyd County	129.8	135.2	157.2
Montgomery County	163.0	144.4	143.6
Pulaski County	175.9	189.9	195.6
Radford City	180.4	236.1	145.8
Wythe County	164.4	153.0	186.5
Virginia	169.5	164.1	161.3

(Statistical Reports and Tables (2015). Virginia Department of Health: Division of Health Statistics. Retrieved from http://www.vdh.virginia.gov/healthstats/stats.htm#pop)

Heart Disease Deaths Per 100,000 Population
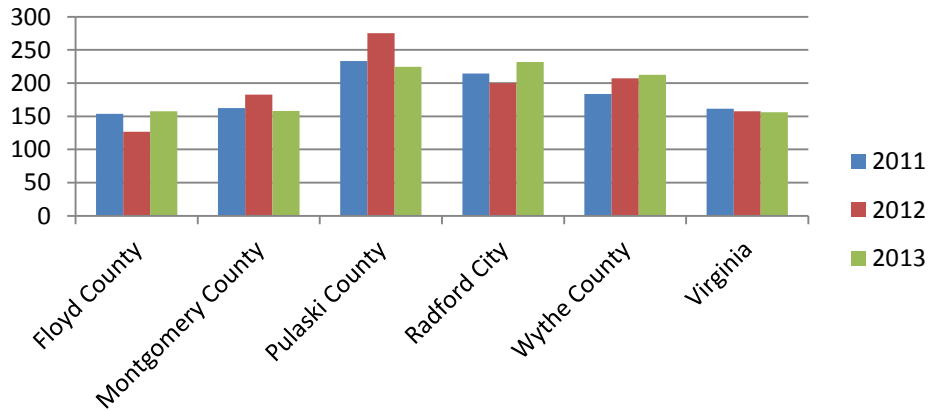
Geography	2011	2012	2013
Floyd County	153.8	126.9	157.4
Montgomery County	162.3	182.6	158.1
Pulaski County	233.4	275.2	224.5
Radford City	214.3	199.8	231.8
Wythe County	183.7	207.1	212.6
Virginia	161.3	157.4	155.9

Cerebrovascular Disease Deaths Per 100,000 Population
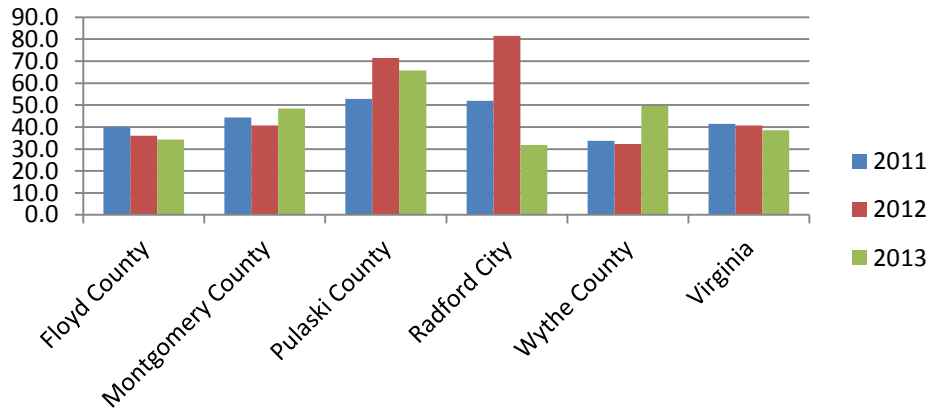
Locality	2011	2012	2013
Floyd County	40.0	36.0	34.3
Montgomery County	44.4	40.7	48.5
Pulaski County	52.8	71.4	65.8
Radford City	51.9	81.5	31.8
Wythe County	33.7	32.3	49.6
Virginia	41.4	40.7	38.5

(Statistical Reports and Tables (2015). Virginia Department of Health: Division of Health Statistics. Retrieved from
http://www.vdh.virginia.gov/healthstats/stats.htm#pop)

Chronic Lower Respiratory Disease
Deaths Per 100,000 Population
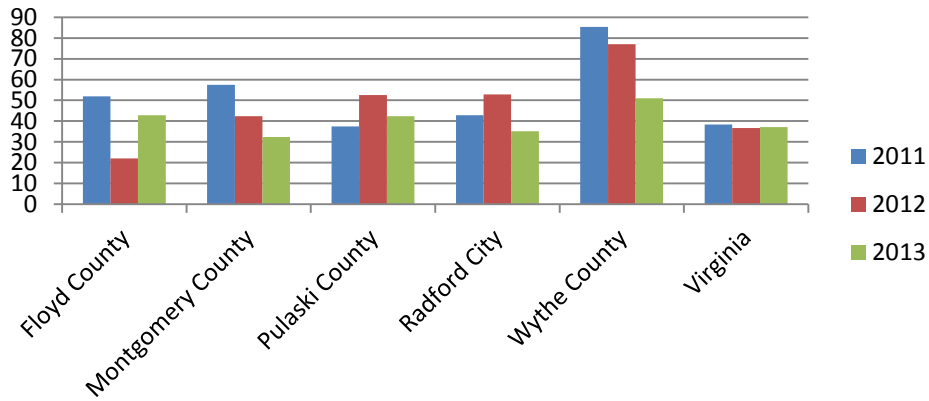
Locality	2011	2012	2013
Floyd County	51.9	22.1	42.9
Montgomery County	57.4	42.4	32.3
Pulaski County	37.4	52.6	42.3
Radford City	42.8	52.9	35.1
Wythe County	85.4	77.1	51
Virginia	38.4	36.6	37.2

(Statistical Reports and Tables (2015). Virginia Department of Health: Division of Health Statistics. Retrieved from http://www.vdh.virginia.gov/healthstats/stats.htm#pop)

Diabetes Mellitus Deaths Per 100,000 Population
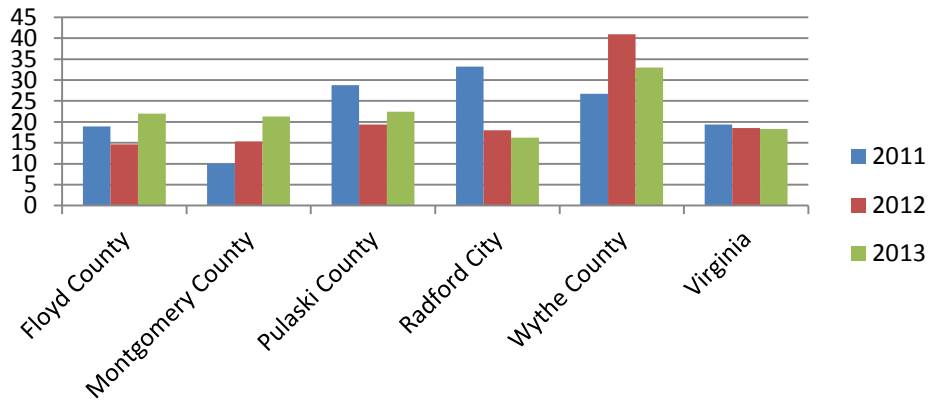
Geography	2011	2012	2013
Floyd County	18.9	14.6	22.0
Montgomery County	10.0	15.3	21.3
Pulaski County	28.8	19.4	22.4
Radford City	33.2	18.0	16.2
Wythe County	26.7	40.9	33.0
Virginia	19.4	18.5	18.3

Prevention Quality Indicators

Prevention Quality Indicators (PQI) identify quality of care for ambulatory sensitive conditions, conditions for which good outpatient care can prevent hospitalization or which early intervention can prevent complications and severe disease.

Statistical Area Age Adjusted Discharge Rates per 100,000

(Virginia Atlas of Community Health, Atlas Data, HPD6, 2013, Retrieved from http://atlasva.com/)

Age-Adjusted Discharge Rate per 100,000	Floyd County	Montgomery County	Pulaski County	Radford City	Wythe County	Virginia Total
Adult Asthma PQI Discharges	n/a	n/a	n/a	n/a	n/a	14.6
Angina PQI Discharges	n/a	n/a	n/a	n/a	n/a	7.5
Bacterial Pneumonia PQI Discharges	165.0	198.0	402.0	445.0	317.7	186.7
Chronic Obstructive Pulmonary Disease (COPD) PQI Discharges	n/a	160.7	317.7	457.8	189.8	181.8
Congestive Heart Failure PQI Discharges	149.2	177.7	325.9	557.2	327.1	237.5
Diabetes PQI Discharges n/a	172.9	172.9	n/a	251.6	n/a	141.5
Hypertension PQI Discharges	n/a	n/a	n/a	n/a	n/a	38.6

Mental Health and Substance Abuse

At any moment, there are millions of people across the nation suffering from mental health and substance abuse problems. The American Psychological Association estimates that one-fourth of American citizens do not have access to any kind of mental health services. Without access to mental health services, many Americans are rendered incapable of living a healthy, productive life. Even the individuals with health insurance are at risk due to the fact that several insurance companies do not cover mental health and substance abuse services under their policies[23]. As the media continues to report crimes committed by people with poor mental health occurring every day, it is the nation's responsibility to increase access to mental health services for all.

The Affordable Care Act has recognized the need and responded with measures to widen access to all Americans. The key in the ACA's guidelines is the need to identify and treat mental

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[23]American Psychological Association.(n.d.). Access To Mental Health Care. Retrieved from http://www.apa.org/health-reform/access-mental-health.html

illness early and effectively. More than 5,000 health care professionals across the nation are being supported by a part of the ACA that sends social workers and psychologists into schools in order to improve the overall social and behavioral atmosphere among at risk adolescents. The ACA is also investing in the creation of new hubs and websites that Americans can access to locate the services they need. By entering a few details such as location and the health issue they want to treat, people will be able to bypass the lengthy referral process that makes accessing mental health services so difficult[24]. The Affordable Care Act is a key player in the improvement of mental health services across the nation.

Accessing mental health and substance abuse services is a need seen across races, ages, genders, and geographic regions. While the public works to fight the negative stigma that is associated with seeking help for mental health crises, health organizations need to commit their money and time to connecting those who are suffering to the resources they need and deserve to heal and rebuild their lives.

Number of Mentally Unhealthy Days in the Past Month

(Behavioral Risk Factor Surveillance System. (2006-2012, 2014). Retrieved from http://www.countyhealthrankings.org/app/virginia/2015/downloads and http://www.countyhealthrankings.org/app/virginia/2016/downloads)

| Geography	Mentally Unhealthy Days in the Past Month, 2006-2012	Mentally Unhealthy Days in the Past Month, 2014
Virginia	3.1	3.3
Floyd County	2.9	3.2
Montgomery County	4.0	3.5
Pulaski County	4.7	3.3
Radford City	2.7	4.2
Wythe County	3.6	3.5

[24]The White House Blog. (2013). Increasing Access To Mental Health Services. Retrieved from https://www.whitehouse.gov/blog/2013/04/10/increasing-access-mental-health-services

Statistical Area Suicide Deaths per 100,000 Population, 2011-2013

(Statistical Reports and Tables (2015). Virginia Department of Health: Division of Health Statistics. Retrieved from http://www.vdh.virginia.gov/healthstats/stats.htm#pop)

Geography	2011	2012	2013
Floyd County	5.8	37.7	22.9
Montgomery County	12.2	8.4	9.0
Pulaski County	23.5	14.3	20.5
Radford City	8.1	9.7	44.8
Wythe County	22.0	15.3	6.3
Virginia	12.5	12.5	12.2

Suicide Deaths per 100,000 Population, 2011-2013

	2011	2012	2013
Floyd County	5.8	37.7	22.9
Montgomery County	12.2	8.4	9
Pulaski County	23.5	14.3	20.5
Radford City	8.1	9.7	44.8
Wythe County	22	15.3	6.3
Virginia	12.5	12.5	12.2
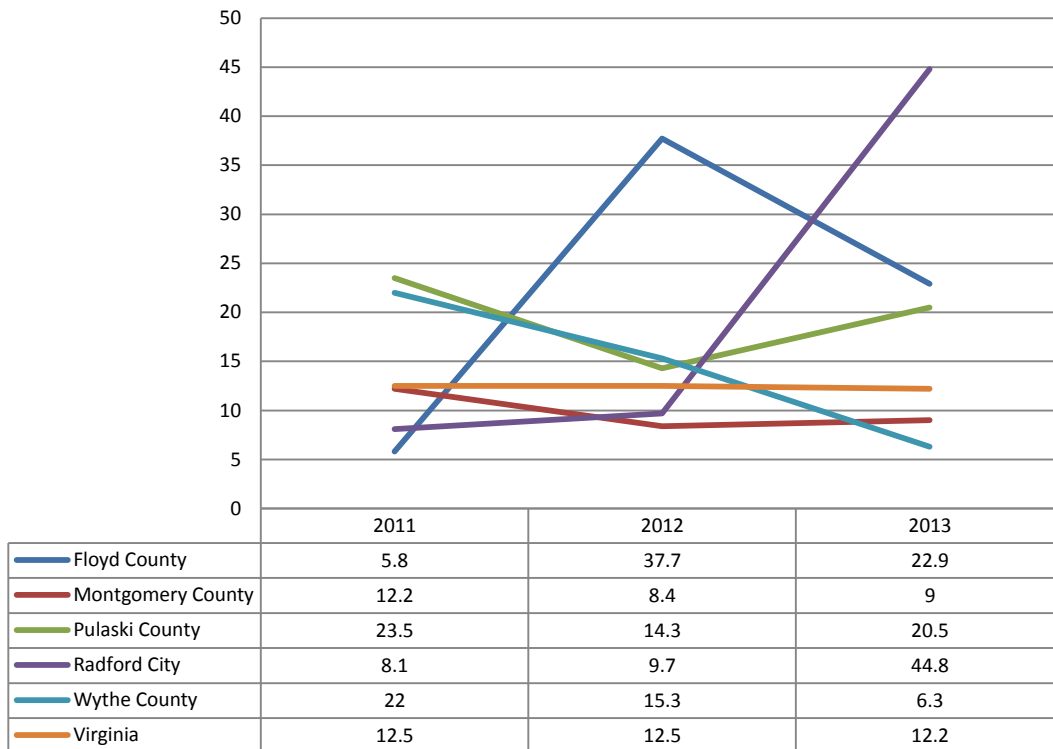
Statistical Area Unintentional Injury Death Rate per 100,000 Population, 2011-2013

(Statistical Reports and Tables (2015). Virginia Department of Health: Division of Health Statistics. Retrieved from http://www.vdh.virginia.gov/healthstats/stats.htm#pop)

Geography	2011	2012	2013
Floyd County	66.5	51.4	63.7
Montgomery County	53.3	22.5	47.7
Pulaski County	64.9	52.8	55.0
Radford City	31.4	58.7	23.1
Wythe County	41.0	62.4	51.2
Virginia	33.4	33.3	33.0

Statistical Area Drug/Poison Deaths (age adjusted rates per 100,000), 2014

(Virginia Department of Health, Office of Chief Medical Examiner's Annual Report, 2013, Table 5.8, 5.11 and 5.15, Retrieved from http://www.vdh.virginia.gov/medExam/documents/pdf/Annual%20Report%202013.pdf)

Drug/Poison (deaths per 100,000 population)	Floyd County	Montgomery County	Radford City	Pulaski County	Wythe County	Virginia Total
Drug/Poison	12.8	11.3	5.7	23.3	34.3	11.4
Heroin	6.4	0.0	0.0	0.0	0.0	2.7
Prescription Opioids	0.0	5.1	5.7	14.6	24.0	6.4

Oral Health

All too often, the importance of oral health maintenance is overshadowed by larger scale health care issues. For about 47 million people in the United States, these issues are left untreated until emergency care is required[25]. In fact, nearly 830,000 emergency room visits during 2009 could have been prevented if underserved populations had access to regular dental services in their community (The White House Blog, 2013). According to the Center for Disease Control, Non-Hispanic Blacks, Hispanics, and American Indians have the worst overall oral health in the nation[26]. In order to mend the oral health issues in this nation, it is absolutely necessary to change the way the public, government, and elected officials view dental health services.

The American Dental Association is leading the charge for transitioning the way oral health is prioritized in the U.S. They have found that nearly one fourth of American children don't have access to oral health services, and have devised several strategies to begin opening the right pathways for intervention. They are teaming up with community centers across the nation to implement programs to provide dental care and educate the underserved population about how to maintain their oral health[27]. A central goal in improving access to oral health services is increasing the prevalence of oral health literacy among all populations in the country.

Great strides have already been seen in child and adolescent oral health. New programs are being implemented across the nation that use school and after-school care centers to reach the vulnerable children without regular access to oral health services. New school-based dental sealant programs have stemmed from Healthy People 2020 initiatives[28].

These programs recognize that tooth decay is a huge issue in underserved populations and provide the thin plastic seals on chewing teeth that help children to minimize the number of dental caries they will face without regular oral care. Other regions are focusing on making every public water source in the nation contain the fluoride that is suggested for strong, healthy teeth[47].

Eliminating oral health disparities requires medical professionals, medical supply companies, and local venues to volunteer their resources and expertise in order to care for the populations with poor oral health.

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[25]The White House Blog. (2013). Increasing Access To Mental Health Services. Retrieved from https://www.whitehouse.gov/blog/2013/04/10/increasing-access-mental-health-services
[26]Centers for Disease Control and Prevention.(2015-b).Disparities in Oral Health. Retrieved from http://www.cdc.gov/oralhealth/oral_health_disparities/index.htm
[27]American Dental Association. (2015). Action For Dental Health: Breaking Down Barriers. Retrieved from http://www.ada.org/en/public-programs/action-for-dental-health/breaking-down-barriers
[28]Healthy People 2020.(2015-b). Access To Health Services. Retrieved from http://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services

Adults age 18+ with No Dental Visit in the Last Year, 2013

(Virgina Behavioral Risk Fact Surveilance system, 2013, Retrieved from
http://www.vdh.virginia.gov/livewell/data/surveys/brfss/archived/tables.htm

	Floyd County	Montgomery County	Pulaski County	Radford City	Wythe County	Virginia Total
Percent Adults age 18+ with No Dental Visit in the Last Year	18%	21%	21%	18%	19%	22%

Youth (age 0-17) with No Dental Visit in the Last Year, 2013

(Virgina Atlas of Communty Health, 2013, Retrieved from http://www.atlasva.com/)

	Floyd County	Montgomery County	Pulaski County	Radford City	Wythe County	Virginia Total
Percent Youth age 18+ with No Dental Visit in the Last Year	20%	20%	20%	20%	20%	21%

Youth (age 0-17) with Dental Caries in their Primary or Permanent Teeth, 2013

(Virgina Atlas of Communty Health, 2013, Retrieved from http://www.atlasva.com/)

	Floyd County	Montgomery County	Pulaski County	Radford City	Wythe County	Virginia Total
Percent Youth (age 0-17) with Dental Caries in their Primary or Permanent Teeth	16%	16%	16%	17%	16%	18%

Youth (age 0-17) with Teeth in Fair/Poor Condition, 2013

(Virgina Atlas of Communty Health, 2013, Retrieved from http://www.atlasva.com/)

	Floyd County	Montgomery County	Pulaski County	Radford City	Wythe County	Virginia Total
Percent Youth (age 0-17) with Teeth in Fair/Poor Condition	5%	5%	5%	5%	5%	6%

Prevention and Wellness

Well-being is a concept whose definition varies greatly between individuals. Essentially, well-being involves the ability to see your own life in a positive way and feeling good. Well-being and wellness are interchangeable terms and encompass different aspects of a person's life. Some specific aspects of well-being include physical, psychological, developmental, and emotional well-being[29]. In health care, measuring wellness is done by collecting data in order to evaluate community behaviors, determine the average life span and top causes of death, study regional access to healthy food, individual activity levels, and many other categories involving the way humans live[30].

Wellness in America is at a historical low in several areas. Obesity runs rampant across almost every race and region in the country[49]. Food deserts, or areas where there is virtually no access to healthy and local food choices, are becoming a normal presence in urban areas across the nation. People continue to partake in risky health behaviors like binge-drinking and drug use despite knowing the negative impact it has on the body as a whole[48]. In order to reverse the negative trend that well-being is following, individuals and organizations alike must change everything about the way the average person spends their day. Learning what a healthy lifestyle is can take countless different forms, whether it is a class, a festival, or a school presenter[49]. As communities embrace the concept that they have the power to change their state of wellness, it will become easy to implement the right programs and initiatives for the area. Wellness is core to human life and the task of monitoring and improving it is highly important in order to ensure that future generations will have the opportunity to thrive.

County Health Rankings

Beginning in 2010, the County Health Rankings have analyzed localities in all 50 states using measures to determine how healthy people are and how long they live. These measures include (1) health outcomes which look at how long people live (mortality) and how healthy people feel while alive (morbidity); and (2) health factors which represent what influences the health of a county including health behaviors, clinical care, social and economic factors, and physical environment.[31] The lower the overall ranking is, the healthier the community.

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[29]Centers for Disease Control and Prevention.(2015-e). Health-Related Quality Of Life: Well-Being Concepts. Retrieved from http://www.cdc.gov/hrqol/wellbeing.htm

[30]U.S. Department of Health and Human Services.(2015-b).Prevention. Retrieved from http://www.hhs.gov/safety/

[31] University of Wisconsin Population Health Institute & the Robert Wood Johnson Foundation, County Health Rankings, www.countyhealthrankings.org, 2012

Since 2014, the Pulaski County has been ranked the unhealthiest locality in the service area until 2016 when it was surpassed by Radford City. Montgomery County has consistently been ranked the healthiest in the service area.

County Health Rankings--Health Outcomes (out of 133)			
Locality	2014 Rank	2014 Rank	2016 Rank
Floyd County	48	35	47
Montgomery County	20	34	46
Pulaski County	112	108	85
Radford City	64	84	101
Wythe County	100	85	73

County Health Rankings--Health Factors (out of 133)			
Locality	2014 Rank	2015 Rank	2016 Rank
Floyd County	51	78	46
Montgomery County	19	22	41
Pulaski County	96	104	91
Radford City	47	64	100
Wythe County	80	82	89

Health Risk Factors

Low education levels in the region and high poverty rates result in the inability for many to understand the complexities of health care resulting in poor compliance with disease management goals, preventive services and screenings, and follow-up with providers.

High blood pressure and high cholesterol are two of the controllable risk factors for heart disease and stroke. Reducing the proportion of adults with hypertension to 26.9% (HDS-5) and high blood cholesterol levels to 13.5% (HDS-7) are two targets for the Healthy People 2020 goal to improve cardiovascular health. More adults living in the Wythe and Pulaski Counties reported having hypertension or high blood cholesterol levels as compared statewide. Both health districts and state rates exceeded Healthy People 2020 targets with the highest rates belonging to those who live in the Wythe County.[32]

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[32]Virginia Department of Health, Office of Family Health Services, Behavior Risk Factor Surveillance System, 2013

Virginia Behavior Risk Factor Surveillance System Health Risk Factors- High Blood Pressure and Cholesterol, 2013

(Virginia Department of Health, Virginia Behavioral Risk Factor Surveillance System, 2013, Retrieved from http://www.vdh.virginia.gov/OFHS/brfss/brfss_tables/12.%20Cardiovascular/14.VBR13%20_RFHYPE5%20%28HBP%29%20Health%20Districts.pdf and http://www.vdh.virginia.gov/OFHS/brfss/brfss_tables/13.%20Cholesterol/8.VBR13%20_RFCHOL%20%28High%20Cholesterol%29%20Health%20Districts.pdf)

Adult Age 18+ Health Risk Profile	Floyd County	Montgomery County	Pulaski County	Radford City	Wythe County	Virginia
High Blood Pressure (told by a doctor or other health professional)	30.0%	30.0%	32.0%	30.0%	32.0%	30.0%
High Cholesterol (told by a doctor or other health professional)	34.0%	34.0%	35.0%	31.0%	36.0%	35.0%

One of the Healthy People 2020 Leading Health Indicators addresses the effects of tobacco and a goal to "reduce illness, disability, and death related to tobacco use and secondhand smoke exposure". One of its key objectives is to reduce the number of adults who are current smokers to 12% (TU-1).

Virginia Behavior Risk Factor Surveillance System Health Risk Factors- Adult Smoking

(Behavioral Risk Factor Surveillance System. (2011-2012, 2014). Retrieved from http://www.countyhealthrankings.org/app/virginia/2015/downloads and http://www.countyhealthrankings.org/app/virginia/2016/downloads)

Locality	% Adults who smoke daily or most days, 2006-2012	% Adults who smoke daily or most days, 2014
Virginia	18%	20%
Floyd County	27%	19%
Montgomery County	14%	21%
Pulaski County	31%	20%
Radford City	n/a	27%
Wythe County	24%	20%

Nutrition, Weight Status, and Physical Activity

A healthy body weight, good nutrition, and physical activity are positive predictors of good health and are a Healthy People 2020 Leading Health Indicator. The prevalence of overweight and obesity has increased tremendously in the past 30 years and is at epidemic proportions in the United States. These increasing rates raise concern because of their implications on health and their contribution to obesity-related diseases like diabetes and hypertension

Virginia Behavior Risk Factor Surveillance System Health Risk Factors- Obesity and Physical Inactivity

(National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation.(2010-2012). Retrieved from http://www.countyhealthrankings.org/app/virginia/2016/downloads) and (CDC Diabetes Interactive Atlas. (2011). Retrieved from http://www.countyhealthrankings.org/app/virginia/2016/downloads)

Locality	2010		2011		2012	
	% Obese	% No Leisure Time Physical Activity	% Obese	% No Leisure Time Physical Activity	% Obese	% No Leisure Time Physical Activity
Virginia	28%	23%	28%	22%	27%	22%
Floyd County	28%	24%	29%	24%	27%	23%
Montgomery County	27%	20%	26%	19%	24%	19%
Pulaski County	27%	26%	32%	26%	32%	26%
Radford City	28%	22%	30%	20%	29%	21%
Wythe County	29%	29%	30%	27%	30%	27%

The presence of recreational facilities in a community can influence a person's ability to engage in physical activity. In the New River Valley outside of Montgomery County, there were fewer recreational facilities. In addition, rich in scenic beauty, the New River Valley boasts miles of hiking and biking trails, greenways, and rivers for outdoor recreation.

Access to Recreational Facilities, 2014

(United States Department of Agriculture. 2014. Food Environment Atlas: Data Access and Documentation Downloads. Economic Research Service. Retrieved from http://ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads.aspx)

Access to Recreational Facilities		
Locality	Rec. Facs.	Rec. Fac. Rate
Floyd County	1	6.50
Montgomery County	9	9.45
Pulaski County	3	8.64
Radford City	3	17.98
Wythe County	3	10.26

Fast Food Restaurant Rate per 1,000 population

(USDA Food Environment Index. (2012) Retrieved from http://ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads.aspx)

Geography	Rate of Fast Foods per 1,0000 population	Number of Fast Food Restaurants
Floyd County	0.32	5
Montgomery County	0.65	62
Pulaski County	0.98	34
Radford City	0.71	9
Wythe County	0.82	25

Access to healthy foods directly impacts an individual's (and community's) ability to consume fruits, vegetables, and whole grains. Increasing the proportion of Americans who have access to a food retail outlet that sells a variety of foods encouraged by the Dietary Guidelines is an objective of Healthy People 2020 (NWS-4).

Despite the prevalence of food deserts in the United States, there is no universally recognized definition of a "food desert". The U.S. Department of Agriculture (USDA) and the Department of Health and Human Services (HHS) define food deserts as "a census tract with a substantial share of residents who live in low-income areas that have low levels of access to a grocery store or healthy, affordable food retail outlet.[33]" Food deserts and food insecurity go hand-in-hand; individuals living in food deserts are often food insecure.

Individuals who are food insecure are unsure where their food will come from and are more likely to have low access to healthy, nutritious foods, such as fruits and vegetables, whole grains, and dairy[34]. Fruit and vegetable consumption, in particular, is a key component of disease prevention. Individuals who consume more fruits and vegetables are more likely to maintain a healthy body weight and are less likely to develop chronic diseases, such as diabetes, heart disease, or cancer[35]. However, national studies have consistently shown that lower-income individuals consume fewer servings of fruits and vegetables than higher-income individuals[36] with the most often cited barrier being cost[37]. These health behaviors not only

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[33]U.S. Department of Agriculture. "Food deserts". Updated 2014.Accessed January 23, 2015.Retrieved from http://apps.ams.usda.gov/fooddeserts/fooddeserts.aspx.

[34]Food Deserts in Virginia, Recommendations from the Food Desert Task Force. Virginia Tech and Virginia State University, January 2014.

[35]U.S. Department of Health and Human Services, U.S. Department of Agriculture.Dietary Guidelines for Americans. 7th Ed. U.S. Government Printing Office; Washington, D.C.: December 2010.

[36]Centers for Disease Control and Prevention. State-specific trends in fruit and vegetable consumption among adults – United States, 2000-2009. MMWR, Morb Mortal Wkly Rep. 2010; 59:1125-1130.

[37]Larson NI, Story MT, and Nelson MC. Experimental analysis of neighborhood effects.Econometrica. 2009, 75(1):83-119.

fuel disparities in chronic disease prevalence, but are driven by preexisting disparities in income, education, and access to food.

Recently, studies have indicated that individuals with better access to a supermarket or large grocery store are more likely to eat healthier foods[38]. Furthermore, researchers have shown that fruit and vegetable intake in low-income, low food access areas increases when access to healthy foods increases, such as at the opening of a new grocery store or modified corner store[39]. In addition to increased consumption of fruits and vegetables, better access to large grocery stores or supermarkets is also associated with decreased risk of obesity while better access to convenience stores is associated with a higher risk of obesity and obesity-related chronic diseases, such as diabetes and heart disease[52]. Similar results have been associated with increased access to farmer's markets. In one study of adolescent girls, greater access to farmer's markets and produce vendors was associated with decreased risk of overweight and obesity over a three-year period[40].

Decreasing hunger, food insecurity, and food deserts in the United States has been repeatedly prioritized in federal and local initiatives including *Healthy People 2020*, First Lady Michelle Obama's *Let's Move* campaign, and more recently, First Lady of Virginia Dorothy McAuliffe's childhood nutrition and food security initiative. Despite this, the U.S. Department of Agriculture's Economic Research Service estimates that 14.3% of American households, or 43.5 million people, were food insecure at some point in 2013[41][42] with 23.5 million people (7.5%), including 6.5 million children, living in food deserts[43]. In Virginia, food deserts exist in all regions of the state, though some regions are more severely affected than others. In 2012, 12.7% of Virginians were food insecure though many localities, particularly those situated in Central and Southwestern Virginia, reported food insecurity rates much higher than the state average. Similarly, many localities in Central and Southwestern Virginia reported low-access rates, the number of people that live more than a mile from a supermarket in urban areas or 10 miles in rural areas, greater than the state average of 17.8% or the national average of 7.3%[57].

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[38]Larson NI, Story MT, and Nelson MC. Experimental analysis of neighborhood effects.Econometrica. 2009, 75(1):83-119.

[39]Economic Research Service. Access to Affordable and Nutritious Foods: Measuring and Understanding Food Deserts and Their Consequences, Report to Congress, U.S. Department of Agriculture, June 2009.

[40]Leung CW, Laraia BA, Kelly M, Nickleach D, Adler NE, Kushi LH, Yen IH. The influence of neighborhood food stores on change in young girls' body mass index. Am J Prev Med 2011; 41(1):43-51.

[41]Coleman-Jenson A, Gregory C, and Singh A. Household food security in the United States in 2013, ERR-173, U.S. Department of Agriculture, Economic Research Service, September 2014.

[42]U.S. Census Bureau. State and County Quickfacts: USA. Updated December 2014.Accessed January 25, 2015.Retrieved from http://quickfacts.census.gov/qfd/states/00000.html.

[43]Food Deserts in Virginia, Recommendations from the Food Desert Task Force. Virginia Tech and Virginia State University, January 2014.

Access to Healthy Foods

(USDA Food Environment Atlas, Map the Meal Gap. (2016). Retrieved from
http://www.countyhealthrankings.org/app/virginia/2016/downloads)

Locality	2010 - # Limited Access	2010 - % Limited Access
Virginia	295,610	4%
Floyd County	1,651	11%
Montgomery County	2,176	2%
Pulaski County	2,063	6%
Radford City	1,076	7%
Wythe County	488	2%

Census Tract Food Deserts

(United States Department of Agriculture, Economic Research Service, Food Access Research Atlas, 2013, Retrived
from http://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data.aspx)

Locality	Census Tract	Total Population	Percentage of people with low access to a supermarket or large grocery store	Number of people with low access to a supermarket or large grocery store	Percentage of total population that is low-income and has low access to a supermarket or large grocery store	Number of low-income people with low access to a supermarket or large grocery store
Floyd	20101	6177	90.07%	5563.61	31.16%	1924.95
Floyd	20102	3753	87.42%	3280.93	31.86%	1195.74
Floyd	20200	5349	99.93%	5345.14	35.15%	1880.11
Montgomery	20202	2218	99.98%	2217.65	41.60%	922.64
Montgomery	20300	6576	21.84%	1436.47	2.88%	189.25
Montgomery	20500	5988	34.50%	2065.75	6.74%	403.83
Montgomery	20700	5856	10.13%	593.39	5.89%	344.82
Montgomery	20800	6599	12.01%	792.61	7.98%	526.90
Wythe	50200	6773	45.91%	3109.51	2.76%	1049.08
Radford	10102	5672	15.46%	877.01	0.36%	199.32
Radford	10200	6588	37.09%	2443.50	2.98%	1175.08

*People at 1 mile--an urban tract with at least 500 people or 33% percent of the population living at least 1 mile
from the nearest supermarket, supercenter, or large grocery store using LA1and10

Clinical Preventive Screenings

According to the National Cancer Institute, deaths can be greatly reduced for breast, cervical, colon, and rectal cancer through early detection and screening tests. In much of the New River Valley, more women 18 years and older had no PAP test in the past three years as compared statewide, more women had no mammogram in the past three years, and more adults 50 years of age and older had fewer colorectal screenings within the past two years.

Virginia Behavior Risk Factor Surveillance System Health Risk Factors-Cancer Screenings, 2013

(Virginia Department of Health, Virginia Behavioral Risk Factor Surveillance System Data Tables, 2013, Retrieved from http://www.vdh.virginia.gov/OFHS/brfss/tables.htm)

Adult age 18+ Health Risk Profile	Virginia	Floyd County	Montgomery County	Pulaski County	Radford City	Wythe County
Percent of women with no PAP test in the past 3 years	16.00%	17.00%	15.00%	19.00%	20.00%	19.00%
Percent of women 40 and older with no mammogram in past 2 years	28.00%	30.00%	28.00%	29.00%	28.00%	30.00%
Percent of adults 50 and older with no sigmoidoscopy or colonoscopy	28.00%	31.00%	35.00%	32.00%	42.00%	30.00%

Maternal, Infant, and Child Health

Prenatal and Perinatal Health Indicators

Maternal and child health is a Healthy People 2020 Leading Health Indicator with the goal to "improve the health and well-being of women, infants, children and families". Infant mortality is affected by many factors including the socio-economic status and health of the mother, prenatal care, birth weight of the infant, and quality of health services delivered to both the mother and child and is a key predictor of the health of a community.

Healthy People 2020 Objectives and targets are as follows:

- MICH- 1.3: Reduce the rate of infant deaths (within 1 year) to 6.0 infant deaths per 1,000 live births
- MICH- 8.1: Reduce low birth weight (LBW) to 7.8% of live births
- MICH- 10.1: Increase the proportion of pregnant women who receive early and adequate prenatal care to 77.9%

Prenatal & Perinatal Health Indicators, New River Valley, 2013
Late Entry into Prenatal Care, New River Valley, 2013

(Virginia Department of Health, Statistical Reports and Tables, 2013, Retrieved from http://www.vdh.virginia.gov/HealthStats/stats.htm)

Prenatal & Perinatal Health Indicators	Late entry into prenatal care (entry after first trimester) % of all Births
Virginia	17.10%
Floyd County	9.40%
Montgomery County	9.60%
Pulaski County	9.10%
Radford City	5.70%
Wythe County	14.50%

Prenatal & Perinatal Health Indicators, New River Valley, 2013
Low Birth Weight Rate

(Virginia Department of Health, Statistical Reports and Tables, 2013, Retrieved from http://www.vdh.virginia.gov/HealthStats/stats.htm)

Geography	2013	2014
Virginia	8	7.9
Floyd County	9.5	4.8
Montgomery County	7	7
Pulaski County	8.9	8.7
Radford City	10	9.8
Wythe County	6.3	5.8

Prenatal & Perinatal Health Indicators, New River Valley, 2013
Infant Mortality Rates per 1,000 Live Births

(Virginia Department of Health, Statistical Reports and Tables, 2011-2013. Retrieved from
http://www.vdh.virginia.gov/HealthStats/stats.htm)

Geography	2011	2012	2013
Virginia	6.7	6.3	6.2
Floyd County	6.9	No data	No data
Montgomery County	6.7	3.1	5.8
Pulaski County	No data	No data	9.5
Radford City	22.1	No data	No data
Wythe County	9.7	3.4	6.1

Prenatal & Perinatal Health Indicators, Roanoke MSA, 2013

(Virginia Department of Health, Statistical Reports and Tables, 2013, Retrieved from
http://www.vdh.virginia.gov/HealthStats/stats.htm)

Total Live Births Rates by Race, 2013	Floyd County	Montgomery County	Pulaski County	Radford City	Wythe County	Virginia
Total Live Birth Rates per 1,000	9.5	9.0	9.2	9.3	9.2	12.3
Live Birth Rates per 1,000 (White)	9.6	8.9	9.3	9.2	9.2	10.9
Live Birth Rates per 1,000 (Black)	2.8	6.9	7.4	7.7	5.9	12.8
Live Birth Rates per 1,000 (Other)	25.4	11.5	9.7	19.1	26.1	25.4

Total Infant Deaths by Race, 2013	Floyd County	Montgomery County	Pulaski County	Radford City	Wythe County	Virginia
Infant Death Rates per 1,000	No data reported	5.8	9.5	No data reported	No data reported	6.2
Infant Death Rates per 1,000 (White)	No data reported	5.2	10.1	No data reported	No data reported	5.2
Infant Death Rates per 1,000 (Black)	No data reported	33.3	No data reported	No data reported	No data reported	12.2
Infant Death Rates per 1,000 (Other)	No data reported	No data reported	No data reported	No data reported	No data reported	2.2

Pregnancy Rate per 1,000 Females 10-19 (per 1,000 births)	Total	White	Black	Other
Floyd County	16.8	17.3	No data reported	No data reported
Montgomery County	10.1	10.3	11.1	6.5
Pulaski County	25.9	26.6	18.9	No data reported
Radford City	11.3	9.1	27.3	26.3
Wythe County	24.0	23.0	33.3	71.4
Virginia	14.4	10.8	22.6	20.4

(Virginia Department of Health, Statistical Reports and Tables, 2013, Retrieved from
http://www.vdh.virginia.gov/HealthStats/stats.htm)

Preventive Screenings

Reported Number of Children Tested for Elevated Blood Lead Levels under 36 months

(Virginia Department of Health, Lead-Safe Virginia Program, 2014, Retrieved from http://166.67.66.226/leadsafe/documents/pdf/2014%20Surveillance%20Report.pdf)

	Floyd County	Montgomery County	Pulaski County	Radford City	Wythe County	Virginia
Population <36 Months	495	2625	1041	360	907	303439
Number Confirmed Elevated	1	1	0	0	1	185

Infectious diseases

HIV Infection Prevalence and Other Sexually Transmitted Infections Rate

One of the Healthy People 2010 goals is to "promote healthy sexual behaviors, strengthen community capacity, and increase access to quality services to prevent sexually transmitted diseases in their complications".

HIV Infection Prevalence, 2015

(Virginia Department of Health. 2015. Virginia HIV Surveillance Quarterly Report. Retrieved from http://www.vdh.virginia.gov/epidemiology/DiseasePrevention/DAta/#profile)

Geography	Floyd County	Montgomery County	Pulaski County	Radford City	Wythe County	VA
Rate of all cases of HIV disease (per 100,000)	96.3	80.2	72.8	85	130.5	298.5

Sexually Transmitted Infection Rates (per 100,000), 2014

(Virginia Department of Health. (2014). Virignia STD Surveillance Quarterly Report. Retrieved from https://www.vdh.virginia.gov/epidemiology/DiseasePrevention/data/QuarterlySurveillanceReport3_Q_14.htm#Gonorrhea)

Locality	Early Syphilis	Gonorrhea	Chlamydia
Virginia	98.4	6.7	426.7
Floyd County	25.8	0.0	135.2
Montgomery County	27.0	2.1	278.6
Pulaski County	75.3	5.8	234.7
Radford City	93.1	0.0	989.3
Wythe County	37.5	0.0	279.4

New River Valley Number of Reported Tuberculosis (TB) Rates per 100,000 2010-2014

(Virginia Department of Health, Tables of Selected Reportable Diseases in Virginia by Year, 2010-2014, Retrieved from http://www.vdh.virginia.gov/Epidemiology/Surveillance/SurveillanceData/ReportableDisease/index.htm)

Locality	2012	2013	2014
Virginia	2.4	2.2	2.9
Floyd County	0.0	0.0	0.0
Montgomery County	2.1	1.0	1.0
Pulaski County	8.7	0.0	0.0
Radford City	0.0	0.0	0.0
Wythe County	0.0	0.0	3.4

Social environment

Rate of Child Abuse and Neglect (per 1,000 children), 2010-2014

(Virginia Department of Social Services, Child Protective Reports & Studies, 2010-2014, Retrieved from http://www.dss.virginia.gov/geninfo/reports/children/cps/all_other.cgi)

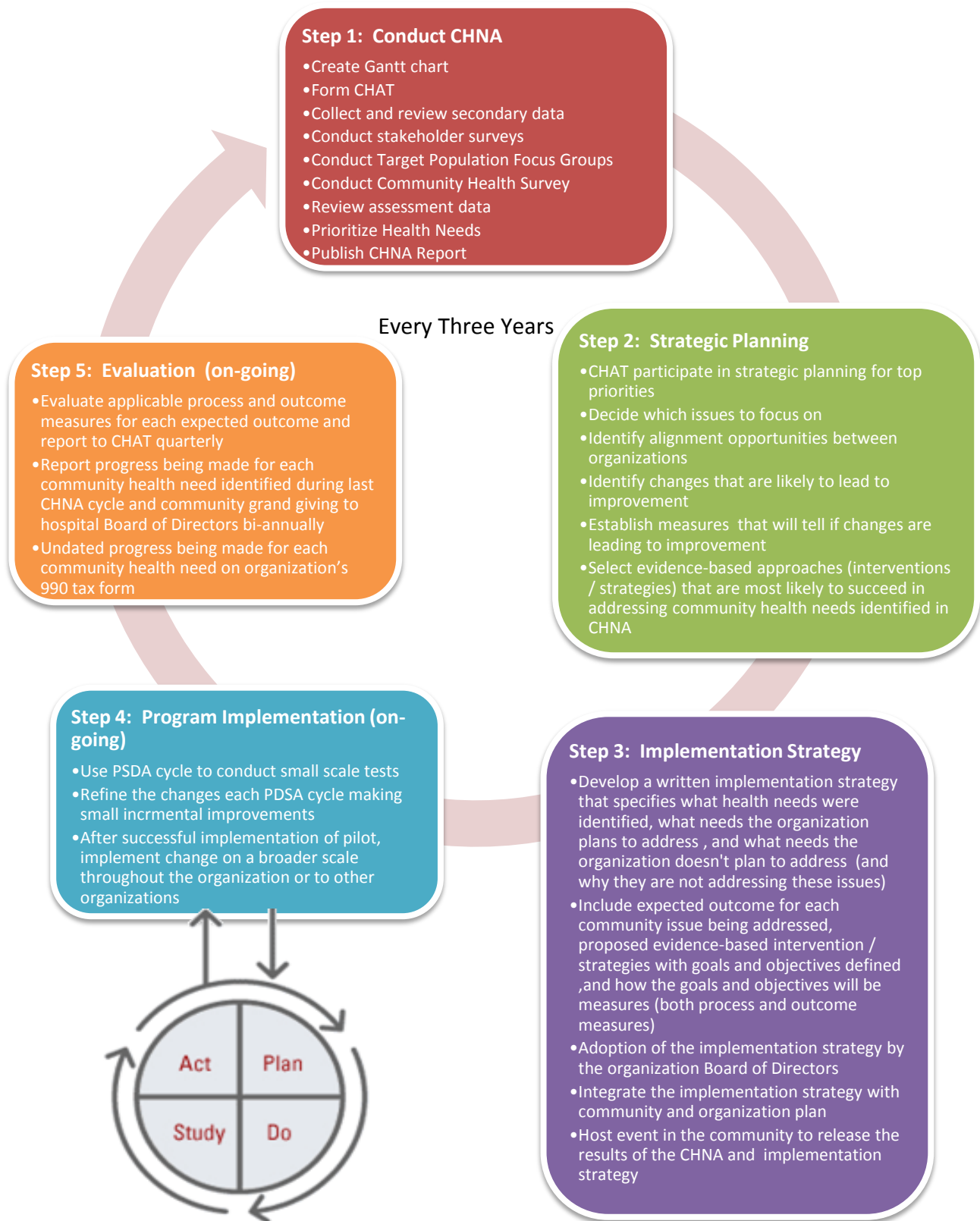| Locality	2012	2013
Floyd County	5.02	4.73
Montgomery County	5.31	6.97
Pulaski County	25.44	23.36
Radford City	5.29	3.09
Wythe County	8.13	10.08

Community Health Need Prioritization

CHAT members participated in a prioritization activity in June 2016 after all primary and secondary data was presented. To quantitatively determine health needs, CHAT members were asked to rank the top ten pertinent community needs, with one being the most pertinent. Next, on a scale of 1-5, CHAT members were ask to assign a feasibility and potential impact score for each of the ranked needs. This information is used to inform strategic planning. (See Appendix 7: Prioritization Worksheet for an example of the tool used.)

The results of the prioritization activity found the following issues as the top prioritized need for the service area:

2016 New River Valley Community Health Needs Assessment Prioritization of Needs	Rank *Frequency*	Rank *Average*	Feasibility *Average*	Potential Impact *Average*
Lack of reliable transportation	13.0	5.4	2.0	2.5
Access to mental health counseling / substance abuse	11.0	2.7	3.0	2.4
High prevalence of obesity / overweight individuals	11.0	3.7	2.6	2.6
High prevalence of substance abuse (alcohol, illegal & prescription drugs)	10.0	5.8	3.0	2.2
Child abuse / neglect	10.0	7.7	3.3	2.8
Access to primary care	9.0	4.9	2.6	2.1
Access to adult dental care	9.0	5.9	3.8	3.9
Improved coordination of care across the health and human sector	8.0	5.5	1.5	1.5
Lack of knowledge of community resources	8.0	5.5	1.8	3.3
High uninsured population	7.0	6.0	4.1	3.9

Appendices

Appendix 1: Community Health Improvement Process

Step 1: Conduct CHNA

- Create Gantt chart
- Form CHAT
- Collect and review secondary data
- Conduct stakeholder surveys
- Conduct Target Population Focus Groups
- Conduct Community Health Survey
- Review assessment data
- Prioritize Health Needs
- Publish CHNA Report

Every Three Years

Step 5: Evaluation (on-going)

- Evaluate applicable process and outcome measures for each expected outcome and report to CHAT quarterly
- Report progress being made for each community health need identified during last CHNA cycle and community grand giving to hospital Board of Directors bi-annually
- Undated progress being made for each community health need on organization's 990 tax form

Step 2: Strategic Planning

- CHAT participate in strategic planning for top priorities
- Decide which issues to focus on
- Identify alignment opportunities between organizations
- Identify changes that are likely to lead to improvement
- Establish measures that will tell if changes are leading to improvement
- Select evidence-based approaches (interventions / strategies) that are most likely to succeed in addressing community health needs identified in CHNA

Step 4: Program Implementation (on-going)

- Use PSDA cycle to conduct small scale tests
- Refine the changes each PDSA cycle making small incrmental improvements
- After successful implementation of pilot, implement change on a broader scale throughout the organization or to other organizations

Step 3: Implementation Strategy

- Develop a written implementation strategy that specifies what health needs were identified, what needs the organization plans to address , and what needs the organization doesn't plan to address (and why they are not addressing these issues)
- Include expected outcome for each community issue being addressed, proposed evidence-based intervention / strategies with goals and objectives defined ,and how the goals and objectives will be measures (both process and outcome measures)
- Adoption of the implementation strategy by the organization Board of Directors
- Integrate the implementation strategy with community and organization plan
- Host event in the community to release the results of the CHNA and implementation strategy

Act Plan

Study Do

Appendix 2: Gantt Chart

Tasks	Assigned To:	Start Date	End Date	Duration (working days)	% complete
2016 New River Valley CHNA		03-29 Tue	10-01 Sat	133	70%
Create Gantt Chart	Amy	04-04 Mon	04-04 Mon	1	100%
Identify additional CHAT members	PATH Steering Committee	03-29 Tue	04-12 Tue	1	100%
Collect Secondary Data for CHNA	Amy + Interns	04-04 Mon	06-10 Fri	49	100%
Pre-CHAT #1 Work	Amy + Aaron	04-04 Mon	04-18 Mon	10	100%
Schedule ALL Meetings	Kenya	04-04 Mon	04-08 Fri	4	100%
CHAT #1 Meeting	PATH and CHAT	04-26 Tue	04-26 Tue	1	100%
Survey Distribution	All	04-25 Mon	06-01 Wed	27	100%
Focus Groups	Amy + Shenika + Aaron + Lindsay	04-29 Fri	05-31 Tue	22	100%
CHAT #2 Meeting	PATH and CHAT	05-23 Mon	05-23 Mon	1	100%
Analyze Survey Data	Amy	06-01 Wed	06-15 Wed	10	100%
CHAT Meeting #3- Data and Prioritization	PATH	06-27 Mon	06-27 Mon	1	100%
Management Team Meeting	Management Team	06-27 Mon	06-30 Thu	1	100%
Final CHNA Report	Carilion Clinic	06-17 Fri	07-18 Mon	21	50%
CHAT Strategic Plan	PATH	07-29 Fri	07-29 Fri	1	
Create Implementation Strategy	Carilion Clinic	07-06 Wed	08-16 Tue	29	10%
Communication Plan and Community Forum	Carilion Clinic/PATH	07-11 Mon	10-01 Sat	59	50%

NEW RIVER VALLEY COMMUNITY HEALTH SURVEY

ACCESS and BARRIERS TO HEALTHCARE

1. **Is there a specific doctor's office, health center, or other place that you usually go if you are sick or need advice about your health?** ❑ Yes ❑ No
   - *Skip to question 2 if you answered No*
   - *If you answered Yes*
     - Is this where you would go for new health problems? ❑ Yes ❑ No
     - Is this where you would go for preventive health care, such as general check-ups, examinations, and immunizations (shots)? ❑ Yes ❑ No
     - Is this where you would go for referrals to other health professions when needed? ❑ Yes ❑ No

2. **Do you use medical care services?** ❑ Yes ❑ No
   - *If yes, where do you go for medical care? (Check all that apply)*

   ❑ Doctor's Office
   ❑ Carilion Clinic Family Medicine
   ❑ Emergency Room
   ❑ Community Health Center of the New River Valley
   ❑ Health Department
   ❑ LewisGale Medical Center
   ❑ Monroe Health Center

   ❑ Pulaski Free Clinic
   ❑ Pharmacy Clinic
   ❑ Salem VA Medical Center
   ❑ Urgent Care / Walk in Clinic
   ❑ Tri-Area Community Health Center
   ❑ Other: _____

3. **Do you use dental care services?** ❑ Yes ❑ No
   - *If yes, where do you go for dental care? (Check all that apply)*

   ❑ Dentist's office
   ❑ Carilion Dental Clinic
   ❑ Commonwealth Dental
   ❑ Community Health Center of the New River Valley
   ❑ Craig County Dental Clinic

   ❑ Dental Aid Partners
   ❑ Emergency Room
   ❑ Kool Smiles
   ❑ Mission of Mercy Project
   ❑ Monroe Health Center
   ❑ Pulaski Free Clinic

   ❑ Salem VA Medical Center
   ❑ Urgent Care / Walk in Clinic
   ❑ Wytheville Community College Dental Hygiene Clinic
   ❑ Other: _____

4. **Do you use mental health, alcohol abuse, or drug abuse services?** ❑ Yes ❑ No
   - *If yes, where do you go for mental health, alcohol abuse, or drug abuse services? (Check all that apply)*

   ❑ Doctor/Counselor's Office
   ❑ Access Services
   ❑ Blue Ridge Behavioral Healthcare
   ❑ Catawba Hospital
   ❑ Community Health Center of the New River Valley

   ❑ Connect
   ❑ Craig County Health Center
   ❑ Emergency Room
   ❑ Monroe Health Center
   ❑ New River Valley Community Services

   ❑ Respond
   ❑ Salem VA Medical Center
   ❑ Urgent Care / Walk in Clinic
   ❑ Other: _____

5. **What do you think are the five most important issues that affect health in our community? (*Please check five*)**

   ❑ Access to healthy foods
   ❑ Accidents in the home (ex. falls, burns, cuts)
   ❑ Aging problems
   ❑ Alcohol and illegal drug use
   ❑ Bullying
   ❑ Cancers
   ❑ Cell phone use / texting and driving / distracted driving
   ❑ Child abuse / neglect
   ❑ Dental problems
   ❑ Diabetes
   ❑ Domestic violence

   ❑ Environmental health (e.g. water quality, air quality, pesticides, etc.)
   ❑ Gang activity
   ❑ Heart disease and stroke
   ❑ High blood pressure
   ❑ HIV / AIDS
   ❑ Homicide
   ❑ Infant death
   ❑ Lack of exercise
   ❑ Lung disease
   ❑ Mental health problems
   ❑ Neighborhood safety

   ❑ Not getting "shots" to prevent disease
   ❑ Not using seat belts / child safety seats / helmets
   ❑ Overweight / obesity
   ❑ Poor eating habits
   ❑ Prescription drug abuse
   ❑ Sexual assault
   ❑ Stress
   ❑ Suicide
   ❑ Teenage pregnancy
   ❑ Tobacco use / smoking
   ❑ Unsafe sex
   ❑ Other:_____

6. Which health care services are hard to get in our community? *(Check all that apply)*

- ❒ Adult dental care
- ❒ Alternative therapy (ex. herbal, acupuncture, massage)
- ❒ Ambulance services
- ❒ Cancer care
- ❒ Child dental care
- ❒ Chiropractic care
- ❒ Dermatology
- ❒ Domestic violence services
- ❒ Eldercare
- ❒ Emergency room care
- ❒ End of life / hospice / palliative care
- ❒ Family doctor
- ❒ Family planning / birth control
- ❒ Immunizations
- ❒ Inpatient hospital
- ❒ Lab work
- ❒ Medication / medical supplies
- ❒ Mental health / counseling
- ❒ Physical therapy
- ❒ Preventive care (ex. yearly check-ups)
- ❒ Programs to stop using tobacco products
- ❒ Specialty care (ex. heart doctor)
- ❒ Substance abuse services –drug and alcohol
- ❒ Urgent care / walk in clinic
- ❒ Vision care
- ❒ Women's health services
- ❒ X-rays / mammograms
- ❒ None
- ❒ Other:_____

7. What do you feel prevents you from getting the healthcare you need? *(Check all that apply)*

- ❒ Afraid to have check-ups
- ❒ Can't find providers that accept my Medicaid insurance
- ❒ Can't find providers that accept my Medicare insurance
- ❒ Childcare
- ❒ Cost
- ❒ Don't know what types of services are available
- ❒ Don't like accepting government assistance
- ❒ Don't trust doctors / clinics
- ❒ Have no regular source of healthcare
- ❒ High co-pay
- ❒ Lack of evening and weekend services
- ❒ Language services
- ❒ Location of offices
- ❒ Long waits for appointments
- ❒ No health Insurance
- ❒ No transportation
- ❒ I can get the healthcare I need
- ❒ Other:_____

GENERAL HEALTH QUESTIONS			
8. Please check one of the following for each statement	**Yes**	**No**	**Not applicable**
I have had an eye exam within the past 12 months.	❒	❒	
I have had a mental health / substance abuse visit within the past 12 months.	❒	❒	
I have had a dental exam within the past 12 months.	❒	❒	
I have been to the emergency room in the past 12 months.	❒	❒	
I have been to the emergency room for an injury in the past 12 months (e.g. motor vehicle crash, fall, poisoning, burn, cut, etc.).	❒	❒	
Have you been a victim of domestic violence or abuse in the past 12 months?	❒	❒	
My doctor has told me that I have a long-term or chronic illness.	❒	❒	
I take the medicine my doctor tells me to take to control my chronic illness.	❒	❒	❒
I can afford medicine needed for my health conditions.	❒	❒	❒
I am over 21 years of age and have had a Pap smear in the past three years (if male or under 21, please check not applicable).	❒	❒	❒
I am over 40 years of age and have had a mammogram in the past 12 months (if male or under 40, please check not applicable).	❒	❒	❒
I am over 50 years of age and have had a colonoscopy in the past 10 years (if under 50, please check not applicable).	❒	❒	❒
Does your neighborhood support physical activity? (e.g. parks, sidewalks, bike lanes, etc.)	❒	❒	
Does your neighborhood support healthy eating? (e.g. community gardens, farmers' markets, etc.)	❒	❒	
In the area that you live, is it easy to get affordable fresh fruits and vegetables?	❒	❒	
Have there been times in the past 12 months when you did not have enough money to buy the food that you or your family needed?	❒	❒	

9. Where do you get the food that you eat at home? *(Check all that apply)*

- ❒ Back-pack or summer food programs
- ❒ Community Garden
- ❒ Corner store / convenience store / gas station
- ❒ Dollar store
- ❒ Farmers' Market
- ❒ Food bank / food kitchen / food pantry
- ❒ Grocery store
- ❒ Home Garden
- ❒ I do not eat at home
- ❒ I regularly receive food from family, friends, neighbors, or my church
- ❒ Meals on Wheels
- ❒ Take-out / fast food / restaurant
- ❒ Other: _____

10. During the past 7 days, how many times did you eat fruit or vegetables (fresh or frozen)? Do not count fruit or vegetable juice. *(Please check <u>one</u>)*

- ❒ I did not eat fruit or vegetables during the past 7 days
- ❒ 1 – 3 times during the past 7 days
- ❒ 4 – 6 times during the past 7 days
- ❒ 1 time per day
- ❒ 2 times per day
- ❒ 3 times per day
- ❒ 4 or more times per day

11. Have you been told by a doctor that you have… *(Check <u>all</u> that apply)*

- ❒ Asthma
- ❒ Cancer
- ❒ Cerebral palsy
- ❒ COPD / chronic bronchitis / Emphysema
- ❒ Depression or anxiety
- ❒ Drug or alcohol problems
- ❒ Heart disease
- ❒ High blood pressure
- ❒ High blood sugar or diabetes
- ❒ High cholesterol
- ❒ HIV / AIDS
- ❒ Mental health problems
- ❒ Obesity / overweight
- ❒ Stroke / Cerebrovascular disease
- ❒ I have no health problems
- ❒ Other: _____

12. How long has it been since you last visited a doctor for a routine checkup? *(Please check <u>one</u>)*

- ❒ Within the past year (1 to 12 months ago)
- ❒ Within the past 5 years (2 to 5 years ago)
- ❒ Within the past 2 years (1 to 2 years ago)
- ❒ 5 or more years ago

13. How long has it been since you last visited a dentist or a dental clinic for any reason? Include visits to dental specialists, such as orthodontists. *(Please check <u>one</u>)*

- ❒ Within the past year (1 to 12 months ago)
- ❒ Within the past 5 years (2 to 5 years ago)
- ❒ Within the past 2 years (1 to 2 years ago)
- ❒ 5 or more years ago

14. In the past 7 days, on how many days were you physically active for a total of at least 30 minutes? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard for some of the time.)

❒ 0 days ❒ 1 days ❒ 2 days ❒ 3 days ❒ 4 days ❒ 5 days ❒ 6 days ❒ 7 days

15. Other than your regular job, what physical activity or exercises do you participate in? *(Check <u>all</u> that apply)*

- ❒ Bicycling
- ❒ Canoeing / kayaking
- ❒ Dancing
- ❒ Gardening
- ❒ Group exercise classes
- ❒ Hiking
- ❒ Horseback riding
- ❒ Hunting
- ❒ Individual sports
- ❒ Running
- ❒ Swimming
- ❒ Team sports
- ❒ Walking
- ❒ Weight training
- ❒ Yoga / Pilates

16. In the past 7 days, how many times did all, or most, of your family living in your house eat a meal together?

- ❒ Never
- ❒ 1-2 times
- ❒ 3-4 times
- ❒ 5-6 times
- ❒ 7 times
- ❒ More than 7 times
- ❒ Not applicable / I live alone

17. Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good? _____ **Days**

18. Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good? _____ **Days**

19. During the last 30 days, how many days did you miss work or school due to pain or illness (physical or mental)? _____ **Days**

20. During the past 30 days: *(Check <u>all</u> that apply)*

- ❒ I have had 5 or more alcoholic drinks (if male) or 4 or more alcoholic drinks (if female) during one occasion.
- ❒ I have used tobacco products (cigarettes, smokeless tobacco, e-cigarettes, etc.)
- ❒ I have taken prescription drugs to get high
- ❒ I have used marijuana
- ❒ I have used other illegal drugs (e.g. cocaine, heroin, ecstasy, crack, LSD, etc.)

21. Have you ever used heroin? ☐ Yes   ☐ No

22. How many vehicles are owned, leased, or available for regular use by you and those who currently live in your household? Please be sure to include motorcycles, mopeds and RVs._____ **vehicles**

23. If you do not drive, what mode of transportation do you use typically use.
☐ Not applicable- I drive
☐ Bike or walk
☐ Friends / Family drive me
☐ Public transit (i.e. bus, shuttle, similar)
☐ RADAR / CORTRAN
☐ Taxi
☐ Other:_____

24. What types of information help you learn the best about your health? *(Check all that apply)*
☐ Classroom presentations, live presentations, or hands on demonstrations
☐ Group activity / support group
☐ I learn best by talking with my health professional (i.e. doctor, nurse, care coordinator, etc.)
☐ Internet or web information
☐ My Chart / patient portal
☐ Pictures, diagrams, illustrations or photographs
☐ Reading materials (i.e. brochure, newspaper, magazine, books)
☐ Video presentation (i.e. video tape, DVD, movie, television)
☐ Other _____

DEMOGRAPHIC INFORMATION and HEALTH INSURANCE

25. Which of the following describes your current type of health insurance? (*Check all that apply*)
☐ COBRA
☐ Dental Insurance
☐ Employer Provided Insurance
☐ Government (VA, Champus)
☐ Health Savings / Spending Account
☐ Individual / Private Insurance / Market Place / Obamacare
☐ Medicaid
☐ Medicare
☐ Medicare Supplement
☐ No Dental Insurance
☐ No Health Insurance

26. If you have no health insurance, why don't you have insurance? (*Check all that apply*)
☐ Not applicable- I have health insurance
☐ I don't understand ACA / Obamacare Options
☐ Not available at my job
☐ Student
☐ Too expensive / cost
☐ Unemployed / no job
☐ Other: _____

27. What is your ZIP code? _____

28. What is your street address (optional)? _____

29. What is your age? _____

30. What is your gender? ☐ Male   ☐ Female   ☐ Transgender

31. What is your height? _____

32. What is your weight? _____

33. How many people live in your home (including yourself)?
Number who are 0 – 17 years of age _____
Number who are 18 – 64 years of age _____
Number who are 65 years of age or older _____

34. What is your highest education level completed?
☐ Less than high school   ☐ Some high school   ☐ High school diploma   ☐ Associates   ☐ Bachelors   ☐ Masters / PhD

35. What is your primary language? ☐ English   ☐ Spanish   ☐ Other_____

36. What ethnicity do you identify with? *(Check all that apply)*
☐ Native Hawaiian / Pacific Islander   ☐ Asian   ☐ Black / African American   ☐ White
☐ American Indian / Alaskan Native   ☐ Latino   ☐ More than one race   ☐ Decline to answer   ☐ Other:_____

37. What is your marital status? ☐ Married   ☐Single   ☐Divorced   ☐Widowed   ☐Domestic Partnership

38. What is your yearly household income?
☐ $0 – $10,000   ☐ $10,001 – $20,000   ☐ $20,001 – $30,000   ☐ $30,001 – $40,000   ☐ $40,001 – $50,000
☐ $50,001 – $60,000   ☐ $60,001 – $70,000   ☐ $70,001 – $100,000   ☐ $100,001 and above

39. What is your current employment status?
☐ Full-time   ☐ Part-time   ☐ Unemployed   ☐ Self-employed   ☐ Retired   ☐ Homemaker

40. Is there anything else we should know about your (or someone living in your home) health care needs in the New River Valley?

_____

Appendix 4: Stakeholder Survey

New River Valley Professional Informant Survey

Barriers and Challenges Faced by Residents and Health and Human Services Agencies

An online version of this survey is available at https://www.surveymonkey.com/r/CHNAProviderSurvey

Responses will not be identified, either in written material or verbally, by name or organization.

Please return to: Amy Michals, Carilion Community Outreach, 1202 Third St. S.W., Roanoke, VA 24016. Thank you!

1. Your name, organization, and title:

    NAME: _____

    ORGANIZATION:_____

    TITLE: _____

2. What are the most important issues (needs) that impact health in the New River Valley?
    _____
    _____
    _____
    _____
    _____
    _____

3. What are the barriers to health for the populations you serve?
    _____
    _____
    _____
    _____
    _____
    _____

4. Is there one locality / neighborhood with the greatest unmet need? If so, why?
    _____
    _____
    _____
    _____
    _____
    _____

5. Is there one population group with the greatest unmet need? If so, why?
    _____
    _____
    _____

_____
_____
_____
_____
_____

6. What are the resources for health for the populations you serve?

_____
_____
_____
_____
_____
_____
_____
_____

7. If we could make one change as a community to meet the needs and reduce the barriers to health in the New River Valley, what would that be?

_____
_____
_____
_____
_____
_____
_____
_____

Thank you for your input!

Please return to: Amy Michals, Carilion Community Outreach, 1202 Third St. SW., Roanoke, VA 24016.

Questions: Please contact Amy Michals at 540-983-4046 or almichals@carilionclinic.org

Appendix 5: 2016 Stakeholder Survey Locations

Organization	Site/Group
Town of Blacksburg	Blacksburg Volunteer Rescue Squad
Pulaski County	Regional EMS Inc. (REMSI)
Town of Christiansburg	Christiansburg Rescue
City of Radford	Carilion Clinic Patient Transport, Radford Ambulance Service
2016 CHNA CHAT	Meeting #2

Appendix 6: Community Resources

Program	Category	Website
911/EMS/Rescue	Services - Healthcare	
Adult Daycare Centers	Community Resource	http://www.humandevelopment.vt.edu/ADS/ads.html
Backpack programs (Micah's, Beans and Rice, etc.)	Community Resources – Access to Food	http://micahsbackpack.org/
Beans and Rice	Community Resource – Access to Food	http://www.beansandrice.org/
Bridge program for Prisoners	Community Resources	http://www.nrvcs.org/bridge-program/
Bus/BT Access (wheelchair service/regular transportation)	Community Resource	http://www.nrvcs.org/community-transit/
Campus Resources for Students (i.e. - Cook Counseling center, RU Campus Infirmary, Shiffert, Hokie Wellness)	Services – Healthcare, Behavioral Health	
Care transitions and intervention	Community Resources	
Charity Care	Cost and Insurance Status	https://www.carilionclinic.org/billing/financial-assistance
CHIP	Community Resource – Access to Food	http://www.swva.net/nrca/chip.html
Chronic Disease Self-Management	Services – Health Management	https://www.hokiewellness.vt.edu/outreach/community/cdsmp.html
CIT center/training	Services – Behavioral Health	http://training.cit.nih.gov/
Community Action	Community Resource – Information and Referral	http://www.swva.net/nrca/
Community Gardens - Floyd, Giles, Christiansburg, Pulaski	Community Resources – Access to Food	https://localwiki.org/bburg/New_River_Valley_Master_Gardeners
Community Health Center of the NRV (Free Clinic)	Services – Healthcare, Dental	http://chcnrv.org/
Cooperative extension	Community Resource – Access to food	http://www.ext.vt.edu/
Dental aid partners	Services – Dental	http://nrvsmiles.org/
Dental offices (only serve those w/ insurance)	Services - Dental	https://www.nrvdentist.com/

Dialysis Centers (Blacksburg/Radford)	Services – Healthcare	https://www.freseniuskidneycare.com/dialysis-centers/virginia/radford/1200-tyler-ave-24141/1361
DSF		
Early intervention	Community Resource	http://www.nrvcs.org/early-intervention/
ED/ Hospital/ CNRV	Services – Health System	https://www.carilionclinic.org/hospitals/carilion-new-river-valley-medical-center
FAMIS	Service – Information and Referral, Healthcare	http://www.coverva.org/programs_famis.cfm
Farmers Markets	Community Resources – Access to Food	http://www.localharvest.org/new-river-valley-farmers-market-M1127
Floyd Pharmacy Delivery Program	Prescriptions	http://www.floydpharmacy.com/services
Floyd trading Dentist (names?)		
Free labs, wellness clinic, free appointments at work with NPs		
Free Parks for biking and outdoor recreation, Recreation centers	Community Resources	http://huckleberrytrail.org/; http://www.christiansburg.org/recreation; http://www.montgomerycountyva.gov/parks; http://www.radfordva.gov/255/Parks; http://randolphpark.org/pcrec/index.html;https://recreation.blacksburg.gov/wbwsc/webtrac.wsc/wbsplash.html?wbp=1; http://www.floydcova.org/floyd-county-departments/floydfloyd-co-parks-recreation-authority/; https://www.recsports.vt.edu/
GAP Program	Cost and Insurance Status	http://www.nrvcs.org/governors-access-plan-gap/
Good Morning Radford	Community Resource	http://www.radfordva.gov/404/Good-Morning-Radford
Head Start	Services – Behavioral Health	http://www.nrvcs.org/head-start-services/
Health department	Public Health, Services – Healthcare, Information and Referral	https://www.vdh.virginia.gov/LHD/newriver/INDEX.HTM
Health education outreach - Shenika	Education and Outreach	https://www.carilionclinic.org/about/community-outreach

Insurance from federal marketplace	Cost and Insurance Status	https://www.healthcare.gov/glossary/health-insurance-marketplace-glossary/
Law Enforcement	Community Resource	http://www.montgomerycountyva.gov/content/15989/16985/default.aspx
LewisGale	Services – Health System	http://lewisgale.com/
Medicaid	Cost and Insurance Status	http://www.montgomerycountyva.gov/content/15989/16065/
Medicaid Cab	Services – Healthcare	http://easyaccess.virginia.gov/transportation.shtml
Medicaid/ Medicaid Part D	Cost and Insurance Status	https://www.medicare.gov/part-d/
Medication Assistance Programs	Prescriptions	https://www.carilionclinic.org/hospitals/carilion-new-river-valley-medical-center/medication-assistance
Methadone Clinic	Services – Behavioral Health	http://www.centralvirginiactc.com/location/roanoke/
New River Valley Community Services	Community Resource	http://www.nrvcs.org/
Outpatient Care	Services – Healthcare	https://www.carilionclinic.org/locations/outpatient-therapy-new-river-valley
PACT team (Radford)	Community Resource	http://www.nrvcs.org/pactict/
Physical Therapy	Services – Healthcare	https://www.carilionclinic.org/outpatient-therapies/physical-therapy
Private providers	Services – Healthcare	
Public Schools	Education	http://www.mcps.org/
Public transportation	Community Resource	http://www.pulaskitransit.org/
Pulaski Free Clinic	Services – Healthcare, Information and Referral	http://pulaskifreeclinic.org/about-us/
Radford Daily Bread		http://www.radfordfairlawndailybread.org/
Radiology	Services – Healthcare	https://www.carilionclinic.org/locations/carilion-clinic-imaging-carilion-new-river-valley-medical-center
Resource mothers for young pregnant teens	Service – Healthcare, Information and Referral, Access to Food	https://www.vdh.virginia.gov/LHD/threeriv/ResourceMothers.htm
Salvation Army	Community Resource	http://virginiasalvationarmy.org/newrivervalleyva/

Smart Beginnings	Community Resource	http://www.smartbeginningsnrv.org/
SNAP	Community Resource – Access to Food	http://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-snap
Social Services	Community Resource	http://www.montgomerycountyva.gov/content/15989/16065/
Traumatic Brain Injury Clinic	Services – Healthcare	http://www.bisswva.org/
Tri-area Community Health Center	Services – Healthcare	http://www.triareahealth.org/
Urgent care - Velocity Care/MedExpress	Services – Healthcare	https://www.medexpress.com/local-centers/virginia/christiansburg.aspx
WIC	Community Resource – Access to Food	http://www.fns.usda.gov/wic/women-infants-and-children-wic
Women's Resource Center	Community Resource	http://www.wrcnrv.org/
YMCA	Community Resource	http://vtymca.org/

Appendix 7: Prioritization Worksheet

Community Health Needs Assessment Prioritization			
Please pick 10 of the most pertinent community needs and rank on a scale of 1 - 10, with 1 being the most pertinent.			
For only those top 10, on a scale of 1 - 5, please rate the feasibility and potential impact of those needs, with 1 being the most feasible and having the most impact.			
Rank	**Community Need**	**Feasibility**	**Potential Impact**
	Access to adult dental care		
	Access to alternative therapies		
	Access to dental care for children		
	Access to hospice services		
	Access to mental health counseling / substance abuse		
	Access to primary care		
	Access to psychiatry services		
	Access to services for the elderly		
	Access to specialty care		
	Access to vision care		
	Alcohol and illegal drug use		
	Births without prenatal care		
	Child abuse / neglect		
	Chronic disease (diabetes, cardiovascular disease, hypertension, asthma)		
	Coordination of care		
	Domestic violence		
	Dropping out of school		
	High cost of living and preferences for necessities		
	High cost of services for insured (co-pay, deductible, premium)		
	High cost of services for Medications		
	High cost of services for uninsured		
	High prevalence of angina		
	High prevalence of asthma		
	High prevalence of cardiovascular disease		
	High prevalence of COPD		
	High prevalence of diabetes		
	High prevalence of hypertension		
	High prevalence of mental health (depression, anxiety) disorders		
	High prevalence of obesity / overweight individuals		
	High prevalence of pneumonia		
	High prevalence of substance abuse (alcohol, illegal & prescription drugs)		
	High uninsured population		
	In home health care		
	Inappropriate utilization of ED/urgent care for primary care, dental, and mental health services		
	Individual self-treatment for medical conditions		
	Lack of exercise / physical activity		
	Lack of knowledge of community resources		
	Lack of knowledge of health care		
	Lack of reliable transportation		
	Lack of trust in health care services		
	Language barriers and services		
	Need for urgent care services		
	Need for weekend and extended hours for health care services		
	Not accessing regular preventive care for adult dental care		
	Not accessing regular preventive care for primary care		
	Not accessing regular preventive care for vision		
	Not taking medications for chronic conditions		
	Poor eating habits / lack of nutrient dense foods in diet		
	Prescription drug abuse		
	Services that are hard to get in our community:		
	Stigma with mental health and substance abuse services		
	Teenage pregnancy		
	Tobacco use		
	Unable to understand what provider is saying		
	Unsafe sex		
	Value not placed on preventive care and chronic disease management		

Community Need		Feasibility		Potential Impact	
• Magnitude/ Prevalence	• Urgency	• Alignment with hospital mission and strategic priorities	• Barriers to implementation (social, cultural, economic)	• Preventability	• Effectiveness of solutions
• Severity	• Historical trends	• Falls within existing hospital capabilities	• Ease of obtaining additional needed resources, fundraising	• Presence of existing alternative resources	• Effect on other health needs
• Impact on vulnerable populations	• Public concern	• Ease of solution implementation			
• Health disparities	• Economic burden				