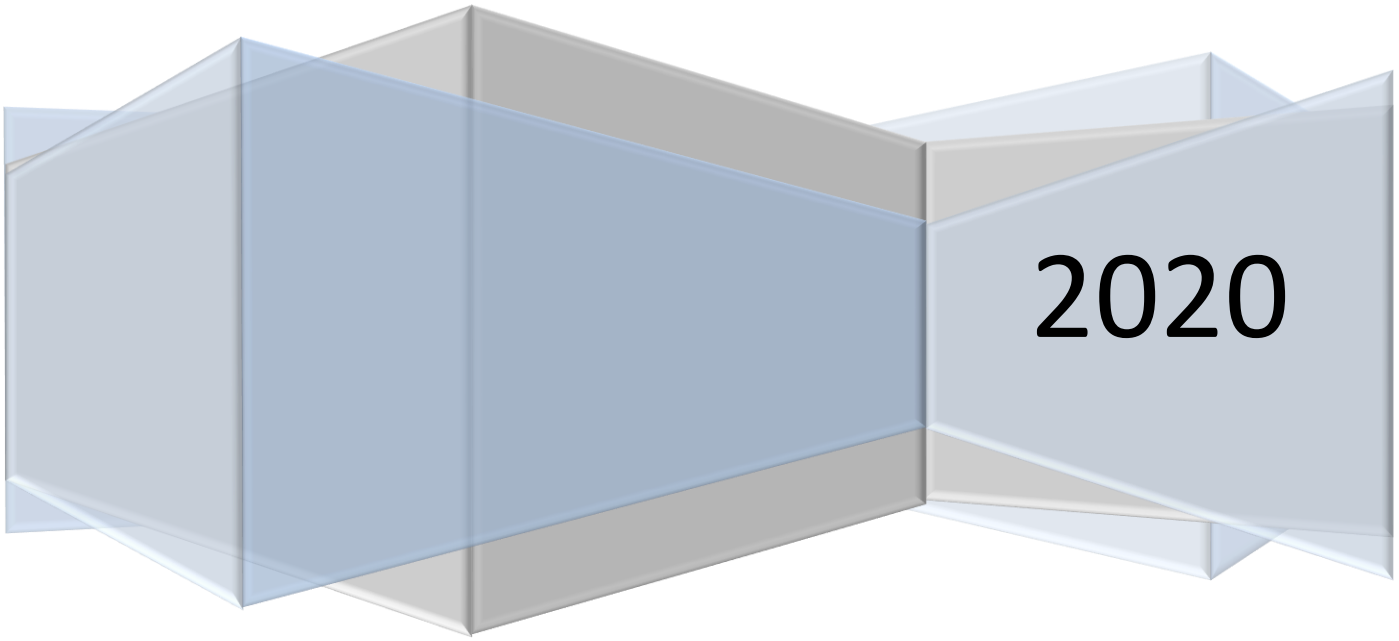
Thomas Health

Thomas Health System

Community Health Needs Assessment for Thomas Memorial Hospital



About Thomas Memorial Hospital

Herbert J. Thomas Memorial Hospital Association ("Thomas") is a part of Thomas Health System, Inc. ("Thomas Health"). Thomas Health's mission is to be the trusted, personal choice for wellness and quality care, focused on optimal individual health. Thomas Health's vision is to offer a range of patient focused service lines creating value for patients, physicians and payers through committed healthcare professionals delivering a compassionate exceptional patient experience, superior clinical outcomes, engaged physicians and staffs, and fiscal stewardship to enhance the health and wellness of the communities it serves.

Thomas Health formed in 2007 forging a partnership based on the strength of two established hospitals—Thomas Memorial and Saint Francis Hospital. Bringing the two hospitals under the umbrella of Thomas Health, allows Thomas Health to bring innovative and cost-effective health care to the Kanawha Valley. With combined years of service, Thomas Health brings nearly 179 years of service to the region. Thomas Health is a 380-bed hospital system with 1,650 employees and an estimated 310 physicians, making Thomas Health the 17th largest private employer in West Virginia.

Opened in 1946, Thomas is a not-for-profit healthcare facility located in South Charleston, West Virginia. It offers supportive, compassionate care, advanced technology and services, and something truly special - the dedication of its employees, physicians and volunteers, who are the true heart and spirit of the hospital. Thomas was named in memory of a South Charleston resident and West Virginia's first congressional Medal of Honor recipient, Marine Corps Sergeant Herbert J. Thomas Jr., who died in World War II by covering a grenade with his own body and thus saving his fellow soldiers.

Purpose of the Community Health Needs Assessment Report

The Patient Protection and Affordable Care Act (ACA), enacted on March 23, 2010, requires tax-exempt hospitals to conduct a Community Health Needs Assessment (CHNA) and develop an implementation strategy (IS) at least every three years. The issuance of final regulations provides further guidance on the ACA requirements. The requirements of a CHNA include defining the community served by the hospital, assessing the health needs of the community, analysis of community health indicators, receiving community input from persons representing the broad interests of the community (including those with special knowledge of or expertise in public health), prioritizing significant community health needs and identifying resources available to address identified needs. The IS is set forth in a separate written document. Both the CHNA Report and the IS report for each Thomas Health hospital facility is publicly available at thomashealth.org.

Board Adoption

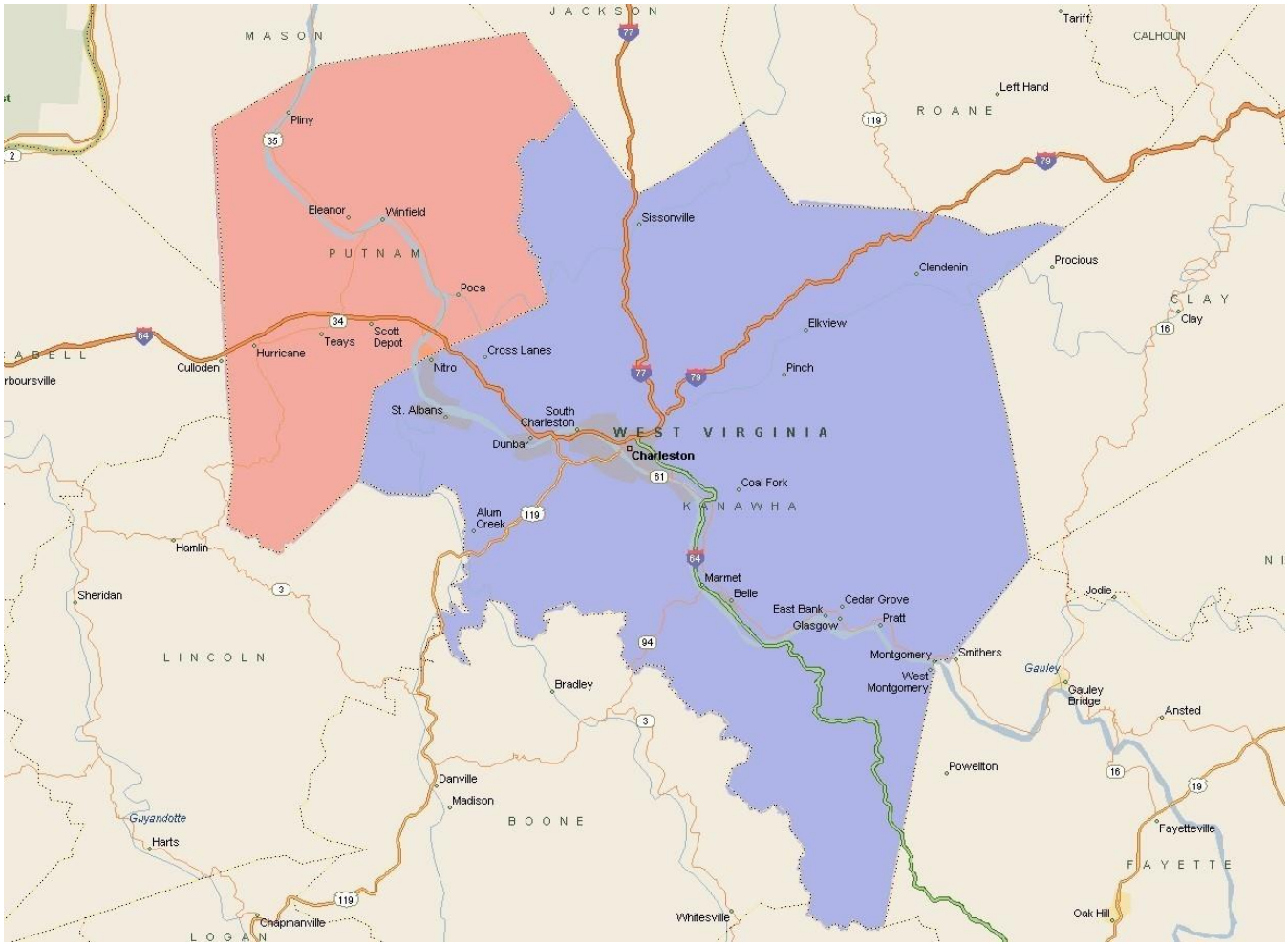
Thomas' Board of Trustees adopted the 2020-2022 CHNA and the corresponding IS on December 31, 2020. The CHNA and IS include: Thomas and the facilities on its approximately 17-acre campus located in South Charleston, West Virginia (the "South Charleston Campus") and the Cancer Center located in Putnam County which is a full-service, regional treatment center.

Community Served by Thomas

Thomas defines the "community served by a hospital facility" as the geographic area in which the majority of its patients reside. Although Thomas' primary service area consists of five counties, portions of Kanawha and

Putnam Counties comprise the majority of the primary service area and have a population base of approximately 241,000 residents. Based on this data, Thomas defined its geographic area to include Kanawha and Putnam counties and all residents residing within these counties.

Residents aged 65 and over, who are typically large consumers of healthcare services, are expected to grow from 21.0% to 23.5% of the population from 2020 to 2025. The unemployment rate (not seasonally adjusted) for November 2020 in Kanawha County was 6.3% and in Putnam County was 4.7% which compares to West Virginia at 5.79%. Thomas does not exclude low-income, minority or underserved populations who live in the geographic area served by Thomas. In addition, Thomas considers all patient populations regardless of their health insurance coverage and ability to otherwise pay for health care received.



Putnam (red) and Kanawha (blue) counties

The following table is from the US Census Bureau and shows "Quickfacts" for both counties:

Table 1

Demographics	Kanawha	Putnam
Population July 1, 2019	178,124	56,450
Under 18	20.0%	21.9%
Race Non-White or more than 1 race	8.9%	2.3%
Hispanic or Latino	1.2%	1.3%
High School Education or Higher	88.7%	91.7%
Bachelor's Degree or Higher	25.5%	26.1%
Under 65 Uninsured	8.1%	5.7%
Persons in Poverty	16.3%	8.9%

Source: https://www.census.gov/quickfacts/ 2019 data

It is important to note that only a small portion of an individual's overall health is tied to actual health care services received. A larger percentage of overall health is attached to social determinants of health and the individual's environment. Social determinants of health often form the foundation of and are a strong determinant of health status within a community. Interventions that address overall social determinants of health have a greater potential impact on public health.

CHNA Methodology

The Kanawha Coalition for Community Health Improvement (KCCHI) and the Putnam County Health Department facilitated primary data collection through community surveys, focus groups, telephone calls, and key informant interviews to identify key areas for health improvement/health need within the communities served. Individuals with the knowledge, information, and expertise relevant to the health needs of the community were consulted. These individuals included representatives from county public health departments as well as leaders, representatives, or members of medically underserved, low-income, and minority populations. Additionally, where applicable, other individuals with expertise of local health needs were consulted. For a complete list of individuals who provided input and the methodologies utilized, please see **Appendix A**.

County-specific secondary data was reviewed to analyze the social determinants of health. Throughout the process those leading the charge made it a priority to get input from populations often not engaged in conversations about health needs or gaps in service areas. Key informant interviews and surveys were used to dive more deeply into health and quality of life matters within Kanawha and Putnam Counties.

This CHNA synthesizes all of the community health data, focus group information with vulnerable populations, and key informant interviews and takes into consideration social and economic as well as health outcomes data collected from secondary sources.

CHNA *Process Diagram*

Thomas' Approach to Community Health Needs Assessment

This year has been challenging on health care providers and the communities served by them. The COVID-19 global pandemic has overshadowed most other health priorities and has affected how we live, learn, work and play within our communities. As the incidence rate for the virus has gone up, the efforts by hospitals to fight the virus have also increased. Efforts made include establishing testing tents or alternative testing locations, adding general and intensive care unit (ICU) bed capacity, and developing COVID-19 units to isolate and treat patients with the disease while protecting the health of other patients and staff.

Over the last ten months, hospitals, including Thomas, have faced historic care delivery and financial pressures in light of COVID-19. Non-emergency procedures have been cancelled and many patients postponed care as they sheltered in place to prevent the continued spread of the virus. Additionally, COVID-19 has created increased demand for certain medical equipment and supplies as the virus has disrupted supply chains, increasing hospitals costs to treat COVID-19 patients. The need for healthcare workers has overwhelmed available resources creating additional strains on the hospital. The rate of uninsured has increased due to the unprecedented number of job losses over the last ten months. While Thomas' doctors and nurses and other health care workers have risen to the challenge of COVID-19 with heroic efforts, there have been increased costs associated with providing essentials for hospital workers.

Thomas is facing financial challenges associated with COVID-19. These areas include the following:

- The effect of COVID-19 hospitalizations on overall hospital costs;
- The effect of cancelled and forgone services, caused by COVID-19, on hospital revenue;
- The additional costs associated with the purchasing of needed personal protective equipment (PPE); and
- The costs of additional support being provided to hospital workers;

In addition to the continuing financial struggle due to the impact of COVID-19, Thomas intends to evaluate and address certain significant health priorities identified through its CHNA processes, including addressing community and population health associated with pandemic response.

Critically, as of December 28, 2020, the U.S. Food and Drug Administration (FDA) has given Emergency Use Authorization for two COVID-19 vaccines. Thomas believes that vaccination efforts against COVID-19 represents a significant public health priority. The supply of COVID-19 vaccines in the United States is expected to be limited at first. Hence, the Centers for Disease Control and Prevention (CDC) recommends that the delivery of COVID-19 vaccines be allocated in a strategically phased manner – with healthcare personnel, essential workers, and certain vulnerable populations receiving the vaccination before the general public. Ultimately, the goal is for everyone to be able to easily get a COVID-19 vaccination as soon as larger quantities are available.

Thomas will strive to achieve this goal in accordance with CDC guidance, best industry practices, and the dynamic needs of the community.

There is significant overlay of health and safety issues that are impacted as a result of COVID-19. These issues include increased incidence of domestic violence, mental health deterioration, and substance abuse health problems that have grown out of the pandemic. The COVID-19 pandemic has necessitated social distancing to contain the spread of the disease and intermittent interruption to in-person schooling, which has altered lifestyles. Individuals have been experiencing fear and anxiety related to their health, the health of friends and loved ones, and the drastic change in some instances to livelihoods. Moreover, the pandemic has forced many to live deprived of social relationships. Even short periods of isolation and loneliness can have negative consequences on physical and mental well-being. The feeling of isolation can lead to anxiety and anger, sleep disorders, depression and post-traumatic stress disorders.

Those with psychological conditions may have had their symptoms exacerbated during the pandemic. Additionally, this unusual and stressful time period may lead to individuals engaging in potentially harmful behaviors, including licit and illicit substance use (both drugs and alcohol).

The pandemic has also forced individuals facing domestic abuse to shelter in place with their abuser. The nature of such abuse can run the spectrum between child and adult and may take the form of sexual, emotional, physical, or psychological abuse. People of all cultures, races, religions, genders, and sexual orientation may experience some level of abuse. Such abuse and violence within the home increases for those also experiencing economic instability, unsafe housing, neighborhood violence, and lack of safe and stable child care and social support.

Thomas will evaluate and determine how to provide additional and strategic services in an effort to alleviate these additional pandemic health overlays that continue to affect the community at large. A majority of the pandemic overlay issues will likely be identified as individuals present to the health care system. Emergency rooms and medical office spaces should be viewed as a safe place where individuals can seek the care they need or be referred to community partners for additional care and more targeted treatment, as needed.

While the COVID-19 pandemic is the most pressing health care issue currently faced by the community served by Thomas, other significant community needs have been identified through county-wide CHNAs in Kanawha and Putnam Counties.

A. Kanawha County

The Kanawha County CHNA was conducted by a community collaborative through the KCCHI. KCCHI has served as the backbone organization for the community's collective efforts to identify and address health needs in Kanawha County since 1994. Its mission is to identify health risks and coordinate resources to measurably improve the health of the people of Kanawha County. Members of KCCHI's leadership team include the county's hospitals, behavioral health facility, federally qualified health center, United Way, local health department, school system, faith-based partnership, business alliance and the State Bureau for Public Health.

KCCHI recently conducted its 8th triennial CHNA. The CHNA process has improved over the years through multiple cycles of learning into a rigorous evidence-based process that has been highlighted as a national role model process by both the National Quality Forum (NQF) and the CDC.

KCCHI has kept abreast of emerging trends and technologies and has adapted its tools and techniques over the years. In 2006, KCCHI began using scannable surveys in order to enter data more efficiently. In 2010, KCCHI began collecting survey responses through an online survey platform. And in 2013, when the number of

households with landline phones decreased due to an increased use of cellular phones, KCCHI began to mail postcards to homes of randomly selected households without landlines, directing them to an online survey portal.

In 2010, KCCHI recognized that certain populations were underrepresented in its household surveying process and as a result KCCHI held its first focus groups to attain opinions and concerns from low-income, under or uninsured populations. In 2013, KCCHI expanded its focus groups to include single parents, African Americans, and lower income households. Additionally, in 2013, KCCHI entered into a partnership with the University of Charleston's Capito Department of Nursing by engaging its fourth-year nursing students in the data collection process. Students assisted with phone interviews and focus group implementation. In 2016-2017, KCCHI expanded its focus groups to capture input from communities in some of the more rural and unincorporated areas of Kanawha County (Cross Lanes, Kanawha City, Elkview, London, Marmet, and Miami).

KCCHI identified the following priorities within its report:

Health and Social

- **Lack of access to health promotion and chronic disease prevention and education;**

Safety and Infrastructure

- **Safe roads and transportation**

Learn

- **Lack of affordable childcare options**

Work

- **Workforce readiness, inability to obtain and keep jobs; Barriers to Employment**

Play

- **Lack of safe and adequate recreational spaces in neighborhoods**

To view the KCCHI's report in its entirety, please see **Appendix A**.

B. Putnam County

Similarly, in Putnam County, Thomas evaluated the Putnam County Health Department's comprehensive 2018-2019 report (the "Putnam County Report"), available in its entirety at **Appendix B**. The Putnam County Report also provides the foundation for health improvement efforts in Putnam County over the next three to five years. The Putnam County Report undertakes the assessment with key partners enabling review of key health issues facing Putnam County, as well as social determinants of health. The Putnam County Report provides for the establishment of health priorities and resource allocation for population health improvement. It is also important to note that Putnam County is a health professional shortage area (HPSA) and is designated as a medically underserved area (MUA).

The Putnam County Report identified the following priorities:

- **Access to Care** – will include access to mental health services, community health workers, community paramedicine, quick response teams, transportation, and other identified barriers.

- **Health Living** – will include accident prevention, cancer prevention and early detection, chronic disease management, communicable disease, healthy aging, and immunizations.
- **Substance Use** – will include planning related to prevention, early intervention, treatment, and recovery to assure a continuum of care for the community related to substance use disorders.

Ultimately, Thomas has taken into consideration data from both the KCCHI report and the Putnam County Report in developing and issuing this written CHNA. In addition to these two reports, Thomas considered its own data and data from other local and federal sources to identify the issues that most impact the community served by Thomas.

Thomas developed a set of criteria to determine what constitutes a health need in its community. Once all community needs were identified, they were prioritized based on additional identified criteria. This process resulted in a list of prioritized community health needs. This process also included an identification of existing community assets and resources to address the prioritized health needs. Thomas developed an IS for the priority health needs the hospital will address. These strategies build on existing Thomas assets and resources. As identified above, both the CHNA and the IS will be posted to Thomas' website.

Selected Priority Areas

Thomas reviewed and identified its priorities based on the following Association for Community Health Improvement (ACHI) guidelines:

- The magnitude of the problem;
- The severity of the problem;
- A need among vulnerable populations;
- The community's capacity and willingness to act on the issue;
- The ability to have a measurable impact on the issue;
- The availability of hospital and community resources;
- Existing interventions focused on the issue;
- Whether the issue is a root cause of other problems; and
- Trending health concerns in the community.

Additional prioritization criteria may include:

- The importance of each problem to community members;
- Evidence that an intervention can positively impact the problem;
- Alignment with Thomas' and Thomas Health's existing priorities;
- Thomas and Thomas Health's ability to contribute finances and resources to address the health concern;
- Potential challenges or barriers to addressing the need; and
- The opportunity to intervene at the prevention level.

Based on all of the factors identified through the collaborative CHNA reports and based on the criteria as further described in this CHNA and its supporting appendices, Thomas identifies the following as health priorities that it intends to address:

1. **Engaging in sustainable and equitable partnerships with community leaders to address the COVID-19 pandemic, in terms of prevention and treatment;**

2. **Effectively distributing COVID-19 vaccines to targeted populations, and phasing such distribution to enable the general public to readily obtain COVID-19 vaccines;**
3. **Pandemic fallout: addressing overlay of mental health, drug abuse, and domestic violence;**
4. **Addressing a lack of access to health promotion and chronic disease prevention and education; and**
5. **Addressing social determinants of health to prevent unnecessary emergency room visits as well as hospital admission and readmissions.**

Resources Available to Address Selected Priority Health Needs

There are many community services and programs available in both Kanawha and Putnam counties. Some of these resources include the following:

- The Public Health Departments in each county
- WV Health Right
- Women's Health Center
- Area hospitals
- Primary care clinics
- Home health care services
- Behavioral health service providers, including Prestera Center, Highland Hospital, Thomas Health Behavioral Health and substance use disorder programs, and WVU Behavioral Medicine
- Numerous 12 step and support groups
- Thomas Healthy Connections
- *Right from the Start* program for Medicaid eligible pregnant women and infants
- YWCA Resolve Family Abuse Program
- YWCA Sojourner's Shelter for Women and Families and Education/Job Readiness Center
- Help Me Grow
- First Choice
- Kanawha Valley Collective
- Mountain Mission
- Covenant House
- Union Mission
- United Way
- Goodwill
- Dismas Charities
- KISRA
- PAAC
- Council of Churches
- MIHOW home visiting program
- Upper Kanawha Valley Starting Points Center
- Charleston Family Resource Center -*Parents as Teachers*
- West Virginia University Extension Service
- Local office of the WV Department of Health and Human Resources
- Regional Family Resource Network
- WV Coalition Against Domestic Violence
- Charleston and Putnam County YMCA
- Aging and Disability Resource Center

Description of Certain Health Needs Not Prioritized

There are health needs that were identified in the Kanawha and Putnam County CHNAs that cannot be addressed at this time. Thomas has identified its five prioritized health needs based on its evaluation of both reports. Given the financial strain placed on the health care system due to the pandemic, Thomas plans to solely focus on the five prioritized health needs to enable both a greater provision of financial support and likelihood of such need being addressed.

Written Comments on Prior CHNAs

As of the time of this CHNA report development, Thomas had not received any written comments on its previous CHNA reports. Thomas will continue to track any submitted written comments and ensure that the relevant submissions will be considered and addressed by appropriate staff. Individuals are encouraged to submit written comments, questions, or other feedback about the CHNAs and corresponding Implementation Strategies by mailing the same to Compliance Officer at 4605 MacCorkle Ave, SW, South Charleston, WV 25301**.** Please make sure to identify the name of the Thomas Health facility that you are commenting about and reference the appropriate section within the Implementation Strategy**.**

Data Limitations and Information Gaps

Data limitations, to the extent applicable, are identified in each respective county report reviewed and relied upon by Thomas.

Evaluation of Progress Since Prior CHNA

Thomas has evaluated its prior CHNA. The health needs addressed in the 2017 CHNA included: (1) alcohol and drug abuse; (2) obesity and diabetes; and (3) access to affordable counseling and mental health services. Thomas' actions to improve the health needs identified during the previous CHNA coverage period were evaluated based on whether progress was made towards achievement of the goals/priorities identified. In light of the COVID-19 pandemic and overlay of substance use disorders and mental health issues, Thomas will continue in its 2020 CHNA to address these community health needs. Thomas believes that it has made progress in its efforts to address obesity and diabetes through community education outreach efforts.

Conclusion

Kanawha and Putnam Counties comprise a community with many positive assets for community health improvement. Thomas intends to continue to engage community stakeholders to assist with implementation of strategies identified in its CHNA and IS for addressing the priority health needs as identified. Thomas' goal is to have a plan that is supported and feasible over the next three-year time period. Thomas hopes that by establishing and fostering local partnerships, and by addressing identified health priorities, its CHNA and IS will serve as a vehicle for positive change within its community. Through an understanding of the factors that define community health, Thomas and its partners can successfully address and improve disease prevention and control.

IMPLEMENTATION STRATEGY OF THOMAS MEMORIAL HOSPITAL

Implementation Strategy Overview

After identifying and confirming top health priorities within the community served by Thomas Memorial Hospital (herein "Hospital") as part of its Community Health Needs Assessment ("CHNA"), the Hospital developed this implementation strategy ("IS"). The IS outlines a set of actions that the Hospital will take to respond to the identified community needs including: goals, objectives, and process/outcome indicators with which the actions will be assessed.

Where feasible, existing community resources that address issues are also listed to identify possible partners. To develop the IS, key hospital stakeholders weighed in to provide guidance relating to public health, community resources, and potential community leaders.

The following IS is a three-year plan depicting the overall work that the Hospital will conduct to address the priority areas identified in the CHNA. The IS has been prepared for approval by the Hospital's Board of Trustees.

As a result of the CHNA process, the following are the priority health needs identified by the Hospital for its community served:

6. **Engaging in sustainable and equitable partnerships with community leaders to address the prevention of COVID-19;**
7. **Effectively distributing COVID-19 vaccines to targeted populations, and phasing such distribution to enable the general public to readily obtain COVID-19 vaccines;**
8. **Pandemic fallout: addressing overlay of mental health, drug abuse, and domestic violence;**
9. **Addressing a lack of access to health promotion and chronic disease prevention and education; and**
10. **Addressing social determinants of health to prevent unnecessary emergency room visits as well as hospital admission and readmissions.**

To facilitate a more efficient and focused effort, the Hospital has consolidated the five priority health needs into the following three categories:

1. COVID-19 Pandemic;
2. Health Promotion and Chronic Disease Prevention; and
3. Drug and Alcohol Use (treatment and prevention).

IS Notes

The IS is not intended to be a comprehensive listing of all of the ways the needs of the community are addressed by the Hospital, but instead constitutes a representation of specific actions that the Hospital commits to undertaking and monitoring as they relate to each identified need. Only a few internal and external partners have been included herein; however, many of the Hospital's clinical departments will be partnering in the collaborative efforts and specific actions that address the goals of "meeting the health needs of the community," whether that entails involvement in a clinical program or protocol, or if it is an individual or group sharing knowledge in an educational outreach opportunity.

1. **COVID-19 Pandemic**
    - This is an ever-evolving situation and Hospital plans to adapt its general operations as necessary to meet the challenges presented by the pandemic.
    - Offering more telehealth services and providing telehealth whenever possible. These services have already been expanded to some degree. Hospital will continue to provide and expand telehealth services to address and adapt to the COVID-19 pandemic.
    - Engage with county health departments to educate the community about COVID-19 and appropriate steps to reduce the risk of contracting and transmitting the virus.
        - Promote wearing a mask and social distancing.
    - Continuing collaboration with the Kanawha County Emergency Ambulance Authority ("KCEAA") to provide home visit paramedicine as appropriate.
    - Effectively distribute COVID-19 vaccines to target populations based on WV vaccine distribution plan and CDC guidance.
        - Distribute first to at risk health care personnel and patients.
        - Phase such distribution to enable general public to readily obtain COVID-19 vaccines as soon as sufficient quantity of vaccines are available.
        - Identify areas with high-risk or vulnerable populations and establish temporary vaccination centers as appropriate.

2. **Health Promotion and Chronic Disease Prevention**
    - Continued expansion of telehealth service offerings at Hospital to provide access for individuals needing further assistance with disease prevention and management.
    - Continuing collaboration with the Kanawha County Emergency Ambulance Authority ("KCEAA") to provide home visit paramedicine as appropriate.
    - Continuing to evaluate and modify existing health promotion and disease programs to focus on keeping individuals healthy – in appropriate heath care locations at the appropriate time.
    - Establish programs and assistance to give individuals more control over their own health care and treatment.
    - Tie health promotion and prevention activities into social determinants of health protocols within the Hospital to identify the root cause of the ailment presented.
    - Hospital will establish additional methods of communication to raise awareness about healthy behaviors for its community served. Examples include newsletters, public service announcements, health fair events, and mass/social media campaigns.
    - Hospital will continue to educate individuals and empower behavior change and actions through increased knowledge. This includes the provision or coordination of courses, trainings and support

groups by Hospital, or other efforts in conjunction with community organizations to benefit its community served**.**

3. Drug and Alcohol Abuse

- Hospital's focus will be to improve access and awareness to substance use disorder service offerings within the Hospital and to community partners.
- Work with the Kanawha Coalition for Community Health Improvement ("KCCHI") and its steering committee to develop alternative programming to promote access to treatment services.
- Considering expanding on the use of recovery/health coaches within substance use disorder program offerings.
- Increase the utilization of telemedicine services as appropriate for substance use disorder treatment.
- Continue to utilize and expand upon Medication-Assisted Treatment (MAT) service offerings.
- Work with community leaders to develop a controlled substance "take back" program.
- Drug and alcohol abuse is often associated with a corresponding mental health diagnosis. Hospital is working to expand mental health service programs through telemedicine.
- Hospital continues with pregnancy connections to provide addicted pregnant mothers with counseling and therapy during the first trimester as well as counseling those beyond the first trimester who are found to be substance abusers.
- Hospital participates, and will continue to participate, with the West Virginia Council of Churches in discussing the substance abuse epidemic in its community and how partnering with churches and other organizations could further patient recovery.
- Hospital will study and evaluate the feasibility and efficacy of offering additional substance use disorder treatment services.
- Hospital continues to operate Behavioral Connections, a resource patients and/or family members can contact to get patients counseling or other mental health services.
- Hospital will continue to evaluate opportunities for partnership to offer affordable psychiatric services, including counseling and mental health services within the community.

[APPENDIX A – KCCHA Report]

[APPENDIX B – Putnam County Report]

Appendix A

Kanawha County

2019-2020 Community Health Assessment Report

Summary of Findings

April 2020

Our Mission: To identify and evaluate health risks and coordinate resources to measurably improve the health of the people of Kanawha County.

Kanawha Coalition for Community Health Improvement

PO Box 1547 Charleston, WV 25326
(304) 388-7557
kcchi@camc.org
www.healthykanawha.org

Charleston Area Medical Center Planning Department

Brooke Parker, Generation West Virginia, CAMC Impact Fellow

Dr. Alfred Tager, Student Practicum, Hopkins Bloomberg School of Public Health

Volunteer Table Facilitators for the Expert Convening: Robin Rector, Cheryl Martin, Karley Walker, Kate Page, Leslie Johnson, Pam Brown, Leigh Chaney, James Vance, Megan Ross

Kanawha Coalition for Community Health Improvement Steering Committee Members (listed below)

Steering Committee

Matthew Ballard, President
Charleston Area Alliance

Julia Blackwood, Executive Assistant
to the Health Officer
Kanawha-Charleston Health Department

Michael Brumage, MD, MPH, FACP, FACPM
Medical Director
Cabin Creek Health Systems

Kerri Cooper, Community Impact Director
United Way of Central West Virginia

Alaina Crislip, Associate General Counsel
Thomas Health Systems

Ronald Duerring, Ph.D., Superintendent

Kanawha County Schools

David Ferretti, Attorney
Spilman Thomas & Battle, PLLC

Chris Ferro, Vice President of Economic Development
Charleston Area Alliance

Tamara Fuller, Chief Strategy Officer
Charleston Area Medical Center

Brenda Isaac, RN, Lead Nurse
Kanawha County Schools
Dan Lauffer, Chief Executive Officer
Thomas Health Systems

Margaret Ann O'Neal, President
United Way of Central West Virginia

Reverend James Patterson, President
Partnership of African American Churches

Cynthia Persily, Chief Executive Officer
Highland Hospital

David Ramsey, Chief Executive Officer
Charleston Area Medical Center

Arthur B. Rubin
Board of Health, President
Kanawha-Charleston Health Department

Jessica Wright, Director
Division of Health Promotion and Chronic Disease, WV Bureau for Public Health

Sherri Young, DO, FAAFP
Executive Director, Health Officer
Kanawha-Charleston Health Department

TABLE OF CONTENTS

INTRODUCTION

ORGANIZATIONAL BACKGROUND / ASSESSMENT HISTORY

The Kanawha Coalition for Community Health Improvement (KCCHI) has served as the backbone organization for our community's collective efforts to identify and address health needs in Kanawha County since 1994. Its mission is to identify health risks and coordinate resources to measurably improve the health of the people of Kanawha County. Members of our leadership team include the county's hospitals, behavioral health facility, federally qualified health center, United Way, local health department, school system, faith-based partnership, business alliance and the State Bureau for Public Health (See acknowledgement page at the beginning of this report for full list of members).

KCCHI recently conducted its 8th triennial Community Health Needs Assessment (CHNA). The CHNA process has improved over the years through multiple cycles of learning into a rigorous evidence-based process that has been highlighted as a national role model process by both the National Quality Forum (NQF) and the Centers for Disease Control (CDC).

KCCHI has kept abreast of emerging trends and technologies and has adapted its tools and techniques over the years. In 2006 KCCHI began using scannable surveys in order to enter data more efficiently. In 2010 we began collecting survey responses through an online survey platform. And in 2013, when the number of households with landline phones decreased due to an increased use of cellular phones, KCCHI began to mail postcards to homes of randomly selected households without landlines, directing them to an online survey portal.

In 2010 KCCHI recognized that certain populations were underrepresented in its household surveying process and as a result we held our first focus groups to attain opinions and concerns

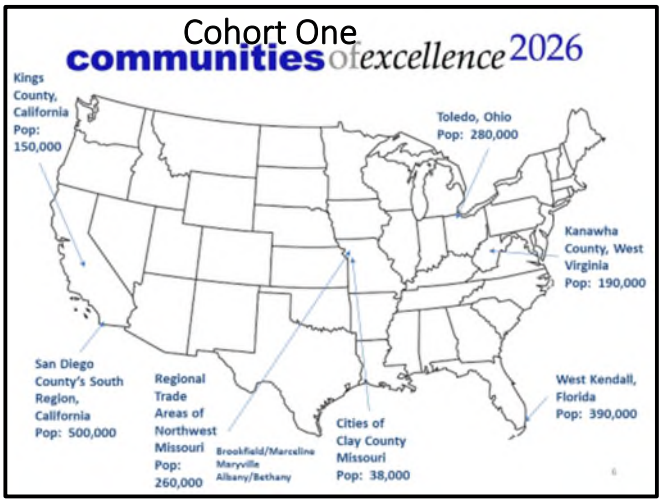
from low-income, under or uninsured populations. In 2013 we expanded our focus groups to include single parents, African Americans, and lower income households. Also In 2013 KCCHI entered into a partnership with the University of Charleston's Capito Department of Nursing by engaging its fourth year nursing students in the data collection process. Students assisted with phone interviews and focus group implementation. In 2016-2017 KCCHI expanded its focus groups to capture input from communities in some of the more rural and unincorporated areas of our county (Cross Lanes, Kanawha City, Elkview, London, Marmet, and Miami).

Today, KCCHI remains committed to excellence through continuous improvements in its assessment process and its overall operations. This report shares the highlights from our 2019-2020 CHNA.

COMMUNITIES OF EXCELLENCE [1]

Our leadership understands that the challenges our community faces today and those we will have in the future will require a high level of performance – a commitment to community performance excellence that grows out the recognition that the social determinants of educational achievement, economic vitality, and health status are inextricable interwoven. We understand that these challenges require a commitment among leaders across sectors and generations to take a systems approach to community performance.

In 2017 the Kanawha Coalition for Community Health Improvement joined the first Cohort of Communities in the Nation to embark on a journey to performance excellence by helping refine and improve the Communities of Excellence Framework and better understand the key requirements needed to successfully adopt and sustain positive change in communities.

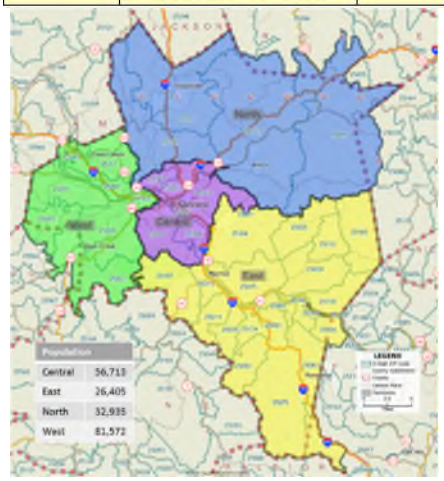


The Communities of Excellence Framework has helped the Kanawha Coalition for Community Health Improvement further enhance its triennial Community Health Needs Assessment (CHNA) process. The following section highlights improvements that have been incorporated into our 2019 CHNA.

Community Group	Key Characteristics	Recent Changes in Need	Key Requirements
North	Rural; Small towns; Most residents are descendants from the area; High rate of home ownership; Strong local governments; Strong community leadership; Declining population; Inadequate broadband	Decline in coal resulting in loss of jobs and impact on the economy; Flood recovery	• Feel valued • Input and inclusion • Involvement of local champions
West	Bedroom communities of Charleston; High traffic area in Cross Lanes; Strong local identity; Chemical industry; Higher education presence; West End of Charleston focus for grants and improvement efforts	New sports complex; New chemical business	• Integrated with Charleston
Central	Most population density and diversity; Business hub; State, county and city government; Losing population; Higher education presence, Health care hub	Population loss in the city of Charleston; New industry and innovation in the Civic Center design	• Voice from all segments of the community • Desire to make Charleston a better place
East	Most rural; Most residents are descendants from the area; High rate of home ownership; Economy fluctuates with the coal industry; Lower income; Feel isolated; Inadequate broadband; Suspicious of outsiders; Internally focused; Everyone knows everyone	Decline in the coal industry; Local college left the area	• Feel valued and connected • Create inclusion without coming to Charleston to participate • Maintain confidentiality

Improvements to our 2019-2020 CHNA Process

Kanawha Coalition leaders identified varying requirements among community groups in Kanawha County based on geography. We developed a Listening Project to learn what residents in the Northern, Central, Eastern, and Western parts of our county believe to be the key challenges and potential solutions under the new priority areas for LIVE, LEARN, WORK and PLAY.



We held 15 listening projects throughout 2 county. Our partners in these areas assisted us in securing locations for our listening sessions and promoting them within their communities, yet still attendance was low, with only 30 in total attending. KCCHI responded by broadening our methods of data collection to adequately capture the voice of our community residents. These included: paper surveys placed strategically throughout communities; opportunities to complete surveys online; and surveillance at local events and fairs.

Our Customers

The Kanawha Coalition has expanded our definition of who our customers are to include, in addition to our residents, employers, visitors and tourists, people who commute here from other areas to work, legislators, and our contiguous counties. The Kanawha Coalition has incorporated listening strategies to hear the opinions and recommendations from each of these customer groups around our priorities under LIVE, LEARN, WORK and PLAY.

Groups	Key Requirements and Expectations
Residents	• Safe communities • Employment/jobs • Quality healthcare • Quality education • Places to Worship, Recreation, Arts, Culture
Employers	• Skilled available workforce • Quality healthcare • High speed internet and telecommunications access
Seniors	Resident Requirements and Expectations plus: • Access to public transportation • Quality healthcare • Access to social services • Access to food • Access to safe, affordable housing and long term care
Other Customers (Commuters, legislators, visitors)	• Hotels/motels • Restaurants • Transportation • Accessible cultural, arts, entertainment opportunities • High speed internet and telecommunications access
Stakeholders (Contiguous counties)	• Safe roads • Accessible cultural, arts, entertainment opportunities • Variety of options for shopping • Accessibility to quality healthcare

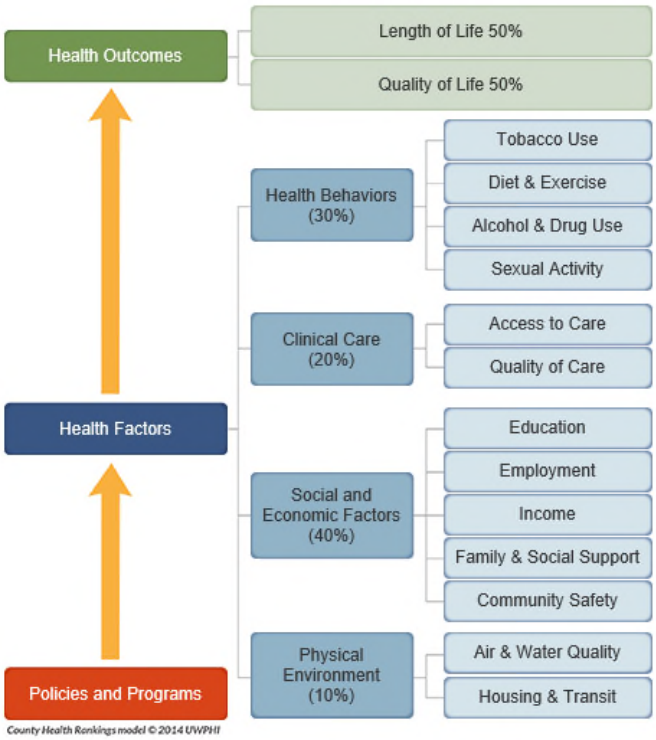
Social Determinants of Health

The World Health Organization defines Social Determinants of Health as circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics.

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

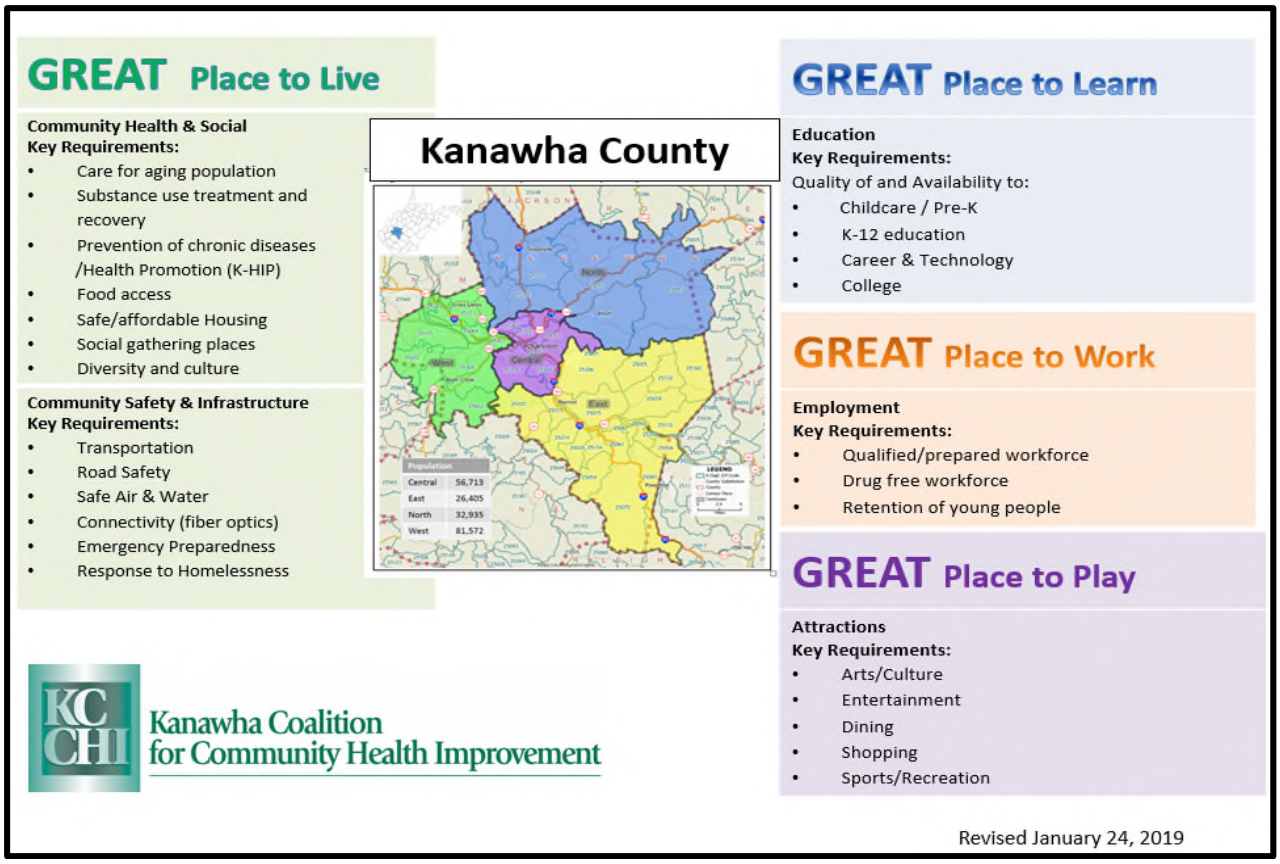
some Americans are healthier than others and why Americans more generally are not as healthy as they could be. (www.healthypeople.gov)

The County Health Rankings (CHR) program measures the health of nearly all counties in the Nation. CHR is the collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.



This report shares findings from the Kanawha Coalition's 2019-2020 Community Health Needs Assessment (CHNA) which include surveying community key informants, a randomly selected household survey, and holding community focus groups. The report will provide these findings within the context of the Social Determinants of Health and include data measured by the 2019 County Health Rankings. By aligning the primary data collected through our CHNA with secondary data measured by the County Health Rankings, we strive to present a more robust interpretation. (See Appendix A for Kanawha County Health Rankings.)

Revisions include an expansion from a health focused model to one that assesses issues across social determinates of health under th egories of Live, Learn, Work and Play. Live is broken into two distinct sections; Heal l Social and Safety and Infrastructure.



Our Key Community Work Systems

The Kanawha Coalition enhanced the ways that stakeholders and experts from key sectors can become engaged in our work to improve health in Kanawha County. Our leadership team identified 283 individual experts in the areas of Live, Learn, Work and Play and invited them to participate in our Expert Opinion Survey. 218 experts participated. Seventy experts participated in Steps 1, 25 in Step 2, and 123 in Step 3 of our new Assessment Process. This resulted in a significant representation from key sectors.

STEP 1: Expert Opinion Survey

Experts were invited to participate in an online Expert Opinion Survey. The survey asked for opinions across a broad list of topics under the Categories of LIVE-Health and Social, LIVE-Safety and Infrastructure, LEARN, WORK, and PLAY. (See appendix B)

STEP 2: Convening of Experts

Experts were invited to convene to further discuss and decide which top challenges under each category should move forward to the final ranking. (See appendix C)

STEP 3: Top Challenge Ranking Survey

Experts were invited to participate in the final ranking of top challenges that would move forward to Step 4 for community input. (See appendix D)

Ranking Criteria:

- This challenge appears to be greater in certain parts of the county or specific populations
- There is baseline data that would help us measure our impact for this challenge
- Other communities, like ours, have been able to overcome this challenge
- We can resolve this challenge in 3-5 years or less and sustain the improvements
- To my knowledge, no one is working to address this challenge at this time
- We can create a major improvement in the quality of life by addressing this challenge
- We can reduce long-term cost to the community by addressing this challenge

Participating Experts: *(Please note that the list below is not all inclusive due to the anonymity of the top challenge ranking process)*

Aila Accad	Future of Nursing WV
Pamela L. Alderman	University of Charleston
Jeffrey S. Allen	West Virginia Council of Churches
Erin Andrews- Sharer	Appalachia Service Project
Sandra Steiner Ball	The United Methodist Church
Maria Belcher	FestivALL Charleston
Jason E. Bibbee	Tyler Mountain Cross Lanes Community Services
Michele Bowles	Regional FRN
Tim Brady	Charleston CVB
Ellen Bullock	Kiwanis Club of West Charleston
Ronald Butlin	Charleston Urban Renewal Authority
Kelli Caseman	West Virginians for Affordable Health Care
Michelle Coon	CAMC/PIHN
Kerri Cooper	United Way Central West Virginia
Amber Crist	Cabin Creek Health Systems
Glenn Crotty Jr., MD	Charleston Area Medical Center
Jared Davis	Camp Appalachia
Pamela J. Dickerscheid	West Virginia Symphony Orchestra
Heidi Edwards	Charleston Area Medical Center
Loren Friend Farmer	Bob Burdette Center, Inc.
Michelle Foster	The Greater Kanawha Valley Foundation
Tamara Fuller	Charleston Area Medical Center
Julia Gonzales	FJG Enterprises LLC
Jeff Goode	Charleston Area Medical Center
Danial Gum	Goodwill Industries of Kanawha Valley
Paula Hamady	DHHR/Bureau for Medical Services
Cindy Hanna	CAMC Health Education and Research Institute, Inc.
Laura Dice Hill	WV Food and Farm Coalition
Roseshalla Holmes	Four Points by Sheraton
Lisa Hudnall	United Way Central West Virginia
Stephanie Hyre	The Greater Kanawha Valley Foundation
Brenda C. Isaac	wha County Schools

Paulette Susan Justice	Kanawha Valley Senior Services, Inc.
Travis Kahle	University of Charleston
Sharon Lansdale	Center for Rural Health Development, Inc.
Daniel Lauffer	Thomas Health System
Valicia Leary	Children's Therapy Clinic
Sharon Malcolm	WV Delegate
Tara Martinez	Manna Meal, Inc.
Johanna Miesner	Charleston Ballet
Mack Miles	Mack Miles Studio
Martha Minter	Community Access Inc. / Red Barn Stables LLC
Doug Paxton	Sand Run Gospel Tabernacle
Elizabeth Pellegrin	Charleston Area Medical Center
Gail Pitchford	CAMC Foundation
Tina Ramirez	Marshall Health
Errol Randle	Catalyst Ministries / The Grace Project
Dominique Ranieri	Yeager Airport (CRW)
Gloria Rhem	Eastern Kanawha Prevention Partnership/ Booker T Washington Community Center
Morgan Robinson	The Clay Center
Christena Ross	CAMC Health Education and Research Institute, Inc.
Marty Roth	University of Charleston
Beth Scohy	Daymark
Serena Seen	Charleston-Kanawha Housing Authority
Angie Settle	WV Health Right
CW Sigman	Kanawha Emergency Management
Megan Simpson	The Greater Kanawha Valley Foundation
Melissa Stewart	West Virginia National Guard
Annie Stroud	Buzz Food Service
Jeremy Taylor	West Virginia Power Baseball, LLC
Jennifer Waggener	Faith in Action of the Greater Kanawha Valley, Inc.
Matthew J. Watts	HOPE CDC
Andrew S. Weber	Charleston Area Medical Center
Barbara Wessels	L 8 Health Plan

Courtney White	YWCA of Charleston, Resolve Family Abuse Program
Bob Whitler	Charleston Area Medical Center
Michael D. Williams	Charleston Area Medical Center
Jessica Wright	WV Bureau for Public Health / Health Promotion & Chronic Disease
Larry Wunderly	Buckskin Council, BSA
Sherri Young	Kanawha Charleston Health Department.

Step 4: Customer Feedback (Community Input)

During this step of the CHNA process, the top priority areas ranked by participating stakeholders and experts were shared with people who live and/or work in Kanawha County. Employees at 18 worksites participated in our community-based survey. We conducted 15 listening sessions which drew a low attendance, therefore we expanded our outreach to include paper and online surveying (See appendices E, F, and G). Below is the breakdown for number of participants in Step 4.

Community Input:

- 15 Listening sessions (30 attendees)
- 91 clip board surveys
- 165 paper surveys (642 responses)
- 1235 online survey responses:
  LIVE Health & Social = 330
  LIVE Safety & Infrastructure = 242
  LEARN = 207
  WORK = 234
  PLAY = 222

Inclusion of Vulnerable Populations:

- Homeless
- People with Substance Use Disorder
- Low Income
- Single parents
- Domestic violence survivors
- Senior citizens

Employee Surveys:

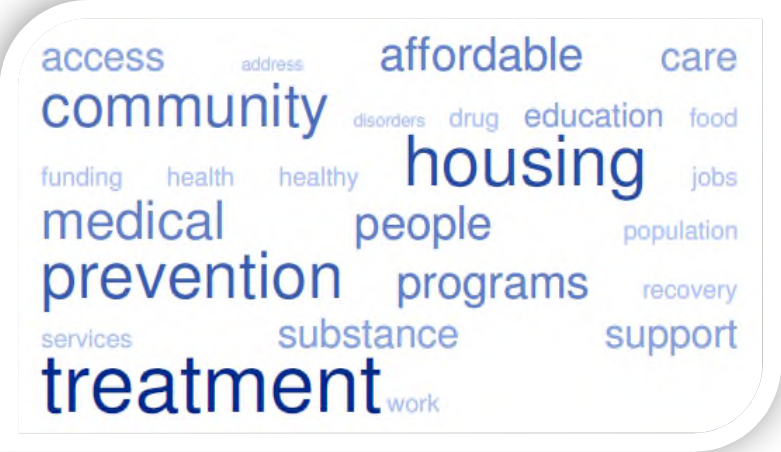
Cabin Creek Health Center
Charleston Area Alliance
Charleston Area Medical Center
Covenant House
Dow
FamilyCare
First Choice/211
Highland Hospital
Kanawha County Commission
Kanawha County Schools
Kanawha County Sheriff's Department
Manna Meal
Regional 3 Workforce Investment Board
Thomas Memorial Hospital
University of Charleston
WV Attorney General's Office
WV Health Right
YWCA

Steps 5 and 6, Planning and Implementation, will occur once our new Community Health Improvement Councils are formed for each new priority. Councils will be comprised of both subject experts and community residents.

EXPERT OPINION SURVEY RESULTS

LIVE: Health and Social

Total Expert Opinions: 60



Top Challenges:

- Access to substance use disorder treatment and recovery
- Access to substance abuse prevention education
- Access to health promotion and chronic disease prevention education
- Lack of services for the aging
- Safe and affordable housing

In General (Across all challenges)

Lack of community, city government, and business cohesion

Many non-profits at work, but would be helpful to have government leaders or some other entity to bring everyone together for the same purpose

Need for coordination of resources

Lack of new ideas among those in power positions

Funding for new ideas (not just evidence-based)

Funding that has less restrictive access

Economics/ unemployment

Lack of jobs

Declining population

Lack of the nuclear family/ breakdown of family systems

More connections, interaction, and communication between different communities

Build better communication / information networks and better align public policy and resources

Lack of awareness of the connectivity between all the of the issues

Broader community engagement - focus on community conditions that impact health, not just access to health care services

Engagement of health, mental health, public health, public safety sectors with local community groups

Development of a community health improvement plan

Too many plans sit on shelves

ACCESS TO SUBSTANCE USE DISORDER TREATMENT AND RECOVERY

Top Contributing Factors:

Availability of drugs and enabling those who take them

Over prescribed by physicians/pushed by big pharma

High rate of prescribing/dispensing

Adverse Childhood Events/Trauma -- increases the # of people with substance use disorders

Not enough facilities and resources for substance abuse treatment

Limited long-term treatment beds

Substance abuse treatment & recovery has become a local political issue

Lack of resources for support/recovery

Lack of affordable treatment options

Stigma of those in recovery or reentry from corrections

Lack of knowledge and stigma about substance abuse disorders

Lack of understanding about addiction

Untreated trauma/sense of hopelessness

Limitation of law enforcement due to widespread drug use

Lack of mental health awareness/treatment

What needs to happen to resolve this issue?

Comprehensive treatment

Affordable and accessible treatment options

More affordable long term treatment programs

Access to Medication Assisted Treatment (MAT)

Accessible treatment - on site therapy/housing agreement for MAT or non-medical therapeutic modalities

Substance abuse intensive intervention, employment that would help get people off drugs

Crack down on drug suppliers

Develop a strategic plan to specifically address the needs of displaced kids

Understanding that treatment affects many more people than the one being treated and improves the community overall

Youth driven initiatives – high school recovery facilities

More attention needs to be paid to pharmaceutical industry and the medical professionals who routinely over prescribe patients.

Homeless & Drug Population continue reassignment & treatment

How other communities have successfully addressed this issue:

Harm Reduction Programs-- decreased risk of infectious disease, connecting people with treatment programs

Huntington has gotten some very good recognition on policy, practice, and system changes in relationship to substance use disorder

Rehab programs that focus on the whole person - coaching, work, treatment, housing etc.

MAT (Medically Assisted Treatment) has worked in other communities

Motivational Interviewing for drug abuse prevention and treatment

Peer Recovery Coaches

Quick Response Teams (QRTs)

ACCESS TO SUBSTANCE ABUSE PREVENTION EDUCATION

Top contributing factors:

Lack of understanding about addiction

Lack of understanding how adverse childhood experiences can lead to substance use disorder

Need for early intervention/prevention/education

Cultural norms, accessibility to prevention (foods, medication, preventative care etc.)

What needs to happen to resolve this issue?

Programming to identify children/adolescents at risk for substance use disorders for early intervention

Need many options for positive activities for kids and young adults

More funding for prevention

How other communities have successfully addressed this issue:

Community strengthening programs to connect young people and adults in their communities through volunteerism

ACCESS TO HEALTH PROMOTION AND CHRONIC DISEASE PREVENTION EDUCATION

Top contributing factors:

A medical model of care that does not promote or pay for prevention

Lack of jobs and income for healthcare coverage

Lack of early intervention/prevention education

Need to engage those experiencing health disparities in the conversation about solutions

Lack of access to affordable and preventative healthcare

Culture that does not promote healthy living

Environment that does not support healthy living

Lack of walkable streets

Lack of grocery stores and fresh produce

Discount stores more handy (readily available) but do not have nutritious food

What needs to happen to resolve this issue?

Access to free clinics in more rural areas

Better payment for health promotion or universal healthcare which would be incentivized by promoting prevention

Create jobs that provide medical insurance

Required education classes in school system

Keep children in school and provide support services

Develop more walkable communities and bike paths

Many community leaders to support and encourage healthy behaviors (healthy options at festival events, improve safe walkability throughout the county, increase drinking water availability, etc.)

Have more employers that promote healthy behaviors on and offsite via policy, environment, and systems changes

Communication of the availability of medical treatment for the uninsured or underinsured.

Educate people of the prevention care available for the uninsured.

More preventative care for obesity, diabetes, more exercise opportunities

More funding for prevention

Fund population health education through private donations with a stipulation that they are provided in Kanawha County so many years

Institute policies that support healthier choices

Eliminate food desserts

Work on economy and unemployment so people can afford healthier foods

How other communities have successfully addressed this issue:

Because health risk factors are contributors to chronic diseases - prevention of these behaviors are always one of the positive things going on in Kanawha County (new Shawnee Recreation fields, Capitol farmer's markets & pop up markets, smoke free parks, etc.)

Pharmacy programs -- pop up farmers market with vouchers

SNAP stretch (double dollar) programs

Healthy food markets at schools/nursing homes/hospitals

Public education campaigns

LACK OF SERVICES FOR THE AGING

Top contributing factors:

Isolation

Changing demographics

Aging population. Middle age families leaving WV for work. Lack of resources for community support of aging population

Population decreasing rapidly

No plan in place for an aging population

Few services geared for seniors – especially those that are above the Federal Poverty Level income limits but still need assistance

Senior centers cost of meals, transport, gasoline and human resources outweigh reimbursement

Medical care unaffordable

Going without meals and utilities to pay for medications

Transportation issues

Geographic barriers

Need for jobs for seniors

What needs to happen to resolve this issue?

Create an elderly workforce

State funded support services - expand delivery of foods/medications/ transportation to appointments and elder care

Improve access to bus lines/van service

Outreach and education of employers

Increase funding for meal programs at federal level as well as dementia care and in home caregiving services

More Medical Transports

How other communities have successfully addressed this issue:

Long Term Service and Supports have been placed under managed care contracts.

SAFE AND AFFORDABLE HOUSING

Top contributing factors:

Unemployment and joblessness

Homelessness due to being un-employable or unwilling to work

Lack of jobs

Lack of livable wages

Economic disparity and unequal distribution of wealth and jobs

Lack of viable skills

Lack of adequate training on how to find and hold jobs

Rise in homelessness due to poverty

Number of people without homes due to severe mental illness

Lack of mental health treatment and diagnosis

Dilapidated housing not being addressed

Dilapidated housing and abandoned homes being used by squatters

Unaddressed criminal activity

People afraid to positively interact with police or report criminal activity

Lack of quality, affordable housing

Lack of will to provide more affordable housing

What needs to happen to resolve this issue?

Intentional and collective effort led by an entity with access to funding, leadership, and contacts to address the failing (and unsafe) housing stock in the area

Provide more employment opportunities

Skills training

Address the blight and delaminates buildings in the community

Destroy dilapidated housing and fine the owners of said property. This leaves nowhere for squatters to sleep

Creation of quality, affordable housing in low income communities -- not just urban areas

A plan for housing that takes into account persons who are in recovery, leaving corrections, or homeless

Housing counseling. Help with navigating through the process to finding affordable housing and helping with the initial down payment

Regulation on utility companies for cost containment

How other communities have successfully addressed this issue:

Charleston West Side leaders get media coverage on their issue and are working to obtain additional resources needed to leverage initiatives positively

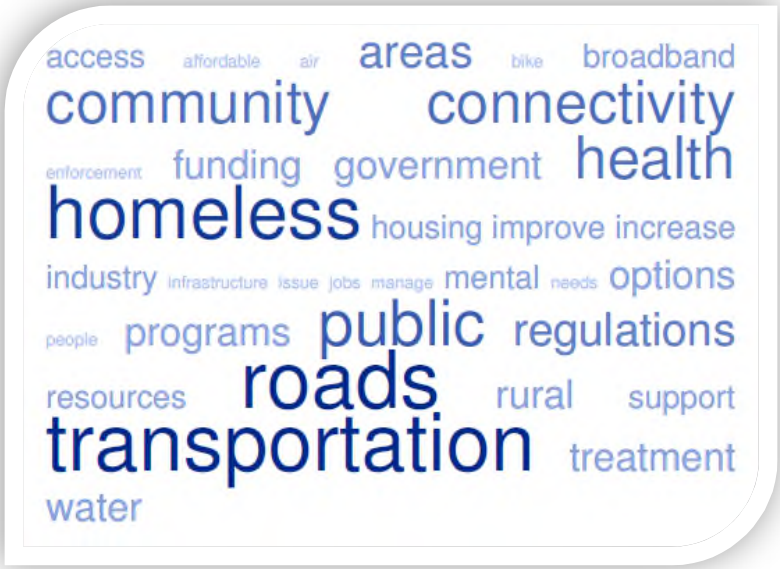
Housing First Housing Initiatives

Poverty tax incentives

Home maintenance assistance

LIVE: Safety and Infrastructure

Total Expert Opinions: 34



Top Challenges:

- Homelessness
- Lack of connectivity (fiber optics/ Internet)
- Lack of access to transportation
- Safe air and water
- Safe roads

In General Experts shared that there needed to be more open and honest dialogue on these issues and there is a need to raise awareness about these issues with lawmakers and legislators.

HOMELESSNESS

Top Contributing Factors:

Drug problems / Addiction

- Community Stigma
- Lack of empathy and understanding, complacency
- Society that enables
- Fear of those with substance use disorders
- People with substance use disorders not abiding by shelter rules

Down Economy - Lack of jobs with benefits

Affordable housing

Lack of government support of housing and urban renewal

Closing of Tent City moved problem to neighborhoods and communities

Lack of community resources to appropriately manage this population

Lack of metal health care diagnosis, treatment & case management

Lack of substance abuse treatment for the homeless

What needs to happen to resolve this issue?

Additional and expanded resources

Increase in empathy and compassion

Restructuring of services and locations of services for the homeless

A not for profit facility must be created to support individuals who need mental health assistance

Mental health treated like physical health

More treatment programs for SUD

More long-term programs for SUD recovery

Real services for true homelessness. We have several types of homeless people here. There are those that are homeless because they mental instability that makes it hard for them to live in a home. We have drug addicts that seem to not be from Charleston that land here because it's easy for them. And then we have panhandlers that are not homeless but disturb the public by begging.

Community Education Campaign around Homelessness and Addiction -- Reducing Stigma

Investment in industry/manufacturing to pay affordable wages

Need a way to move the homeless from the river banks and neighborhoods. Almost need another "tent city" designated area for the homeless that is away from neighborhoods

Laws need to be enacted to prevent panhandlers, so law enforcement has the ability and authority to act on it

Outreach workers to the homeless

Arresting those who are stealing/more police manpower

Inpatient therapy and treatment for Mental illness

Shelters for SUD clients who link them to treatment resources

Government grants for urban renewal housing projects

A transitional program needs to be created to move individuals out of perpetual homelessness with job/life skills training and recovery options

How other communities have successfully addressed this issue:

Housing First Initiatives

ARTICLE INNOVATION Cracking Frontier Markets Innovations from underdeveloped economies are launching brand-new industries, by Clayton Christensen, Efosa Ojomo, and Karen Dillon

CONNECTIVITY (fiber optics)

Top contributing factors:

Lack of connectivity (fiber optics/ Internet)

Lack of government resources for connectivity

Lack of fiber-optics in rural communities

Geography

Poorly managed corporate subsidies around broadband

Towers are not high enough or don't have enough range to accommodate rural low lying areas

What needs to happen to resolve this issue?

Governmental help and regulation of broad band

Incentives and/or fees for extending (or not extending) broadband access to consumers. Supporting alternative systems (Wi-Fi beaming) if cable isn't economically feasible

Connectivity co-ops

Possible connectivity subsidies

Government action to improve broadband access and quality

Priority needs to be given to increasing access to technology in rural areas

How other communities have successfully addressed this issue:

South Carolina has increased their connectivity so high speed internet is available throughout the State. This happened with Governor and legislative support and oversight. This solved the situation of poor medical care in rural areas do to transportation issues.

Aware that there is some action currently happening on the broadband issue by WV representatives in DC

South Carolina Policies for Connectivity

TRANSPORTATION

Top contributing factors:

Lack of public transportation to outlying/rural parts of the county

Minimal public transportation infrastructure

Expensive to operate a transit system

Lack of reliable transportation/drivers

Limited public transportation vouchers

What needs to happen to resolve this issue?

Funding, marketing of public transport (most people don't even know how to use what does exist), "normalization" of it. Bus Stops, schedules etc.

Government action to expand public transportation accessibility

Funding provided to pay drivers

Jobs/programs that imbedded transportation into them

Install bike borrowing stations, especially in flat areas. This would also improve health.

Increase affordable transportation options to outlying areas. Options may include Uber and Lyft that health homes coordinate.

More public transportation options

KRT Bus Route Change

How other communities have successfully addressed this issue:

I know there are communities with bike options that have had good results

Uber Health and ARC transportation pilot in Huntington

SAFE AIR & WATER

Top contributing factors:

Lax/relaxed regulations regarding industry/manufacturing pollution

Lack of adequate monitoring of water supply

Past history of unsafe water and air

What needs to happen to resolve this issue?

Regulations that protect clean air and water with accountable organizations

Enforcement of current regulations

More restriction on extractive industry

Consistent accountability for regulations and testing of water

More stringent regulation on releases into the environment

Laws need to be enacted and enforced to protect the public from profit-driven corporations

How other communities have successfully addressed this issue: None cited

SAFE ROADS

Top contributing factors:

Infrastructure cost

Lack of funding for road repair and retention

Lack of preventive maintenance

Years of neglect

Environmental contributors/climate change

Need for improved road surfacing materials that don't deteriorate so fast

Need for bike borrowing/loan stations

What needs to happen to resolve this issue?

Secure Funding for road repairs

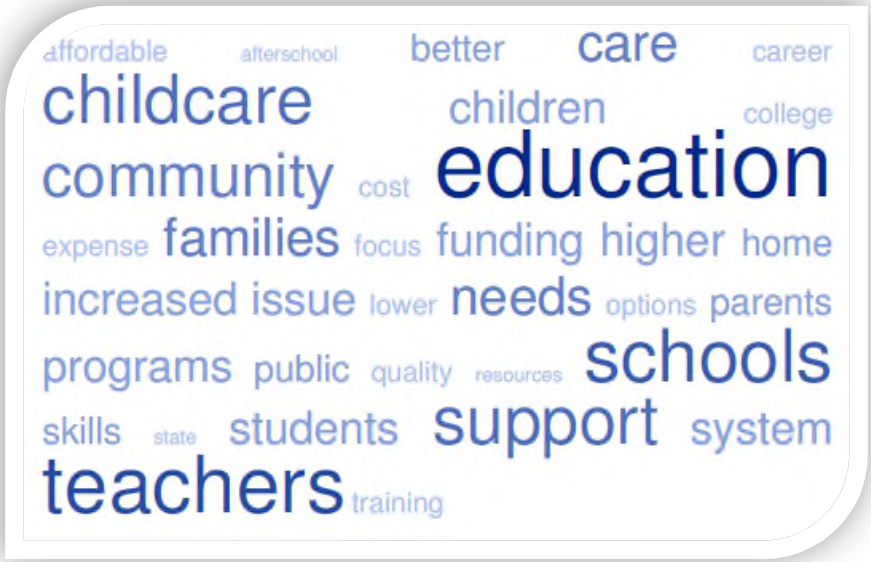
More funding for infrastructure improvements

How other communities have successfully addressed this issue:

Many good Community Development programs to research

LEARN

Total Expert Opinions: 34



Top Challenges:

- Lack of affordable childcare options
- Lack of support for children and families
- Lack of support for quality education K-12
- Lack of career and technology education to meet workforce demand
- Lack of coordination among higher educational institutions
- Lack of access to affordable higher education

In General (across all challenges)

Lack of broadband access, less computers in homes
Education community unwilling to try new ideas

LACK OF AFFORDABLE CHILDCARE OPTIONS

Top Contributing Factors:

Availability of care outside of business hours/expense

Tuition for quality childcare is high

Childcare is expensive and not very flexible. Payment required for a week yet may only use facility 1-2 days a week.

Childcare center operators have difficulties being profitable

Lacking childcare options for rural families

Funding for quality childcare/afterschool care

What needs to happen to resolve this issue?

More quality childcare centers, financial support for families to afford childcare

More affordable childcare facilities for working families

Community support for programs after hours/ lower cost

Increased local, state, federal funding for childcare/afterschool care

Professional development for teachers, childcare/afterschool care workers to effectively engage parents in child(ren)'s education

How other communities have successfully addressed this issue: None cited

LACK OF SUPPORT FOR CHILDREN AND FAMILIES

Top contributing factors:

Conditions in the home

The opioid crisis is robbing children of a safe and stable environment favorable to learning

Children facing too many issues at home

Families struggling to survive

Parents and guardians are underemployed or unemployed

Multiple demands on time/energy of parents, especially the working poor

Need for solid school counseling

Difficulty in working with students due to poverty and other traumatic issues in their lives

Inability to adequately provide support to struggling youth

Social support/coaching going into college age

Lack of parental and community involvement

Family members that don’t care or support education

Uneducated family members guiding young children

The foster care system is overwhelmed

What needs to happen to resolve this issue?

A restructuring of education to focus on the whole child/whole family

Improved home and school environments for children to improve overall learning

Home visits by the DHHR or education officials

Improved access to case management for children in the foster care system

Educate youth on basic life skills

Better curriculum for teaching needed skills for life as an adult

Coordinated community response

Have the school boards address the community involvement

Partner with recovery programs for specialized training

How other communities have successfully addressed this issue:

Whole school systems have brought about change by buying into a more trauma sensitive, caring approach to education

LACK OF SUPPORT FOR QUALITY K-12 EDUCATION

Top contributing factors:

Lack of standardization from county/county; accountability for outcomes; more challenging student population

Lack of public funding for public schools

Cut in corporate taxes over the years

Incentives for attracting teachers to low-performing schools

Underpaid teachers and understaffed schools

Support personnel for teachers

Lack of qualified educators in the K-12 system

Teacher evaluation methods

Teacher pay structure

Teacher training and salaries

Schools lack proper support/resources

Adequate numbers of science and math teachers

Unions and outdated high cost teacher benefits

Lack of funding to the K-12 system and support for current educators to have the resources needed (including continued education) to excel

Public schools focus on test score rather than educational attainment, one size does not fit all students

Education system has failed many students, poor outcomes and test scores

Lack of strong leaders to direct teachers

What needs to happen to resolve this issue?

Increased teacher pay for young teachers

Increase pay for teachers

Better focus on math and science curriculum

Standardized education

Lower ratios

Use of volunteers/retirees for support in challenging populations

Increase wage for outcomes – bonus incentive

Teachers paid based on merit and product

Reward teachers in economically depressed areas

Direct some more accountability toward parents and guardians

Increased local, state, federal funding to place highly qualified teachers in low performing schools

Give teachers a greater voice in curriculum needs, to promote efficacy of learning

More school choice options

Consolidation of high schools and small public colleges to make better use of the resources we have

Rewards for teachers/institutions who are trying new things

Investment in technology

How other communities have successfully addressed this issue: None cited

LACK OF CAREER & TECHNICAL EDUCATION TO MEET WORKFORCE DEMAND

Top contributing factors:

Lack of interest in blue collar careers

Lack of focus on importance of trade skills

No longer “general shop" in high school

Lack of respect and awareness for the trades and Vo-Tech schools

Availability of vocational classes and evening classes

Students are uninformed about growing job sectors

Limited alignment of specialty education for community needs; expense

Cost of vocational training difficult for low income

What needs to happen to resolve this issue?

New approaches to community college and vocational and technology education

Establish more technical programs

State legislature needs to put more funding into current programs

Better internet, training programs (also job readiness)

Place value on trade skills industry

Vision of a career path and mentoring

Develop better career pathways based on interest to lead to employment opportunities

Need to attract business that need skilled labor

Community support for programs after hours/ lower cost

How other communities have successfully addressed this issue: None cited

LACK OF COORDINATION AMONG HIGHER EDUCATION INSTITUTIONS

Top contributing factors:

Seems not as strong as should be and program offerings not balanced

What needs to happen to resolve this issue?

Education about growing sectors

How other communities have successfully addressed this issue: None cited

LACK OF ACCESS TO AFFORDABLE HIGHER EDUCATION

Top contributing factors:

Lack of widespread broadband infrastructure

Lack of widespread broadband infrastructure

Poor Economy

Lack of public/private partnerships

Lack of options for higher education

The availability of college education is limited for some of the most vulnerable populations

Expense of higher education

What needs to happen to resolve this issue?

Higher education organization needs to be held to a higher standard of excellence and for education rather than athletics to be funded

Increased support for students, especially lower income/underprivileged

How other communities have successfully addressed this issue: None cited

WORK

Total Expert Opinions: 40

Top Challenges:

- Lack of a drug free workforce
- Poor retention of young people in our local job market
- Shortage of skilled workforce due to inadequate education/training
- Lack of job education and training opportunities
- Workforce readiness, inability to obtain and keep jobs
- Lack of diverse job opportunities
- Low wages

In General (Across all challenges)

Lack of motivation/long term planning

Lack of vision

A truly coordinated effort

Lack of Innovation/ Investment

Political indifference

Lack of awareness among legislators

Lack of infrastructure

So focused on an immediate issue, we lose sight of other things and those begin to fail

Too much focus on other issues (money, drugs, teachers, etc.) –lack focus on needs of elderly

Diversify business portfolio of West Virginia

State or Federal recruitment programs

LACK OF A DRUG FREE WORKFORCE

Top Contributing Factors:

Substance use disorder

Drug dealers and trafficking

Availability of drugs-Prevention & Treatment need to increase

Substance Abuse/Drug epidemic

Lack of effective treatment and support for returning to community

Access and availability to drugs at early age

The drug epidemic is challenging to our current workforce

What needs to happen to resolve this issue?

Variety of treatment options

More public money used for prevention of drug abuse

Educate employers on substance use disorder and stigma

Willingness of employers to employ recovering people

Focus on the root cause of the substance abuse crisis

Public/private investment, incentives to stay clean

Stronger education programs at an early age

How other communities have successfully addressed this issue:

CORE (*Creating Opportunities for Recovery Employment)* and SOAR *(Solutions Oriented Addiction Response)* in Kanawha County

POOR RETENTION OF YOUNG PEOPLE IN OUR LOCAL JOB MARKET

Top contributing factors:

Need a concerted efforts to make singles welcomed and promote the value of our lifestyle advantages

Limited work options for many degrees; compensation and benefits

Lack of modern jobs and industry to retain young professionals

There is a large pay gap for many professionals in West Virginia compared to other states that is driving our young professionals to other areas

Other cities have more to offer young people

Cultural/lifestyle limitations, legislative policies that drive out young people

Ability to grow professionally is not accessible in all fields

Lack of affordable housing options in safe areas

Lack of flexibility in work options (that are commonly found in other cities)

Families and individuals desire entertainment that does not break the bank. We have little to offer in and around Kanawha County to entice younger generations to stay

Lack of recreational activities to engage young professionals and to increase quality of life

Rural nature of the state – younger people seem to be attracted to vibrant metro areas

What needs to happen to resolve this issue?

A concerted focused attention to young WV

Thriving community and state invested in adapting to the needs of Millennials instead of Baby Boomers

Attitude change for young adults

Mission to keep people here

Improve salaries to compete with other states, for our young professionals

More arts, diversity, cultural activities

Offer incentives for people to stay in West Virginia

More vibrant social atmosphere, festivals and activities

Legislative action to make the area attractive to young families/workers, expectations/support for professionals

Delinquent landlords must be held accountable and dilapidated buildings transitioned to affordable housing for small families/empty nesters/young professionals

How other communities have successfully addressed this issue:

More vibrant communities- you don't always need big cities to attract young people, but you do need vibrant communities. Lewisburg, Fayetteville, and Thomas are great examples. The Pullman Square area of Huntington, Capitol Street, and Elk City in Charleston are also great examples of vibrant community building.

SHORTAGE OF SKILLED WORKFORCE DUE TO INADEQUATE EDUCATION/TRAIINING

Top contributing factors:

Not enough emphasis on vocational training (hands-on)

Too much emphasis on must have higher education sometimes rather than but learn a skill set which is suitable to an individual

More training options for non-degree education

Shortage of training programs

Lack of vocation training/prep

Workers reluctance to retrain fueled by politicians who talk about industry comebacks

Funding for training and education

What needs to happen to resolve this issue?

Emphasis in the school system for vocational training

Emphasis on job readiness in high schools

Development of structured career training pathways

Assessment of workforce needs, buy in by the students so they want to succeed

Making students more aware of 2-year degrees

Apprenticeships by high school age

How other communities have successfully addressed this issue:

There are studies in other areas, and even other countries that show sustained and coordinated efforts that have brought success

LACK OF JOB EDUCATION AND TRAINING OPPORTUNITIES

Top contributing factors:

Lack of 21st century re-entry strategies

Lack of effective education and job training

Role models to help guide folks to trade industries

Structural Racism and economic exploitation

Availability and access to funds to support their education

Lack of education

Economic inequality

Proper training before hired

What needs to happen to resolve this issue?

Make community/tech education low cost/free and have more in demand certificate programs

Apprenticing and intern programs

More technical training programs

Address workforce needs with educational institutions

Connectivity

Showcase offender skill sets to business owners to create employment opportunities grant programs

How other communities have successfully addressed this issue: None cited

WORKFORCE READINESS- INABILITY TO OBTAIN AND KEEP JOBS

Top contributing factors:

People don't want to work

Extremely low workforce participation rate

Generations of folks living on welfare, kids know what they see

Coddling by the social service agencies

Poor households who do not value education

Hopelessness

Lack of family support

Families are fractured and struggling to survive

Lack of mentors for youth both at school and in the home

A lot of young people have not experienced work

Services for young kids that teaches them responsibility, love and drive

People haven't learned to come to work on time

Managers being unwilling to coach new employees to be stronger in their positions

Proper training for managers/continued education

Lack of prison reform

Poor preparation and early intervention with education to prepare for college and future careers

Misunderstanding of mental health issues in the work force.

Trauma and family support service support

Flexible Day Care held to high standards-Example: The Lighthouse

What needs to happen to resolve this issue?

Job readiness training

Training of current workforce to educate them on mental disorders and accommodations for those employees

Families need to have sufficient resources to feed, clothe and house themselves

Cost containment with for profits, medical practices, utility companies

Pilot programs and measure outcomes

Comprehensive plan for building intercultural competency

Break the chain of family dependence on social service programs

Workforce training in convenient locations

Train people to think critically

How other communities have successfully addressed this issue: None cited

LACK OF DIVERSE JOB OPPORTUNITIES

Top contributing factors:

Diverse places of employment

Fewer opportunities

Lack of diversity

Not enough jobs that don't require college degrees

High skill jobs absent from the economy

Lack of diversity and failure to fully support diversity and inclusion

Lack of investment in innovative and diversified businesses

Lack of criminal justice reform

Funding must be generated for small business growth, entrepreneurship and tourism

What needs to happen to resolve this issue?

Investment on attracting new industry

Bring in new employment opportunities

Strengthen networking between corrections, local communities, and local businesses

Promote OJT (On the Job) opportunities for offenders that are still incarcerated in communities needing rehabbed

We need to attract a bigger variety of businesses- not just manufacturing and extraction

More education in entrepreneurship, job skills

Availability of well-paid jobs and seed money, mentor-ship for start-ups

More small business assistance

Combat racism and ageism

How other communities have successfully addressed this issue:

Increase in entrepreneurial activity like the Raleigh-Durham area has experienced in recent decades

Blue Zone Communities-Loma Linda, California

LOW WAGES

Top contributing factors:

Poor economy - lack of decent paying jobs

Social economic plight

Low-paying jobs

Stagnant funding for non-profits

Difficulty competing with for profits

Expecting a work force to work in the "donut hole" of receiving state benefits and not being able to provide for themselves.

Lack of industry

Lack of incentives and low pay for young people

What needs to happen to resolve this issue?

Corporations need to accept their responsibility for paying workers the true value of their skills

The pipeline and gas industries lack welders, 50K welders short nationwide few training facilities and few funding sources to help

How other communities have successfully addressed this issue:

I would look at areas like Raleigh-Durham, Asheville, NC, Lexington, KY, and Charlottesville, VA as case studies for Charleston. These are vibrant communities in Appalachian states that are thriving

PLAY

Total Expert Opinions: 21

Top Challenges:

- Lack of access for all to the arts, cultural and entertainment opportunities
- Lack of funding to support the arts, culture and entertainment
- Lack of/decline in shopping opportunities
- Lack of support for small businesses
- Lack of safe and adequate recreational spaces in neighborhoods
- Underutilization of available river access for recreation
- Lack of financial support for recreational opportunities
- Decline in population affecting ability to support the arts, culture and recreation

In General (Across all challenges):

Lack of diversity / limited activities

Strategic marketing

Public safety

More focus/support from government

Lack of community coordination and planning

Lack of hotels to accommodate tourist/visitors

Limited access

Expensive to fly to West Virginia

ACCESS TO THE ARTS, CULTURAL & ENTERTAINMENT OPPORTUNITIES

Top Contributing Factors:

Affordability, making sure arts organization have funding to put on events, supporting them through other means to not price out local populations

Educational system has limited arts and physical education

Arts are too location specific and not spread out enough

Limited financial resource for brining events to our area

Limited financial resources for our people to pay for tickets

Need to have more affordable options

There need to be more local options (spread out into communities)

Limited venues for entertainment—and areas located between much larger venues tend to get off season or mid-week instead of weekends (and often only one night)

Culture and arts are not as appreciated or supported as they should be

What needs to happen to resolve this issue?

Expose children to art and music classes in elementary school

Transportation assistance and mobile productions

More public art

How other communities have successfully addressed this issue: None cited

FUNDING TO SUPPORT THE ARTS, CULTURE & ENTERTAINMENT

Top contributing factors:

Corporations don't adequately support organizations that provide a better quality of life in WV

Weak economy -- ties into the workforce section but if businesses struggle to stay afloat, then they also cannot provide entertainment at an affordable cost

There are many small groups seeking funds from the same 10 employers

Need help for community buildings to keep the lights on

What needs to happen to resolve this issue?

More funding/support for arts organizations

Funding or low interest loans made available for an entertainment component

Provide incentives for businesses to sponsor

Public funding towards the arts

Find ways to support art organizations in partnership with other community events

Support of area foundations and endowments to support the arts

How other communities have successfully addressed this issue: None cited

SHOPPING OPPORTUNITIES

Top contributing factors:

Large stores moving from Charleston

Retail stores closing

Loss of shopping to other areas/ Internet sales

Increase in discount stores

Outside sprawl keeps local businesses on their toes, Hard to compete with large stores

The Charleston Town Center, like many malls nationally, is a dying resource that needs to be refurbished and reimagined (must think outside of the box to use space more effectively)

What needs to happen to resolve this issue?

Attract new businesses

The Charleston Town Center must be reimagined whether it be transitioned to an outlet mall, a housing opportunity, a recreational center, etc.

Reconfigure downtown; rejuvenate business

How other communities have successfully addressed this issue: None cited

SUPPORT FOR SMALL BUSINESSES

Top contributing factors:

Small businesses not supported by state government

Small businesses are struggling to stay afloat due to rising costs of everything

Big companies get tax breaks; smaller ones taxed too much

What needs to happen to resolve this issue?

Diversify the job opportunities here -- diversifies the population and helps support the local businesses

Supportive small business policies

Encouragement of alternative food sources with investment even at the business level

How other communities have successfully addressed this issue: None cited

RECREATIONAL SPACES IN NEIGHBORHOODS

Top contributing factors:

Not as many local recreational locations

No good transportation routes for biking/walking outside of downtown areas w/out needing car access

Lack of funding for more recreation projects like parks

What needs to happen to resolve this issue?

Inner city recreation spaces

Complete streets concepts

How other communities have successfully addressed this issue: None cited

RIVER ACCESS FOR RECREATION

Top contributing factors:

Lack of knowledge of water recreational activities

What needs to happen to resolve this issue?

More awareness to build interest

How other communities have successfully addressed this issue: None cited

FUNDING FOR RECREATIONAL OPPORTUNITIES

Top contributing factors:

Socio-economics of population

What needs to happen to resolve this issue?

Supporting green infrastructure/recreational planning

More teen and young adult recreational programs

How other communities have successfully addressed this issue: None cited

DECLINE IN POPULATION (AS IT AFFECTS RECREATION)

Top contributing factors:

Need for retention of people who would be involved (aging and declining population)

Shrinking population, market size

Population decline

Young people are leaving -- to find work or to live somewhere else

What needs to happen to resolve this issue?

Engage the millennial population to help identify best solutions

More housing options; Condos

Need to clean up homelessness and drug traffic

How other communities have successfully addressed this issue: None cited

CONVENING OF EXPERTS

The Kanawha Coalition for Community Health Improvement held a Convening of Community Experts, August 20, 2019 at the West Virginia Regional Technology Center.

Attendees were presented highlights from the initial Expert Opinion Survey (from Step 1).

Breakout sessions were held to review the printed highlight reports. Volunteer Table Facilitators asked the groups to discuss if any listed challenges could be merged (addressed at the same time), required more clarification, or if there were any challenges that needed to be added to the list prior to the ranking process (See Appendix B).

Attendees were provided with ranking sheets and asked to select up to five challenges, on a scale of 1-5, with 5 being the highest priority and 1 being the lowest.

Experts in attendance ranked the following issues to move forward for the Top Challenge Ranking (Step 3):

LIVE: Health and Social

- Access to Substance Use Disorder Treatment
- Access to Health Promotion and Prevention Chronic Disease Prevention Education (including Dental
- Access to Recovery Services

LIVE: Safety and Infrastructure

- Safe Air and Water
- Safe Roads
- Homelessness-Treatment, Recovery and Housing

LEARN

- Lack of Education Programs to Meet Workforce Demand
- Lack of Affordable Childcare Options
- Lack of Resources for Non-Traditional Families

WORK

- Barriers to Employment
- Workforce Readiness, Inability to Obtain and Keep Jobs
- Shortage of Skilled Workforce Due to Inadequate Education/Training - Along with Lack of Job Education and Training Opportunities

PLAY

- Lack of Access and Affordability and Funding for all of the Arts, Cultural and Entertainment Opportunities
- Lack of/Decline in Shopping Opportunities and Lack of Support in Small Businesses
- Lack of Safe and Adequate Recreational Spaces in Neighborhoods

TOP CHALLENGE RANKING RESULTS

Experts were invited to participate in the final online Top Challenge Ranking process (See ranking criteria on Page __ and Appendix C: Expert Top Challenge Ranking Instrument).

Below are the final ranking scores. Only the top scored challenges under each Challenge area moved forward to Step 4 for Community Input.

LIVE: Health and Social Top Challenge	Total Weight
Access to Health Promotion and Prevention Chronic Disease Prevention Education (including Dental)	**36**
Access to Recovery Services	35.18
Access to Substance Use Disorder Treatment	34.89

LIVE: Safety and Infrastructure Top Challenge	Total Weight
Safe Roads	**35.81**
Safe Air and Water	35.68
Homelessness-Treatment, Recovery and Housing	35.61

LEARN Top Challenge	Total Weight
Lack of Affordable Childcare Options	**36.15**
Lack of Education Programs to Meet Workforce Demand	35.66
Lack of Resources for Non-Traditional Families	33.35

WORK Top Challenge	Total Weight
Barriers to Employment	**36.57**
Shortage of Skilled Workforce Due to Inadequate Education/Training - Along with Lack of Job Education and Training Opportunities	35.54
Workforce Readiness, Inability to Obtain and Keep Jobs	35.35

PLAY Top Challenge	Total Weight
Lack of Safe and Adequate Recreational Spaces in Neighborhoods	**37.07**
Lack of/Decline in Shopping Opportunities and Lack of Support in Small Businesses	35.78
Lack of Access and Affordability and Funding for all of the Arts, Cultural and Entertainment Opportunities	35.1

TOP KCCHI PRIORITIES 2020-2023

LIVE: Health and Social

Wellness promotion and chronic disease prevention education

LIVE: Safety and Infrastructure

Safe roads

LEARN

Access to affordable and adequate childcare options

WORK

Barriers to work

PLAY

Access to safe and adequate recreation, exercise and play opportunities

COMMUNITY INPUT ON TOP PRIORITIES

OVERALL RESPONDENT DEMOGRAPHICS:
(Assessment includes statistically significant data, more than 5 percentage point difference)

The paper survey reached more individuals between 18-34 years old and less individuals 45-54 years old, as compared to older individuals who had a better overall response rate via online survey.

Age Range	Online Survey Averages	Paper Survey Averages
18-24	4.18%	6.20%
25-34	13.60%	21.71%
35-44	25.30%	20.16%
45-54	26.07%	21.71%
55-64	24.57%	25.58%
65-74	4.75%	3.10%
75+	4.21%	0.00%
No answer	2.68%	1.55%

The online survey was completed by far more Caucasian individuals, 94.16% compared to 69.77%. The paper survey was far more successful in reaching minority populations and people of color, indicating the importance and significance of conducting surveys at the community level.

Race/Ethnicity	Online Survey Averages	Paper Survey Averages
Caucasian	94.16%	69.77%
African American	2.07%	20.16%
Asian American	0.72%	0.78%
Hispanic/Latino	0.58%	3.10%
American Indian	0.40%	0%
Arab American	0.46%	1.55%
Pacific Islander	0.43%	0%
No Answer	10.2%	1.55%

The paper survey was more successful in reaching individuals with lower educational attainment. Of those who responded to the paper survey, 41.08% had attained a high school diploma or less education, compared to only 4.66% among those who responded to the online survey.

Education	Online Survey Averages	Paper Survey Averages
k-8	0%	3.10%
Some High School	0.43%	6.2%
Diploma/GED	4.7%	31.78%
Vocational/Trade	4.7%	6.2%
Some College	14.53%	24.03%
Associate Degree	17.52%	7.75%

Bachelor's Degree	33.33%	11.63%
Master's Degree	18.80%	9.30%
Doctorate Degree	5.98%	0%

Both the paper and online surveys reached a significant number of people who both lived and worked in Kanawha County.

	Online Survey Averages	**Paper Survey Averages**
Live in Kanawha County	84.36%	83.59%
Work in Kanawha County	76.52%	60.16%

Priority: Wellness promotion and chronic disease prevention education

Comparing the paper survey to the online survey, there is little difference in responses for *moderate* access and *a great deal* of access to chronic health and disease education and awareness information, but surprisingly the number of responses from our online survey for *none at all* nearly doubled compared to the paper survey. Paper survey responses indicated a 7.97% of people feel they have no access to health education and awareness, while online survey responses indicated 12.50% of people feel they have no access to this information.

The chronic health problems or chronic diseases included in this survey included Diabetes, Obesity, Heart Disease, Hepatitis A/B/C, COPD, and HIV/AIDS. These diseases were chosen as they were identified as the top causes of death among Americans by the Centers for Disease Control (Centers for Disease Control, 2017. https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm).

The top responses between both surveys were Diabetes, Obesity, and Heart Disease, having similar rates of response between both survey types. There were significant statistical differences in responses collected via paper survey, with this population knowing significantly more about Hepatitis A/B/C (52.59% paper survey compared to 38.91% internet survey), and HIV/AIDS (42.22% paper survey compared to 25.53% internet survey). This could be because the majority of paper surveys were collected at community health clinics and drop-in centers, shelters, and largely focused on surveying minority and at-risk populations. These populations may have increased access to information, testing, and resources due to socioeconomic factors, lifestyle factors, and risky behaviors.

We were able to collect more information via online survey, and made the following findings:

68% of respondents identified that they hear about health information, news, and resources via social media, and 54% identified TV as their source of this information. Only 12.54% identified that they heard about health from their doctors or healthcare providers, the health department, or that they themselves work in the medical field. Through the online survey we were able to survey employees through two major hospitals in the area, as well as the county health department and local health clinics in Kanawha County.

It is significant that nearly 70% of people learn about chronic health conditions through social media or other media sources, and that 12.5% identified their health care providers as sources of this information. This could indicate that our healthcare providers need more support in relaying this information to patients, and that patients need increased information from their providers to be able to make informed decisions.

It is of note that of the individuals surveyed online, 90.16% had achieved college level education, whereas only 52.71% of individuals completing the paper surveys had achieved college level education. This may also be a factor in the ability to access health education or resources, as lower educational attainment and low income levels correlate strongly with lower health outcomes.

Additional Resource: https://societyhealth.vcu.edu/work/the-projects/why-education-matters-to-health-exploring-the-causes.html

Also important to note is that the online survey was completed by far more Caucasian individuals, 94.16% compared to 69.77% paper survey. The paper survey was far more successful in reaching minority populations and people of color, indicating the importance and significance of conducting surveys at the community level. This should be taken into consideration when compared to education and health outcomes, as minority populations have more barriers to overcome with regards to health. This could be a gap identified in our community, where we can see where minority populations as well as low-income and at-risk populations need additional supports with regards to access to health resources to improve health disparities.

Additional Resources:

https://www.rwjf.org/en/library/research/2014/06/reducing-disparities-to-improve-care-for-racial-and-ethnic-minorities.html

https://www.rwjf.org/en/library/research/2019/11/what-can-the-health-care-sector-do-to-advance-health-equity.html

In our online survey, we were able to ask more in-depth questions about awareness and engagement in the community to better determine the needs of the community, and identify potential gaps. We asked if community members would know who to contact with concerns about access to health information, and the response was split 48.48% indicating yes, and 47.87% indicating no. Less than 3% indicated they had already contacted someone

about their concerns, and some respondents identified that they were healthcare professionals so they would not need to contact anyone, and indicated that they did not know who people would go to if they didn't work in the healthcare profession. This relates strongly to information gathered about how health information is communicated, and could be a gap identified; the level of access all individuals in our community have to health information, chronic health condition and disease education impacts health outcomes.

Summary

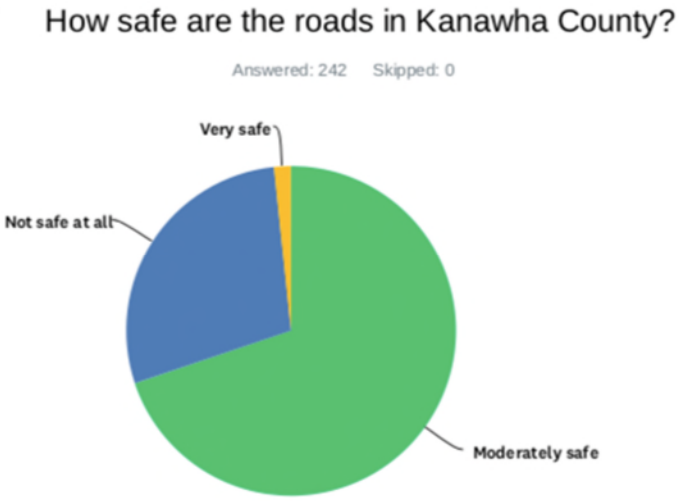
Potential Gaps and Other Considerations:

Gaps illustrated by the Live: Health and Social study include a need for increasing access to health education and awareness across all populations, potentially working with medical/community health professionals to increase information provided at doctor's visits, and increasing advertising as well as exploring new methods of advertising and communication about health issues. Vulnerable populations such as individuals and families with low income, senior citizens, and single parents need more supports and resources to access health information to support positive health choices, and this could also be an area to explore.

Priority: Safe roads and Transportation

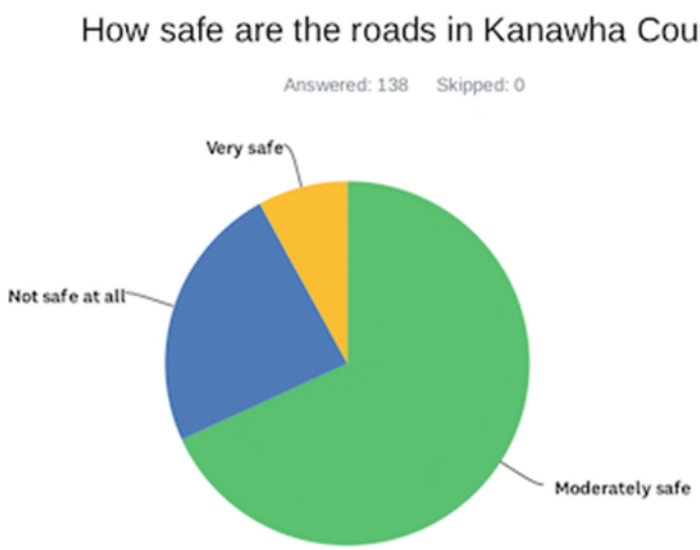
Comparing the Safety and Infrastructure survey responses, there is little difference in responses to questions about how safe the roads are in Kanawha County, with both online and paper survey participants reporting the following: about 69% believe the roads to be Moderately Safe, about 26% believe the roads are Not Safe at All. The only responses that showed differed significantly were that nearly 8% of online survey participants reported that the roads are Very Safe, while less than 2% of paper survey participants believed this to be true.

Online survey



ANSWER CHOICES	RESPONSES	
Moderately safe	69.83%	169
Not safe at all	28.51%	69
Very safe	1.65%	4
TOTAL		242

Paper Survey



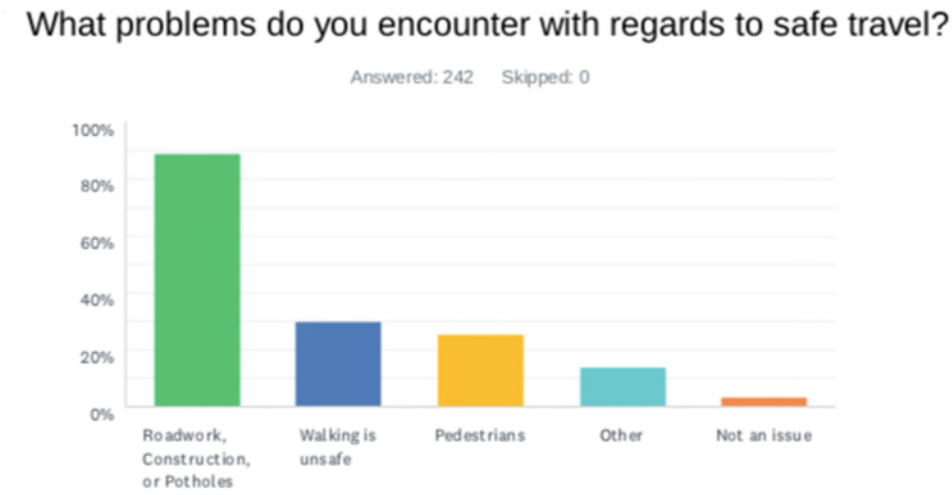
ANSWER CHOICES	RESPONSES	
Moderately safe	68.12%	94
Not safe at all	23.91%	33
Very safe	7.97%	11
TOTAL		138

In surveying participants about the problems that they encounter specific to safe travel, there were significant differences between the opinions of online and paper survey participants. Overall, the online survey participants believed that roads were unsafe due to physical issues with the roads (89% compared to 68% of paper survey participants) and due to pedestrians (25% compared to 8% of paper survey participants). Both participant groups felt that it was difficult to walk safely to the places they needed to go, with 30% of online survey participants reporting this compared to 23% of paper survey participants. This could be related to the method of travel used, such as private vehicle or public transportation, and also the distance that one has to travel to get where they need to go.

Other concerns that all survey participants brought up included:

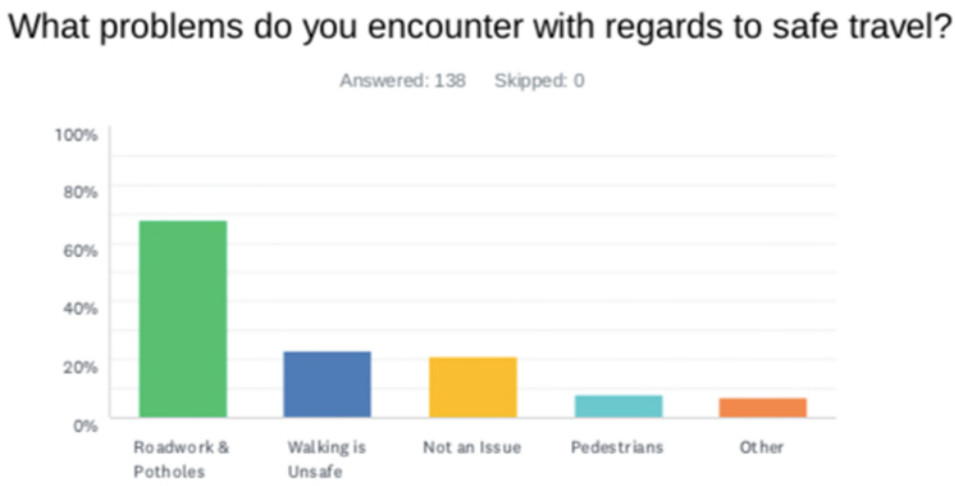
- Issues with road infrastructure failing, lack of inspection, narrow roads, and paint lines being insufficient on existing roads and after construction takes place, slippage
- Semi-truck drivers are unsafe
- Sidewalks are in disrepair, it is not safe to walk, Lack of lighting on sidewalks
- Panhandling, homelessness
- Drivers using cell phones, distracted drivers
- Speeding

Online



ANSWER CHOICES	RESPONSES	
Roadwork, Construction, or Potholes	88.84%	215
Walking is unsafe	29.75%	72
Pedestrians	25.62%	62
Other	14.05%	34
Not an issue	3.72%	9
Total Respondents: 242		

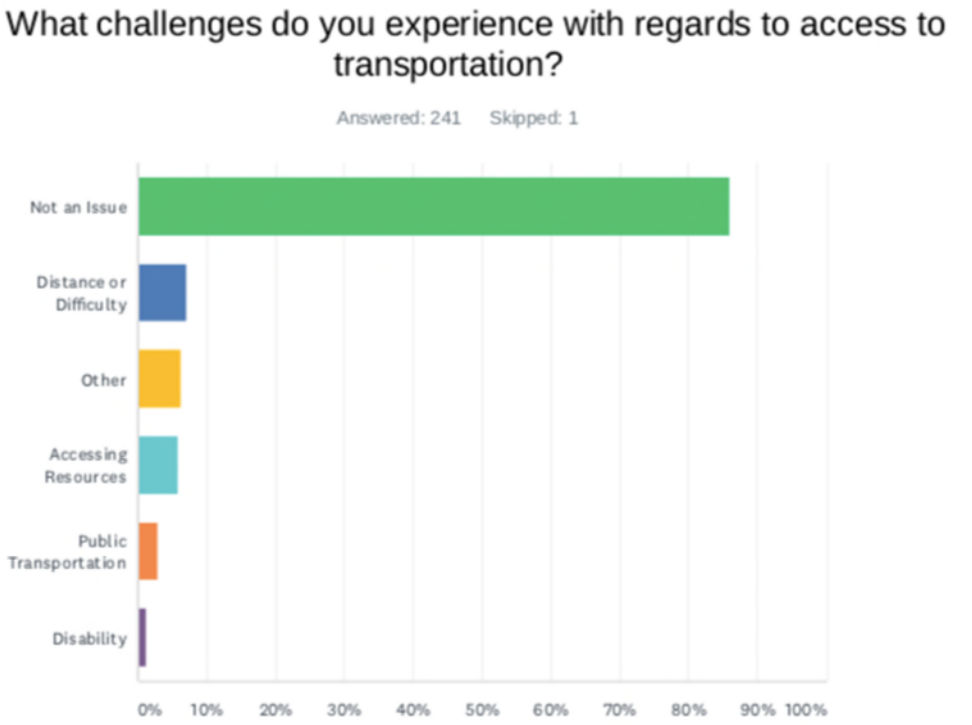
Paper



ANSWER CHOICES	RESPONSES	
Roadwork & Potholes	68.12%	94
Walking is Unsafe	23.19%	32
Not an Issue	21.01%	29
Pedestrians	7.97%	11
Other	7.25%	10
Total Respondents: 138		

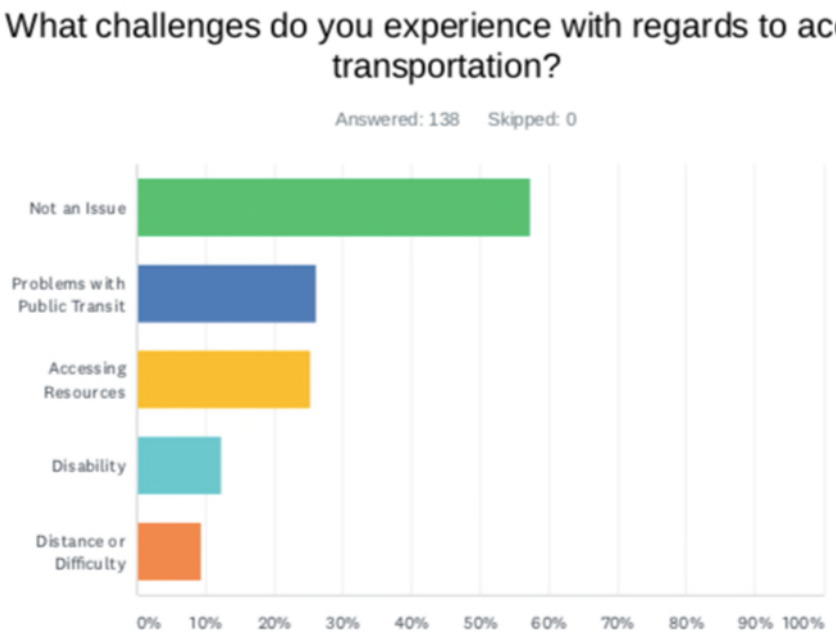
With regards to accessing transportation, 86% of online survey participants identified that they did not have trouble with transportation, compared to 57% of paper survey participants. There were significant differences in opinions about these difficulties, with an average of 26% of paper survey respondents identifying that they did not have access to a car and relied on public transit to meet their needs, and also that the lack of transportation makes it difficult to access basic resources such as health care, grocery stores, or other community services. 12% identified that they were disabled and struggled to find adequate transportation for their needs, and nearly 10% identified that they lived too far out or that it was hard to travel to meet their needs. In comparison, an average of 5% of online survey respondents were concerned about these same issues.

Online



ANSWER CHOICES	RESPONSES	
Not an Issue	85.89%	207
Distance or Difficulty	7.05%	17
Other	6.22%	15
Accessing Resources	5.81%	14
Public Transportation	2.90%	7
Disability	1.24%	3
Total Respondents: 241		

Paper



ANSWER CHOICES	RESPONSES	
Not an Issue	57.25%	79
Problems with Public Transit	26.09%	36
Accessing Resources	25.36%	35
Disability	12.32%	17
Distance or Difficulty	9.42%	13
Total Respondents: 138		

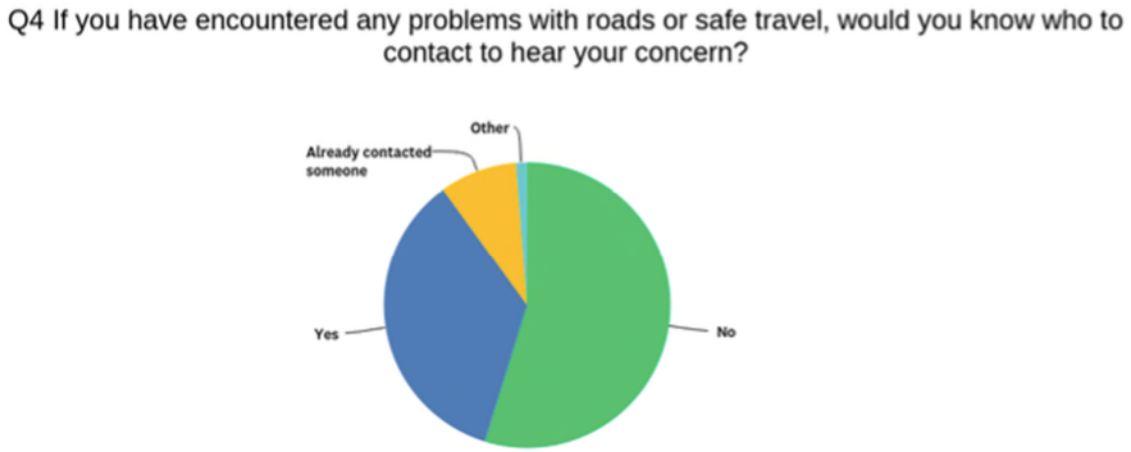
This could be because the paper survey method reached a segment of lower socioeconomic status that the online survey did not reach, as evidenced by the sites that paper surveys were placed at, including mostly community health clinics, shelters, and other community service sites. This could also be affected by the level of educational attainment among survey participants, as this is directly related to income and employment. "Because transportation touches many aspects of a person's life, adequate and reliable transportation services are fundamental to healthy communities. Transportation issues can affect a person's access to health care services. These issues may result in missed or delayed health care appointments, increased health expenditures and overall poorer health outcomes. Transportation also can be a vehicle for wellness" (AHA, 2017). Transportation is a critical economic and social factor that impacts the ability to be healthy for both individuals and communities.

Additional Resources:

http://www.hpoe.org/resources/ahahret-guides/3078

https://www.rwjf.org/en/library/research/2012/10/how-does-transportation-impact-health-.html

More than half of respondents were not able to identify who they would contact to hear concerns, and this could be an opportunity to improve our community's connection to infrastructure resources.



Summary

Potential Gaps and Other Considerations:

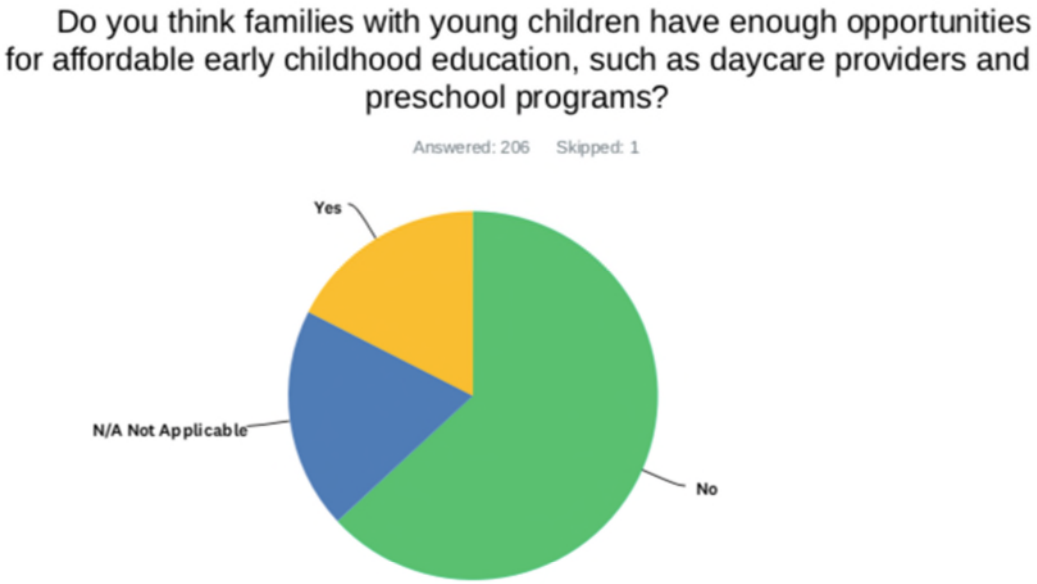
In the Live: Safety and Infrastructure study, the most common concerns among community members included the physical safety and structure of the roads, and the use of public transportation. Individuals surveyed that have their own transportation were more concerned about the road construction issues, and individuals dependent on public transportation indicated concerns about the availability and accessibility of public transportation to meet their everyday needs. There are potential areas to explore in policy, systems, and environment concerning both of these issues, such as working with local government and infrastructure systems to support growth and change to meet the needs of the community.

Priority: Access to affordable and adequate child care options

Access to early childhood education, including daycare and preschool programs, is an integral part of a young child's development and sets the stage for developing healthy behaviors, as well as healthy mental and physical development (ODPHP). In considering education as a social determinant of health, our assessment included questions about families' access to adequate and affordable early childhood education opportunities.

Both online and paper survey participants had similar responses: when asked if they believe families had enough opportunities for affordable early childhood education programs, 63% of online respondents indicated no, 17% indicated yes, and 19% selected not applicable, presumably indicating they did not have children. Paper survey respondents indicated that 52% indicated no, 17% indicated yes, and nearly 34% selected not applicable. More effort should be made in future assessments to include parents of young children to gain a better understanding of the issues in our community.

Online

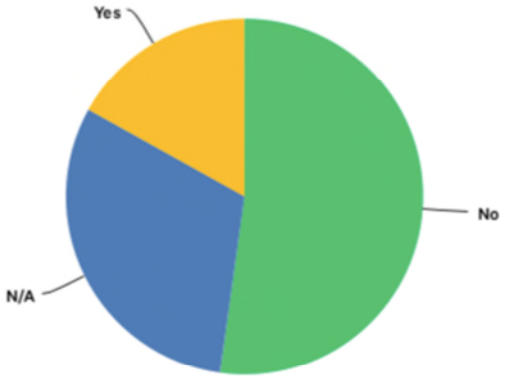


ANSWER CHOICES	RESPONSES	
No	63.11%	130
N/A Not Applicable	19.42%	40
Yes	17.48%	36
TOTAL		206

Paper

Do you think families with young children have enough opportunities for affordable early childhood education, such as daycare providers and preschool programs?

Answered: 136 Skipped: 2



ANSWER CHOICES	RESPONSES	
No	52.21%	71
N/A	30.88%	42
Yes	16.91%	23
TOTAL		136

When asked about the problems that families with young children face, we found that both online and paper survey participants ranked the problems listed in the survey in the same order. Many participants selected more than one issue, therefore it is important to keep in mind that there are often multiple issues facing families with young children. We found that the top problem was that childcare is not affordable (85% of online participants and 74% of paper participants). The next top concern for both groups was that childcare centers are not open during the hours that parents need care (59% of online participants and 58% of paper participants). The third most important concern was that there were not enough providers or facilities (59% of online participants and 58% of paper participants). Next, participants felt concern with the care and/or education provided (29% of online participants and 28% of paper participants).

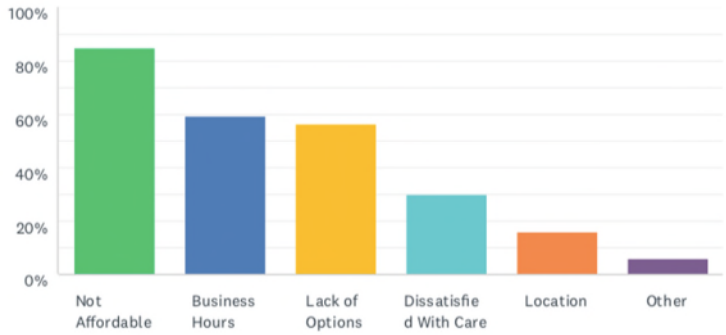
Last, and most notably, participants showed a significant difference in opinions about location of providers, with only 6% of online participants choosing location as a problem, and 27% of paper survey participants. Again, this could be due in part to the segment of the population that the paper survey was able to reach and their lack of access to resources such as transportation.

“Other” responses included: concerns for single parents; the need for night-time care or babysitters for parents working evening or overnight shifts; preschool hours being inconsistent with school hours; lack of after-school care; and finding care for children with special needs.

Online

What are the problems that families with young children face?

Answered: 197 Skipped: 10

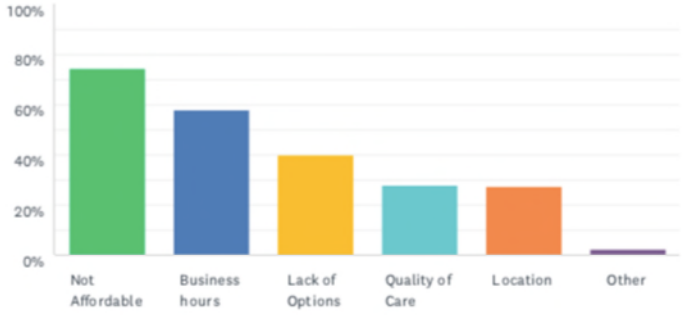


ANSWER CHOICES	RESPONSES	
Not Affordable	84.77%	167
Business Hours	59.39%	117
Lack of Options	56.35%	111
Dissatisfied With Care	29.95%	59
Location	16.24%	32
Other	6.09%	12
Total Respondents: 197		

Paper

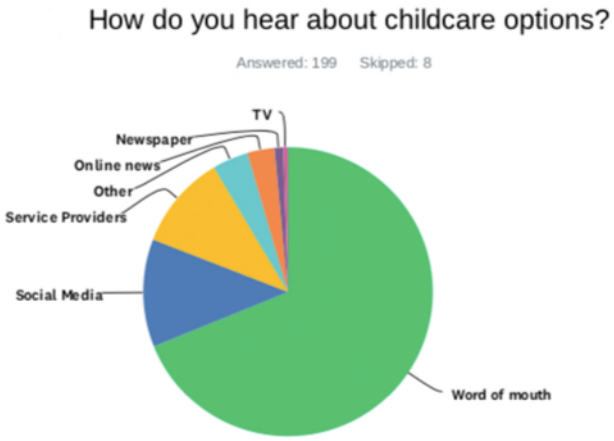
What are the problems that families with young children face?

Answered: 110 Skipped: 28

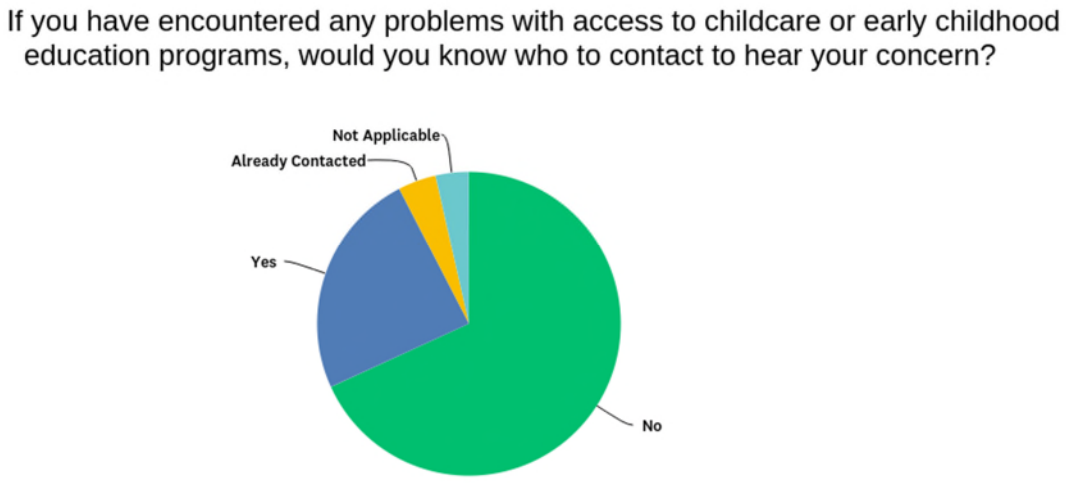


ANSWER CHOICES	RESPONSES	
Not Affordable	74.55%	82
Business hours	58.18%	64
Lack of Options	40.00%	44
Quality of Care	28.18%	31
Location	27.27%	30
Other	2.73%	3
Total Respondents: 110		

The study showed that the vast majority of survey participants hear about childcare options via word of mouth (69%). Social media (12%) and service provider referrals (11%) are the next most popular methods of communication about childcare options. Interestingly, the vast majority of respondents did not know who to contact if they had concerns (68% indicated no and 24% indicated yes).



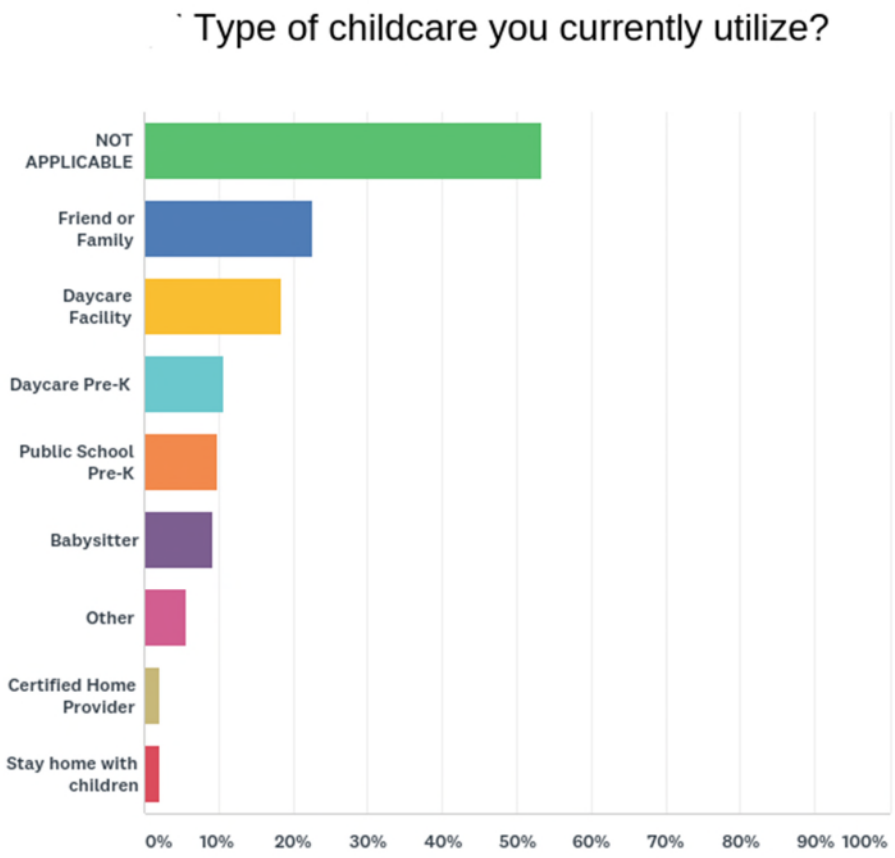
ANSWER CHOICES	RESPONSES	
Word of mouth	68.84%	137
Social Media	12.06%	24
Service Providers	10.55%	21
Other	4.02%	8
Online news	3.02%	6
Newspaper	1.01%	2
TV	0.50%	1
TOTAL		199



When asked about the type of childcare used, the study also showed that among both online and paper survey participants, more than half indicated that this was not applicable to them. Online survey participants used a friend or family the most often (23%), then a

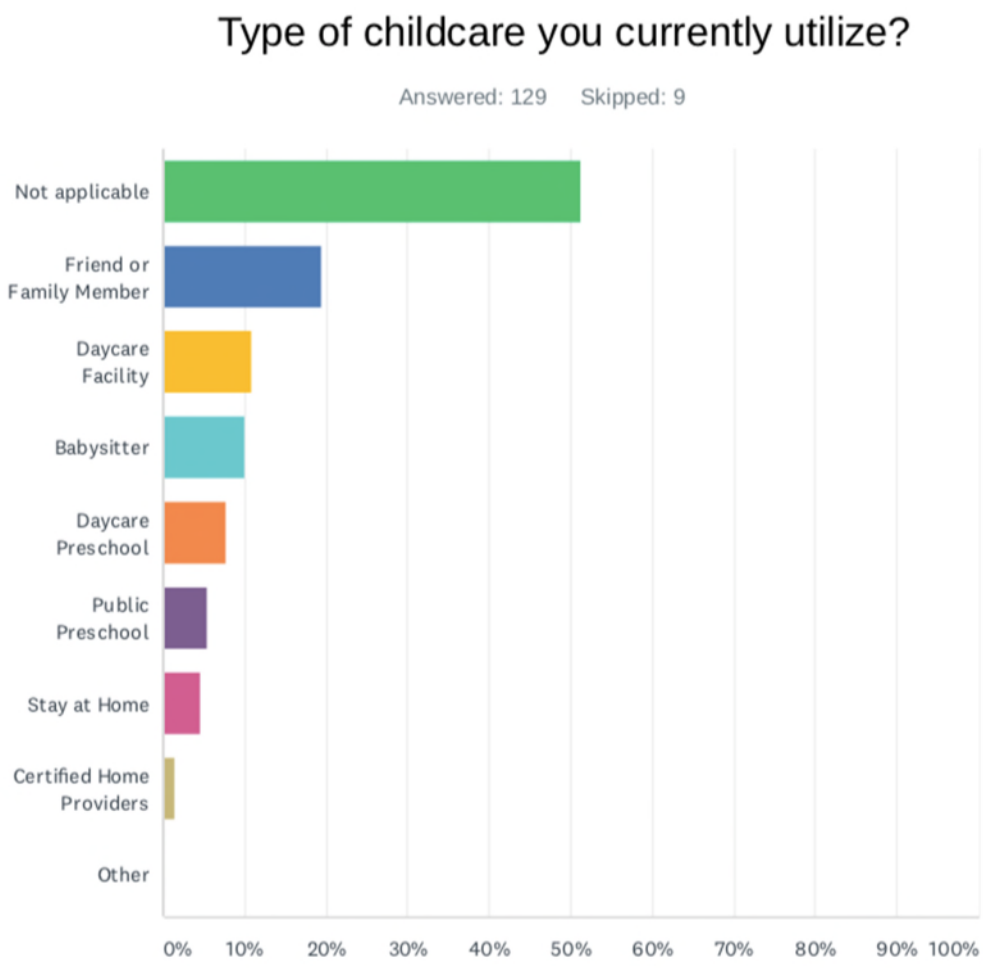
daycare facility (18%) and a daycare pre-k program (11%). Paper survey participants also used a friend or family member (19%), a daycare facility (11%) and a babysitter (10%). The type of childcare utilized the least in both groups were certified home providers (about 2% for both survey groups).

Online



ANSWER CHOICES	RESPONSES	
NOT APPLICABLE	53.33%	104
Friend or Family	22.56%	44
Daycare Facility	18.46%	36
Daycare Pre-K	10.77%	21
Public School Pre-K	9.74%	19
Babysitter	9.23%	18
Other	5.64%	11
Certified Home Provider	2.05%	4
Stay home with children	2.05%	4
Total Respondents: 195		

Paper



ANSWER CHOICES	RESPONSES	
Not applicable	51.16%	66
Friend or Family Member	19.38%	25
Daycare Facility	10.85%	14
Babysitter	10.08%	13
Daycare Preschool	7.75%	10
Public Preschool	5.43%	7
Stay at Home	4.65%	6
Certified Home Providers	1.55%	2
Other	0.00%	0
Total Respondents: 129		

Additional Resources:

https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/early-childhood-0

Administration for Children and Families PDF download:
https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=2ahUKEwipy7TFv__oAhUIcq0KHTaRA_IQFjABegQIARAB&url=https%3A%2F%2Fchildcareta.acf.hhs.gov%2Fstate-profiles%2Fprofiles%2FWV%2Fpdf&usg=AOvVaw1CNVgMBeBlW_b7_JLfEdI6

http://www.nccp.org/profiles/WV_profile_7.html

Summary

Potential Gaps and Other Considerations

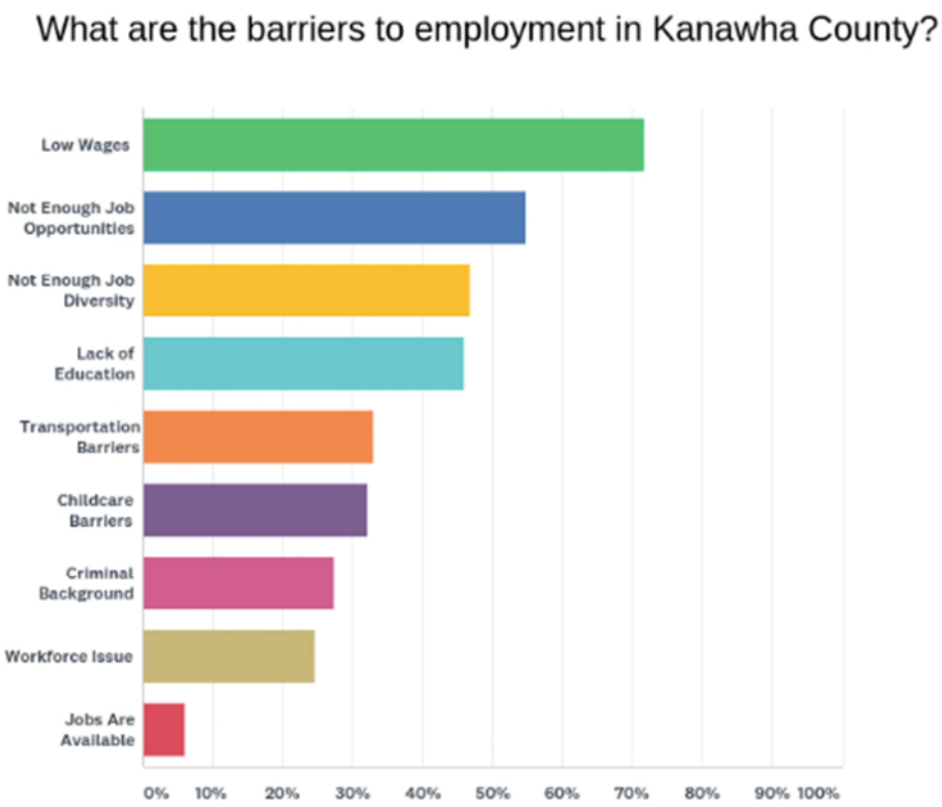
The Learn study indicates that more effort should be made in future assessments to include parents of young children to gain a better understanding of the issues in our community, and that additional work needs to be done between daycare providers and families utilizing the services to understand the needs and challenges. Affordability and hours of service are the top issue that families are concerned about, so there are potential opportunities here for policy, systems, and environmental changes to explore to increase the usefulness and affordability for families and profitability for providers.

Priority: Barriers to Work

When asked about the problems surrounding employment, we found that both online and paper survey participants ranked the problems somewhat differently, and that many participants selected more than one issue, so this needs to be taken into consideration as there are multiple issues affecting employment. 71% of online survey participants and 69% of paper survey participants believe that low wages and minimum wage jobs are a top concern. 54% of online survey participants and 42% of paper survey participants believe that there is a lack of job opportunities. Online participants listed not enough job diversity/types of work available as the next problem, then lack of education or skills to support job growth and development. Paper survey participants listed lack of education or skills training as the next barrier, then transportation barriers, and finally a lack of job diversity.

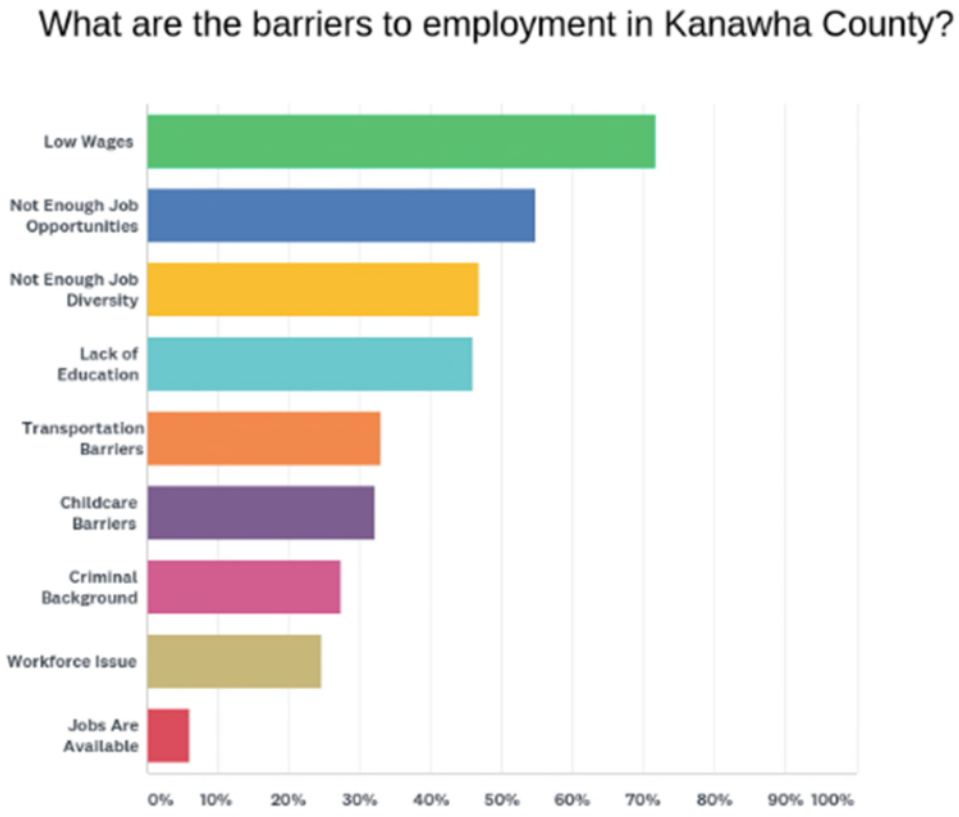
The paper survey had to be simplified, and did not include questions about childcare or criminal backgrounds, whereas the online survey was more robust in the data gathered. This needs to be taken into consideration when looking at these results, and may indicate need for further exploration.

Online



ANSWER CHOICES	RESPONSES	
Low wages/minimum wage jobs	71.74%	165
Not enough job opportunities	54.78%	126
There is not enough job diversity/types of work available	46.96%	108
Not enough education or skills training to support job growth/advancement	46.09%	106
Transportation barriers	33.04%	76
Childcare barriers	32.17%	74
Criminal backgrounds	27.39%	63
It is more of a workforce issue than job availability	24.78%	57
Employment is not an issue- there are plenty of jobs available	6.09%	14
Total Respondents: 230		

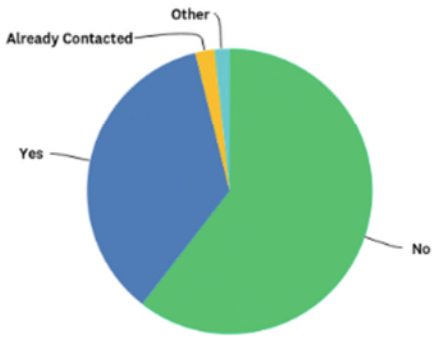
Paper



ANSWER CHOICES	RESPONSES	
Low wages/minimum wage jobs	71.74%	165
Not enough job opportunities	54.78%	126
There is not enough job diversity/types of work available	46.96%	108
Not enough education or skills training to support job growth/advancement	46.09%	106
Transportation barriers	33.04%	76
Childcare barriers	32.17%	74
Criminal backgrounds	27.39%	63
It is more of a workforce issue than job availability	24.78%	57
Employment is not an issue- there are plenty of jobs available	6.09%	14
Total Respondents: 230		

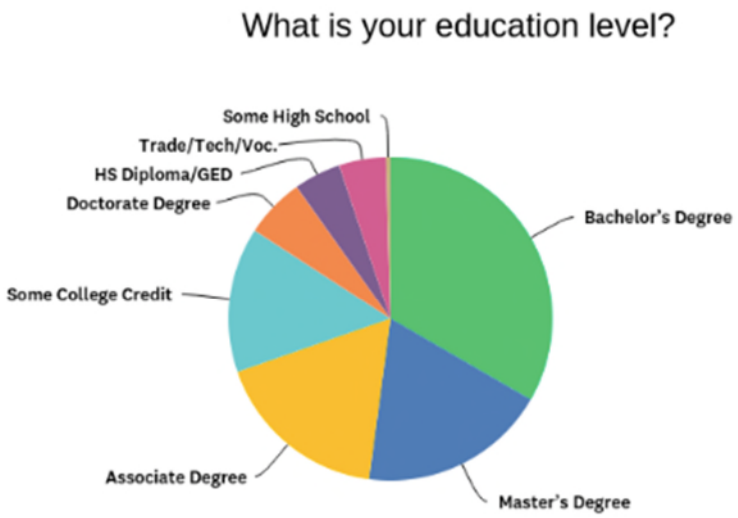
61% of respondents did not know who to contact about concerns with employment, possibly indicating a need for increased community engagement.

If you have encountered any problems with access to employment, training, or education to meet your employment goals, would you know who to contact to hear your concern?

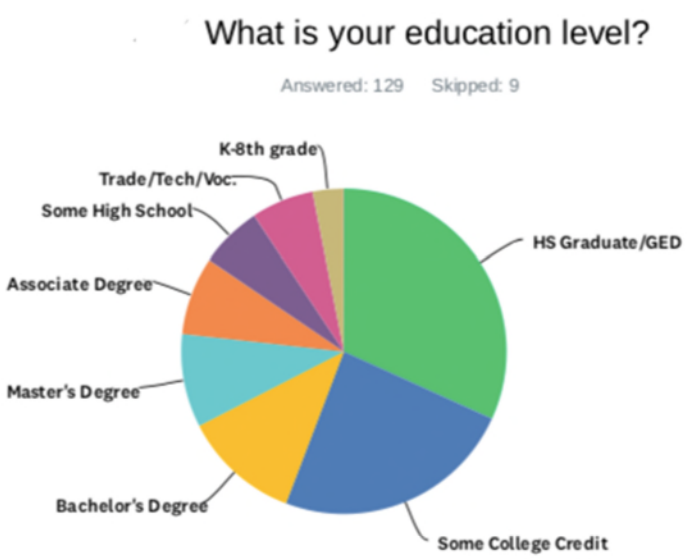


Employment status information was collected for both survey groups, and there were significant differences. Of the paper survey respondents, only 43% were employed full time, while 19% were retired, 16% were unemployed, and 11% were employed part time. About 5% were under employed or work more than one job, and about 2% were students. Of the online survey respondents, 92% were employed full time, 5% work more than one job, and about 2% were employed part time. Less than 1% were underemployed or were students, and 0% were retired or unemployed. From this data we can see that the paper surveys reach a wider segment of people and can be used to reach lower income and more vulnerable populations. Work needs to be done to reach our retired and disabled citizens, and to reach our older populations.

Online



ANSWER CHOICES	RESPONSES	
Bachelor's degree	33.33%	78
Master's degree	18.80%	44
Associate degree	17.52%	41
Some college credit, no degree	14.53%	34
Doctorate degree	5.98%	14
High school graduate, diploma or the equivalent (for example: GED)	4.70%	11
Trade/technical/vocational training	4.70%	11
Some high school, no diploma	0.43%	1
No schooling completed	0.00%	0
Nursery school to 8th grade	0.00%	0
TOTAL		234



ANSWER CHOICES	RESPONSES	
HS Graduate/GED	31.78%	41
Some College Credit	24.03%	31
Bachelor's Degree	11.63%	15
Master's Degree	9.30%	12
Associate Degree	7.75%	10
Some High School	6.20%	8
Trade/Tech/Voc.	6.20%	8
K-8th grade	3.10%	4
Doctorate Degree	0.00%	0
TOTAL		129

Summary

Potential Gaps and Other Considerations:

The gaps identified by the Work study include needing more in-depth survey and research to understand the problems encountered by individuals experiencing the problems with employment, to better understand the underlying issues. Another gap identified was with retired and disabled citizens, and our older populations, to support all types of employment needs and understand more of the problem. An area to explore may be supported employment options for people, training or mentoring programs for individuals re-entering the work force, and supporting employers willing to provide extra training and support for individuals with poor work histories to support job growth and development.

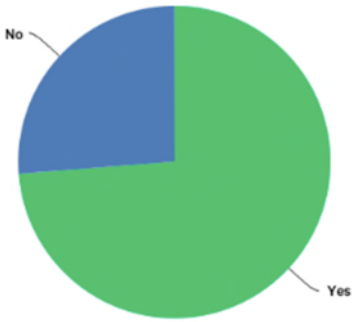
Priority: Access to Safe and Adequate Recreation, Exercise and Play Opportunities

In our Play study, we asked about accessibility to safe space for recreation in the community, what types of recreation space is available to survey respondents, and possible issues that are present with outdoor recreation.

Survey respondents indicated that 67% (paper surveys) and 74% (online surveys) felt that they did have access to safe recreation in their community, and 34% (paper surveys) and 26% (online surveys) stated they did not. When asked about the types of recreation space available to them, respondents could choose all that applied to them and answered in the following ways:

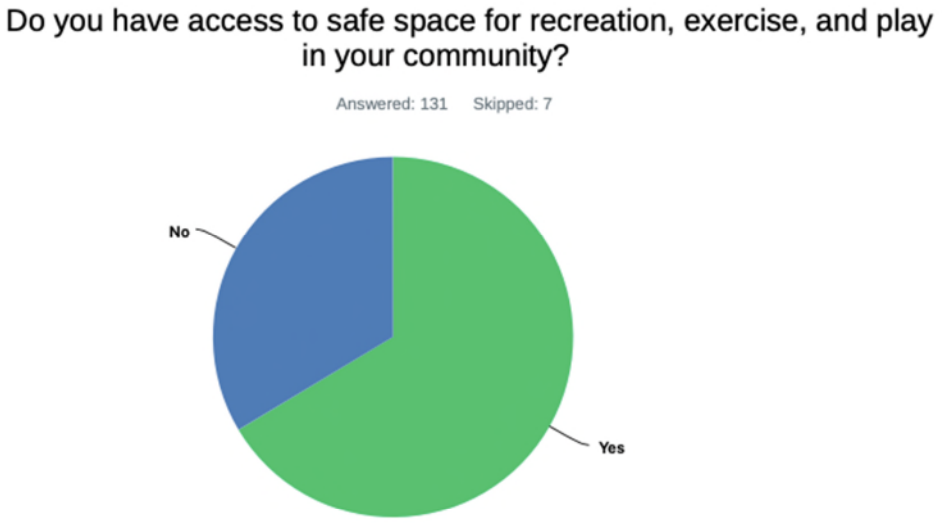
Online

Do you have access to safe space for recreation, exercise, and play in your community?



ANSWER CHOICES	RESPONSES	
Yes	73.76%	163
No	26.24%	58
TOTAL		221

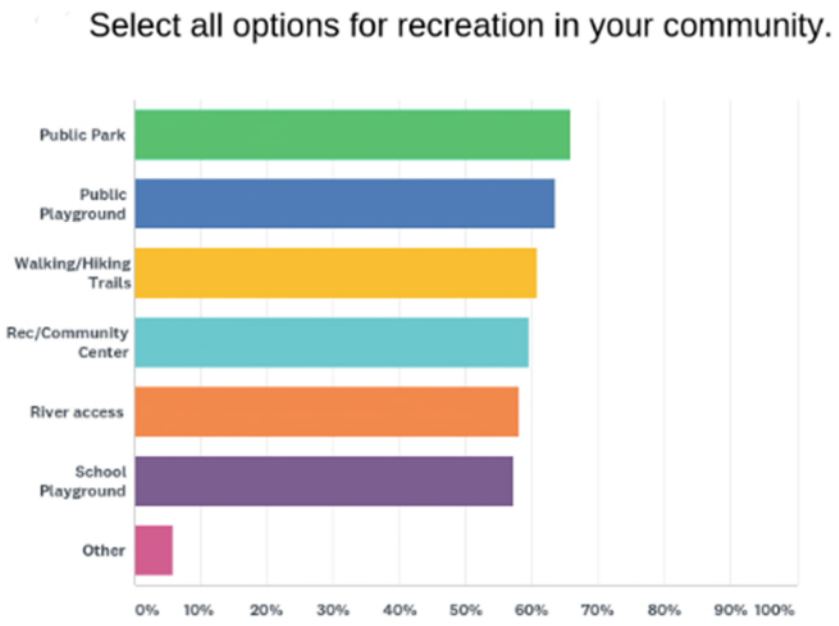
Paper



ANSWER CHOICES	RESPONSES	
Yes	66.41%	87
No	33.59%	44
TOTAL		131

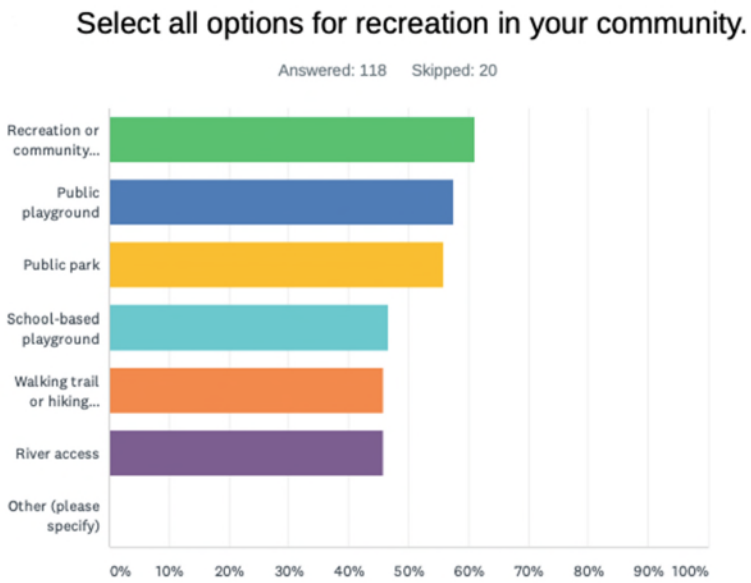
Paper survey respondents indicated that they had access to Recreation or Community center (61%), public playground (58%), public park (56%), school-based playground (47%), walking or hiking trails (46%), and river access (46%). Online survey respondents indicated that they had access to public parks (67%), public playground (64%), walking or hiking trails (61%), recreation or community center (60%), river access (58%), and school-based playground (57%).

Online



ANSWER CHOICES	RESPONSES	
Public park	65.91%	145
Public playground	63.64%	140
Walking trail or hiking trails	60.91%	134
Recreation/community center	59.55%	131
River access	58.18%	128
School-based playground	57.27%	126
Other	5.91%	13
Total Respondents: 220		

Paper



ANSWER CHOICES	RESPONSES	
Recreation or community center	61.02%	72
Public playground	57.63%	68
Public park	55.93%	66
School-based playground	46.61%	55
Walking trail or hiking trails	45.76%	54
River access	45.76%	54
Other (please specify)	0.00%	0
Total Respondents: 118		

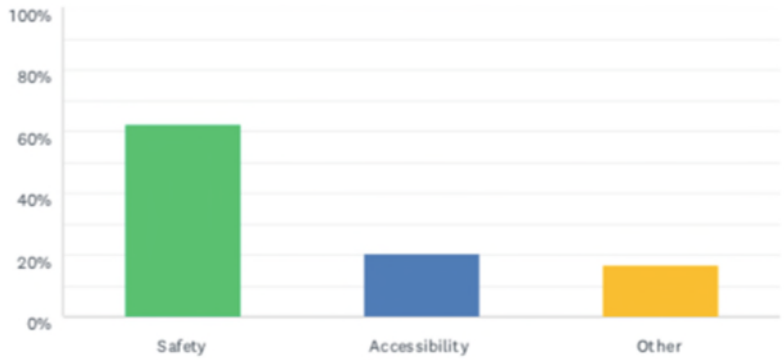
When asked why they would choose NOT to use available recreation spaces, online survey respondents indicated safety issues (62%) and accessibility issues (21%) as well as travel and lack of time, syringe litter, lack of security cameras or security guards, inability to carry a firearm for self-protection, lack of cleanliness, and drug users.

Paper survey respondents indicated safety issues (74%) and accessibility issues (33%) as well as gun violence, vandalism, syringe litter, blight, homeless and drug users as reasons they would not choose to use public recreation spaces available to them.

Online

Why would you choose not to use recreational spaces that are available to you?

Answered: 208 Skipped: 14

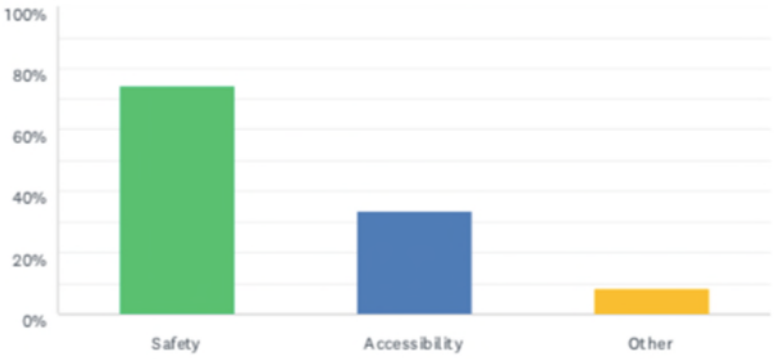


ANSWER CHOICES	RESPONSES	
Safety	62.50%	130
Accessibility	20.67%	43
Other	16.83%	35
TOTAL		208

Paper

Why would you choose to NOT use recreation spaces available to you?

Answered: 93 Skipped: 45



ANSWER CHOICES	RESPONSES	
Safety	74.19%	69
Accessibility	33.33%	31
Other	8.60%	8
Total Respondents: 93		

Summary

Potential Gaps and Other Considerations:

In the Play study, the issues most commonly identified concerning utilizing existing recreational spaces centered on safety. Cities such as Charleston do not seem to lack recreation space, but the safety of the spaces available is an obvious concern. One gap in our study that needs attention is more attention to surveying individuals in other parts of Kanawha County that cannot access Charleston or other larger towns for recreation opportunities, to better understand the needs of the greater Kanawha County. Of the existing recreational spaces, programs and plans to clean up or monitor the spaces to increase a feeling of safety is an area to explore, and possibly finding funding to support this work.

APPENDICES

APPENDIX A: Kanawha County 2020 Health Rankings

Kanawha (KA)

Show areas to explore Show areas of strength

County Demographics +

	Kanawha County	Trend	Error Margin	Top U.S. Performers	West Virginia	Rank (of 55)
Health Outcomes						38
Length of Life						42
Premature death	12,300		11,700-13,000	5,500	10,800	
Quality of Life						32
Poor or fair health	22%		21-22%	12%	24%	
Poor physical health days	4.8		4.6-5.0	3.1	5.3	
Poor mental health days	5.4		5.2-5.6	3.4	5.5	
Low birthweight	10%		10-11%	6%	9%	
Additional Health Outcomes (not included in overall ranking) −						
Life expectancy	73.4		73.0-73.9	81.1	74.8	
Premature age-adjusted mortality	550		530-570	270	500	
Child mortality	50		40-70	40	60	
Infant mortality	6		5-8	4	7	
Frequent physical distress	14%		14-14%	9%	17%	
Frequent mental distress	16%		16-17%	11%	18%	
Diabetes prevalence	16%		15-18%	7%	15%	
HIV prevalence	192			41	114	

Health Factors					24
Health Behaviors					**18**
Adult smoking	21%		20-21%	14%	26%
Adult obesity	38%		36-40%	26%	37%
Food environment index	7.4			8.6	6.7
Physical inactivity	28%		26-30%	20%	29%
Access to exercise opportunities	72%			91%	59%
Excessive drinking	12%		12-13%	13%	12%
Alcohol-impaired driving deaths	24%		20-29%	11%	27%
Sexually transmitted infections	361.7			161.4	228.0
Teen births	37		35-39	13	34
Additional Health Behaviors (not included in overall ranking) –					
Food insecurity	14%			9%	15%
Limited access to healthy foods	8%			2%	7%
Drug overdose deaths	66		59-73	10	50
Motor vehicle crash deaths	14		12-16	9	16
Insufficient sleep	38%		37-39%	27%	40%
Clinical Care					**4**
Uninsured	7%		6-8%	6%	8%
Primary care physicians	760:1			1,030:1	1,290:1
Dentists	1,200:1			1,240:1	1,810:1
Mental health providers	530:1			290:1	770:1
Preventable hospital stays	5,496			2,761	6,149
Mammography screening	38%			50%	39%
Flu vaccinations	47%			53%	41%
Additional Clinical Care (not included in overall ranking) –					
Uninsured adults	9%		7-10%	7%	9%
Uninsured children	2%		1-3%	3%	3%
Other primary care providers	390:1			665:1	660:1

Social & Economic Factors 36

High school graduation	83%			96%	89%
Some college	60%		57-62%	73%	55%
Unemployment	5.2%			2.6%	5.3%
Children in poverty	26%		21-31%	11%	23%
Income inequality	4.8		4.6-5.1	3.7	4.9
Children in single-parent households	40%		36-44%	20%	34%
Social associations	17.9			18.4	13.1
Violent crime	616			63	330
Injury deaths	146		138-154	58	119

Additional Social & Economic Factors (not included in overall ranking) –

Disconnected youth	11%	8-15%	4%	9%
Reading scores	2.9		3.4	3.0
Math scores			3.4	2.9
Median household income	$41,900	$39,600-44,200	$69,000	$44,000
Children eligible for free or reduced price lunch	51%		32%	55%
Residential segregation - Black/White	54		23	61
Residential segregation - non-white/white	45		14	49
Homicides	8	7-10	2	5
Suicides	24	21-27	11	19
Firearm fatalities	22	19-25	8	17
Juvenile arrests	22			

Physical Environment 36

Air pollution - particulate matter	10.4			6.1	9.6
Drinking water violations	Yes				
Severe housing problems	11%		10-12%	9%	11%
Driving alone to work	82%		81-83%	72%	83%
Long commute - driving alone	22%		20-24%	16%	33%

Additional Physical Environment (not included in overall ranking) –

Traffic volume	124			58
Homeownership	69%	68-70%	81%	73%
Severe housing cost burden	11%	10-12%	7%	10%

Note: Blank values reflect unreliable or missing data

APPENDIX B: Expert Opinion Survey Instrument

Kanawha Coalition
for Community Health Improvement

Communities of Excellence Expert Opinion Survey

⊕ PAGE TITLE

The Kanawha Coalition is both excited and honored that Kanawha County is among the select communities in the United States to take part in the Communities of Excellence initiative. We and other communities across the Nation are leading efforts to refine and improve a Communities of Excellence Framework and improve the understanding of the key requirements needed to successfully adopt and sustain positive change in communities.

By participating in this Expert Opinion Survey, you will help gather information that will direct the Communities of Excellence work in Kanawha County over the next 3-5 years.

All survey participants will be invited to a "Convening of Community Experts" to help us "Chart our Course towards Excellence" on August 20, 2019.

Please note that your name and affiliation will be included on a list of all survey respondents. However, your name will not be associated with your responses. All responses will be reported out in aggregate form only.

This survey should take approximately 20 minutes and allows for narrative responses.

Survey Participant Information

Name	
Organization/Affiliation	
Email Address	
Phone Number	

Do you wish to share your expert opinion on issues under the **Category LIVE (Health and Social)**? This Category includes the following:

- Care for an aging population
- Substance use disorder treatment and recovery
- Prevention of chronic diseases/Health promotion
- Food access
- Safe an affordable housing
- Social gathering places
- Diversity and culture

○ Yes

○ No

Category **LIVE (Health & Social)** includes:

- Care for an aging population
- Substance use disorder treatment and recovery
- Prevention of chronic diseases/Health promotion
- Food access
- Safe an affordable housing
- Social gathering places
- Diversity and culture

Based on your knowledge and observations, what do you believe are the three biggest challenges in this Category? (Please be specific as possible)

First:

Second:

Third:

Is there **data, reports, or other documentation** that captures the level/extent of the problems you mentioned above?

- ◯ Yes (If possible, please share report titles/data sources in the Comment Area below)
- ◯ No, but I have personally observed these problems.
- ◯ Maybe, I am not sure.

Date Source/Report or Document Title:

In your opinion, what are the **three biggest contributing factors** to these issues?

First:

Second:

Third:

Name up to **three things that would need to happen** for these issues to be resolved.

First:

Second:

Third:

Are you aware of **evidence based policies, practices or system changes** that have been proven effective in addressing these issues in other communities?

- ◯ Yes, please describe using the text box below
- ◯ No
- ◯ Unsure

Please specify the policy, practice, or system that has been proven effective in other communities.

Do you wish to wish to share your expert opinion on issues under the **Category LIVE (Safety and Infrastructure)**? This Category includes:

- Transportation (access)
- Safe roads
- Safe air and water
- Connectivity (fiber optics)
- Emergency preparedness
- Response to homelessness

◯ Yes

◯ No

Category **LIVE (Safety and Infrastructure)** includes:

- Transportation (access)
- Safe roads
- Safe air and water
- Connectivity (fiber optics)
- Emergency preparedness
- Response to homelessness

Based on your knowledge and observations, what do you believe are the three biggest challenges in this Category? (Please be specific as possible)

First:

Second:

Third:

Is there **data, reports, or other documentation** that captures the level/extent of the problems you mentioned above?

◯ Yes (If possible, please share report titles/data sources in the Comment Area below)

◯ No, but I have personally observed these problems.

◯ Maybe, I am not sure.

Date Source/Report or Document Title:

In your opinion, what are the **three biggest contributing factors** to these issues?

First:

Second:

Third:

Name up to **three things that would need to happen** for these issues to be resolved.

First:

Second:

Third:

Are you aware of **evidence based policies, practices or system changes** that have been proven effective in addressing these issues in other communities?

- ◯ Yes, please describe using the text box below
- ◯ No
- ◯ Unsure

Please specify the policy, practice, or system that has been proven effective in other communities.

Do you wish to share your expert opinion on issues under the **Category LEARN**? This Category includes:

Quality and Availability of:

- Childcare/pre-K
- K-12 education
- Career & Technology
- College & University

- ◯ Yes
- ◯ No

Category **LEARN** includes:

Quality and Availability of

- Childcare/pre-K
- K-12 education
- Career & Technology
- College & University

Based on your knowledge and observations, what do you believe are the three biggest challenges in this Category? (Please be specific as possible)

First:

Second:

Third:

Is there **data, reports, or other documentation** that captures the level/extent of the problems you mentioned above?

- ◯ Yes (If possible, please share report titles/data sources in the Comment Area below)
- ◯ No, but I have personally observed these problems.
- ◯ Maybe, I am not sure.

Date Source/Report or Document Title:

In your opinion, what are the **three biggest contributing factors** to these issues?

First:

Second:

Third:

Name up to **three things that would need to happen** for these issues to be resolved.

First:

Second:

Third:

Are you aware of **evidence based policies, practices or system changes** that have been proven effective in addressing these issues in other communities?

- ◯ Yes, please describe using the text box below
- ◯ No
- ◯ Unsure

Please specify the policy, practice, or system that has been proven effective in other communities.

Do you wish to share your expert opinion on issues under the **Category WORK**? This Category includes:

- Qualified, prepared workforce
- Drug free workforce
- Retention of young people

- ◯ Yes
- ◯ No

Category **WORK** includes:

- Qualified, prepared workforce
- Drug free workforce
- Retention of young people

Based on your knowledge and observations, what do you believe are the three biggest challenges in this Category? (Please be specific as possible)

First:

Second:

Third:

Is there **data, reports, or other documentation** that captures the level/extent of the problems you mentioned above?

- ◯ Yes (If possible, please share report titles/data sources in the Comment Area below)
- ◯ No, but I have personally observed these problems.
- ◯ Maybe, I am not sure.

Date Source/Report or Document Title:

In your opinion, what are the **three biggest contributing factors** to these issues?

First:

Second:

Third:

Name up to **three things that would need to happen** for these issues to be resolved.

First:

Second:

Third:

Are you aware of **evidence based policies, practices or system changes** that have been proven effective in addressing these issues in other communities?

- ◯ Yes, please describe using the text box below
- ◯ No
- ◯ Unsure

Please specify the policy, practice, or system that has been proven effective in other communities.

Do you wish to share your expert opinion of issues under the **Category PLAY**? This Category includes:

- Arts/Culture
- Entertainment
- Dining
- Shopping
- Sports/Recreation

◯ Yes

◯ No

Category **PLAY** includes:

- Arts/Culture
- Entertainment
- Dining
- Shopping
- Sports/Recreation

Based on your knowledge and observations, what do you believe are the three biggest challenges in this Category? (Please be specific as possible)

First:

Second:

Third:

Is there **data, reports, or other documentation** that captures the level/extent of the problems you mentioned above?

◯ Yes (If possible, please share report titles/data sources in the Comment Area below)

◯ No, but I have personally observed these problems.

◯ Maybe, I am not sure.

Date Source/Report or Document Title:

In your opinion, what are the **three biggest contributing factors** to these issues?

First:

Second:

Third:

Name up to **three things that would need to happen** for these issues to be resolved.

First:

Second:

Third:

Are you aware of **evidence based policies, practices or system changes** that have been proven effective in addressing these issues in other communities?

- ◯ Yes, please describe using the text box below
- ◯ No
- ◯ Unsure

Please specify the policy, practice, or system that has been proven effective in other communities.

Thank you for taking our Community Expert Opinion Survey. If you have further questions or comments please call Judy at 304-388-7557.

If you would like to recommend another expert in your field to receive this survey, please share their contact information below:

Name

Organization

Email Address

Mark your calendar for our upcoming **Convening of Community Experts on August 20, 2019 from 8:00 a.m. until Noon**. Attendees will help set the course for our journey to community excellence! You will receive an email invitation with all the details. The meeting will take place in Charleston.

Please indicate your ability to attend:

- ◯ Yes
- ◯ No
- ◯ Tentative

APPENDIX C: Convening of Expert – Table Facilitators Instructions

TABLE FACILITATORS INSTRUCTIONS

Time	STEPS
5 minutes	1. Hand out Survey Highlights document 2. Ask individuals to review silently
40 minutes	3. Hand out Challenge Ranking Tool (Colored sheets) 4. Discuss the following: • Can any challenges be merged (addressed together?) • Should some challenges be more specific (are any too broad?) • Does the group think a challenge needs to be added to the list? (Optional) NOTE: Do not exceed 10 challenges total.
5 minutes	5. Ask individuals to change their ranking sheets to reflect any changes made above in Step 4.
10minutes	6. Ask individuals to select up to 5 challenges (on their Challenge Ranking Tool) they would like addressed through the Kanawha Communities of Excellence plan. *(On a scale of 1 – 5, with 5 being the highest priority and 1 being the lowest)*
15 minute Break	7. Facilitators take completed Challenge Ranking Sheets to Small Conference Room to be tabulated.

APPENDIX D: Expert Top Challenge Ranking Instrument

Kanawha Coalition for
Community Health Improvement

Communities of Excellence Top Challenge Survey

You have been identified as a key contributor for the FINAL STEP in the prioritization process of the Kanawha County Triennial Community Needs Assessment.

You will be ranking challenges under LIVE, LEARN, WORK and PLAY which were identified through the initial Expert Opinion Survey and refined through our Conversation with Experts meeting that took place on August 20.

The top ranked challenges from this survey will then be taken to the community and other key customer groups for input. Community feedback will be considered as the Kanawha Community Improvement Plan 2020-2023 is developed.

This survey should take approximately 10 minutes. We value your input and appreciate your time!

Communities of Excellence Top Challenge Survey

GREAT Place to Live: *"Community Health & Social"*

* 1. Would you like to Prioritize the Challenges for **GREAT Place to Live *"Community Health & Social"***?

◯ **Yes** ◯ **No**

Communities of Excellence Top Challenge Survey

GREAT Place to Live: *"Community Health & Social"*

* 2. Please respond to the following statements with regard to "Access to Substance Use Disorder Treatment".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	◯	◯	◯	◯	◯	◯	◯
There is baseline data that would help us measure our impact for this challenge	◯	◯	◯	◯	◯	◯	◯
Other communities, like ours, have been able to overcome this challenge	◯	◯	◯	◯	◯	◯	◯
We can resolve this challenge in 3-5 years or less and sustain the improvements	◯	◯	◯	◯	◯	◯	◯
To my knowledge, no one is working to address this challenge at this time	◯	◯	◯	◯	◯	◯	◯
We can create a major improvement in the quality of life by addressing this challenge	◯	◯	◯	◯	◯	◯	◯
We can reduce long-term cost to the community by addressing this challenge	◯	◯	◯	◯	◯	◯	◯

* 3. Please respond to the following statements with regard to "Access to Health Promotion and Prevention Chronic Disease Prevention Education (including Dental)".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	○	○	○	○	○	○	○
There is baseline data that would help us measure our impact for this challenge	○	○	○	○	○	○	○
Other communities, like ours, have been able to overcome this challenge	○	○	○	○	○	○	○
We can resolve this challenge in 3-5 years or less and sustain the improvements	○	○	○	○	○	○	○
To my knowledge, no one is working to address this challenge at this time	○	○	○	○	○	○	○
We can create a major improvement in the quality of life by addressing this challenge	○	○	○	○	○	○	○
We can reduce long-term cost to the community by addressing this challenge	○	○	○	○	○	○	○

* 4. Please respond to the following statements with regard to "Access to Recovery Services".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	◯	◯	◯	◯	◯	◯	◯
There is baseline data that would help us measure our impact for this challenge	◯	◯	◯	◯	◯	◯	◯
Other communities, like ours, have been able to overcome this challenge	◯	◯	◯	◯	◯	◯	◯
We can resolve this challenge in 3-5 years or less and sustain the improvements	◯	◯	◯	◯	◯	◯	◯
To my knowledge, no one is working to address this challenge at this time	◯	◯	◯	◯	◯	◯	◯
We can create a major improvement in the quality of life by addressing this challenge	◯	◯	◯	◯	◯	◯	◯
We can reduce long-term cost to the community by addressing this challenge	◯	◯	◯	◯	◯	◯	◯

Communities of Excellence Top Challenge Survey

GREAT Place to Live: *"Community Safety & Infrastructure"*

* 5. Would you like to Prioritize the Challenges for **GREAT Place to Live *"Community Safety & Infrastructure"***?

◯ **Yes** ◯ **No**

Communities of Excellence Top Challenge Survey

GREAT Place to Live: *"Community Safety & Infrastructure"*

* 6. Please respond to the following statements with regard to "Safe Air and Water".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	○	○	○	○	○	○	○
There is baseline data that would help us measure our impact for this challenge	○	○	○	○	○	○	○
Other communities, like ours, have been able to overcome this challenge	○	○	○	○	○	○	○
We can resolve this challenge in 3-5 years or less and sustain the improvements	○	○	○	○	○	○	○
To my knowledge, no one is working to address this challenge at this time	○	○	○	○	○	○	○
We can create a major improvement in the quality of life by addressing this challenge	○	○	○	○	○	○	○
We can reduce long-term cost to the community by addressing this challenge	○	○	○	○	○	○	○

* 7. Please respond to the following statements with regard to "Safe Roads".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	○	○	○	○	○	○	○
There is baseline data that would help us measure our impact for this challenge	○	○	○	○	○	○	○
Other communities, like ours, have been able to overcome this challenge	○	○	○	○	○	○	○
We can resolve this challenge in 3-5 years or less and sustain the improvements	○	○	○	○	○	○	○
To my knowledge, no one is working to address this challenge at this time	○	○	○	○	○	○	○
We can create a major improvement in the quality of life by addressing this challenge	○	○	○	○	○	○	○
We can reduce long-term cost to the community by addressing this challenge	○	○	○	○	○	○	○

* 8. Please respond to the following statements with regard to "Homelessness-Treatment, Recovery and Housing".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	◯	◯	◯	◯	◯	◯	◯
There is baseline data that would help us measure our impact for this challenge	◯	◯	◯	◯	◯	◯	◯
Other communities, like ours, have been able to overcome this challenge	◯	◯	◯	◯	◯	◯	◯
We can resolve this challenge in 3-5 years or less and sustain the improvements	◯	◯	◯	◯	◯	◯	◯
To my knowledge, no one is working to address this challenge at this time	◯	◯	◯	◯	◯	◯	◯
We can create a major improvement in the quality of life by addressing this challenge	◯	◯	◯	◯	◯	◯	◯
We can reduce long-term cost to the community by addressing this challenge	◯	◯	◯	◯	◯	◯	◯

Communities of Excellence Top Challenge Survey

GREAT Place to Learn: *"Education"*

* 9. Would you like to Prioritize the Challenges for **GREAT Place to Learn *"Education"***?

◯ **Yes** ◯ **No**

Communities of Excellence Top Challenge Survey

GREAT Place to Learn: *"Education"*

* 10. Please respond to the following statements with regard to "Lack of Education Programs to Meet Workforce Demand".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	○	○	○	○	○	○	○
There is baseline data that would help us measure our impact for this challenge	○	○	○	○	○	○	○
Other communities, like ours, have been able to overcome this challenge	○	○	○	○	○	○	○
We can resolve this challenge in 3-5 years or less and sustain the improvements	○	○	○	○	○	○	○
To my knowledge, no one is working to address this challenge at this time	○	○	○	○	○	○	○
We can create a major improvement in the quality of life by addressing this challenge	○	○	○	○	○	○	○
We can reduce long-term cost to the community by addressing this challenge	○	○	○	○	○	○	○

* 11. Please respond to the following statements with regard to "Lack of Affordable Childcare Options".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	◯	◯	◯	◯	◯	◯	◯
There is baseline data that would help us measure our impact for this challenge	◯	◯	◯	◯	◯	◯	◯
Other communities, like ours, have been able to overcome this challenge	◯	◯	◯	◯	◯	◯	◯
We can resolve this challenge in 3-5 years or less and sustain the improvements	◯	◯	◯	◯	◯	◯	◯
To my knowledge, no one is working to address this challenge at this time	◯	◯	◯	◯	◯	◯	◯
We can create a major improvement in the quality of life by addressing this challenge	◯	◯	◯	◯	◯	◯	◯
We can reduce long-term cost to the community by addressing this challenge	◯	◯	◯	◯	◯	◯	◯

* 12. Please respond to the following statements with regard to "Lack of Resources for Non-Traditional Families".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	◯	◯	◯	◯	◯	◯	◯
There is baseline data that would help us measure our impact for this challenge	◯	◯	◯	◯	◯	◯	◯
Other communities, like ours, have been able to overcome this challenge	◯	◯	◯	◯	◯	◯	◯
We can resolve this challenge in 3-5 years or less and sustain the improvements	◯	◯	◯	◯	◯	◯	◯
To my knowledge, no one is working to address this challenge at this time	◯	◯	◯	◯	◯	◯	◯
We can create a major improvement in the quality of life by addressing this challenge	◯	◯	◯	◯	◯	◯	◯
We can reduce long-term cost to the community by addressing this challenge	◯	◯	◯	◯	◯	◯	◯

Communities of Excellence Top Challenge Survey

GREAT Place to Work: *"Employment"*

* 13. Would you like to Prioritize the Challenges for **GREAT Place to Work *"Employment"***?

◯ **Yes** ◯ **No**

Communities of Excellence Top Challenge Survey

GREAT Place to Work: *"Employment"*

* 14. Please respond to the following statements with regard to "Barriers to Employment".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	○	○	○	○	○	○	○
There is baseline data that would help us measure our impact for this challenge	○	○	○	○	○	○	○
Other communities, like ours, have been able to overcome this challenge	○	○	○	○	○	○	○
We can resolve this challenge in 3-5 years or less and sustain the improvements	○	○	○	○	○	○	○
To my knowledge, no one is working to address this challenge at this time	○	○	○	○	○	○	○
We can create a major improvement in the quality of life by addressing this challenge	○	○	○	○	○	○	○
We can reduce long-term cost to the community by addressing this challenge	○	○	○	○	○	○	○

* 15. Please respond to the following statements with regard to "Workforce Readiness, Inability to Obtain and Keep Jobs".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	○	○	○	○	○	○	○
There is baseline data that would help us measure our impact for this challenge	○	○	○	○	○	○	○
Other communities, like ours, have been able to overcome this challenge	○	○	○	○	○	○	○
We can resolve this challenge in 3-5 years or less and sustain the improvements	○	○	○	○	○	○	○
To my knowledge, no one is working to address this challenge at this time	○	○	○	○	○	○	○
We can create a major improvement in the quality of life by addressing this challenge	○	○	○	○	○	○	○
We can reduce long-term cost to the community by addressing this challenge	○	○	○	○	○	○	○

* 16. Please respond to the following statements with regard to "Shortage of Skilled Workforce Due to Inadequate Education/Training - Along with Lack of Job Education and Training Opportunities".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	◯	◯	◯	◯	◯	◯	◯
There is baseline data that would help us measure our impact for this challenge	◯	◯	◯	◯	◯	◯	◯
Other communities, like ours, have been able to overcome this challenge	◯	◯	◯	◯	◯	◯	◯
We can resolve this challenge in 3-5 years or less and sustain the improvements	◯	◯	◯	◯	◯	◯	◯
To my knowledge, no one is working to address this challenge at this time	◯	◯	◯	◯	◯	◯	◯
We can create a major improvement in the quality of life by addressing this challenge	◯	◯	◯	◯	◯	◯	◯
We can reduce long-term cost to the community by addressing this challenge	◯	◯	◯	◯	◯	◯	◯

Communities of Excellence Top Challenge Survey

GREAT Place to Play: *"Attractions"*

* 17. **Would you like to Prioritize the Challenges for GREAT Place to Play*"Attractions"*?**

◯ **Yes** ◯ **No**

Communities of Excellence Top Challenge Survey

GREAT Place to Play: *"Attractions"*

* 18. Please respond to the following statements with regard to "Lack of Access and Affordability and Funding for all of the Arts, Cultural and Entertainment Opportunities".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	◯	◯	◯	◯	◯	◯	◯
There is baseline data that would help us measure our impact for this challenge	◯	◯	◯	◯	◯	◯	◯
Other communities, like ours, have been able to overcome this challenge	◯	◯	◯	◯	◯	◯	◯
We can resolve this challenge in 3-5 years or less and sustain the improvements	◯	◯	◯	◯	◯	◯	◯
To my knowledge, no one is working to address this challenge at this time	◯	◯	◯	◯	◯	◯	◯
We can create a major improvement in the quality of life by addressing this challenge	◯	◯	◯	◯	◯	◯	◯
We can reduce long-term cost to the community by addressing this challenge	◯	◯	◯	◯	◯	◯	◯

* 19. Please respond to the following statements with regard to "Lack of/Decline in Shopping Opportunities and Lack of Support in Small Businesses".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	◯	◯	◯	◯	◯	◯	◯
There is baseline data that would help us measure our impact for this challenge	◯	◯	◯	◯	◯	◯	◯
Other communities, like ours, have been able to overcome this challenge	◯	◯	◯	◯	◯	◯	◯
We can resolve this challenge in 3-5 years or less and sustain the improvements	◯	◯	◯	◯	◯	◯	◯
To my knowledge, no one is working to address this challenge at this time	◯	◯	◯	◯	◯	◯	◯
We can create a major improvement in the quality of life by addressing this challenge	◯	◯	◯	◯	◯	◯	◯
We can reduce long-term cost to the community by addressing this challenge	◯	◯	◯	◯	◯	◯	◯

* 20. Please respond to the following statements with regard to "Lack of Safe and Adequate Recreational Spaces in Neighborhoods".

	Completely Agree	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Completely Disagree
This challenge appears to be greater in certain parts of the county or specific populations	◯	◯	◯	◯	◯	◯	◯
There is baseline data that would help us measure our impact for this challenge	◯	◯	◯	◯	◯	◯	◯
Other communities, like ours, have been able to overcome this challenge	◯	◯	◯	◯	◯	◯	◯
We can resolve this challenge in 3-5 years or less and sustain the improvements	◯	◯	◯	◯	◯	◯	◯
To my knowledge, no one is working to address this challenge at this time	◯	◯	◯	◯	◯	◯	◯
We can create a major improvement in the quality of life by addressing this challenge	◯	◯	◯	◯	◯	◯	◯
We can reduce long-term cost to the community by addressing this challenge	◯	◯	◯	◯	◯	◯	◯

APPENDIX E: Listening Project Discussion Guide

Group 1: Access to Health Promotion and Prevention Chronic Disease Prevention Education (including Dental)

"What are your initial thoughts about what this means- what does 'health promotion' and 'chronic disease prevention' mean to you?"

"Do you hear about prevention or education efforts in your community?"

"Do you feel like you/your family knows much about health promotion and chronic disease prevention?"

"What do you struggle with? Access to education, treatment, prevention resources?"

"Do you feel that there are places or people in your community that work on this?"

"Is this a bigger challenge in your community, or do certain populations struggle with it more?"

"Are you better off or worse off in _____ than in other parts of Kanawha co?"

Group 2: Safe Roads

"What are your initial thoughts about what this means- what comes to mind when you think of safe roads?"

Prompts:

- Driving on the roads?
- Pedestrians on the roads?
- The actual road conditions?
- Construction/road work?
- Accessibility/getting to main roads?
- Public transportation options?
- Distracted driving?

"Do you commute to work?"

"Do you depend on public transit?"

“What unsafe road conditions have you encountered?”

“Do you feel that there are places or people in your community that work on this?”

“Is this a bigger challenge in your community, or do certain populations struggle with it more?”

“Are you better off or worse off in _____ than in other parts of Kanawha co?”

Group 3: Childcare options and affordability

“What are your initial thoughts about what this means- what comes to mind when you think of childcare?”

“Are you parent/care provider for children?”

“Does your family struggle to find affordable childcare?”

“Is the childcare available to you cost prohibitive/too expensive, or are there other barriers to finding childcare?”

“Do you qualify for childcare assistance, and are there enough providers available?”

“Are you satisfied/are your childcare needs met?”

“Do you feel that there are places or people in your community that work on this?”

“Is this a bigger challenge in your community, or do certain populations struggle with it more?”

“Are you better off or worse off in _____ than in other parts of Kanawha co?”

Group 4: Barriers to employment

“What are your initial thoughts about what this means- what comes to mind when you think of barriers to employment?”

“What is your employment status, or do you know people that struggle with sufficient employment?”

“What are the barriers to employment?” (Prompts)

- Are there enough jobs? Or are there more jobs available that are unfilled?
- Criminal records
- Ability to get to work, transportation problems?
- Lack of ID, proof of residency, etc.?
- Lack of available employment, scheduling problems,
- Are there jobs available for people with varying education levels?
- Are there opportunities for advancement, further training, and growth in your job?
- Lack of educational opportunities?
- What are causes/contribution to lack of sustainability, is employment sustainable?

“Do you feel that there are places or people in your community that work on this?”

“Is this a bigger challenge in your community, or do certain populations struggle with it more?”

“Are you better off or worse off in _____ than in other parts of Kanawha co?”

Group 5: Lack of Safe and Adequate Recreational Spaces in Neighborhoods

“Do you have safe places to be physically active and have fun outdoors in your community?”
Examples- river access, parks, playgrounds, walking and bike paths, etc.?

Yes-what are your main safety concerns and barriers?

-Do you use them, what are they?

No-why not? Are they accessible? Do you feel like you need more public recreation space where you live?

“Do you feel that there are places or people in your community that work on this?”

“Is this a bigger challenge in your community, or do certain populations struggle with it more?”

“Are you better off or worse off in _____ than in other parts of Kanawha co?”

# # #

APPENDIX F: Community Health Survey Instrument (paper)

Community Health Survey

How Are We Doing?

The health of a community is measured by people's health and also by looking at where we live, learn, work, and play. Please tell us what you think and help us measure Kanawha county's health, and add additional concerns or solutions you might think of. Thank you!

1) Do you think people in Kanawha County have access to enough health education and chronic disease prevention information?

☐ Yes ☐ No ☐ Do not know

Why or why not? Do you have an idea that would help with this problem?

2) Do you think that Kanawha County has safe roads?

☐ Yes ☐ No ☐ Do not know

Why or why not? Do you have an idea that would help with this problem?

3) Do you think that there are enough affordable childcare options in Kanawha County to support families?

☐ Yes ☐ No ☐ Do not know

Why or why not? Do you have an idea that would help with this problem?

4) Do you think that there are barriers to employment in Kanawha County?

☐ Yes ☐ No ☐ Do not know

Why or why not? Do you have an idea that would help with this problem?

5) Do you think that there is a lack of safe recreational spaces in neighborhoods?

☐ Yes ☐ No ☐ Do not know

Why or why not? Do you have an idea that would help with this problem?

Do you live and/or work in Kanawha County?

☐ I live in Kanawha Co.

☐ I work in Kanawha Co.

Please share any additional comments or suggestions.

Thank you!

Would you be interested in staying **updated?**
Name:_____
Email Address:_____
Phone Number:_____

Would you be interested in participating in a **Focus Group** held in your area? ☐ Yes | ☐ No

APPENDIX G: Community Health Survey Instrument (online)

Community Feedback Survey 1: LIVE (health and social)

We at Kanawha Coalition for Community Health Improvement are interested in understanding how the local community feels about chronic disease prevention and education efforts in Kanawha County. We greatly appreciate you taking the time to share your thoughts.

1. How much awareness or education about chronic health and disease do you have access to in your community?

- ◯ A great deal
- ◯ A moderate amount
- ◯ None at all

2. If you have encountered any problems with access to chronic disease prevention or education, would you know who to contact to hear your concern?

- ◯ Yes
- ◯ No
- ◯ I have already contacted someone, and I didn't get the help I needed/didn't get a response.
- ◯ Other (please specify)

3. What chronic health problems or chronic diseases do you hear about regularly?

- ☐ Heart Disease
- ☐ COPD
- ☐ Diabetes
- ☐ HIV/AIDS
- ☐ Obesity
- ☐ Hepatitis A/B/C
- ☐ Other (please specify)

4. How is health/community information communicated to you? How do you learn about information, news, and resources?

- [ ] Word of mouth
- [ ] Social Media
- [ ] Newspaper
- [ ] TV
- [ ] Online news
- [ ] This survey
- [ ] Other (please specify)

Community Feedback Survey 2: LIVE (safety and infrastructure)

We at Kanawha Coalition for Community Health Improvement are interested in understanding how the local community feels about safety and infrastructure efforts in Kanawha County. We greatly appreciate you taking the time to share your thoughts.

1. How safe are the roads in Kanawha County?

- ◯ Very safe
- ◯ Moderately safe
- ◯ Not safe at all

2. What problems do you encounter with regards to safe travel? Please check all that apply.

- ☐ I think the roads are unsafe because of roadwork, construction, or potholes.
- ☐ I think the roads are unsafe due to pedestrians.
- ☐ I can't walk safely to get to the places I need to go.
- ☐ I don't think travel or roads are an issue.
- ☐ Other (please specify)

3. What challenges do you experience with regards to access to transportation? Please check all that apply.

- ☐ I live too far out, or it is too hard to travel, to get where I need to go.
- ☐ I am disabled and struggle to find adequate transportation for my needs.
- ☐ I don't drive or don't have access to a car, and experience difficulty accessing public transportation to meet my needs.
- ☐ I don't have trouble with transportation.
- ☐ Lack of transportation makes it hard to access basic resources such as health care, grocery stores, or other community services.
- ☐ Other (please specify)

4. If you have encountered any problems with roads or safe travel, would you know who to contact to hear your concern?

- ◯ Yes
- ◯ No
- ◯ I have already contacted someone, and the issue remains unresolved/ I did not get a response.
- ◯ Other (please specify)

Community Feedback Survey 3: LEARN

We at Kanawha Coalition for Community Health Improvement are interested in understanding how the local community feels about access to affordable and adequate early childhood education opportunities in Kanawha County. We greatly appreciate you taking the time to share your thoughts.

1. Do you think families with young children have enough opportunities for affordable early childhood education, such as daycare providers and preschool programs? (If you don't know or don't have experience, please select N/A and skip to end.)

- ◯ N/A Not Applicable
- ◯ Yes
- ◯ No

2. What are the problems that families with young children face? Select all that apply.

- ☐ Childcare is not affordable
- ☐ Childcare is not open during hours that parents need care
- ☐ Not enough providers or facilities
- ☐ Other (please specify)
- ☐ Dissatisfied with care and/or education provided
- ☐ Location of providers is not convenient to me

3. How do you hear about childcare options?

- ◯ Word of mouth
- ◯ Social Media
- ◯ Newspaper
- ◯ TV
- ◯ Online news
- ◯ Service Providers in the community
- ◯ Other (please specify)

4. If you have encountered any problems with access to childcare or early childhood education programs, would you know who to contact to hear your concern?

- ◯ Yes
- ◯ No
- ◯ I have already contacted someone, and I didn't get the help I needed/didn't get a response.
- ◯ Other (please specify)

Community Feedback Survey 4: WORK

We are interested in understanding how the local community feels about access to employment opportunities in Kanawha County. We greatly appreciate you taking the time to share your thoughts.

1. What are the barriers to employment in Kanawha County? Please select all that apply. (If you don't know or don't have experience, please select N/A.)

- ☐ Not enough job opportunities
- ☐ Not enough education or skills training to support job growth/advancement
- ☐ Transportation barriers
- ☐ Low wages/minimum wage jobs
- ☐ There is not enough job diversity/types of work available
- ☐ Childcare barriers
- ☐ Criminal backgrounds
- ☐ Employment is not an issue- there are plenty of jobs available
- ☐ It is more of a workforce issue than job availability

2. If you have encountered any problems with access to employment, training, or education to meet your employment goals, would you know who to contact to hear your concern?

- ◯ Yes
- ◯ No
- ◯ I have already contacted someone, and I didn't get the help I needed/didn't get a response.
- ◯ Other (please specify)

3. What is your education level?

- ◯ No schooling completed
- ◯ Nursery school to 8th grade
- ◯ Some high school, no diploma
- ◯ High school graduate, diploma or the equivalent (for example: GED)
- ◯ Some college credit, no degree
- ◯ Trade/technical/vocational training
- ◯ Associate degree
- ◯ Bachelor's degree
- ◯ Master's degree
- ◯ Doctorate degree

Community Feedback Survey 5: PLAY

We are interested in understanding how the local community feels about access to safe and adequate recreation, exercise, and play opportunities in Kanawha County. We greatly appreciate you taking the time to share your thoughts.

1. Do you have access to safe space for recreation, exercise, and play in your community?

- ◯ Yes
- ◯ No

2. If you have encountered any problems with recreation spaces in your community, would you know who to contact to hear your concern?

- ◯ Yes
- ◯ No
- ◯ I have already contacted someone, and the issue remains unresolved/ I did not get a response.
- ◯ Other (please specify)

3. Select all options for recreation in your community.

- ☐ Recreation/community center
- ☐ Public playground
- ☐ Public park
- ☐ Other (please specify)
- ☐ Walking trail or hiking trails
- ☐ School-based playground
- ☐ River access

4. Why would you choose not to use recreational spaces that are available to you?

- ◯ Safety
- ◯ Accessibility
- ◯ Other (please specify)

Demographics

5. What is your age?

- ◯ 18 to 24
- ◯ 25 to 34
- ◯ 35 to 44
- ◯ 45 to 54
- ◯ 55 to 64
- ◯ 65 to 74
- ◯ 75 or older
- ◯ Prefer not to answer

6. I identify as (check all that apply):

- ☐ White or Caucasian
- ☐ Black or African American
- ☐ Hispanic or Latino
- ☐ Asian or Asian American
- ☐ American Indian or Alaska Native
- ☐ Native Hawaiian or other Pacific Islander
- ☐ Prefer not to answer
- ☐ Other, not listed

7. Do you live and/or work in Kanawha County? Check all that apply please.

- [ ] Live in Kanawha County
- [ ] Work in Kanawha County
- [ ] Zip code (optional)

Thank you for taking our survey, your participation is extremely helpful as we continue to collect opinions for our Community Health Needs Assessment!

8. Would you like to be added to a mailing list so that we can update you on our findings, upcoming community events, and other opportunities to participate? (Joining our email list is NOT required to complete the survey, it is optional!)

Email Address

APPENDIX H: Leading Causes of Death

2017 Leading Causes of YPLL Before Age 75, Kanawha County Residents

Cause	2017			
	YPLL	Percent of Total	Deaths	Percent of Total
Total, All Causes	22,300		2,599	
Non-Motor Vehicle Accidents	4,764	21.4%	196	7.5%
Malignant Neoplasms (Cancer)	3,597	16.1%	476	18.3%
Diseases of the Heart	2,863	12.8%	507	19.5%
Intentional Self Harm (Suicides)	1,329	6.0%	44	1.7%
Diabetes Mellitus	716	3.2%	83	3.2%
Motor Vehicle Accidents	679	3.0%	22	0.8%
Chronic Liver Disease and Cirrhosis	647	2.9%	43	1.7%
Assaults (Homicides)	639	2.9%	16	0.6%
Chronic Lower Respiratory Disease	636	2.9%	163	6.3%
Cerebrovascular Disease (Stroke)	549	2.5%	150	5.8%
Alcohol or Drug Psychoses, Dependence or Abuse	466	2.1%	19	0.7%
Infectious and Parasitic Diseases (excluding HIV)	390	1.7%	60	2.3%
Congenital Malformations	268	1.2%	7	0.3%
Obesity	266	1.2%	17	0.7%
Essential Hypertension and Hypertensive Renal Disease	259	1.2%	32	1.2%
Influenza and Pneumonia	229	1.0%	59	2.3%
Nephritis, Nephrotic Syndrome and Nephrosis	200	0.9%	70	2.7%
#REF!	149	0.7%	2	0.1%
Injury Undetermined Whether Accidental or Purposely Inflicted	90	0.4%	3	0.1%
Human Immunodeficiency Virus Infection	85	0.4%	4	0.2%
Dementia	77	0.3%	126	4.8%
Alzheimer's Disease	64	0.3%	127	4.9%
All Other Causes (Residual)	3,339	15.0%	373	14.4%

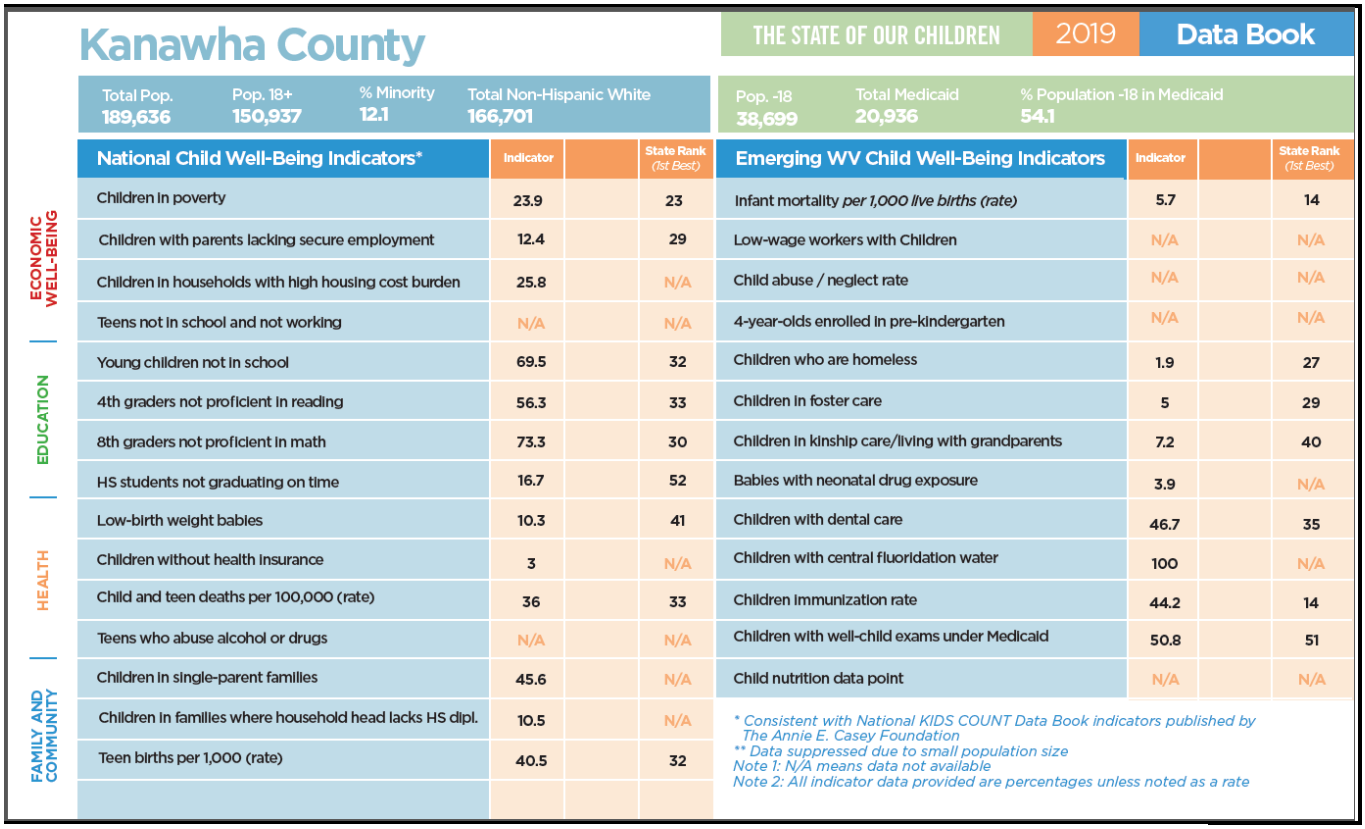
Source: West Virginia Health Statistics Center, Vital Statistics System, October 2019

2017 Leading Causes of Death, Kanawha County Residents by Gender

Cause	Both		Male		Female	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Total Deaths, All Causes	2,599		1,263		1,336	
Diseases of the Heart	507	19.5%	267	21.1%	240	18.0%
Malignant Neoplasms (Cancer)	476	18.3%	251	19.9%	225	16.8%
Accidents. All Forms	218	8.4%	126	10.0%	92	6.9%
Chronic Lower Respiratory Diseases	163	6.3%	68	5.4%	95	7.1%
Cerebrovascular Disease (Stroke)	150	5.8%	55	4.4%	95	7.1%
Alzheimer's Disease	127	4.9%	45	3.6%	82	6.1%
Dementia	126	4.8%	38	3.0%	88	6.6%
Diabetes Mellitus	83	3.2%	44	3.5%	39	2.9%
Nephritis, Nephrotic Syndrome and Nephrosis	70	2.7%	28	2.2%	42	3.1%
Influenza and Pneumonia	59	2.3%	24	1.9%	35	2.6%
Septicemia	45	1.7%	22	1.7%	23	1.7%
Intentional Self Harm (Suicides)	44	1.7%	30	2.4%	14	1.0%
Chronic Liver Disease and Cirrhosis	43	1.7%	26	2.1%	17	1.3%
Essential Hypertension and Hypertensive Renal Disease	32	1.2%	22	1.7%	10	0.7%
Obesity	17	0.7%	7	0.6%	10	0.7%
All Other Causes (Residual)	439	16.9%	210	16.6%	229	17.1%

Source: West Virginia Health Statistics Center, Vital Statistics System, October 2019

APPENDIX I: KIDS COUNT Data – Kanawha County



Kanawha County

THE STATE OF OUR CHILDREN 2019 **Data Book**

Total Pop.	Pop. 18+	% Minority	Total Non-Hispanic White
189,636	150,937	12.1	166,701

Pop. -18	Total Medicaid	% Population -18 in Medicaid
38,699	20,936	54.1

	National Child Well-Being Indicators*	Indicator		State Rank (1st Best)
ECONOMIC WELL-BEING	Children in poverty	23.9		23
	Children with parents lacking secure employment	12.4		29
	Children in households with high housing cost burden	25.8		N/A
EDUCATION	Teens not in school and not working	N/A		N/A
	Young children not in school	69.5		32
	4th graders not proficient in reading	56.3		33
	8th graders not proficient in math	73.3		30
	HS students not graduating on time	16.7		52
HEALTH	Low-birth weight babies	10.3		41
	Children without health insurance	3		N/A
	Child and teen deaths per 100,000 (rate)	36		33
	Teens who abuse alcohol or drugs	N/A		N/A
FAMILY AND COMMUNITY	Children in single-parent families	45.6		N/A
	Children in families where household head lacks HS dipl.	10.5		N/A
	Teen births per 1,000 (rate)	40.5		32

Emerging WV Child Well-Being Indicators	Indicator		State Rank (1st Best)
Infant mortality *per 1,000 live births (rate)*	5.7		14
Low-wage workers with Children	N/A		N/A
Child abuse / neglect rate	N/A		N/A
4-year-olds enrolled in pre-kindergarten	N/A		N/A
Children who are homeless	1.9		27
Children in foster care	5		29
Children in kinship care/living with grandparents	7.2		40
Babies with neonatal drug exposure	3.9		N/A
Children with dental care	46.7		35
Children with central fluoridation water	100		N/A
Children immunization rate	44.2		14
Children with well-child exams under Medicaid	50.8		51
Child nutrition data point	N/A		N/A

** Consistent with National KIDS COUNT Data Book indicators published by The Annie E. Casey Foundation*
*** Data suppressed due to small population size*
Note 1: N/A means data not available
Note 2: All indicator data provided are percentages unless noted as a rate

Source: WV Kids Count 2019 Data Book
https://wvkidscount.org/wp-content/uploads/2019/06/WV-KIDS-COUNT-2019-Data-Book.pdf

APPENDIX J: West Virginia High School Youth Risk Behavior Survey (YRBS)

West Virginia 2017 and United States 2017 Results

High School Youth Risk Behavior Survey						
Question	**West Virginia 2017**	**United States 2017**	**p-value**	**West Virginia 2017 More Likely Than United States 2017**	**United States 2017 More Likely Than West Virginia 2017**	**No Difference**
Unintentional Injuries and Violence						
Rarely or never wore a seat belt (when riding in a car driven by someone else)	8.9 (7.2–10.9)†	5.9 (4.8–7.3)	0.01	●		
Rode with a driver who had been drinking alcohol (in a car or other vehicle, one or more times during the 30 days before the survey)	12.8 (10.7–15.2)	16.5 (15.2–17.7)	0.00		●	
Drove when they had been drinking alcohol (in a car or other vehicle, one or more times during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)	5.4 (3.9–7.5)	5.5 (4.9–6.3)	0.90			●
Drove when they had been using marijuana (also called grass, pot, or weed, in a car or other vehicle, one or more times during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)	–	13.0 (11.7–14.6)	~			
Texted or e-mailed while driving a car or other vehicle (on at least 1 day during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)	34.0 (28.2–40.4)	39.2 (37.0–41.4)	0.10			●
Carried a weapon (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)	23.8 (20.6–27.4)	15.7 (13.3–18.4)	0.00	●		
Carried a weapon on school property (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey)	4.8 (3.4–6.8)	3.8 (2.9–4.8)	0.24			●
Carried a gun (on at least 1 day during the 12 months before the survey, not counting the days when they carried a gun only for hunting or for a sport such as target shooting)	7.4 (5.6–9.7)	4.8 (4.1–5.7)	0.02	●		

Were threatened or injured with a weapon on school property (such as a gun, knife, or club, one or more times during the 12 months before the survey)	6.5 (4.6–9.2)	6.0 (5.3–6.7)	0.63			●
Were in a physical fight (one or more times during the 12 months before the survey)	19.3 (16.4–22.5)	23.6 (21.6–25.6)	0.02		●	
Were in a physical fight on school property (one or more times during the 12 months before the survey)	6.2 (5.0–7.7)	8.5 (7.5–9.7)	0.01		●	
Were electronically bullied (counting being bullied through texting, Instagram, Facebook, or other social media, during the 12 months before the survey)	19.3 (16.3–22.7)	14.9 (13.7–16.2)	0.01	●		
Were bullied on school property (during the 12 months before the survey)	23.7 (20.4–27.3)	19.0 (17.6–20.5)	0.01	●		
Did not go to school because they felt unsafe at school or on their way to or from school (on at least 1 day during the 30 days before the survey)	7.1 (4.9–10.3)	6.7 (5.7–7.8)	0.77			●
Were ever physically forced to have sexual intercourse (when they did not want to)	8.9 (7.3–10.8)	7.4 (6.6–8.3)	0.12			●
Experienced sexual violence by anyone (being forced to do sexual things (counting such things as kissing, touching, or being physically forced to have sexual intercourse) they did not want to do by anyone, one or more times during the 12 months before the survey)	10.8 (8.6–13.6)	9.7 (9.0–10.5)	0.39			●
Experienced sexual dating violence (being forced to do sexual things (counting such things as kissing, touching, or being physically forced to have sexual intercourse) they did not want to do by someone they were dating or going out with, one or more times during the 12 months before the survey, among students who dated or went out with someone during the 12 months before the survey)	6.8 (5.0–9.1)	6.9 (6.2–7.6)	0.93			●

Question	West Virginia 2017	United States 2017	p-value	West Virginia 2017 More Likely Than United States 2017	United States 2017 More Likely Than West Virginia 2017	No Difference
Experienced physical dating violence (being physically hurt on purpose (counting such things as being hit, slammed into something, or injured with an object or weapon) by someone they were dating or going out with, one or more times during the 12 months before the survey, among students who dated or went out with someone during the 12 months before the survey)	9.0 (6.8–11.8)	8.0 (7.3–8.8)	0.43			●
Felt sad or hopeless (almost every day for 2 weeks or more in a row so that they stopped doing some usual activities, during the 12 months before the survey)	32.0 (28.6–35.6)	31.5 (29.6–33.4)	0.79			●
Seriously considered attempting suicide (during the 12 months before the survey)	18.5 (15.5–21.8)	17.2 (16.2–18.3)	0.43			●
Made a plan about how they would attempt suicide (during the 12 months before the survey)	14.8 (11.9–18.3)	13.6 (12.4–14.8)	0.45			●
Attempted suicide (one or more times during the 12 months before the survey)	9.4 (7.1–12.4)	7.4 (6.5–8.4)	0.13			●
Suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (during the 12 months before the survey)	4.1 (2.6–6.2)	2.4 (2.1–2.9)	0.06			●
Tobacco Use						
Ever tried cigarette smoking (even one or two puffs)	39.5 (36.6–42.5)	28.9 (26.0–32.0)	0.00	●		
First tried cigarette smoking before age 13 years (even one or two puffs)	15.0 (13.0–17.2)	9.5 (8.0–11.2)	0.00	●		
Currently smoked cigarettes (on at least 1 day during the 30 days before the survey)	14.4 (11.4–18.0)	8.8 (7.2–10.7)	0.00	●		
Currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey)	5.5 (4.2–7.2)	2.6 (1.9–3.7)	0.00	●		
Currently smoked cigarettes daily (on all 30 days during the 30 days before the survey)	4.5 (3.3–6.2)	2.0 (1.4–2.9)	0.00	●		
Smoked more than 10 cigarettes per day (on the days they smoked during the 30 days before the survey, among students who currently smoked cigarettes)	9.5 (5.5–16.0)	9.7 (7.8–12.0)	0.94			●

Ever used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens)	44.4 (40.0–48.9)	42.2 (39.3–45.2)	0.40			●
Currently used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens, on at least 1 day during the 30 days before the survey)	14.3 (11.7–17.3)	13.2 (11.4–15.2)	0.51			●
Currently frequently used electronic vapor products (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens, on 20 or more days during the 30 days before the survey)	3.1 (2.3–4.3)	3.3 (2.6–4.2)	0.77			●
Currently used electronic vapor products daily (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens, on all 30 days during the 30 days before the survey)	2.5 (1.6–3.8)	2.4 (2.0–3.0)	0.95			●
Usually got their own electronic vapor products by buying them in a store (such as a convenience store, supermarket, discount store, gas station, or vape store, including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens, during the 30 days before the survey, among students who currently used electronic vapor products and who were aged <18)	10.1 (6.1–16.3)	13.6 (10.3–17.6)	0.25			●
Currently used smokeless tobacco (chewing tobacco, snuff, dip, snus, or dissolvable tobacco products, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, Copenhagen, Camel Snus, Marlboro Snus, General Snus, Ariva, Stonewall, or Camel Orbs, not counting any electronic vapor products, on at least 1 day during the 30 days before the survey)	11.5 (9.2–14.3)	5.5 (4.4–6.7)	0.00	●		
Currently frequently used smokeless tobacco (chewing tobacco, snuff, dip, snus, or dissolvable tobacco products, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, Copenhagen, Camel Snus, Marlboro Snus, General Snus, Ariva, Stonewall, or Camel Orbs, not counting any electronic vapor products, on 20 or more days during the 30 days before the survey)	5.8 (4.1–8.3)	2.1 (1.5–2.8)	0.00	●		

Question	West Virginia 2017	United States 2017	p-value	West Virginia 2017 More Likely Than United States 2017	United States 2017 More Likely Than West Virginia 2017	No Difference
Currently used smokeless tobacco daily (chewing tobacco, snuff, dip, snus, or dissolvable tobacco products, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, Copenhagen, Camel Snus, Marlboro Snus, General Snus, Ariva, Stonewall, or Camel Orbs, not counting any electronic vapor products, on all 30 days during the 30 days before the survey)	5.1 (3.4–7.6)	1.6 (1.1–2.3)	0.00	●		
Currently smoked cigars (cigars, cigarillos, or little cigars, on at least 1 day during the 30 days before the survey)	11.4 (9.0–14.3)	8.0 (7.2–8.9)	0.01	●		
Currently frequently smoked cigars (cigars, cigarillos, or little cigars, on 20 or more days during the 30 days before the survey)	2.9 (2.0–4.2)	1.3 (1.0–1.6)	0.00	●		
Currently smoked cigars daily (cigars, cigarillos, or little cigars, on all 30 days during the 30 days before the survey)	2.4 (1.6–3.4)	1.0 (0.8–1.2)	0.00	●		
Currently smoked cigarettes or cigars (on at least 1 day during the 30 days before the survey)	17.9 (14.6–21.7)	12.3 (11.0–13.8)	0.00	●		
Currently smoked cigarettes or cigars or used smokeless tobacco (on at least 1 day during the 30 days before the survey)	22.7 (19.3–26.5)	14.0 (12.2–15.9)	0.00	●		
Currently smoked cigarettes or cigars or used smokeless tobacco or an electronic vapor product (on at least 1 day during the 30 days before the survey)	26.6 (22.9–30.6)	19.5 (17.3–21.9)	0.00	●		
Did not try to quit using all tobacco products (including cigarettes, cigars, smokeless tobacco, shisha or hookah tobacco, and electronic vapor products, during the 12 months before the survey, among students who used any tobacco products during the 12 months before the survey)	52.6 (44.5–60.6)	58.6 (56.0–61.1)	0.15			●

Alcohol and Other Drug Use						
Ever drank alcohol (at least one drink of alcohol, on at least 1 day during their life)	64.4 (60.2–68.3)	60.4 (57.9–62.8)	0.09			●
Had their first drink of alcohol before age 13 years (other than a few sips)	19.4 (17.3–21.7)	15.5 (13.9–17.2)	0.01	●		
Currently drank alcohol (at least one drink of alcohol, on at least 1 day during the 30 days before the survey)	27.9 (25.0–30.9)	29.8 (27.3–32.4)	0.32			●
Usually got the alcohol they drank by someone giving it to them (during the 30 days before the survey, among students who currently drank alcohol)	39.8 (33.4–46.6)	43.5 (41.0–46.0)	0.28			●
Reported current binge drinking (four or more drinks of alcohol in a row (if they were female) or five or more drinks of alcohol in a row (if they were male), within a couple of hours, on at least 1 day during the 30 days before the survey)	14.3 (11.5–17.6)	13.5 (12.0–15.1)	0.63			●
Reported 10 or more as the largest number of drinks they had in a row (within a couple of hours, during the 30 days before the survey)	6.9 (5.3–8.8)	4.4 (3.6–5.3)	0.01	●		
Ever used marijuana (also called grass, pot, or weed, one or more times during their life)	35.1 (31.5–38.8)	35.6 (33.0–38.3)	0.82			●
Tried marijuana for the first time before age 13 years (also called grass, pot, or weed)	8.8 (6.7–11.3)	6.8 (5.8–8.0)	0.11			●
Currently used marijuana (also called grass, pot, or weed, one or more times during the 30 days before the survey)	18.5 (15.4–22.1)	19.8 (18.1–21.6)	0.49			●
Ever used synthetic marijuana (also called "K2," "Spice," "fake weed," "King Kong," "Yucatan Fire," "Skunk," or "Moon Rocks," one or more times during their life)	8.3 (6.1–11.1)	6.9 (5.9–7.9)	0.27			●
Ever used cocaine (any form of cocaine, such as powder, crack, or freebase, one or more times during their life)	6.0 (4.1–8.6)	4.8 (4.2–5.6)	0.31			●

Question	West Virginia 2017	United States 2017	p-value	West Virginia 2017 More Likely Than United States 2017	United States 2017 More Likely Than West Virginia 2017	No Difference
Ever used inhalants (sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high, one or more times during their life)	7.0 (5.2–9.4)	6.2 (5.6–6.9)	0.45			●
Ever used heroin (also called "smack," "junk," or "China White," one or more times during their life)	3.4 (2.1–5.6)	1.7 (1.3–2.2)	0.05			●
Ever used methamphetamines (also called "speed," "crystal," "crank," or "ice," one or more times during their life)	4.6 (3.2–6.6)	2.5 (2.0–3.0)	0.01	●		
Ever used ecstasy (also called "MDMA," one or more times during their life)	4.3 (2.9–6.3)	4.0 (3.4–4.7)	0.72			●
Ever used hallucinogenic drugs (such as LSD, acid, PCP, angel dust, mescaline, or mushrooms, one or more times during their life)	–	6.6 (5.7–7.6)	~			
Ever took steroids without a doctor's prescription (pills or shots, one or more times during their life)	3.7 (2.7–5.1)	2.9 (2.5–3.3)	0.15			●
Ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, Oxycontin, Hydrocodone, and Percocet, one or more times during their life)	12.5 (9.9–15.7)	14.0 (12.7–15.4)	0.33			●
Ever injected any illegal drug (used a needle to inject any illegal drug into their body, one or more times during their life)	2.5 (1.4–4.4)	1.5 (1.2–1.8)	0.14			●
Were offered, sold, or given an illegal drug on school property (during the 12 months before the survey)	24.0 (20.8–27.4)	19.8 (18.3–21.4)	0.02	●		

Sexual Behaviors						
Ever had sexual intercourse	45.9 (41.4–50.5)	39.5 (36.8–42.4)	0.02	●		
Had sexual intercourse for the first time before age 13 years	3.8 (2.8–5.1)	3.4 (3.0–3.9)	0.53			●
Had sexual intercourse with four or more persons during their life	11.5 (8.8–14.8)	9.7 (8.4–11.3)	0.28			●
Were currently sexually active (had sexual intercourse with at least one person, during the 3 months before the survey)	33.5 (29.4–37.9)	28.7 (26.6–30.8)	0.04	●		
Did not use a condom during last sexual intercourse (among students who were currently sexually active)	49.3 (44.1–54.5)	46.2 (43.8–48.6)	0.26			●
Did not use birth control pills before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)	74.6 (68.5–79.8)	79.3 (77.3–81.2)	0.10			●
Did not use an IUD (e.g., Mirena or ParaGard) or implant (e.g., Implanon or Nexplanon) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)	96.4 (93.3–98.1)	95.9 (94.5–97.0)	0.69			●
Did not use a shot (e.g., Depo-Provera), patch (e.g., OrthoEvra), or birth control ring (e.g., NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)	94.1 (90.0–96.6)	95.3 (94.3–96.2)	0.43			●
Did not use birth control pills; an IUD (e.g., Mirena or ParaGard) or implant (e.g., Implanon or Nexplanon); or a shot (e.g., Depo-Provera), patch (e.g., OrthoEvra), or birth control ring (e.g., NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)	65.1 (57.7–71.9)	70.6 (68.1–73.0)	0.13			●
Did not use both a condom during last sexual intercourse and birth control pills; an IUD (e.g., Mirena or ParaGard) or implant (e.g., Implanon or Nexplanon); or a shot (e.g., Depo-Provera), patch (e.g., OrthoEvra), or birth control ring (e.g., NuvaRing) before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)	88.1 (84.1–91.2)	91.2 (89.7–92.5)	0.09			●
Did not use any method to prevent pregnancy during last sexual intercourse (among students who were currently sexually active)	14.2 (10.7–18.7)	13.8 (12.0–15.9)	0.85			●
Drank alcohol or used drugs before last sexual intercourse (among students who were currently sexually active)	15.1 (11.5–19.7)	18.8 (17.1–20.5)	0.09			●
Were never tested for human immunodeficiency virus (HIV) (not counting tests done if they donated blood)	87.7 (84.9–90.0)	90.7 (89.7–91.6)	0.03		●	

Question	West Virginia 2017	United States 2017	p-value	West Virginia 2017 More Likely Than United States 2017	United States 2017 More Likely Than West Virginia 2017	No Difference

Dietary Behaviors						
Did not eat fruit or drink 100% fruit juices (such as orange juice, apple juice, or grape juice, not counting punch, Kool-Aid, sports drinks, or other fruit-flavored drinks, during the 7 days before the survey)	7.9 (6.5–9.7)	5.6 (4.9–6.3)	0.01	●		
Did not eat vegetables (green salad, potatoes (not counting French fries, fried potatoes, or potato chips), carrots, or other vegetables, during the 7 days before the survey)	8.5 (6.7–10.6)	7.2 (6.3–8.2)	0.22			●
Did not drink milk (counting milk in a glass or cup, from a carton, or with cereal and counting the half pint of milk served at school as equal to one glass, during the 7 days before the survey)	23.1 (20.4–26.1)	26.7 (25.1–28.4)	0.03		●	
Drank soda or pop (such as Coke, Pepsi, or Sprite, not counting diet soda or diet pop, during the 7 days before the survey)	76.9 (74.6–79.1)	72.2 (69.7–74.5)	0.00	●		
Drank a can, bottle, or glass of soda or pop one or more times per day (such as Coke, Pepsi, or Sprite, not counting diet soda or diet pop, during the 7 days before the survey)	26.2 (24.0–28.5)	18.7 (16.6–21.1)	0.00	●		
Drank a can, bottle, or glass of soda or pop two or more times per day (such as Coke, Pepsi, or Sprite, not counting diet soda or diet pop, during the 7 days before the survey)	18.1 (16.1–20.3)	12.5 (10.7–14.4)	0.00	●		
Drank a can, bottle, or glass of soda or pop three or more times per day (such as Coke, Pepsi, or Sprite, not counting diet soda or diet pop, during the 7 days before the survey)	10.5 (9.6–11.6)	7.1 (6.1–8.3)	0.00	●		
Drank a sports drink (such as Gatorade or Powerade, not counting low-calorie sports drinks such as Propel or G2, during the 7 days before the survey)	—	52.3 (49.3–55.3)	~			
Drank a can, bottle, or glass of a sports drink one or more times per day (such as Gatorade or Powerade, not counting low-calorie sports drinks such as Propel or G2, during the 7 days before the survey)	—	12.4 (11.1–13.8)	~			
Drank a can, bottle, or glass of a sports drink two or more times per day (such as Gatorade or Powerade, not counting low-calorie sports drinks such as Propel or G2, during the 7 days before the survey)	—	7.6 (6.5–8.7)	~			
Drank a can, bottle, or glass of a sports drink three or more times per day (such as Gatorade or Powerade, not counting low-calorie sports drinks such as Propel or G2, during the 7 days before the survey)	—	4.2 (3.5–4.9)	~			
Did not drink plain water (counting tap, bottled, and unflavored sparkling water, during the 7 days before the survey)	—	3.8 (3.2–4.6)	~			
Did not eat breakfast (during the 7 days before the survey)	14.0 (11.8–16.6)	14.1 (13.0–15.2)	0.96			●
Did not eat breakfast on all 7 days (during the 7 days before the survey)	65.4 (62.8–68.0)	64.7 (63.2–66.2)	0.61			●

Question	West Virginia 2017	United States 2017	p-value	West Virginia 2017 More Likely Than United States 2017	United States 2017 More Likely Than West Virginia 2017	No Difference
Physical Activity						
Were not physically active for a total of at least 60 minutes on at least 1 day (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time, during the 7 days before the survey)	16.5 (13.1–20.7)	15.4 (13.5–17.5)	0.59			●
Were not physically active at least 60 minutes per day on 5 or more days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time, during the 7 days before the survey)	55.6 (52.2–58.9)	53.5 (50.5–56.5)	0.34			●
Were not physically active at least 60 minutes per day on all 7 days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time, during the 7 days before the survey)	76.6 (75.2–78.0)	73.9 (71.7–75.9)	0.03	●		
Did not do exercises to strengthen or tone their muscles on three or more days (such as push-ups, sit-ups, or weight-lifting, during the 7 days before the survey)	–	48.9 (45.3–52.5)	~			
Played video or computer games or used a computer for 3 or more hours per day (counting time spent on things such as Xbox, PlayStation, an iPad or other tablet, a smartphone, texting, YouTube, Instagram, Facebook, or other social media, for something that was not school work, on an average school day)	40.8 (37.1–44.6)	43.0 (41.1–44.9)	0.28			●
Watched television 3 or more hours per day (on an average school day)	23.9 (21.0–27.0)	20.7 (19.1–22.4)	0.06			●
Did not go to physical education (PE) classes on 1 or more days (in an average week when they were in school)	61.5 (54.7–67.9)	48.3 (44.0–52.8)	0.00	●		
Did not go to physical education (PE) classes on all 5 days (in an average week when they were in school)	73.1 (66.4–78.9)	70.1 (63.0–76.4)	0.51			●
Did not play on at least one sports team (counting any teams run by their school or community groups, during the 12 months before the survey)	49.5 (46.2–52.7)	45.7 (42.0–49.4)	0.12			●
Had a concussion from playing a sport or being physically active one or more times (during the 12 months before the survey)	15.2 (12.5–18.4)	15.1 (13.6–16.6)	0.94			●
Obesity, Overweight, and Weight Control						
Had obesity (students who were >= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)	19.5 (16.6–22.9)	14.8 (13.8–15.8)	0.00	●		
Were overweight (students who were >= 85th percentile but <95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)	16.0 (13.6–18.7)	15.6 (14.7–16.6)	0.77			●
Described themselves as slightly or very overweight	30.5 (27.6–33.6)	31.5 (30.2–32.8)	0.53			●
Were not trying to lose weight	55.3 (51.4–59.1)	52.9 (51.6–54.1)	0.22			●

Question	West Virginia 2017	United States 2017	p-value	West Virginia 2017 More Likely Than United States 2017	United States 2017 More Likely Than West Virginia 2017	No Difference
Other Health Topics						
Were ever told by a doctor or nurse that they had asthma	23.8 (21.2–26.6)	22.5 (21.2–23.9)	0.40			●
Never saw a dentist (for a check-up, exam, teeth cleaning, or other dental work)	1.8 (1.1–3.0)	1.5 (1.2–1.8)	0.51			●
Did not get 8 or more hours of sleep (on an average school night)	78.4 (75.7–80.8)	74.6 (73.1–76.0)	0.01	●		
Used an indoor tanning device (such as a sunlamp, sunbed, or tanning booth, not counting getting a spray-on tan, one or more times during the 12 months before the survey)	–	5.6 (4.7–6.6)	~			
Had a sunburn (counting the number of times even a small part of their skin turned red or hurt for 12 hours or more after being outside in the sun or after using a sunlamp or other indoor tanning device, one or more times during the 12 months before the survey)	–	57.2 (54.1–60.3)	~			
Had to avoid some foods because eating the food could cause an allergic reaction (such as skin rashes, swelling, itching, vomiting, coughing, or trouble breathing)	–	15.2 (14.2–16.3)	~			

Footnotes

†	Percentage, confidence interval
–	Data not available
~ = P-value not available	

Application URL:
https://nccd.cdc.gov/youthonline/App/Results.aspx?TT=G&OUT=0&SID=HS&QID=QQ&LID=WV&YID=2017&LID2=XX&YID2=2017&COL=T&ROW1=N&ROW2=N&HT=QQ&LCT=LL&FS=S1&FR=R1&FG=G1&FA=A1&FI=I1&FP=P1&FSL=S1&FRL=R1&FGL=G1&FAL=A1&FIL=I1&FPL=P1&PV=&TST=True&C1=WV2017&C2=XX2017&QP=G&DP=1&VA=CI&CS=N&SYID=&EYID=&SC=DEFAULT&SO=ASC

APPENDIX K: American Community Survey

2014—2018 ACS 5-Year Narrative Profile

Kanawha County, West Virginia

Demographics

Total Population

A total of 185,710 people live in the 901.63 square mile report area defined for this assessment according to the U.S. Census Bureau American Community Survey 2014-18 5-year estimates. The population density for this area, estimated at 205.97 persons per square mile, is greater than the national average population density of 91.42 persons per square mile.

Report Area	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
Kanawha County, WV	185,710	901.63	205.97
West Virginia	1,829,054	24,040.88	76.08
United States	322,903,030	3,532,068.58	91.42

Data Source: US Census Bureau, American Community Survey, 2014-18. Source geography: Tract

Total Population by Gender

Report Area	Male	Female	Percent Male	Percent Female
Kanawha County, WV	89,483	96,227	48.18%	51.82%
West Virginia	904,196	924,858	49.44%	50.56%
United States	158,984,190	163,918,840	49.24%	50.76%

Total Population by Age Groups, Total

Report Area	Age 0-4	Age 5-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65+
Kanawha County, WV	10,090	27,471	14,141	22,805	22,599	24,286	28,311	36,007
West Virginia	99,291	274,082	163,597	216,248	222,762	242,752	265,603	344,719
United States	19,836,850	53,716,390	30,903,713	44,567,976	40,763,210	42,589,573	41,286,731	49,238,581

Total Population by Age Groups, Percent

Report Area	Age 0-4	Age 5-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65+
Kanawha County, WV	5.43%	14.79%	7.61%	12.28%	12.17%	13.08%	15.24%	19.39%
West Virginia	5.43%	14.98%	8.94%	11.82%	12.18%	13.27%	14.52%	18.85%
United States	6.14%	16.64%	9.57%	13.80%	12.62%	13.19%	12.79%	15.25%

Total Population by Race Alone, Total

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Kanawha County, WV	164,367	13,461	2,111	322	0	345	5,104
West Virginia	1,704,345	66,728	14,534	3,668	350	7,290	32,139
United States	234,904,818	40,916,113	17,574,550	2,699,073	582,718	15,789,961	10,435,797

Total Population by Race Alone, Percent

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Kanawha County, WV	88.51%	7.25%	1.14%	0.17%	0.00%	0.19%	2.75%
West Virginia	93.18%	3.65%	0.79%	0.20%	0.02%	0.40%	1.76%
United States	72.75%	12.67%	5.44%	0.84%	0.18%	4.89%	3.23%

Total Population by Ethnicity Alone

Report Area	Total Population	Hispanic or Latino Population	Percent Population Hispanic or Latino	Non-Hispanic Population	Percent Population Non-Hispanic
Kanawha County, WV	185,710	2,025	1.09%	183,685	98.91%
West Virginia	1,829,054	27,522	1.50%	1,801,532	98.50%
United States	322,903,030	57,517,935	17.81%	265,385,095	82.19%

Change in Total Population

According to the United States Census Bureau Decennial Census, between 2000 and 2010 the population in the report area fell by -7,010 persons, a change of -3.50%. A significant positive or negative shift in total population over time impacts healthcare providers and the utilization of community resources.

Report Area	Total Population, 2000 Census	Total Population, 2010 Census	Total Population Change, 2000-2010	Percent Population Change, 2000-2010
Kanawha County, WV	200,073	193,063	-7,010	-3.50%
West Virginia	1,808,345	1,852,994	44,649	2.47%
United States	280,405,781	307,745,539	27,339,758	9.75%

Data Source: US Census Bureau, Decennial Census, 2000 - 2010. Source geography: Tract

Families with Children

According to the most recent the American Community Survey estimates, 26.83% of all occupied households in the report area are family households with one or more child(ren) under the age of 18. As defined by the US Census Bureau, a family household is any housing unit in which the householder is living with one or more individuals related to him or her by birth, marriage, or adoption. A non-family household is any household occupied by the householder alone, or by the householder and one or more unrelated individuals.

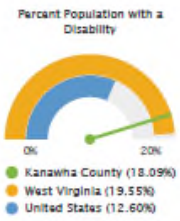
Report Area	Total Households	Total Family Households	Families with Children (Under Age 18)	Families with Children (Under Age 18), Percent of Total Households
Kanawha County, WV	79,437	49,130	21,315	26.83%
West Virginia	734,676	475,835	199,198	27.11%
United States	119,730,128	78,697,103	37,228,998	31.09%

Data Source: US Census Bureau, American Community Survey, 2014-18. Source geography: Tract

Population with Any Disability

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

Report Area	Total Population (For Whom Disability Status Is Determined)	Total Population with a Disability	Percent Population with a Disability
Kanawha County, WV	183,858	33,252	18.09%
West Virginia	1,800,270	351,879	19.55%
United States	317,941,631	40,071,666	12.60%



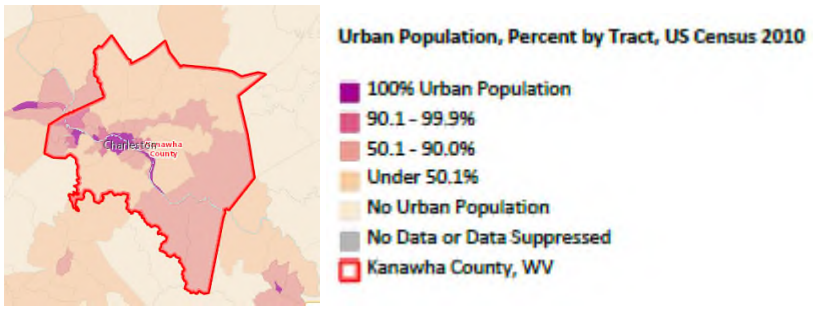
Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey. 2014-18. Source geography: Tract

Urban and Rural Population

This indicator reports the percentage of population living in urban and rural areas. Urban areas are identified using population density, count, and size thresholds. Urban areas also include territory with a high degree of impervious surface (development). Rural areas are all areas that are not urban.

Report Area	Total Population	Urban Population	Rural Population	Percent Urban	Percent Rural
Kanawha County, WV	193,063	144,434	48,629	74.81%	25.19%
West Virginia	1,852,994	902,810	950,184	48.72%	51.28%
United States	312,471,327	252,746,527	59,724,800	80.89%	19.11%

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



Households and Families

In 2014-2018, there were 79,437 households in Kanawha County, West Virginia. The average household size was 2.30 people.

Families made up 61.8 percent of the households in Kanawha County, West Virginia. This figure includes both married-couple families (44.0 percent) and other families (17.8 percent). Female householder families with no husband present and own children under 18 years are 6.7 percent of all households. Nonfamily households made up 38.2 percent of all households in Kanawha County, West Virginia.

In Kanawha County, West Virginia, 27.2 percent of all households have one or more people under the age of 18; 33.0 percent of all households have one or more people 65 years and over.

	Percent
Married-couple families	44.0
Other families	17.8
People living alone	32.7
Other nonfamily households	5.5

Marital status

Among persons 15 and older, 49.8 percent of males and 45.7 percent of females are currently married.

Population 15 years and over	Males	Females
Never married	30.9	24.4
Now married, except separated	49.8	45.7
Separated	1.7	2.0
Widowed	3.4	12.0
Divorced	14.3	15.9

Grandparents and grandchildren

In Kanawha County, West Virginia, 4,853 grandparents lived with their grandchildren under 18 years old. Of those grandparents, 56.6 percent were responsible for the basic needs of their grandchildren.

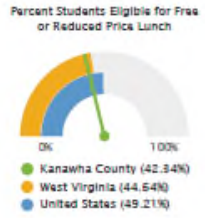
SOCIAL AND ECONOMIC FACTORS

FOOD ACCESS

Children Eligible for Free/Reduced Price Lunch

Within the report area 11,284 public school students or 42.34% are eligible for Free/Reduced Price lunch out of 26,650 total students enrolled. This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs. Additionally, when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.

Report Area	Total Students	Number Free/Reduced Price Lunch Eligible	Percent Free/Reduced Price Lunch Eligible
Kanawha County, WV	26,650	11,284	42.34%
West Virginia	273,855	122,257	44.64%
United States	50,737,716	24,970,187	49.21%



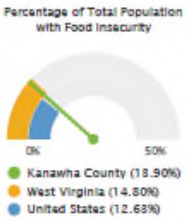
Note: This indicator is compared to the state average.
Data Source: National Center for Education Statistics, NCES - Common Core of Data. 2016-17. Source geography: Address

Food Insecurity Rate

This indicator reports the estimated percentage of the population that experienced food insecurity at some point during the report year. Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food.

Report Area	Total Population	Food Insecure Population, Total	Food Insecurity Rate
Kanawha County, WV	188,129	26,150.00	13.90%
West Virginia	1,811,284	268,070.00	14.80%
United States	325,717,422	41,133,950.00	12.63%

Note: This indicator is compared to the state average.
Data Source: Feeding America, 2017. Source geography: County



Food Insecurity - Food Insecure Children

This indicator reports the estimated percentage of the population under age 18 that experienced food insecurity at some point during the report year. Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food.

Report Area	Population Under Age 18	Food Insecure Children, Total	Child Food Insecurity Rate
Kanawha County, WV	38,263	7,270.00	19.00%
West Virginia	373,641	76,970.00	20.60%
United States	73,641,039	13,411,620.00	18.21%

Food Insecurity - Food Insecure Population Ineligible for Assistance

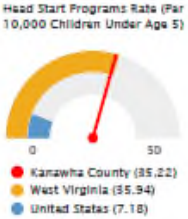
This indicator reports the estimated percentage of the total population and the population under age 18 that experienced food insecurity at some point during the report year, but are ineligible for State or Federal nutrition assistance. Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food. Assistance eligibility is determined based on household income of the food insecure households relative to the maximum income-to-poverty ratio for assistance programs (SNAP, WIC, school meals, CSFP and TEFAP).

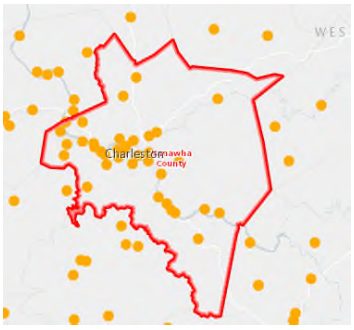
Report Area	Food Insecure Population, Total	Percentage of Food Insecure Population Ineligible for Assistance	Food Insecure Children, Total	Percentage of Food Insecure Children Inelgible for Assistance
Kanawha County, WV	26,150.00	31.00%	7,270.00	36.00%
West Virginia	268,070.00	31.00%	76,970.00	35.00%
United States	41,133,950.00	33.00%	13,411,620.00	35.00%

Head Start is a program designed to help children from birth to age five who come from families with poverty level and below incomes, with the goal to help children become ready for kindergarten while also providing needed requirements like health care and food support.
This indicator reports the number and rate of Head Start program facilities per 10,000 children under age 5. Head Start facility data is acquired from the US Department of Health and Human Services (HHS) 2018 Head Start locator. Population data is from the 2010 US Decennial Census.

Report Area	Total Children Under Age 5	Total Head Start Programs	Head Start Programs, Rate (Per 10,000 Children)
Kanawha County, WV	10,790	38	35.22
West Virginia	104,060	414	35.94
United States	20,426,118	18,886	7.18

Note: This indicator is compared to the state average.
Data Source: US Department of Health & Human Services, Administration for Children and Families, 2019. Source geography: Point





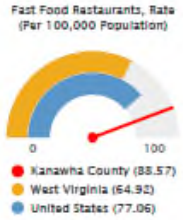
Head Start Facilities, All Facilities, ACF 2019
Kanawha County, WV

Food Access - Fast Food Restaurants

This indicator reports the number of fast food restaurants per 100,000 population. Fast food restaurants are defined as limited-service establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.

Report Area	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Kanawha County, WV	193,063	171	88.57
West Virginia	1,852,994	1,203	64.92
United States	308,745,538	237,922	77.06

Note: This indicator is compared to the state average.
Data Source: US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2016. Source geography: ZCTA

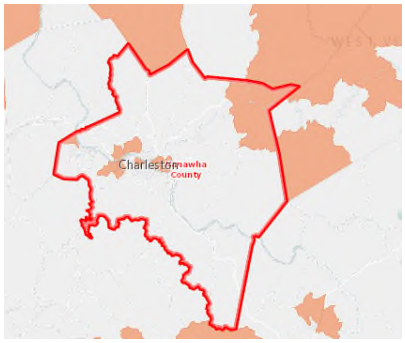


Food Access - Food Desert Census Tracts

This indicator reports the number of neighborhoods in the report area that are within food deserts.

Report Area	Total Population (2010)	Food Desert Census Tracts	Other Census Tracts	Food Desert Population	Other Population
Kanawha County, WV	193,063.00	23.00	30	90,055.00	103,008.00
West Virginia	1,852,994.00	174.00	310	724,314.00	1,128,680.00
United States	308,745,538.00	27,527.00	45,337	129,885,212.00	178,860,326.00

Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2015.



Food Desert Census Tracts, 1 Mi. / 10 Mi. by Tract, FARA 2015

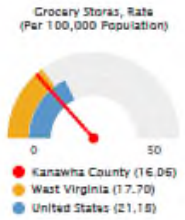
Food Desert
Not a Food Desert
No Data
Kanawha County, WV

Food Access - Grocery Stores

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

Report Area	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Kanawha County, WV	193,063	31	16.06
West Virginia	1,852,994	328	17.70
United States	308,745,538	65,399	21.18

Note: This indicator is compared to the state average.
Data Source: US Census Bureau, County Business Patterns. Additional data analysis by CARES, 2018. Source geography: ZCTA

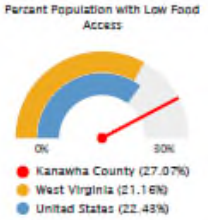


Food Access - Low Food Access

This indicator reports the percentage of the population with low food access. Low food access is defined as living more than ½ mile from the nearest supermarket, supercenter, or large grocery store. Data are from the 2017 report, Low-Income and Low-Supermarket-Access Census Tracts, 2010-2015. This indicator is relevant because it highlights populations and geographies facing food insecurity.

Report Area	Total Population	Population with Low Food Access	Percent Population with Low Food Access
Kanawha County, WV	193,063	52,267	27.07%
West Virginia	1,852,994	392,087	21.16%
United States	308,745,538	69,266,771	22.43%

Note: This indicator is compared to the state average.
Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas, 2015. Source geography: Tract

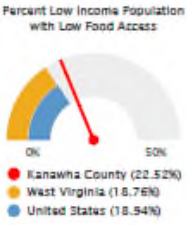


Food Access - Low Income & Low Food Access

This indicator reports the percentage of the low income population with low food access. Low food access is defined as living more than ½ mile from the nearest supermarket, supercenter, or large grocery store. Data are from the 2017 report, Low-Income and Low-Supermarket-Access Census Tracts, 2010-2015. This indicator is relevant because it highlights populations and geographies facing food insecurity.

Report Area	Total Population	Low Income Population	Low Income Population with Low Food Access	Percent Low Income Population with Low Food Access
Kanawha County, WV	193,063	71,794	16,165	22.52%
West Virginia	1,852,994	750,328	140,727	18.76%
United States	308,745,538	106,758,543	20,221,368	18.94%

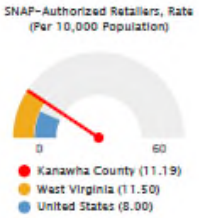
Note: This indicator is compared to the state average.
Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas, 2015. Source geography: Tract



Food Access - SNAP-Authorized Food Stores

This indicator reports the number of SNAP-authorized food stores as a rate per 10,000 population. SNAP-authorized stores include grocery stores as well as supercenters, specialty food stores, and convenience stores that are authorized to accept SNAP (Supplemental Nutrition Assistance Program) benefits.

Report Area	Total Population	Total SNAP-Authorized Retailers	SNAP-Authorized Retailers, Rate per 10,000 Population
Kanawha County, WV	193,063	216	11.19
West Virginia	1,852,994	2,131	11.50
United States	312,383,875	250,022	8.00

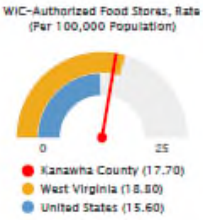


Note: This indicator is compared to the state average.
Data Source: US Department of Agriculture, Food and Nutrition Service, USDA - SNAP Retailer Locator. Additional data analysis by CARES. 2019. Source geography: Tract

Food Access - WIC-Authorized Food Stores

This indicator reports the number of food stores and other retail establishments per 100,000 population that are authorized to accept WIC Program (Special Supplemental Nutrition Program for Women, Infants, and Children) benefits and that carry designated WIC foods and food categories. This indicator is relevant because it provides a measure of food security and healthy food access for women and children in poverty as well as environmental influences on dietary behaviors.

Report Area	Total Population (2011 Estimate)	Number WIC-Authorized Food Stores	WIC-Authorized Food Store Rate (Per 100,000 Pop.)
Kanawha County, WV	192,315.00	34.00	17.70
West Virginia	1,871,890.00	352.00	18.80
United States	318,921,538.00	50,042.00	15.60

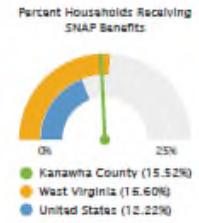


Note: This indicator is compared to the state average.
Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Environment Atlas. 2011. Source geography: County

Population Receiving SNAP Benefits (ACS)

In the report area, an estimate 12,330 or 15.52% households receive Supplemental Nutrition Assistance Program (SNAP) benefits. The value for the report area is greater than the national average of 12.22%. This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.

Report Area	Total Households	Households Receiving SNAP Benefits	Percent Households Receiving SNAP Benefits
Kanawha County, WV	79,437	12,330	15.52%
West Virginia	734,676	121,943	16.60%
United States	119,730,128	14,635,287	12.22%



Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey, 2014-18. Source geography: Tract

EDUCATION

In 2014-2018, 88.1 percent of people 25 years and over had at least graduated from high school and 24.9 percent had a bachelor's degree or higher. An estimated 11.9 percent did not complete high school.

The total school enrollment in Kanawha County, West Virginia was 37,055 in 2014-2018. Nursery school enrollment was 1,831 and kindergarten through 12th grade enrollment was 27,223. College or graduate school enrollment was 8,001.

	Percent
Less than High school diploma	11.9
High school diploma or equivalency	37.5
Some college, no degree	19.3
Associate's degree	6.5
Bachelor's degree	14.4
Graduate or Professional degree	10.5

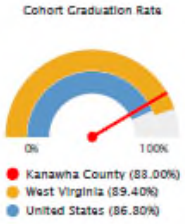
High School Graduation Rate (Ed*Facts*)

Within the report area 83.00% of students are receiving their high school diploma within four years. Data represents the 2016-17 school year.

This indicator is relevant because research suggests education is one the strongest predictors of health (Freudenberg & Ruglis, 2007).

Report Area	Total Student Cohort	Estimated Number of Diplomas Issued	Cohort Graduation Rate
Kanawha County, WV	1,914	1,589	83.00%
West Virginia	19,451	17,394	89.40%
United States	3,095,906	2,688,701	86.80%

Note: This indicator is compared to the state average.
Data Source: US Department of Education, EDFacts. Accessed via DATA.GOV. Additional data analysis by CAREL. 2016-17. Source geography: School District

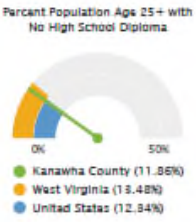


Population with No High School Diploma

Within the report area there are 15,894 persons aged 25 and older without a high school diploma (or equivalency) or higher. This represents 11.86% of the total population aged 25 and older. This indicator is relevant because educational attainment is linked to positive health outcomes (Freudenberg & Ruglis, 2007).

Report Area	Total Population Age 25+	Population Age 25+ with No High School Diploma	Percent Population Age 25+ with No High School Diploma
Kanawha County, WV	134,008	15,894	11.86%
West Virginia	1,292,084	174,230	13.48%
United States	218,446,071	26,948,057	12.34%

Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey. 2014-18. Source geography: Tract

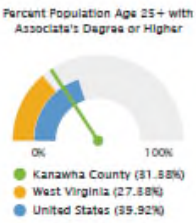


Population with Associate's Level Degree or Higher

31.38% of the population aged 25 and older, or 42,048 have obtained an Associate's level degree or higher. This indicator is relevant because educational attainment has been linked to positive health outcomes.

Report Area	Total Population Age 25+	Population Age 25+ with Associate's Degree or Higher	Percent Population Age 25+ with Associate's Degree or Higher
Kanawha County, WV	134,008	42,048	31.38%
West Virginia	1,292,084	353,725	27.38%
United States	218,446,071	87,205,374	39.92%

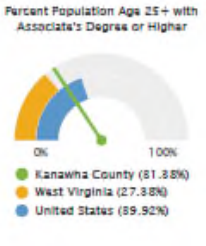
Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey. 2014-18. Source geography: Tract



Population with Associate's Level Degree or Higher

31.38% of the population aged 25 and older, or 42,048 have obtained an Associate's level degree or higher. This indicator is relevant because educational attainment has been linked to positive health outcomes.

Report Area	Total Population Age 25+	Population Age 25+ with Associate's Degree or Higher	Percent Population Age 25+ with Associate's Degree or Higher
Kanawha County, WV	134,008	42,048	31.38%
West Virginia	1,292,084	353,725	27.38%
United States	218,446,071	87,205,374	39.92%

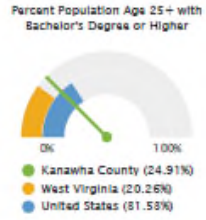


Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey, 2014-18. Source geography: Tract

Population with Bachelor's Degree or Higher

24.91% of the population aged 25 and older, or 33,388 have obtained an Bachelor's level degree or higher. This indicator is relevant because educational attainment has been linked to positive health outcomes.

Report Area	Total Population Age 25+	Population Age 25+ with Bachelor's Degree or Higher	Percent Population Age 25+ with Bachelor's Degree or Higher
Kanawha County, WV	134,008	33,388	24.91%
West Virginia	1,292,084	261,750	20.26%
United States	218,446,071	68,867,051	31.53%



Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey, 2014-18. Source geography: Tract

EMPLOYMENT

Employment Status and Type of Employer

In Kanawha County, West Virginia, 52.1 percent of the population 16 and over were employed; 44.3 percent were not currently in the labor force.

An estimated 75.6 percent of the people employed were private wage and salary workers; 20.6 percent were federal, state, or local government workers; and 3.7 percent were self-employed in their own (not incorporated) business.

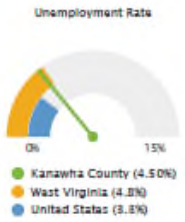
Class of worker	Number	Percent
Private wage and salary workers	60,122	75.6
Federal, state, or local government workers	16,390	20.6
Self-employed workers in own not incorporated business	2,916	3.7

Unemployment Rate

Total unemployment in the report area for the current month equals 3,688, or 4.50% of the civilian non-institutionalized population age 16 and older (non-seasonally adjusted). This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

Report Area	Labor Force	Number Employed	Number Unemployed	Unemployment Rate
Kanawha County, WV	82,661	78,973	3,688	4.50%
West Virginia	803,798	764,838	38,960	4.8%
United States	165,431,597	159,902,120	5,529,477	3.3%

Note: This indicator is compared to the state average.
Data Source: US Department of Labor, Bureau of Labor Statistics. 2019 - November. Source geography: County



Commuting to Work

An estimated 81.9 percent of Kanawha County, West Virginia workers drove to work alone in 2014-2018, and 8.8 percent carpooled. Among those who commuted to work, it took them on average 20.9 minutes to get to work.

Percent of Workers 16 and over Commuting by Mode in Kanawha County, West Virginia in 2014-2018

	Percent
Car, truck, van -- drove alone	81.9
Car, truck, van -- carpooled	8.8
Public transportation (excluding taxicab)	2.2
Walked	3.3
Other means	0.8
Worked at home	3.1

Is this page hel

INCOME

The median income of households in Kanawha County, West Virginia was $45,426. An estimated 7.9 percent of households had income below $10,000 a year and 3.7 percent had income over $200,000 or more.

Household Income in Kanawha County, West Virginia in 2014-2018

	Percent
Less than $10,000	7.9
$10,000 to $14,999	6.1
$15,000 to $24,999	13.1
$25,000 to $34,999	11.7
$35,000 to $49,999	14.6
$50,000 to $74,999	18.5
$75,000 to $99,999	10.2
$100,000 to $149,999	10.9
$150,000 to $199,999	3.3
$200,000 or more	3.7

Median earnings for full-time year-round workers was $40,732. Male full-time year-round workers had median earnings of $46,693. Female full-time year-round workers had median earnings of $35,863.

An estimated 69.9 percent of households received earnings. An estimated 41.1 percent of households received Social Security and an estimated 24.3 percent of households received retirement income other than Social Security. The average income from Social Security was $19,199. These income sources are not mutually exclusive; that is, some households received income from more than one source.

Proportion of Households with Various Income Sources in Kanawha County, West Virginia in 2014-2018

	Percent
Earnings	69.9
Social Security	41.1
Retirement income	24.3
Supplemental Security Income (SSI)	6.4
Cash public assistance income	2.8

Poverty and Participation in Government Programs

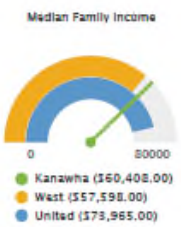
In 2014-2018, 17.1 percent of people were in poverty. An estimated 25.9 percent of children under 18 were below the poverty level, compared with 8.5 percent of people 65 years old and over. An estimated 16.9 percent of people 18 to 64 years were below the poverty level.

Income - Median Family Income

This indicator reports median family income based on the latest 5-year American Community Survey estimates. A family household is any housing unit in which the householder is living with one or more individuals related to him or her by birth, marriage, or adoption. Family income includes the incomes of all family members age 15 and older.

Report Area	Total Family Households	Average Family Income	Median Family Income
Kanawha County, WV	49,130	$79,644.00	$60,408.00
West Virginia	475,835	$73,168.00	$57,598.00
United States	78,697,103	$99,436.00	$73,965.00

Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey, 2014-18. Source geography: Tract

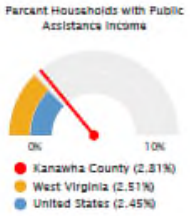


Income - Public Assistance Income

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

Report Area	Total Households	Households with Public Assistance Income	Percent Households with Public Assistance Income
Kanawha County, WV	79,437	2,230	2.81%
West Virginia	734,676	18,445	2.51%
United States	119,730,128	2,939,063	2.45%

Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey, 2014-18. Source geography: Tract

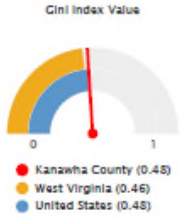


Income - Inequality (GINI Index)

This indicator reports income inequality using the Gini coefficient. Gini index values range between zero and one. A value of one indicates perfect inequality where only one house-hold has any income. A value of zero indicates perfect equality, where all households have equal income.
Index values are acquired from the 2014-18 American Community Survey and are not available for custom report areas or multi-county areas.

Report Area	Total Households	Gini Index Value
Kanawha County, WV	79,437	0.48
West Virginia	734,676	0.46
United States	119,730,128	0.48

Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey, 2014-18. Source geography: Tract



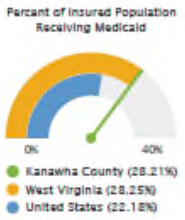
HEALTH INSURANCE

Among the civilian noninstitutionalized population in Kanawha County, West Virginia in 2014-2018, 93.6 percent had health insurance coverage and 6.4 percent did not have health insurance coverage. Private coverage was 63.2 percent and government coverage was 46.6 percent, respectively. The percentage of children under the age of 19 with no health insurance coverage was 2.8 percent.

Insurance - Population Receiving Medicaid

This indicator reports the percentage of the population with insurance enrolled in Medicaid (or other means-tested public health insurance). This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.

Report Area	Total Population (For Whom Insurance Status is Determined)	Population with Any Health Insurance	Population Receiving Medicaid	Percent of Insured Population Receiving Medicaid
Kanawha County, WV	183,858	172,096	48,554	28.21%
West Virginia	1,800,270	1,683,444	475,499	28.25%
United States	317,941,631	288,188,864	63,906,660	22.18%



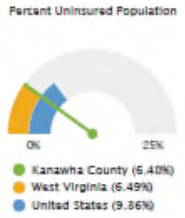
Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey, 2014-18. Source geography: Tract

Insurance - Uninsured Population

The lack of health insurance is considered a *key driver* of health status.

In the report area 6.40% of the total civilian non-institutionalized population are without health insurance coverage. The rate of uninsured persons in the report area is less than the state average of 6.49%. This indicator is relevant because lack of insurance is a primary barrier to healthcare access including regular primary care, specialty care, and other health services that contributes to poor health status.

Report Area	Total Population (For Whom Insurance Status is Determined)	Total Uninsured Population	Percent Uninsured Population
Kanawha County, WV	183,858	11,762	6.40%
West Virginia	1,800,270	116,826	6.49%
United States	317,941,631	29,752,767	9.36%



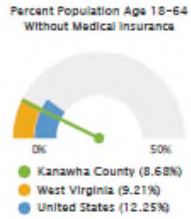
Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey, 2014-18. Source geography: Tract

Insurance - Uninsured Adults

The lack of health insurance is considered a *key driver* of health status.

This indicator reports the percentage of adults age 18 to 64 without health insurance coverage. This indicator is relevant because lack of insurance is a primary barrier to healthcare access including regular primary care, specialty care, and other health services that contributes to poor health status.

Report Area	Total Population Age 18 - 64	Population with Medical Insurance	Percent Population With Medical Insurance	Population Without Medical Insurance	Percent Population Without Medical Insurance
Kanawha County, WV	108,156	98,768	91.32%	9,388	8.68%
West Virginia	1,062,272	964,476	90.79%	97,796	9.21%
United States	195,788,599	171,809,298	87.75%	23,979,301	12.25%



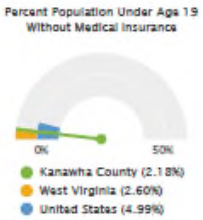
Note: This indicator is compared to the state average.
Data Source: US Census Bureau, Small Area Health Insurance Estimates, 2017. Source geography: County

Insurance - Uninsured Children

The lack of health insurance is considered a *key driver* of health status.

This indicator reports the percentage of children under age 19 without health insurance coverage. This indicator is relevant because lack of insurance is a primary barrier to healthcare access including regular primary care, specialty care, and other health services that contributes to poor health status.

Report Area	Total Population Under Age 19	Population with Medical Insurance	Percent Population With Medical Insurance	Population Without Medical Insurance	Percent Population Without Medical Insurance
Kanawha County, WV	37,910	37,084	97.82%	826	2.18%
West Virginia	378,374	368,547	97.40%	9,827	2.60%
United States	76,244,403	72,436,020	95.01%	3,808,383	4.99%



Note: This indicator is compared to the state average.
Data Source: US Census Bureau, Small Area Health Insurance Estimates, 2017. Source geography: County

COMPUTER AND INTERNET USE

In 2014-2018, 84.8 percent of households in Kanawha County, West Virginia had a computer, and 76.0 percent had a broadband internet subscription.

An estimated 68.7 percent of households had a desktop or laptop, 69.8 percent had a smartphone, 50.9 percent had a tablet or other portable wireless computer, and 6.4 percent had some other computer.

HEALTH FACTORS

Clinical Care

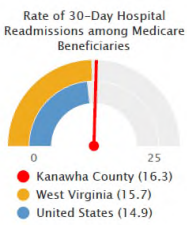
A lack of access to care presents barriers to good health. The supply and accessibility of facilities and physicians, the rate of uninsurance, financial hardship, transportation barriers, cultural competency, and coverage limitations affect access.

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

30-Day Hospital Readmissions

This indicator reports the percentage of Medicare fee-for-service beneficiaries readmitted to a hospital within 30 days of an initial hospitalization discharge.

Report Area	Medicare Part A and B Beneficiaries	Rate of 30-Day Hospital Readmissions among Medicare Beneficiaries
Kanawha County, WV	2,557	16.3
West Virginia	24,136	15.7
United States	2,885,032	14.9



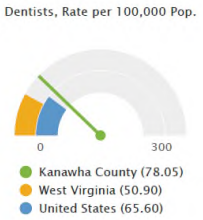
Note: This indicator is compared to the state average.
Data Source: Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care. Source geography: County

Access to Dentists

This indicator reports the number of dentists per 100,000 population. This indicator includes all dentists - qualified as having a doctorate in dental surgery (D.D.S.) or dental medicine (D.M.D.), who are licensed by the state to practice dentistry and who are practicing within the scope of that license.

Report Area	Total Population, 2015	Dentists, 2015	Dentists, Rate per 100,000 Pop.
Kanawha County, WV	188,332.00	147.00	78.05
West Virginia	1,844,128.00	939.00	50.90
United States	321,418,820.00	210,832.00	65.60

Note: This indicator is compared to the state average.
Data Source: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2015. Source geography: County



Access to Dentists, Rate (Per 100,000 Pop.) by Year, 2010 through 2015

This indicator reports the rate of dentists per 100,000 population by year.

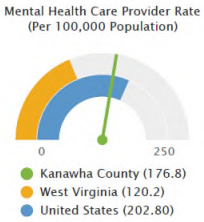
Report Area	2010	2011	2012	2013	2014	2015
Kanawha County, WV	69.90	72.80	73.90	74.80	77.30	78.10
West Virginia	44.60	46.20	46.90	48.40	49.30	50.90
United States	58.90	60.30	61.70	63.20	64.70	65.60

Access to Mental Health Providers

This indicator reports the rate of the county population to the number of mental health providers including psychiatrists, psychologists, clinical social workers, and counsellors that specialize in mental health care.

Report Area	Estimated Population	Number of Mental Health Providers	Ratio of Mental Health Providers to Population (1 Provider per x Persons)	Mental Health Care Provider Rate (Per 100,000 Population)
Kanawha County, WV	183,293	324	565.7	176.8
West Virginia	1,815,857	2,183	831.8	120.2
United States	317,105,555.00	643,219.00	493.00	202.80

Note: This indicator is compared to the state average.
Data Source: University of Wisconsin Population Health Institute, County Health Rankings. 2017. Source geography: County

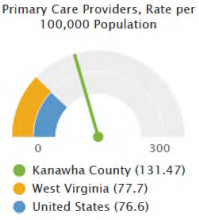


Access to Primary Care

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

Report Area	Total Population (2017)	Primary Care Physicians, 2017	Primary Care Physicians, Rate per 100,000 Pop.
Kanawha County, WV	183,310	241	131.47
West Virginia	1,817,048	1,411	77.7
United States	325,147,121	249,103	76.6

Note: This indicator is compared to the state average.
Data Source: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2017. Source geography: County



Access to Primary Care, Rate (Per 100,000 Pop.) by Year, 2004 through 2014

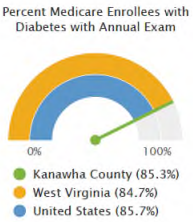
This indicator reports the rate of primary care physicians per 100,000 population by year.

Report Area	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Kanawha County, WV	119.87	122.96	122.65	117.09	110.98	127.31	142.44	151.83	160.27	162.59	159.81
West Virginia	72.55	73.64	74.62	73.78	72.53	80.89	87.80	89.25	91.41	91.52	91.71
United States	80.76	80.94	80.54	80.38	80.16	82.22	84.57	85.83	86.66	87.76	87.77

Diabetes Management - Hemoglobin A1c Test

This indicator reports the percentage of diabetic Medicare patients who have had a hemoglobin A1c (hA1c) test, a blood test which measures blood sugar levels, administered by a health care professional in the past year. In the report area, 2,454 Medicare enrollees with diabetes have had an annual exam out of 2,877 Medicare enrollees in the report area with diabetes, or 85.3%. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Medicare Enrollees	Medicare Enrollees with Diabetes	Medicare Enrollees with Diabetes with Annual Exam	Percent Medicare Enrollees with Diabetes with Annual Exam
Kanawha County, WV	20,297	2,877	2,454	85.3%
West Virginia	206,961	29,239	24,774	84.7%
United States	26,937,083	2,919,457	2,501,671	85.7%



Note: This indicator is compared to the state average.
Data Source: Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care. 2015. Source geography: County

Annual Hemoglobin A1c Test by Year, 2009 through 2015

Percent of Medicare Beneficiaries with Diabetes with Annual Hemoglobin A1c Test

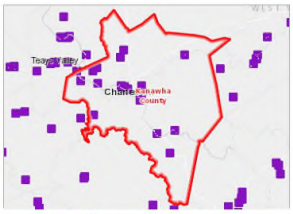
Report Area	2009	2010	2011	2012	2013	2014	2015
Kanawha County, WV	83.37	81.90	83.52	84.75	83.46	86.27	85.30
United States	83.52	83.81	84.18	84.57	84.92	85.16	85.69

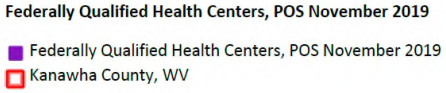
Federally Qualified Health Centers

This indicator reports the number of Federally Qualified Health Centers (FQHCs) in the community. This indicator is relevant because FQHCs are community assets that provide health care to vulnerable populations; they receive extra funding from the federal government to promote access to ambulatory care in areas designated as medically underserved.

Report Area	Total Population	Number of Federally Qualified Health Centers	Rate of Federally Qualified Health Centers per 100,000 Population
Kanawha County, WV	193,063	22	11.40
West Virginia	1,852,994	331	17.86
United States	312,471,327	9,192	2.94

Note: This indicator is compared to the state average.
Data Source: US Department of Health & Human Services, Center for Medicare & Medicaid Services, Provider of Services File. November 2019. Source geography: Address





Health Professional Shortage Areas

This indicator reports the number and location of health care facilities designated as "Health Professional Shortage Areas" (HPSAs), defined as having shortages of primary medical care, dental or mental health providers. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

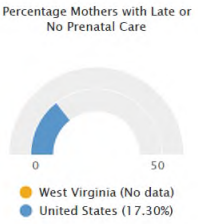
Report Area	Primary Care Facilities	Mental Health Care Facilities	Dental Health Care Facilities	Total HPSA Facility Designations
Kanawha County, WV	2	1	1	4
West Virginia	76	73	66	215
United States	3,985	3,623	3,438	11,028

Data Source: US Department of Health & Human Services, Health Resources and Services Administration, Health Resources and Services Administration. February 2019. Source geography: Address

Lack of Prenatal Care

This indicator reports the percentage of women who do not obtain prenatal care during their first trimester of pregnancy. This indicator is relevant because engaging in prenatal care decreases the likelihood of maternal and infant health risks. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Births	Mothers Starting Prenatal Care in First Semester	Mothers with Late or No Prenatal Care	Prenatal Care Not Reported	Percentage Mothers with Late or No Prenatal Care
Kanawha County, WV	9,382.00	No data	No data	9,382.00	No data
West Virginia	85,233.00	No data	No data	85,233.00	No data
United States	16,693,978.00	7,349,554.00	2,880,098.00	6,464,326.00	17.30%

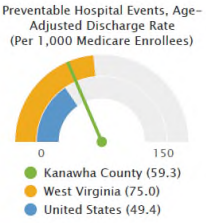


Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research. 2007-10. Source geography: County

Preventable Hospital Events

This indicator reports the discharge rate (per 1,000 Medicare enrollees) for conditions that are ambulatory care sensitive (ACS). ACS conditions include pneumonia, dehydration, asthma, diabetes, and other conditions which could have been prevented if adequate primary care resources were available and accessed by those patients. This indicator is relevant because analysis of ACS discharges allows demonstrating a possible “return on investment” from interventions that reduce admissions (for example, for uninsured or Medicaid patients) through better access to primary care resources.

Report Area	Total Medicare Part A Enrollees	Ambulatory Care Sensitive Condition Hospital Discharges	Ambulatory Care Sensitive Condition Discharge Rate
Kanawha County, WV	16,938	1,004	59.3
West Virginia	171,837	12,887	75.0
United States	22,488,201	1,112,019	49.4



Note: This indicator is compared to the state average.
Data Source: Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care. 2015. Source geography: County

Ambulatory Care Sensitive Condition Discharges by Year, 2009 through 2015

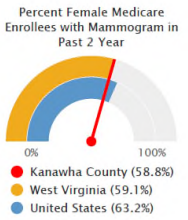
Rate of Ambulatory Care Sensitive Condition Discharges (per 1,000 Medicare Part A Beneficiaries)

Report Area	2009	2010	2011	2012	2013	2014	2015
Kanawha County, WV	75.87	80.67	83.07	73.41	64.55	60.53	59.31
United States	68.16	66.58	64.93	59.29	53.76	49.90	49.45

Prevention - Mammogram

This indicator reports the percentage of female Medicare enrollees, age 67-69, who have received one or more mammograms in the past two years. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Medicare Enrollees	Female Medicare Enrollees Age 67-69	Female Medicare Enrollees with Mammogram in Past 2 Years	Percent Female Medicare Enrollees with Mammogram in Past 2 Year
Kanawha County, WV	20,297	1,955	1,148	58.8%
West Virginia	206,961	20,777	12,269	59.1%
United States	26,937,083	2,544,732	1,607,329	63.2%



Note: This indicator is compared to the state average.
Data Source: Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care. 2015. Source geography: County

Breast Cancer Screening by Year, 2009 through 2015

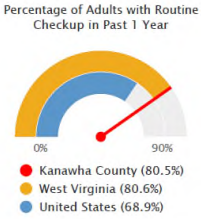
Percent of Female Medicare Beneficiaries Age 67-69 with Mammogram trend

Report Area	2009	2010	2011	2012	2013	2014	2015
Kanawha County, WV	61.53%	60.27%	58.67%	57.92%	55.96%	56.15%	58.77%
United States	65.87%	65.37%	62.90%	62.98%	62.82%	63.06%	63.16%

Prevention - Recent Primary Care Visit

This indicator reports the number and percentage of adults age 18 and older with one or more visits to a doctor for routine checkup within the past one year. Data for this indicator is only available for the population within the top 500 most populous cities across the United States. County, State, and National values represent the population within those cities, and not the total US population.

Report Area	Total Population (2010)	Total Population in the 500 Cities (2010)	Percentage of Adults with Routine Checkup in Past 1 Year
Kanawha County, WV	193,063	51,400	80.5%
West Virginia	1,852,994.00	51,400	80.6%
United States	308,745,538	103,020,808	68.9%



Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the 500 Cities Data Portal. 2015.

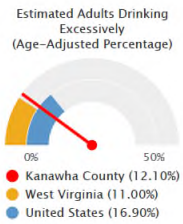
HEALTH BEHAVIORS

Health behaviors such as poor diet, a lack of exercise, and substance abuse contribute to poor health status.

Alcohol Consumption

This indicator reports the percentage of adults aged 18 and older who self-report heavy alcohol consumption (defined as more than two drinks per day on average for men and one drink per day on average for women). This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs.

Report Area	Total Population Age 18+	Estimated Adults Drinking Excessively	Estimated Adults Drinking Excessively (Crude Percentage)	Estimated Adults Drinking Excessively (Age-Adjusted Percentage)
Kanawha County, WV	152,884.00	15,441	10.10%	12.10%
West Virginia	1,458,378.00	145,838	10.00%	11.00%
United States	232,556,016.00	38,248,349	16.40%	16.90%

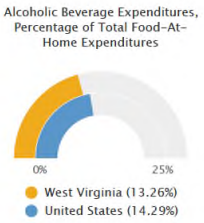


Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12. Source geography: County

Alcohol Expenditures

This indicator reports estimated annual expenditures for alcoholic beverages purchased at home, as a percentage of total household expenditures. This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs. Expenditures data are suppressed for single counties and single-geography custom areas. Rank data are not available custom report areas or multi-county areas.

Report Area	State Rank	Z-Score (US)	Z-Score (State)	Average Expenditures (USD)	Percentage of Food-At-Home Expenditures
Kanawha County, WV	46.00	-0.35	0.37	Suppressed	Suppressed
West Virginia	No data	-0.25	0	$691.40	13.26%
United States	No data	No data	No data	$839.54	14.29%



Note: This indicator is compared to the state average.
Data Source: Nielsen, Nielsen SiteReports. 2014. Source geography: Tract

Breastfeeding - Ever

This indicator reports the percentage children under 6 years old who were ever breastfed or fed breast milk.

Report Area	Estimated Number of Children Ever Breastfed *Total Population*	Percentage of Children Ever Breastfed *Total Population*	Estimated Number of Children Ever Breastfed *SNAP-Ed Population*	Percentage of Children Ever Breastfed *SNAP-Ed Population*
West Virginia	90,447	68.00%	31,103	50.00%
United States	18,709,604	80.00%	6,655,880	70.00%

Data Source: Child and Adolescent Health Measurement Initiative, National Survey of Children's Health. Additional data analysis by CARES. 2017. Source geography: State

Percentage of Children Ever Breastfed by Income Level

This indicator reports the percentage of children under age 6 who were ever breastfed, by income level.

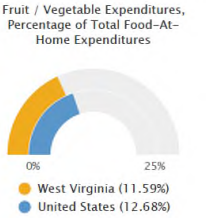
Report Area	Under 100% FPL	101% - 200% FPL	201% - 400% FPL	Over 400% FPL
West Virginia	43.00%	58.00%	76.00%	85.00%
United States	65.00%	74.00%	82.00%	88.00%

Note: No county data available. See data source and methodology for more details.

Fruit/Vegetable Expenditures

This indicator reports estimated expenditures for fruits and vegetables purchased for in-home consumption, as a percentage of total food-at-home expenditures. This indicator is relevant because current behaviors are determinants of future health, and because unhealthy eating habits may illustrate a cause of significant health issues, such as obesity and diabetes. Expenditures data are suppressed for single counties and single-geography custom areas. Rank data are not available custom report areas or multi-county areas.

Report Area	State Rank	Z-Score (US)	Z-Score (State)	Average Expenditures (USD)	Percentage of Food-At-Home Expenditures
Kanawha County, WV	16.00	-1.76	-0.27	Suppressed	Suppressed
West Virginia	No data	-0.75	0	$604.34	11.59%
United States	No data	No data	No data	$744.71	12.68%

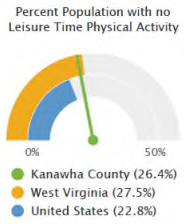


Note: This indicator is compared to the state average.
Data Source: Nielsen, Nielsen SiteReports. 2014. Source geography: Tract

Physical Inactivity

Within the report area, 40,553 or 26.4% of adults aged 20 and older self-report no leisure time for activity, based on the question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?" This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as obesity and poor cardiovascular health.

Report Area	Total Population Age 20+	Population with no Leisure Time Physical Activity	Percent Population with no Leisure Time Physical Activity
Kanawha County, WV	144,317	40,553	26.4%
West Virginia	1,410,324	407,177	27.5%
United States	241,280,347	56,248,204	22.8%



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

Adults with No Leisure-Time Physical Activity by Gender, 2016

Report Area	Total Males with No Leisure-Time Physical Activity	Percent Males with No Leisure-Time Physical Activity	Total Females with No Leisure-Time Physical Activity	Percent Females with No Leisure-Time Physical Activity
Kanawha County, WV	17,799	24.8%	22,754	27.9%
West Virginia	185,287	25.8%	221,888	29.1%
United States	25,551,380	21.4%	30,696,841	24.0%

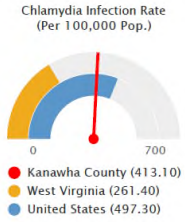
Percent Adults Physically Inactive by Year, 2004 through 2016

Report Area	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Kanawha County, WV	24.8%	25.0%	26.2%	26.3%	29.4%	30.4%	30.4%	28.2%	28.7%	26.1%	28.2%	25.1%	26.4%
West Virginia	26.5%	25.8%	27.0%	28.2%	30.4%	31.5%	32.6%	31.2%	30.7%	27.9%	28.1%	26.5%	27.5%
United States	23.0%	22.8%	22.9%	23.2%	23.5%	23.7%	23.4%	22.5%	22.6%	21.8%	22.6%	21.6%	22.8%

STI - Chlamydia Incidence

This indicator reports incidence rate of chlamydia cases per 100,000 population. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

Report Area	Total Population	Total Chlamydia Infections	Chlamydia Infections, Rate (Per 100,000 Pop.)
Kanawha County, WV	188,332.00	778.00	413.10
West Virginia	1,844,128.00	4,821.00	261.40
United States	321,418,820.00	1,598,354.00	497.30



Note: This indicator is compared to the state average.
Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2016. Source geography: County

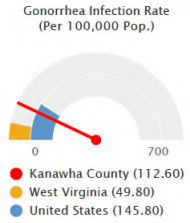
Chlamydia Incidence Rate (Per 100,000 Pop.) by Year, 2005 through 2016

Report Area	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Kanawha County, WV	313.08	318.06	351.79	314.63	314.09	385.88	401.42	454.46	432.36	362.31	452.92	413.10
West Virginia	163.18	160.94	174.81	182.56	197.88	209.05	231.51	257.99	277.10	254.50	268.85	261.42
United States	330.30	345.40	367.70	398.00	405.70	422.80	453.40	453.40	443.50	456.10	474.97	497.28

STI - Gonorrhea Incidence

This indicator reports incidence rate of Gonorrhea cases per 100,000 population. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

Report Area	Total Population	Total Gonorrhea Infections	Gonorrhea Infections, Rate (Per 100,000 Pop.)
Kanawha County, WV	188,332.00	212.00	112.60
West Virginia	1,844,128.00	919.00	49.80
United States	321,418,820.00	468,514.00	145.80



Note: This indicator is compared to the state average.
Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2016. Source geography: County

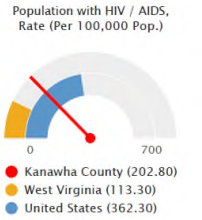
Gonorrhea Incidence Rate (Per 100,000 Pop.) by Year, 2005 through 2016

Report Area	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Kanawha County, WV	99.71	136.68	134.86	95.80	41.74	38.85	54.60	48.36	70.58	85.74	78.58	112.57
West Virginia	42.68	52.71	51.32	41.07	26.08	31.23	42.91	44.76	57.30	45.40	41.70	49.83
United States	114.90	120.10	118.10	110.70	98.20	100.00	103.30	106.70	105.30	110.70	122.96	145.76

STI - HIV Prevalence

This indicator reports prevalence rate of HIV per 100,000 population. This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

Report Area	Population Age 13+	Population with HIV / AIDS	Population with HIV / AIDS, Rate (Per 100,000 Pop.)
Kanawha County, WV	160,778.00	326.00	202.80
West Virginia	1,571,300.00	1,781.00	113.30
United States	268,159,414.00	971,524.00	362.30



Note: This indicator is compared to the state average.
Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2015. Source geography: County

HIV Prevalence Rate by Race / Ethnicity

Report Area	Non-Hispanic White	Non-Hispanic Black	Hispanic / Latino
Kanawha County, WV	144.39	651.00	572.16
West Virginia	76.20	761.99	392.72
United States	174.00	1,243.80	462.00

HIV Prevalence Rate (Per 100,000 Pop.) by Year, 2009 through 2015

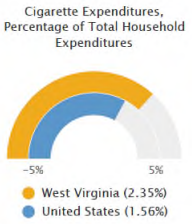
Report Area	2009	2010	2011	2012	2013	2014	2015
Kanawha County, WV	No data	174.70	No data	No data	187.70	No data	202.80
West Virginia	94.60	102.10	108.50	113.20	111.50	114.80	113.30
United States	322.20	329.70	336.80	343.50	353.16	355.80	362.30

Tobacco Expenditures

This indicator reports estimated expenditures for cigarettes, as a percentage of total household expenditures. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease. Expenditures data are suppressed for single counties and single-geography custom areas. Rank data are not available custom report areas or multi-county areas. Expenditures data are suppressed for single counties and single-geography custom areas. Rank data are not available custom report areas or multi-county areas.

Report Area	State Rank	Z-Score (US)	Z-Score (State)	Average Expenditures (USD)	Percentage of Food-At-Home Expenditures
Kanawha County, WV	6.00	1.51	-0.61	Suppressed	Suppressed
West Virginia	No data	1.08	0	$1,059.19	2.35%
United States	No data	No data	No data	$822.70	1.56%

Note: This indicator is compared to the state average.
Data Source: Nielsen, Nielsen SiteReports. 2014. Source geography: Tract

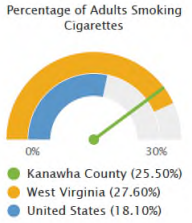


Tobacco Usage - Current Smokers

In the report area an estimated 35,775, or 23.40% of adults age 18 or older self-report currently smoking cigarettes some days or every day. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease.

Report Area	Total Population Age 18+	Total Adults Regularly Smoking Cigarettes	Percent Population Smoking Cigarettes (Crude)	Percent Population Smoking Cigarettes (Age-Adjusted)
Kanawha County, WV	152,884.00	35,775	23.40%	25.50%
West Virginia	1,458,378.00	379,178	26.00%	27.60%
United States	232,556,016.00	41,491,223	17.80%	18.10%

Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12. Source geography: County



HEALTH OUTCOMES

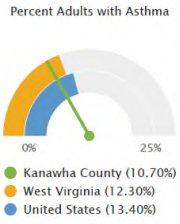
Measuring morbidity and mortality rates allows assessing linkages between social determinants of health and outcomes. By comparing, for example, the prevalence of certain chronic diseases to indicators in other categories (e.g., poor diet and exercise) with outcomes (e.g., high rates of obesity and diabetes), various causal relationship may emerge, allowing a better understanding of how certain community health needs may be addressed.

Asthma Prevalence

This indicator reports the percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they had asthma. This indicator is relevant because asthma is a prevalent problem in the U.S. that is often exacerbated by poor environmental conditions.

Report Area	Survey Population (Adults Age 18+)	Total Adults with Asthma	Percent Adults with Asthma
Kanawha County, WV	166,284	17,876	10.70%
West Virginia	1,458,945	179,485	12.30%
United States	237,197,465	31,697,608	13.40%

Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County



Adults Ever Diagnosed with Asthma by Race / Ethnicity, Percent

Report Area	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Other Race	Hispanic or Latino
West Virginia	11.90%	16.67%	15.55%	17.23%
United States	13.19%	15.75%	11.90%	12.02%

Note: No county data available. See data source and methodology for more details.

Percentage of Medicare Population with Asthma by Age

This indicator reports the prevalence of asthma among Medicare beneficiaries by age.

Report Area	65 Years and Older	Less than 65 Years
West Virginia	3.90%	2.40%

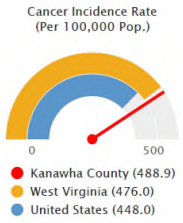
Note: No county data available. See data source and methodology for more details.

Cancer Incidence - All Sites

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of cancer (all sites) adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Estimated Total Population	New Cases (Annual Average)	Cancer Incidence Rate (Per 100,000 Pop.)
Kanawha County, WV	25,772	1,260	488.9
West Virginia	244,810	11,653	476.0
United States	36,564,955	1,638,110	448.0

Note: This indicator is compared to the state average.
Data Source: State Cancer Profiles. 2012-16. Source geography: County

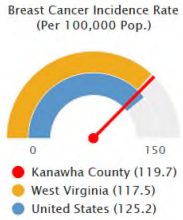


Cancer Incidence - Breast

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of females with breast cancer adjusted to 2000 U.S. standard population age groups (Under Age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Estimated Total Population (Female)	New Cases (Annual Average)	Cancer Incidence Rate (Per 100,000 Pop.)
Kanawha County, WV	13,700	164	119.7
West Virginia	125,106	1,470	117.5
United States	19,113,178	239,297	125.2

Note: This indicator is compared to the state average.
Data Source: State Cancer Profiles. 2012-16. Source geography: County

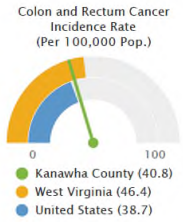


Cancer Incidence - Colon and Rectum

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of colon and rectum cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Estimated Total Population	New Cases (Annual Average)	Cancer Incidence Rate (Per 100,000 Pop.)
Kanawha County, WV	25,980	106	40.8
West Virginia	244,181	1,133	46.4
United States	36,429,457	140,982	38.7

Note: This indicator is compared to the state average.
Data Source: State Cancer Profiles. 2012-16. Source geography: County

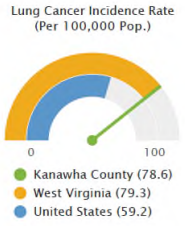


Cancer Incidence - Lung

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of colon and rectum cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Estimated Total Population	New Cases (Annual Average)	Cancer Incidence Rate (Per 100,000 Pop.)
Kanawha County, WV	27,353	215	78.6
West Virginia	258,133	2,047	79.3
United States	37,083,277	219,533	59.2

Note: This indicator is compared to the state average.
Data Source: State Cancer Profiles. 2012-16. Source geography: County

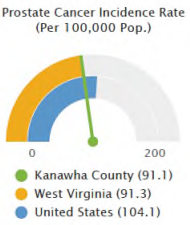


Cancer Incidence - Prostate

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of males with prostate cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Estimated Total Population (Male)	New Cases (Annual Average)	Cancer Incidence Rate (Per 100,000 Pop.)
Kanawha County, WV	12,952	118	91.1
West Virginia	126,396	1,154	91.3
United States	17,981,171	187,184	104.1

Note: This indicator is compared to the state average.
Data Source: State Cancer Profiles. 2012-16. Source geography: County

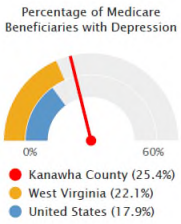


Depression (Medicare Population)

This indicator reports the percentage of the Medicare fee-for-service population with depression.

Report Area	Total Medicare Fee-for-Service Beneficiaries	Beneficiaries with Depression	Percent with Depression
Kanawha County, WV	27,506	6,986	25.4%
West Virginia	283,163	62,670	22.1%
United States	33,725,823	6,047,681	17.9%

Note: This indicator is compared to the state average.
Data Source: Centers for Medicare and Medicaid Services. 2017. Source geography: County



Percentage of Medicare Population with Depression by Year, 2011 through 2017

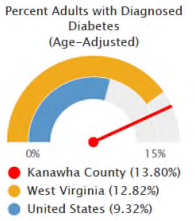
This indicator reports the percentage of the Medicare fee-for-service population with depression over time.

Report Area	2011	2012	2013	2014	2015	2016	2017
Kanawha County, WV	20.65%	21.03%	22.00%	22.98%	24.54%	24.37%	25.40%
West Virginia	18.28%	18.72%	19.39%	19.95%	21.40%	21.44%	22.13%
United States	15.28%	15.81%	16.22%	16.72%	17.41%	17.40%	17.93%

Diabetes (Adult)

This indicator reports the percentage of adults aged 20 and older who have ever been told by a doctor that they have diabetes. This indicator is relevant because diabetes is a prevalent problem in the U.S.; it may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

Report Area	Total Population Age 20+	Population with Diagnosed Diabetes	Population with Diagnosed Diabetes, Age-Adjusted Rate
Kanawha County, WV	144,153.00	23,497.00	13.80%
West Virginia	1,409,586.00	210,234.00	12.82%
United States	243,852,590.00	25,204,602.00	9.32%



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

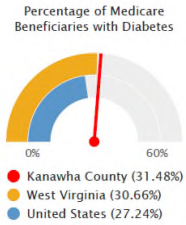
Percent Adults with Diagnosed Diabetes by Year, 2004 through 2016

Report Area	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Kanawha County, WV	9.30%	9.40%	9.60%	10.40%	11.00%	11.30%	11.20%	11.30%	11.80%	12.00%	13.00%	12.80%	13.80%
West Virginia	10.4%	11.3%	11.3%	11.8%	12.0%	12.4%	12.4%	12.4%	12.6%	12.8%	13.3%	13.7%	14.2%
United States	7.5%	7.8%	8.3%	8.6%	8.9%	9.1%	9.5%	9.7%	9.8%	9.9%	10.0%	10.1%	10.2%

Diabetes (Medicare Population)

This indicator reports the percentage of the Medicare fee-for-service population with diabetes.

Report Area	Total Medicare Fee-for-Service Beneficiaries	Beneficiaries with Diabetes	Percent with Diabetes
Kanawha County, WV	27,506	8,660	31.48%
West Virginia	283,163	86,821	30.66%
United States	33,725,823	9,188,128	27.24%



Note: This indicator is compared to the state average.
Data Source: Centers for Medicare and Medicaid Services. 2017. Source geography: County

Percentage of Medicare Population with Diabetes by Year, 2011 through 2017

This indicator reports the percentage of the Medicare fee-for-service population with diabetes over time.

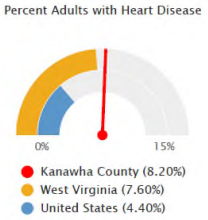
Report Area	2011	2012	2013	2014	2015	2016	2017
Kanawha County, WV	30.60%	30.84%	30.93%	31.02%	31.74%	31.94%	31.48%
West Virginia	29.82%	30.06%	30.17%	30.22%	30.44%	30.59%	30.66%
United States	27.52%	27.62%	27.54%	27.43%	27.36%	27.33%	27.24%

Heart Disease (Adult)

13,646, or 8.20% of adults aged 18 and older have ever been told by a doctor that they have coronary heart disease or angina. This indicator is relevant because coronary heart disease is a leading cause of death in the U.S. and is also related to high blood pressure, high cholesterol, and heart attacks.

Report Area	Survey Population (Adults Age 18+)	Total Adults with Heart Disease	Percent Adults with Heart Disease
Kanawha County, WV	166,578	13,646	8.20%
West Virginia	1,450,446	110,104	7.60%
United States	236,406,904	10,407,185	4.40%

Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County

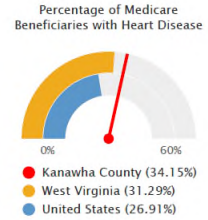


Heart Disease (Medicare Population)

This indicator reports the percentage of the Medicare fee-for-service population with ischaemic heart disease.

Report Area	Total Medicare Fee-for-Service Beneficiaries	Beneficiaries with Heart Disease	Percent with Heart Disease
Kanawha County, WV	27,506	9,392	34.15%
West Virginia	283,163	88,609	31.29%
United States	33,725,823	9,076,698	26.91%

Note: This indicator is compared to the state average.
Data Source: Centers for Medicare and Medicaid Services. 2017. Source geography: County



Percentage of Medicare Population with Heart Disease by Year, 2011 through 2017

This indicator reports the percentage of the Medicare fee-for-service population with ischaemic heart disease over time.

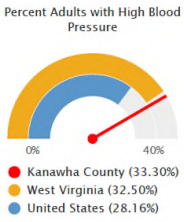
Report Area	2011	2012	2013	2014	2015	2016	2017
Kanawha County, WV	33.23%	33.30%	32.79%	32.34%	32.69%	33.65%	34.15%
West Virginia	31.59%	31.20%	30.67%	30.16%	30.40%	30.90%	31.29%
United States	29.85%	29.18%	28.38%	27.69%	27.25%	27.04%	26.91%

High Blood Pressure (Adult)

50,910, or 33.30% of adults aged 18 and older have ever been told by a doctor that they have high blood pressure or hypertension.

Report Area	Total Population (Age 18+)	Total Adults with High Blood Pressure	Percent Adults with High Blood Pressure
Kanawha County, WV	152,884.00	50,910	33.30%
West Virginia	1,458,378.00	473,973	32.50%
United States	232,556,016.00	65,476,522	28.16%

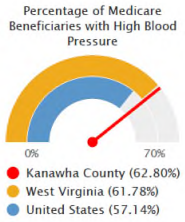
Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12. Source geography: County



High Blood Pressure (Medicare Population)

This indicator reports the percentage of the Medicare fee-for-service population with hypertension (high blood pressure).

Report Area	Total Medicare Fee-for-Service Beneficiaries	Beneficiaries with High Blood Pressure	Percent with High Blood Pressure
Kanawha County, WV	27,506	17,273	62.80%
West Virginia	283,163	174,941	61.78%
United States	33,725,823	19,269,721	57.14%



Note: This indicator is compared to the state average.
Data Source: Centers for Medicare and Medicaid Services. 2017. Source geography: County

Percentage of Medicare Population with High Blood Pressure by Year, 2011 through 2017

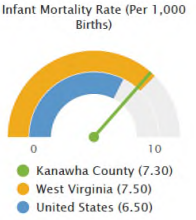
This indicator reports the percentage of the Medicare fee-for-service population with high blood pressure over time.

Report Area	2011	2012	2013	2014	2015	2016	2017
Kanawha County, WV	61.36%	61.88%	62.57%	62.61%	63.08%	62.92%	62.80%
West Virginia	59.09%	59.33%	60.00%	60.06%	60.71%	61.22%	61.78%
United States	56.72%	56.73%	56.79%	56.53%	56.57%	56.95%	57.14%

Infant Mortality

This indicator reports the rate of deaths to infants less than one year of age per 1,000 births. This indicator is relevant because high rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health.

Report Area	Total Births	Total Infant Deaths	Infant Mortality Rate (Per 1,000 Births)
Kanawha County, WV	11,460	84	7.30
West Virginia	104,840	786	7.50
United States	20,913,535	136,369	6.50

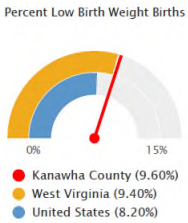


Note: This indicator is compared to the state average.
Data Source: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2006-10. Source geography: County

Low Birth Weight

This indicator reports the percentage of total births that are low birth weight (Under 2500g). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

Report Area	Total Live Births	Low Weight Births (Under 2500g)	Low Weight Births, Percent of Total
Kanawha County, WV	16,639.00	1,597.00	9.60%
West Virginia	148,344.00	13,944.00	9.40%
United States	29,300,495.00	2,402,641.00	8.20%



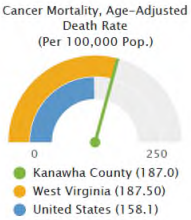
Note: This indicator is compared to the state average.
Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2006-12. Source geography: County

Mortality - Cancer

This indicator reports the rate of death due to malignant neoplasm (cancer) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because cancer is a leading cause of death in the United States.

Report Area	Total Population	Average Annual Deaths, 2012-2016	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Kanawha County, WV	187,873	502	267.2	187.0
West Virginia	1,839,143	4,750	258.27	187.50
United States	321,050,281	593,931	185.0	158.1

Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2013-17. Source geography: County

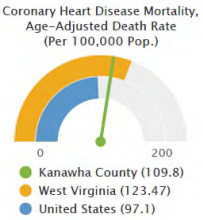


Mortality - Coronary Heart Disease

Within the report area the rate of death due to coronary heart disease (ICD10 Codes I20-I25) per 100,000 population is 109.8. This rate is greater than than the Healthy People 2020 target of less than or equal to 103.4. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because heart disease is a leading cause of death in the United States.

Report Area	Total Population	Average Annual Deaths, 2012-2016	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Kanawha County, WV	187,873	294	156.4	109.8
West Virginia	1,839,143	3,071	166.97	123.47
United States	321,050,281	366,195	114.1	97.1

Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2013-17. Source geography: County

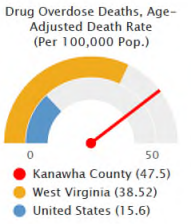


Mortality - Drug Poisoning

This indicator reports the rate of death due to drug overdose per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available.

Report Area	Total Population	Average Annual Deaths, 2012-2016	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Kanawha County, WV	189,650	86	45.4	47.5
West Virginia	1,847,055	673	36.43	38.52
United States	318,689,254	49,715	15.6	15.6

Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2012-16. Source geography: County

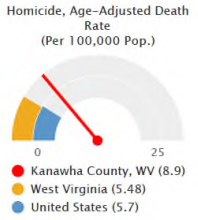


Mortality - Homicide

This indicator reports the rate of death due to assault (homicide) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because homicide rate is a measure of poor community safety and is a leading cause of premature death.

Report Area	Total Population	Average Annual Deaths, 2012-2016	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Kanawha County, WV	187,873	16	8.4	8.9
West Virginia	1,839,143	95	5.19	5.48
United States	321,050,281	17,732	5.5	5.7

Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2013-17. Source geography: County

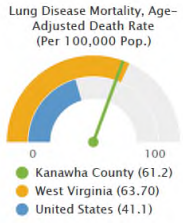


Mortality - Lung Disease

This indicator reports the rate of death due to chronic lower respiratory disease per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because lung disease is a leading cause of death in the United States.

Report Area	Total Population	Average Annual Deaths, 2012-2016	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Kanawha County, WV	187,873	166	88.5	61.2
West Virginia	1,839,143	1,615	87.82	63.70
United States	321,050,281	153,229	47.7	41.1

Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2013-17. Source geography: County

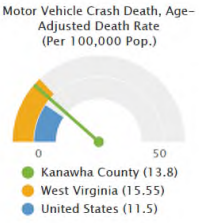


Mortality - Motor Vehicle Crash

This indicator reports the rate of death due to motor vehicle crashes per 100,000 population, which include collisions with another motor vehicle, a nonmotorist, a fixed object, and a non-fixed object, an overturn, and any other non-collision. This indicator is relevant because motor vehicle crash deaths are preventable and they are a cause of premature death.

Report Area	Total Population	Average Annual Deaths, 2012-2016	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Kanawha County, WV	187,873	25	13.4	13.8
West Virginia	1,839,143	292	15.90	15.55
United States	321,050,281	37,816	11.8	11.5

Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2013-17. Source geography: County

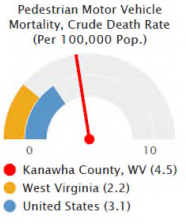


Mortality - Pedestrian Motor Vehicle Crash

This indicator reports the crude rate of pedestrians killed by motor vehicles per 100,000 population. This indicator is relevant because pedestrian-motor vehicle crash deaths are preventable and they are a cause of premature death.

Report Area	Total Population (2010)	Total Pedestrian Deaths, 2011-2015	Average Annual Deaths, Rate per 100,000 Pop.
Kanawha County, WV	193,063	26	4.5
West Virginia	1,852,994	122	2.2
United States	312,732,537	28,832	3.1

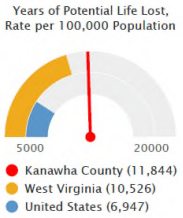
Note: This indicator is compared to the state average.
Data Source: US Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System. 2011-2015. Source geography: County



Mortality - Premature Death

This indicator reports Years of Potential Life Lost (YPLL) before age 75 per 100,000 population for all causes of death, age-adjusted to the 2000 standard. YPLL measures premature death and is calculated by subtracting the age of death from the 75 year benchmark. This indicator is relevant because a measure of premature death can provide a unique and comprehensive look at overall health status.

Report Area	Total Population	Total Premature Death, 2015-2017	Total Years of Potential Life Lost, 2015-2017 Average	Years of Potential Life Lost, Rate per 100,000 Population
Kanawha County, WV	512,364	3,732	60,685	**11,844**
West Virginia	5,068,608	33,861	533,509	10,526
United States	908,082,355	3,744,894	63,087,358	6,947



Note: This indicator is compared to the state average.
Data Source: University of Wisconsin Population Health Institute, County Health Rankings. 2015-17. Source geography: County

Premature Death - Years of Potential Life Lost, Rate per 100,000 Population by Time Period, 1997-1999 to 2015-2017

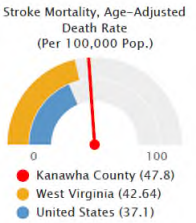
This indicator reports Years of Potential Life Lost (YPLL) per 100,000 age-adjusted population by time period.

Report Area	1997-1999	2000-2002	2003-2005	2006-2008	2009-2011	2012-2014	2015-2017
Kanawha County, WV	8,934.8	9,671.9	9,558.5	10,227.9	9,839.3	10,308.3	11,844.1
West Virginia	8,872.2	9,107.9	9,308.4	9,426.41	9,513.2	9,725	10,472.52
United States	7,705.2	7,535	7,345	7,090.49	6,703.7	6,601.2	6,900.63

Mortality - Stroke

Within the report area there are an estimated 47.8 deaths due to cerebrovascular disease (stroke) per 100,000 population. This is greater than than the Healthy People 2020 target of less than or equal to 33.8. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because stroke is a leading cause of death in the United States.

Report Area	Total Population	Average Annual Deaths, 2012-2016	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Kanawha County, WV	187,873	127	67.8	**47.8**
West Virginia	1,839,143	1,052	57.22	42.64
United States	321,050,281	138,186	43.0	37.1

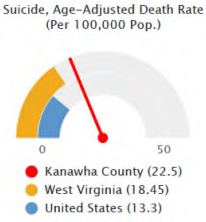


Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2013-17. Source geography: County

Mortality - Suicide

This indicator reports the rate of death due to intentional self-harm (suicide) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because suicide is an indicator of poor mental health.

Report Area	Total Population	Average Annual Deaths, 2012-2016	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Kanawha County, WV	187,873	44	23.4	**22.5**
West Virginia	1,839,143	355	19.32	18.45
United States	321,050,281	44,061	13.7	13.3



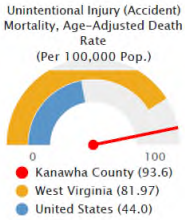
Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2013-17. Source geography: County

Mortality - Unintentional Injury

This indicator reports the rate of death due to unintentional injury (accident) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because accidents are a leading cause of death in the U.S.

Report Area	Total Population	Average Annual Deaths, 2012-2016	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Kanawha County, WV	187,873	186	98.9	93.6
West Virginia	1,839,143	1,578	85.78	81.97
United States	321,050,281	148,873	46.4	44.0

Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2013-17. Source geography: County

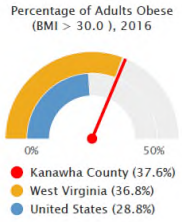


Obesity

37.6% of adults aged 20 and older self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese) in the report area. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

Report Area	Total Population Age 20+	Adults with BMI > 30.0 (Obese)	Percent Adults with BMI > 30.0 (Obese)
Kanawha County, WV	144,556	54,353	37.6%
West Virginia	1,410,281	517,979	36.8%
United States	241,277,748	69,949,540	28.8%

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



Percent Adults Obese (BMI > 30.0) by Year, 2004 through 2016

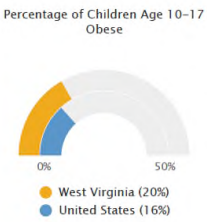
Report Area	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Kanawha County, WV	28.6%	28.5%	30.0%	29.4%	30.5%	31.8%	31.6%	30.4%	31.7%	32.8%	35.5%	36.1%	37.6%
West Virginia	27.8%	28.9%	29.7%	30.3%	30.5%	31.8%	31.7%	32.0%	32.8%	33.1%	34.1%	34.5%	35.0%
United States	23.1%	23.8%	24.8%	25.6%	26.2%	27.2%	27.1%	27.0%	26.8%	27.1%	27.4%	27.7%	28.3%

Obesity (Youth)

This indicator reports the percentage of youth aged 10 - 17 who are obese, based on Body Mass Index (BMI). Children are classified as obese if their calculated BMI is in the 95th percentile or above for their age. This indicator is relevant because excess weight is a prevalent problem in the U.S.; it indicates an unhealthy lifestyle and puts individuals at risk for further health issues.

Report Area	Total Population (Age 10 - 17)	Number Obese	Percent Obese
Kanawha County, WV	No data	No data	No data
West Virginia	154,830	30,835	20%
United States	30,059,005	4,851,000	16%

Note: This indicator is compared to the state average.
Data Source: Child and Adolescent Health Measurement Initiative, National Survey of Children's Health. 2016. Source geography: State



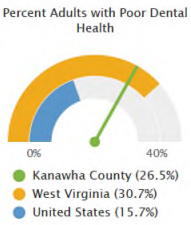
Children by Race / Ethnicity, Percent Obese

Report Area	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Other Race	Hispanic or Latino
West Virginia	19%	36%	12%	35%
United States	13%	22%	10%	23%

Poor Dental Health

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

Report Area	Total Population (Age 18+)	Total Adults with Poor Dental Health	Percent Adults with Poor Dental Health
Kanawha County, WV	152,840.00	40,456.00	26.5%
West Virginia	1,458,378.00	448,343.00	30.7%
United States	235,375,690.00	36,842,620.00	15.7%



Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2006-10. Source geography: County

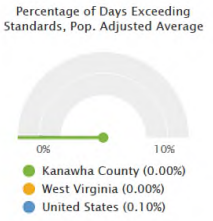
PHYSICAL ENVIRONMENT

A community's health also is affected by the physical environment. A safe, clean environment that provides access to healthy food and recreational opportunities is important to maintaining and improving community health.

Air Quality - Particulate Matter 2.5

This indicator reports the percentage of days with particulate matter 2.5 levels above the National Ambient Air Quality Standard (35 micrograms per cubic meter) per year, calculated using data collected by monitoring stations and modeled to include counties where no monitoring stations occur. This indicator is relevant because poor air quality contributes to respiratory issues and overall poor health.

Report Area	Total Population	Average Daily Ambient Particulate Matter 2.5	Number of Days Exceeding Emissions Standards	Percentage of Days Exceeding Standards, Crude Average	Percentage of Days Exceeding Standards, Pop. Adjusted Average
Kanawha County, WV	193,063	9.97	0.00	0.00	0.00%
West Virginia	1,852,994	9.52	0.00	0.00	0.00%
United States	312,471,327	9.10	0.35	0.10	0.10%



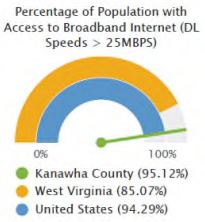
Note: This indicator is compared to the state average.
Data Source: Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network. 2012. Source geography: Tract

Built Environment - Broadband Access

This indicator reports the percentage of population with access to high-speed internet. Data are based on the reported service area of providers offering download speeds of 25 MBPS or more and upload speeds of 3 MBPS or more. This data represent both wireline and fixed/terrestrial wireless internet providers. Cellular internet providers are not included. This indicator is important because access to technology opens up opportunities for employment and education.

Report Area	Total Population (2010)	Access to DL Speeds > 25MBPS (2018)
Kanawha County, WV	193,063	95.12%
West Virginia	1,852,994	85.07%
United States	312,846,570	94.29%

Note: This indicator is compared to the state average.
Data Source: National Broadband Map. June 2018. Source geography: Tract

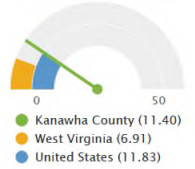


Built Environment - Recreation and Fitness Facility Access

This indicator reports the number per 100,000 population of recreation and fitness facilities as defined by North American Industry Classification System (NAICS) Code 713940. This indicator is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors.

Report Area	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Kanawha County, WV	193,063	22	11.40
West Virginia	1,852,994	128	6.91
United States	308,745,538	36,525	11.83

Note: This indicator is compared to the state average.
Data Source: US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2017. Source geography: ZCTA

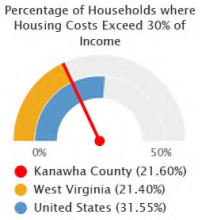


Housing - Housing Cost Burden (30%)

This indicator reports the percentage of the households where housing costs exceed 30% of total household income. This indicator provides information on the cost of monthly housing expenses for owners and renters. The information offers a measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels.

Report Area	Total Households	Cost Burdened Households (Housing Costs Exceed 30% of Income)	Percentage of Cost Burdened Households (Over 30% of Income)
Kanawha County, WV	79,437	17,162	21.60%
West Virginia	734,676	157,218	21.40%
United States	119,730,128	37,771,047	31.55%

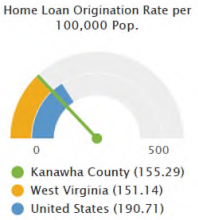
Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey. 2014-18. Source geography: Tract



Housing - Mortgage Lending

Lending institutions must report all loans for home purchases, home improvements, and mortgage refinancing based on the Home Mortgage Disclosure Act (HMDA) of 1975. This indicator displays information derived from the 2014 HMDA loan-level data files.

Report Area	Total Population (2010)	Number of Home Loans Originated	Loans Originations, Approval Rate	Loan Originations, Rate per 100,000 Population
Kanawha County, WV	193,063	2,998	50.16%	155.29
West Virginia	1,852,994	28,007	52.95%	151.14
United States	312,470,869	5,959,108	51.57%	190.71

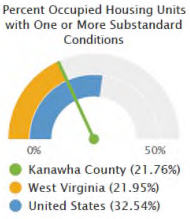


Note: This indicator is compared to the state average.
Data Source: Federal Financial Institutions Examination Council, Home Mortgage Disclosure Act. Additional data analysis by CARES. 2014.

Housing - Substandard Housing

This indicator reports the number and percentage of owner- and renter-occupied housing units having at least one of the following conditions: 1) lacking complete plumbing facilities, 2) lacking complete kitchen facilities, 3) with 1.01 or more occupants per room, 4) selected monthly owner costs as a percentage of household income greater than 30%, and 5) gross rent as a percentage of household income greater than 30%. Selected conditions provide information in assessing the quality of the housing inventory and its occupants. This data is used to easily identify homes where the quality of living and housing can be considered substandard.

Report Area	Total Occupied Housing Units	Occupied Housing Units with One or More Substandard Conditions	Percent Occupied Housing Units with One or More Substandard Conditions
Kanawha County, WV	79,437	17,288	21.76%
West Virginia	734,676	161,233	21.95%
United States	119,730,128	38,964,205	32.54%

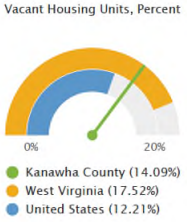


Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey. 2014-18. Source geography: Tract

Housing - Vacancy Rate

This indicator reports the number and percentage of housing units that are vacant. A housing unit is considered vacant by the American Community Survey if no one is living in it at the time of interview. Units occupied at the time of interview entirely by persons who are staying two months or less and who have a more permanent residence elsewhere are considered to be temporarily occupied, and are classified as “vacant.”

Report Area	Total Housing Units	Vacant Housing Units	Vacant Housing Units, Percent
Kanawha County, WV	92,463	13,026	14.09%
West Virginia	890,715	156,039	17.52%
United States	136,384,292	16,654,164	12.21%



Note: This indicator is compared to the state average.
Data Source: US Census Bureau, American Community Survey. 2014-18. Source geography: Tract

NOTES

Kanawha Coalition
for Community Health Improvement

P.O. Box 1547
Charleston, WV 25326
Phone: 304.388.7557
www.healthykanawha.org

Appendix B

Putnam County Community Health Assessment 2018-2019

XECUTIVE SUMMARY

This report is a comprehensive community health assessment conducted by the Putnam County Health Department and with local community partners. The current process of undertaking the assessment with key partners enables review of health issues facing the County, as well as determinants of health, in order to establish health priorities and resource allocation for population health improvement. The overall purpose of the community health assessment process is to support rational, data-driven allocation of resources, and identify high-need areas of health for Putnam County residents to support planning. The needs assessment process itself is considered to be as important as the product that is generated. The results of this community assessment report will determine the scope of health improvement efforts that will be reflected in a written community health improvement plan. Moving forward, assessments will be conducted in an ongoing manner, with annual updates of any new available data, to establish additional primary and secondary data collection, and to engage the community in identifying the most pressing health issues in an ever-changing environment. The information contained in this report will provide the foundation for health improvement efforts In Putnam County over the next three to five years.

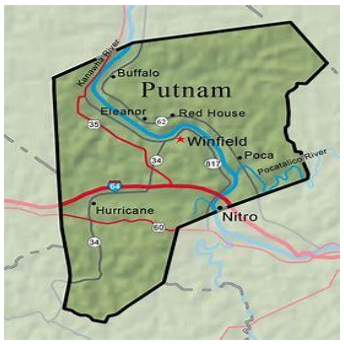
DESCRIPTION OF COMMUNITY

Putnam County, West Virginia is the community defined for evaluation of new and/or updated data reflecting the health of the population for this Community Health Assessment. The county is located in the southcentral portion of West Virginia, surrounded by five adjacent counties, and is part of the Huntington-Ashland, WV-KY-OH Metropolitan Statistical Area. Putnam County is 346 square miles in size, with 160.5 persons per square mile, compared to the West Virginia average of 77.1 persons per square mile (U.S. Census Bureau, 2010). The total estimated population of the County in 2017 was 56,792 and has consistently increased in population size since 2010 (U.S. Census Bureau, 2018). Putnam County has two cities (Hurricane and Nitro), five towns, three census-designated places, and 12 unincorporated communities (U.S. Census Bureau, 2018). Putnam County lies along Interstate-64 between two of the largest cities in the state, Charleston and Huntington.

Year	Population
2017	56,792
2016	56,743
2015	56,596
2014	56,356
2013	56,033
2012	55,660
2011	55,305
2010	54,940

In 2018, the County Health Rankings, sponsored by the Robert Wood Johnson Foundation, ranked Putnam County as the 3rd healthiest county in West Virginia of all 55 counties for health outcomes (a gauge of the health status of a county) and 1st healthiest for health factors (those factors that influence the health of a county). Over the past five years the ranking has improved from 12th in the state to 3rd most recently for health outcomes and has consistently maintained ranking as 1st for health factors. As of June 1, 2018, Putnam County was listed in the Federal Register as a Health Professional Shortage Area (HPSA) for primary care, mental health care, and dental care (Health Resources and Services Administration, 2018). Health Professional Shortage Areas (HPSAs) are designated by HRSA as having shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), population (e.g. low income or Medicaid eligible) or facilities (e.g. federally qualified health center or other state or federal prisons).

Year	Health Outcomes Ranking	Health Factors Ranking
2014	12	1
2015	6	1
2016	2	1
2017	2	1
2018	3	1



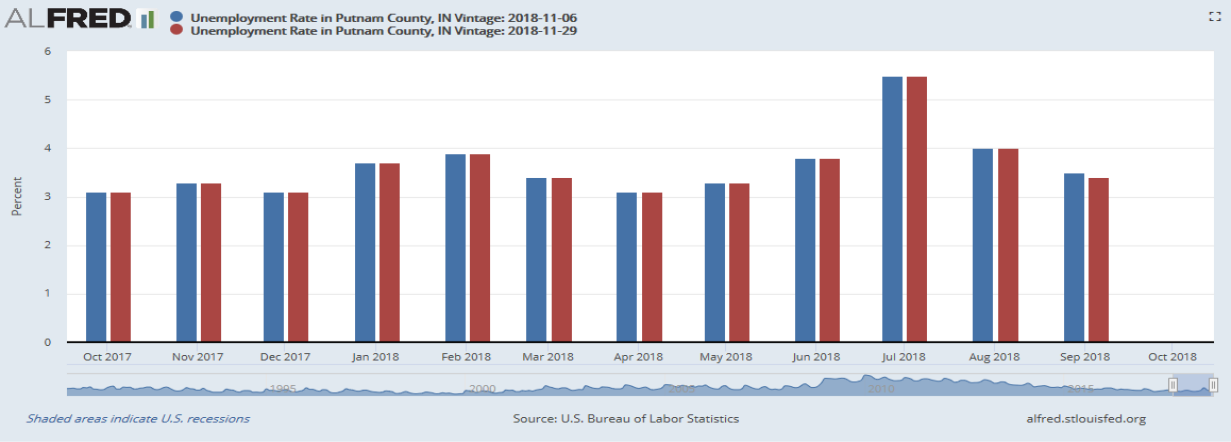
SOCIOECONOMIC INDICATORS

Data was examined for the following to examine changes in socio-economic indicators having implications for health: 1) employment; 2) educational attainment; 3) household income and population in poverty; and 4) health insurance coverage, access and quality of care. Evaluation and analysis of this updated data is important due as they are known to significantly influence health and well-being in local communities.

Employment

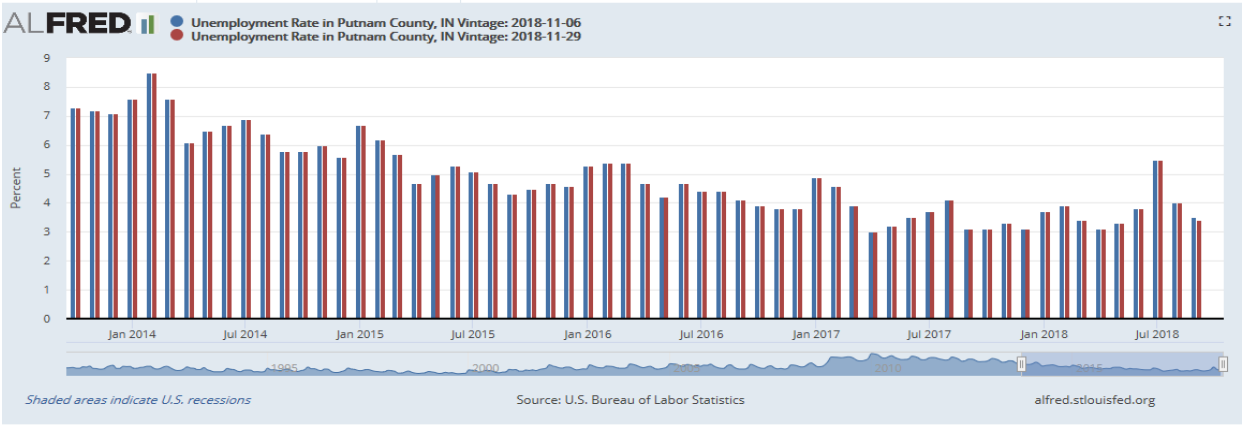
In Putnam County, the total civilian labor force was estimated to be 58% of the total population in 2016, as compared to 53.8% for West Virginia. For the period of 2010 to 2015, the total civilian labor force was 58.9% to 60.2%. Since 2005 the unemployment rate in Putnam County, West Virginia has ranged from 2.8% in July 2008 to 10.9% in January 1992. The current unemployment rate for Putnam County is 5.0% in April 2018. Over the past 25 years, the unemployment rate in Putnam County has ranged from a low of 2.8% in December of 2008 to a high of 10.9% in January of 1992 (Figure 1).

Figure 1. 1-Year Unemployment Rates for Putnam County, 2017-



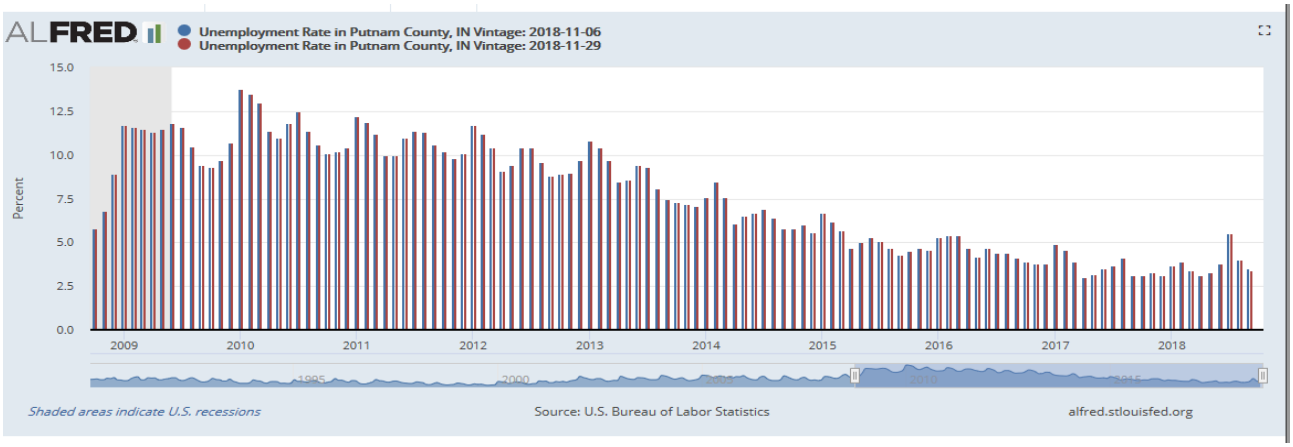
Source: Fred Economic Data, St. Louis Federal Reserve, 2018

Figure 2. 5-Year Unemployment Rates for Putnam County, 2014-2018



Source: Fred Economic Data, St. Louis Federal Reserve, 2018

Figure 3. 10-Year Unemployment Rates for Putnam County, 2009-2018



Source: Fred Economic Data, St. Louis Federal Reserve, 2018

Educational Attainment

U.S. Census data reported for 2017 demonstrated that in Putnam County, 91.9% of adults have a high school degree or higher as compared to 85.9% for West Virginia and 87.3% for the U.S. (Table 1). From 2012 to 2017, the percent of individuals who are high school graduates or higher has increased from 88.9% to 91.9% and the percent having a bachelor's degree or higher has increased from 23.8% to 24.9% (Table 1). The proportion of adults in the County having less than a high school education was 14.6% in 2017 as compared to 16.6% in 2012 in Putnam County, and as compared to 14.1% for West Virginia and 12.6% for the U.S. The graduation rates for each of the four high schools in Putnam County vary as well, range from 93% to 98% (Table 2).

Table 1. Level of Educational Attainment, Putnam County, West Virginia, and U.S., 2010, 2015.

Level of Educational Attainment	2012			2017		
	Putnam Co	WV	U.S.	Putnam Co	WV	U.S.
Less than 9th grade	3.6%	6.2%	6.0%	4.9%	4.7%	5.4%
9th to 12th grade, no diploma	6.4%	10.4%	8.2%	9.7%	9.4%	7.2%
HS Graduate (includes equiv.)	37.2%	40.9%	28.2%	38.0%	40.6%	27.3%
Some college; no degree	19.7%	18.5%	21.3%	19.9%	18.5%	20.8%
Associate's degree	8.1%	6.1%	7.7%	9.1%	6.9%	8.3%
Bachelor's degree	15.4%	11.0%	17.9%	15.1%	12.0%	19.1%
Graduate or prof degree	9.7%	6.9%	10.3%	10.6%	7.9%	11.8%
High School graduate or higher	**88.9%**	**83.4%**	**85.7%**	**91.9%**	**85.9%**	**87.3%**
Bachelor's degree or higher	**23.8%**	**17.9%**	**28.5%**	**24.9%**	**19.9%**	**30.9%**

Source: U.S. Census Bureau

Table 2. Summary of High School Score Card Results

Category	Buffalo H.S.	Hurricane H.S.	Poca H.S.	Winfield H.S.
Enrollment	341	1,237	552	861
Graduation Rate	94%	98%	93%	96%
AP Tested	-----	42%	19%	39%
AP Passed	-----	52%	31%	48%

Source:

Buffalo High School: student body makeup is 51% male and 49% female, and the total minority enrollment is 1 percent.

Hurricane High School: students have opportunity to take AP course work and exams; AP participation rate 42%. The student body makeup is 50% male and 50% female, and the total minority enrollment is 5%.

Winfield High School: ranked 6th within WV, students have opportunity to take AP course work and exams. AP rate 39 percent. The student body makeup is 52 percent male and 48 percent female; total minority enrollment is 5 percent.

Household Income

Putnam County's median income in 2017 was $59.111 (Table 3) compared to the median income of $44,061 for West Virginia. The median income for Putnam County represents a continued trend of increasing income; however, overall this indicator continues to be less than that for the U.S.

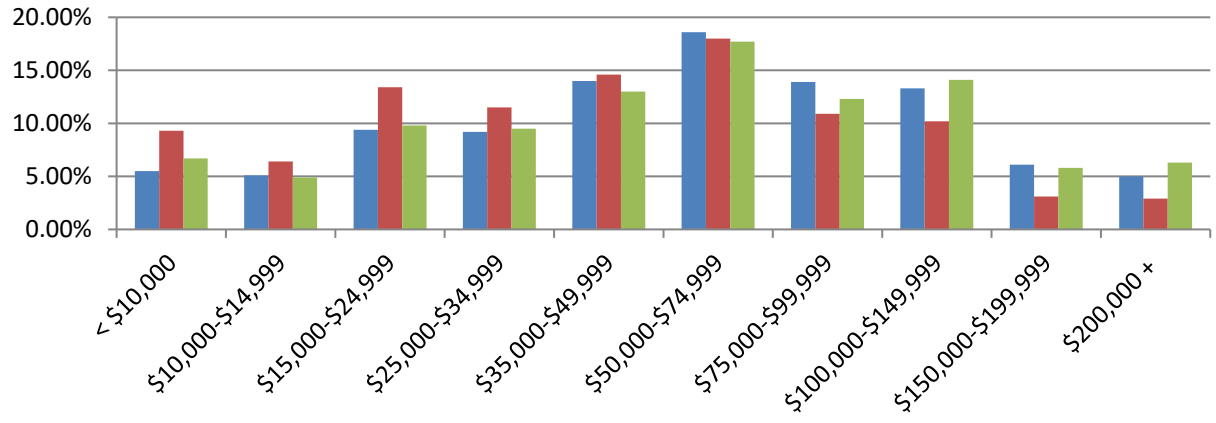
Table 3. Median income, Putnam County, 2010-2015.

Year	Median Household Income
2012	$56.081
2013	$54,854
2014	$55,939
2015	$56.774
2016	$56,640
2017	$59.111

Source: U.S. Census Bureau, American Community Survey, 2018

The 2017 U.S. Census data indicated that the largest percentage of household incomes in Putnam County (18.6%) fell between $50,000 and $74,999, consistent with that observed in WV and the U.S (Figure 4); however 14.0% of the population has a household income of $35,000 to $49,999 and additionally, 20.0% have a household income of less than $24,999 (10.6% less than $14,900). Finally, disparities are noted as compared to the proportion of the population (24.4%) with annual household income of $100,000 or more.

Figure 4. Median household income, by level of income, Putnam County, WV, US, 2017.

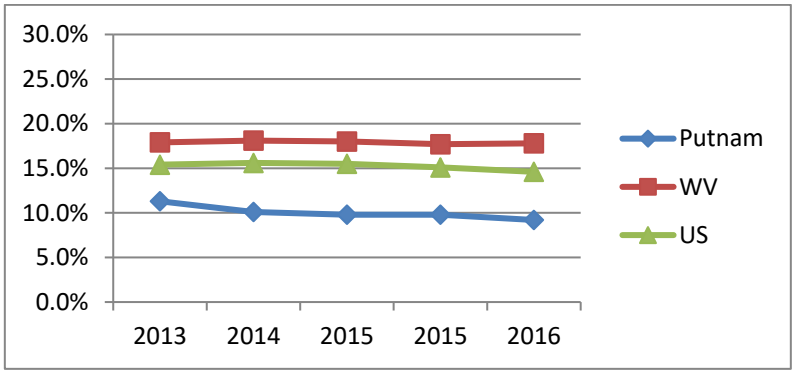


Source: U.S. Census Bureau, 2018

Population in Poverty

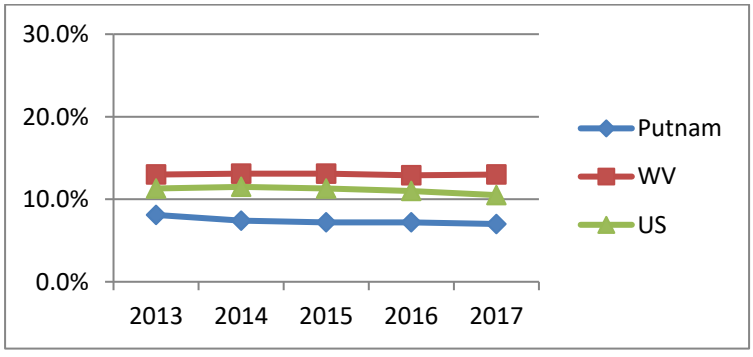
In Putnam County, the number of all individuals over 18 years living in poverty from 2013 to 2017 has decreased from 11.3% in 2013 to 9.2% in 2017 and remains much below the rate for WV (Figure 5). The rate of families living in poverty in Putnam County has decreased slightly from 8.1% to 7.0% over the past five years and is lower than the state or national rate (Figure 6). The percentage of children under 18 years living in a household with income below poverty level in the past 12 months, has decreased significantly in Putnam County, from 17.0% in 2013 to 9.6% in 2017 and in 2017 remains well below the State or national levels (Figure 7). Finally, the percentage of adults over 65 years of age living in a household with income below poverty level in the past 12 months has consistently increased in Putnam County over the past five years, from 5.7% in 2013 to 9.1% in 2017 (Figure 8).

Figure 5. Percentage of all individuals with income below poverty level in past 12 months, Putnam County, West Virginia, U.S., 2013-2017.



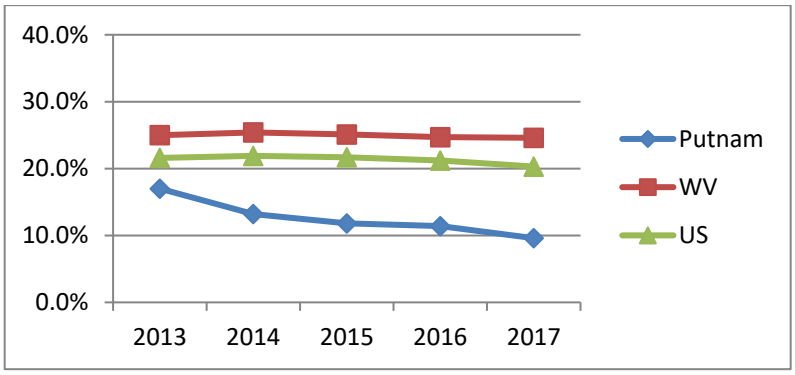
Source: U.S. Census Bureau, American Community Survey, 2018

Figure 6. Percentage of families living in a household with income below poverty level in past 12 months, Putnam County, West Virginia, U.S., 2013-2017.



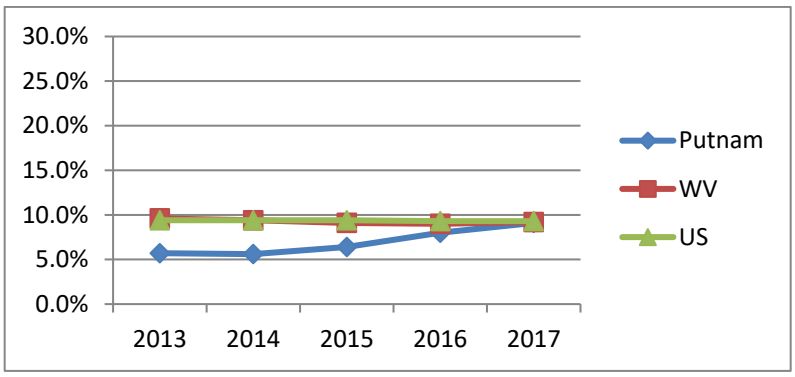
Source: U.S. Census Bureau, American Community Survey, 2018

Figure 7. Percentage of children under 18 years living in a household with income below poverty level in past 12 months, Putnam County, West Virginia, U.S., 2013-2017.



Source: U.S. Census Bureau, American Community Survey, 2018

Figure 8. Percentage of adults over age 65 years living in a household with income below poverty level in past 12 months, Putnam County, West Virginia, U.S., 2013-2017.



Source: U.S. Census Bureau, American Community Survey, 2018

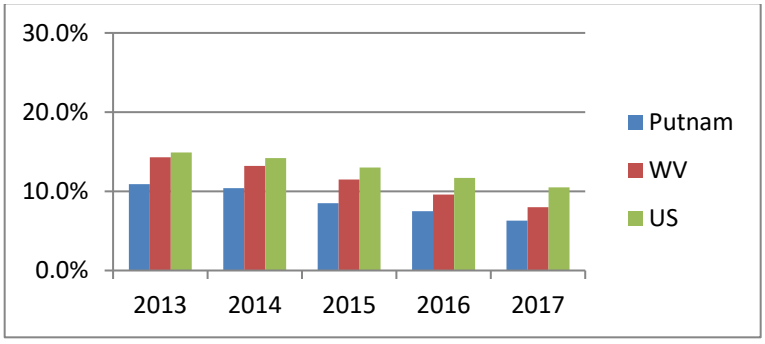
Health Insurance Coverage and Health Care Access

A variety of health insurance coverage options exist, including employer-provided plans, independently purchased plans, health savings accounts, government-subsidized and government-funded plans. It is well known that lack of health insurance coverage presents significant risk to those needing health care services. According to a Harvard Medical School study, approximately 45,000 adults die each year as a result of not having health insurance coverage. This means that an American dies every 12 minutes of every year because they have no health care insurance coverage.

Adults without Health Insurance Coverage

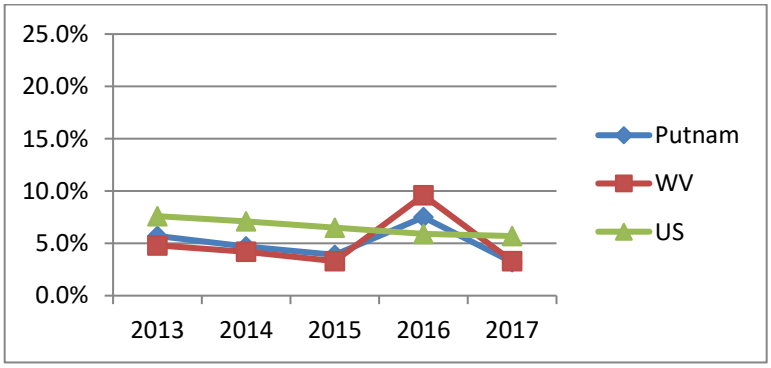
With the availability of subsidized marketplace plans for purchase in West Virginia, as well as significant Medicaid expansion, examining access to health care is an important factor in health outcomes for Putnam County. Figures 9 and 10 below provide the most recent data publically available from the U.S. Census Bureau, for Putnam County, West Virginia, and the U.S., for all individuals and those under 18 years of age without healthcare insurance coverage. From 2013 to 2017, uninsured rates for all individuals decreased in Putnam County from 10.9% to 6.3%. For children 18 years and under, uninsured rates decreased from 5.7% to 3.2% for that same period. It is important to note that for children under 18 years the percentage uninsured in Putnam County in 2013-2015 was higher than the state rate, but has since been less than the state rate in 2016 and 2017.

Figure 9. Percentage of all individuals without healthcare insurance coverage, Putnam County, West Virginia, U.S., 2013-2017.



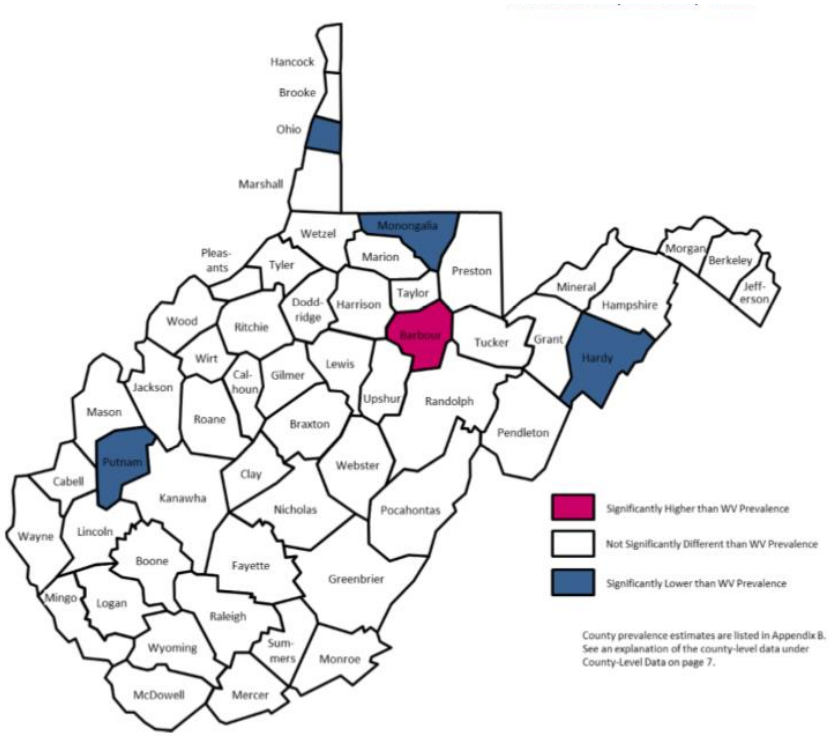
Source: U.S. Census Bureau, American Community Survey, 2018.

Figure 10. Percentage of individuals under 18 years without healthcare insurance coverage, Putnam County, West Virginia, U.S., 2013-2017.



Source: U.S. Census Bureau, American Community Survey, 2018.

Figure 11. Prevalence f uninsured in WV by county, 2011-2015.



Source: Small Area Health Insurance Estimates

Primary Care Physician (PCP) Ratio

Access to care requires not only financial coverage, but also access to providers. While high rates of specialist physicians have been shown to be associated with higher (and perhaps unnecessary) utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care (County Health Rankings, 2018). 'Primary Care Physicians' is the ratio of the population to total primary care physicians and include non-federal, practicing physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. In 2015, the most recent data available, the primary care provider ratio of 920:1 was the second lowest in the last five years in Putnam County and significantly lower than the ratio in either West Virginia or the U.S. Putnam County is geographically located between two of the largest cities in the state as well as having good resources for primary care in the county.

Table 4. PCP Ratio for 2011 to 2015 in Putnam County, West Virginia, and the U.S.

Year	Putnam County	West Virginia	U.S.
2011	1018:1	1,306:1	1,051:1
2012	941:1	1,299:1	1,045:1
2013	930:1	1,290:1	1,040:1
2014	900:1	1,290:1	1,040:1
2015	920:1	1,270:1	1,030:1

Data Source: Area Health Resource File/American Medical Association

Other Primary Care Providers

Physicians are not the only providers of primary health care, and other healthcare professionals such as nurse practitioners (NPs) and physician assistants (PAs) serve as sources of routine, preventive care. This segment of the healthcare workforce is expected to grow more rapidly than physician supply, this is another indicator that is important to consider with regard to access to healthcare services. 'Other Primary Care Providers' is the ratio of the county population to the number of other primary care providers, taking into consideration NPs, PAs, and clinical nurse specialists. For the period of 2013 to 2017 the ratio of 'other primary care providers' has decreased from 2,687:1 to 2.278:1 in Putnam County but remains much higher than the rate for WV which is only 796:1.

Table 5. Other Primary Care Provider Ratio for 2013 to 2017 in Putnam County and West Virginia.

Year	Putnam County	West Virginia
2013	2,687:1	1,097:1
2014	3,147:1	1,047:1
2015	2,839:1	958:1
2016	2,186:1	868:1
2017	2,278:1	796:1

Data Source: CMS, National Provider Identification

Mental Health Provider Ratio

It is estimated that 30% of the population in WV lives in a county designated as a Mental Health Professional Shortage Area (County Health Rankings, 2018). In addition to increasing access to primary care, the Affordable Care Act was also created to increase coverage for mental health services. However, significant workforce shortages continue to present significant challenges in accessing mental health services, especially in rural, Appalachian states such as West Virginia. Mental Health Providers is defined as the ratio of the county population to the number of mental health providers and includes psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers that treat alcohol and other drug abuse, and advanced practice nurses specializing in mental health care. In 2015, marriage and family therapists and mental health providers that treat alcohol and other drug abuse were added to this measure. Given that Putnam County is located in WV, which is known as 'ground zero' of the nation's heroin epidemic, this indicator is especially critical in considering access to care for those with substance use disorders.

For the period of 2013 to 2017 the mental health provider ratio has seen a consistent decrease from 1,820:1 to 1,350:1. The mental health provider ratio in Putnam County continues to be higher than the rate for WV or top U.S. performers with ratios as low as 330:1. A key finding of the 'Putnam County 2018 Key Stakeholder Survey' was the need for mental health services. In that report, 57% of respondents identified those with mental health needs as the second greatest population with unmet need, 77% identified drug use (illicit drugs) as a health risk/risky behavior, and 90% identified lack of access to mental health and/or addiction services as a significant or highly significant barrier to care.

Table 6. Mental Health Provider Ratio for 2013 to 2017 in Putnam County, West Virginia, and U.S.

Year	Putnam County	West Virginia	Top U.S. Performers
2013	1,820:1	1,291:1	521:1
2014	1,717:1	1,091:1	412:1
2015	1,620:1	1,030:1	390:1
2016	1,320:1	950:1	360:1
2017	1,360:1	890:1	330:1

Data Source: CMS, National Provider Identification

Dentist Ratio

It has been well established that untreated dental disease can lead to serious health effects including pain, infection, and tooth loss. Although lack of sufficient providers is only one barrier to accessing oral health care, much of the country, especially West Virginia as the only state entirely located in central Appalachia, suffers from significant shortage in dental providers. Dentists are measured as the direct ratio of the county population to total dentists in the county. The dentist provider ratio has remained fairly consistent over the past five years with 2017 ratio reported as 2,280:1 (Table 7). This remains above that of WV or top U.S. performers. A consistent key finding of local public health system partners on the '2018 Key Informant Survey' was 66% identifying lack of access to dental services as a significant or highly significant barrier in Putnam County.

Table 7. Dentist Ratio for 2012 to 2016 in Putnam County, West Virginia, and U.S.

Year	Putnam County	West Virginia	Top U.S. Performers
2012	2,268:1	2,130:1	1,392:1
2013	2,266:1	2,065:1	1,377:1
2014	2,370:1	2,030:1	1,340:1
2015	2,270:1	1,960:1	1,320:1
2016	2,280:1	1,920:1	1,280:1

Data Source: Area Health Resource File/National Provider Identification file

Preventable Hospital Stays

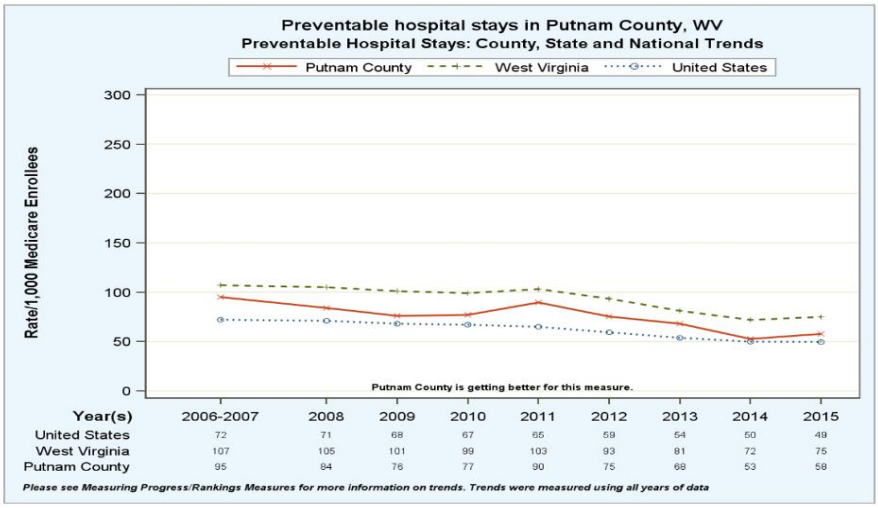
When individuals are hospitalized for health issues that could be treated in an outpatient setting, it is suggested that quality and/or access to health care services may be improved. In addition, this indicator is used to assess overuse of hospitals as a main source of care instead of establishing medical homes and stable primary care and supportive healthcare services in an ongoing manner to prevent such hospitalizations. Preventable Hospital Stays is the hospital discharge age-adjusted rate for ambulatory care-sensitive conditions per 1,000 fee-for-service Medicare enrollees. Conditions included in calculating this measure include what are known as 'ambulatory care-sensitive conditions' of angina (chest pain), asthma, bacterial pneumonia, cellulitis, chronic obstructive pulmonary disease, convulsions, dehydration, diabetes, heart failure, gastroenteritis, and kidney/urinary tract infections. Putnam County has seen a consistent decrease in 'preventable hospital stays' per 1,000 Medicare enrollees from a rate of 90 in 2011 to 53 in 2014, and a slight increase to a rate of 58 in 2015 (Table 8). While Putnam County remains well below the State rate consistently, the County also remains well above the most favorable U.S. rates for this measure. Of additional note with this measure related to access to care is that: 1) as it uses Medicare claims data, this limits the population which is evaluated to being primarily 65 years of age and older; and 2) does not appropriately reflect preventable hospitalizations associated with other conditions such as opioid use disorder. Given the significant opioid crisis that exists in West Virginia, with known associated hospitalizations due to secondary complications and sequalae related to opioid use disorder (i.e. wound infections, cardiac diseases, this is an important consideration. Finally, understanding and monitoring of the significant decrease in number of Medicare enrollees is noteworthy.

Table 8. Preventable Hospital Stays for 2011 to 2015 in Putnam County, West Virginia, and U.S.

Year	Putnam County	Putnam # Medicare Enrollees	West Virginia	Top U.S. Performers
2011	90	5,248	103	46
2012	75	5,340	93	41
2013	68	5,414	83	38
2014	53	5,515	72	36
2015	58	4,201	75	35

Data Source: Dartmouth Atlas of Health Care

Figure 12. Preventable Hospital Stays for 2011 to 2015 in Putnam County, West Virginia, and U.S.



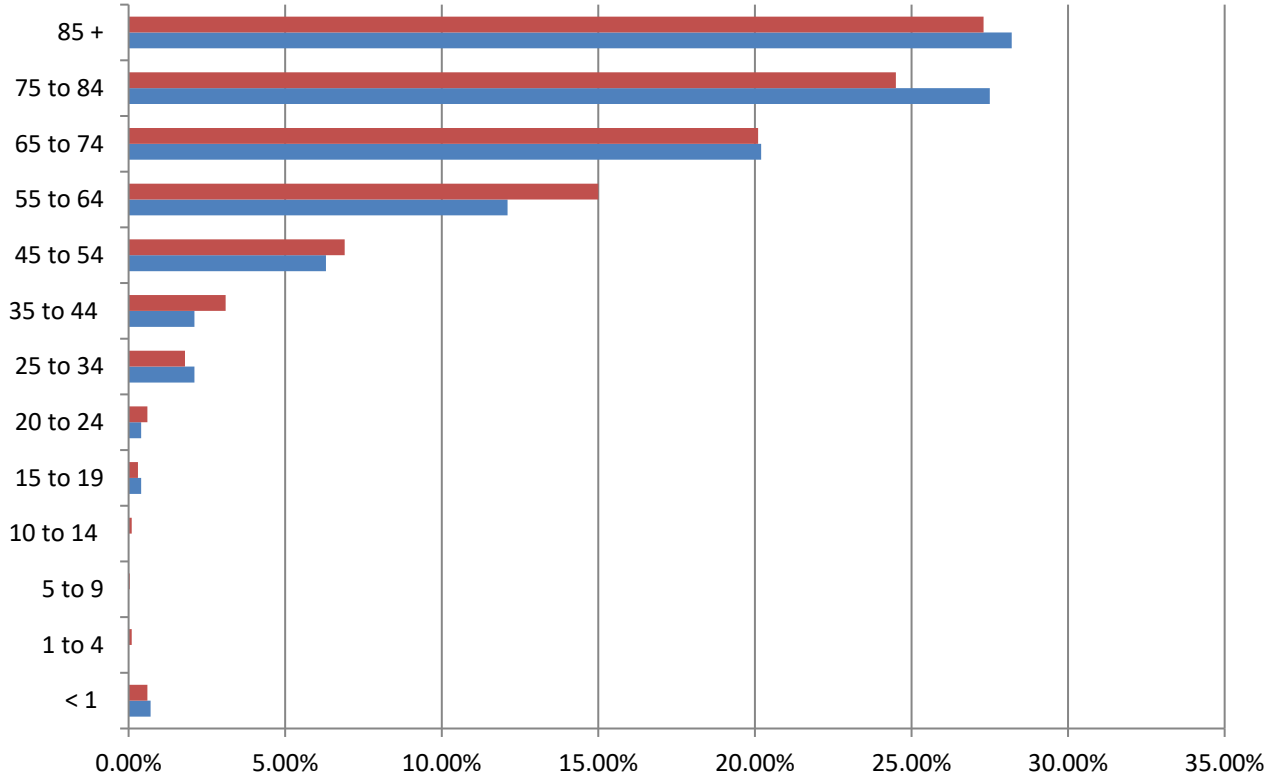
Data Source: Dartmouth Atlas of Health Care

CAUSES OF DEATH

Much of the data in this section compares Putnam County's mortality rates to those for the state of West Virginia and the U.S. All data presented in this section, unless otherwise noted, is from the 2014 West Virginia Vital Statistics Report, representing the most recent data available. Unless otherwise noted, all mortality rates in this section are age-adjusted deaths per 100,000 people. Age-adjusted mortality rates provide rates of death while controlling for changes in the age distribution over time. Age-adjustment also affords comparison of death rates among communities with different age distributions.

This section details information related to deaths occurring in Putnam County in 2015. The percent of deaths occurring in Putnam County in 2015 were significantly higher for individuals age 75 and older as compared to West Virginia overall (a positive finding). More specifically, and significantly, 55.7% of all deaths in Putnam County in 2015 occurred in the age 75 and older age group, as compared to only 51.8% for West Virginia. The percentage of deaths is comparable between Putnam County and WV for 65-74 years. In almost all other groups the percentage of death is lower in Putnam County than West Virginia, except the age group of 25-34 year where it is slightly higher.

Figure 13. Percentage of deaths by age for Putnam County (blue) and West Virginia (red), 2015.



Source: WV Vital Statistics Report

Ranked Causes of Death

Ranking the leading causes of death is one way of tracking those conditions that affect the population the most at any moment in time. Although cause-of-death is only one indicator of the health status of a given population, it is the most significant and severe indicator, and is therefore included in considering health priorities. Leading causes of death, and leading morbidities, vary by multiple factors, including age, race/ethnicity, gender, income, geographic location and access to healthcare resources.

The leading causes of death for Putnam County were examined and for 2015 were: (1) Malignant neoplasms, (2) Diseases of the Heart, (3) Accidents, (4) Dementia, (5) Chronic Lower Respiratory Disease, (6) Stroke, (7) Alzheimer's, (8) Influenza/Pneumonia, (9) Diabetes, and (10) Lung Disease Due to External Causes (Table 3). This 'order; for leading cause of deaths is comparable to that for West Virginia however it should be noted that the following rates for dementia, Alzheimer's and influenza/pneumonia are significantly higher in Putnam County than for WV.

Table 9. Top 10 Leading Causes of Death, Putnam County, West Virginia, and U.S., 2015

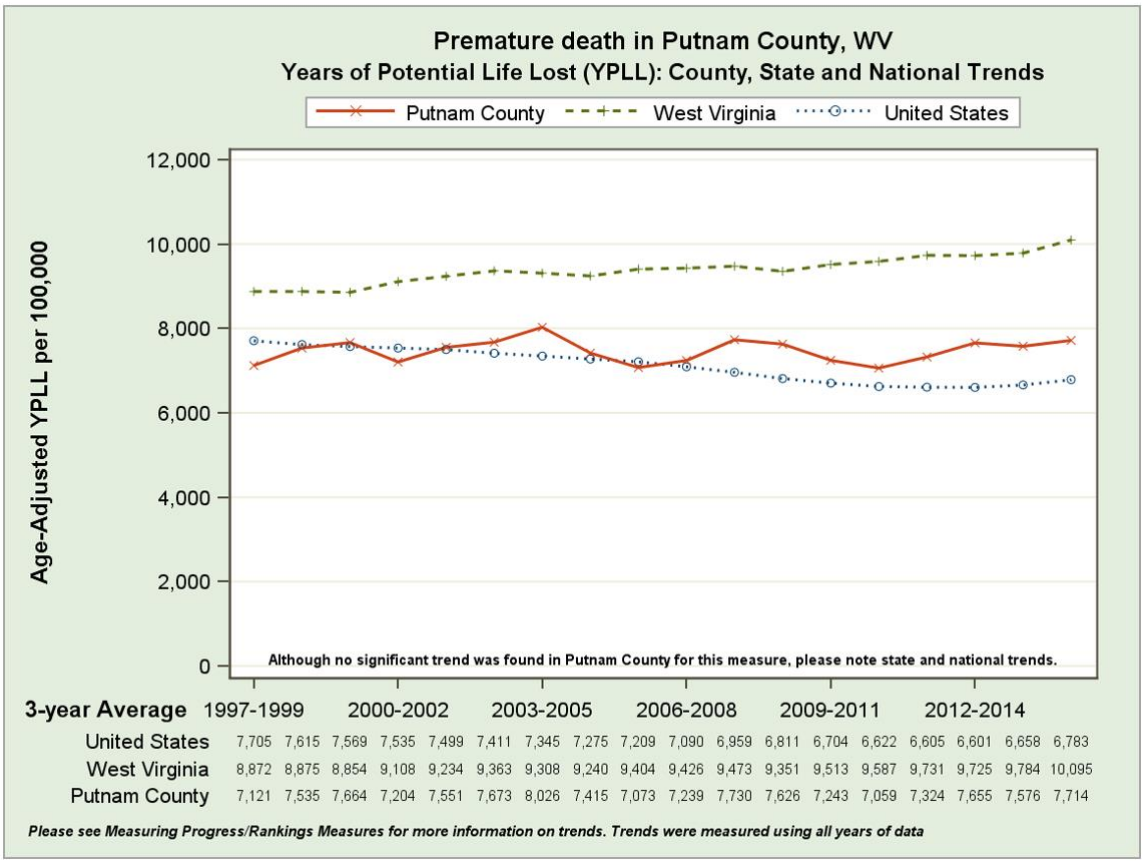
Rank	Putnam County		West Virginia		U.S.*	
1	Malignant neoplasms	218.1	Malignant neoplasm	261.3	Diseases of the heart	185.4
2	Diseases of the heart	179.4	Diseases of the heart	255.1	Malignant neoplasms	197.2
3	Accidents	75.6	Chr. lower resp. dx	88.1	Chr. lower resp. dx	48.2
4	Dementia	65.1	Accidents	82.3	Stroke	45.6
5	Ch Lower Resp	59.8	Stroke	58.0	Accidents	43.7
6	Stoke	58.0	Dementia	51.7	Alzheimer's	37.7
7	Alzheimer's	52.8	Diabetes	42.5	Diabetes	24.7
8	Influenza/Pneu	36.9	Alzheimer's Disease	40.0	Influenza/Pneumonia	34.4
9	Diabetes	24.6	Influenza/Pneumonia	28.4	Nephritis/Nephrosis	17.8
10	Pneumoconiosis	17.6	Nephritis/Nephrosis	27.5	Septicemia	15.5

Source: 2015 West Virginia Vital Statistics Report.
*Dementia not available for U.S.

Life Expectancy. Average Age at Death, and Premature Death

Life expectancy is defined as the age from birth that individuals are expected to survive. Between 2000 and 2007, life expectancy in more than 80% of United States counties fell in standing against the average of the 10 nations with the best life expectancies in the world. In Putnam County, life expectancy for females is 77.4 years of age, which is comparable to the U.S. life expectancy rate of 77.9 years. The average age at death in Putnam County was 73.4 years in 2015 as compared to 72.2 years for West Virginia. Figure 14 depicts the Years of Potential Life Lost for Putnam County, WV, and the U.S.

Figure 14. Years of Potential Life Lost, Putnam County, WV, US, 1997.2014

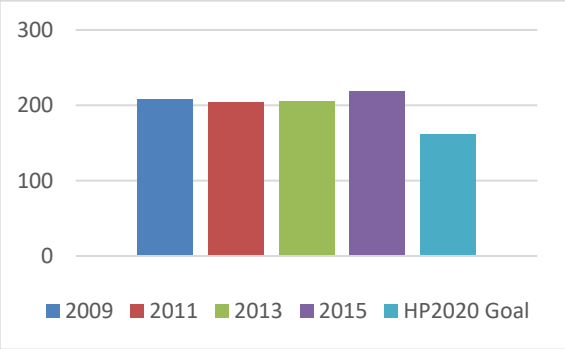


Source: National Center for Health Statistics - Mortality Files

1. Malignant Neoplasms (Cancers)

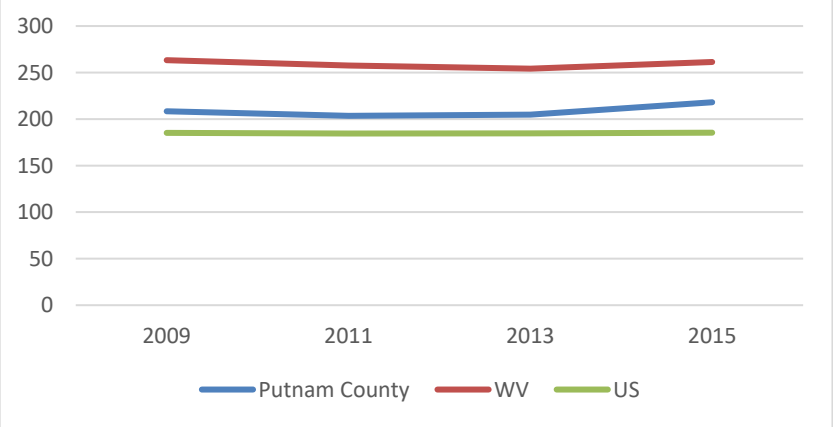
Cancer is now the leading cause of death in Putnam County and West Virginia, a change which occurred in 2013. Prior to this time diseases of the heart was the leading cause of death. Deaths due to cancer accounted for about 21% of deaths in the County as compared to 21.3% of deaths in the state and 22% in the U.S. in 2015. While the 5-year relative survival rate for cancer has improved, the mortality rate associated with cancer continues to increase. With an age-adjusted death rate of 218.1, Putnam County has a lower cancer mortality rate than West Virginia (261.3) but higher than the U.S. (185.4) (Figure 15). Death rates due to cancer have continually increased in Putnam County from 2009 (208.4) to 2015 (218.1). The most notable increase in the past ten years occurred between 2013 (204.8) and 2015 (218.1). **The overall age-adjusted rate of deaths due to cancer established by Healthy People 2020 as a goal for all counties is 161.4 per 100,000.** Cancers having the highest age-adjusted mortality rates in 2015 (reported in 2018) include (trachea, bronchus, lung rate (67.8), pancreas (32.4), colon (23.6), breast (17.7) and prostate (11.8).

Figure 15. Age-adjusted death rates due to cancer, 2009, 2011, 2013, 2015, and HP2020 Goal.



Source: WV Center for Health Statistics, Vital Statistics Reports

Figure 16. Age-adjusted death rates due to cancer, 2009, 2011, 2013, 2015, Putnam County, WV,

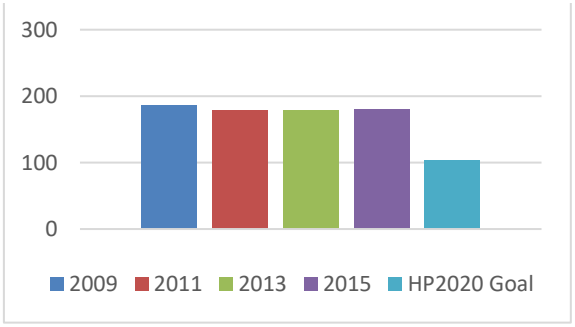


Source: WV Center for Health Statistics, Vital Statistics Reports

2. Diseases of the Heart

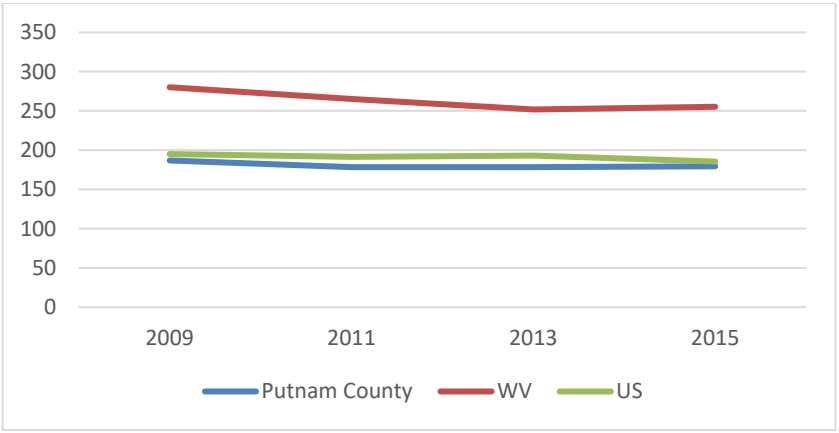
Heart disease, including ischemic heart disease, is the now the second leading cause of death for West Virginians, including residents of Putnam County; however, it remains the leading cause of death for Americans overall. The 2015 age-adjusted rate of death due to diseases of the heart in Putnam County of 179.4 is significantly lower than the rate for West Virginia (255.1) and similar to the U.S. (185.4). The rate of 179.4 is the lowest rate seen in Putnam County in the past ten years with a trend of continual slight decrease; however it has also remained relatively stable with a decrease only from 186.8 to 179.4 in the past decade. **The overall age-adjusted rate of deaths due to heart disease established by Healthy People 2020 as a goal for all counties is 103.4 per 100,000.**

Figure 17. Age-adjusted death rate due to diseases of the heart, 2009, 2011, 2013, 2015, HP2020 Goal.



Source: WV Center for Health Statistics, Vital Statistics Reports

Figure 18. Age adjusted death rates due to diseases of the heart, 2009, 2011, 2013, 2015, Putnam County, WV, US.

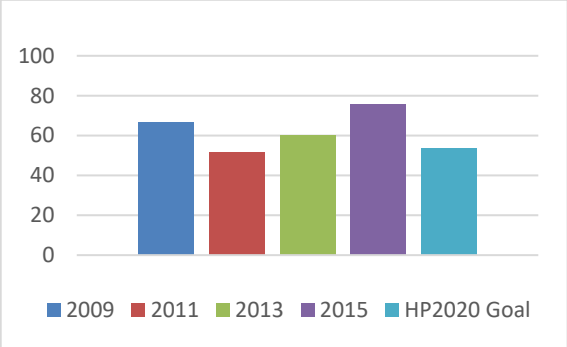


Source: WV Center for Health Statistics, Vital Statistics Reports

3. Accidents

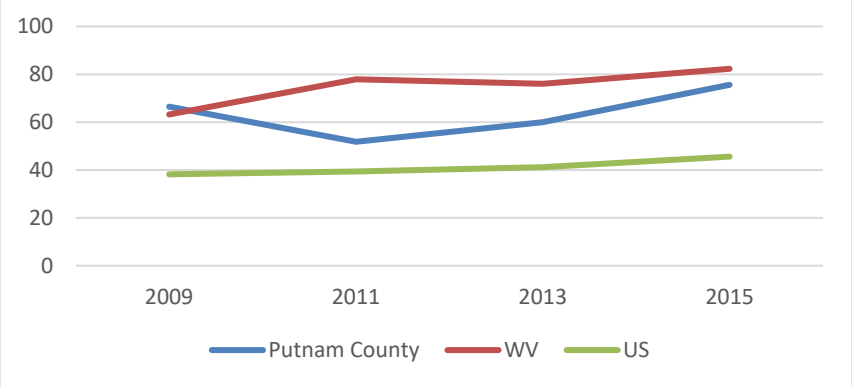
The mortality rate for accidents includes unintentional accidents that result in death, including but not limited to falls, poisoning, burns, firearm discharges, and drowning. Deaths due to accidents are the third leading cause of death in Putnam County as compared to being the fourth leading cause of death in WV and fifth leading cause of death in the U.S. Rates of death due to accidents have varied over the past ten years (Figure 19). The rate of 75.6 in 2015 is the highest rate in the past ten years and while it remains lower than the WV rate of 82.3 it remains much higher than the rate for the U.S. which in 2015 was 45.6 (Figure 20). **The overall age-adjusted rate of fatal injuries established by Healthy People 2020 as a goal for all counties is 53.7 per 100,000.**

Figure 19. Age-adjusted death rate due to accidents, Putnam County, 2009, 2011, 2013, 2015



Source: WV Center for Health Statistics, Vital Statistics Reports

Figure 20. Age adjusted death rate due to accidents, 2009, 2011, 2013, 2015, Putnam County, WV, U.S.

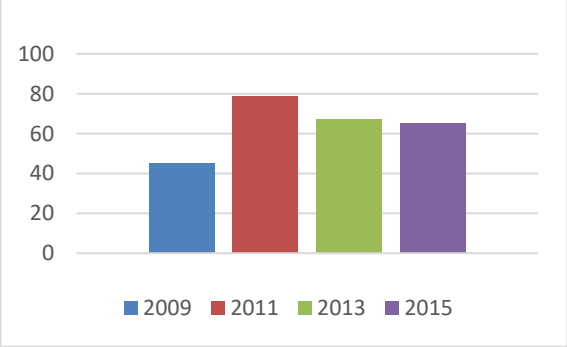


Source: WV Center for Health Statistics, Vital Statistics Reports

4. Dementia

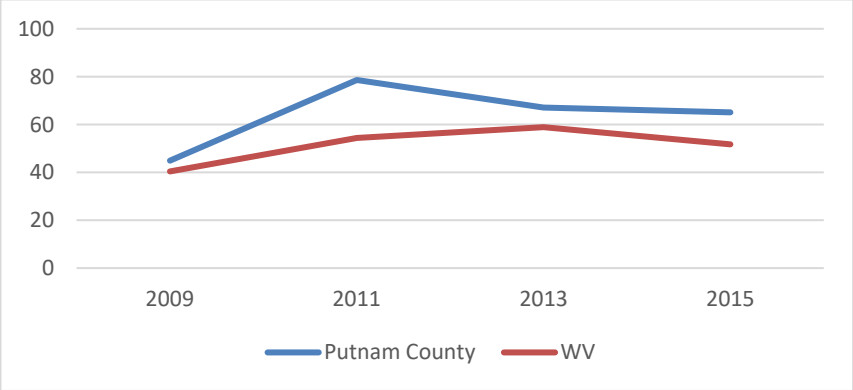
Dementia is a progressive and incurable disease characterized by memory loss and impaired intellectual functioning. Slowly, the symptoms result in an adult's inability to complete daily tasks of living and function independently. In 2015, dementia was the 4th leading cause of death in Putnam County. As demonstrated in Figure 21 below, the rate of deaths due to dementia increased significantly from 2009 (44.9) to 2011 (78.4). Rates for the past decade have been higher in Putnam County than in WV, and when report for the U.S. in 2015 are significantly higher in the county (Figure 22).

Figure 21. Age-adjusted death rate due to dementia, Putnam County, 2009, 2011, 2013, 2015.



Source: WV Center for Health Statistics, Vital Statistics Reports

Figure 22. Age adjusted dementia death rate, 2009, 2011, 2013, 2015, Putnam County, WV (dementia not in top ten for U.S. until 2015 and rate was reported to be 37.7 in 2015).

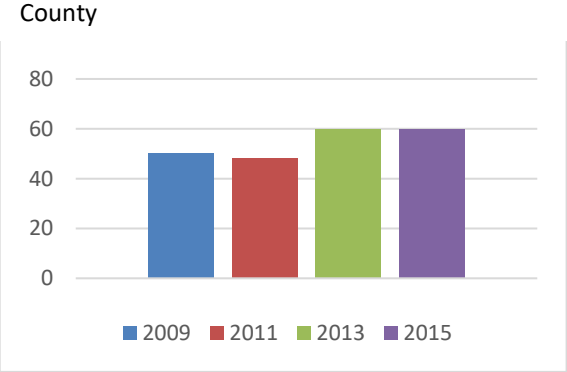


Source: WV Center for Health Statistics, s Vital Statistics Report

5. Chronic Lower Respiratory Disease

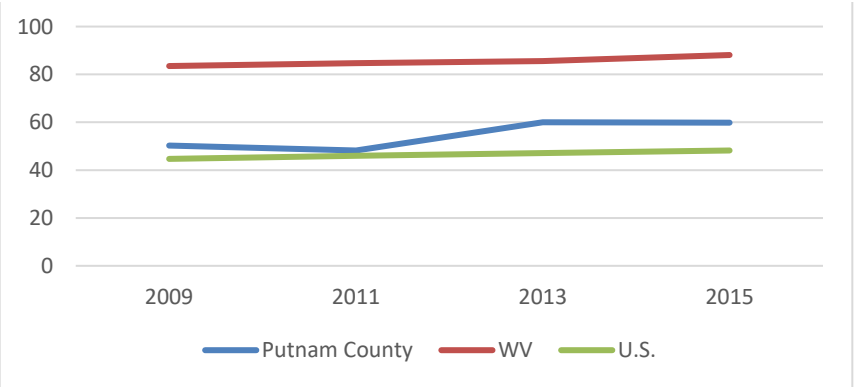
Chronic lower respiratory disease includes chronic bronchitis, asthma, emphysema, and other chronic lower respiratory diseases. Based on the 2015 WV Vital Statistics Report, deaths due to chronic lower respiratory disease in 2015 (59.8) have increased in the past three years. Overall, the 2015 rate in Putnam County is significantly lower than the rate in West Virginia, but since 2011 has been higher than the U.S. rate of 46 (Figure 24).

Figure 23. Age-adjusted death rate due to chronic lower respiratory disease, 2009, 2011, 2013, 2015, Putnam County



Source: WV Center for Health Statistics, Vital Statistics Reports

Figure 24. Adjusted chronic lower respiratory disease death rate, 2009, 2011, 2013, 2015, Putnam County, WV, US.

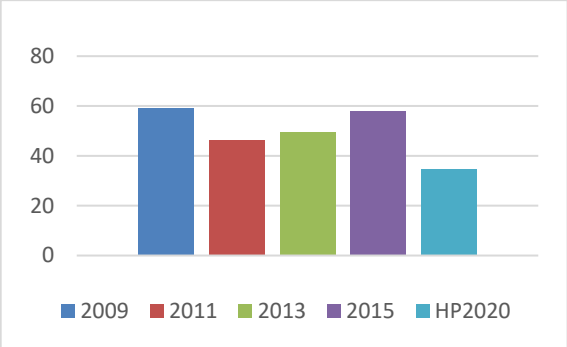


Source: WV Center for Health Statistics, Vital Statistics Reports

6. Stroke

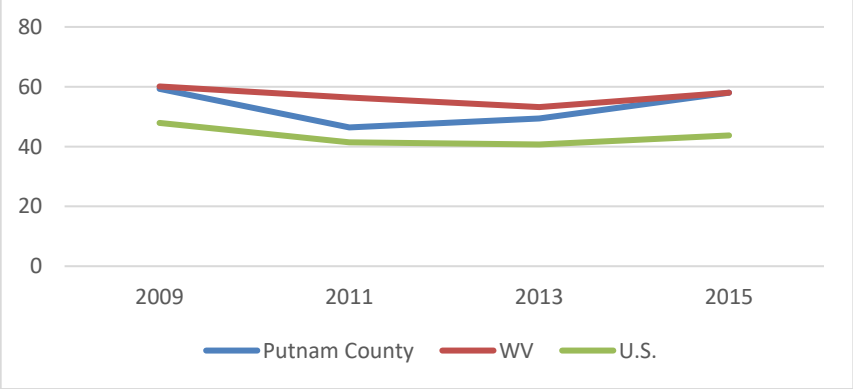
Over the past decade, Putnam County has seen a rate of deaths due to stroke ranging from 46.4 (2011) to 58.0 (2015) (Figure 25). The current rate of deaths due to stroke (2015) of 58.0 is equivalent to the state rate, but remains much higher than the rate for the U.S. of 43.7 (Figure 26). **The Healthy People 2020 goal is to reduce deaths due to stroke to a rate of 34.8 deaths per 100,000 population.**

Figure 25. Age-adjusted death rate due to stroke, 2009, 2011, 2013, 2015, Putnam County



Source: WV Center for Health Statistics, Vital Statistics

Figure 26. Adjusted stroke death rate, 2009, 2011, 2013, 2015, Putnam County, WV, US.

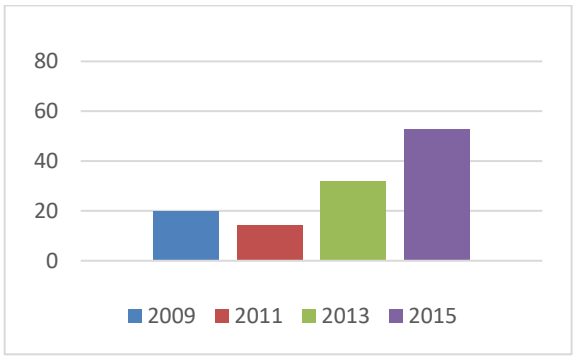


Source: WV Center for Health Statistics, Vital Statistics Reports

7. Alzheimer's

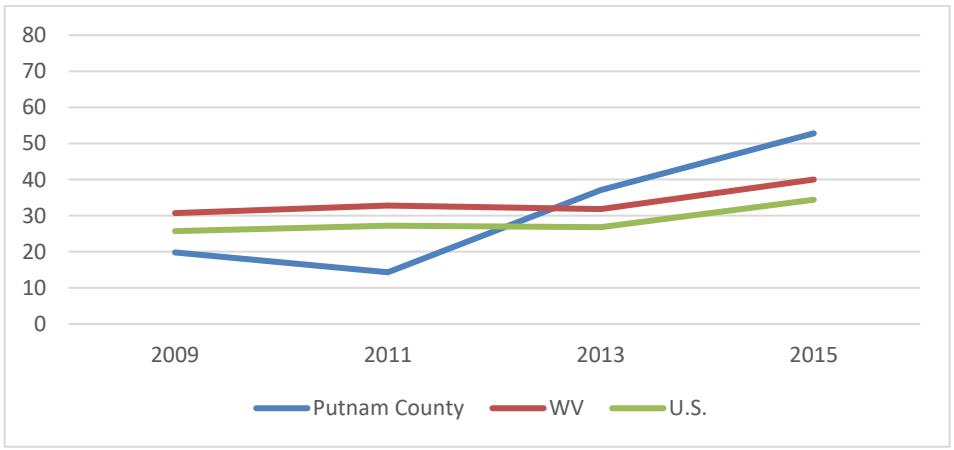
Alzheimer's disease is the most common form of dementia, accounting for the majority of all diagnosed cases and is reported separately from dementia as a cause of death in WV. In 2015, Alzheimer's disease was the 6th leading cause of death among adults aged 18 years and older based on death certificate data. The estimated total cost for health care, long-term care, and hospice for persons with Alzheimer's disease and other dementias is estimated to be $236 billion for 2016. Over the past decade, Putnam County has seen a rate of increase in deaths due to Alzheimer's from 19.8 in 2009 to 52.8 in 2015. Deaths due to Alzheimer's in Putnam County are significantly higher than the rate for WV or the U.S. This is the largest increase and change in causes of death in Putnam County in 2015.

Figure 27. Age-adjusted death rate due to stroke, 2009, 2011, 2013, 2015, Putnam County



Source: WV Center for Health Statistics, Vital Statistics

Figure 28. Adjusted stroke death rate, 2009, 2011, 2013, 2015, Putnam County, WV, US.

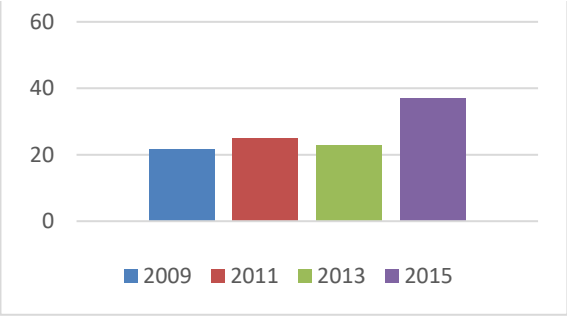


Source: WV Center for Health Statistics, Vital Statistics Reports

8. Influenza/Pneumonia

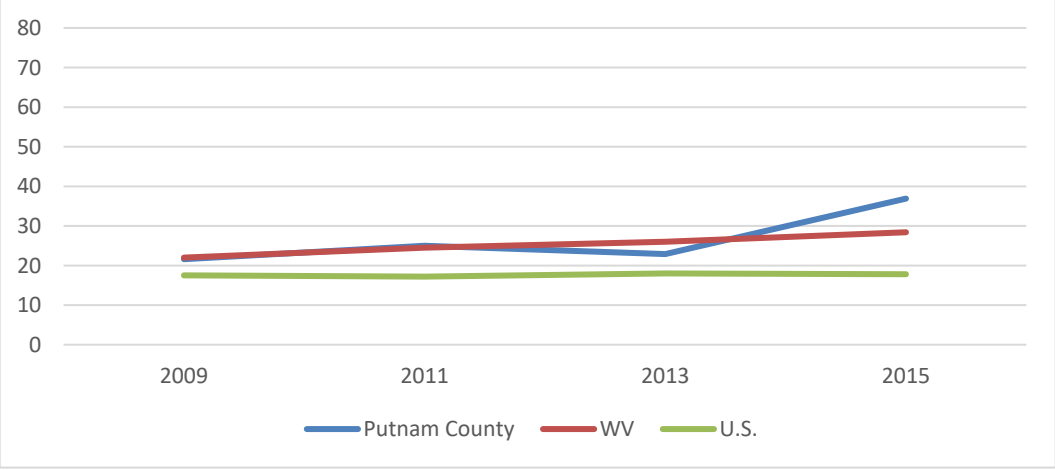
Influenza (also called 'flu') is a highly contagious viral infection of the respiratory passages causing fever, severe aching, etc. and often occurring in epidemics and cause serious complications such as pneumonia. Seasonal flu is a serious disease that causes illness, hospitalizations, and deaths every year in the United States. Seasonal influenza-related deaths are deaths that occur in people for whom seasonal influenza infection was likely a contributor to the cause of death, but not necessarily the primary cause of death. The CDC feels it is important to convey the full burden of seasonal flu to the public. In Putnam County, influenza/pneumonia is the eighth leading cause of death in 2015. Over the past ten years, rates of influenza/pneumonia have remained relatively stable until a reported increased rate to 36.9 in 2015. Rates for the state and U.S. have remained relatively stable over the past decade.

Figure 29. Age-adjusted death rate due to influenza/pneumonia, Putnam County, 2009, 2011, 2013, 2015.



Source: WV Center for Health Statistics, Vital Statistics Reports

Figure 30. Age adjusted death rate due to influenza/pneumonia, 2009, 2011, 2013, 2015, Putnam County, WV, U.S.

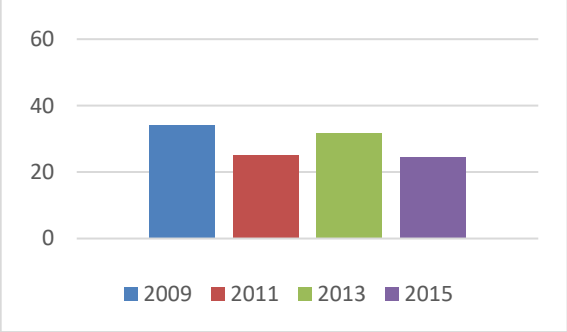


Source: WV Center for Health Statistics, Vital Statistics Reports

9. Diabetes

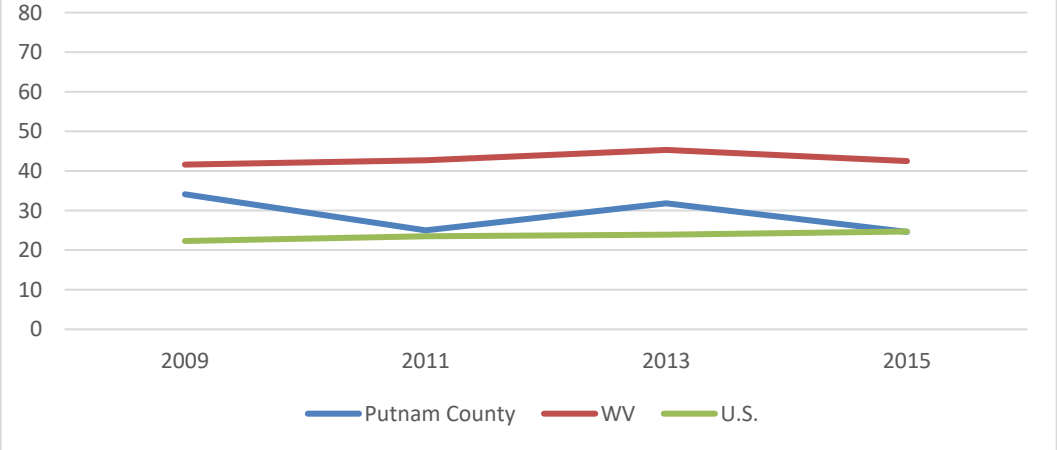
Diabetes is not only a risk factor for many other co-morbidities, physical complications, and illnesses, it is the 9th leading causes of death in Putnam County. Diabetes is a chronic illness marked by resistance to insulin, insulin deficits, or both, causing high blood sugar levels. The number of deaths due to diabetes in the U.S> has remained steady. In Putnam County, the rate of deaths due to diabetes fell in 2011 and has seen a greater degree of fluctuation until 2012, and a decreased noted from 2013 to 2015 (Figures 31 and 32).

Figure 31. Age-adjusted death rate due to diabetes, Putnam County, 2009, 2011, 2013, 2015.



Source: WV Center for Health Statistics, Vital Statistics Reports

Figure 32. Age adjusted diabetes disease death rate, 2009, 2011, 2013, 2015, Putnam County, WV, US.

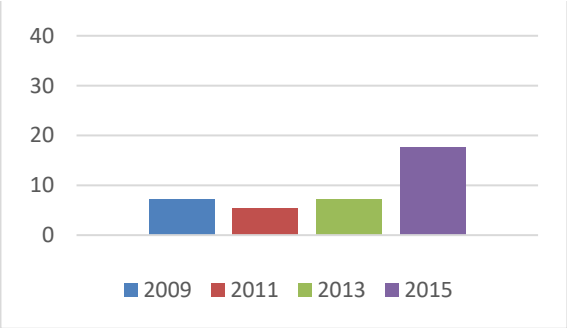


Source: WV Center for Health Statistics, Vital Statistics Reports

10. Lung Disease due to External Agents

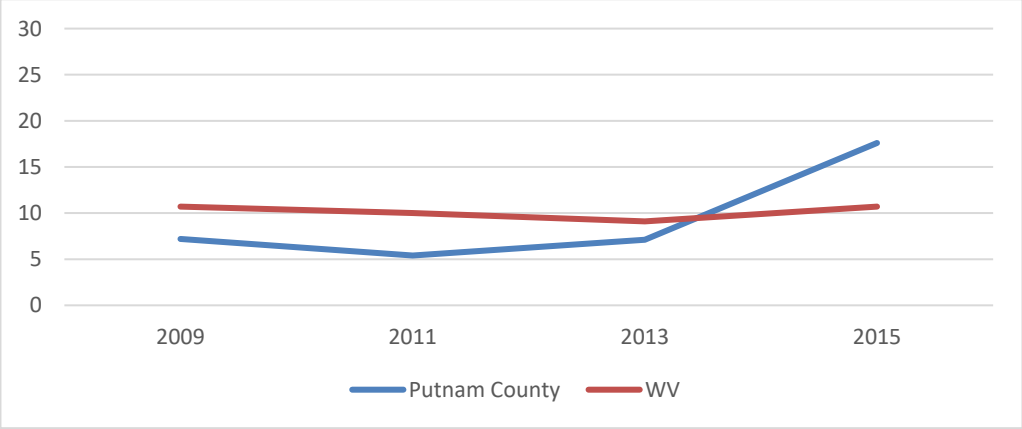
Over the past decade, Putnam County has seen the rate of deaths due to lung disease from external agents increase from 6.5 in 2014 to 17.6 in 2015 (Figure 33). The current rate of deaths due to stroke (2015) of 17.6 is significantly higher than the state rate (Figure 34). Deaths due to lung disease from external agents is currently in the top ten leading cause of deaths for Putnam County, however, does not appear in the top ten cuses of death for WV or the U.S.

Figure 33. Age-adjusted death rate due to lung disease from external agents, 2009, 2011, 2013, 2015,Putnam County



Source: WV Center for Health Statistics, Vital Statistics Reports

Figure 34. Age adjusted death rate due to lung disease from external agents, 2009, 2011, 2013, 2015, Putnam County, WV, US.



Source: WV Center for Health Statistics, Vital Statistics Reports

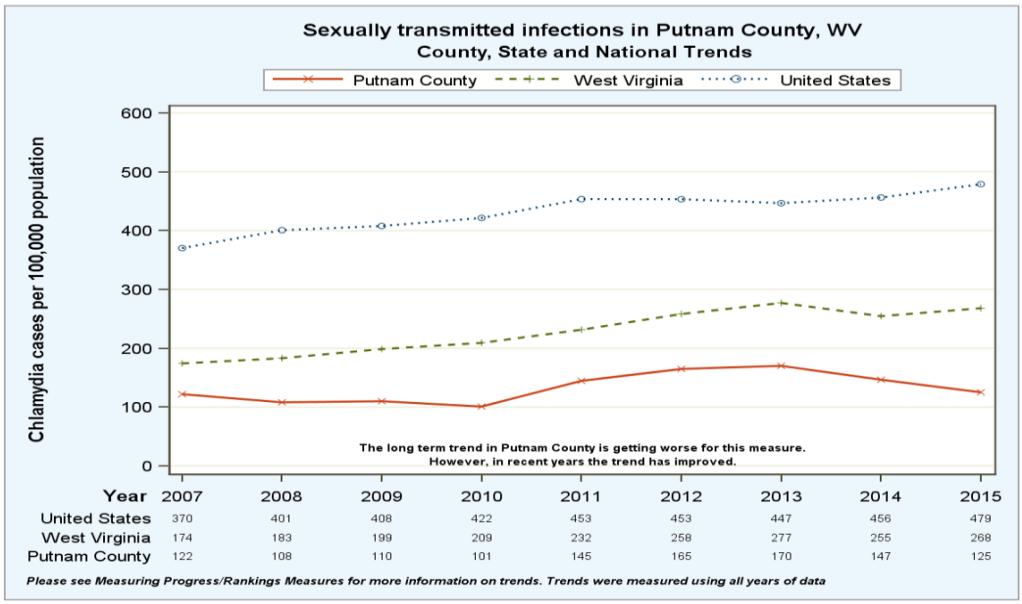
COMMUNICABLE DISEASE

According to the CDC, the cost of sexually transmitted infections (STIs) to the U.S. health care system is estimated to be as much as $15.9 billion annually. Sexually transmitted diseases (STDs) that are left untreated can lead to serious long-term health consequences and are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, infertility, and premature death. The CDC estimates that undiagnosed and untreated STDs cause at a minimum, 24,000 women in the U.S. to become infertile. STIs also have a high economic burden on society. The direct medical costs of managing sexually transmitted infections and their complications in the US, for example, was approximately 15.6 billion dollars in 2008

Chlamydia

Chlamydia is the most common bacterial STI in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain and is the most proliferous of the reportable sexually transmitted diseases (STDs) in West Virginia with 4,128 infections (222.8 population rate per 100,000) in 2017, showing a decrease of 12.4% from 4,718 cases (254.6 population rate per 100,000) in 2016. Chlamydia is seen most often among the 15 to 29 year-old age group which accounts for 70.1% (N=2,895) of all reported cases. The greatest disparity is seen among the African American race at 1,116.8 (N=705) by population rate per 100,000, followed by Native Hawaiian/Pacific Islanders with a population rate of 467.3 (N=2), while Caucasians make up the greatest percentage of cases at 64% (N=2,653). For the period of 2011 to 2015, chlamydia rates in Putnam County demonstrated an increase from 2011 to 2013 and then decreased increased in 2014 and 2015 to the lowest in the past five years (Figure 35).

Figure 35. Number of newly diagnosed chlamydia cases per 100,000 population, Putnam County, 2011-2015

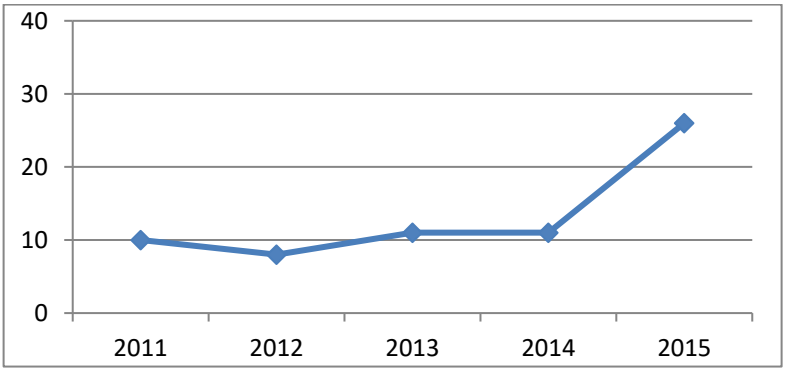


Source: National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

Gonorrhea

Gonorrhea has the second highest incidence of STDs in West Virginia with 1,301 reported cases in 2017, an increase of 38.2% from 2016 (N=941). Gonorrhea infection is most prevalent among 15 to 29 year-old females (N=432, 33%) and 20 to 34 year-old-males (N=412, 32%). Disparity is greater among the African American race at 692.3 (N=437, 34%) by population rate per 100,000. Just like chlamydia, gonorrhea can cause infertility issues in women if left untreated. The number of cases of gonorrhea in Putnam County, for the period 2011 to 2015, ranged from 9 to 26 with a notable increase noted from 11 (2014 to 26 (2015) which was the 9th highest rate of all counties for that year (Figure 38).

Figure 36. Number of gonorrhea cases, Putnam County, 2011-2015

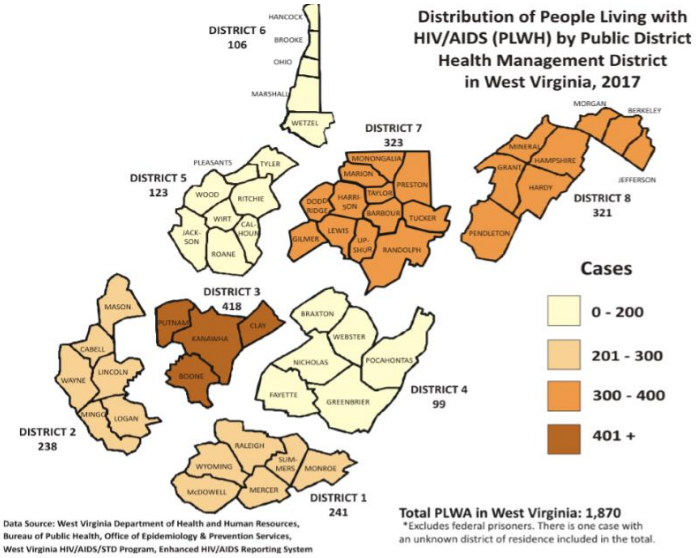


Source: WV Center for Health Statistics, Vital

HIV/AIDS

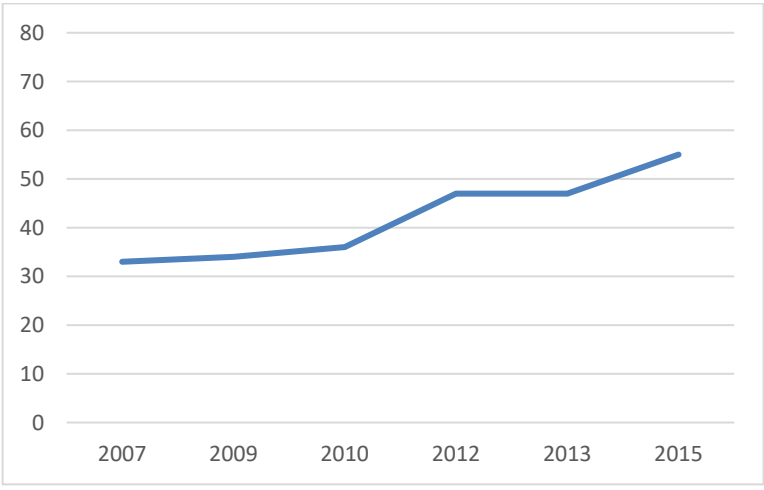
Below is the most recent data available from the West Virginia Bureau for Public Health by county, and depicting the prevalence of HIV/AIDS in Putnam County as of 2017. Given increasing rates of some other infectious diseases such as Hepatitis (not reported here), analysis of HIV/AIDS trends must continue to be evaluated in an ongoing manner. Among West Virginia counties, Putnam County is located in one of two regions with the next to the highest rates of HIV/AIDS (Figure 37). Based on data reported by the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, HIV prevalence rates at the county level for Putnam County from 2007 to 2015 have increased from a rate of 33 per 100,000 to 55 per 100,000, respectively.

Figure 37. HIV/AIDS prevalence by District, West Virginia, 2017.



Source: WV Center for Health Statistics, Vital Statistics

Figure 38. HIV prevalence rates for Putnam County, 2007-2015



Source: National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

CHRONIC DISEASE PREVALENCE

Many chronic diseases examined as part of previous assessments have historically revealed prevalence rates lower in Putnam County than in West Virginia, but higher than U.S. rates. Each of the chronic disease risk factors, as identified in primary data collection as part of the West Virginia Behavioral Risk Factor Surveillance Survey (WV BRFSS), are presented below with the most current available data for 2011-2015 and reported in 2018 by the West Virginia Bureau for Public Health. The percentage of the population indicating a prevalence for arthritis, asthma, cancer, cardiovascular disease, depression, diabetes, hypertension, obesity, and obesity/overweight are notably lower than for West Virginia, higher than reported for the U.S. (Table 4).

Table 10. Chronic Disease Prevalence in Putnam County, WV, US, 2011-2015.

Indicator (2011-2015)	Putnam County	WV County Ranking	West Virginia	United States
Arthritis	35.5%	40	39.0%	24.7%
Asthma	8.10%	45	15.1%	13.8%
Cancer	12.8%	39	14.1%	11.3%
Cardiovascular Disease	11.7%	41	14.0%	8.4%
Depression	22.1%	26	23.1%	17.6%
Diabetes	11.1%	47	14.5%	10.5%
Hypertension	41.1%	19	42.7%	32.0%
Obese	32.9%	44	35.6%	28.9%
Obese or Overweight	72.0%	18	71.1%	64.6%

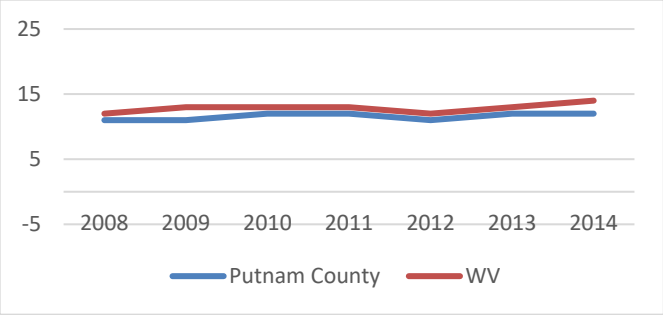
Source: WV Center for Health Statistics, Vital Statistics

Adult Diabetes

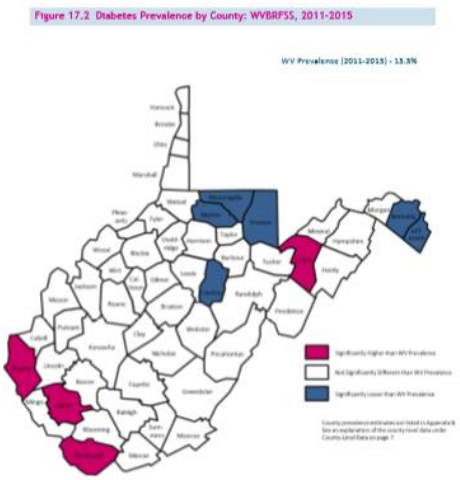
Diabetes affects an estimated 23.6 million people in the U.S. and is the 7th leading cause of death nationally. In Putnam County, diabetes is the 9th leading cause of death. Diabetes lowers life expectancy by up to 15 years and increases the risk of heart disease by 2 to 4 times. Diabetes is the leading cause of kidney failure, lower limb amputations, and adult-onset blindness. In addition to these human costs, the estimated total financial cost of diabetes in the United States in 2007 was $174 billion, which includes the costs of medical care, disability, and premature death, and has only increased since. Diabetes prevalence is the prevalence of diagnosed diabetes in a given county. Respondents were considered to have diagnosed diabetes if they responded "yes" to the question, "Has a doctor ever told you that you have diabetes?" Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes. In Putnam County, for 2009 to 2014 as part of the CDC Diabetes Interactive Atlas, the percentage of the population responding yes to the question “has a doctor, nurse, or other health professional ever told you that you have diabetes” has consistently been 11-12% since 2009 and has remained just below the state percentage of 12-14% (Figure 39).

Regular HbA1c monitoring among diabetic patients is considered the standard of care. It helps assess the management of diabetes over the long term by providing an estimate of how well a patient has managed his or her diabetes over the past two to three months. When hyperglycemia is addressed and controlled, complications from diabetes can be delayed or prevented. The County Health Rankings defined the ‘Diabetes Monitoring’ indicator as the percentage of diabetic fee-for-service Medicare patients ages 65-75 whose blood sugar control was monitored in the past year using a test of their glycated hemoglobin (HbA1c) levels. In Putnam County in 2014 (most recent data available) 84% received HbA1c monitoring, which is lower than 84% receiving monitoring in Putnam County which is similar to 84% for WV and much less than 91% which is reported by the top U.S. counties for this indicator.

Figure 39. Percentage of adults aged 20 and above with diagnosis of diabetes.



Source: CDC Diabetes Interactive Atlas

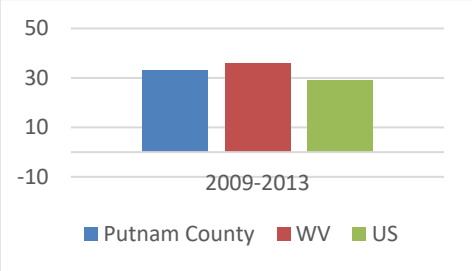


Source: WV Center for Health Statistics, Vital Statistics

Adult Obesity

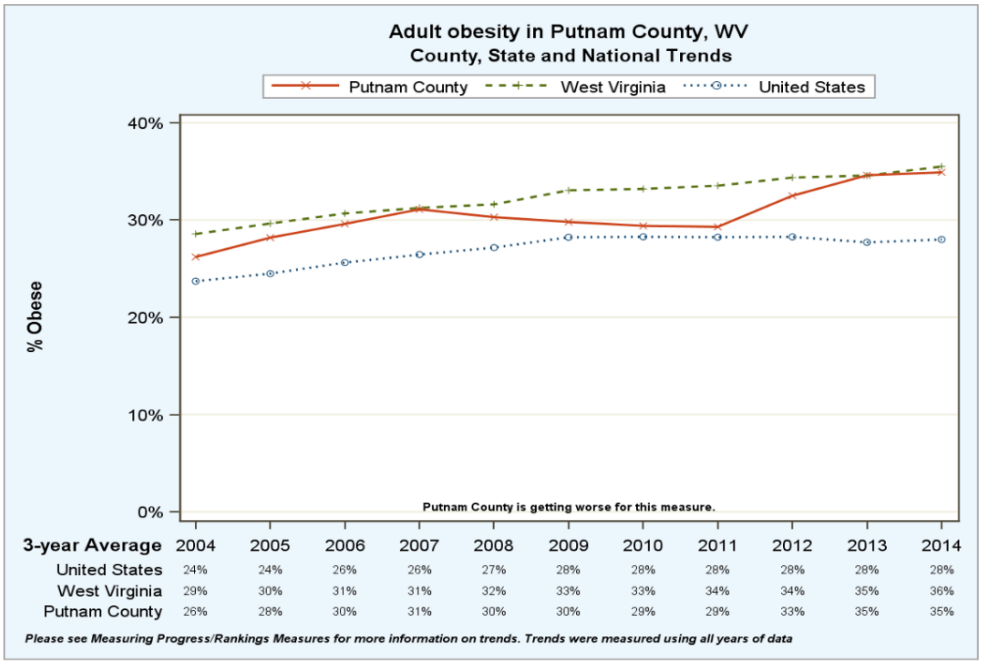
Obesity is often the result of an overall energy imbalance due to poor diet and limited physical activity. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, osteoarthritis, and poor health status. According to the 2014 WV-BRFSS, for the combined years of 2011-2014, 32.9% of Putnam County residents indicated being obese, as compared to 35.6% for West Virginia and 28.9 for the U.S. (Figure 40). This indicator was also examined as part of the County Health Rankings where trends for 2004 to 2014 clearly demonstrate the increase in the percentage of the population reporting obesity over the past decade, most notably since 2011 (Figure 41).

Figure 40. Percent of adults reporting obesity, Putnam County, WV, US, 2009-2013.



Source: WV Center for Health Statistics, Vital Statistics

Figure 41. Adult obesity trends, 2003-2013, Putnam County, WV, U.S.

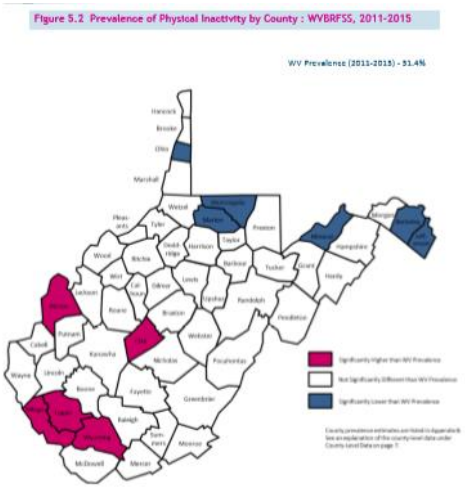


Source: CDC Diabetes Interactive Atlas

Physical Inactivity

In general, more than 80 percent of adults do not meet the guidelines for both aerobic and muscle-strengthening activities. Regular physical activity can improve the health and quality of life of Americans of all ages, regardless of the presence of a chronic disease or disability. The behavioral indicator of 'no leisure exercise' reflects responses obtained from the 2015 WV-BRFSS Report (released in 2018), where respondents were asked, 'during the past month, other than your regular job, did you participate in any physical activities or exercise such as running, calisthenics, golf, gardening, or walking for exercise.' From the most recent WV-BRFSS report, for data representing 2011-2015, 27.8% of the population in Putnam County responded 'No' to this question. This is relatively consistent, but lower than, the overall state percentage of 31.4%.

Figure 42. Physical inactivity by county, 2011-2015.



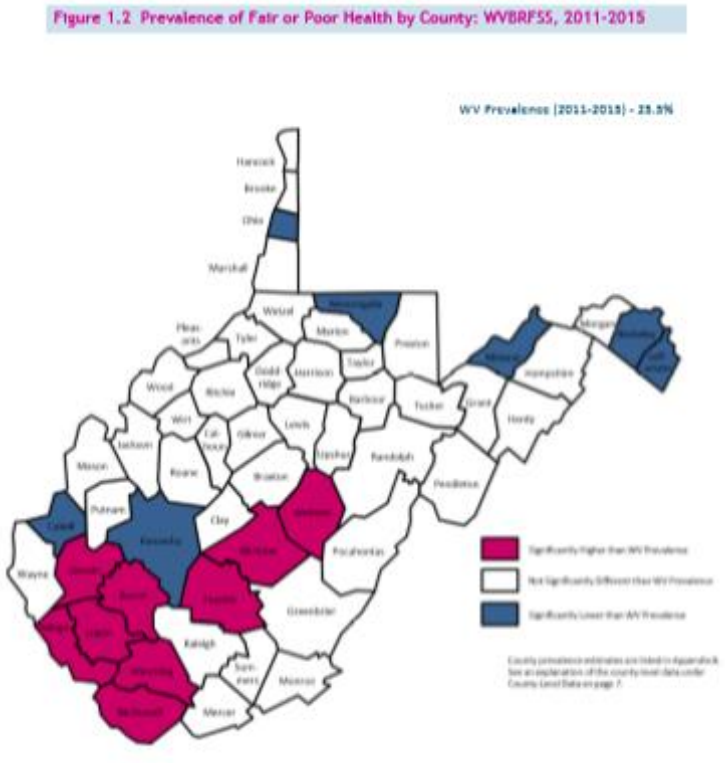
Source: WV Center for Health Statistics, BRFSS

QUALITY OF LIFE AND MENTAL HEALTH

Quality of Life

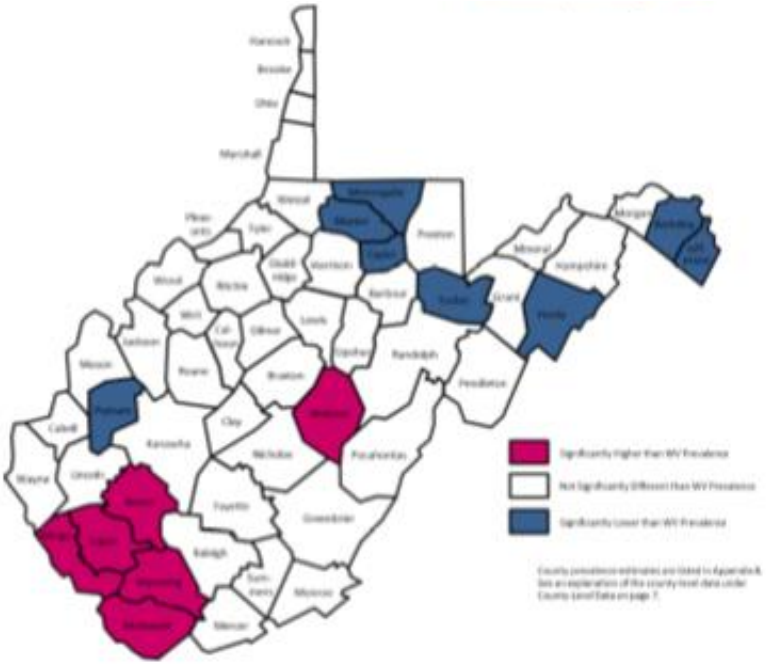
According to the CDC, health-related quality of life (HRQOL) measures of perceived physical and mental health and function have become an important component of health surveillance and are generally considered valid indicators of service needs and intervention outcomes. Self-assessed health status has also proven to be a more powerful predictor of mortality and morbidity than many objective measures of health. The CDC reports that the percentage of the population reporting their health to be poor or fair in Putnam County according to the 2015 BRFSS was 23.4% for the combined years of 2011 to 2015 (Figure 43). Close to one in every four adults in the County rate their health as fair or poor. In addition, the average number of reported mentally unhealthy days per month among adults in Putnam County was 4.9 days per month (Figure 44) according to the County Health Rankings and the average number of reported physically unhealthy days per month among adults in Putnam County was 4.5 days per among adults.

Figure 43. Percentage of adults reporting fair or poor health, age adjusted, 2014, WV.



Source: WV Center for Health Statistics, BRFSS

Figure 44. Percentage of adults reporting fair or poor metal health, age adjusted, 2011, 2015.

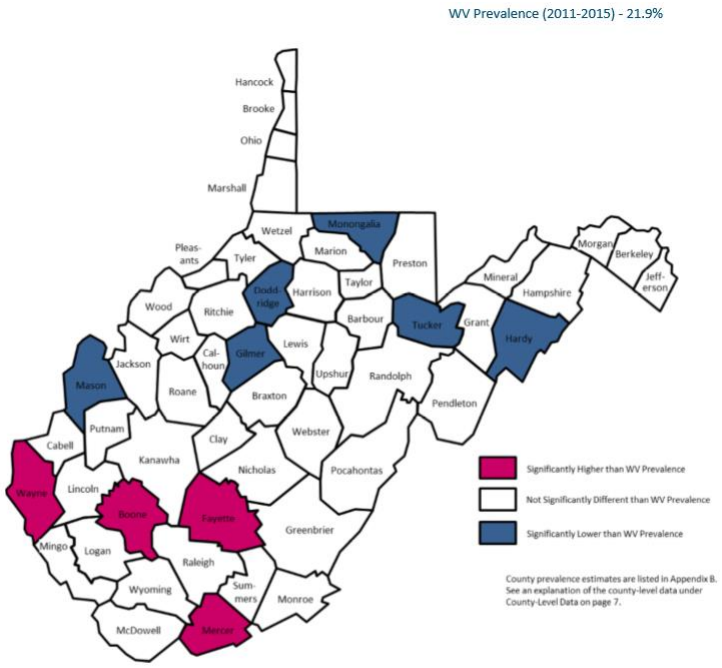


Source: WV Center for Health Statistics, BRFSS

Mental Health

Depression is characterized by depressed or sad mood, diminished interest in activities which used to be pleasurable, weight gain or loss, psychomotor agitation or retardation, fatigue, inappropriate guilt, difficulties concentrating, as well as recurrent thoughts of death. But depression is more than a “bad day”; diagnostic criteria established by the American Psychiatric Association dictate that five or more of the above symptoms must be present for a continuous period of at least two weeks. As an illness, depression falls within the spectrum of affective disorders. In the 2015 BRFSS report published by the WV Bureau for Public Health, in Putnam County 22.1% of residents (as compared to 23.1% for WV) responded “Yes” to the question, “Has a doctor, nurse, or other health professional ever told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?” (Figur3 45) In addition, according to the County Health Rankings, the percentage of individuals with ‘frequent mental distress’, defined as the percentage of adults reporting 14 or more days of poor mental health per month, was 14% in Putnam County in 2016.

Figure 45. Percentage of individuals responding they have ever been told they had depression, 2011-2015, Putnam County and WV. .



WV BRFSS 2015 Report

MATERNAL CHILD HEALTH

Maternal child health outcomes can be improved only by first determining the current needs of the maternal child health population and then setting priorities as determined to be appropriate and based on the analysis of most recent available data. In Putnam County, maternal child health was assessed for the trimester prenatal care was started, use of tobacco and alcohol during pregnancy, teen birth rate, low birth weight, infant mortality, and PAP screening.

Total Births and Low Birthweight

In 2015, there were a total of 601 births by county of residence for Putnam County, with birth rates remaining stable over the past five years (Figure 46). A total of 597 births occurred in the hospital setting. About 0.4% of infants were born to mothers who were less than 18 years of age Of births in 2015, 9.3% (nearly one of every ten) of newborns were low birthweight compared to 9.6% in West Virginia and 8.0% in the U.S. Low birthweight is defined as infants born less than 2,500 grams, or 5 pounds 8 ounces. Infant mortality rates for the years 2006-2010 and 2011-2015 are depicted in the maps below (Figure 47)..

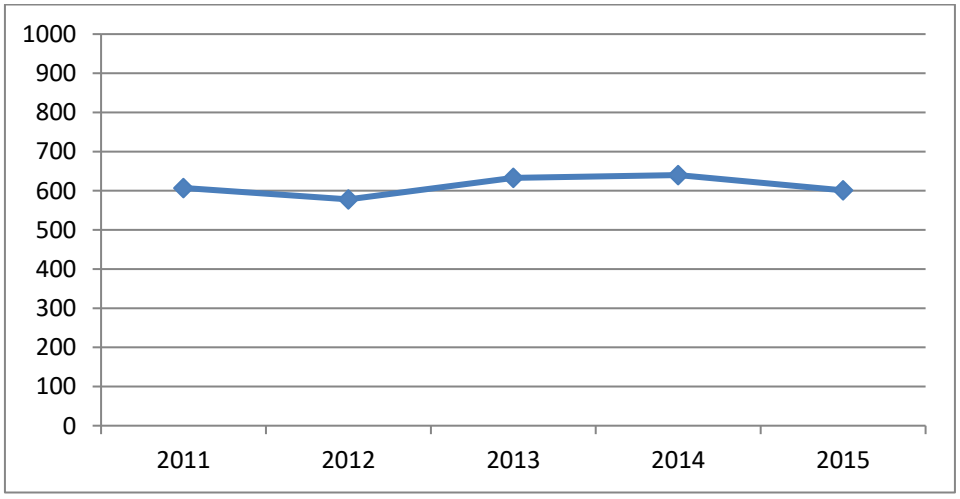
Prenatal Care

Prenatal care, especially care beginning in the first trimester, allows health care providers to identify and manage a woman's risk factors and health conditions and to provide expectant parents with relevant health care advice. Based on most recent data from the 2015 West Virginia Vital Statistics Report, the initiation of prenatal care in the first trimester in Putnam County was 86.2%. In addition, 9,7%, or about 1 in every 10 women who become pregnant, did not seek care until the second trimester as compared to 17% in West Virginia. About 3.2% of women did not seek care until their third trimester as compared to 4.7% in West Virginia, and 0.9% received no prenatal care during pregnancy.

Maternal Behaviors during Pregnancy

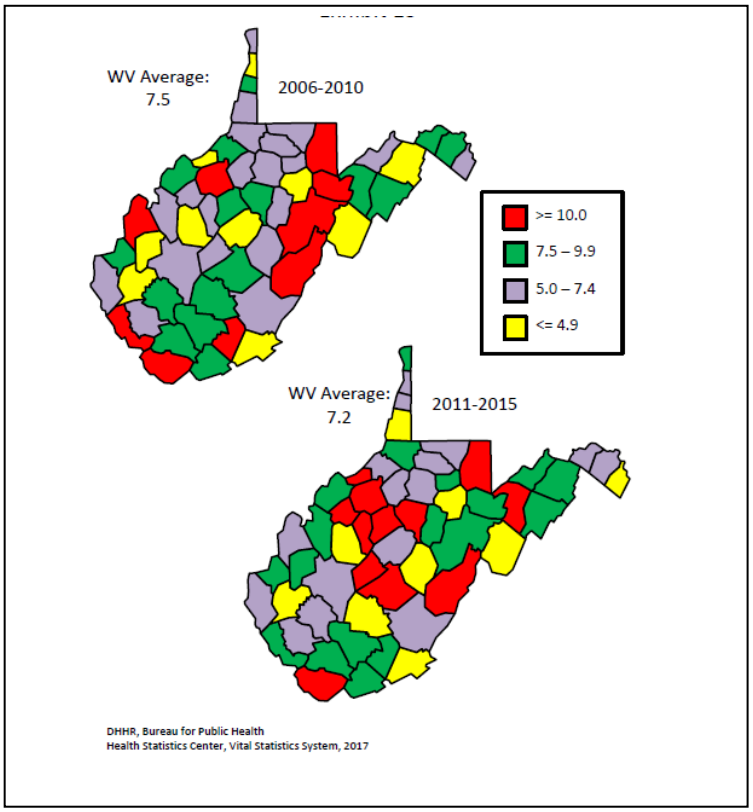
Maternal behaviors during pregnancy also influence health outcomes of infants. In Putnam County in 2015, 14.0%, of women, used tobacco during pregnancy, which is the lowest reported percentage in the state. Of significance, however, is that the smoking rate among pregnant women in the U.S. in 2014 was only 8.4%. **The Healthy People 2020 goal for smoking during pregnancy is 14.4% and Putnam County is meeting this goal.** Maternal drug use during pregnancy among pregnant women in Putnam County was 7.2% in 2015, much lower than the State reported percentage of 39.2%.

Figure 46. Number births by year in Putnam County, 2011-2015.



Source: West Virginia Center for Health Statistics, Vital Statistics Reports

Figure 47. Infant mortality rates, Putnam County, WV 2011-2015.



Source: West Virginia Center for Health Statistics, Vital Statistics Reports

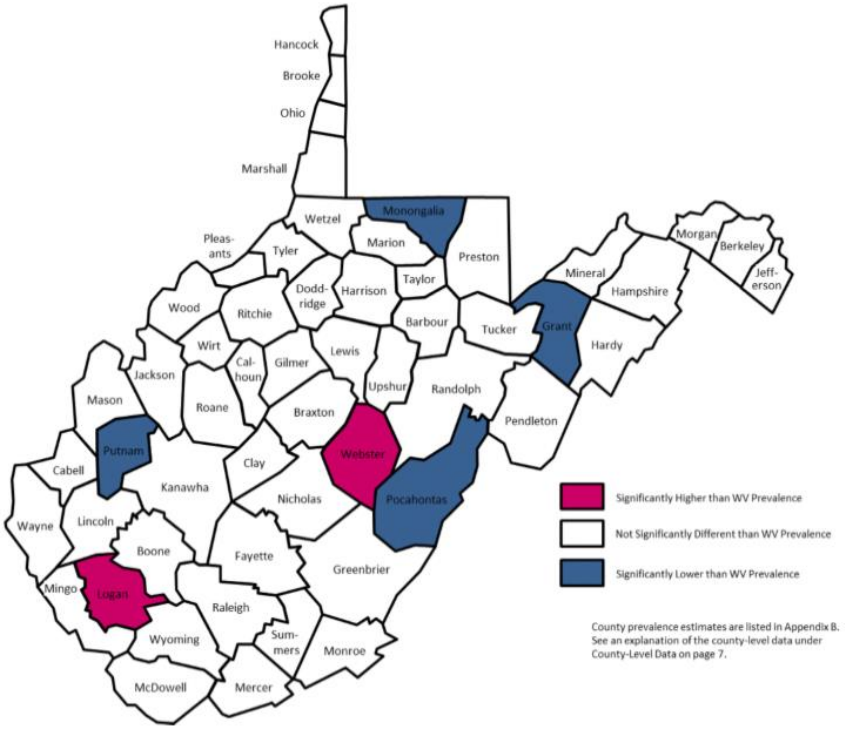
ADDICTION

According to a recent 2015 report released by the Institute of Medicine, 'addiction', defined as misuse and/or abuse of nicotine, alcohol, and other drugs, is a prevalent and rapidly growing public health issue in many states in the U.S. It is estimated that each year, substance abuse and addiction costs in the U.S are greater than $500 billion. Subsequently, this community health assessment establishes a new section of the report focused solely on addiction in Putnam County in order to better understand the magnitude and scope of the issues around addictive behaviors, specifically tobacco use, alcohol dependence/misuse, and drug dependence/illicit use. It is anticipated that this section will continue to grow as more data is available at the county level.

Tobacco Use

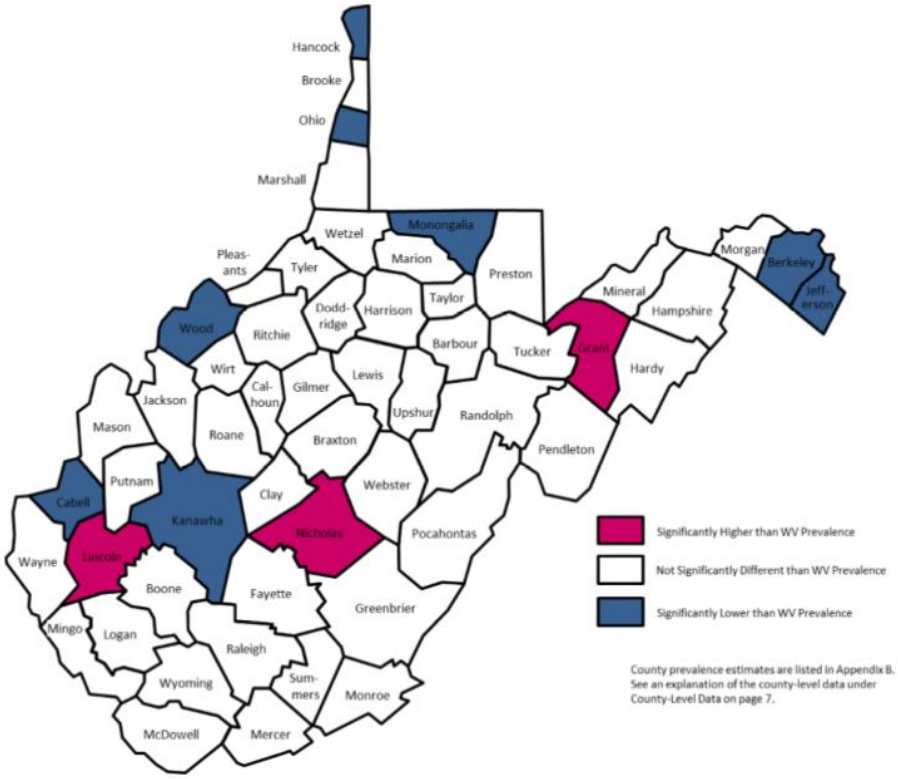
Most recent trends in tobacco use for Putnam County depict a tobacco use rate of 18.0% for the year 2016, lower than the rate of 25.0% in West Virginia (Figure 48). A map for the first time depicting smokeless tobacco by county is also provided (Figure 49). **The Health People 2020 goal for smoking among adults in the U.S. is 12.0%**.

Figure 48. Tobacco use percent by county, WV, 2011-2015.



WV BRFSS 2015 Report

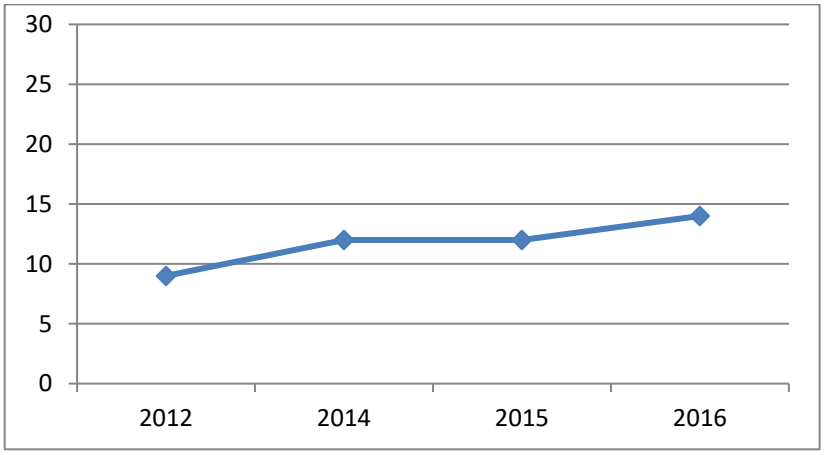
Figure 49. Smokeless tobacco use by county, WV, 2011-2015.



Excessive Drinking

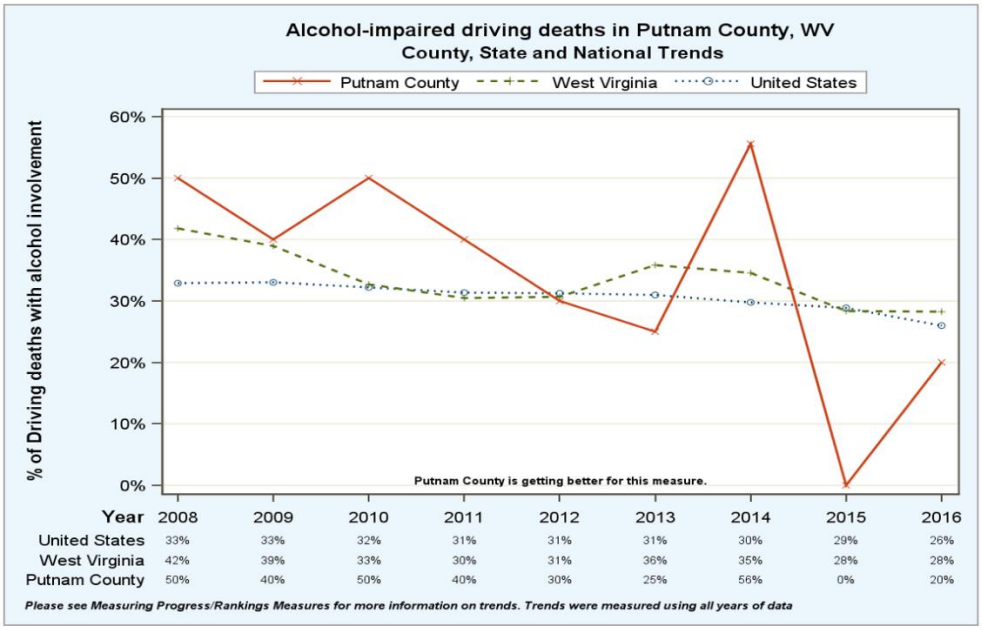
Excessive drinking is a risk factor for a number of adverse health outcomes, such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes. Approximately 80,000 deaths are attributed annually to excessive drinking. Excessive drinking is the third leading lifestyle-related cause of death in the United States. Excessive Drinking is the percentage of adults that report either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average. The percentage of adults reporting excessive drinking has increased in Putnam County for the period 2012-2016 from 9% to 14% (Figure 50).

Figure 50. Excessive drinking among adults, Putnam County, 2012-2016



Behavioral Risk Factor Surveillance System, 2015

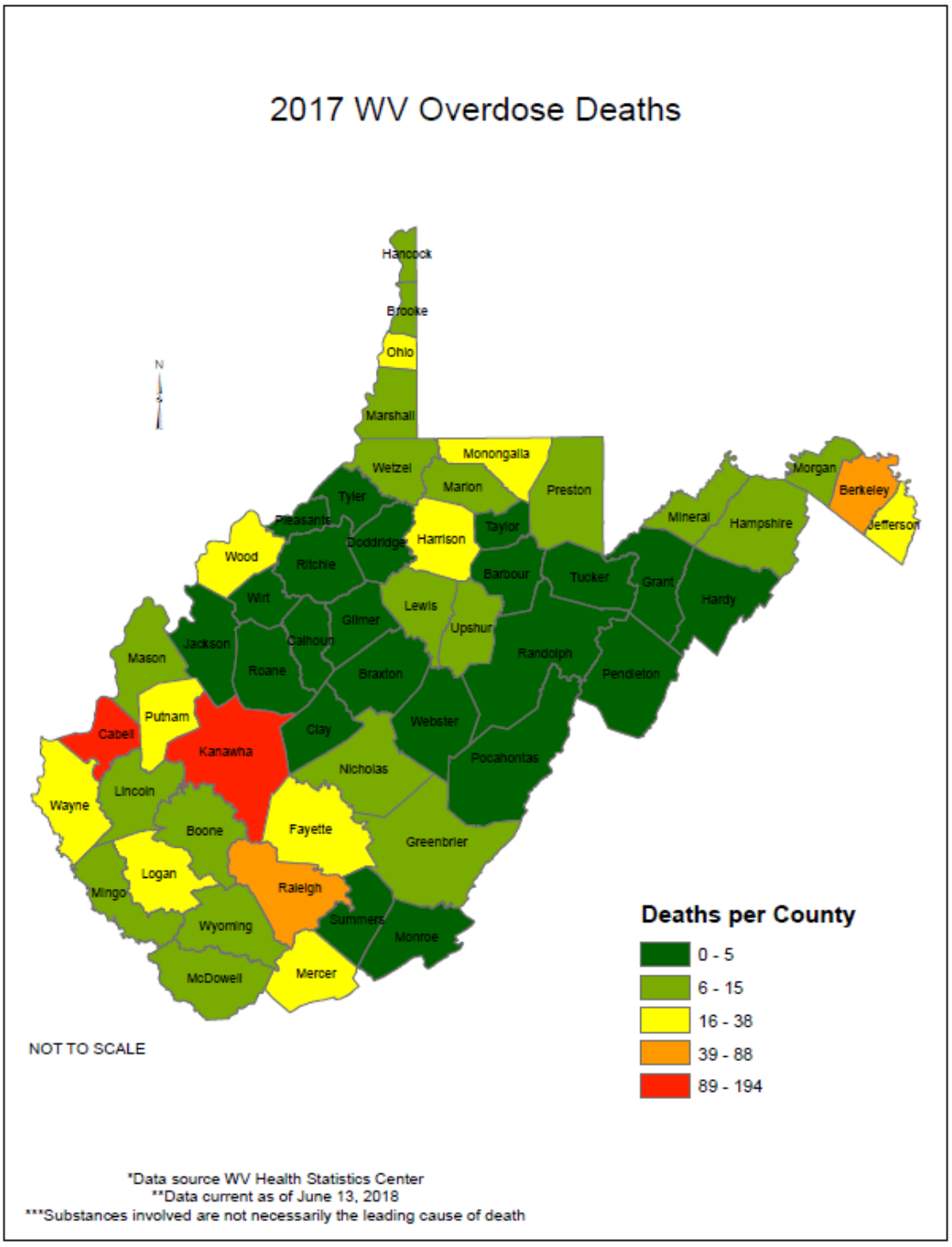
Figure 51. Alcohol impaired driving deaths in Putnam County, WV, US, 2006-2016

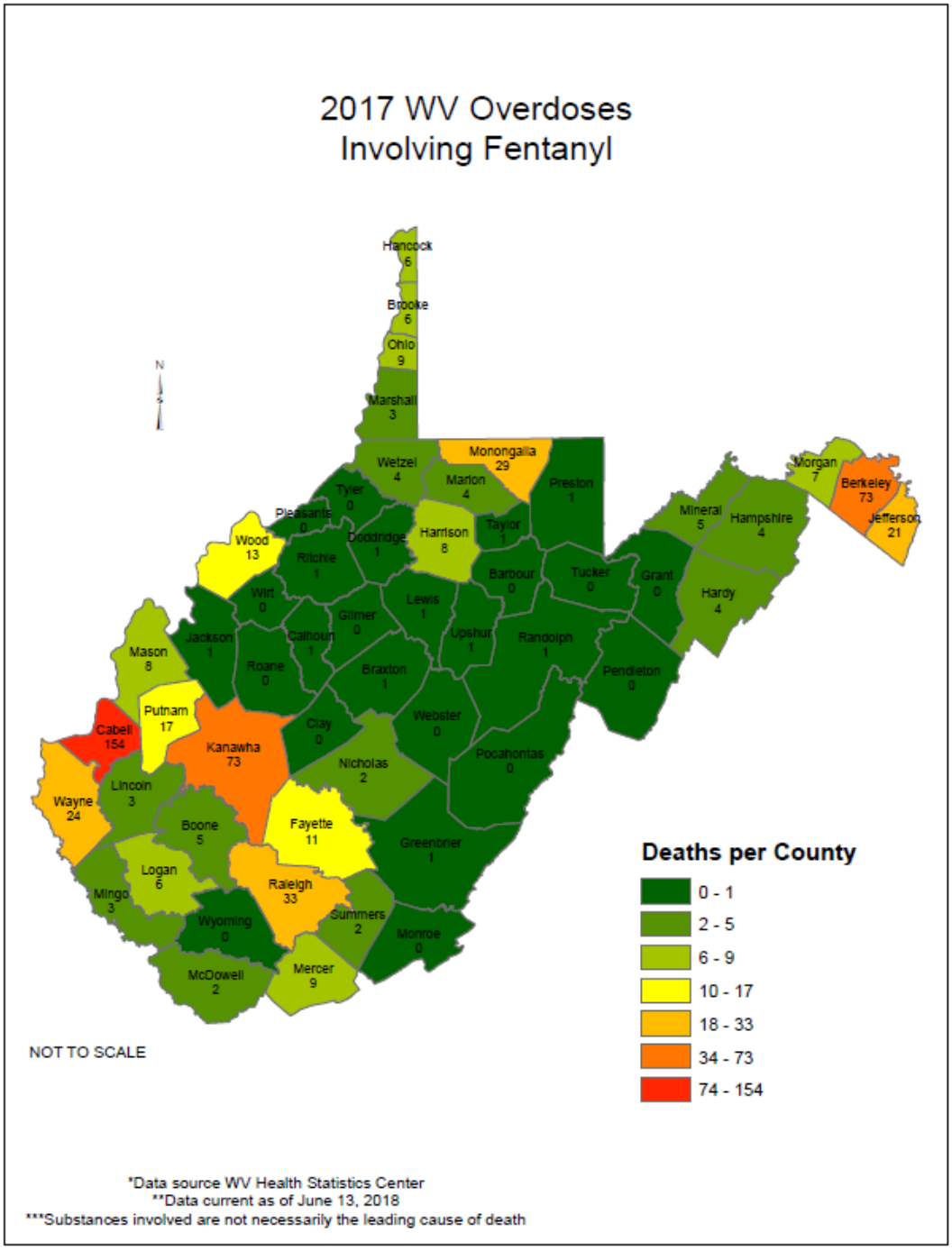


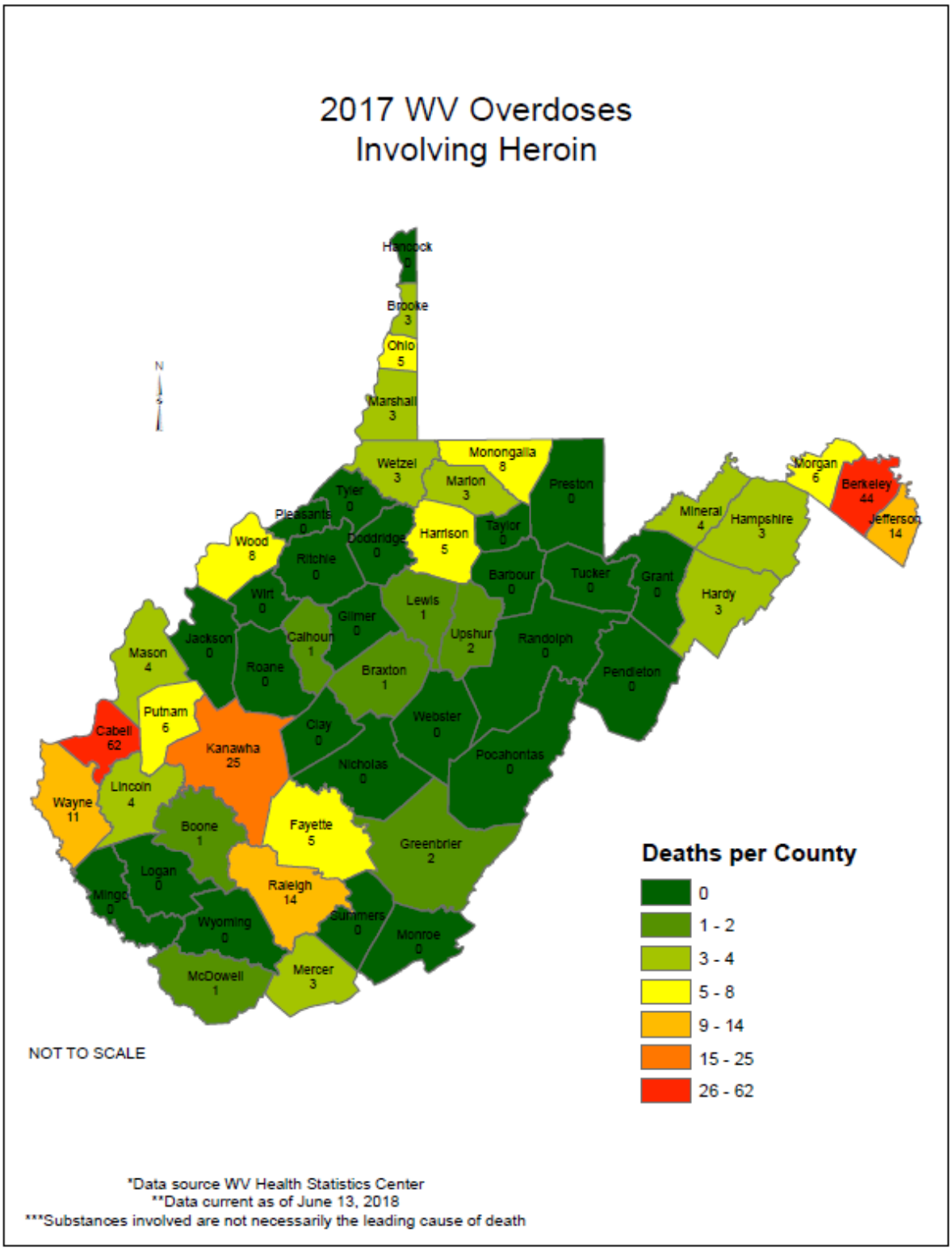
Fatality Analysis Reporting System

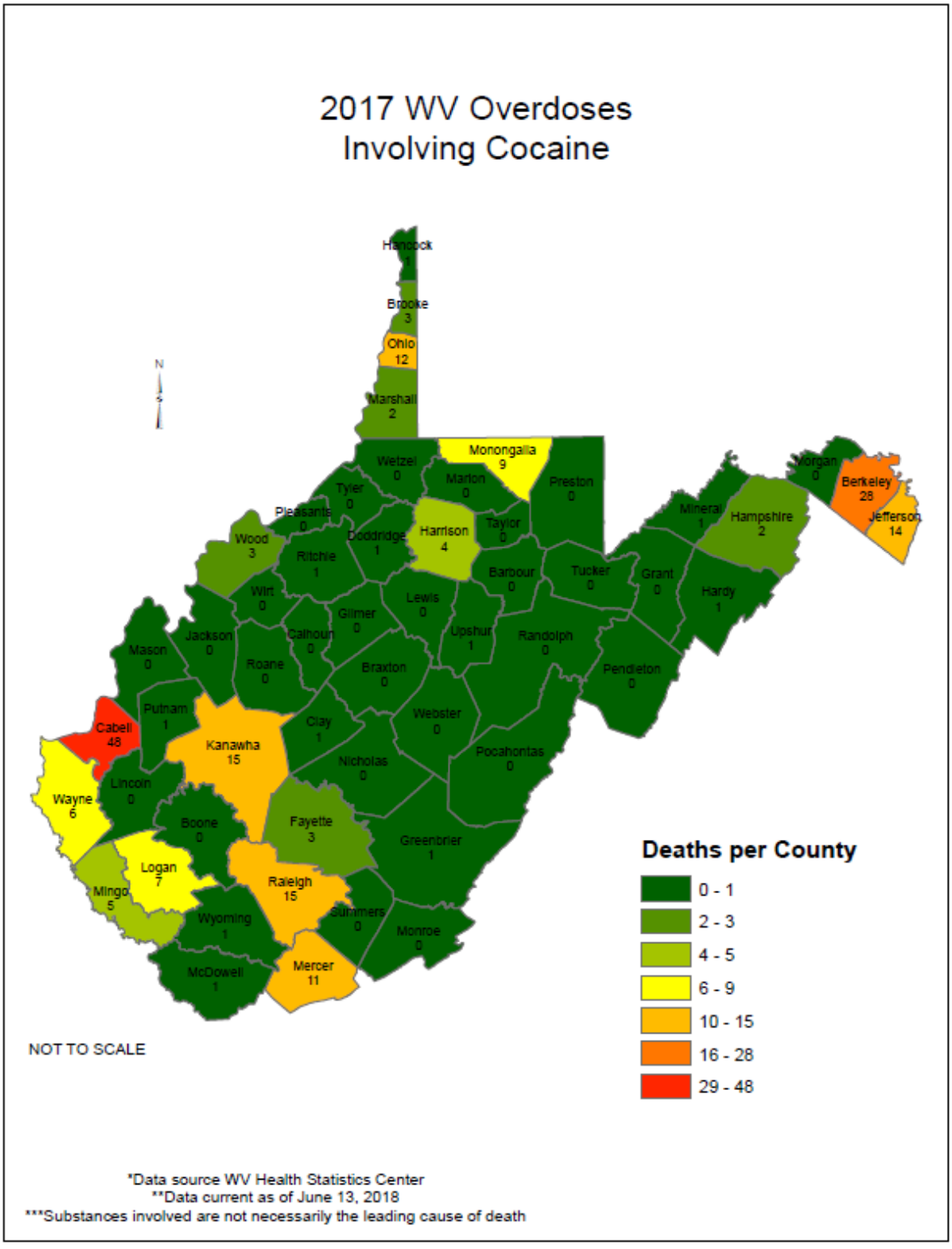
Illicit Drug Use

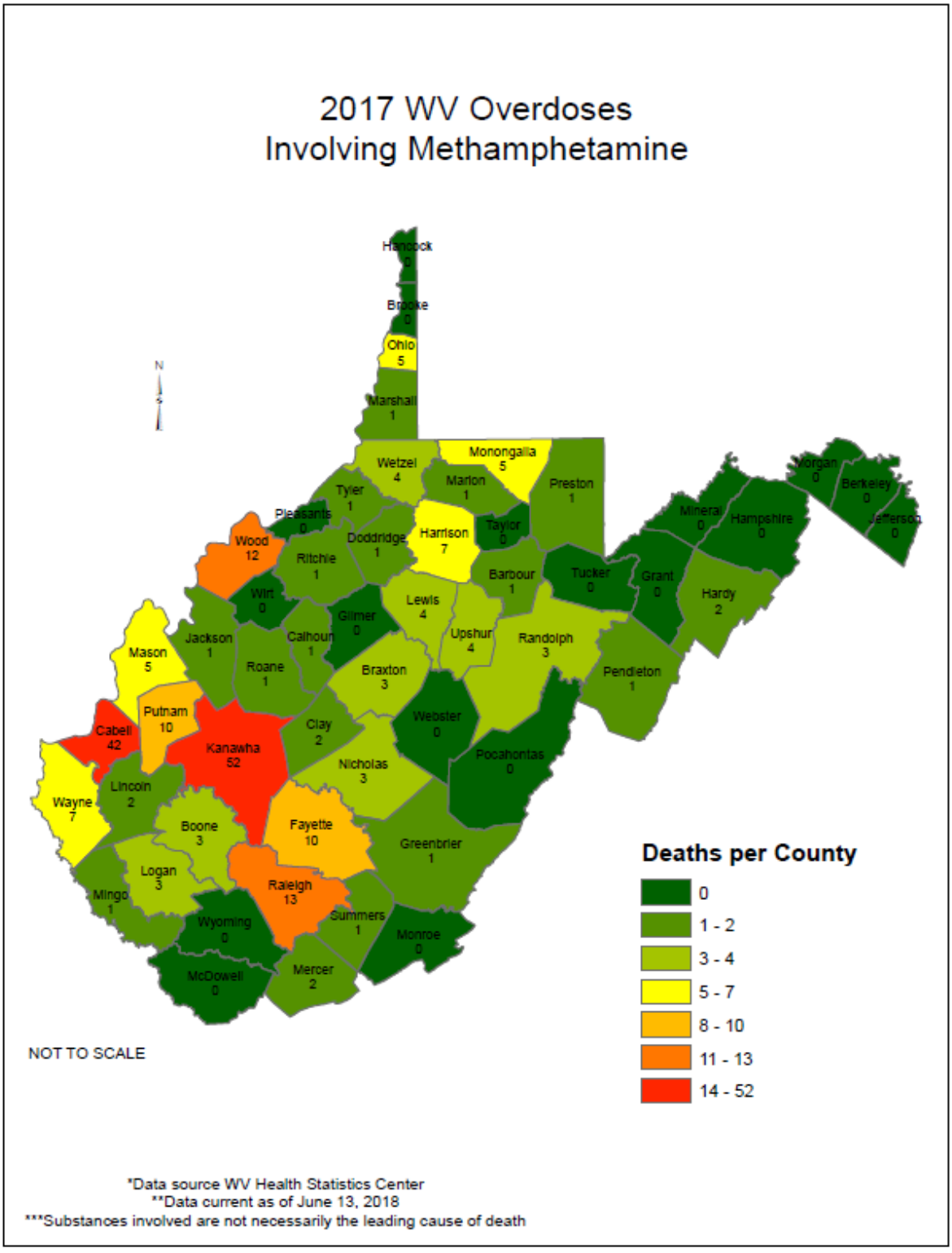
The following maps released by HIDTA in late 2018 depict the most current information available to understand this issue. Based on this data additional information will be added to this report.

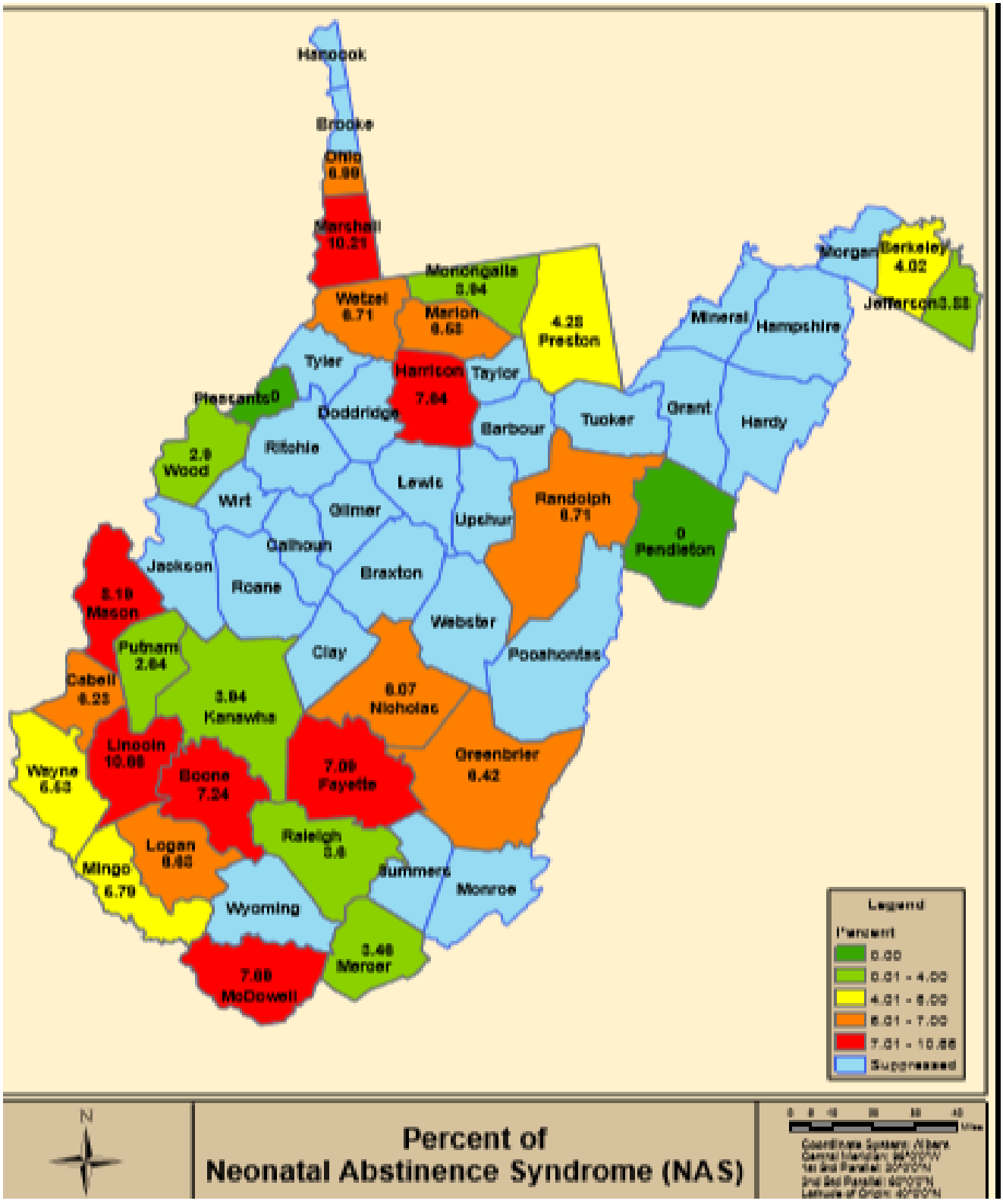


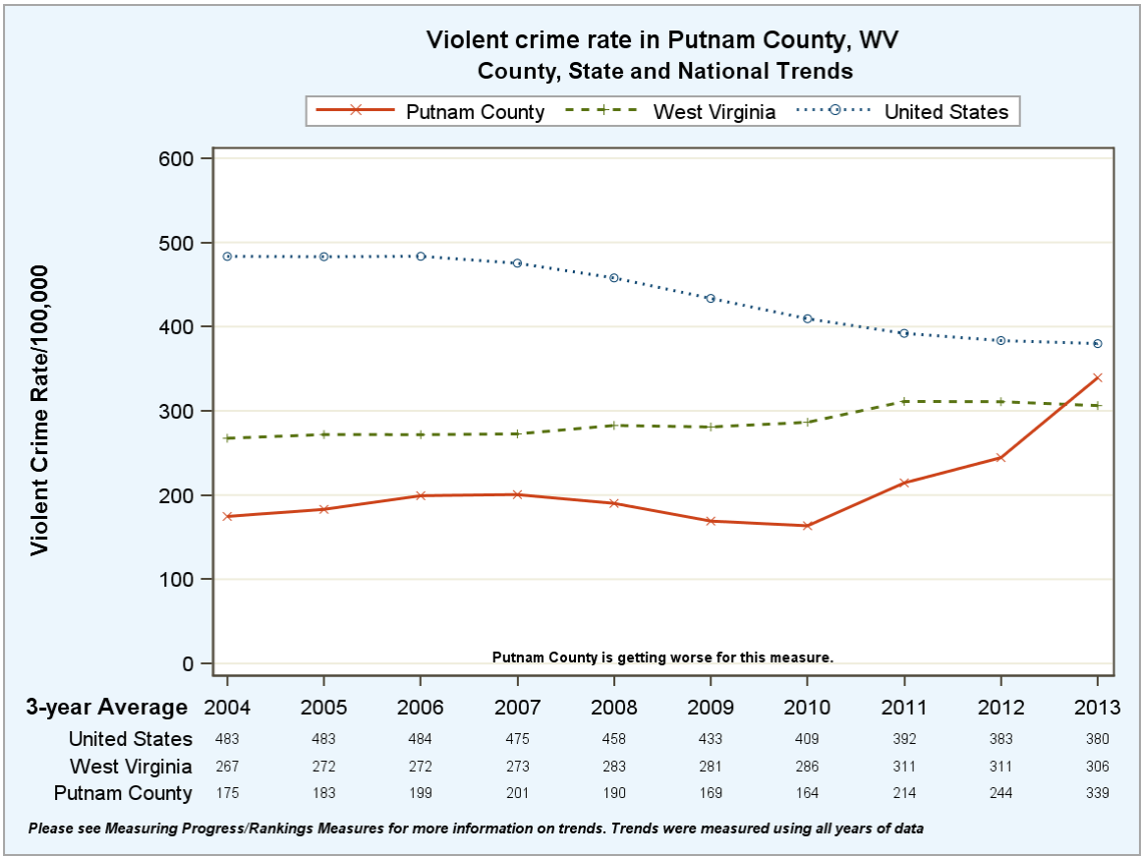

2017 WV Overdoses
Involving Fentanyl
Hancock 6
Brooke 6
Ohio 9
Marshall 3
Wetzel 4
Monongalia 29
Marion 4
Preston 1
Tyler 0
Pleasants 0
Wood 13
Ritchie 1
Doddridge 1
Harrison 8
Taylor 1
Barbour 0
Tucker 0
Lewis 1
Upshur 1
Randolph 1
Webster 0
Pocahontas 0
Gilmer 0
Calhoun 1
Braxton 1
Roane 0
Jackson 1
Mason 8
Putnam 17
Cabell 154
Kanawha 73
Clay 0
Nicholas 2
Fayette 11
Greenbrier 1
Wayne 24
Lincoln 3
Boone 5
Logan 6
Mingo 3
Raleigh 33
Wyoming 0
Summers 2
Monroe 0
McDowell 2
Mercer 9
Pendleton 0
Grant 0
Hardy 4
Mineral 5
Hampshire 4
Morgan 7
Berkeley 73
Jefferson 21
N
NOT TO SCALE
Deaths per County
0 - 1
2 - 5
6 - 9
10 - 17
18 - 33
34 - 73
74 - 154
*Data source WV Health Statistics Center
**Data current as of June 13, 2018
***Substances involved are not necessarily the leading cause of death


2017 WV Overdoses
Involving Heroin
Hancock 0
Brooke 3
Ohio 5
Marshall 3
Wetzel 3
Monongalia 8
Marion 3
Preston 0
Tyler 0
Pleasants 0
Wood 8
Doddridge 0
Harrison 5
Taylor 0
Ritchie 0
Barbour 0
Tucker 0
Wirt 0
Gilmer 0
Lewis 1
Upshur 2
Randolph 0
Jackson 0
Calhoun 1
Roane 0
Braxton 1
Mason 4
Putnam 6
Cabell 62
Kanawha 25
Clay 0
Webster 0
Pocahontas 0
Nicholas 0
Lincoln 4
Wayne 11
Boone 1
Fayette 5
Greenbrier 2
Logan 0
Raleigh 14
Mingo 0
Wyoming 0
Summers 0
Monroe 0
McDowell 1
Mercer 3
Pendleton 0
Grant 0
Hardy 3
Mineral 4
Hampshire 3
Morgan 6
Berkeley 44
Jefferson 14
N
NOT TO SCALE
Deaths per County
0
1 - 2
3 - 4
5 - 8
9 - 14
15 - 25
26 - 62
*Data source WV Health Statistics Center
**Data current as of June 13, 2018
***Substances involved are not necessarily the leading cause of death


2017 WV Overdoses
Involving Cocaine
N
Hancock 1
Brooke 3
Ohio 12
Marshall 2
Wetzel 0
Monongalia 9
Marion 0
Preston 0
Tyler 0
Pleasants 0
Wood 3
Doddridge 1
Harrison 4
Taylor 0
Ritchie 1
Barbour 0
Tucker 0
Grant 0
Mineral 1
Hampshire 2
Morgan 0
Berkeley 28
Jefferson 14
Hardy 1
Wirt 0
Gilmer 0
Lewis 0
Upshur 1
Randolph 0
Pendleton 0
Jackson 0
Calhoun 0
Mason 0
Roane 0
Braxton 0
Putnam 1
Cabell 48
Clay 1
Webster 0
Kanawha 15
Nicholas 0
Pocahontas 0
Lincoln 0
Wayne 6
Boone 0
Fayette 3
Greenbrier 1
Logan 7
Raleigh 15
Mingo 5
Summers 0
Monroe 0
Wyoming 1
McDowell 1
Mercer 11
Deaths per County
0 - 1
2 - 3
4 - 5
6 - 9
10 - 15
16 - 28
29 - 48
NOT TO SCALE
*Data source WV Health Statistics Center
**Data current as of June 13, 2018
***Substances involved are not necessarily the leading cause of death


2017 WV Overdoses
Involving Methamphetamine
Hancock 0
Brooke 0
Ohio 5
Marshall 1
Wetzel 4
Monongalia 5
Marion 1
Preston 1
Tyler 1
Pleasants 0
Wood 12
Doddridge 1
Harrison 7
Taylor 0
Ritchie 1
Barbour 1
Tucker 0
Mineral 0
Hampshire 0
Morgan 0
Berkeley 0
Jefferson 0
Grant 0
Hardy 2
Wirt 0
Gilmer 0
Lewis 4
Upshur 4
Randolph 3
Pendleton 1
Jackson 1
Calhoun 1
Mason 5
Roane 1
Braxton 3
Putnam 10
Cabell 42
Clay 2
Webster 0
Kanawha 52
Nicholas 3
Pocahontas 0
Lincoln 2
Wayne 7
Boone 3
Fayette 10
Greenbrier 1
Logan 3
Raleigh 13
Mingo 1
Summers 1
Wyoming 0
Monroe 0
McDowell 0
Mercer 2
N
NOT TO SCALE
Deaths per County
0
1 - 2
3 - 4
5 - 7
8 - 10
11 - 13
14 - 52
*Data source WV Health Statistics Center
**Data current as of June 13, 2018
***Substances involved are not necessarily the leading cause of death


Hancock
Brooke
Ohio
6.89
Marshall
10.21
Wetzel
6.71
Monongalia
3.84
Marion
6.68
4.28
Preston
Morgan
Berkeley
4.02
Jefferson3.88
Mineral
Hampshire
Tyler
Harrison
7.84
Taylor
Pleasants0
Doddridge
Barbour
Tucker
Grant
Hardy
2.9
Wood
Ritchie
Wirt
Lewis
Gilmer
Upshur
Randolph
6.71
0
Pendleton
Calhoun
Jackson
Roane
Braxton
8.19
Mason
Webster
Putnam
2.64
Clay
Pocahontas
Cabell
6.23
3.94
Kanawha
6.07
Nicholas
Lincoln
10.08
Greenbrier
6.42
Wayne
6.43
Boone
7.24
7.09
Fayette
Logan
6.82
Raleigh
3.8
Summers
Mingo
6.79
Monroe
Wyoming
3.48
Mercer
7.08
McDowell
Legend
Percent
0.00
0.01 - 4.00
4.01 - 6.00
6.01 - 7.00
7.01 - 10.88
Suppressed
N
Percent of
Neonatal Abstinence Syndrome (NAS)



3-year Average	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
United States	483	483	484	475	458	433	409	392	383	380
West Virginia	267	272	272	273	283	281	286	311	311	306
Putnam County	175	183	199	201	190	169	164	214	244	339

Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data

Community Survey Results

SURVEY FINDINGS

Descriptive data analysis was performed using the survey responses collected from the Putnam County Health Department 2018 Community Survey. Findings are presented here, reflecting all questions and all responses in their entirety as provided by community members. All responses provided by community members were voluntary and no incentives were provided. .

ZIP CODE OF RESPONDENTS

Respondents were asked to provide their zip code of residence to understand representation of respondents from across Putnam County. The areas in the County having the greatest number of respondents included Hurricane, Winfield, and Scott Depot. Six 'other' responses were from individuals indicating their primary zip code of residence to be 25143 (2 - Nitro), 25160 (Pond Gap), 25302 (Charleston), 25303 (South Charleston) and 25541 (Milton). One individual did not respond to this question.

Zip code of respondents for primary place of residence.

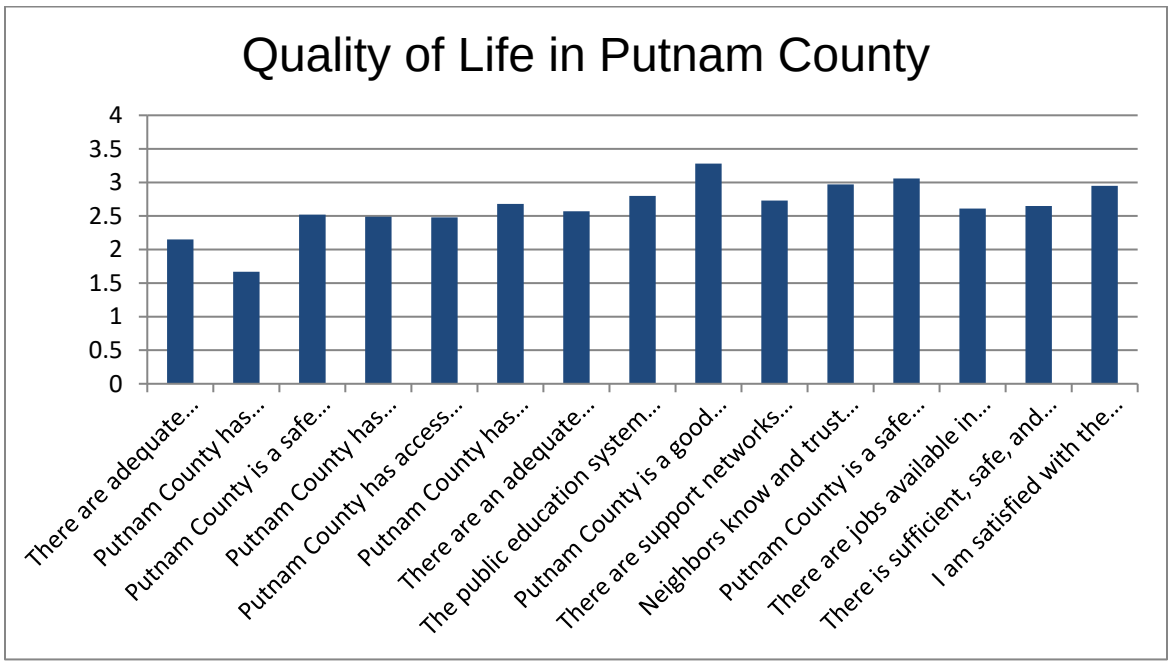
Answer Choices	Responses	
25011 (Bancroft)	0.7%	1
25033 (Buffalo)	1.3%	2
25070 (Eleanor)	2.7%	4
25082 (Frazier's Bottom)	2.0%	3
25109 (Hometown)	4.0%	6
25124 (Liberty)	2.7%	4
25159 (Poca)	19.5%	29
25168 (Red House)	2.7%	4
25213 (Winfield)	18.1%	27
25510 (Culloden)	1.3%	2
25526 (Hurricane)	27.5%	41
25560 (Scott Depot)	13.4%	20
25569 (Teays)	0.0%	0
Other (please specify)	4.0%	6
	Answered	**149**
	Skipped	**1**

QUALITY OF LIFE IN PUTNAM COUNTY

Respondents were asked to rate a set of 15 questions pertaining to quality of life in Putnam County. A total of 103 community members completed the survey; no respondents skipped this question. An overview of responses is provided below with the top statements where the greatest proportion agreed or strongly agreed being noted in green and the statements were the most number of respondents disagreed or strongly disagreed in red. .

QUALITY OF LIFE Please select a response to rate each statement based on how you feel

Answer Options	Strongly Disagree	Disagree	Agree	Strongly Agree	Weighted Ave.
There are adequate sidewalks in Putnam County.	**25%**	**38%**	35%	3%	**2.15**
Putnam County has sufficient public transportation.	**46%**	42%	10%	1%	**1.67**
Putnam County is a safe place to walk and bike.	**15%**	29%	46%	10%	2.52
Putnam County has adequate health and wellness activities.	10%	**36%**	49%	5%	2.49
Putnam County has access to affordable, healthy foods.	13%	**32%**	50%	5%	**2.48**
Putnam County has adequate and safe access to recreation and exercise.	9%	27%	52%	12%	2.68
There are an adequate number of safe places for children to play/exercise in Putnam County.	11%	31%	49%	9%	2.57
The public education system in Putnam County adequately meets the health needs of school-age children in the County.	11%	14%	59%	**16%**	2.80
Putnam County is a good place to raise children.	2%	5%	55%	**37%**	**3.28**
There are support networks for individuals and families in Putnam County.	6%	22%	65%	7%	2.73
Neighbors know and trust one another and look out for one another in Putnam County.	3%	12%	**70%**	15%	2.97
Putnam County is a safe place to live.	1%	10%	**71%**	**18%**	**3.06**
There are jobs available in Putnam County.	6%	31%	60%	3%	2.61
There is sufficient, safe, and affordable housing in Putnam County.	8%	23%	67%	3%	2.65
I am satisfied with the quality of life in Putnam County.	3%	11%	**73%**	13%	**2.95**
				Total	**150**

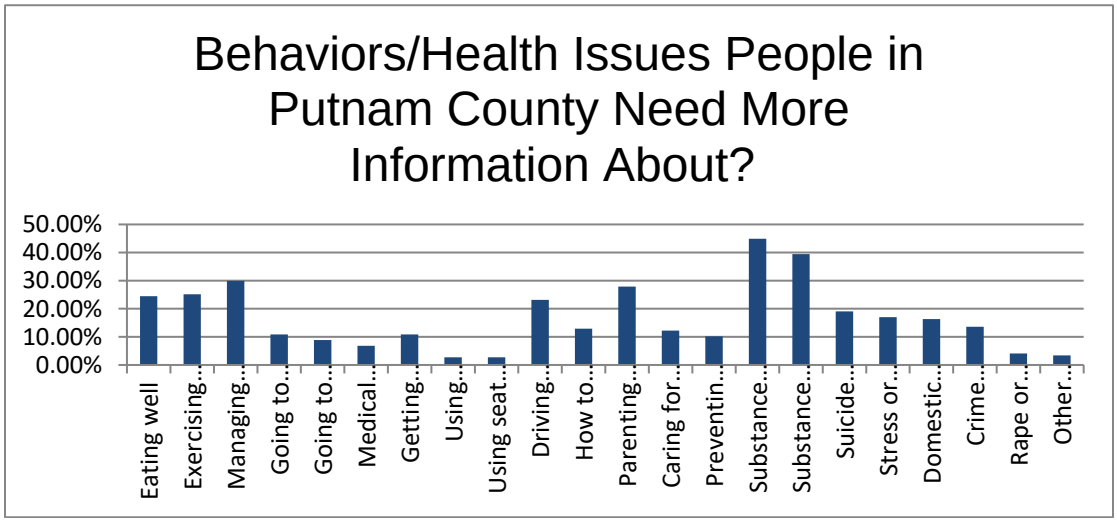

Quality of Life in Putnam County
4
3.5
3
2.5
2
1.5
1
0.5
0
There are adequate...
Putnam County has...
Putnam County is a safe...
Putnam County has...
Putnam County has access...
Putnam County has...
There are an adequate...
The public education system...
Putnam County is a good...
There are support networks...
Neighbors know and trust...
Putnam County is a safe...
There are jobs available in...
There is sufficient, safe, and...
I am satisfied with the...

Health Behaviors/Issues People Need More information About in Putnam County

Respondents were provided a list of health behaviors/issues and were asked which three behaviors/issues people in Putnam County need more information about. The top three selected health behaviors/issues were substance abuse prevention (45%), substance abuse treatment and recovery services (39%), and managing weight (30%). Five 'other' responses were help for the elderly and disabled, being clean/hygiene, an improved educational system with less sports and more learning, job seeking/job keeping skills, and senior meds. Three respondents did not answer this question.

Answer Choices	Responses	
Eating well	24%	36
Exercising / Physical Fitness	25%	37
Managing Weight	30%	44
Going to the doctor for yearly check-ups	11%	16
Going to the dentist for yearly check-ups	9%	13
Medical care while pregnant	7%	10
Getting flu shots and immunizations (shots to prevent disease)	11%	16
Using child safety seats in cars	3%	4
Using seat belts	3%	4
Driving safely (such as not texting while driving)	23%	34
How to quit smoking	13%	19
Parenting skills	28%	41
Caring for family members with special needs or disabilities	12%	18
Preventing pregnancy or sexually transmitted diseases	10%	15
Substance abuse prevention (drugs and alcohol)	45%	66
Substance abuse treatment and recovery resources or services	39%	58
Suicide prevention	19%	28
Stress or anger management	17%	25
Domestic violence prevention	16%	24
Crime prevention	14%	20
Rape or sexual abuse prevention	4%	6
Other (senior meds, job seeking/job keeping skills, elderly/disabled, being clean – hygiene, improved education system, less sports – more learning)	3%	5
	Answered	**147**

Skipped		**3**

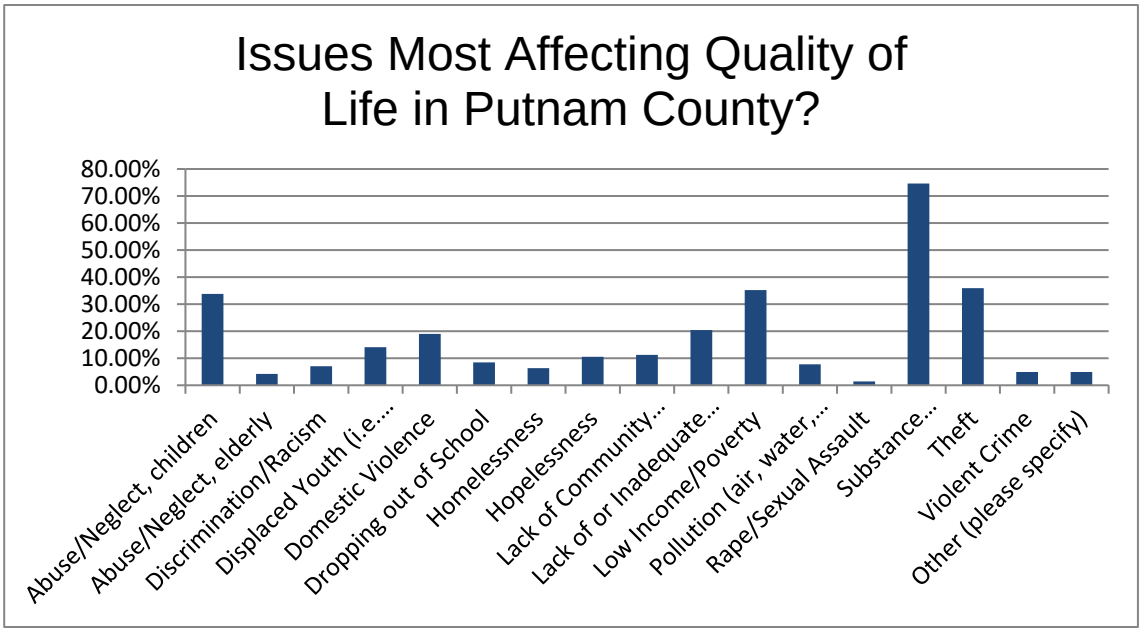


Issues Affect Quality of Life in Putnam County

Respondents were asked to review a list of community issues and select the three which most affect quality of life in Putnam County. Of the 142 individuals responding to this question, 75% identified substance misuse/abuse (addiction) as the issue most greatly affecting quality of life, followed by 36% identifying theft, and 35% identifying low income/poverty. Important to note is the 34% identified child abuse/neglect as affecting quality of life in the County. Seven 'other' responses included help for the elderly, lack of resources in the north end of the county, lack of parental involvement among school-age children, lack of education. Seven respondents did not answer this question.

Answer Choices	Responses	
Abuse/Neglect, children	34%	48
Abuse/Neglect, elderly	4%	6
Discrimination/Racism	7%	10
Displaced Youth (i.e. number of youth in foster care)	14%	20
Domestic Violence	19%	27
Dropping out of School	8%	12
Homelessness	6%	9
Hopelessness	11%	15
Lack of Community Support	11%	16
Lack of or Inadequate Health Insurance Coverage	20%	29
Low Income/Poverty	35%	50
Pollution (air, water, land)	8%	11
Rape/Sexual Assault	1%	2

Substance Misuse/Abuse (i.e. Addiction)	75%	107
Theft	36%	51
Violent Crime	5%	7
Other (Lack of public transportation, help for the elderly, north end of county not getting resources, lack parental involvement among school-age children, and lack of education)	4%	5
Answered		**142**
Skipped		**8**



GENERAL HEALTH STATUS

Respondents were asked to rate their general health status as excellent, very good, good, fair, or poor. A total of 145 individuals responded to this question. Results are provided below, where 90% of respondents rates their health as good, very good, or excellent.

Answer Choices	Responses	
Poor	3%	4
Fair	8%	11
Good	43%	62
Very Good	34%	50
Excellent	13%	19
Don't Know	0%	0
	Answered 145	
	Skipped 5	

EXISTING HEALTH CONDITIONS

Respondents were asked if they have ever been told by a doctor, nurse or other health professional that you have any of the health conditions below. Of note among the 147 respondents for this question is that 41% have been told they have high blood pressure, 41% that they are overweight or obese, 40% that they have high cholesterol and 40% that they have depression or anxiety. 9.4%).

	Yes		No		Don't Know		Rather Not Answer		Total	Weighted Average
Asthma	19%	26	80%	108	1%	1	0.00%	0	96	1.81
Cancer	8%	11	91%	126	1%	2	0.00%	0	98	1.94
Dementia or Alzheimer's	1%	2	98%	135	1%	1	0.00%	0	96	1.99
Depression or Anxiety	40%	57	58%	83	1%	2	1.01%	1	99	1.63
Diabetes (high blood sugars)	18%	26	81%	114	1%	1	0.00%	0	98	1.82
Heart Disease	11%	15	87%	120	2%	3	0.00%	0	97	1.91
High Blood Pressure	41%	59	59%	85	0%	0	0.00%	0	100	1.59
High Cholesterol	40%	57	60%	86	0%	0	0.00%	0	99	1.60
Osteoporosis	8%	11	92%	125	0%	0	0.00%	0	96	1.92
Overweight or Obesity	41%	58	59%	84	0%	0	0.00%	0	100	1.59
									Answered	**147**
									Skipped	**3**

FOLLOW UP AFTER TOLD OF DIAGNOSIS

Respondents were asked, if they were told of one or more diagnoses above, if they have followed up with a health care provider. Of the 127 individuals who responded to this question, 90% have followed up, 6% were unsure, 3% have not followed up, and 2% have not followed up but have made changes. .

Answer Choices	Responses	
Yes, I have followed up	90%	114
No, I have not followed up or made any changes	3%	4
No, I have not followed up, BUT I have made changes	2%	2
Don't know, not sure	6%	7
Answered		**127**
Skipped		**23**

EXERCISE AND PHYSICAL ACTIVITY

Respondents were asked where they go for physical activity or exercise. A list of response options was provided as well as an 'other' category. A total of 147 individuals responded to this question. Results are provided below, where 56% go outdoors, 50% use their home, 37% go to a private gym or health club, and 22% go to a park. Five 'other' responses were provided as noted in the chart below. Of note is that only 6% (9 out of 145) responses indicated that they do not participate in any exercise or physical activity.

Answer Choices	Responses	
Park	22%	32
Outdoors	56%	81
Private Gym or Health Club	37%	54
Home	50%	73
I do not participate in exercise or physical activity.	6%	9
Other (golf club (1), local school track (1), work (2), friend's home (1)	3%	5
	Answered	**145**
	Skipped	**5**

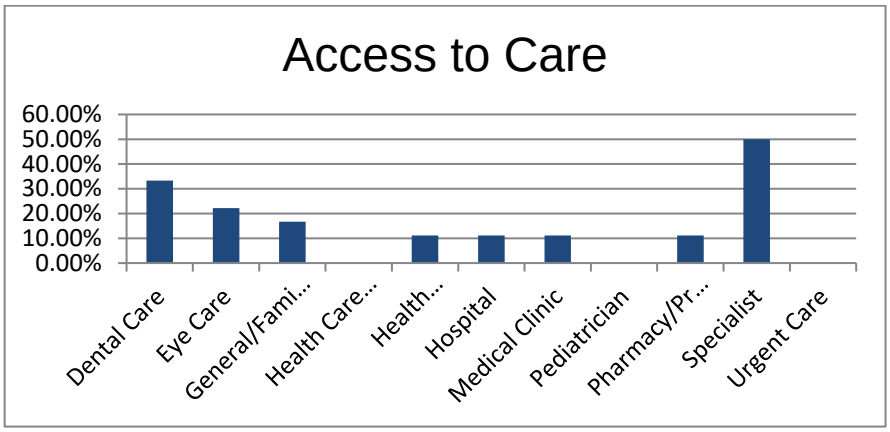
ACCESS TO CARE

Respondents were asked if they had a problem getting health care for themselves or a family member in the past 12 months. Of the 145 respondents for this question, about 1 in 5 (20%) indicated they had a problem getting needed health care in the past 12 months.

Answer Choices	Responses	
No	81.00%	117
Yes	20.00%	29
Don't Know	0.00%	0
Prefer not to answer	0.00%	0
Answered		**145**
Skipped		**5**

For respondents that indicated they had difficulty getting needed health care in the past 12 months, they were also asked to identify the type of provider they had difficulty with access to care from a list that was provided. The most commonly reported difficulty getting needed health care was with a specialist by 14 of 27 (52%) individuals and dental care by 11 (41%).

Answer Choices	Responses	
Dental Care	41%	11
Eye Care	30%	8
General/Family Doctor	11%	3
Health Care - Pregnancy	0%	0
Health Department	11%	3
Hospital	7%	2
Medical Clinic	7%	2
Pediatrician	0%	0
Pharmacy/Prescriptions	7%	2
Specialist	52%	14
Urgent Care	0%	0
Answered		**23**
Skipped		**127**


Access to Care
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
Dental Care
Eye Care
General/Fami...
Health Care...
Health...
Hospital
Medical Clinic
Pediatrician
Pharmacy/Pr...
Specialist
Urgent Care

Finally, respondents were asked to identify from a list, specific problems that prevented them from accessing care in the past 12 months. An 'other' response option was provided. Of the 91 respondents for this question, 27.47% indicated that the deductible or co-pay was too high and 16.48% indicated their insurance did not cover what they needed.

Answer Choices	Responses
No health insurance	7
Insurance didn't cover what I needed	20
The deductible or co-pay was too high	35
The doctor would not take my insurance or Medicaid	10
The hospital would not take my insurance or Medicaid	1
The pharmacy would not take my insurance or Medicaid	2
The dentist would not take my insurance or Medicaid	5
I had not transportation to get there	2
I did not know where to go	2
I could not get an appointment	5
None	67
	8
The wait was too long	
Other (V.A. (1), no/inadequate dental insurance (2), lack of doctors in the area (2), insurance wouldn't cover certain meds (1), office locked (1).	7

RESPONDENT DEMOGRAPHICS

GENDER

Respondents were asked to provide their gender to characterize the population completing the survey. There were a total of 148 responses. Overall 112 (76%) surveys were received from females, 23% from males, 1% from individuals identifying as transgender, and 1% from individuals not identifying as female, male, or transgender.

Answer Choices	Responses	
Male	23%	34
Female	76%	112
Transgender	1%	1
Do not identify as female, male, or transgender	1%	1
Answered		**148**
Skipped		**1**

RACE

Respondents were asked to identify their race as an additional means of understanding the population completing the survey. There were a total of 148 responses with 140 surveys (95%) received from individuals who were white and 2 'other' responses where individuals declined to answer.

Answer Choices	Responses	
White	95%	140
Black or African American	2%	3
American Indian or Alaska Native	3%	4
Hispanic	0%	0
Other (please specify)	2%	3
Answered		**148**
Skipped		**2**

MARITAL STATUS

Respondents were asked to provide their marital status from a list of options and an 'other' category was provided. From a total of 143 respondents for this question, 109 (77%) were married, 14 (10%) were single, 11 (8%) were divorced, 8 (6%) were widowed, and 1 individual declined to answer.

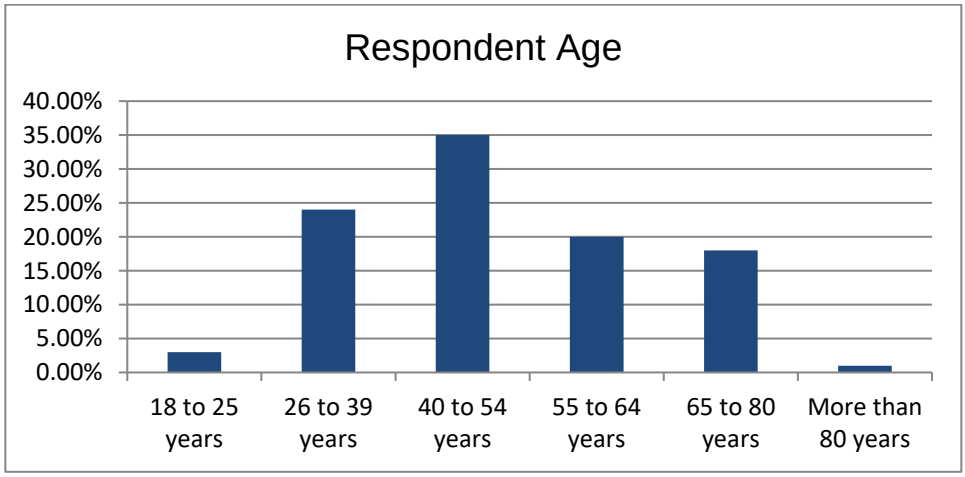
Answer Choices	Responses	
Single	10%	14
Married / Unmarried partner	77%	109

Separated		0%	0
Divorced		8%	11
Widowed		6%	8
	Answered		**142**
	Skipped		**6**

RESPONDENT AGE

Respondents were asked to select an age range that reflected their current age. There were a total of 142 responses with surveys received from all age groups. Overall surveys were received from 4 individuals between 18 and 25 years of age, 34 individuals 26 to 39 years of age, 49 from individuals 40 to 54 years of age, 28 from individuals 55 to 64 years of age, 25 from individuals 65 to 80 years of age, and 2 from individuals greater than 80 years of age.

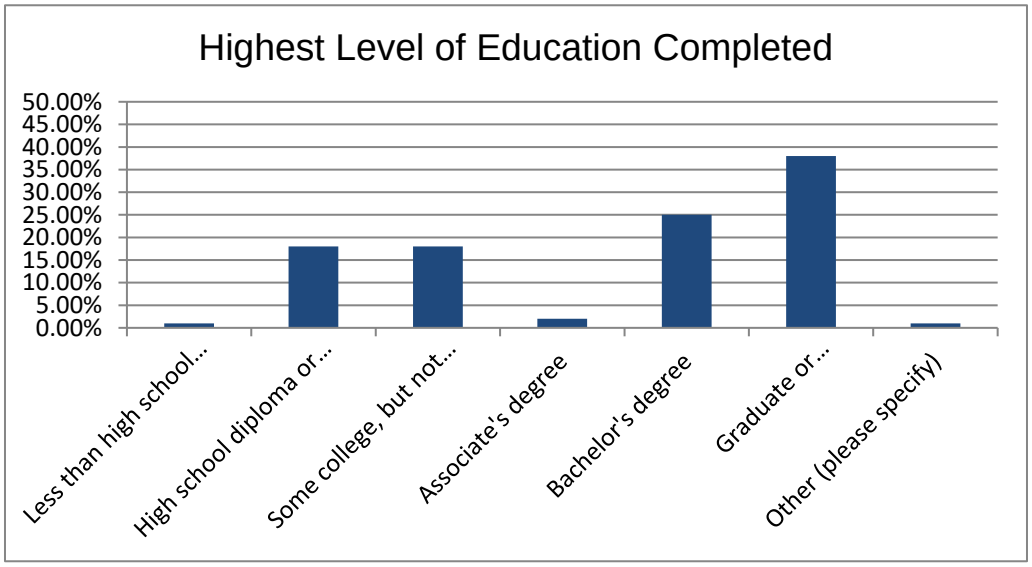
Answer Choices	Responses	
18 to 25 years	3%	4
26 to 39 years	24%	34
40 to 54 years	35%	49
55 to 64 years	20%	28
65 to 80 years	18%	25
More than 80 years	1%	2
Answered		**142**
Skipped		**8**



HIGHEST LEVEL OF EDUCATION COMPLETED

Respondents were asked to provide the highest level of education they had completed. There were a total of 142 responses for this question. Overall 63% of respondents had a college degree (bachelor's or graduate/professional degree), 2% had an Associate's degree and 18% had some college but no degree, 18% had a high school degree or GED, and 1% had less than a high school degree. Two 'other' responses were also received as noted in the table below.

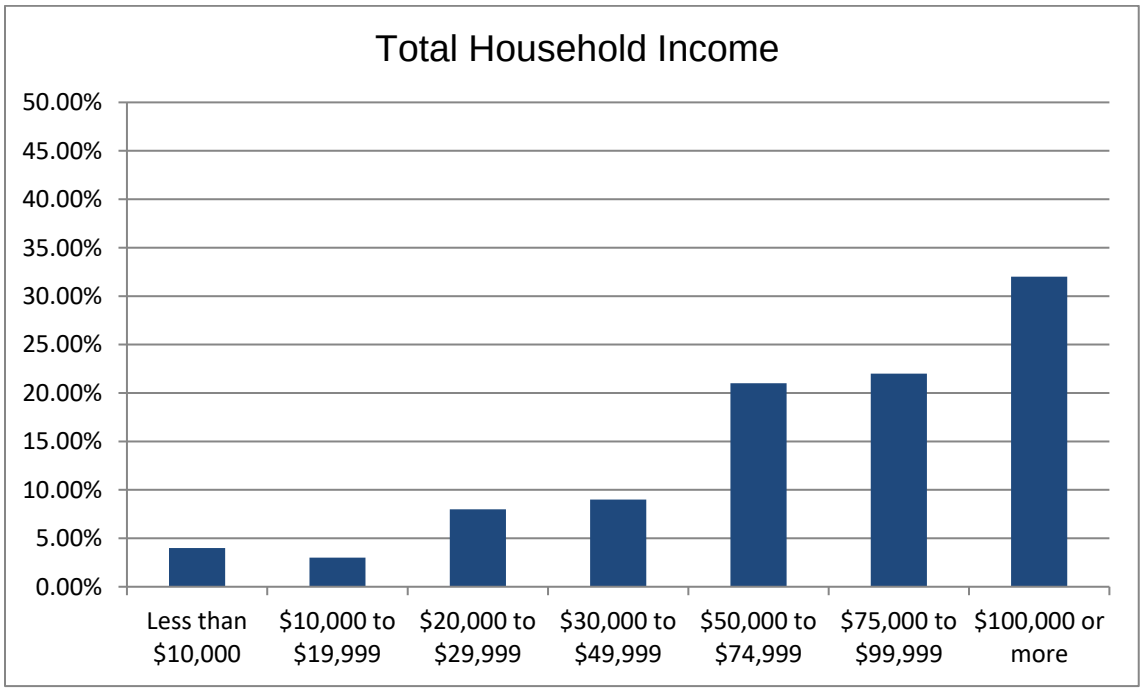
Answer Choices	Responses	
Less than high school graduate	1%	1
High school diploma or GED	18%	25
Some college, but not degree	18%	25
Associate's degree	2%	3
Bachelor's degree	25%	35
Graduate or Professional Degree	38%	54
Other (trade pgm/vocation – 2)	1%	2
Answered		**142**
Skipped		**8**



TOTAL HOUSEHOLD INCOME

Respondents were asked to provide their total household income. There were a total of 140 responses for this question with surveys received from all levels of household income. The greatest number of surveys (32%) were received by those with income of $100,000 or more A total of 54% of survey were received from respondents with total household income of $75,000 or more. and the fewest (7%) from those with low income of $19,999 or less.

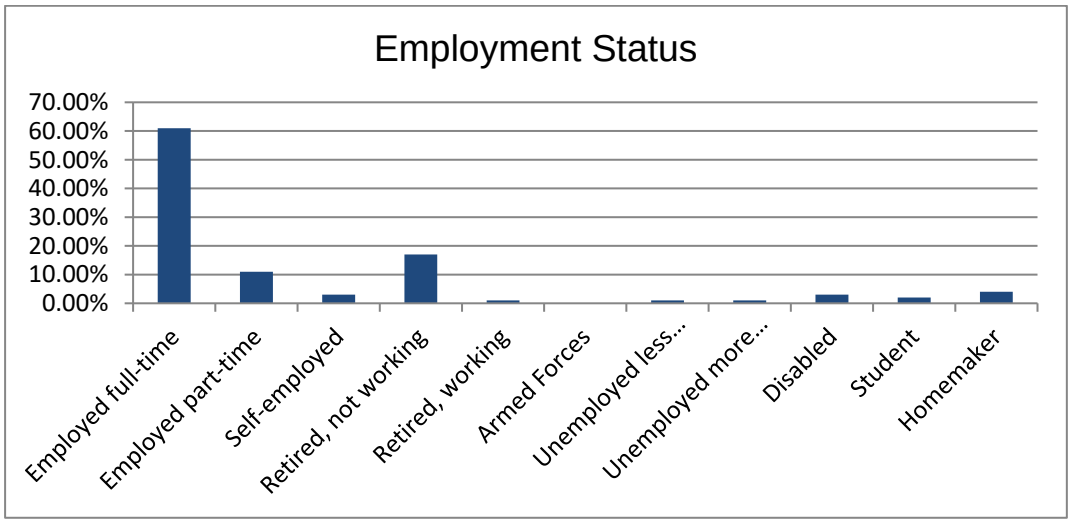
Answer Choices	Responses	
Less than $10,000	4%	6
$10,000 to $19,999	3%	4
$20,000 to $29,999	8%	11
$30,000 to $49,999	9%	13
$50,000 to $74,999	21%	20
$75,000 to $99,999	22%	31
$100,000 or more	32%	45
Answered		**140**
Skipped		**10**



EMPLOYMENT STATUS

Respondents were asked to provide their employment status. There were a total of 100 responses for this question. Overall, 75.0% of surveys were received from respondents working full-time, part-time, or self-employed. A total of 17.0% were retired and additional responses are summarized in the table below.

Answer Choices	Responses	
Employed full-time	61%	87
Employed part-time	11%	16
Self-employed	3%	5
Retired, not working	17%	25
Retired, working	1%	1
Armed Forces	0%	0
Unemployed less than 1 year	1%	2
Unemployed more than 1 year	1%	2
Disabled	3%	4
Student	2%	3
Homemaker	4%	6
	Answered	**143**
	Skipped	**7**



ARING FOR ELDERLY IN THE HOME

Respondents were asked if they are providing care for someone elderly in their home at the time they responded to the survey. Of the 146 respondents, 10% indicated they are caring for someone in their home.

Answer Choices	Responses	
No	91%	133
Yes	10%	14
Answered		**146**
Skipped		**4**

PERSONAL ACCESS TO INTERNET

Respondents were asked if they had personal access to internet in their home. Of the 142

respondents, 8% (nearly 1 in 10) did NOT have access to internet in their home.

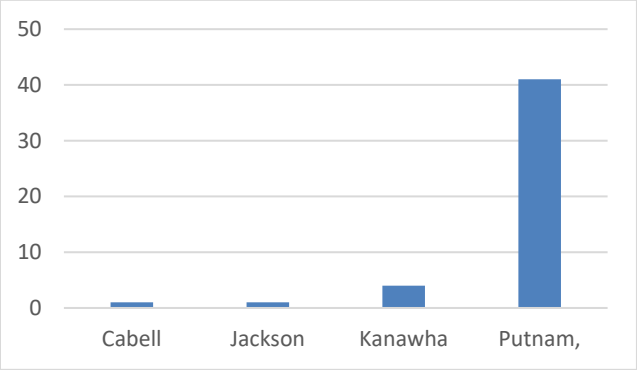
Answer Choices	Responses	
Yes	92%	131
No	8%	11
Answered		**97**
Skipped		**6**

Key Informant (Partner) Results

Respondent Characteristics

"What is your county of residence?

A total of 41 (87%) of respondents indicated they were from Putnam County, 4 (8.5%) were from Kanawha County, and there was 1 each from Cabell and Jackson Counties.



"Please select one response that best represents your primary area of professional expertise and/or practice".

The following table represents the areas of expertise represented by respondents to the survey. There were no responses from the following sectors: academic, disability services, education (secondary, media, and veteran services.

Area of Expertise	Response Percent	Response Count
Governmental Entity	21.3%	10
Health Care Provider	10.6%	5
Healthcare Organization	8.5%	4
Law Enforcement	8.5%	4
Business	6.4%	3
Mental/Behavioral Health	6.4%	3
Public Safety	6.4%	3
Nonprofit Services/Nonprofit Organization	4.3%	2
Advocacy	2.1%	1
Economics	2.1%	1
Education (primary)	2.1%	1
Faith-Based Organization	2.1%	1
First Responder	2.1%	1
Human Services/Charity	2.1%	1
Public Health	2.1%	1
Pharmacy	2.1%	1
Philanthropic	2.1%	1
School Food Service	2.1%	1
Sexual Violence advocacy, counseling, and prevention	2.1%	1

Transportation		2.1%	1
Youth Development		2.1%	1
	TOTAL		**47**

UNMET NEED

Target Populations with Greatest Unmet Need

A total of 46 partners responded to identifying the top three target populations having the greatest unmet need or in need of additional public health/health care resources in Putnam County. Of those, 27 (58.7%) identified addiction as the top target population having unmet needs. Also identified were mental health by 16 respondents (34.8%) and low income by 13 respondents (28.2%).

Top Target Populations with Unmet Need	# Respondents	% Respondents
Addictions	27	58.7%
Mental Health	16	34.8%
Low Income	13	28.2%

All Responses for Identifying Populations with Greatest Unmet Need

A summary of all responses for identifying populations with greatest unmet need is provided below. Four 'other' responses were received that are not reflected below, including child psychologist, dental, obesity, and transportation.

Answer Options	Response Percent	Response Count
Addictions	**27**	**58.7%**
Mental Health	**16**	**34.8%**
Low Income	**13**	**28.3%**
Seniors	12	26.1%
Uninsured/Underinsured	11	23.9%
Children, displaced (i.e. foster care)	10	21.7%
Disabled, unable to work	8	17.4%
Homebound Persons	7	15.2%
Children (13-18 years)	5	10.9%
Children (1-5 years)	4	8.7%
Homeless	4	8.7%
Veterans	4	8.7%
Developmentally Disabled/Cognitively Disabled	3	6.5%
Victims of Abuse/Neglect	3	6.5%
Visual/Hearing Impaired	2	4.3%
Children (6-12 years)	2	4.3%
Lesbian/Gay/Bisexual/Transgender	1	2.2%
Persons with HIV/AIDS/hepatitis	1	2.2%
End of life (individuals w/end of life needs)	1	2.2%
Other (Dental, Transportation, Obesity, Child Psychologist)	4	8.7%

YOUTH HEALTH RISKS AND RISKY BEHAVIORS

Youth Health Risks/Risky Behaviors

A total of 46 partners responded to identifying the top three youth health risks/risky behaviors that are most significant in Putnam County. For purposes of this question youth was defined as the population of those less than 18 years of age in the county. Of those, 56.5% identified drug use (illicit) as a top priority, 32.6% identified drug use (prescription medications) and child abuse/neglect as the second top priority (tied), and 30.4% identified unsafe driving habits (e.g. texting while driving, not wearing seat belt) as the third priority health risk among youth.

Top Health Risks/Risky Behaviors	# Respondent Comments	% Respondent Comments
Drug Use – Illicit Drugs	26	56.5%
Drug Use – Prescription Medications	15	32.6%
Child Abuse/Neglect	15	32.6%
Unsafe Driving Habits	14	30.4%

All Responses for Identification of Youth Top Health Risks/Risky Behaviors

Answer Options	Response Percent	Response Count
Drug Use - Illicit drugs	**56.5%**	**26**
Drug Use - prescription medications	**32.6%**	**15**
Child abuse/Neglect	**32.6%**	**15**
Unsafe driving habits	**30.4%**	**14**
Poor nutrition habits	28.3%	13
Alcohol abuse	17.4%	8
Obesity	21.7%	10
Sedentary lifestyle	21.7%	10
Suicide ideation/depression	7.4%	8
Domestic violence	15.2%	7
Social isolation	8.7%	4
Tobacco Use - Smoking	6.5%	3
Sexual promiscuity	4.3%	2
Teen pregnancy	2.1%	1
Tobacco Use - smokeless tobacco products	2.1%	1
Other (overall unhealthy lifestyle)	2.1%	1
	answered question	**46**

ADULT HEALTH RISKS AND RISKY BEHAVIORS

Adult Health Risks/Risky Behaviors

A total of 47 partners responded to identifying the top three adult health risks/risky behaviors that are most significant in Putnam County. For purposes of this question youth was defined as the population of those 18 to 64 years of age in the county. Of those, 57.4% identified drug use (illicit) as a top priority, 38.3% identified obesity as the second priority, and 34.0% identified affordable health care as the third priority.

Top Health Risks/Risky Behaviors	# Respondent Comments	% Respondent Comments
Drug Use – Illicit Drugs	27	57.4%
Obesity	18	38.3%
Affordable Health Care	16	34.0%

All Responses for Identification of Adult Top Health Risks/Risky Behaviors

Answer Options	Response Percent	Response Count
Drug Use – Illicit Drugs	**57.4%**	**27**
Obesity	**38.3%**	**18**
Affordable Health Care	**34.0%**	**16**
Poor nutrition habits	25.5%	12
Tobacco Use - Smoking	21.3%	10
Alcohol abuse	19.1%	9
Unsafe Driving Habits	17.0%	8
Affordable prescriptions	12.8%	6
Domestic violence	8.5%	4
Social isolation	10.6%	5
Suicide ideation/depression	6.4%	3
Sedentary lifestyle	4.3%	2
Sexual promiscuity	2.1%	1
Other (overall unhealthy lifestyle)	2.1%	1
Other (dental care)	2.1%	1
Other (anxiety)	2.1%	1
	answered question	**47**

OLDER ADULT HEALTH RISKS AND RISKY BEHAVIORS

Older Adult Health Risks/Risky Behaviors

A total of 47 partners responded to identifying the top three health risks/risky behaviors among older adults that are most significant in Putnam County. For purposes of this question youth was defined as the population of those 65 years of age and older in the county. Of those, 55.0% identified affordable prescriptions as the top health risk, 52.5% identified social isolation as the second risk, and 42.5% identified affordable health care as the third top health risk among older adults.

Top Health Risks/Risky Behaviors	# Respondent Comments	% Respondent Comments
Affordable prescriptions	27	57.4%
Social isolation	24	51.1%
Affordable health care	21	44.7%

All Responses for Identification of Older Adult Top Health Risks/Risky Behaviors

Answer Options	Response Percent	Response Count
Affordable prescriptions	**57.4%**	**27**
Social isolation	**51.1%**	**24**
Affordable health care	**44.7%**	**21**
Falls	36.2%	17
Poor nutrition habits	27.7%	13
Sedentary lifestyle	21.3%	10
Obesity	14.9%	7
Drug Use - Prescription Medications	12.8%	6
Suicide ideation/depression	8.5%	4
Drug use – illicit drugs	6.4%	3
Domestic violence	4.3%	2
Tobacco use - smoking	4.3%	2
Alcohol abuse	2.1%	1
Sexual promiscuity	2.1%	1
Tobacco use – smokeless tobacco products	2.1%	1
	answered question	**47**

COMMUNITY AND ENVIRONMENTAL FACTORS

A total of 47 partners responded to identifying the top three community and/or environmental factors that are most significant in Putnam County. Of those, 57.4% identified lack of access to community recreation as the top community/environmental factor in Putnam County, 53.2% identified lack of access to healthy foods as the second greatest factors, and 46.8% identified public safety as the third greatest factors in the County.

Top Health Risks/Risky Behaviors	# Respondent Comments	% Respondent Comments
Lack of access to community recreation	27	57.4%
Lack of access to healthy foods	25	53.2%
Public safety (e.g. unsafe neighborhoods)	22	46.8%

All Responses for Identification of Community and/or Environmental Factors

Answer Options	Response Percent	Response Count
Lack of access to community recreation	57.4%	27
Lack of access to healthy foods	53.2%	25
Public safe (e.g. unsafe neighborhoods)	46.8%	22
Smoking/second hand smoke	38.3%	18
Proximity to industrial development and/or factories	29.8%	14
Availability of water	14.9%	7
Water quality	14.9%	7
Unhealthy work environments	10.6%	5
Lack of public transportation	4.3%	2
Unsafe back roads	2.1%	1
Lack of connection/activities/entertainment for adolescents/adults	2.1%	1
Jobs paying more than minimum wage	2.1%	1
	answered question	**47**

BARRIERS TO HEALTH CARE

CLINICAL CARE

Key respondents were asked to rate access to a set of health care services as being not significant, significant, or highly significant in Putnam County. Those services where respondents identified the barriers as the most significant were lack of addiction services, lack of access to mental health services, and lack of access to dental, long term care and specialist services. It should be noted that at least 50% of respondents identified all 8 of the health care services as having significant or highly significant barriers.

Answer Options	Not Significant 1	Significant 2	Highly Significant 3	% Identifying Services as Having Sig or Highly Sig Barriers	Response Count
Lack of access to addiction services	5	23	19	89%	47
Lack of access to dental services	18	21	10	66%	47
Lack of access to long term care services	11	26	10	66%	47
Lack of access to health care specialist services	13	24	10	66%	47
Lack of access to mental health services	10	18	19	79%	47
Lack of access to prescription drug services	22	16	9	53%	47
Lack of access to primary care services	20	23	5	60%	47
Lack of access to vision care services	19	20	7	59%	46

FACTORS IMPACTING BARRIERS TO CARE

Key respondents were asked to rate a set of barriers to health care as being not significant, significant, or highly significant in Putnam County. Those services where respondents identified the barriers as depicted in the chart below.

Answer Option	Provider Availability	Cost	Cultural / Language	Transportation	Total Responses
Lack of access to addiction services	**25**	22	6	**23**	45
Lack of access to dental services	9	33	1	17	44
Lack of access to long term care services	18	**36**	3	11	45
Lack of access to health care specialist services	14	32	2	19	45
Lack of access to mental health services	**27**	24	5	16	45
Lack of access to prescription drug services	7	**36**	2	13	44
Lack of access to primary care services	9	29	2	18	45
Lack of access to vision care services	10	31	1	16	44

HEALTH AND PUBLIC HEALTH ISSUES BEING ADDRESS WELL

Key informants were provided opportunity to identify health care and/or public health issues being addressed well in Putnam County. A total of 26 respondents provided the following data:

- Dental and vision
- Child/school nutrition
- Addiction
- Local recreation activities and Youth related high risk decision prevention
- Drug use with Teens
- Good EMS system.
- WIC ebt
- New providers to area
- Plenty of recreation areas. Safe neighborhoods
- Well addressed is addictions to opioids and the EMS 911 county Services
- Access to Recreation
- Emergency care
- Access to public parks; transportation (Putnam aging)
- Immunizations
- Collaborative effort with all agencies
- Vaccinations
- Dissemination of public information and strong law enforcement presence
- Putnam County has a great network of local doctors and dentists that meet the needs of most of Putnam County residents.
- There are more mental health providers in the county than ever; plenty of medical providers
- Recreation; Drug and Alcohol awareness; Economic development
- Putnam County Health Department does a good job in providing health information to the public on health issues, provides health clinics services and vaccinations. Community hospital with specialty practitioners and teaching hospital referral access.
- Exercise classes are on the rise as well as fitness facilities
- School based dental services

Text Analysis

GREATEST PUBLIC HEALTH ISSUE

Key respondents were asked to identify the single greatest public health issue in Kanawha County. Of the 37 respondents for this questions, 15 (41%) overwhelmingly identify drug addiction as the single greatest public health threat.

- Addiction (15)
- Lack of healthy connection/activities/entertainment resulting in substance abuse as only form of social activity for adolescents
- Old teaching about what is a healthy diet. Grains are what they give to cattle & chickens to fatten them up. Why is it acceptable for people & then complain about obesity? Also all the sugar in food for kids. Making diabetics.
- Dental care
- Affordable mental health
- Mental Health and School Bullying
- Lack of public transportation
- Affordable healthcare
- Under-insured individuals refusing health care due to cost.
- Drug Issue that compounds to theft
- Drug use and addictions
- Hypertension/ High Cholesterol
- The single greatest public health issues in Putnam County is illicit IV drug use, which puts strains on public health budgets, leads to higher amounts of overdoses and overdose deaths, as well as a much higher frequency of Hepatitis A, B, and C cases.
- Hepatitis Outbreak
- Drug Addiction
- Lack of access to all services due to lack of public transportation
- Need more substance abuse recovery programs
- Transportation
- Drug addiction with lack of available services and lack of Mental Health Services
- We need better grocery stores and health food stores. Lack of quality of produce, meats and supplements are hurting Putnam County. We need more health related stores to come to the area!
- Transportation
- Water
- Drugs and children affected by drugs
- Drug addiction and crime related to it

ESCRIPTION OF PRIORITIZED NEEDS

Putnam County Community Health Assessment Prioritization and Development of Health Improvement Priorities

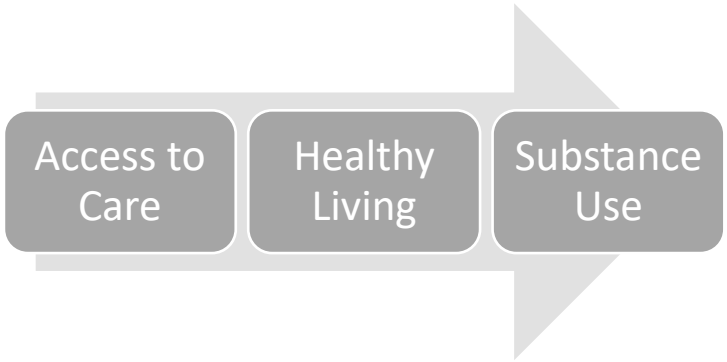
January 2020

January 2020

The Putnam County Health Department is pleased to present the results of the prioritization of the 2019 Community Health Assessment that will provide the foundation for comprehensive community health improvement planning for Putnam County. Priorities were established based on the participation of key stakeholders and community partners representing a wide variety of organizations and was based on the data in the most recent assessment. Important is the use of a collaborative and community participatory process to drive health improvement in the county. One opportunity of such an approach is to 'align community organizations to positively impact health'. Without the contributions and commitment of these partners this document would not exist.

Putnam County's needed health improvements can only occur in conjunction with strategic and coordinated efforts, as well as recognition of the complex factors that influence health across the county. As efforts continue, the community health improvement process in Putnam County that follows will require a community-based, systematic, and consistent approach that creates a dynamic network of health promotion through specific goals, measurable outcomes, and strong partnerships.

Priorities for health improvement in Putnam County for 2020-2023 will focus on three priority areas, equal in importance, which were identified by the Health Department and community stakeholders. These are the areas the community will work together on to improve health:



The goals, objectives, and strategies that will subsequently be developed for a written Community Health Improvement Plan will be aimed toward improving the lives of all Putnam county residents and will align with national priorities for quality health care. The Putnam County Health Department is confident that the strong and committed partners that exist in the County will move this plan forward in a successful manner. All interested parties are encouraged to review this document and determine what role they can play in the future of the public's health in Putnam County. Participation is open to all partners and the community at large. There are multiple challenges, but also tremendous opportunities, for every individual and entity to play a critical role. This includes, but is not limited to, hospitals, the health department, health care providers and clinics, nonprofit organizations, schools and universities, law enforcement, social services, and individuals.

Sincerely,

Cindy Farley, Chair
Putnam County Board of Health

Table of Contents

INTRODUCTION

Effective community health improvement planning that provides a countywide, systematic, and consistent approach linking health promotion to measurable change in health outcomes and optimal delivery of services is critical. This prioritization summary provides the foundation for the development of a concise implementation plan that will set forth our goals, identify data-driven priorities through measurable objectives, and provide a process for managing and measuring progress. The Plan that is developed will also provide a framework to focus the efforts of participating partners on primary, secondary and tertiary prevention efforts to impact Putnam County's most pressing population health issues. The long-term goal for each issue, and the accountability measures that are established will align with national priorities such as Healthy People 2020 and use evidence-based strategies such as those found in the Guide to Community Preventive Services.

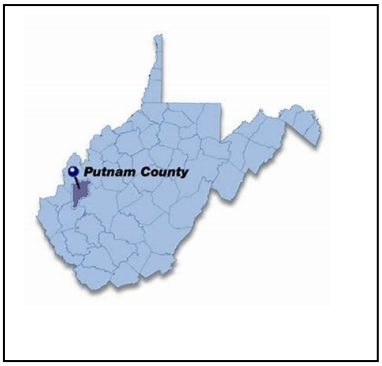
The ongoing process of developing and implementing the Health Improvement Plan that follows will bring together stakeholders and Health Department staff on a periodic, regular basis to review health priorities, progress, and accountability measures as part of ongoing evaluation. Important to this process will be the need to evaluate new health data that provides indication of the need for additional or emerging health or system infrastructure priorities in the county, as well as help us understand current priorities.

This document is not intended to be a final report or end document. It is intended to be the beginning of a process that will establish the path forward in Putnam County. The approach that follows will be structured and specific to guide decisions, but flexible enough to respond to new health challenges and change as determined by the partner experts in each of the priority workgroups that are established. Its' inclusive process represents a framework for all stakeholders.

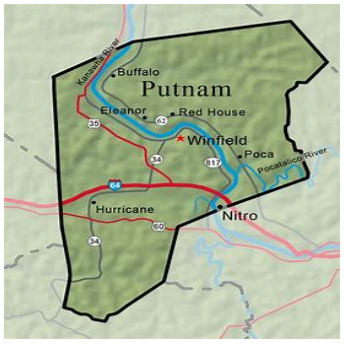
Putnam County

OVERVIEW

Putnam County, West Virginia was the community defined for evaluation of new and/or updated data reflecting the health of the population for the Community Health Assessment upon which prioritization was based. The county is located in the southcentral portion of West Virginia, surrounded by five adjacent counties, and is part of the Huntington-Ashland, WV-KY-OH Metropolitan Statistical Area. Putnam County is 346 square miles in size, with 160.5 persons per square mile, compared to the West Virginia average of 77.1 persons per square mile (U.S. Census Bureau, 2010). The total estimated population of the County in 2018 was 56,682 and has consistently increased in population size since 2010 (U.S. Census Bureau, 2019). Putnam County has two cities (Hurricane and Nitro), five towns, three census-designated places, and 12 unincorporated communities (U.S. Census Bureau, 2019). Putnam County lies along Interstate-64 between two of the largest cities in the state, Charleston and Huntington.



In 2019, the County Health Rankings, sponsored by the Robert Wood Johnson Foundation, ranked Putnam County as the 3rd healthiest county in West Virginia of all 55 counties for health outcomes (a gauge of the health status of a county) and 1st healthiest for health factors (those factors that influence the health of a county). Over the past six years the ranking has improved from 12th in the state to 3rd most recently for health outcomes and has consistently maintained ranking as 1st for health factors. Putnam County is also listed in the Federal Register as a Health Professional Shortage Area (HPSA) for primary care, mental health care, and dental care (Health Resources and Services Administration, 2019). Health Professional Shortage Areas (HPSAs) are designated by HRSA as having shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), population (e.g. low income or Medicaid eligible) or facilities (e.g. federally qualified health center or other state or federal prisons).



Putnam County Community Health Assessment
Highlight of Findings

COMMUNTY DATA

Socioeconomic Indicators

- Where many counties in WV have seen a decrease in population, especially over recent years, Putnam County has seen a consistent growth in population from 54,950 in 2010 to 56,792 in 2017.
- The total civilian labor force in the county was estimated to be 58% of the total population in 2016, as compared to 53.8% for West Virginia.
- 91.9% of adults have a high school degree or higher compared to 85.9% for West Virginia and 87.3% for the U.S.
- From 2012 to 2017, the percent of individuals who are high school graduates or higher has increased from 88.9% to 91.9% and the percent having a bachelor's degree or higher has increased from 23.8% to 24.9%.
- Median income in 2017 was $59.111 as compared to $44,061 for West Virginia and represents a continued trend of increasing income; however, overall this indicator continues to be less than that for the U.S.
- The largest percentage of household incomes in Putnam County (18.6%) fell between $50,000 and $74,999, consistent with WV and the U.S; however, 14.0% of the population in the county has a household income of $35,000 to $49,999 and 20.0% have a household income of less than $24,999 (10.6% less than $14,900).
- The percentage of individuals over 18 years living in poverty from 2013 to 2017 has decreased from 11.3% in 2013 to 9.2% in 2017 and remains much below the rate for WV.
- The percentage of children under 18 years living in poverty has decreased significantly from 17.0% in 2013 to 9.6% in 2017 and in 2017 remains well below the State and national levels.
- The percentage of adults over 65 years of age living in poverty has consistently increased over the past five years, from 5.7% in 2013 to 9.1% in 2017.
- From 2013 to 2017, uninsured rates for all individuals decreased from 10.9% to 6.3%. For children 18 years and under, uninsured rates decreased from 5.7% to 3.2% for that same period.
- The primary care provider ratio of 920:1 was the second lowest in the last five years in Putnam County and significantly lower than the ratio in either West Virginia or the U.S; and for the period of 2013 to 2017 the mental health provider ratio has also seen a consistent decrease from 1,820:1 to 1,350:1 in the county.

Causes of Death

- The leading causes of deaths in 2015 were: (1) Malignant neoplasms (cancers), (2) Diseases of the heart, (3) Accidents, (4) Dementia, (5) Chronic lower respiratory disease, and (6) Stroke.
- The 'order' for leading cause of deaths is comparable to that for West Virginia however it should be noted that the following rates for dementia, Alzheimer's and influenza/pneumonia are significantly higher in Putnam County than for WV.
- The percent of deaths occurring in 2015 was slightly higher than the percentage occurring in the state for the age group of 25-34 years.
- In Putnam County, life expectancy for females is 77.4 years of age, which is comparable to the U.S. life expectancy rate of 77.9 years. The average age at death in Putnam County was 73.4 years in 2015 as compared to 72.2 years for West Virginia.

Communicable Disease

- Chlamydia rates in Putnam County demonstrated an increase from 2011 to 2013 and then decreased increased in 2014 and 2015 to the lowest rate in the past five years.
- The number of cases of gonorrhea in Putnam County, for the period 2011 to 2015, ranged from 9 to 26 with a notable increase noted from 11 (2014) to 26 (2015) which was the 9th highest rate of all WV counties that year.
- Among West Virginia counties, Putnam County is located in one of two regions with the next to the highest rates of HIV/AIDS. Based on data reported by the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB. Prevention, HIV prevalence rates at the county level for Putnam County from 2007 to 2015 have increased from a rate of 33 per 100,000 to 55 per 100,000, respectively.

Chronic Disease Prevalence

- The percentage of the population with arthritis, asthma, cancer, cardiovascular disease, depression, diabetes, hypertension, obesity, and obesity/overweight in Putnam County is notably lower than for WV, but higher than reported for the U.S.
- 32.9% of Putnam County residents indicated being obese, as compared to 35.6% for West Virginia and 28.9% for the U.S.
- In Putnam County, diabetes is the 9th leading cause of death and the percentage of the population who have ever been told they have diabetes is 11-12%.
- 31.4% of the population in the county have not engaged in physical activity (outside of work) in the past 30 days.

Quality of Life and Mental Health

- The percentage of the population reporting their health to be poor or fair in Putnam County is approximately 23.4% (1 in 4).
- 22.1% of residents (as compared to 23.1% for WV) responded they have been told they have a depressive disorder.

Maternal Child Health

- In 2015 there were a total of 601 births by county of residence for Putnam County, with birth rates remaining stable over the past five years.
- Only 0.4% of infants were born to mothers who were less than 18 years of age in 2015.
- 9.3% (nearly one of every ten) of newborns in 2015 were low birthweight compared to 9.6% in West Virginia and 8.0% in the U.S.
- About 1 in every 10 women who become pregnant did not seek care until the second trimester, 3.2% did not seek care until the third trimester and 0.9% did not receive prenatal care during pregnancy.
- 14.0% of women residing in Putnam County used tobacco during pregnancy, which is the lowest reported percentage in the state; however, the smoking rate among pregnant women in the U.S. in 2014 was only 8.4%.

Substance Use/Misuse

- Most recent trends in tobacco use for Putnam County depict a tobacco use rate of 18.0% for the year 2016, lower than the rate of 25.0% in WV.
- The percentage of adults reporting excessive drinking has increased in Putnam County for the period 2012-2016 from 9% to 14%.
- In 2017, HIDTA reported 16-38 deaths in Putnam County due to drug overdose, as compared to counties with lowest overdose rates of 0 to 5 and highest overdose rates of 89-194.
- In 2017, there were 17 overdoses involving fentanyl, 6 overdoses involving heroin, 1 involving cocaine, and 10 overdoses involving methamphetamine.

COMMUNITY SURVEY.

- A community-based survey was distributed throughout Putnam County with a total of 149 responses and specific effort made to capture surveys from all zip codes and all ages.
- Opportunities related to quality of life that may be explored based on community feedback included transportation, adequate sidewalks, adequate parks and recreation, health and wellness activities, and access to healthy, affordable foods.
- Managing weight and substance abuse prevention and treatment were the top 'Health Behaviors/Issues' people wanted more information about.
- Issues most affecting quality of life in Putnam county were identified as poverty and substance abuse/misuse.
- 90% of respondents identified their health status as good, very good, or excellent.
- The highest prevalence of existing health conditions included high blood pressure, high cholesterol, obesity and depression/anxiety.
- 94% of respondents indicated they participate in some type of physical activity outside of work.
- 20% responded they had difficulty accessing health care in the past 12 months.

- Dental care and health care specialists were the types of care individuals had difficulty accessing.
- Reasons they had difficulty accessing care were health insurance coverage inadequate or deductible too high.

COMMUNITY PARTNER SURVEY RESULTS

- The top three target populations having the greatest unmet need were those with a substance use disorder, mental health need or low income.
- The top 3 health risks/risky behaviors identified for youth were drug use, child abuse and unsafe driving habits.
- The top 3 health risks/risky behaviors identified for adults were drug use, obesity and affordable health care.
- The top 3 health risks/risky behaviors identified for older adults were affordable prescriptions, social isolation, and affordable health care.
- The top three community and/or environmental factors in the county were lack of access to community recreation, lack of access to healthy foods, and public safety.

METHODOLOGY FOR PRIORITIZATION AND IDENTIFICATION OF COMMUNITY HEALTH ISSUES

AGENDA FOR PRIORITIZATION PROCESS

Putnam County stakeholders/partners were invited to participate in a half-day meeting which would determine the prioritization of Putnam County's community health needs based on the recent Community Health Assessment. The following agenda was established and used for the meeting:

Community Health Assessment Prioritization

Location: Putnam County Health Department
Date: Friday, November 8, 2019
Time: 12:00 p.m. to 3:00 p.m.

12:00 p.m.	**Welcome and Overview of the Meeting Day**
12:10 p.m.	**Review and Discussion of Key Findings**
12:45 p.m.	**Prioritization Steps 1 and 2**
1:15 -1:30 p.m.	**BREAK**
1:30 – 2:15 p.m.	**Prioritization Steps 3 and 4**
2:15 – 2:30 p.m.	**Review and Discussion of Health Improvement Priorities**
2:30 - 2:45 p.m.	**Determination of Final Health Improvement Priorities and Establishing Next Steps**

PARTICIPANTS

Participants in the prioritization process included:

Prioritization Partner Participants

Name	Organization
Mayor Randy Barrett	City of Winfield
Frank Chapman	Putnam County Emergency Management
Amy Connelly	Putnam Wellness Coalition
Ellis Connelly	Faith Based
Kerri Cooper	United Way Central WV
Cindy Farley	Putnam County Health Department
Larry Frye	Putnam County Commission
Danielle Gillispie	Putnam County Schools
Ashley Alford Glance	Putnam County Chamber of Commerce
Lolita Kirk	Putnam County Health Department
Deb Koester	WV Local Health, Inc
Wanda Marks	Charleston Area Medical Center
E Michael Robie	Charleston Area Medical Center
Jenni Sutherland	Putnam County Aging Program
Eric Tarr	WV State Senate
Mary Lynn Tran	Great Rivers Regional System for Addiction Care
Evan Young	Putnam Wellness Coalition

PRIORITIZATION PROCESS

Once the Community Health Assessment was completed, the identification of health problems facing Putnam County, and subsequently those issues to be addressed through the Community Health Improvement Plan were undertaken. Having a standard methodology that provided the foundation for prioritization was recognized as important and consisted of a series of deliberate steps in a process in order to identify the 'right priorities' to focus on to benefit the community. Each participating stakeholder received a copy of the Community Health Assessment as part of the prioritization meeting. A copy of a prioritization guide and outline in the pages that follow, originally developed by Purdue University Health Care Advisors, was used to support this process.

Prioritizing Opportunities for Improving the Community's Health
Task: Identifying Health Improvement Priorities in Putnam County

Once the community health assessment report is complete, it is necessary to identify the health issues facing the community that you want to address as part of an improvement plan. Having a standard way to develop your ideas and evaluate each idea as a priority is important. In the end, taking the time to go through these steps will prove valuable in selecting 'the right priorities' to focus on.

Getting Started – The Affinity Diagram
Using this tool/exercise will help to generate a number of possible areas to target your improvement efforts and then organize them into natural groupings. Because of the interactive nature of this exercise, it enables everyone to participate. It will also help you not to be overwhelmed by the many possibilities – but to arrive at consensus as a team – for the remaining steps.

Step 1: Silent Brainstorming
Each person will need a pad of Post-It notes. Consider the following question:

> What are the most important issues we need to address in order to improve/enhance health in Putnam County?

You will use the next 15 minutes to conduct a 'silent brainstorming exercise, ' so that everyone is individually thinking about possible answers to the question above. Each person should record one response or idea on a separate Post-It note. Each person may identify up to 5 ideas – each on a separate Post-It note. When each person has recorded all of their possible topics, they should place them anywhere on the wall.

Step 2: Grouping Ideas into Like Themes
Now, for the next 15 minutes, everyone should participate in 'grouping' the Post-It notes into common themes. The rules for this part are: 1) anyone can move any Post-It note; 2) no talking; and 3) you can move a Post-It that has already been moved. Your goal is to group the Post-It notes 'where they best fit' working as a group. One you have grouped them and everyone is satisfied, you will create 'header cards' that serve as a label for the project area or issue represented in that group of Post-It notes that you have created. You are now identifying a larger theme for that grouping. When this is complete, your facilitators will provide you with the next steps using your Prioritization Worksheet.

15 MINUTE BREAK

Step 3: The Critical Weighting Method and the PEARL Test

With the community issues identified, each group has now been given a worksheet with a set of issues to consider using the Prioritization Worksheet. Each group will complete the worksheet for those issues, report your scores to the facilitator, and identify a spokesperson to report out.

Prioritization will be completed using the Critical Weighting Method, which uses the following weighted criteria to prioritize each issue individually:

1) The ability to evaluate outcomes
2) The size of the problem in the community, based on the impacted population.
3) The seriousness of the problem

Each of these criteria will be considered separately and the results totaled. The total score will establish the relative priorities of the health problems.

1. **<u>Ability to Evaluate Outcomes</u>**

   Give each assigned issue in your group a numerical rating of 0 to 10 that represents the ability to evaluate the outcome of any given information. The more measurable the outcome is, the higher the number.

Ability to Evaluate Outcomes	Outcome Rating
No ability to evaluate outcome	0
Perceptions only (anecdotal)	2
Perceptions + some data	4
Perceptions + data – surveys w/out ongoing evaluation	6
Perceptions + data – baseline data available for last yr.	8
Perceptions + data – baseline data available for several years to establish trends	10

2. **Size of the Health Problem**

   Next, give each assigned issue in your group a numerical rating of 0 to 10 that represents the percentage of the overall population affected by the problem. The higher the percentage affected, the larger the number. Because this issue is considered more critical than the ability to evaluate outcomes, this score is multiplied by a factor of 2.

Size of the Health Problem	Outcome Rating

Less than 0.01% (Fewer than 10 residents)	0
0.01% to 0.09% (10 to 99 residents)	2
0.1% to 0.9% (100 to 999)	4
1.0% to 9.9% (1,000 to 9,999)	6
10% to 24.9% (10,000 to 24,999)	8
25% or more (more than 25,000)	10

3. Seriousness of the Health Problem

You must also give each assigned issue in your group a numerical rating of 0 to 10 that represents the seriousness of the health problem – the more serious the problem, the greater the number. Recognizing that this rating is subjective, consider the following questions as you are using the criteria for rating seriousness:

- Is there public concern? Is there urgency to intervene?
- Does the issue lead to a high death or disability rate, or high hospitalization rate? Does it lead to premature illness or death over time?
- Is there actual or potential economic loss associated with this issue? Will the community have to bare the economic burden?
- What is the potential or actual impact on others in the community?

As the seriousness of the issue is considered more critical than the ability to evaluate the outcomes or the size of the problem, this score is multiplied by a factor of 3.

Seriousness of the Health Problem	**Outcome Rating**
No impact on community.	0
Not serious, little impact on others	2
Moderately serious (illness, no general long term effect)	4
Serious – impacts others, increased hospitalization rates, some long term effects	6
Relatively Serious – increased impacts on others, increased death rates, long term effects on overall community.	8
Very Serious – higher death rates, premature deaths, great impact on others and overall community.	10

4. The PEARL Test

Finally, once each health problem has been prioritized, apply the PEARL test to your assigned issues. This test is used to screen out health issues based on the following feasibility factors:

- **Propriety**: Is a plan for the health problem suitable for the community? Is this the best group to address the issue?

- **Economics**: Does it make economic sense to address the problem? Are there economic consequences in 'not' addressing it?
- **Acceptability**: Will the community accept working on this issue? Is it wanted?
- **Resources**: Is funding available or potentially available for the interventions needed? Are other resources needed and available?
- **Legality**: Do current laws allow the needed activities to be implemented? Does policy development need to happen first?

For each factor, the group must assign a '1' (yes, the issue is feasible for this factor) or a '0' (no, the issue is not feasible for this factor). The final PEARL score is calculated by multiplying the scores of all 5 factors together.

The Overall Prioritization Score is calculated by the Critical Weighting Criteria Score and the PEARL score. Health problems which receive a score of 0 (due to the outcome of the PEARL test) must either be eliminated or the group must agree to the development of a corrective action plan to ensure that potential health priorities will meet all give feasibility factors. Issues with the highest combined scores are identified as the most important to be addressed. The total number of issues to be addressed should be carefully considered at this time.

Prioritization Process

Participants were asked to silently brainstorm their responses to the following question, "What are the public health issues that need to be addressed in Putnam County," based on the information and data compiled in the recent Community Assessment. Each participant then participated in an Affinity Diagram by identifying the top health issues to answer the question, placing one issue on one post-it note page and placing their post-it notes on the wall. Next, all participants worked together to groups or categorize their responses into one set of final health issues facing Putnam County. Following categorization, over 70 post it notes were posted and categorized for the next steps of prioritization.

Affinity Topic Headers

At the conclusion of the affinity exercise and combining post it notes to create headers, participants had identified 11 topics to move to the Prioritization Worksheet.

Affinity Topic Headers for Final Issues Needing Addressed in Cabell County
Accident Prevention
Aging – Senior Living
Cancers
Chronic Disease Management
Communicable Disease
Community Supports
Healthcare Access & Cost
Healthy Living
Immunizations
Mental Health
Substance Use

APPLYING THE CRITICAL WEIGHTING AND PEARL TEST TO ESTABLISH FINAL PRIORITIES

Having a standard methodology to identify the 'right priorities' to focus on to benefit the community is critical. Subsequently, forming two groups, Putnam County prioritization participants used the Criteria Weighting Method and PEARL test to evaluate and assign scores for the 11 health issues independently, with one group evaluating five topics and the other group evaluating six topics. Final results for all Affinity Header Topics, including the Criteria Weighting Score and the Final Score when PEARL applied. are included in the Prioritization Tables below. Only two issues (community supports and substance use) received scores of zero following the application of the PEARL test. A score of zero does not eliminate a topic, but brings attention to factors to be addressed if the community prioritizes it in the plan.

Group 1 Critical Weighting and PEARL Test Results

Results of Critical Weighting and PEARL Test	Criteria Score	Final Score When PEARL Applied
Accident Prevention	46	46
Chronic Disease Management	52	52
Community Supports	34	**0**
Mental Health	38	38
Substance Use	52	**0**

Group 2 Critical Weighting and PEARL Test Results

Results of Critical Weighting and PEARL Test	Criteria Score	Final Score When PEARL Applied
Aging – Senior Living	44	44
Cancers	52	52
Communicable Disease	50	50
Healthcare Access & Cost	52	52
Healthy Living	60	60
Immunizations	60	60

Two final scores changed from the original criteria weighting score to a "0" when the PEARL test was applied. Those topics were 1) Community Supports with the rationale for the change being lack of funding support to have a measurable impact; and 2) Substance Use with the rationale being that addressing some aspects of this topic may not be acceptable to the community. Following further discussion, participants recommended a total of three issues or topics as the priorities for the Community Health Improvement Plan that will be developed. Due to the significant nature of the substance use epidemic participants maintained this as a priority and will address challenges/barriers as they move forward that were identified in this process

- **Access to Care** – will include access to mental health services, community health workers, community paramedicine, quick response teams, transportation, and other identified barriers
- **Healthy Living** – will include accident prevention, cancer prevention and early detection, chronic disease management, communicable disease, healthy aging, and immunizations
- **Substance Use** - will include planning related to prevention, early intervention, treatment, and recovery to assure a continuum of care for the community related to substance use disorders

The next steps in the health improvement planning process will include the creation of three workgroups to develop goals, strategies and key performance indicators as a 'roadmap' for wellness in Putnam County.