

Geisinger

Community Health Needs Assessment

July 1, 2018 – June 30, 2021



Western Region
Geisinger Lewistown Hospital
June 2018



Candor. Insight. Results.

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Our Commitment to Community Health

Geisinger has long been known for providing high-quality and compassionate healthcare to the communities we serve throughout western Pennsylvania. Our commitment continues as we expand services in the region. Over the past year, we began major renovation and expansion projects in Lewistown and State College to make services more convenient for patients, including orthopaedics, women’s health, cardiology, dermatology and gastroenterology services.

In Geisinger Lewistown Hospital’s emergency and radiology departments, updated equipment, more patient rooms and a better patient flow process have led to improved patient care. Geisinger Lewistown Hospital expanded its hospitalist program, which includes five provider teams and two advanced practitioners, to provide better coverage for hospital patients. By late 2018, LIFE Geisinger and Fresh Food Farmacy™ will be expanding into Mifflin County. These programs are designed to meet the needs of patients with chronic health conditions and patients who suffer from food insecurity.

We are proud of our nonprofit mission, and we work every day on meeting the healthcare needs of the region for years to come. Geisinger has taken major steps recently in achieving that goal.

- The medical services we provide are the most advanced and innovative in the region.
- In fiscal year 2017, our organization contributed \$875.1 million in community benefit, and nearly \$3 billion over the past 10 years.
- We partner with area providers and hospitals to strengthen healthcare delivery throughout northeast Pennsylvania and the Commonwealth.
- We’ve added 10,000 new jobs throughout Pennsylvania over the last decade.
- Recognizing that our employees drive everything we do, we invest over \$2 billion annually in their salaries, benefits, training and education.
- With approximately 32,000 employees and more than 1,800 employed physicians, we’re growing the local economy and growing our \$12.7 billion annual positive impact on the Pennsylvania and New Jersey economies.
- We’ve also invested more than \$1 billion in capital expenditures over the past decade.

Our integrated health services organization includes 13 hospital campuses, a nearly 600,000-member health plan, two research centers, the Geisinger Lewistown Hospital School of Nursing and the Geisinger Commonwealth School of Medicine. And Geisinger’s MyCode® Community Health Initiative, the largest healthcare system-based precision health project in the world, with nearly 200,000 volunteers enrolled, is conducting extensive research and returning medically actionable results to participants.

Looking forward, Geisinger is firmly committed to staying on the forefront of innovation, quality and value; finding the most efficient and effective ways to deliver care; and collaborating with other organizations to best serve our communities.

Sincerely,
 Michael Hegstrom, MD
 Chief Medical Officer
 Geisinger Lewistown Hospital

Kirk Thomas
 Chief Administrative Officer
 Western Region

Overview of the FY2019 CHNA

A Collaborative Approach to Community Health Improvement

The FY2019 Geisinger Community Health Needs Assessment (CHNA) was conducted in partnership with Geisinger, Allied Services Integrated Health System, and Evangelical Community Hospital. The study area included 19 counties across Central, Northeastern, and South Central Pennsylvania which represent the collective service areas of the collaborating hospitals. To distinguish unique service areas among hospitals and foster cooperation with local community partners to impact health needs, regional research and local reporting was developed.

The collaborating health systems agreed that by coordinating efforts to identify community health needs across the region, the health systems would conserve community resources while demonstrating leadership in convening local community partners to address common priority needs.

Best practices in community health improvement demonstrate that fostering “collective impact” is among the most successful ways to affect the health of a community. Collective impact is achieved by committing a diverse group of stakeholders toward a common goal or action, particularly to impact deep rooted social or health needs.

By taking a collaborative approach to the CHNA, Geisinger, Allied Services Integrated Health System, and Evangelical Community Hospital are leading the way to improve the health of communities in Central, Northeastern, and South Central Pennsylvania. The following pages describe the process and research methods used in the FY2019 CHNA and the findings that portray the health status of the communities we serve and outline opportunities to work with our community partners to advance health among all residents across our service areas.

CHNA Leadership

The FY2019 CHNA was overseen by a Planning Committee of representatives from each health system, as well as a Regional Advisory Committee of representatives from each hospital. CHNA committee members are listed below.

CHNA Planning Committee

Tracey Wolfe, Vice President, Medicine Institute, Geisinger; Executive Leader
Allison Clark, Community Benefit Coordinator, Community Affairs, Geisinger; Project Manager
Joni Fegan, Strategic Planning Manager, Geisinger Holy Spirit
Gregory Lilly, Administrative Fellow, Geisinger
Barb Norton, Allied Services Integrated Health System
Sheila Packer, Director Community Health and Wellness, Evangelical Community Hospital
Tamara Persing, Vice President Nursing Administration, Evangelical Community Hospital
Phyllis Mitchell, Vice President Corporate Communications, Geisinger

CHNA Regional Advisory Committee

Renee Blakiewicz, Administrative Director, Geisinger Community Medical Center
Julie Bordo, Operations Manager, Geisinger Wyoming Valley Medical Center/Geisinger South Wilkes-Barre
Lorie Dillon, Chief Executive Officer, Geisinger HealthSouth Rehabilitation Hospital
Brian Ebersole, Senior Director of Springboard Health
Olive Herb, RN Care Coordinator, Geisinger Jersey Shore Hospital
Allison Hess, Associate Vice President, Geisinger Health and Wellness
Kristy Hine, Associate Vice President, Geisinger Lewistown Hospital
Leslie Jones, Business Development Director, Geisinger HealthSouth Rehabilitation Hospital
Corinne Klose, Associate Vice President of Operations and Special Projects, Geisinger Shamokin Area Community Hospital
Daniel Landesberg, Administrative Director, Geisinger Wyoming Valley Medical Center/Geisinger South Wilkes-Barre
Lisa Makara, Program & Events Specialist, Geisinger Bloomsburg Hospital
Adam Robinson, Administrative Fellow, Geisinger Medical Center/Geisinger Shamokin Area Community Hospital
Donna Schuck, Associate Vice President/Chief Development Officer, Evangelical Community Hospital
Nadine Srouji, MD, Medical Director, Value-Based Care & Bundling, Geisinger Holy Spirit Medical Group
Kirk Thomas, Chief Administrative Officer, Geisinger Lewistown Hospital
Brock Trunzo, Digital Marketing Producer, Geisinger Jersey Shore Hospital
Skip Wieder, Volunteer, Geisinger, United Way
Barbara Zarambo, Director of Operations, Geisinger Viewmont Imaging
Randy Zickgraf, Director Tax Services, Geisinger

Community Engagement

Community engagement was an integral part of the FY2019 CHNA. Webinars were held in October and November 2017 to announce the onset of the CHNA and encourage broad participation across the region. Throughout October and November 2017, a Key Informant Survey was sent to approximately 1,000 representatives of health and human service organizations, religious institutions, civic associations, businesses, elected officials and other community representatives. Partner Forums were held throughout the region in January 2018 to bring together these partners to review research findings and provide feedback on the most pressing community health needs. In March and April 2018, focus groups with seniors were held to better understand challenges and opportunities to improving health among high risk populations. Community Forums are planned for Fall 2018 to present CHNA findings and Implementation Plans to community residents and provide a forum for input.

CHNA Methodology

The FY2019 CHNA was conducted from September 2017 to April 2018 and used both primary and secondary research to illustrate and compare health trends and disparities across the region. Primary research was used to solicit input from key community stakeholders representing the broad interests of the community, including experts in public health and individuals representing medically underserved, low-income and minority populations. Focus groups and interviews were used to collect in-depth insight from health consumers representing medically underserved or high risk populations. Existing data sources, including public health statistics, demographic and social measures, and healthcare utilization, were collected and analyzed to identify health trends across hospital service areas.

Specific research methods included:

- > An analysis of statistical health and socioeconomic indicators from across the region
- > An analysis and comparison of acute hospital utilization data
- > A Key Informant Survey with 113 community leaders and representatives
- > Six regional Partner Forums with community based organizations to identify community health priorities and facilitate collaboration toward community health improvement
- > Twelve Focus Groups with seniors to examine preferences, challenges, and opportunities to accessing and receiving healthcare
- > Prioritization of community health needs to determine the most pressing health issues on which to focus community health improvement efforts

The FY2019 CHNA built upon the hospitals' previous CHNAs and subsequent Implementation Plans. The CHNA was conducted in a timeline to comply with IRS Tax Code 501(r) requirements to conduct a CHNA every three years as set forth by the Affordable Care Act (ACA). The research findings will be used to guide community benefit initiatives for the hospitals and engage local partners to collectively address identified health needs.

Prioritized Community Health Needs

In assessing the health needs of the community, Geisinger and its CHNA partners solicited and received input from persons who represent the broad interests of the communities served by each hospital, including those with expertise in public health, representatives of medically underserved, low income, and minority populations, and other community stakeholders who brought wide perspectives on community health needs, existing community resources to meet those needs, and gaps in the current service delivery system. Through facilitated dialogue and a series of criteria-based voting exercises, the following health issues were prioritized as the most significant health needs across the region on which to focus health improvement efforts over the coming three-year cycle.

- > Access to Care
- > Behavioral Health (to include substance abuse and mental health strategies)
- > Chronic Disease Prevention and Management (with a focus on increasing healthy habits)

To direct community benefit and health improvement activities, Geisinger and its CHNA partners created individual Implementation Plans for each hospital to detail the resources and services that will be used to address these identified health priorities.

Board Approval

The Geisinger FY2019 CHNA final reports were reviewed and approved by the Geisinger Health Affiliate Boards on June 20, 2018 and the Geisinger Health Board of Directors on June 21, 2018. Following the Boards' approval, all CHNA reports were made available to the public via the Geisinger website at <https://www.geisinger.org/about-geisinger/in-our-community/chna>.

Research Partner

Baker Tilly was engaged as the research partner for the CHNA. Baker Tilly assisted in all phases of the CHNA including project management, quantitative and qualitative data collection, small and large group facilitation and report writing.

The Baker Tilly team has worked with more than 100 hospitals and thousands of their community partners across the nation to assess health needs and develop actionable plans for community health improvement.

Geisinger FY2019 CHNA Research and Planning Team

Julius Green, CPA, JD, Tax Exempt Practice Leader

Colleen Milligan, MBA, CHNA Project Manager

Catherine Birdsey, MPH, Research Manager

Brittany Blau, MPH, Research Consultant

Jessica Losito, BS, Research Consultant

Keith Needham, BS, Research Consultant

Service Area Description for Geisinger Lewistown Hospital

Population Overview

Geisinger Lewistown Hospital primarily serves residents in 10 zip codes spanning Juniata and Mifflin Counties in Pennsylvania. The 2017 population of the service area is 59,214 and is projected to increase 1% by 2022.

Geisinger Lewistown Hospital Primary Service Area

Zip Codes
17004, Mifflin County
17009, Mifflin County
17044, Mifflin County
17051, Mifflin County
17058, Juniata County
17059, Juniata County
17063, Mifflin County
17082, Juniata County
17084, Mifflin County
17841, Mifflin County



Service Area Population Growth

2017 Population	% Growth from 2010	% Growth by 2022
59,214	1.9%	1.0%

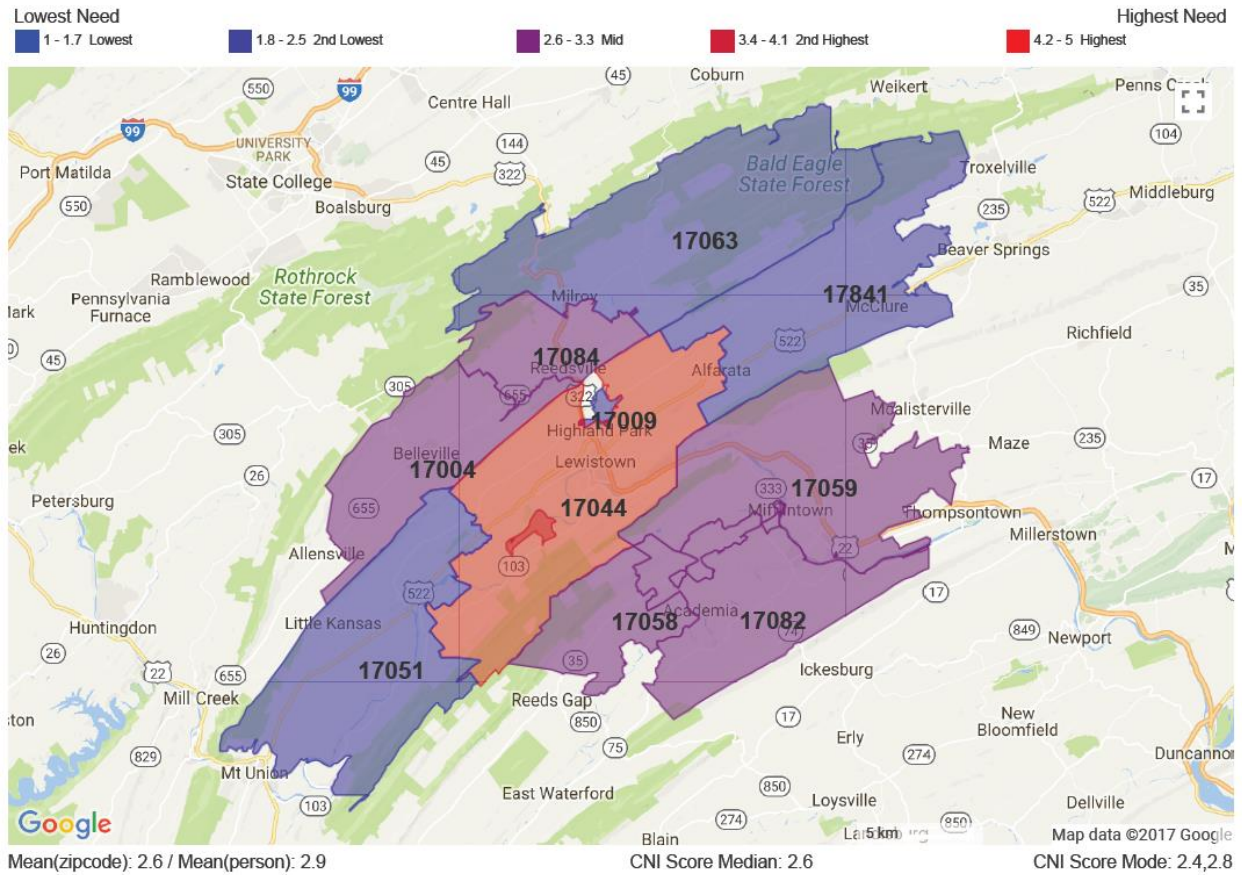
Zip code of residence is one of the most important predictors of health disparity; where residents live matters in determining their health. The Community Need Index (CNI) was developed by Dignity Health and Truven Health Analytics to illustrate the potential for health disparity at the zip code level. The CNI scores zip codes on a scale of 1.0 (low need) to 5.0 (high need) based on 2015 data indicators for five socio-economic barriers:

- > Income: Poverty among elderly households, families with children, and single female-headed families with children
- > Culture/Language: Minority populations and English language barriers
- > Education: Population over 25 years without a high school diploma

- > Insurance coverage: Unemployment rate among population 16 years or over and population without health insurance
- > Housing status: Householders renting their home

The weighted average CNI score for Geisinger Lewistown Hospital's 10 zip code service area is 2.9, indicating moderate overall community need. Zip code 17063, Milroy, has the lowest CNI score (2.2); zip code 17044, Lewistown, has the highest CNI score (3.4).

Community Needs Index for Geisinger Lewistown Hospital's Service Area



The following table analyzes social determinants of health contributing to zip code CNI scores. Zip codes are shown in comparison to their respective county and the state, and are presented in descending order by CNI score. Cells highlighted in **yellow** are more than 2% points higher than the county statistic. Exception: English speaking cells are more than 2% points lower than the county statistic.

Zip code 17044, Lewistown, has the highest CNI score, indicating the greatest community need. The zip code has the highest percentage of households living in poverty and the highest unemployment rate. However, residents are more likely to have attained higher education and less likely to be without health insurance when compared to the county overall.

Zip codes 17004, Belleville, and 17084, Reedsville, have a lower percentage of English only speaking residents and a larger uninsured population. Both zip codes are part of the Big Valley/Belleville settlement for Amish residents. The Amish are less likely to be insured and may also speak Pennsylvania German/Dutch.

Social Determinants of Health Indicators by Zip Code

	Black/ African American	Hispanic/ Latino	English Speaking (only)	HHs in Poverty	Unemploy -ment	Less than HS Diploma	Without Health Insurance	CNI Score
Juniata County	0.8%	3.5%	90.8%	12.7%	5.3%	17.4%	14.5%	
17082 (Port Royal)	1.5%	3.3%	92.1%	14.4%	6.4%	13.1%	13.4%	2.8
17059 (Mifflintown)	0.6%	6.4%	87.4%	12.0%	5.5%	14.8%	13.2%	2.8
17058 (Mifflin)	0.7%	6.1%	92.9%	11.3%	6.1%	17.2%	9.7%	2.8
Mifflin County	0.8%	1.5%	91.1%	14.6%	5.2%	16.9%	15.0%	
17044 (Lewistown)	1.2%	2.2%	96.8%	17.6%	6.7%	12.1%	9.2%	3.4
17004 (Belleville)	0.7%	1.2%	66.7%	16.4%	3.5%	32.5%	38.3%	2.6
17084 (Reedsville)	0.2%	0.5%	80.9%	12.5%	2.7%	22.4%	27.9%	2.6
17051 (McVeytown)	0.4%	1.1%	96.8%	11.3%	5.1%	15.1%	11.3%	2.4
17841 (McClure)	0.5%	1.0%	89.8%	10.1%	3.0%	21.7%	16.5%	2.4
17009 (Burnham)	0.5%	1.9%	99.5%	7.8%	6.6%	11.9%	5.1%	2.4
17063 (Milroy)	0.1%	0.4%	89.1%	9.2%	3.7%	18.9%	13.5%	2.2
Pennsylvania	11.2%	7.4%	89.4%	12.9%	6.2%	10.1%	8.8%	

Secondary Data Profile: Western Region

The Western region is comprised of three counties and is served by Geisinger Lewistown Hospital.

Western Region Service Area Counties

- > Centre County
- > Juniata County
- > Mifflin County

Secondary Data Profile Summary

Secondary data, including demographic and public health indicators, were analyzed for the Western region to better understand community drivers of health status, health and socio-economic trends, and emerging community needs. Data were compared to state and national benchmarks, as available, to identify areas of strength and opportunity for the region.

All reported demographic data were provided by ESRI Business Analyst, 2017 and the US Census Bureau, American Community Survey, unless otherwise noted. Health data were compiled from secondary sources, including the Pennsylvania Department of Health, the Centers for Disease Control and Prevention (CDC), the Behavioral Risk Factor Surveillance System (BRFSS), the University of Wisconsin County Health Rankings & Roadmaps program, among other sources. A comprehensive list of data sources can be found in Appendix A.

Public health data were analyzed for a number of health issues, including access to care, health behaviors and outcomes, chronic disease prevalence and mortality, mental health and substance abuse, and maternal and child health. This section provides a summary of the data findings. Full analysis of the demographic and public health measures follows this summary.

Public health data were analyzed for a number of health issues, including access to care, health behaviors and outcomes, chronic disease prevalence and mortality, mental health and substance abuse, and maternal and child health. This section provides a summary of the data findings. Full analysis of the demographic and public health measures follows this summary.

Public health data for the service counties are compared to state and national averages and Healthy People 2020 (HP 2020) goals, where applicable, to provide benchmark comparisons. Healthy People is a U.S. Department of Health and Human Services health promotion and disease prevention initiative. Healthy People provides science-based, 10-year national objectives for improving the health of all Americans.

The Western region population is primarily White, but diversity is increasing. The White population as a percentage of the total population is declining in all counties, while Black/African American and Hispanic/Latino populations are growing. The demographic shift is a statewide trend. Minority populations are the only growing demographic in Pennsylvania. The Hispanic/Latino population is one of the fastest growing demographic groups.

The Amish are also a prominent population group within the Western region. Approximately 8,200 Amish individuals reside in six settlements across the three counties. Mifflin County has the largest estimated Amish population, but the Amish account for a higher percentage of total residents in both Juniata and Mifflin Counties.

Pennsylvania fares better than the nation on most economic indicators. Pennsylvania residents are less likely to live in poverty, have a similar unemployment rate as the nation's average, and are more likely to have attained at least a high school diploma.

Within the Western region, residents in all counties have a lower median household income than the state and the nation, and residents in Centre and Mifflin Counties have higher poverty rates. However, the Centre County poverty rate is likely impacted by the number of college students residing in the county. Centre County residents are more likely to attain higher education when compared to the state and the nation, while Juniata and Mifflin County residents are more likely to have a high school education or less.

Racial and ethnic minority groups like Black/African American or Hispanic/Latino residents are more likely to be impacted by adverse socioeconomic factors, including poverty, unemployment, or education attainment. Poverty is one of the biggest drivers of disparity in the Western region. Poverty rates among minority populations exceed rates among Whites in nearly all counties. Socioeconomic disparity contributes to worse health outcomes. Because population counts for minority residents across the region are low, health disparities are primarily evidenced by state and national trends.

Areas of Strength for the Western Region:

- > Health Insurance Coverage: The percentage of uninsured residents declined for Centre and Mifflin Counties. Centre County has a lower uninsured rate than the state and the nation.
- > Provider Rates: Primary, dental, and mental healthcare provider rates per 100,000 population increased for Centre County from the FY2016 CHNA. Primary and mental healthcare provider rates are similar to the state or the nation.
- > Health Outcomes: Centre County has a higher (better) health outcomes ranking from the FY2016 CHNA. A leading indicator of health outcomes is premature death; the county has a lower premature death rate than the state and the nation.
- > Top Causes of Death: Heart disease, chronic lower respiratory disease (CLRD), and stroke are among the top causes of death within the Western region. County death rates due to all three causes are similar to or lower than state and national benchmarks.
 - > Heart Disease: The heart disease death rate decreased for all counties over the last decade. All counties have a lower death rate than the state and the nation.
 - > CLRD: All counties have a similar or lower death rate than the state and the nation. The CLRD death rate for Centre County declined over the past decade.

- > Stroke: All counties have a lower death rate than the state and the nation; Juniata and Mifflin Counties meet the Healthy People 2020 goal for stroke death.
- > Mental Health and Substance Abuse:
 - > Suicide Death: The three-year suicide death rate for Centre County meets the Healthy People 2020 goal. A rate is not reported for Juniata County due to low death counts.
 - > Mental and Behavioral Disorders Death: Centre and Juniata Counties have a lower mental and behavioral disorders death rate than the state and the nation.
 - > Drug-Induced Deaths: Drug-induced deaths include drug overdoses and deaths from medical conditions resulting from chronic drug use. Centre County has a lower death rate than the state and the nation. Rates for Juniata and Mifflin Counties are not reported due to low death counts.
 - > Youth Indicators: Centre County students are less likely to use alcohol or marijuana when compared to the state.
- > Senior Health: Senior Medicare Beneficiaries have similar or lower rates of Alzheimer's disease, arthritis, cancer, and stroke compared to the state and the nation. Beneficiaries in all counties are also more likely to receive diabetes and mammogram screenings.
- > Maternal and Child Health:
 - > Teen Birth: The teen birth percentage declined for all counties; Centre and Juniata Counties have a lower percentage than the state and the nation.
 - > Low Birth Weight/Preterm Births: All counties meet or nearly meet Healthy People 2020 goals.
 - > Breastfeeding: All counties meet or nearly meet the Healthy People 2020 goal. The percentage of mothers who breastfeed increased over the past decade.
 - > Infant Death: Centre County meets the Healthy People 2020 goal.

Areas of Opportunity for the Western Region:

- > Health Insurance Coverage: A higher percentage of residents in Juniata and Mifflin Counties are uninsured when compared to the state and the nation; children have the highest uninsured rate. The large Amish population in the counties likely impacts the uninsured rates.
- > Provider Rates:
 - > Primary Care: Juniata and Mifflin Counties have a lower provider rate than the state and the nation. All of Juniata County is designated as a Health Professional Shortage Area (HPSA) for primary care, and the county is not served by a Federally Qualified Health Center. Areas and populations within Centre and Mifflin Counties are also designated as HPSAs.
 - > Dental Care: All counties have a lower provider rate than the state and the nation, and all counties are HPSAs for dental care for low income populations.

- > Mental Healthcare: Juniata and Mifflin Counties have a lower provider rate than the state and the nation; both counties are HPSAs for mental healthcare.
- > Health Outcomes: Juniata and Mifflin Counties have a lower (worse) health outcomes ranking from the FY2016 CHNA. A leading indicator of health outcomes is premature death; both counties have a higher premature death rate than the state and the nation.
- > Smoking: The percentage of adults who smoke increased for all counties from the FY2016 CHNA. Current smoking rates are similar to the state and the nation.
- > Obesity:
 - > More than one quarter of adults in the region are obese. Adults in Juniata and Mifflin Counties are more likely to be obese and physically inactive than adults across the state and the nation.
 - > Approximately 14% to 26% of students in the region are obese. Students in Juniata and Mifflin Counties are more likely to be obese and food insecure than students across the state.
- > Top Causes of Death: Cancer and accidents are among the top causes of death within the Western region. Death rates for Juniata and Mifflin Counties exceed state and/or national benchmarks.
 - > Cancer: Cancer death rates for Juniata and Mifflin Counties increased over the past decade and exceed state and national rates. Death rates are highest for colorectal and lung cancer.
 - > Accidents: Juniata County has a higher rate of accidental death than the state and the nation; the rate exceeds the state by nearly 30 points.
- > Diabetes: Adult diabetes prevalence is increasing for all counties. Juniata and Mifflin Counties have higher diabetes prevalence and death rates than the state and the nation.
- > Notifiable Diseases:
 - > Chlamydia/Gonorrhea: All counties have lower incidence rates compared to the state and the nation, but chlamydia incidence increased for all counties, and gonorrhea incidence increased for Centre County.
 - > Lyme Disease: All counties have a higher incidence rate than the state; rates increased steadily for Centre and Mifflin Counties over the past decade.
 - > Child Lead Poisoning: Western region children are less likely than children across the state to be tested for lead poisoning; Juniata County children ages 3 to 6 are more likely to test positive for lead poisoning.
- > Mental Health and Substance Abuse:
 - > Suicide/Mental and Behavioral Disorders Death: Mifflin County has a higher suicide and mental and behavioral disorders death rate than the state and the nation. The mental and behavioral disorders death rate increased.

- > Excessive Drinking: The percentage of adults who drink excessively increased for Centre and Mifflin Counties from the FY2016 CHNA; the Centre County rate increased 9 points and exceeds the state and the nation. Centre County also has a higher percentage of driving deaths due to DUI.
- > Drug Overdose Deaths: Western region counties are among the bottom 25% of Pennsylvania counties with regard to overdose rates, however, the number of overdose deaths increased for all counties from 2015 to 2016.
- > Youth Indicators: Centre County students are less likely to be sad or depressed when compared to the state, but the percentage increased from 2011 to 2015.
- > Senior Health:
 - > Senior Medicare Beneficiaries in Juniata and Mifflin Counties have higher rates of chronic disease and are more likely to manage six or more conditions concurrently when compared to the state and the nation.
 - > Mifflin County has a higher percentage of seniors who live alone compared to the state and the nation, but the percentage increased for all counties.
- > Maternal and Child Health:
 - > Prenatal Care: No counties meet the Healthy People 2020 goal for mothers receiving first trimester prenatal care. In Centre County, Black/African American and Hispanic/Latina mothers are the least likely to receive care.
 - > Smoking during Pregnancy: The percentage of mothers who smoke during pregnancy decreased, but no counties meet the Healthy People 2020 goal for the measure. In Centre County, White mothers are the most likely to smoke during pregnancy.
 - > Infant Death: Reported rates for Juniata and Mifflin Counties exceed the state and the Healthy People 2020 goal.

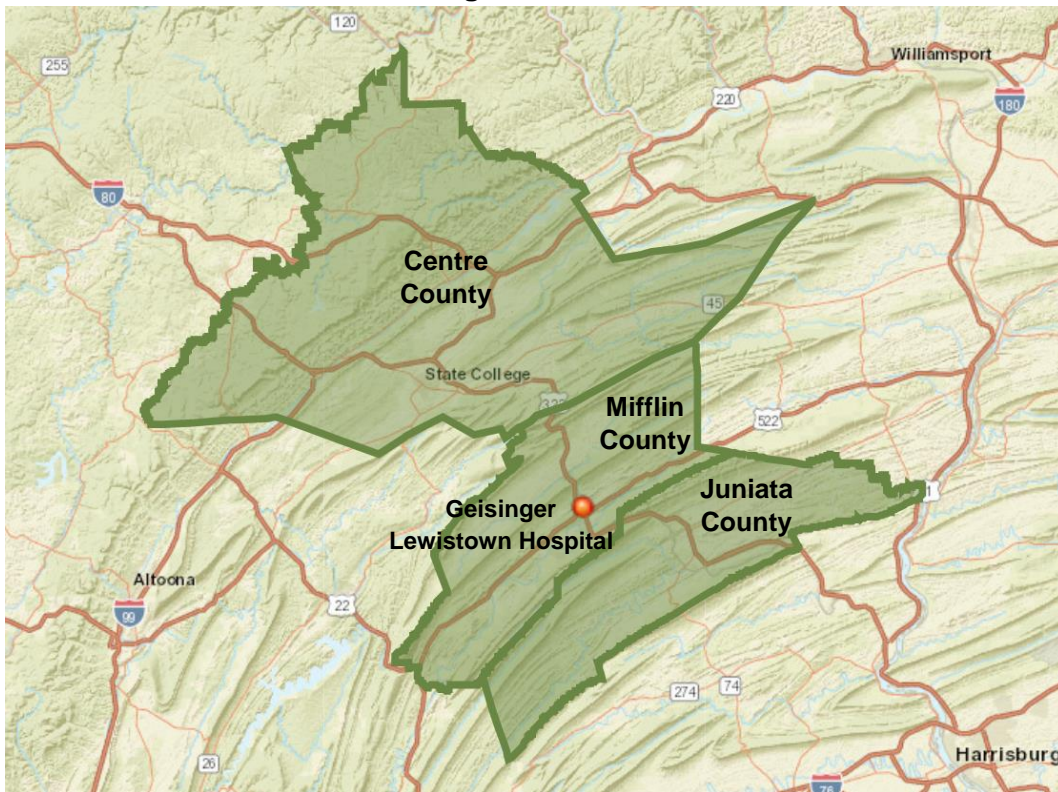
Full Report of Demographic Analysis

The following section outlines key demographic indicators related to the social determinants of health within the service counties. Social determinants of health are factors within the environment in which people live, work, and play that can affect health and quality of life, and are often the root cause of health disparity. Healthy People 2020 defines a health disparity as “a particular type of health difference that is closely linked with social, economic, or environmental disadvantage.” All reported demographic data are provided by ESRI Business Analyst, 2017 and the US Census Bureau, American Community Survey.

Western Region Demographic Overview

The 2017 population of the Western region is 236,615. Centre County comprises the largest portion of the population (69%), followed by Mifflin County (20%). County populations are expected to grow with increases of 1% to 3% by 2022.

Western Region Service Counties



Population Growth

	2017 Population	% Growth from 2010	% Growth by 2022
Centre County	164,029	6.5%	3.4%
Juniata County	24,936	1.2%	1.0%
Mifflin County	47,650	2.1%	1.0%

The Western region population is primarily White, but increasingly diverse. The percentage of White residents decreased from 2010 to 2017, and is projected to decrease through 2022. The percentage of residents identifying as Black/African American and/or Hispanic/Latino is increasing. Centre County has the most diverse population. Consistent with the demographics of the service area, residents are more likely to speak English as their primary language when compared to residents across the state and the nation.

Pennsylvania has a higher median age than the nation. The median age of Juniata and Mifflin County residents exceeds the state. Centre County has a lower median age than the state and the nation. The county is home to the Pennsylvania State University and a large young adult population.

2017 Population Overview

	Centre County	Juniata County	Mifflin County	PA	US
White	87.0%	95.9%	96.7%	79.6%	70.2%
Black or African American	4.1%	0.8%	0.8%	11.2%	12.8%
Asian	5.9%	0.5%	0.7%	3.5%	5.6%
Hispanic or Latino (any race)	3.2%	3.5%	1.5%	7.4%	18.2%
Speak English Only*	89.7%	90.8%	91.1%	89.4%	79.0%

*Data are reported for 2011-2015.

2010-2022 Population Change by Race/Ethnicity

	White		Black/African American		Hispanic or Latino	
	2010	2022	2010	2022	2010	2022
Centre County	89.4%	85.3%	3.0%	4.8%	2.4%	3.8%
Juniata County	96.8%	95.0%	0.6%	0.9%	2.5%	4.4%
Mifflin County	97.5%	96.0%	0.6%	0.9%	1.1%	1.9%

2017 Population by Age

	Centre County	Juniata County	Mifflin County	PA	US
Under 14 years	12.3%	18.5%	17.9%	16.8%	18.6%
15-24 years	30.9%	10.8%	10.6%	13.2%	13.3%
25-34 years	13.0%	11.8%	11.2%	12.5%	13.8%
35-54 years	20.0%	25.6%	24.7%	13.7%	6.6%
55-64 years	10.4%	14.1%	14.1%	14.1%	12.9%
65+ years	13.2%	19.0%	21.2%	18.1%	15.6%
Median Age	29.8	42.3	44.0	41.3	38.2

Economic indicators vary across the region. Mifflin County has a higher percentage of children living in poverty and households receiving food stamp benefits. Juniata County mirrors the state for residents and children living in poverty, despite a lower median household income. Centre County has the highest percentage of residents living in poverty, but the percentage is likely impacted by the number of college students residing in the county. The percentage of Centre County children living in poverty and the percentage of households receiving food stamp benefits is lower compared to the state and the nation.

Juniata and Mifflin Counties have a more prominent blue collar workforce compared to the state and the nation, while Centre County has a more prominent white collar workforce. All counties have a lower unemployment rate than the state and the nation.

2017 Median Household Income and 2011-2015 Poverty/Food Stamp Status

	Centre County	Juniata County	Mifflin County	PA	US
Median Household Income	\$52,232	\$50,445	\$42,586	\$56,184	\$56,124
People in Poverty	19.3%	13.2%	15.8%	13.5%	15.5%
Children in Poverty	12.8%	20.5%	25.8%	19.2%	21.7%
Households with Food Stamp/SNAP Benefits	6.7%	9.7%	18.5%	12.9%	13.2%

2017 Population by Occupation and Unemployment

	Centre County	Juniata County	Mifflin County	PA	US
White Collar Workforce	64.0%	47.0%	43.0%	60.0%	61.0%
Blue Collar Workforce	36.0%	53.0%	57.0%	40.0%	39.0%
Unemployment Rate	4.7%	5.3%	5.2%	6.2%	5.5%

Homeownership is a measure of housing affordability and economic stability. Juniata and Mifflin Counties have a lower median home value, and residents are more likely to own their home. Centre County residents are less likely to own their home; the percentage is likely impacted by the presence of college students.

2017 Population by Household Type

	Centre County	Juniata County	Mifflin County	PA	US
Renter-Occupied	43.3%	24.8%	29.0%	32.3%	37.3%
Owner-Occupied	56.7%	75.2%	71.0%	67.7%	62.7%
Median Home Value	\$209,763	\$151,394	\$111,156	\$182,727	\$207,344

Education is the largest predictor of poverty and one of the most effective means of reducing inequalities. Residents in Juniata and Mifflin Counties are less likely to have attained higher education beyond a high school diploma. Residents in Centre County are more likely to have attained higher education; more than 40% of residents have a bachelor's degree or higher.

2017 Population (25 Years or Over) by Educational Attainment

	Centre County	Juniata County	Mifflin County	PA	US
Less than a high school diploma	6.3%	17.4%	16.9%	10.1%	12.6%
High school graduate/GED	26.8%	46.1%	42.0%	31.2%	23.4%
Bachelor's degree or higher	43.4%	14.2%	12.6%	30.3%	31.0%

Black/African American and Hispanic/Latino residents in Centre and Mifflin Counties are impacted by poorer social determinants of health. The racial and ethnic groups have higher rates of poverty and unemployment compared to Whites. Black/African American and Hispanic/Latino residents in Centre County also have lower educational attainment.

In Juniata County, Blacks/African Americans experience economic disparity, but they are more than three times as likely as Whites to have a bachelor's degree or higher. Hispanic/Latino residents in the county have better social determinants of health outcomes than Whites.

Note: Blacks/African Americans account for less than 1% of the population in Juniata and Mifflin Counties. Percentages shown below may be based on small counts.

2011-2015 Social and Economic Differences by Race and Ethnicity

People in Poverty						
	Centre County		Juniata County		Mifflin County	
	Count	Percentage	Count	Percentage	Count	Percentage
White	22,446	17.7%	3,111	13.1%	7,051	15.8%
Black/African American	1,304	33.0%	43	26.7%	100	34.0%
Hispanic/Latino	933	29.2%	86	11.9%	250	42.8%
Unemployment Rate						
	Centre County		Juniata County		Mifflin County	
	Count	Percentage	Count	Percentage	Count	Percentage
White	5,908	4.9%	1,102	5.7%	2,298	6.3%
Black/African American	385	6.9%	8	7.0%	39	14.0%
Hispanic/Latino	229	6.1%	18	4.2%	67	19.4%
Bachelor's Degree or Higher						
	Centre County		Juniata County		Mifflin County	
	Count	Percentage	Count	Percentage	Count	Percentage
White	33,363	40.2%	2,172	12.8%	3,616	11.3%
Black/African American	1,070	35.1%	37	44.0%	65	30.4%
Hispanic/Latino	611	33.9%	22	7.8%	99	34.4%

Western Region Special Population Groups

The Amish are a prominent population group within Pennsylvania communities. According to the 2010 study, *The Amish Population: County Estimates and Settlement Patterns*, “The Amish are growing faster than almost any other subculture, religious or non-religious, in North America. One reason is that they are a “high fertility” group. For the Amish, large families are an expression both of religious convictions and of a people whose economy is based on agriculture and other manual trades where the labor of children is valued.”

The following table depicts estimated population counts for Amish settlements within the Western region. The population is captured by church district, which is typically comprised of a few dozen families. Big Valley/Belleville has the largest estimated Amish population, followed by Nittany Valley/Howard and Mifflintown/Port Royal.

2017 Amish Population by Settlement

County	Settlement	Districts	Population
Centre	Aaronsburg	4	329
Centre	Brush Valley/Rebersburg	7	960
Centre	Penns Valley	4	577
Centre/Clinton	Nittany Valley/Howard	7	1,244
Juniata	Mifflintown/Port Royal	11	1,209
Mifflin/Huntingdon	Big Valley/Belleville	30	3,905
Western region		63	8,224
Pennsylvania		497	74,251

Source: Elizabethtown College, Young Center for Anabaptist and Pietist Studies, 2017

A study published in 2016 by The Sentencing Project, a nonprofit advocacy organization, found that in state prisons, African Americans are incarcerated five times more than Whites, and Hispanics are incarcerated nearly two times more than Whites. The following table identifies state and federal prison facilities within the Western region and corresponding demographic data for the facility’s zip code of origin to analyze potential drivers of racial and ethnic diversity. Zip code 16866, Philipsburg, home to a Correctional Institution, has a higher population of Hispanic/Latino residents, which may impact overall diversity percentages for Centre County.

State and Federal Prison Facilities and Racial/Ethnic Demographics

Prison Facility	Location	Inmate Population	Zip Code Demographics		County Demographics	
			Black/African American	Hispanic/Latino	Black/African American	Hispanic/Latino
Correctional Institution, Moshannon Valley	16866, Philipsburg (Centre County)	1,685	3.4%	12.0%	4.1%	3.2%
State Correctional Institution, Benner Township	16823, Bellefonte (Centre County)	2,111	5.8%	2.2%	4.1%	3.2%
State Correctional Institution, Rockview	16823, Bellefonte (Centre County)	2,416	5.8%	2.2%	4.1%	3.2%

Source: Federal Bureau of Prisons and Pennsylvania Department of Corrections

Full Report of Public Health Statistical Analysis

Public health data were analyzed across a number of health issues, including access to care, health behaviors and outcomes, chronic disease morbidity and mortality, mental health and substance abuse trends, and maternal and child health measures.

Data were compiled from secondary sources including the Pennsylvania Department of Health, the Centers for Disease Control and Prevention (CDC), the Behavioral Risk Factor Surveillance System (BRFSS), the University of Wisconsin County Health Rankings & Roadmaps program, among other sources. A comprehensive list of data sources can be found in Appendix A.

Public health data focus on county-level reporting; zip code data is provided as available. Public health data for the service counties are compared to state and national averages and Healthy People 2020 (HP 2020) goals, where applicable, to provide benchmark comparisons. Healthy People is a U.S. Department of Health and Human Services health promotion and disease prevention initiative. Healthy People provides science-based, 10-year national objectives for improving the health of all Americans.

Age-adjusted rates are referenced throughout the report to depict the burden of disease among residents. Age-adjusted rates are summary measures adjusted for differences in age distributions so that data from one year to another, or between one geographic area and another, can be compared as if the communities reflected the same age distribution.

The BRFSS is a telephone survey conducted nationally by the CDC to assess health-related risk behaviors, chronic health conditions, and the use of preventive services. BRFSS findings are reported by county or by region, as available. The regions reported in this assessment include:

- > Region 1: Bedford, Blair, Huntingdon, Juniata, and Mifflin Counties
- > Region 2: Centre, Columbia, Montour, Northumberland, Snyder, and Union Counties

Access to Healthcare

Western region service counties received the following County Health Rankings for Clinical Care Access out of 67 counties in Pennsylvania. The rankings are based on a number of indicators, including health insurance coverage and provider access. The Centre County ranking improved from the 2014 rankings reported as part of the FY2016 CHNA; Juniata and Mifflin Counties dropped in the rankings.

2017 Clinical Care County Health Rankings

#8 Centre County (#12 in 2014)

#57 Juniata County (#42 in 2014)

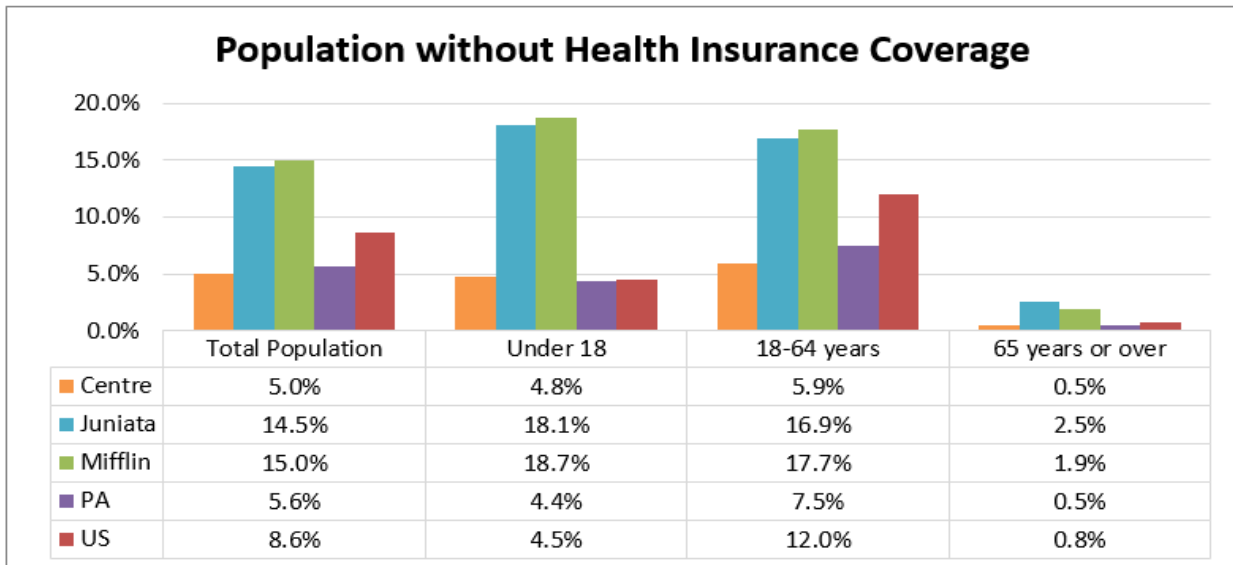
#61 Mifflin County (#59 in 2014)

Health Insurance Coverage

Uninsured rates within Juniata and Mifflin Counties are higher when compared to state and national benchmarks. However, the rates represent five-year aggregates due to secondary data limitations. Aggregate rates include data years prior to the implementation of the Affordable Care Act individual mandate, which may contribute to a higher reported percentage of uninsured residents. The Mifflin County uninsured rate declined 1 point from 2008-2012 to 2011-2015, but the Juniata uninsured rate increased by 1 point. County uninsured rates are highest among children under 18 years.

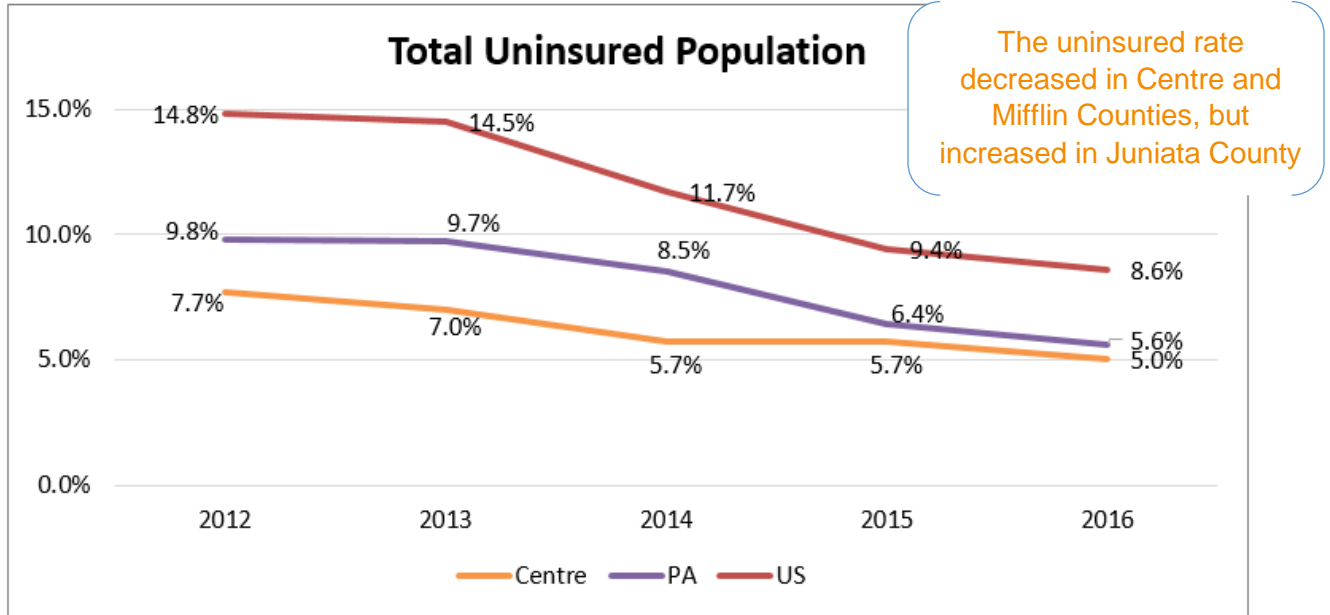
Uninsured rates for Juniata and Mifflin Counties exceed state and national benchmarks; Centre County nearly meets the HP 2020 goal

Centre County has a lower uninsured rate compared to the state and the nation and nearly meets the Healthy People 2020 goal of having 100% of all residents insured. The uninsured rate declined 3 points from 2012 to 2016.

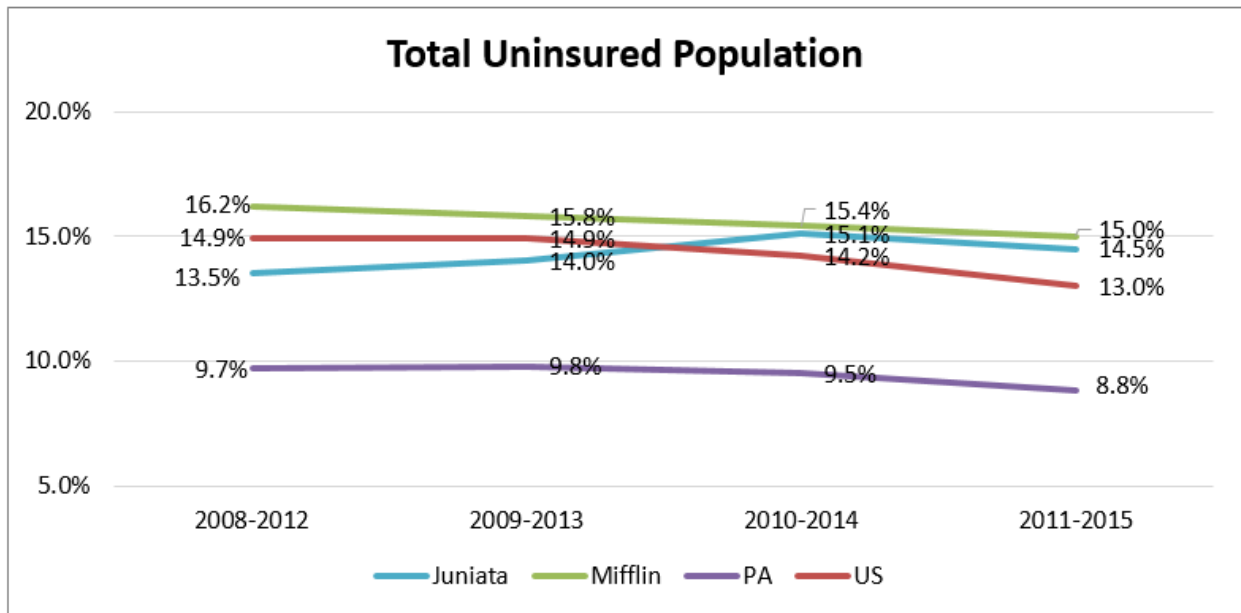


Source: American Community Survey, 2016 & 2011-2015

*Juniata and Mifflin County data are reported for 2011-2015. All other data are reported for 2016.



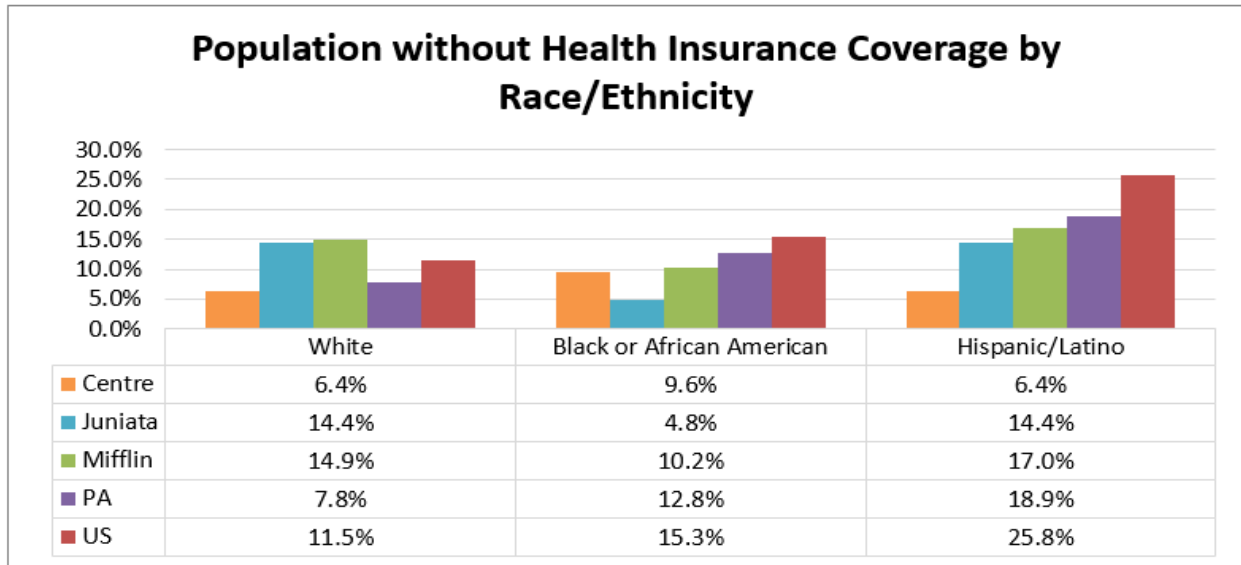
Source: American Community Survey, 2012-2016



Source: American Community Survey, 2008-2012 – 2011-2015

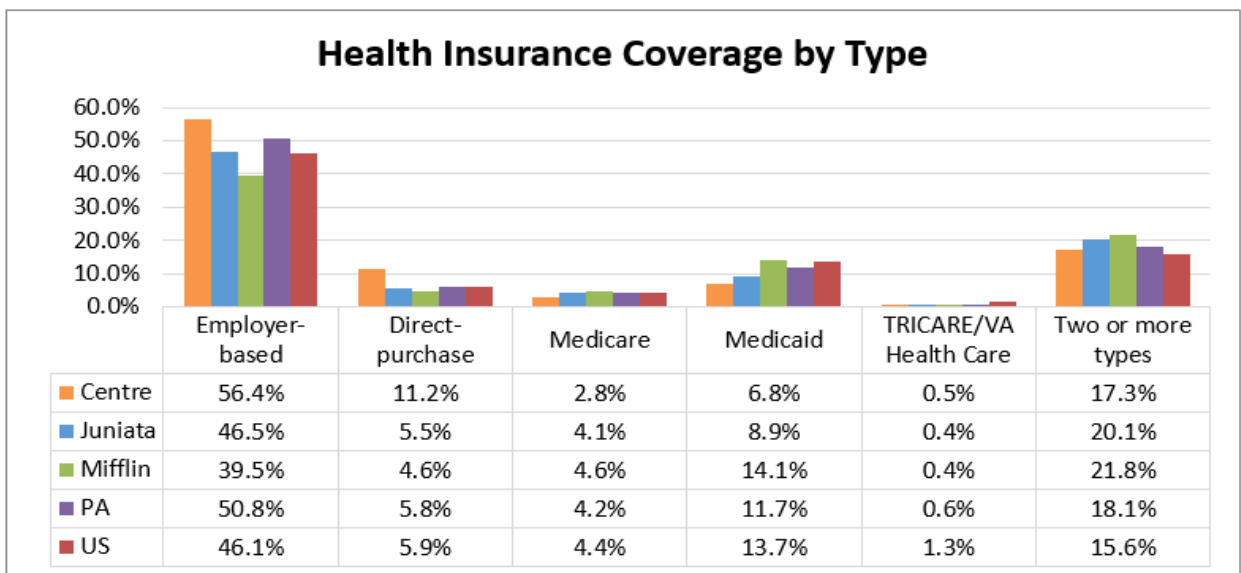
Across the state and the nation, uninsured rates are highest among Hispanic/Latino residents. In the Western region, Whites and Hispanics/Latinos have similar uninsured rates. Uninsured rates among Blacks/African Americans are lower than Whites and Hispanics/Latinos in Juniata and Mifflin Counties, but may be impacted by low population counts.

White and Hispanic/Latino residents in the Western region have similar uninsured rates, contrary to state and national trends



Source: American Community Survey, 2011-2015

The following graph depicts health insurance coverage by type of insurance. Residents in the Western region are most likely to be covered by employer-based insurance, followed by a combination (private and/or public) of insurance types. Centre County residents are more likely to be covered by employer-based insurance compared to the state and the nation.



Source: American Community Survey, 2016 & 2011-2015

*Juniata and Mifflin County data are reported for 2011-2015. All other data are reported for 2016.

Provider Access

Provider rates are measured for primary, dental, and mental healthcare. In the following table, cells highlighted in green represent provider rates that increased from the previous reporting year. Cells highlighted in red represent provider rates that decreased from the previous reporting year. Provider rates are compared to rates reported in the 2014 County Health Rankings, a source for the FY2016 CHNA.

In Centre County, all provider rates increased from previously reported years. Primary and mental healthcare provider rates are similar to the state or the nation. The dental care provider rate is the highest in the region, but lower than state and national benchmarks. All three counties are designated by the Health Resources & Services Administration (HRSA) as Health Professional Shortage Areas (HPSAs) for dental care for low income individuals.

All Western region counties are designated as HPSAs for dental care among low income populations

Juniata County is a HPSA for primary and mental healthcare

Juniata County provider rates remained stable. The county has three dental and mental healthcare providers and six primary care providers. The county is a HPSA for primary care and mental healthcare and is not served by a Federally Qualified Health Center.

Mifflin County primary care and dental care provider rates are consistent from the 2014 County Health Rankings report, but the mental healthcare provider rate increased. All provider rates are lower than state and national benchmarks. The county is a HPSA for mental healthcare.

Mifflin County is a HPSA for mental healthcare

Provider Rate Trends per 100,000*
(Green = Increase of More than 2 Points; Red = Decrease of More than 2 Points)

	Primary Care		Dental Care		Mental Healthcare	
	2011	2014	2012	2015	2014**	2016
Centre County	69.2	75.0	49.6	54.8	149.3	167.5
Juniata County	24.6	24.2 (n=6)	12.0	12.1 (n=3)	12.1	12.1 (n=3)
Mifflin County	44.8	45.1	29.9	30.1	70.8	86.0
Pennsylvania	80.4	81.4	60.6	65.4	146.6	167.3
United States	73.8	75.8	60.1	65.8	189.0	200.0

Source: Health Resources & Services Administration, 2011-2015; Centers for Medicare and Medicaid Services, 2013-2016

*Providers are identified based on the county in which their preferred professional/business mailing address is located. Provider rates do not take into account providers that serve multiple counties or satellite clinics.

**Data are reported by the County Health Rankings (CHR). An error occurred in the method for identifying mental health providers in the 2014 CHR report. Data are shown for the 2015 CHR report (data year 2014).

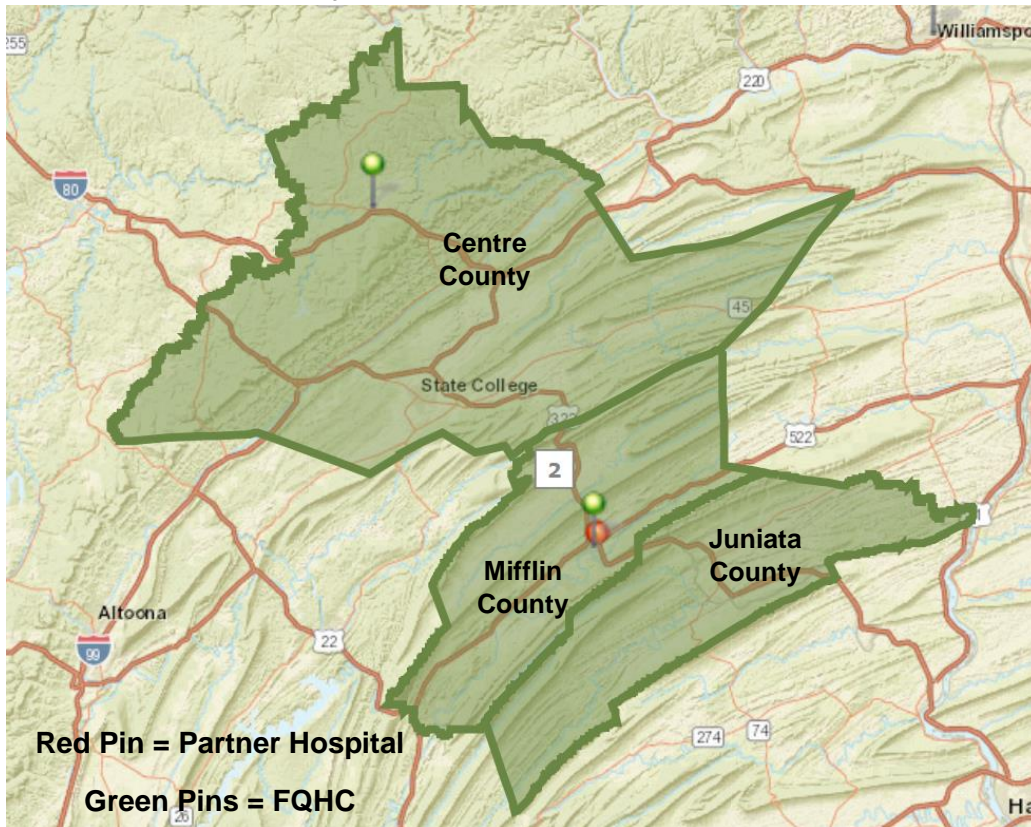
Health Professional Shortage Areas

Geographic Area/Population	Primary Care	Dental Care	Mental Healthcare
Centre County (All)			
Philipsburg service area (low income population): Huston, Philipsburg, Port Matilda, Rush, Taylor, Worth	X		
Snow Shoe service area: Boggs, Burnside, Curtin, Howard (Twp./Boro.), Liberty, Milesburg, Snow Shoe (Twp./Boro.), Union, Unionville	X		
Low income population		X	
Juniata County (All)	X		X
Low income population		X	
Mifflin County (All)			X
Huntingdon service area (low income population): Bratton, Kistler, McVeytown, Menno, Newton Hamilton, Oliver, Union, Wayne	X		
Low income population		X	

Source: Health Resources & Services Administration, 2017

Federally Qualified Health Centers (FQHCs), as defined by HRSA, “are community-based healthcare providers that receive funds from the HRSA Health Center Program to provide primary care services in underserved areas.” They provide care services on a sliding fee scale based on patient ability to pay. The following map identifies the location of FQHCs within the region. Primary Health Network operates two locations within Lewistown, Mifflin County, including a community health center and dental center. There are no FQHCs in Juniata County.

Federally Qualified Health Center Locations



FQHC	Address
Centre County	
Mountaintop Area Medical Center	402 East Sycamore Rd., Snow Shoe, 16874
Mifflin County	
Primary Health Network: Lewistown Community Health Center	21 South Brown St., Lewistown, 17044
Primary Health Network: Lewistown Dental Center	31 South Dorcas St., Lewistown, 17044

Source: Pennsylvania Association of Community Health Centers & Health Resources & Services Administration

Routine Care

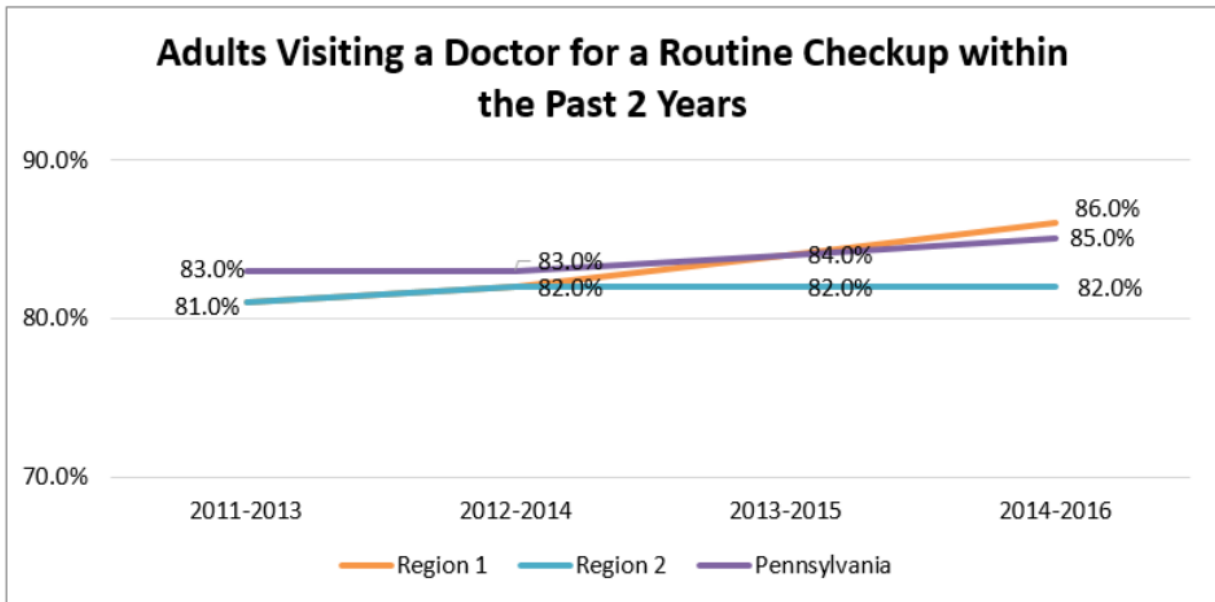
Health insurance coverage and provider rates impact the number of adults who have a primary care provider and receive routine care. The percentage of adults who receive routine checkups is increasing across the state and in Reporting Region 1. Adults in Region 2, including Centre County, are less likely to have received a routine checkup within the past two years. Adults in both regions are less likely to consider cost as a barrier to receiving care.

The percentage of adults receiving routine check-ups is increasing across the state

Adult Healthcare Access

	Does Not Have a Personal Doctor	Received a Routine Checkup within the Past 2 Years	Unable to See a Doctor within the Past Year due to Cost
Region 1: Bedford/Blair/Huntingdon/Juniata/Mifflin	12%	86%	8%
Region 2: Centre/Columbia/Montour/Northumberland/Snyder/Union	13%	82%	11%
Pennsylvania	14%	85%	12%

Source: PA Department of Health BRFSS, 2014-2016



Source: PA Department of Health, 2011-2013 – 2014-2016

Overall Health Status

Western region service counties received the following County Health Rankings for Health Outcomes out of 67 counties in Pennsylvania. Health outcomes are measured in relation to premature death (before age 75) and quality of life. The Centre County ranking improved from the 2014 rankings. Juniata and Mifflin Counties dropped in the rankings; Juniata dropped by 15 points.

<p>2017 Health Outcomes County Health Rankings</p> <p>#2 Centre County (#3 in 2014)</p> <p>#22 Juniata County (#7 in 2014)</p> <p>#42 Mifflin County (#39 in 2014)</p>
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Centre County has the best health outcomes ranking in the region. The premature death rate and the percentage of county adults who self-report having “poor” or “fair” health status are the lowest in the region and lower than the state and the nation.

Mifflin County has the lowest health outcomes ranking in the region. The county has a higher premature death rate than the state and the nation, and adults report a higher average of poor physical and mental health days. Juniata County also has a higher premature death rate despite fewer adults reporting poor health status.

Health Outcomes Indicators
(Red = Higher Premature Death Rate than the State and the Nation)

	Premature Death Rate per 100,000	Adults with “Poor” or “Fair” Health Status	30-Day Average - Poor Physical Health Days	30-Day Average - Poor Mental Health Days
Centre County	4,126	13.4%	3.4	3.7
Juniata County	7,253	13.9%	3.6	3.8
Mifflin County	7,281	15.0%	3.7	4.0
Pennsylvania	6,843	15.3%	3.5	3.9
United States	6,600	15.0%	3.6	3.7

Source: National Center for Health Statistics, 2012-2014; CDC BRFSS, 2015

Health Behaviors

Individual health behaviors include risk behaviors like smoking, excessive drinking, and obesity, or positive behaviors like exercise, good nutrition, and stress management. Health behaviors may increase or reduce the chance of disease. The prevalence of these health behaviors is provided below, with benchmark comparisons, as available.

Risk Behaviors

Adults in the Western region counties have similar smoking rates when compared to the state and the nation, but do not meet the Healthy People 2020 goal. Smoking rates for all counties are higher than rates reported in 2006-2012 (2014 County Health Rankings report).

Adult smoking rates increased for all counties from 2006-2012, and do not meet the HP 2020 goal

Excessive drinking includes heavy drinking (two or more drinks per day for men and one or more drinks per day for women) and binge drinking (five or more drinks on one occasion for men and four or more drinks on one occasion for women).

The rate of excessive drinking among adults in Centre County increased by 9 points from 2006-2012

Adults in Centre County are more likely to drink excessively compared to adults across the state and the nation. The county rate increased by 9 points from 2006-2012 to 2015. The excessive drinking rate also increased in Mifflin County; both Mifflin and Juniata Counties have a similar rate to the state and the nation.

Health Risk Behavior Changes among Adults from the FY2016 CHNA to Present (Green = Decrease of More than 2 Points; Red = Increase of More than 2 Points)

	Smoking		Excessive Drinking	
	2006-2012	2015	2006-2012	2015
Centre County	12.2%	17.7%	13.5%	22.3%
Juniata County	16.4%	17.9%	NA	17.5%
Mifflin County	16.1%	18.2%	10.8%	17.1%
Pennsylvania	19.9%	18.1%	17.3%	18.1%
United States	18.1%	18.0%	15.0%	18.0%
Healthy People 2020	12.0%	12.0%	NA	NA

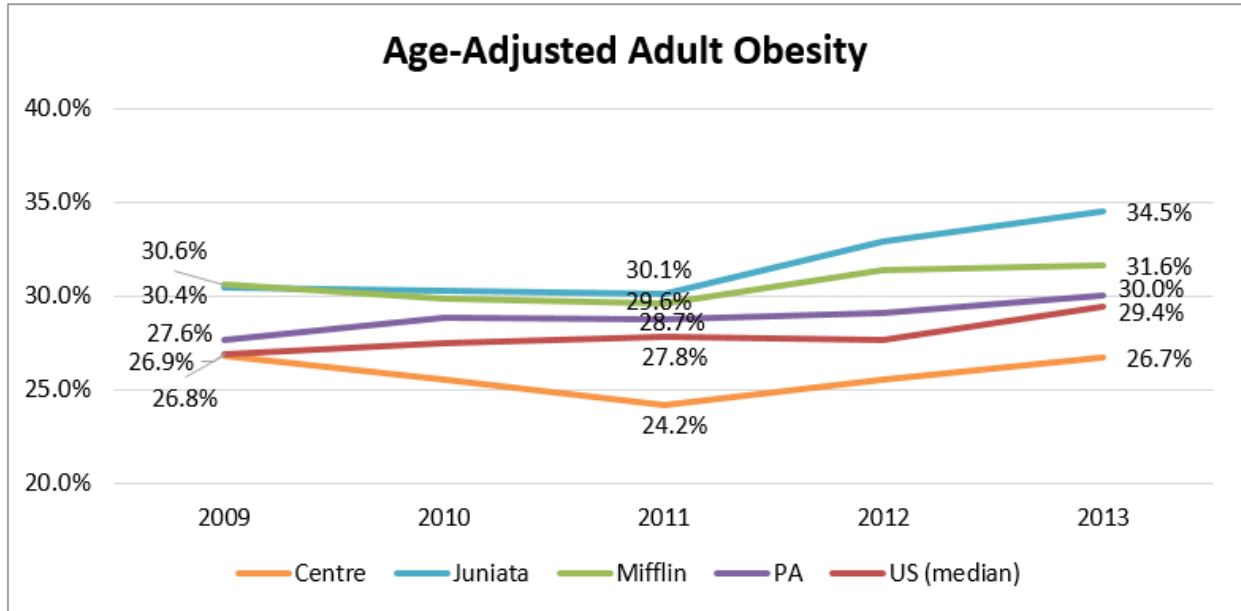
Source: CDC BRFSS*, 2006-2012 & 2015 & Healthy People 2020

*A change in methods occurred in 2011 that may affect the validity of comparisons to past years.

Obesity

The percentage of obese adults and youth is a national epidemic. Across Pennsylvania and the nation, approximately 30% of adults are obese. Adults in Juniata and Mifflin Counties are more likely to be obese when compared to the state and the nation and do not meet the Healthy People 2020 goal of 30.5%. The adult obesity percentage in Centre County is lower than state and national rates, but accounts for more than one-quarter of adults.

Approximately one-quarter to one-third of service county adults are obese



Source: CDC BRFSS, 2009-2013

*A change in methods occurred in 2011 that may affect the validity of comparisons to past years.

Pennsylvania youth are screened for BMI as part of school health assessments. Data are reported for students in grades K-6 and 7-12. As of the 2012-2013 school year, approximately 14% to 22% of K-6 graders and 17% to 26% of 7-12 graders in the service counties are obese. Obesity percentages in Juniata County are the highest in the region and exceed state benchmarks.

Approximately 22% of K-6 graders and 26% of 7-12 graders in Juniata County are obese, the highest in the region and higher than the state

**Overweight and Obesity among Students
(Red = Higher Overweight/Obesity Rate than the State by More than 2 Points)**

	Overweight		Obese	
	K-6 Grade	7-12 Grade	K-6 Grade	7-12 Grade
Centre County	21.6%	21.5%	13.6%	16.7%
Juniata County	16.5%	16.5%	21.6%	25.6%
Mifflin County	15.0%	12.9%	18.5%	17.4%
Pennsylvania	22.0%	22.1%	16.4%	18.0%

Source: PA Department of Health, 2012-2013

Food insecurity, defined as being without a consistent source of sufficient and affordable nutritious food, contributes to obesity rates. The food insecurity rate for the total population within the Western region is similar to state and national rates, but higher for children in

Child food insecurity rates for Juniata and Mifflin Counties exceed state and national benchmarks; 19% to 22% of children are food insecure

Juniata and Mifflin Counties. Children in Mifflin County are also more likely to be eligible for free or reduced price lunches in school.

Food Insecure Residents

	All Residents	Children
Centre County	14.0%	15.5%
Juniata County	11.2%	18.6%
Mifflin County	13.2%	21.5%
Pennsylvania	13.1%	17.9%
United States	13.4%	17.9%

Source: Feeding America, 2015

Children Eligible for Free or Reduced Price Lunch

	Percent
Centre County	24.7%
Juniata County	41.8%
Mifflin County	53.6%
Pennsylvania	45.6%
United States	52.0%

Source: National Center for Education Statistics, 2014-2015

Access to physical activity includes access to parks, gyms, pools, etc. Residents in Centre County are the most likely to have access to physical activity opportunities and the least likely to be physically inactive. Adults in Juniata and Mifflin Counties exceed state and national benchmarks for inactivity and are less likely to have access to physical activity options.

Adults in Juniata and Mifflin Counties have fewer options for physical activity and are more likely to be physically inactive

Physical Activity

(Red = Lower Access and Higher Inactivity than the State and Nation by More than 2 Points)

	Access to Physical Activity	Physically Inactive Adults
Centre County	88.1%	16.4%
Juniata County	42.6%	26.7%
Mifflin County	61.4%	26.8%
Pennsylvania	85.2%	23.1%
United States	84.0%	22.0%

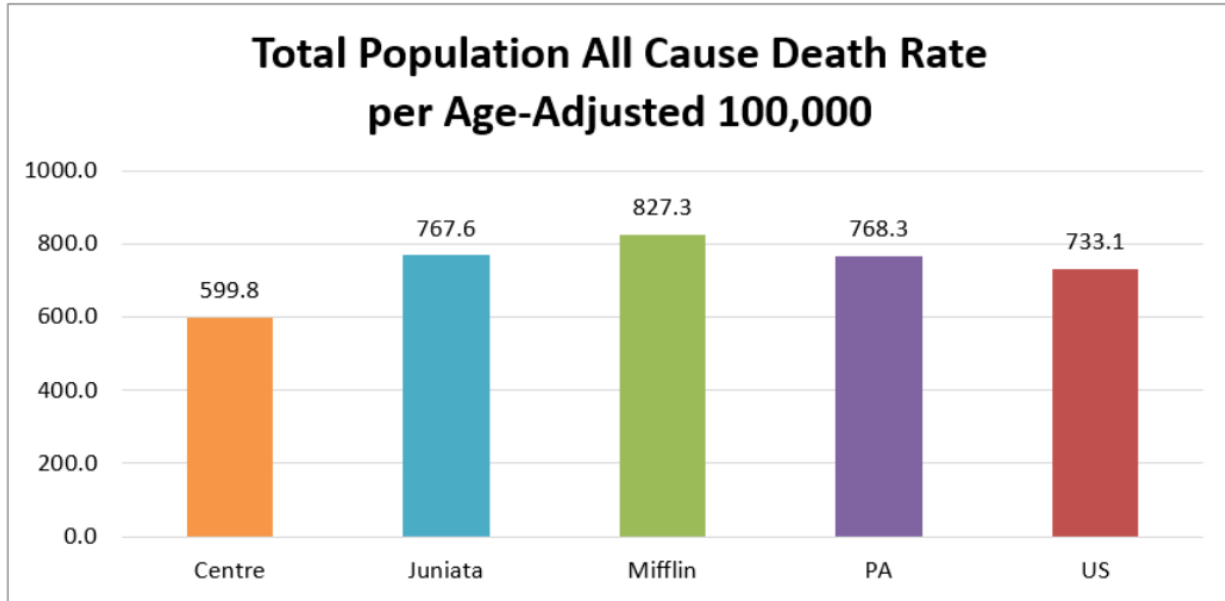
Source: Business Analyst, Delorme Map Data, ESRI, & US Census Tigerline Files, 2010 & 2014; CDC BRFSS, 2013

Mortality

The 2015 all cause age-adjusted death rate varies across Western region counties. The Centre County death rate is lower than state and national rates, but the Mifflin County death rate exceeds both benchmarks. The Juniata County death rate is on par with the state.

Across the state and the nation, the death rate is highest among Blacks/African Americans. Race and ethnicity data are not reported for the Western region due to low death counts.

The death rate for Mifflin County exceeds the death rate for Centre County by 228 points



Source: CDC WONDER, 2015

State and National Death Rates by Race and Ethnicity

	White Death Rate	Black/African American Death Rate	Hispanic/Latino Death Rate
Pennsylvania	760.3	920.4	550.4
United States	753.2	876.1	525.3

Source: CDC WONDER, 2015

The top five causes of death in the nation, in rank order, are heart disease, cancer, accidents, chronic lower respiratory disease (CLRD), and stroke. The following chart profiles death rates for the top five causes by service county.

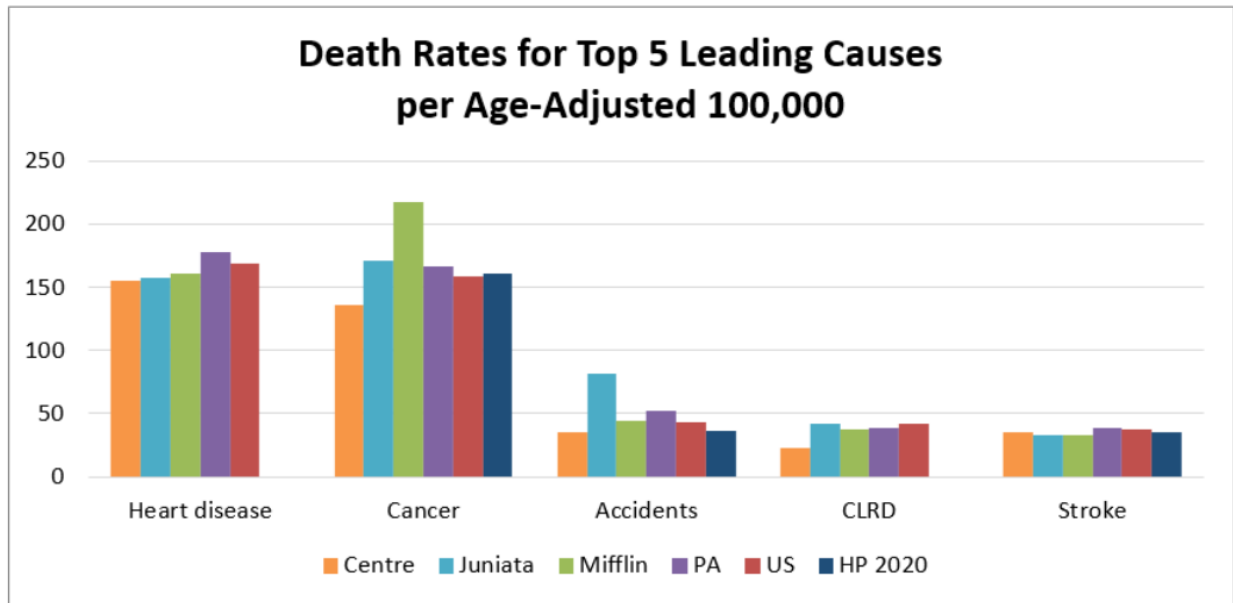
Western region residents have lower or similar rates of death due to heart disease, CLRD, and stroke when compared to state and national benchmarks. Juniata and Mifflin Counties meet the Healthy People 2020 goal for stroke death.

Western region residents have lower or similar rates of death due to heart disease, CLRD, and stroke compared to state and national benchmarks

Pennsylvania overall has a higher death rate due to accidents than the nation. Accidental deaths include transport accidents, falls, accidental discharge of firearms, drowning, exposure to fire or smoke, and poisoning. The accidental death rate for Juniata County exceeds the state rate by nearly 30 points. Centre County meets the Healthy People 2020 goal for accidental death, and Mifflin County has a similar rate to the nation.

Centre County meets the Healthy People 2020 goal for cancer death, but Juniata and Mifflin Counties exceed all state and national benchmarks. The death rate for Mifflin County exceeds the Healthy People 2020 goal by 57 points.

Juniata and Mifflin Counties have higher rates of death due to accidents and cancer, respectively



Source: CDC WONDER, 2013-2015 & 2015; Healthy People 2020

*Death rates due to stroke and CLRD in Juniata County and accidents in Mifflin County represent 2013-2015 rates due to low death counts.

Chronic Diseases

Chronic disease rates are increasing across the nation and are the leading causes of death and disability. Chronic diseases are often preventable through reduced health risk behaviors like smoking and alcohol use, increased physical activity and good nutrition, and early detection of risk factors and disease.

Heart Disease and Stroke

Heart disease is the leading cause of death in the nation. Approximately 6% to 7% of adults in the Western region have been diagnosed with a form of heart disease, similar to the state rate. Adults in Reporting Region 2 also have similar rates of heart attack and stroke when compared to the state, but adults in Region 1 have higher rates.

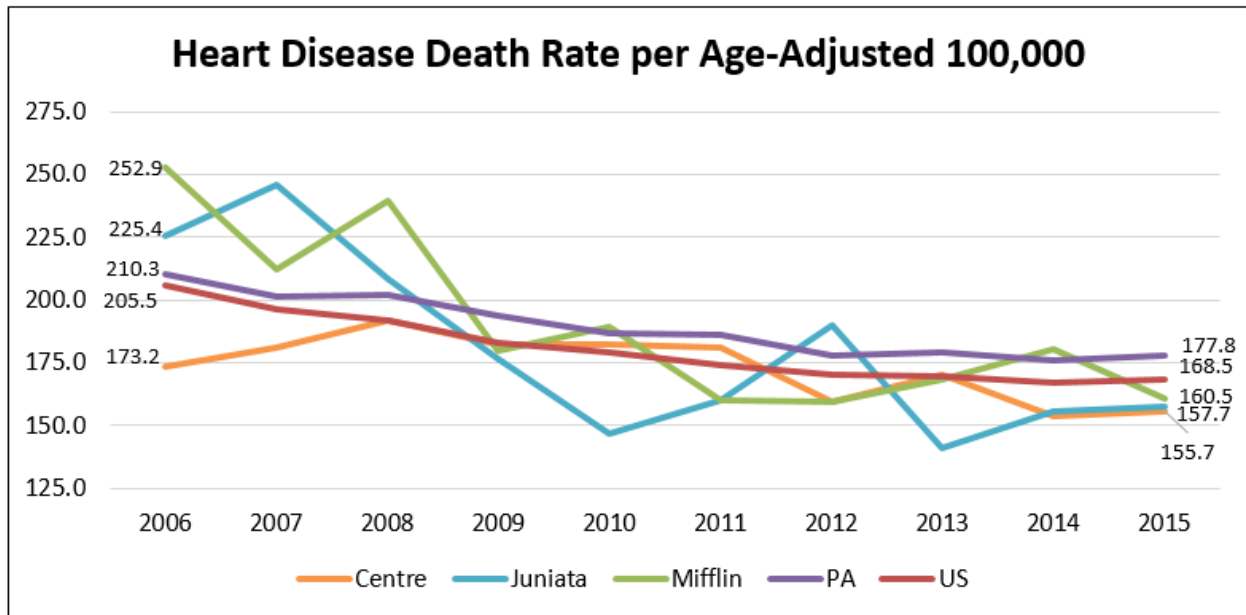
Heart disease death rates decreased across the Western region and are lower than state and national rates. Mifflin County experienced the greatest rate decline between 2006 and 2015 (92 points), followed by Juniata County (68 points).

The heart disease death rate for all counties is decreasing, particularly in Mifflin County

Heart Disease Prevalence among Adults

	Heart Disease	Heart Attack	Stroke
Region 1: Bedford/Blair/Huntingdon/Juniata/ Mifflin	6%	9%	7%
Region 2: Centre/Columbia/Montour/Northumberland/Snyder/Union	7%	6%	4%
Pennsylvania	7%	7%	5%

Source: PA Department of Health, 2014-2016



Source: CDC WONDER, 2006-2015

Across the state and the nation, Blacks/African Americans have a higher heart disease death rate than Whites. Race and ethnicity data are not reported for the Western region due to low death counts.

State and National Heart Disease Death Rates by Race and Ethnicity

	White Death Rate	Black/African American Death Rate	Hispanic/Latino Death Rate
Pennsylvania	175.0	213.8	117.4
United States	171.2	212.1	117.9

Source: CDC WONDER, 2013-2015

Coronary heart disease (CHD) is characterized by the buildup of plaque inside the coronary arteries. All Western region counties meet the Healthy People 2020 goal for death due to CHD. However, Mifflin County has a higher rate of death than Centre and Juniata Counties.

Several types of heart disease, including coronary heart disease, are risk factors for stroke. All Western region counties either meet or are within reach of the Healthy People 2020 goal for stroke death.

All Western region counties meet the HP 2020 goal for CHD deaths

Coronary Heart Disease and Stroke Death Rates

(Green = Meets Healthy People 2020 Goal; Red = Higher than the State and the Nation)

	Coronary Heart Disease Death per Age-Adjusted 100,000	Stroke Death per Age-Adjusted 100,000
Centre County	61.8	35.5
Juniata County	78.5	32.6
Mifflin County	102.3	33.1
Pennsylvania	99.7	38.8
United States	97.2	37.6
HP 2020	103.4	34.8

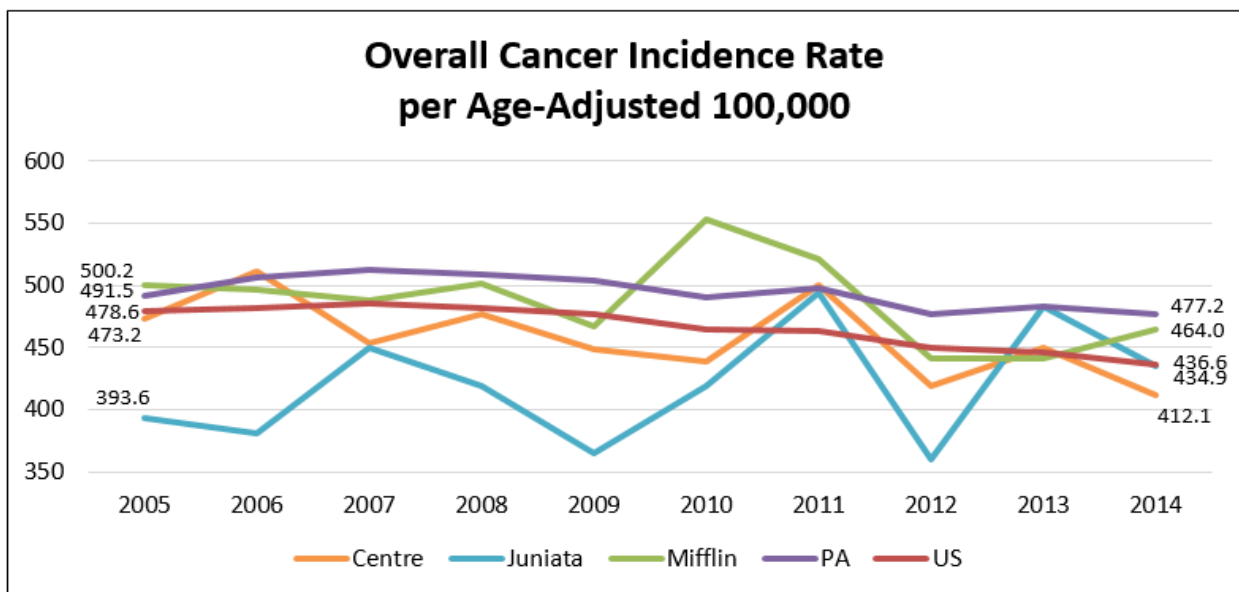
Source: CDC WONDER, 2013-2015 & 2015

*The stroke death rate for Juniata County is reported for 2013-2015 due to a low death count.

Cancer

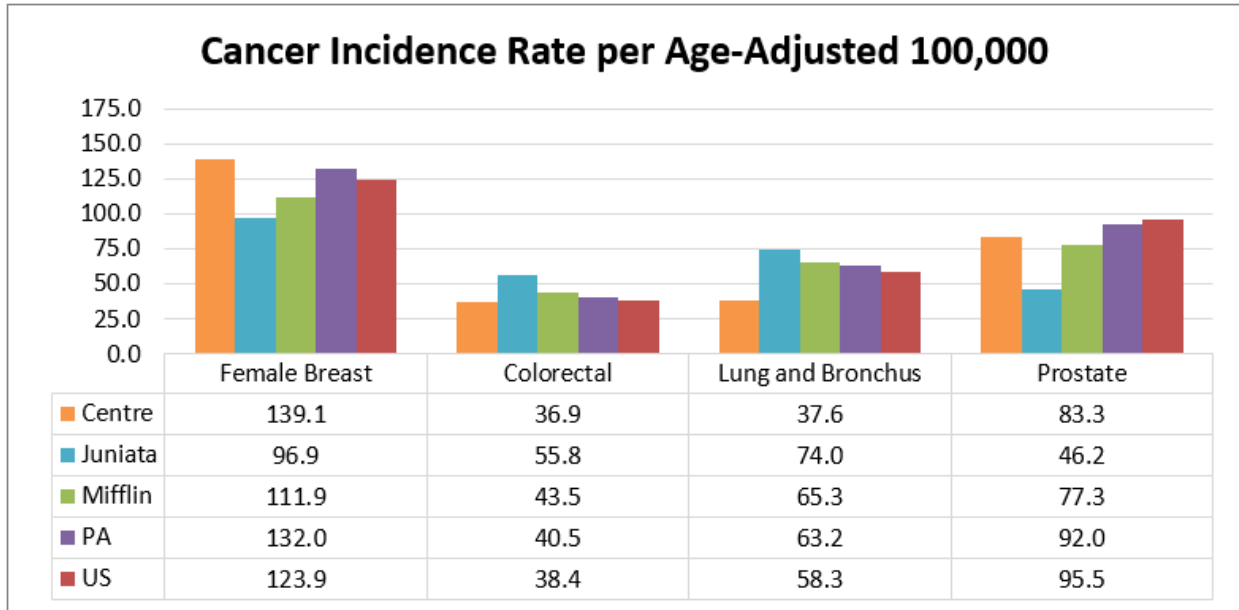
The cancer incidence rate for Pennsylvania and the nation is declining. Incidence rates among Western region counties have been variable over the past decade with inconsistent trends. Current rates for Centre and Mifflin Counties are lower than at the beginning of the decade, but the Juniata County rate is higher by 41 points. All counties have a lower incidence rate than the state; Centre and Juniata Counties also have a lower rate than the nation.

All counties have a lower cancer incidence rate than the state



Source: CDC National Program of Cancer Registries, 2005-2014; PA Department of Health, 2005-2014

Presented below are the incidence rates for the most commonly diagnosed cancers: breast (female), colorectal, lung, and prostate (male). Centre County has a higher rate of female breast cancer compared to the state and the nation, but lower rates of all other reported cancers. Juniata and Mifflin Counties have higher rates of colorectal and lung cancer, but lower rates of female breast and prostate cancer.



Source: CDC National Program of Cancer Registries, 2014; PA Department of Health, 2014
 *Breast and prostate cancer data for Juniata County are reported for 2012-2014 due to a low count.

The cancer death rate is declining across the state and the nation. The death rate for Centre County is also declining and meets the Healthy People 2020 goal (161.4). Current death rates for Juniata and Mifflin Counties are higher than at the beginning of the decade and exceed state and national rates. Cancer incidence

The Centre County cancer death rate is declining and meets the HP 2020 goal

Current cancer death rates for Juniata and Mifflin Counties are higher than at the beginning of the decade and exceed state and national benchmarks

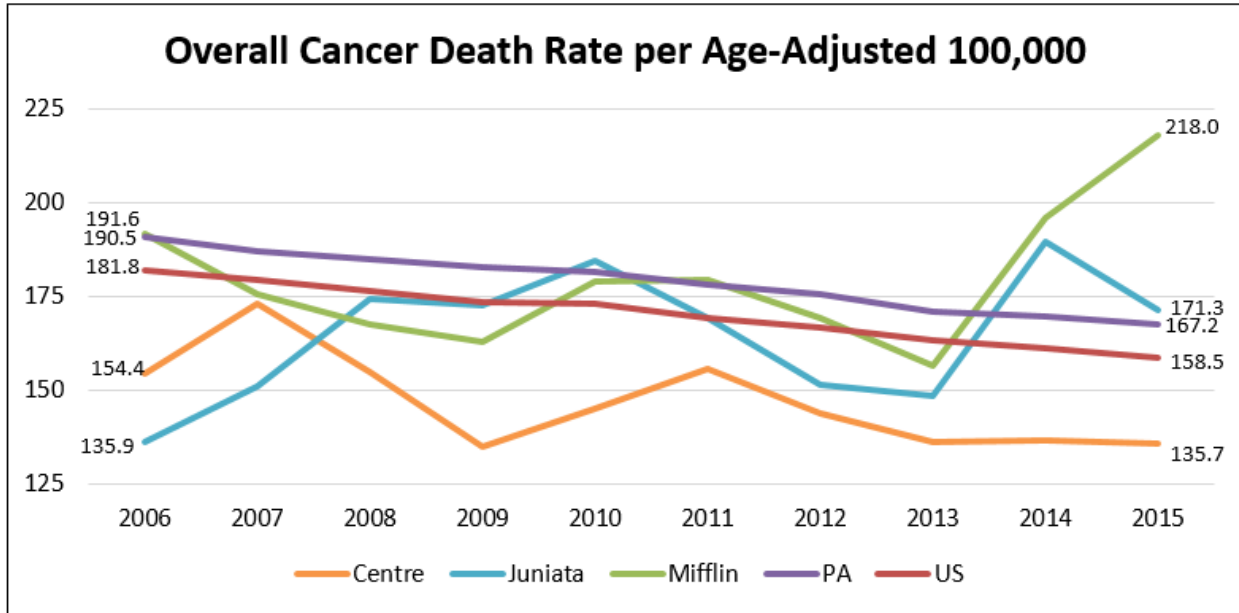
rates for the counties are lower than or similar to state and national benchmarks, indicating that residents are less likely to develop cancer, but more likely to die from the condition.

Across the state and the nation, Blacks/African Americans have a higher cancer death rate than Whites. Race and ethnicity data are not reported for the Western region due to low death counts.

State and National Cancer Death Rates by Race and Ethnicity

	White Death Rate	Black/African American Death Rate	Hispanic/Latino Death Rate
Pennsylvania	167.4	210.5	104.6
United States	165.9	189.8	112.3

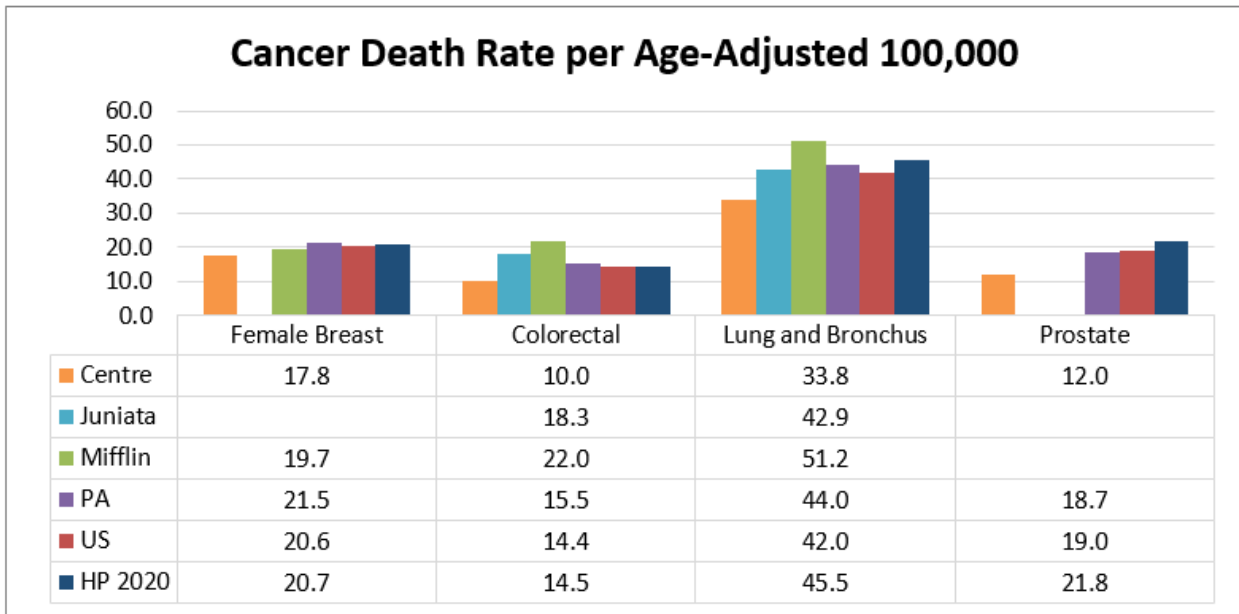
Source: CDC WONDER, 2013-2015



Source: CDC Wonder, 2006-2015

Presented below are the death rates for the most commonly diagnosed cancers. Centre County meets the Healthy People 2020 goals for all cancer types. Juniata County meets the goal for lung cancer death. Both Juniata and Mifflin Counties exceed state and national benchmarks for colorectal cancer death; Mifflin County also exceeds benchmarks for lung cancer death.

Centre County meets the HP 2020 goals for all reported cancer types; Juniata County meets the goal for lung cancer



Source: CDC Wonder, 2013-2015

*Death rates are reported as a 2013-2015 aggregate. Data for breast cancer death in Juniata County and prostate cancer death in Juniata and Mifflin Counties are not reported due to low death counts.

Chronic Lower Respiratory Disease

Chronic lower respiratory disease (CLRD) is the third most common cause of death in the nation. CLRD encompasses diseases like chronic obstructive pulmonary disorder (COPD), emphysema, and asthma.

Western region counties have lower rates of death due to CLRD compared to state and national benchmarks

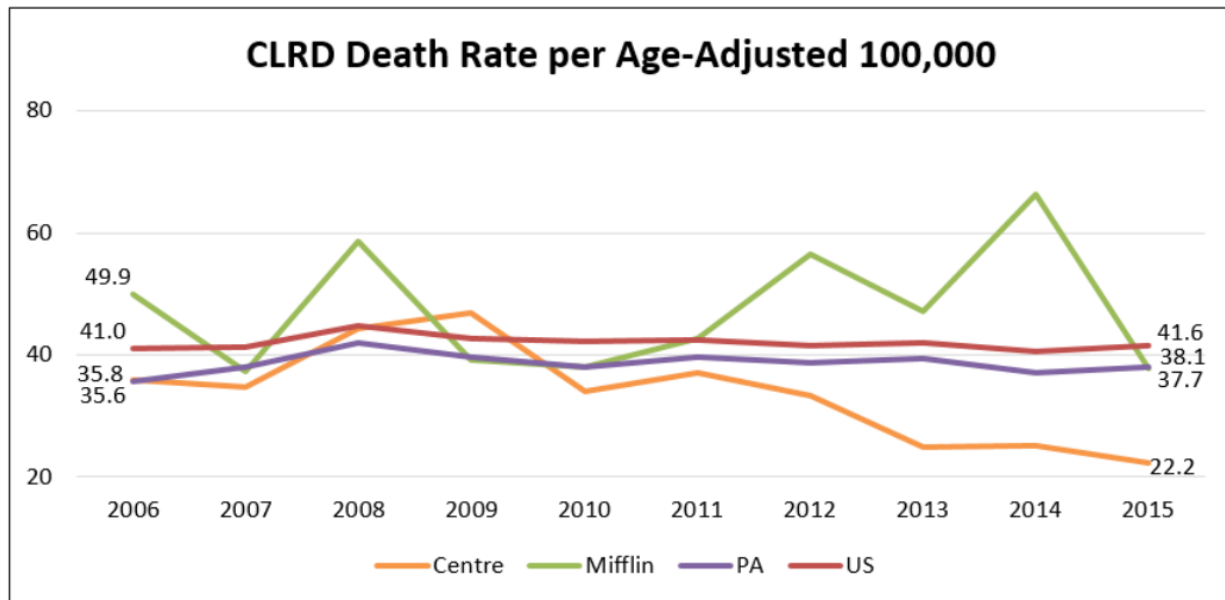
Reporting Region 2, which includes Centre County, has a higher incidence of adults with asthma. However, the CLRD death rate for Centre County is declining and lower than state and national rates. The CLRD death rate for Mifflin County has been variable, but the current rate is also lower than state and national rates. Juniata County year-over-year trends are not reported due to low death counts. The three year (2013-2015) aggregate death rate for the county is 41.8 per 100,000, similar to the nation.

Smoking cigarettes contributes to the onset of CLRD. All counties exceed the Healthy People 2020 goal for the percentage of adults who smoke.

CLRD Prevalence among Adults

	Asthma Diagnosis (Current)	COPD Diagnosis (Ever)
Region 1: Bedford/Blair/Huntingdon/Juniata/Mifflin	11%	8%
Region 2: Centre/Columbia/Montour/Northumberland/Snyder/Union	13%	6%
Pennsylvania	10%	7%

Source: PA Department of Health, 2014-2016



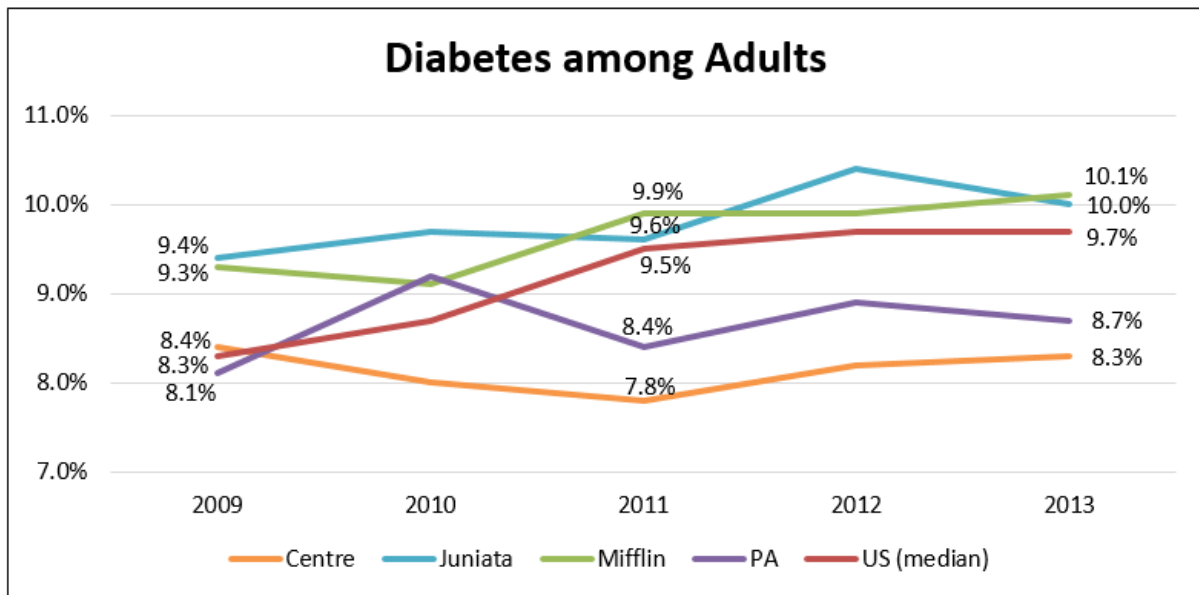
Source: CDC Wonder, 2006-2015

Diabetes

Diabetes is among the top 10 causes of death in the nation. According to the American Diabetes Association, diabetes and prediabetes affect more than 110 million Americans and cost \$332 billion per year. Diabetes can cause a number of serious complications. Type II diabetes, the most common form, is largely preventable through diet and exercise.

Adult diabetes prevalence increased in Juniata and Mifflin Counties between 2009 and 2013. Current prevalence rates for the counties exceed state and national rates. Adult diabetes prevalence in Centre County declined between 2009 and 2011, but is now increasing. The current prevalence rate is lower than state and national rates.

Adult diabetes prevalence is increasing in all Western region counties



Source: CDC Diabetes Atlas & BRFSS, 2009-2013

*A change in methods occurred in 2011 that may affect the validity of comparisons to past years.

Year-over-year diabetes death rates are not reported for the Western region due to low death counts. Death rates are reported as a three year (2013-2015) aggregate. Juniata and Mifflin Counties have a higher death rate than the state and the nation; Centre County has a lower death rate.

Juniata and Mifflin Counties exceed the state and the nation for adult diabetes prevalence and the diabetes death rate

Diabetes Death Rate per Age-Adjusted 100,000

	Diabetes Death Rate
Centre County	10.6
Juniata County	27.2
Mifflin County	23.7
Pennsylvania	22.2
United States	21.1

Source: CDC Wonder, 2013-2015

Across Pennsylvania and the nation, the diabetes death rate is highest among Blacks/African Americans and Hispanics/Latinos. Race and ethnicity data are not reported for the Western region due to low death counts.

State and National Diabetes Death Rates by Race and Ethnicity

	White Death Rate	Black/African American Death Rate	Hispanic/Latino Death Rate
Pennsylvania	21.0	34.6	26.5
United States	18.7	38.5	25.5

Source: CDC WONDER, 2013-2015

Notifiable Diseases

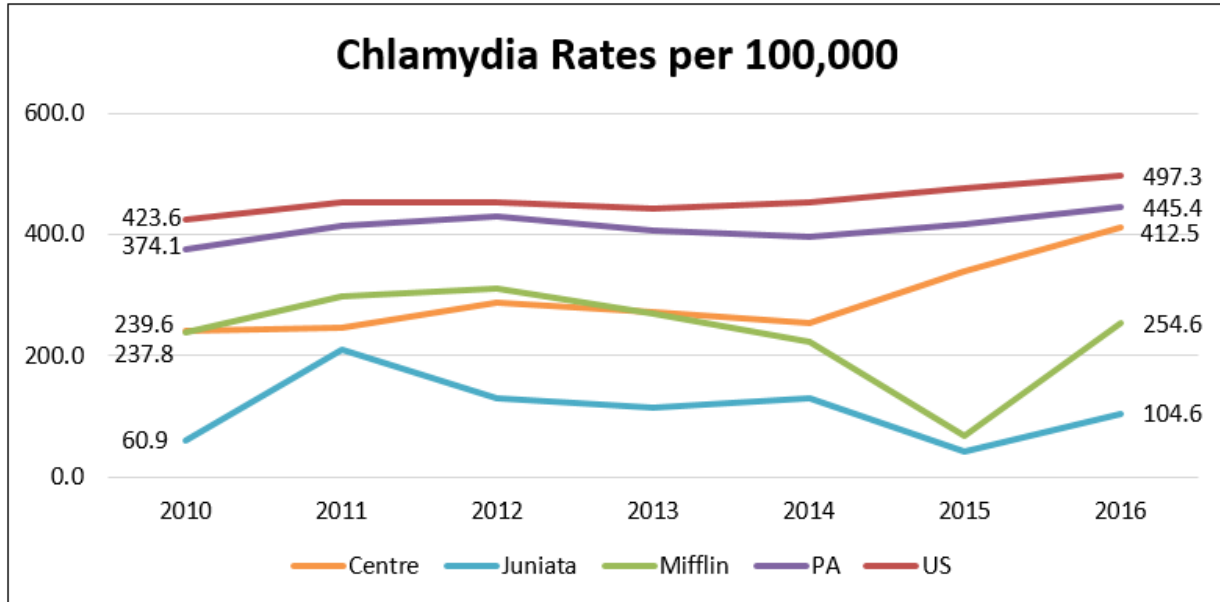
Sexually Transmitted Infections

Sexually transmitted infections (STIs) include chlamydia, gonorrhea, and HIV. The incidence of chlamydia in the Western region is lower when compared to the state and the nation. However, the Centre County incidence rate increased steadily from 2014 to 2016, and both Juniata and Mifflin Counties experienced increases between 2015 and 2016.

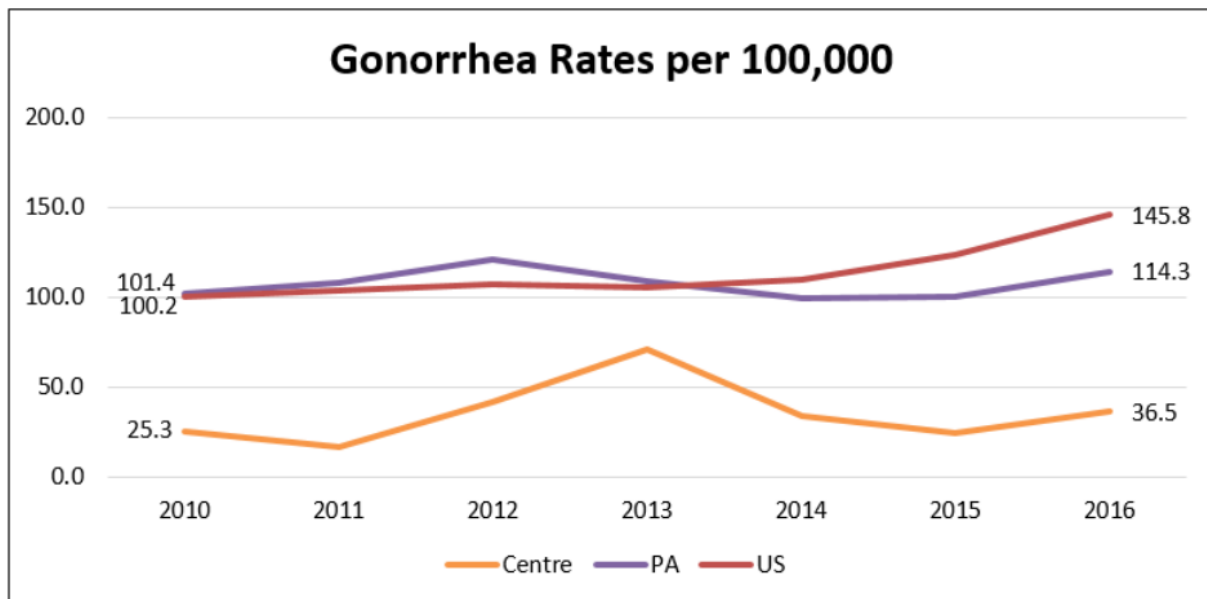
The incidence of chlamydia and gonorrhea in Western region counties is lower when compared to the state and the nation, but chlamydia incidence is increasing

The incidence of gonorrhea in the Western region is also lower when compared to the state and the nation. The rate for Centre County has been variable since 2010, but it is currently increasing. Juniata and Mifflin County year-over-year trends are not reported due to low counts. The three year (2014-2016) aggregate incidence rate for Mifflin County is 23.7 per 100,000, lower than the state, nation, and Centre County. A rate is not reported for Juniata County; eight cases of gonorrhea were reported in the county between 2014 and 2016.

All service counties have a lower incidence of HIV compared to the state and the nation. A total of 35 cases of HIV occurred in all three counties between 2013 and 2016.



Source: CDC Sexually Transmitted Diseases, 2010-2016 & PA Department of Health, 2010-2016



Source: CDC Sexually Transmitted Diseases, 2010-2016 & PA Department of Health, 2010-2016
 *Annual incidence rates are not reported for Juniata and Mifflin Counties due to low counts.

HIV Incidence Rate

	2015 Crude Incidence Rate per 100,000	Cumulative 2013-2016 Incidence Count
Centre County	5.0	33
Juniata County	0.0	0
Mifflin County	2.2	2
Pennsylvania	9.1	4,705
United States	12.3	NA

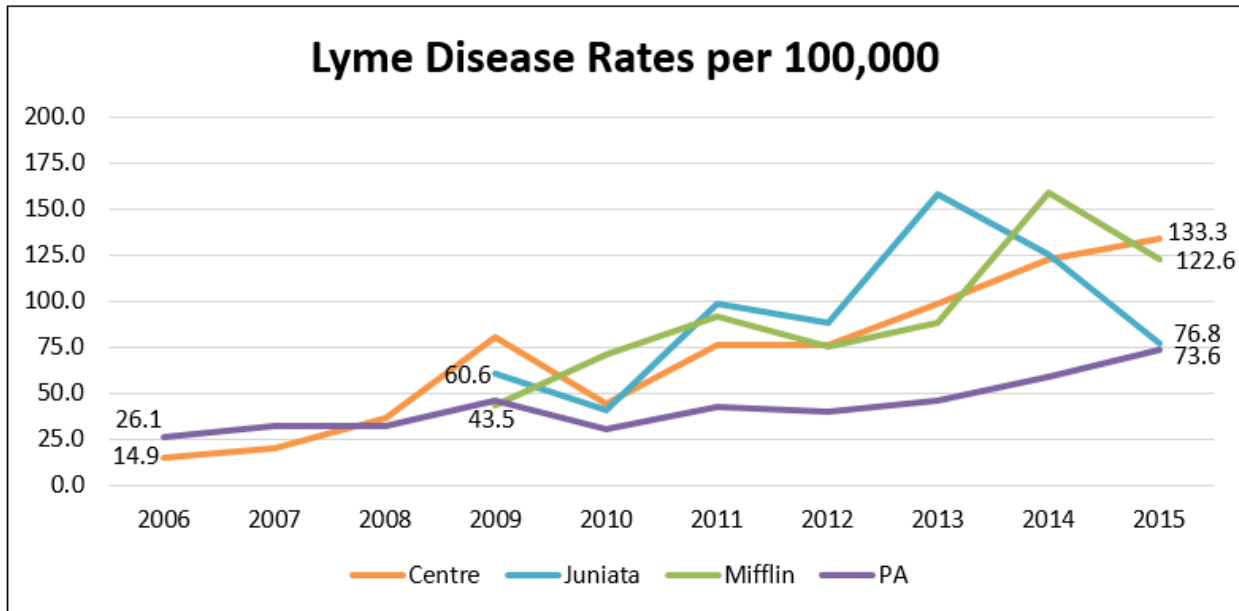
Source: CDC, 2015 & PA Department of Health, 2013-2016 & 2015

Lyme Disease

Lyme disease, according to the CDC, “is transmitted to humans through the bite of infected blacklegged ticks. Typical symptoms include fever, headache, fatigue, and a characteristic skin rash called erythema migrans. If left untreated, infection can spread to joints, the heart, and the nervous system.” The northeast United States, from Virginia to Maine, is one of the primary geographic areas for infection.

The incidence of Lyme disease has increased steadily across the state and most of the region. Centre County has the highest Lyme disease incidence rate. Approximately 562 people in the county were infected between 2013 and 2015, accounting for 68% of all cases in the region. Juniata County has the lowest Lyme disease incidence rate in the region; the rate declined sharply from 2013 to 2015.

Centre County has the highest Lyme disease rate in the region; 68% of regional cases between 2013 and 2015 occurred in the county



Source: PA Department of Health, 2006-2015

*Lyme disease rates for 2006-2008 are not reported for Juniata and Mifflin Counties due to low counts.

Child Lead Screening and Poisoning

The CDC estimates that at least four million households have children living in them that are being exposed to high levels of lead. Lead exposure increases the risk for central nervous system damage, slowed growth and development, and hearing and speech problems.

The measure for high levels of lead exposure or lead poisoning was recently revised from 10 micrograms per decileter of blood (µg/dL) or higher to 5 µg/dL of blood or higher. The Pennsylvania Department of Health reports blood lead levels based on the original measure. The following table depicts children between 0 and 6 years who have been tested for blood lead levels and who have lead poisoning.

The percentage of Juniata County children ages 3 to 6 with lead poisoning is triple the state percentage

Children in the Western region are less likely to be tested for lead poisoning when compared to the state. Children in Centre and Mifflin Counties who are tested for blood lead levels are less likely to have lead poisoning. Juniata County children ages 3 to 6 are more likely to have lead poisoning; the percentage among the age group is triple the state percentage.

Lead Screening and Poisoning among Children 0 to 6 Years of Age

	Age Group	Percent Tested for Lead Poisoning	Percent with Blood Lead Levels ≥10 µg/dL
Centre County	0-2 years	19.8%	0.5%
	3-6 years	1.0%	1.8%
Juniata County	0-2 years	24.3%	1.1%
	3-6 years	2.3%	7.1%
Mifflin County	0-2 years	23.0%	1.0%
	3-6 years	3.1%	1.4%
Pennsylvania	0-2 years	26.0%	1.8%
	3-6 years	4.5%	2.4%

Source: PA Department of Health, 2014

Behavioral Health

Mental Health

The suicide rate is one measure of mental health status. The Centre County rate is lower than state and national rates and meets the Healthy People 2020 goal. The Mifflin County rate is the highest in the region and exceeds the Healthy People 2020 goal by 5 points. Year-over-year trends are not reported for the region due to low death counts.

Mifflin County has the highest rates of death due to suicide and mental and behavioral disorders

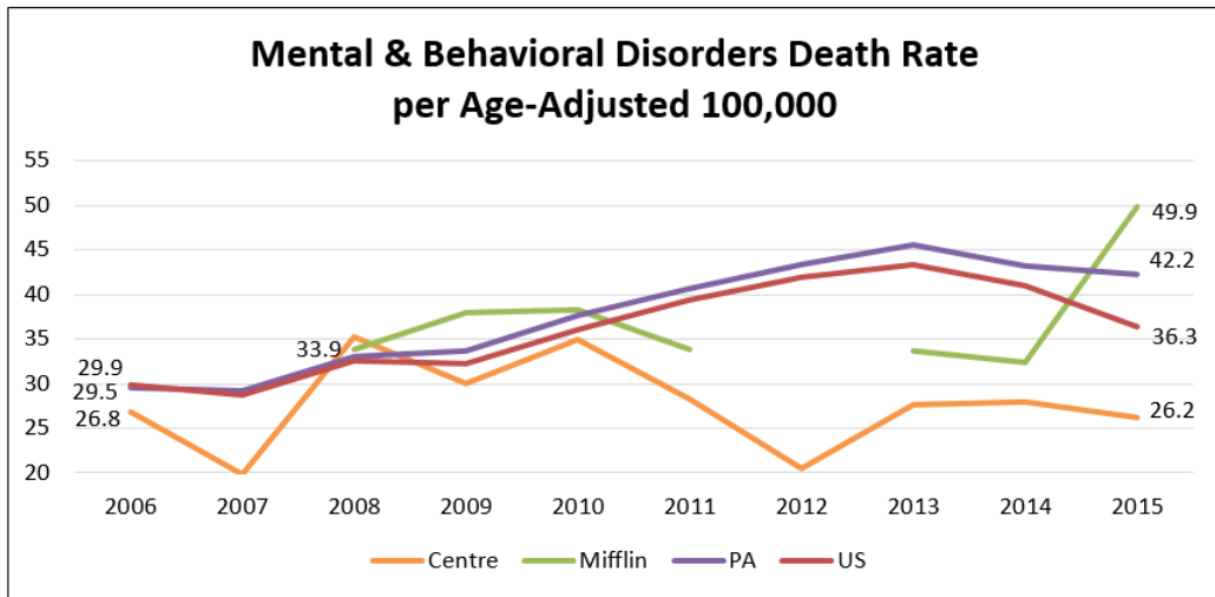
Mental and behavioral disorders span a wide range of disorders, including dementia, amnesia, Schizophrenia, phobias, and mood or personality disorders. The disorders are not induced by alcohol and other psychoactive substances, but they may result from substance abuse. The mental and behavioral disorders death rate for Mifflin County is higher than the state and the nation. The county death rate increased sharply between 2014 and 2015.

Mental Health Measures

	30-Day Average - Poor Mental Health Days (Adults)	Suicide Rate per Age-Adjusted 100,000	Mental & Behaviors Disorders Death Rate per Age-Adjusted 100,000
Centre County	3.7	8.7	26.2
Juniata County	3.8	NA (n=13)	36.1
Mifflin County	4.0	14.9	49.9
Pennsylvania	3.9	13.6	42.2
United States	3.7	12.9	36.3
HP 2020	NA	10.2	NA

Source: CDC BRFSS & WONDER, 2013-2015 & 2015 & Healthy People 2020

*Suicide death data for all counties and mental and behavioral disorders death data for Juniata County are reported for 2013-2015 due to a low death count.



Source: CDC Wonder, 2006-2015

*Death rate data are not reported for Mifflin County for 2006-2007 and 2012 due to low death counts.

Substance Abuse

Substance abuse includes both alcohol and drug abuse. Adults in Centre County are more likely to drink excessively compared to the state and the nation; the county also has the highest percentage of driving deaths due to driving under the influence (DUI). Juniata and Mifflin Counties have lower rates of excessive drinking and DUI-related death.

Adults in Centre County are the most likely to drink excessively; the county also has a higher percentage of driving deaths due to DUI

Drug-induced deaths include all deaths for which drugs are the underlying cause, including drug overdoses and deaths from medical conditions resulting from chronic drug use. Pennsylvania has a higher drug-induced death rate than the nation. The drug-induced death rate for Centre

County is lower than the state and the nation. A death rate is not reported for Juniata or Mifflin County due to low death counts.

Substance Abuse Measures

	Excessive Drinking (Adults)	Percent of Driving Deaths due to DUI	Drug-Induced Death Rate per Age-Adjusted 100,000
Centre County	22.3%	29.6%	7.0
Juniata County	17.5%	25.0%	NA
Mifflin County	17.1%	22.6%	NA (n=19)
Pennsylvania	18.1%	32.0%	23.3
United States	18.0%	30.0%	15.7
HP 2020	NA	NA	11.3

Source: CDC BRFSS & WONDER, 2013-2015; National Highway Traffic Safety Administration, 2011-2015; Healthy People 2020

*Drug-induced death data are reported for 2013-2015 due to a low death count. A death count is not reported for Juniata County.

Licensed drug and alcohol treatment providers in Pennsylvania that receive federal, state, or local funds from the Department of Drug and Alcohol Programs are required to report admission data to the Department. Providers that do not receive federal, state, or local funds are not required to report admission data, but may do so voluntarily. The following tables profile information from reporting providers.

Across the Western region, there are 15 licensed drug and alcohol treatment facilities. Nearly all of the facilities provide outpatient services. Outpatient services typically focus on individuals with mild addiction, providing education, counseling, and support.

The number of drug and alcohol treatment admissions declined in all counties from fiscal years 2013-2014 to 2014-2015. The percentage of individuals admitted for treatment more than once within a year also decreased in Juniata and Mifflin Counties. In Juniata and Mifflin Counties, the majority of admissions are due to drug abuse. In Centre County, the majority of admissions are due to alcohol abuse.

The majority of treatment admissions in Centre County are for alcohol abuse, consistent with the high rates of excessive drinking and DUI related death

Licensed Drug and Alcohol Treatment Facilities

	Total Facilities	Inpatient Non-Hospital	Inpatient Hospital	Partial Hospitalization	Outpatient Facilities
Centre County	11	1	0	1	11
Juniata County	1	0	0	0	1
Mifflin County	3	1	0	1	2
Pennsylvania	721	177	14	125	575

Source: PA Department of Health, FY2014-2015

Admissions to State Supported Facilities by Fiscal Year (FY)

	Admissions		Number of Clients Admitted		Percent of Clients Admitted Once	
	FY 13-14	FY 14-15	FY 13-14	FY 14-15	FY 13-14	FY 14-15
Centre County	598	444	487	362	83.2%	83.1%
Juniata County	31	22	27	13	88.9%	53.8%
Mifflin County	53	41	42	32	78.6%	71.9%

Source: PA Department of Health, FY2013-2015

Primary Diagnosis on Admission to State Supported Facilities by Fiscal Year (FY)

	Drug Abuse		Alcohol Abuse		Other*	
	FY 13-14	FY 14-15	FY 13-14	FY 14-15	FY 13-14	FY 14-15
Centre County	46.8%	43.4%	49.7%	55.0%	3.5%	1.7%
Juniata County	37.0%	61.5%	11.1%	30.8%	51.9%	7.7%
Mifflin County	52.4%	59.4%	26.2%	31.3%	21.4%	9.4%

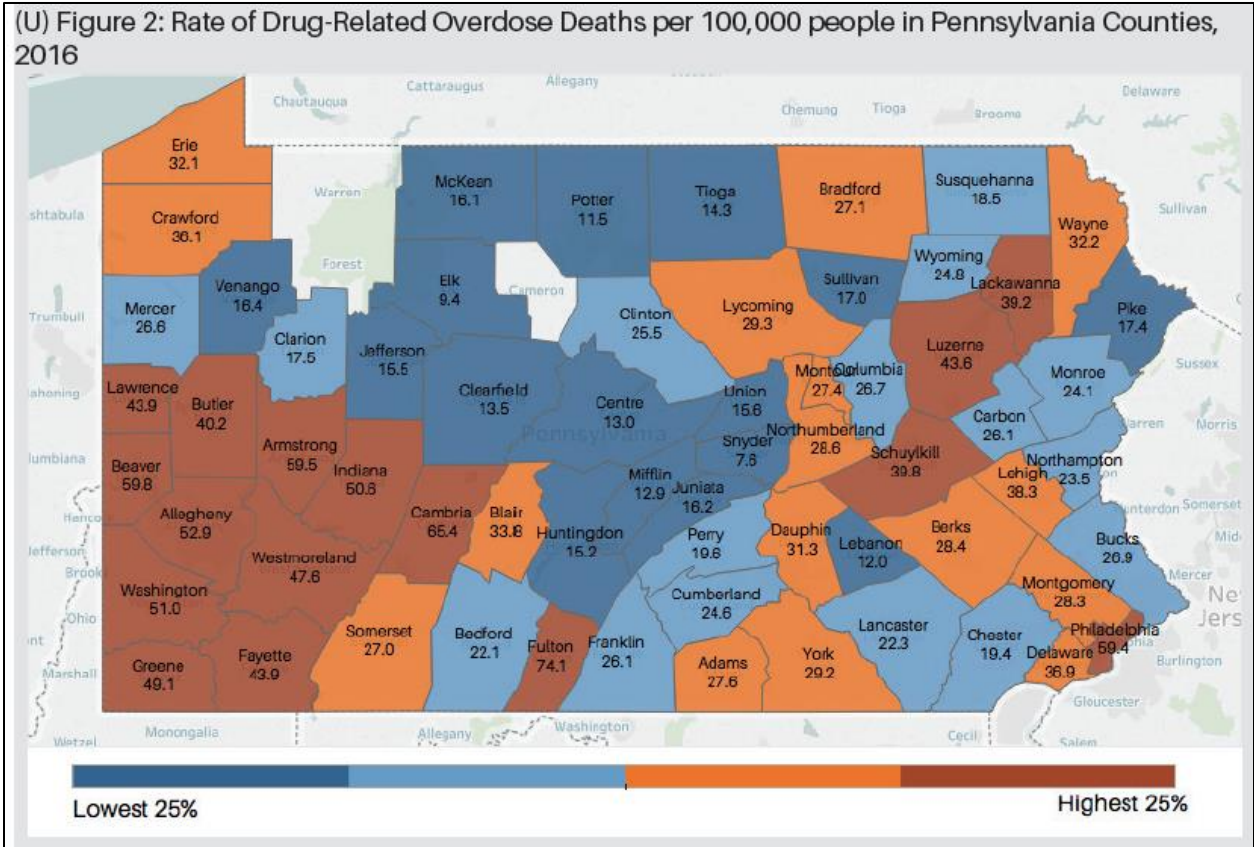
Source: PA Department of Health, FY2013-2015

*Includes family members receiving counseling.

In 2016, the Drug Enforcement Administration, Philadelphia Division released a report analyzing overdose deaths in Pennsylvania. According to the report, 4,642 drug-related overdose deaths were recorded in the state for a rate of 36.5 per 100,000, an increase of 37% from 2015. The following figure profiles the rate of drug-related overdose deaths by Pennsylvania county.

Western region counties are among the bottom 25% of counties for drug-related overdose death rates, but Juniata County moved up in the rankings

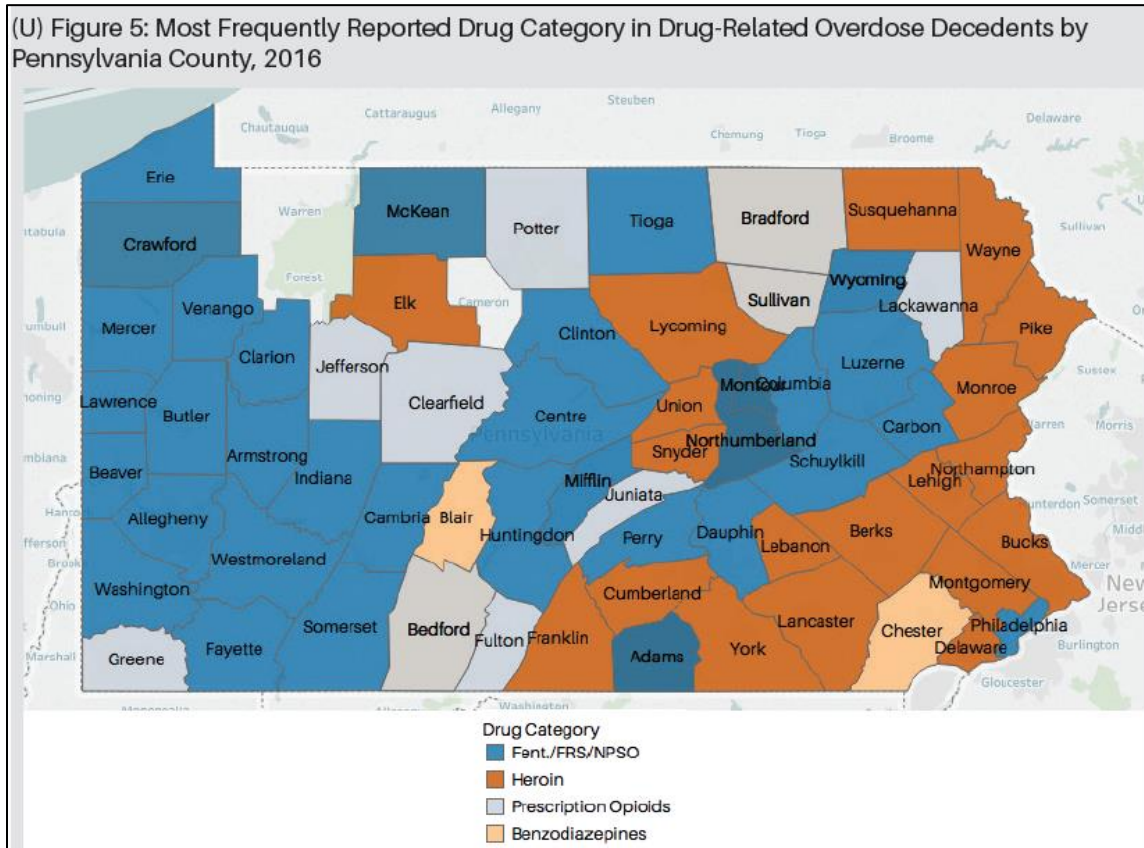
Western region counties are among the lowest 25% of Pennsylvania counties with regard to overdose rates, ranking between 51 and 60. Centre and Mifflin Counties dropped in the rankings from 2015, but Juniata County moved up in the rankings by 13 spots.



County Rankings by Rate of Drug-Related Overdose Deaths per 100,000 (2015 and 2016)

	2015			2016		
	Rank	Death Rate	Death Count	Rank	Death Rate	Death Count
Centre County	57	9.3	15	59	13.0	20
Juniata County	64	4.0	1	51	16.2	4
Mifflin County	54	10.8	5	60	12.9	6

Across Pennsylvania, fentanyl and heroin are the most commonly reported drug categories among drug-related overdose deaths. The most commonly reported drug in Centre and Mifflin Counties is fentanyl; the most commonly reported drug in Juniata County is prescription opioids.



Youth

Youth who consistently feel depressed or sad may be at risk for committing suicide. The following figures depict the percentage of students in grades sixth through twelfth who felt sad or depressed on most days during the past year. Students in all reported grades in Centre County are less likely to be sad or depressed when compared to the state. However, the percentage of sad or depressed students in the county increased 5 points from 2011 to 2015. Data for Juniata and Mifflin Counties are not reported.

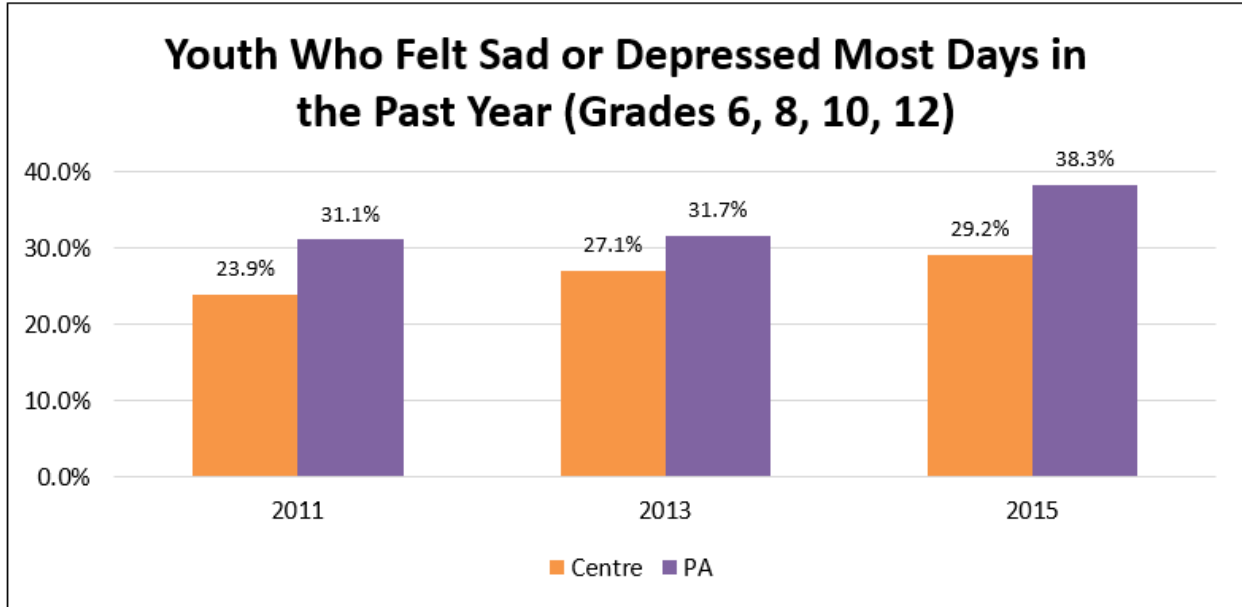
Students in Centre County are less likely to be sad or depressed when compared to the state, but the percentage is increasing

Youth Who Felt Sad or Depressed on Most Days in the Past Year

	6 th Grade	8 th Grade	10 th Grade	12 th Grade
Centre County	22.5%	28.2%	31.5%	35.1%
Pennsylvania	33.9%	37.7%	40.6%	40.7%

Source: Pennsylvania Commission on Crime and Delinquency, 2015

*Data are not reported for Juniata and Mifflin Counties.



Source: Pennsylvania Commission on Crime and Delinquency, 2011-2015

*Data are not reported for Juniata and Mifflin Counties.

Alcohol and marijuana use is highest among students in grades ten and twelve. Students in all reported grades in Centre County are less likely to use alcohol or marijuana when compared to the state. Percentages remained stable from 2011 to 2015.

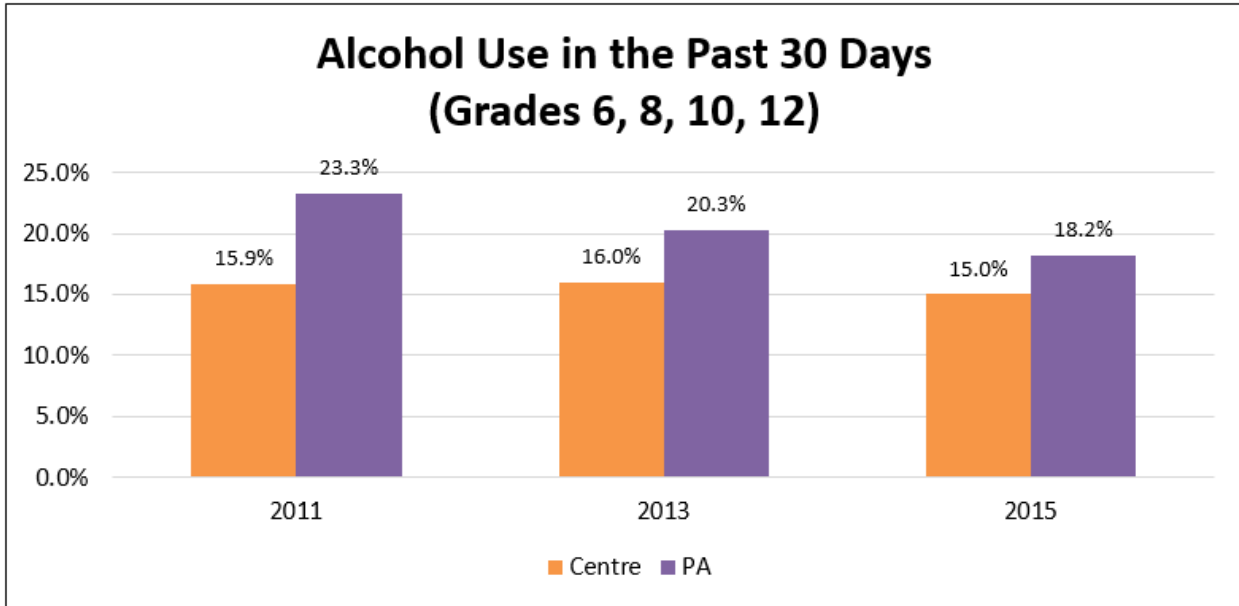
Centre County students are less likely to use alcohol or marijuana when compared to the state

Youth Substance Abuse Measures

	6 th Grade	8 th Grade	10 th Grade	12 th Grade
Used Alcohol in the Past 30 Days				
Centre County	2.2%	7.5%	16.8%	36.5%
Pennsylvania	3.3%	9.5%	22.3%	37.6%
Used Marijuana in the Past 30 Days				
Centre County	0.1%	2.3%	4.5%	19.0%
Pennsylvania	0.6%	3.8%	12.0%	20.8%

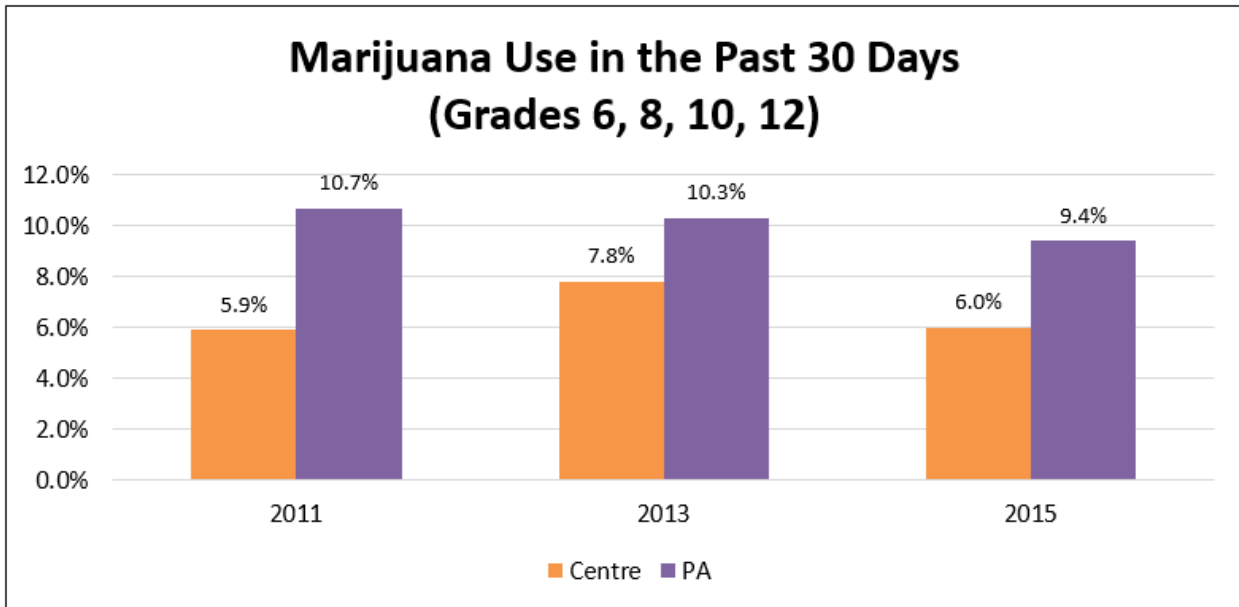
Source: Pennsylvania Commission on Crime and Delinquency, 2015

*Data are not reported for Juniata and Mifflin Counties.



Source: Pennsylvania Commission on Crime and Delinquency, 2011-2015

*Data are not reported for Juniata and Mifflin Counties.



Source: Pennsylvania Commission on Crime and Delinquency, 2011-2015

*Data are not reported for Juniata and Mifflin Counties.

Senior Health

Seniors face a number of challenges related to health and well-being as they age. They are more prone to chronic disease, social isolation, and disability. The following sections highlight key health indicators for the region’s senior population.

Chronic Conditions

The following table notes the percentage of Medicare Beneficiaries 65 years or over who have been diagnosed with a chronic condition. Cells highlighted in red represent percentages that are above state and national benchmarks by more than 2 points.

Medicare Beneficiaries (65+) in Juniata/Mifflin Counties have a higher prevalence of chronic disease and are more likely to have 6 or more chronic conditions

Juniata and Mifflin County Medicare Beneficiaries have a higher prevalence of chronic conditions, particularly high cholesterol and hypertension.

Chronic Conditions among Medicare Beneficiaries 65 Years or Over (Red = Higher than the State and the Nation by More than 2 Points)

	Centre County	Juniata County	Mifflin County	Pennsylvania	United States
Alzheimer's Disease	11.0%	NA	11.5%	11.8%	11.3%
Arthritis	32.7%	31.4%	30.3%	33.5%	31.3%
Asthma	9.9%	9.5%	14.1%	7.8%	7.6%
Cancer	10.0%	8.5%	9.8%	9.8%	8.9%
COPD	10.8%	14.8%	15.7%	11.0%	11.2%
Depression	16.1%	18.5%	19.1%	14.9%	14.1%
Diabetes	25.7%	31.6%	30.3%	26.5%	26.8%
Heart Failure	13.4%	18.0%	15.9%	14.7%	14.3%
High Cholesterol	51.5%	68.3%	67.3%	53.0%	47.8%
Hypertension	58.5%	67.5%	67.9%	61.0%	58.1%
Ischemic Heart Disease	25.8%	34.9%	33.5%	30.2%	28.6%
Stroke	4.0%	4.7%	4.7%	4.9%	4.2%

Source: Centers for Medicare & Medicaid Services, 2015

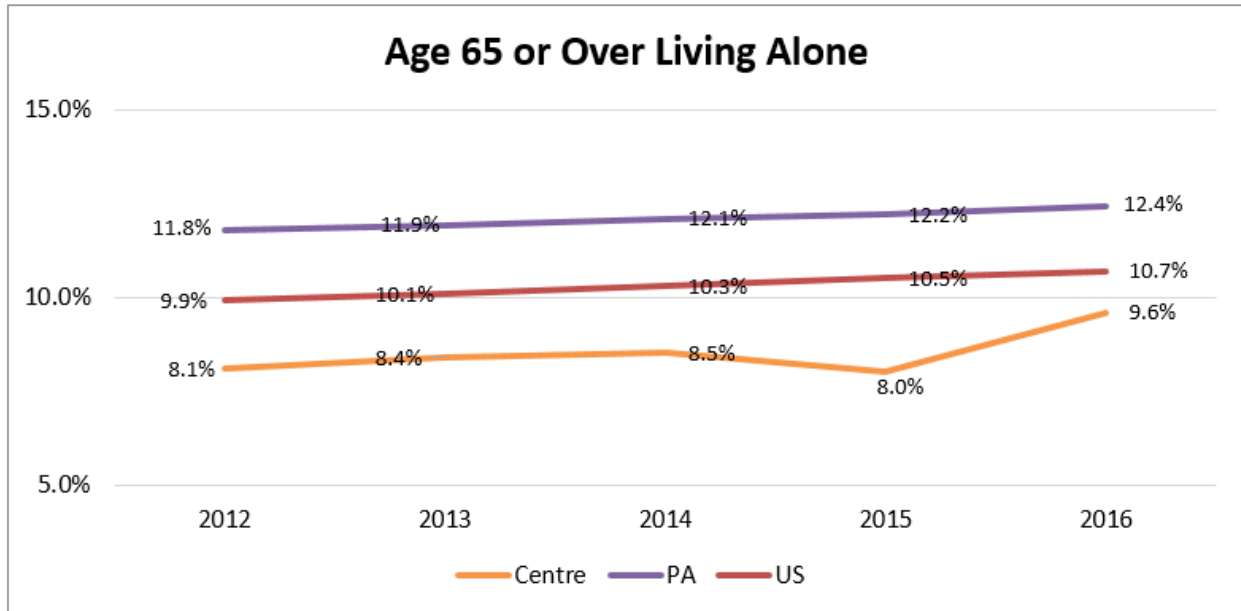
According to the CDC, "Among Medicare fee-for-service beneficiaries, people with multiple chronic conditions account for 93% of total Medicare spending." The table below notes the percentage of Western region Medicare Beneficiaries by number of chronic conditions. Juniata and Mifflin Counties exceed the state and the nation for the percentage of Beneficiaries with six or more conditions.

Number of Chronic Conditions among Medicare Beneficiaries 65 Years or Over (Red = Higher than the State and the Nation by More than 2 Points)

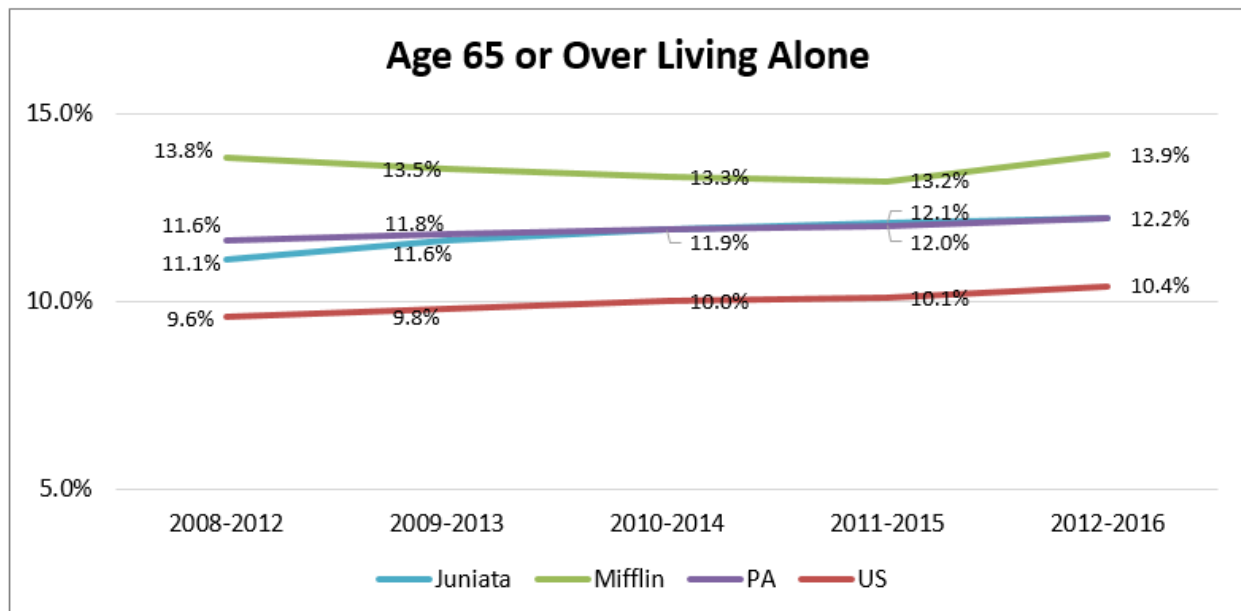
	Centre County	Juniata County	Mifflin County	Pennsylvania	United States
0 to 1 condition	28.8%	21.9%	21.4%	28.5%	32.3%
2 to 3 conditions	31.5%	28.9%	31.0%	31.1%	30.0%
4 to 5 conditions	22.2%	26.6%	24.2%	22.9%	21.6%
6 or more conditions	17.5%	22.7%	23.5%	17.6%	16.2%

Source: Centers for Medicare & Medicaid Services, 2015

As seniors age, they are at risk for isolation due to physical limitations and decreasing social circles. One indicator of isolation is the percentage of seniors age 65 or over who live alone. Mifflin County has a higher percentage of seniors who live alone when compared to the state and the nation, but the percentage of seniors who live alone increased in Centre and Juniata Counties.



Source: American Community Survey, 2012-2016



Source: American Community Survey, 2008-2012 – 2011-2015

Regular screenings are essential for the early detection and management of chronic conditions. The following table analyzes diabetes and mammogram screenings among Medicare enrollees. Medicare enrollees in all three counties have higher screening rates than the state and the nation.

Medicare enrollees in all three counties have higher chronic disease screening rates compared to the state and the nation

Chronic Disease Screenings among Medicare Enrollees

	Annual hA1c Test from a Provider (65-75 Years)	Mammogram in Past Two Years (67-69 Years)
Centre County	87.7%	72.0%
Juniata County	91.9%	71.8%
Mifflin County	87.7%	76.8%
Pennsylvania	86.3%	64.8%
United States	85.0%	63.0%

Source: Dartmouth Atlas of Health Care, 2014

Assistance with Activities of Daily Living (ADL)

Chronic conditions and related disabilities can lead to limitations in activities of daily living. Approximately 5% of older adults in Pennsylvania have difficulty dressing or bathing, 25% have difficulty walking or climbing steps, and 5% have difficulty with vision. Older adults in the Western region are less likely to have these limitations.

Adults 65 Years or Over Requiring Assistance with ADLs

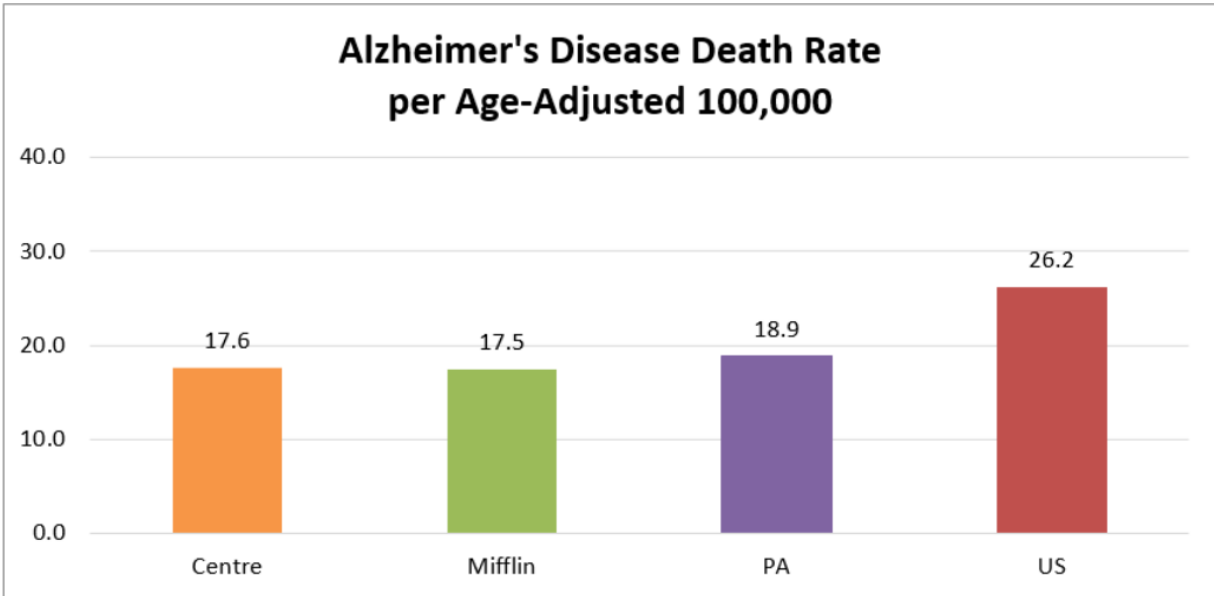
	Have Difficulty Dressing or Bathing	Have Serious Difficulty Walking or Climbing Stairs	Blind or Serious Difficulty Seeing, Even with Glasses
Region 1: Bedford/Blair/Huntingdon/Juniata/Mifflin	2%	22%	3%
Region 2: Centre/Columbia/Montour/Northumberland/Snyder/Union	3%	22%	4%
Pennsylvania	5%	25%	5%

Source: PA Department of Health BRFSS, 2014-2016

Alzheimer’s Disease

According to the National Institute on Aging, “Although one does not die of Alzheimer’s disease, during the course of the disease, the body’s defense mechanisms ultimately weaken, increasing susceptibility to catastrophic infection and other causes of death related to frailty.”

A lower percentage of Western region Medicare Beneficiaries age 65 years or over have Alzheimer’s disease when compared to state and national percentages. Death rates due to Alzheimer’s disease are also lower among Western region counties.



Source: CDC Wonder, 2013-2015

*Data for Juniata County is not reported due to a low death count.

Immunizations

Pneumococcal disease continues to be a leading cause of serious illness among older adults. According to the CDC, approximately 13,500 cases of invasive pneumococcal disease occurred among adults age 65 years or over in 2013. Approximately 20%–25% of the cases are potentially preventable with proper vaccination. Older adults in Reporting Region 1, including Juniata and Mifflin Counties, are less likely to receive a pneumonia vaccine when compared to the state.

Adults 65 Years or Over Who Received a Pneumonia Vaccination

	Ever Received a Pneumonia Vaccination
Region 1: Bedford/ Blair/ Huntingdon/Juniata/Mifflin	69%
Region 2: Centre/Columbia/ Montour/Northumberland/ Snyder/Union	78%
Pennsylvania	72%

Source: PA Department of Health BRFSS, 2014-2016

Maternal and Infant Health

Total Births

The overall birth rate is highest in Juniata and Mifflin Counties. Births in all counties were primarily to White mothers. Centre County had the most births to non-White and Hispanic/Latino mothers.

2015 Births by Race and Ethnicity

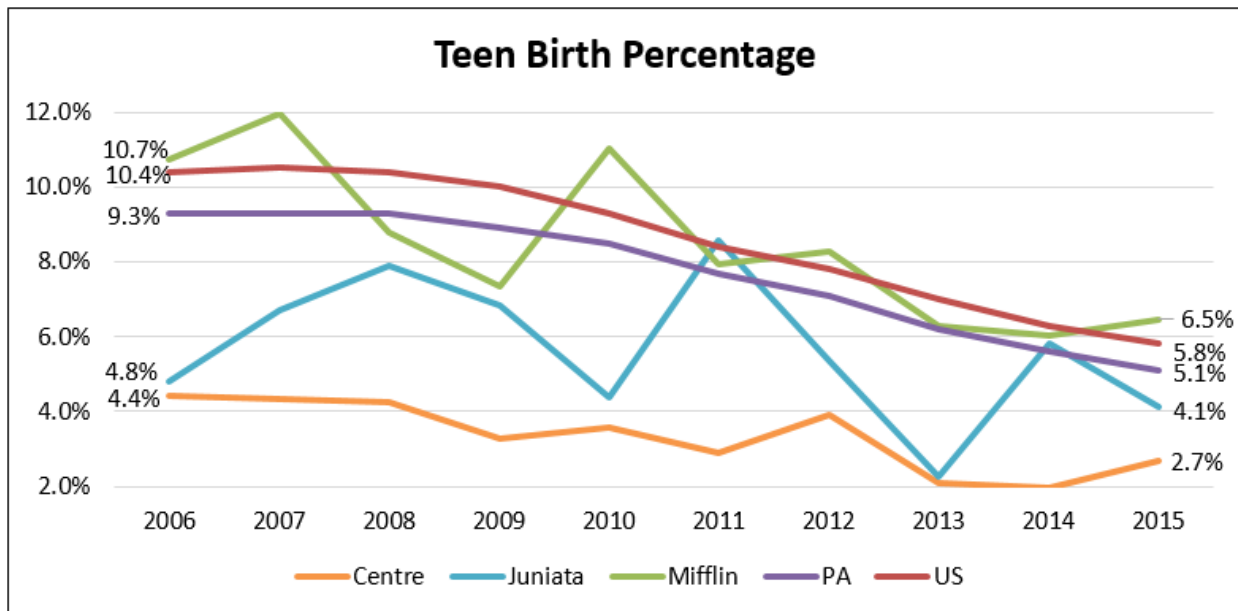
	Total Births	Birth Rate per 1,000	White Birth Count	Black/African American Birth Count	Hispanic/Latino Birth Count
Centre County	1,276	16.7	1,097	25	29
Juniata County	268	21.7	251	1	13
Mifflin County	603	25.5	584	1	13

Source: PA Department of Health, 2015

Teen Births

The percentage of births to teenagers declined in Centre and Mifflin Counties and remained variable in Juniata County. Mifflin County experienced the greatest decline in teen births over the past decade, but it has the highest percentage in the region. The percentage exceeds the state and the nation.

Mifflin County had the greatest decline in teen births over the past decade, but has the highest rate in the region



Source: CDC National Vital Statistics System, 2006-2015 & PA Department of Health, 2006-2015

Prenatal care should begin during the first trimester to ensure a healthy pregnancy and birth. None of the counties in the Western region meet the Healthy People 2020 goal for first trimester care. Mothers in Juniata and Mifflin Counties are the least likely to receive first trimester prenatal care, but the percentages are on the rise.

Western region counties do not meet HP 2020 goals for prenatal care and smoking during pregnancy

Low birth weight is defined as a birth weight of less than 5 pounds, 8 ounces. It is often a result of premature birth, fetal growth restrictions, or birth defects. The low birth weight percentage across the state and the nation has been consistent over the past decade at approximately 8%. Low birth weight percentages for Western region counties have been variable. Percentages for

Centre and Juniata Counties meet HP 2020 goals for low birth weight and breastfeeding

Centre and Juniata Counties have consistently met the Healthy People 2020 goal. Mifflin County experienced an increase in the low birth weight percentage from 2014 to 2015; the current rate exceeds the Healthy People goal.

Mothers in the Western region do not meet the Healthy People 2020 goal for smoking during pregnancy. However, the indicator improved for all counties over the past decade. Mifflin County had the greatest improvement with a percentage change of 8 points.

Centre and Juniata Counties meet the Healthy People 2020 goal for breastfeeding, and Mifflin County is within reach of the goal. The percentage of mothers who breastfeed increased in all counties over the past decade. Mifflin County had the greatest improvement with a percentage change of 19 points.

Mifflin County had the greatest improvement in the percentage of non-smoking mothers during pregnancy and breastfeeding

All counties meet the Healthy People 2020 goal for preterm births. Preterm birth rates for the counties have been variable over the past decade. Centre and Mifflin County rates increased in the last five years.

In Centre County, Black/African American and Hispanic/Latina women are less likely to receive first trimester prenatal care. However, they are also less likely to smoke during pregnancy and are more likely to breastfeed than White women.

In Centre County, Black/African American and Hispanic/Latina women are less likely to receive first trimester prenatal care than White women

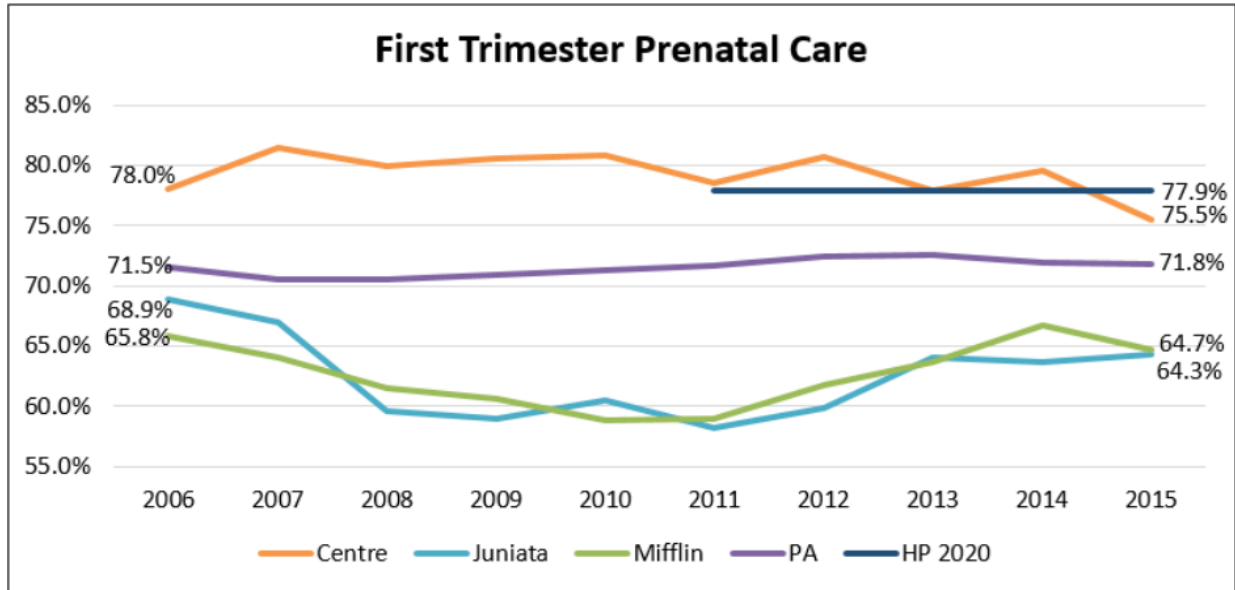
Maternal and Child Health Indicators by Race and Ethnicity

	Centre County	Juniata County	Mifflin County	Healthy People 2020 Goal
Mothers with First Trimester Care				
Total Population	75.5%	64.3%	64.7%	77.9%
White	75.9%	NA	NA	
Black/African American	60.9%	NA	NA	
Hispanic/Latina	59.3%	NA	NA	
Low Birth Weight Infants				
Total Population	6.5%	7.1%	8.5%	7.8%
White	6.5%	NA	NA	
Black/African American	NA (n=2)	NA	NA	
Hispanic/Latina	NA (n=3)	NA	NA	
Non-Smoking Mothers during Pregnancy				
Total Population	90.3%	87.5%	83.2%	98.6%
White	89.1%	NA	NA	
Black/African American	100.0%	NA	NA	
Hispanic/Latina	96.3%	NA	NA	
Breastfeeding				
Total Population	87.8%	84.3%	80.0%	81.9%
White	86.9%	NA	NA	
Black/African American	92.0%	NA	NA	
Hispanic/Latina	93.1%	NA	NA	
Preterm Births				
Total Population	7.5%	6.4%	8.7%	9.4%*
White	7.5%	NA	NA	
Black/African American	NA (n=3)	NA	NA	
Hispanic/Latina	NA (n=3)	NA	NA	

Source: PA Department of Health, 2015 & Healthy People 2020

*The Healthy People 2020 goal for preterm birth was revised in 2017 from 11.4% to 9.4%.

**Indicators by race and ethnicity are only reported for counties with more than 20 births among minority populations.



Source: PA Department of Health, 2006-2015 & Healthy People 2020

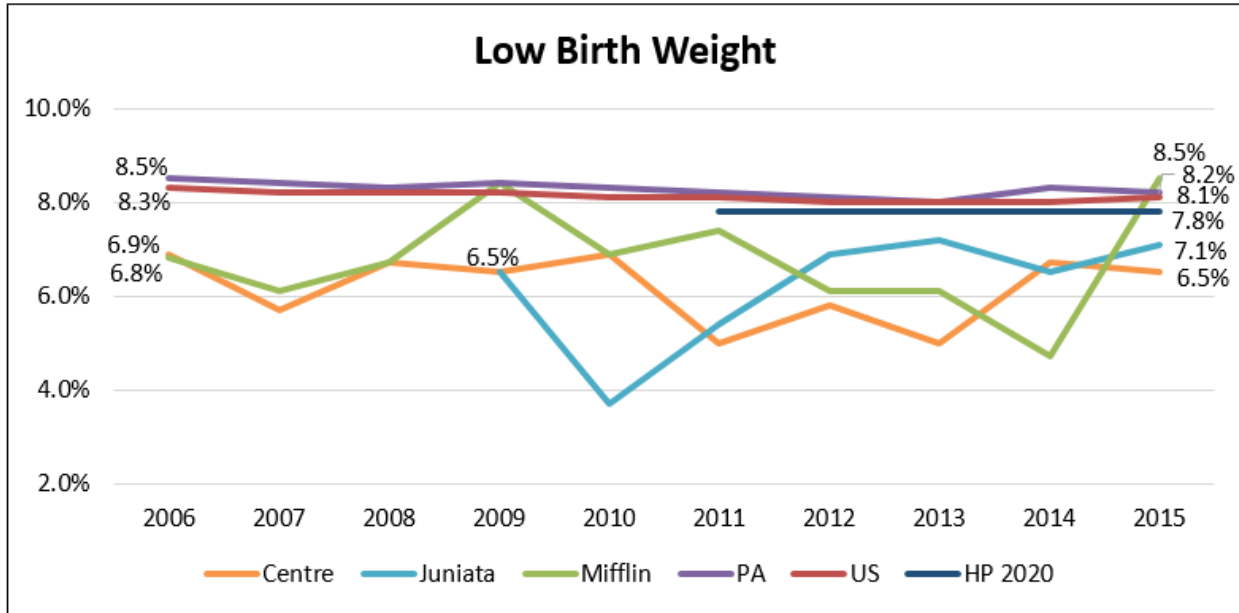
The following municipalities within each county do not meet the Healthy People 2020 goal for mothers receiving first trimester prenatal care (77.9%) by more than 3 points. Municipalities are presented in ascending order by percentage of mothers receiving first trimester prenatal care.

Municipalities That Do Not Meet the Healthy People 2020 Goal (77.9%) for Mothers Receiving First Trimester Prenatal Care by More Than 3 Points

Centre County		Juniata County		Mifflin County	
Municipality	%	Municipality	%	Municipality	%
Haines Twp.	26.5%	Walker Twp.	43.0%	Menno Twp.	22.4%
Miles Twp.	30.0%	Turbett Twp.	44.4%	Union Twp.	40.3%
Howard Boro.	51.4%	Tuscarora Twp.	52.0%	Armagh Twp.	41.9%
Marion Twp.	56.9%	Delaware Twp.	53.8%	Brown Twp.	51.3%
Penn Twp.	59.1%	Fayette Twp.	59.4%	McVeytown Boro.	60.9%
Gregg Twp.	62.6%	Susquehanna Twp.	64.2%	Oliver Twp.	66.7%
Curtin Twp.	72.7%	Spruce Hill Twp.	64.3%	Decatur Twp.	67.1%
State College Boro.	74.2%	Mifflin Boro.	64.4%	Burnham Boro.	67.6%
Potter Twp.	74.8%	Monroe Twp.	65.1%	Lewistown Boro.	73.5%
		Greenwood Twp.	65.2%		
		Beale Twp.	65.9%		
		Fermanagh Twp.	66.7%		
		Mifflintown Boro.	66.7%		
		Thompsontown Boro.	66.7%		
		Port Royal Boro.	68.0%		
		Lack Twp.	68.2%		
		Milford Twp.	72.6%		

Source: PA Department of Health, 2011-2015

*Only municipalities with more than 20 reported births are included.



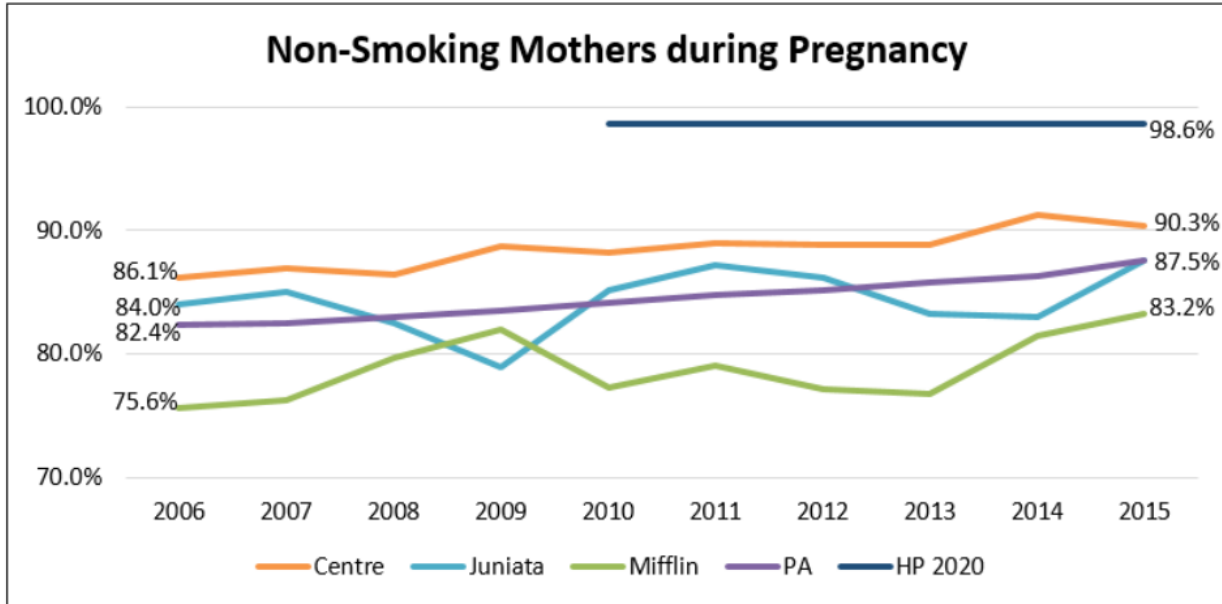
Source: PA Department of Health, 2006-2015 & Healthy People 2020
 *Data are not reported for Juniata County for 2006-2008 due to low counts.

The following municipalities within each county do not meet the Healthy People 2020 goal for low birth weight babies (7.8%) by more than 3 points. Municipalities are presented in descending order by percentage of low birth weight babies.

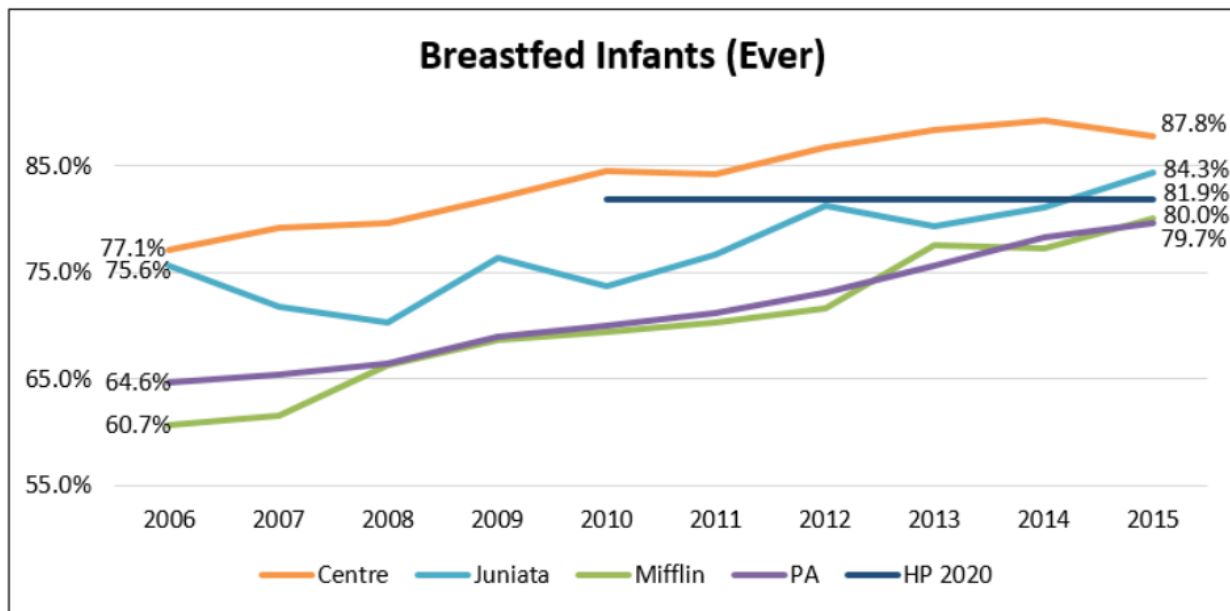
Municipalities that Do Not Meet the Healthy People 2020 Goal (7.8%) for Low Birth Weight Babies by More Than 3 Points

Centre County		Juniata County		Mifflin County	
Municipality	%	Municipality	%	Municipality	%
Port Matilda Boro.	13.5%	Thompsontown Boro.	18.2%	Juniata Terrace Boro.	15.4%
Snow Shoe Twp.	13.0%	Greenwood Twp.	13.0%		
Worth Twp.	12.5%	Beale Twp.	12.2%		
Huston Twp.	11.9%	Mifflin Boro.	11.1%		
Centre Hall Boro.	11.5%				

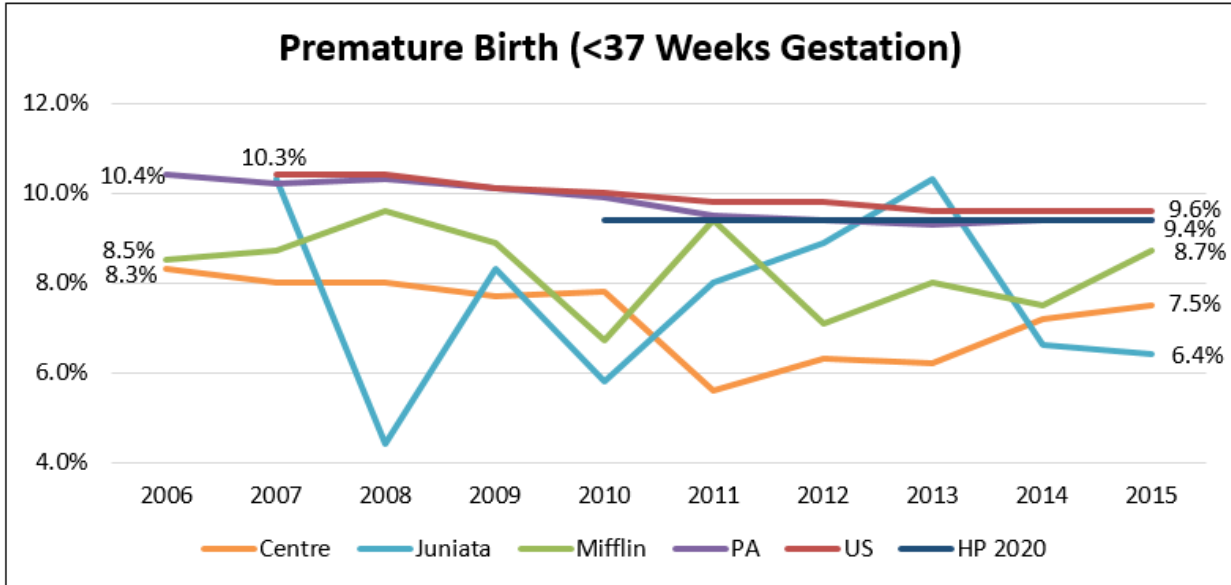
Source: PA Department of Health, 2011-2015
 *Only municipalities with more than 20 reported births are included.



Source: PA Department of Health, 2006-2015 & Healthy People 2020



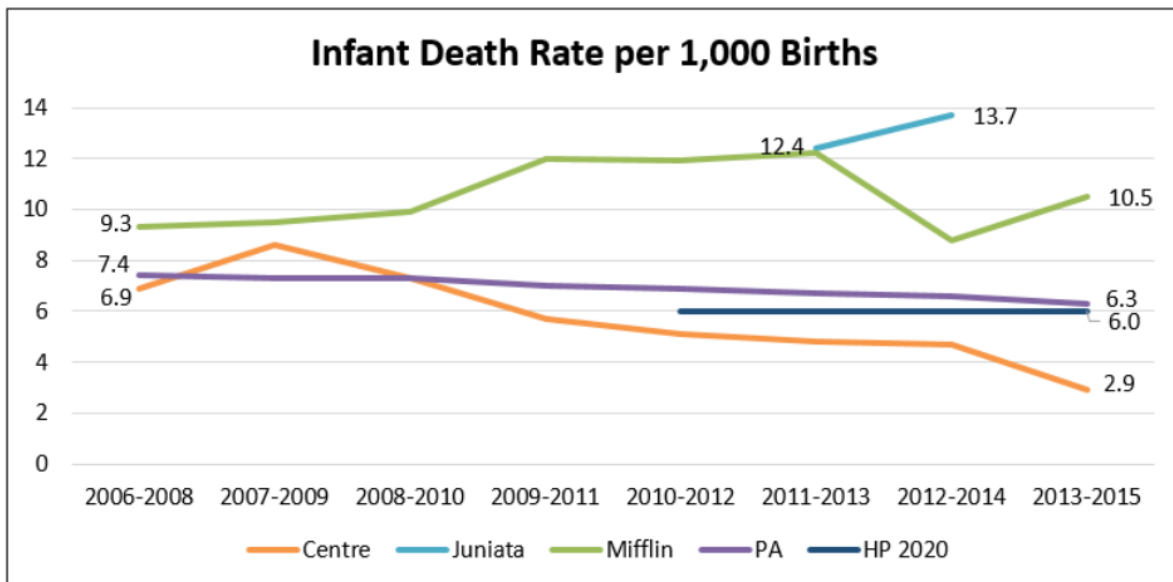
Source: PA Department of Health, 2006-2015 & Healthy People 2020



Source: PA Department of Health, 2006-2015 & Healthy People 2020

Maternal and child health indicators and disparities impact infant death rates. The death rate for Mifflin County exceeds the Healthy People 2020 goal. Data for Juniata County is limited, but reported rates are the highest in the region. Centre County meets the Healthy People 2020 goal for infant death. The county death rate declined 4 points from 2006-2008 to 2013-2015.

Death rates by race and ethnicity are not reported for the Western region. Across the state, death rates are highest among Blacks/African Americans (13.3 per 1,000 live births) and Hispanics/Latinas (7.1 per 1,000 live births) compared to Whites (4.8 per 1,000 live births).



Source: PA Department of Health, 2006-2015 & Healthy People 2020

*Infant death rate data is not reported for Juniata County for 2006-2008 – 2010-2012 and 2013-2015. Nine infant deaths occurred in the county from 2013-2015.

Key Informant Survey Summary

The Key Informant Survey was conducted with 47 community leaders representing diverse populations across the Western region. The most commonly served populations by key informants are shown in the table below.

Populations Served by Key Informants

	Percent of Informants*	Number of Informants
Not Applicable (Serve all populations)	48.9%	22
Low income/Poor	36.2%	17
Children/Youth	31.9%	15
Families	31.9%	15
Seniors/Elderly	27.7%	13
Uninsured/Underinsured	27.7%	13
Disabled	23.4%	11
Homeless	21.3%	10
Men	17.0%	8
Women	17.0%	8

*Key informants were able to select multiple counties. Percentages may not add up to 100%.

Approximately 58% of key informants “disagree” or “strongly disagree” that the community is healthy. When asked what health conditions and factors contribute to poor health among residents, informants identified the following top needs:

Top Health Conditions

- > Mental health conditions
- > Substance abuse
- > Overweight/Obesity

Top Contributing Factors

- > Health habits
- > Poverty
- > Ability to afford healthcare

Informants acknowledged poor health habits and social determinants, including poverty, as the top contributing factors to health conditions. “I believe the community is despondent, we enroll our children in some healthy activities, but there doesn't seem to be a lot for adults that is affordable and there isn't a culture of health attitude.” “Education and health programs are lacking in this community.” “There is a large disparity between the high and low end of the population economically, educationally, and socially. Much of the housing is substandard.”

Mifflin County is particularly impacted by poverty and the ability to afford healthcare. “Mifflin County doesn't have a lot of employment opportunities and wages are depressed, so I don't think a lot of people put spending for their health as a priority.” “Mifflin County is a depressed community when it comes to the availability of quality education, jobs, and access to healthcare.”

Behavioral health providers were identified as the most needed resource in the community; 83% of key informants disagree that there is a sufficient number. “There are long bed searches for

mental health. There is one option locally for substance abuse outpatient treatment in addition to the county funded commission. There is a long wait list to see doctors (psychiatrist). “[A] lack of mental health providers is also a contributing factor in the community for mental health conditions.”

More than 25% of informants disagree that residents have a regular primary care provider and can access a medical specialist when they need care. The top barriers to accessing healthcare services are a lack of bilingual providers, transportation for appointments, and providers that accept Medicaid/Medical Assistance. Informants also noted that residents may not seek regular care because they “feel healthy” and/or cannot afford out-of-pocket costs (copays, deductibles, prescriptions, etc.). Potentially related to residents not feeling like they need to go to the doctor is lack of awareness or emphasis of preventive health measures.

Social determinants of health impact the ability of individuals to access healthcare and maintain healthy lifestyles. The majority of key informants rated social determinants within the community as “average” or “poor.” Health and healthcare, including access to care, health literacy, etc., was rated the highest by informants (2.7 out of 5). Economic stability, including poverty, employment, etc., was rated the lowest by informants (2.23 out of 5). “There are many residents of our communities that live in a rural setting with little access to necessary resources and limited funds, which may impact their health.”

Key informants were asked to share what resources are missing in the community that would help residents optimize their health. The top identified missing resources were mental health services, transportation, and health and wellness education and programs. “Transportation is particularly difficult in rural areas.” “Rural areas need trained community health workers who are people of the community and trusted by the community.” “We need more and better ways to reach all parents to improve family communication skills and support, as well as overall nutrition, health and wellbeing education.”

When asked how local and regional healthcare providers can better engage community members to achieve optimal health outcomes, informants made recommendations focused on advocacy; prevention; improved healthcare access; health literacy; and community partnerships to address needs. The following are recommendations by informants:

- > Emphasize prevention through health promotion education and outreach both in the clinical and community setting
- > Improve access to affordable healthcare services, including behavioral healthcare and group homes for individuals with complex health needs
- > Improve continuity of care for patients, accounting for changing/moving physicians
- > Improve transportation options for medical appointments
- > Integrate free and fee-based health services into community settings
- > Promote and support cross-agency partnerships to improve community health
- > Utilize Community Health Workers to bridge the gap between healthcare providers and community members

Key Informant Survey Analysis

Background

A Key Informant Survey was conducted with community representatives to solicit information about health needs and disparities among residents. Key informants were asked a series of questions about their perceptions of health needs in the community, health drivers, barriers to care, and recommendations for community health improvement.

The survey was conducted with 113 key informants across the 19-county service area; 47 informants serve the Western region. Half of the informants serve all population groups. The most commonly served special population groups are low income/poor, children/youth, and families. A list of community organizations represented by key informants, and their respective role/title, is included in Appendix B.

Western Region Counties Served by Key Informants

	Percent of Informants*	Number of Informants
Mifflin County	85.1%	40
Juniata County	66.0%	31
Centre County	51.1%	24

*Key informants were able to select multiple counties. Percentages may not add up to 100%.

Populations Served by Key Informants

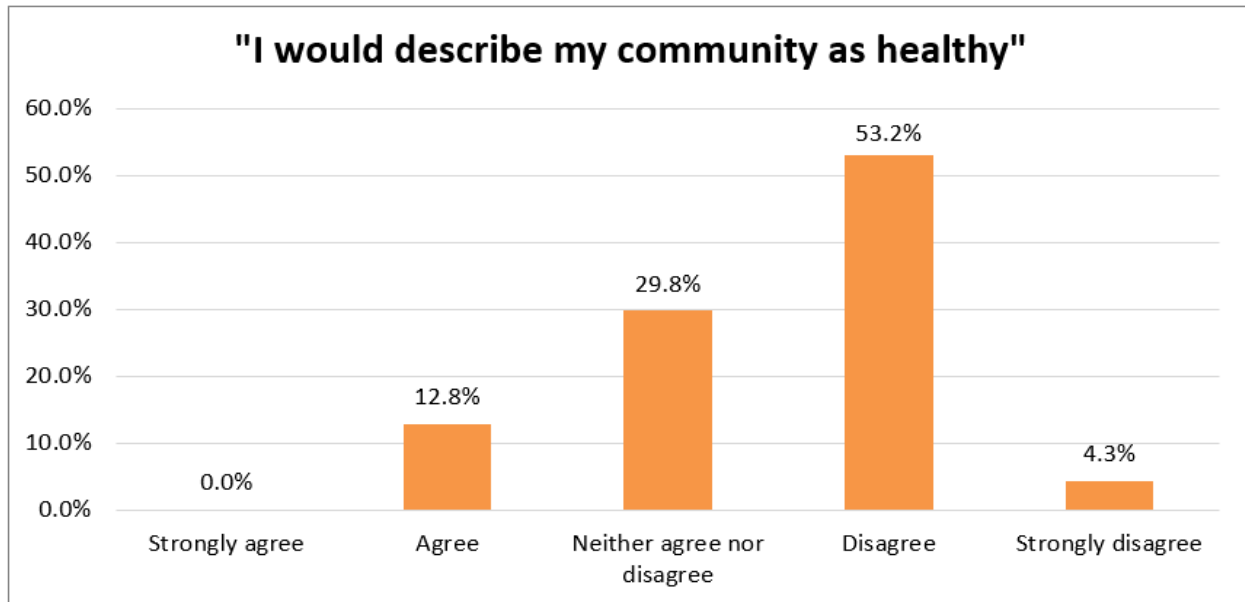
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Children/Youth	31.9%	15
Families	31.9%	15
Seniors/Elderly	27.7%	13
Uninsured/Underinsured	27.7%	13
Disabled	23.4%	11
Homeless	21.3%	10
Men	17.0%	8
Women	17.0%	8
Hispanic/Latino	10.6%	5
Other**	10.6%	5
Black/African American	8.5%	4
LGBTQ+ community	6.4%	3
Immigrant/Refugee	4.3%	2
American Indian/Alaska Native	2.1%	1
Asian/Pacific Islander	2.1%	1

*Key informants were able to select multiple counties. Percentages may not add up to 100%.

**Other response: Persons with mental illness, food insecure residents, Plain community, visually impaired.

Community Health Needs

Nearly 60% of informants “disagree” that their community is healthy, while less than 13% of informants “agree” that their community is healthy. When asked what health conditions are affecting residents, informants stated that mental health conditions are the top concern for the region, followed by substance abuse and overweight/obesity.



Health Conditions Affecting Residents

Ranking	Condition	Informants Selecting as the Top (#1) Health Concern	Informants Selecting as a Top 3 Health Concern	
			Percent	Count
1	Mental health conditions	23.4%	19.9%	28
2	Substance abuse	21.3%	16.3%	23
3	Overweight/Obesity	19.1%	19.1%	27
4	Diabetes	14.9%	10.6%	15
5	Alzheimer's disease/Dementia	6.4%	3.5%	5
6	Cancers	6.4%	5.0%	7
7	Dental problems	2.1%	2.1%	3
8	Heart disease and stroke	2.1%	7.8%	11
9	Infectious disease	2.1%	0.7%	1
10	Respiratory disease	2.1%	2.1%	3
11	Domestic violence	0.0%	3.5%	5
12	Tobacco Use	0.0%	3.5%	5
13	Other*	0.0%	2.1%	3
14	Suicide	0.0%	1.4%	2
15	Autism	0.0%	0.7%	1
16	Disability	0.0%	0.7%	1
17	Teenage pregnancy	0.0%	0.7%	1

*Other responses: Chronic conditions, drug use, specialty care.

Key informants identified the top contributing factor to health conditions as health habits, such as diet and physical activity. Poor health habits among residents are impacted by a lack of education and resources and lack of a community culture of health.

“I believe the community is despondent, we enroll our children in some healthy activities, but there doesn't seem to be a lot for adults that is affordable and there isn't a culture of health attitude.”

“Education and health programs are lacking in this community.”

“I don't think that a lot of people ever think that their behavior affects their health and when they do get sick they blame their problems on the doctors. “

Other top contributing factors are poverty and the inability to afford healthcare, particularly in Mifflin County. Specific comments from respondents highlight the issues:

“Mifflin County doesn't have a lot of employment opportunities and wages are depressed, so I don't think a lot of people put spending for their health as a priority.”

“Mifflin County has lost many industries over the past 10 years and people have either become unemployed or have non-meaningful jobs, which leads to drug/alcohol use contributing to domestic violence and mental health issues.”

“Even people with good health insurance and good jobs cannot afford to go to a doctor and pay their bills.”

“[It's difficult to find] providers that will accept Medicaid. [It's difficult for] the families who make just enough to not qualify for Medicaid, but don't make enough to pay for dental or specialty follow up.”

Key informants stated that there is a lack of behavioral health providers that contributes to both mental health and substance abuse conditions in the community.

“[A] lack of mental health providers is also a contributing factor in the community for mental health conditions. With the area being a small, close community, people feel like they can't be anonymous/people will talk if they do seek out drug, alcohol, or mental health services.”

Informants noted the impact of social determinants of health on the community:

“There is a large disparity between the high and low end of the population economically, educationally, and socially. Much of the housing is substandard.”

“Socioeconomic factors apply across all factors.”

Top Contributing Factors to Conditions Affecting Residents

Ranking	Contributing Factor	Informants Selecting as the Top (#1) Contributor	Informants Selecting as a Top 3 Contributor	
			Percent	Count
1	Health habits	25.5%	17.1%	24
2	Poverty	12.8%	10.0%	14
3	Ability to afford healthcare	10.6%	10.7%	15
4	Education attainment	10.6%	6.4%	9
5	Drug/Alcohol use	8.5%	7.1%	10
6	Health literacy	6.4%	7.9%	11
7	Availability of healthy food options	4.3%	1.4%	2
8	Lack of preventive healthcare	4.3%	5.7%	8
9	Number of healthcare providers available in the community	4.3%	6.4%	9
10	Stress	4.3%	5.0%	7
11	Availability of health and wellness programs	2.1%	5.0%	7
12	Environmental quality	2.1%	0.7%	1
13	Social support	2.1%	5.7%	8
14	Other*	2.1%	3.6%	5
15	Health insurance	0.0%	2.9%	4
16	Domestic violence	0.0%	1.4%	2
17	Transportation	0.0%	1.4%	2
18	Quality of housing	0.0%	0.7%	1
19	Quality of schools	0.0%	0.7%	1

*Other responses: Parental choices/role modeling, lack of exercise, poor nutrition habits, attitude towards mental illness.

Healthcare Access

Key informants were asked to rate the availability of health services within the region. The following table depicts their responses on a scale of (1) “strongly disagree” to (5) “strongly agree.”

Informants were most likely to “agree” or “strongly agree” that residents have a regular primary care provider and can receive vision care when they need it. However, the services are still considered limited within the community. Approximately 26% of informants “disagree” that residents have a regular primary care provider and approximately 30% of informants “disagree” or “strongly disagree” that residents can receive vision care.

Informants were least likely to agree that there is a sufficient number of mental health/behavioral health and bilingual providers in the community. Transportation for medical appointments is also a top concern for the region.

Access to Healthcare Services

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Mean Score
Residents have a regular primary care provider/doctor/practitioner that they go to for healthcare.	0.0%	25.5%	29.8%	42.6%	2.1%	3.21
Residents can receive vision care when they need it.	6.4%	23.4%	31.9%	34.0%	4.3%	3.06
Residents can access a medical specialist (i.e., Cancer, Cardiovascular, Neuroscience, etc.) when they need care.	6.4%	34.0%	27.7%	29.8%	2.1%	2.87
Providers in the community are culturally sensitive to race, ethnicity, cultural preferences, etc. of patients.	10.6%	21.3%	44.7%	19.1%	4.3%	2.85
Residents can receive dental care when they need it.	17.0%	34.0%	19.1%	25.5%	4.3%	2.66
There are a sufficient number of providers that accept Medicaid/Medical Assistance in this community.	10.6%	34.0%	34.0%	21.3%	0.0%	2.66
Residents have available transportation (public, personal, or other service) for medical appointments and other services.	23.4%	44.7%	19.1%	12.8%	0.0%	2.21
There are a sufficient number of bilingual providers in this community.	29.8%	44.7%	19.1%	6.4%	0.0%	2.02
There are a sufficient number of mental/behavioral health providers in the community.	31.9%	51.1%	6.4%	10.6%	0.0%	1.96

Key informants were then asked to identify the primary reasons that individuals who have health insurance do not receive regular care to maintain their health. Approximately 30% of informants stated that the top reason is that individuals feel healthy and don't need to go to the doctor. The inability to afford care is the second most common reason for not seeking services. Potentially related to residents not feeling like they need to go the doctor is respondents' acknowledgement that individuals lack an awareness or emphasis of preventive health measures.

Primary Reason Individuals with Insurance Do Not Receive Regular Care

Ranking	Reason	Informants Selecting as the Top (#1) Reason	Informants Selecting as a Top 3 Reason	
			Percent	Count
1	Feel healthy ("Don't need to go to the doctor")	29.8%	20.1%	28
2	Unable to afford care (copays, deductibles, prescriptions, etc.)	27.7%	24.5%	34
3	Awareness/Emphasis of preventive health measures	14.9%	14.4%	20
4	Lack of transportation to access healthcare services	10.6%	5.8%	8
5	Limited office hours of providers (no weeknight/weekend office hours)	6.4%	8.6%	12
6	Fear of diagnosis, treatment	4.3%	7.2%	10
7	Providers not accepting insurance/new patients	4.3%	6.5%	9
8	Other	2.1%	5.0%	7
9	Lack of providers available in the community	0.0%	4.3%	6
10	Personal beliefs or community biases related to religion, spirituality, culture, gender/sexual orientation, etc.	0.0%	1.4%	2
11	Providers do not speak their language	0.0%	2.2%	3

"Other" Reasons Insured Individuals Do Not Receive Regular Care

-
- *"I feel that they give other "things" in their lives a much higher priority--just neglectful."*
 - *"Lack of education/know how to obtain services/lack of motivation to receive care."*
 - *"Lack of primary care physicians and long waiting times to get into specialists."*
 - *"People work and cannot take time off."*
 - *"The constant turnover of doctors - there is no feeling of having a doctor who knows you and has a continuum of care for you as an individual."*
 - *"TIME."*
 - *"Unable to afford insurance premiums."*
-

Social determinants of health impact the ability of individuals to access healthcare and maintain healthy lifestyles. Key informants were asked to rate social determinants of health in the community, including economic stability, education, health and healthcare, neighborhood and built environment, and social and community context, on a scale of (1) "very poor" to (5) "excellent."

The majority of key informants rated social determinants as “average” or “poor.” Health and healthcare was rated the highest with an average rating of 2.70. However, 32% of informants stated it is “poor” or “very poor.” Informants cited concerns related to cost, lack of awareness or emphasis on health, and lack of services. Specific comments on this issue included the following:

“The cost of insurance is so high that even if you have it, you are afraid to use it except in emergencies.”

“Mifflin County is a depressed community when it comes to the availability of quality education, jobs, and access to healthcare.”

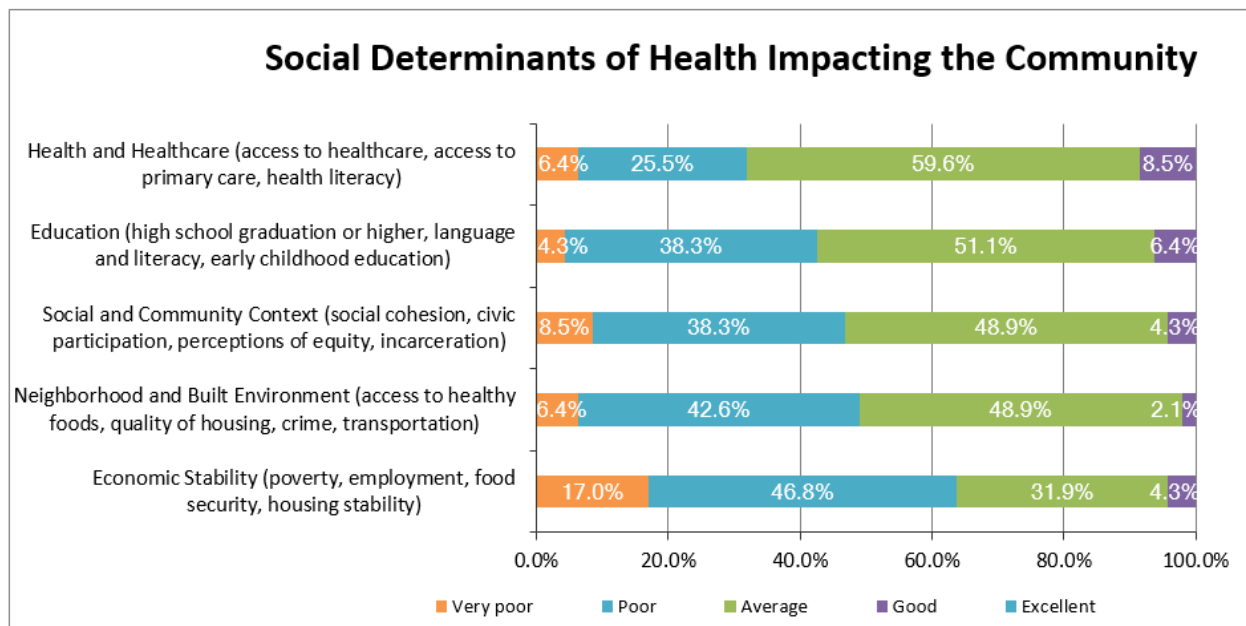
“Transportation for healthcare is still an issue for our communities.”

“In most of the communities I serve, it appears that there is a lower value placed on health and residents are reactive to health concerns instead of proactive with preventive measures and care.”

Economic stability was rated the lowest by key informants with an average rating of 2.23.

“There are many residents of our communities that live in a rural setting with little access to necessary resources and limited funds, which may impact their health.”

“We have a poor social and economic community with a need for an improved educational system. Education is key to a healthy community.”



Ranking	Social Determinant of Health	Mean Score
1	Health and Healthcare	2.70
2	Education	2.60
3	Social and Community Context	2.49
4	Neighborhood and Built Environment	2.47
5	Economic Stability	2.23

Other Comments to Support Perceptions of Social Determinants of Health

- *“I think people in the community have better access to healthcare and are used to seeking it out since Geisinger has been here so long, but I think many of them still suffer from poor health literacy. Neighborhood question: I think there is access to healthy food and low crime/violence at least around the Danville area but lack of public transportation still brings the area down from good to average as people struggle to get to grocery stores/markets or even doctors since everything is spread out.”*
- *“Lack of public transportation is why I rated neighborhood and built environment low. The others are fine.”*
- *“The mixed urban/rural nature of the midstate tends to contribute to lack of access.”*
- *“While our primary population is consistent with the overall population and impacts many, those who are diagnosed are typically over 65. This impacts their finances, social support and access to transportation and community resources. There is also a very significant lack of understanding and training as it relates to dementia in the local provider and healthcare community. While our constituents may have access to care, they have limited access to quality care capable of responding to their needs.”*

Community Resources

Key informants were asked to share what resources are missing in the community that would help residents optimize their health. Nearly three-quarters of informants identified the need for mental health services.

“We have limited resources to provide mental health services, but a large population who would benefit from services.”

“There are long bed searches for mental health. There is one option locally for substance abuse outpatient treatment in addition to the county funded commission. There is a long wait list to see doctors (psychiatrist).”

More than half of the informants identified the need for transportation options and health and wellness education and programs.

“Transportation is particularly difficult in rural areas.”

“Our organization provides transportation (shared ride services). I believe it is possible to collaborate with healthcare providers to expand services.”

“Rural areas need trained community health workers who are people of the community and trusted by the community.”

“We need more and better ways to reach all parents to improve family communication skills and support, as well as overall nutrition, health and wellbeing education.”

Missing Resources within the Community to Optimize Health

Ranking	Resource	Percent of Informants	Number of Informants
1	Mental health services	71.7%	33
2	Transportation options	58.7%	27
3	Health and wellness education and programs	54.3%	25
4	Dental care	41.3%	19
5	Substance abuse services	39.1%	18
6	Healthy food options	37.0%	17
7	Housing	32.6%	15
8	Multi-cultural or bilingual healthcare providers	30.4%	14
9	Community Clinics/Federally Qualified Health Centers (FQHC)	28.3%	13
10	Outlets for physical activity (parks, rec centers, gyms, walking trails, etc.)	21.7%	10
11	Child care providers	19.6%	9
12	Primary care services	19.6%	9
13	Specialty care services	19.6%	9
14	Other	19.6%	9
15	Home healthcare services	13.0%	6
16	Vision care	8.7%	4
17	Emergency care	2.2%	1

“Other” Missing Resources

- *“Community Health Workers.”*
 - *“Mental Health issues are high and the number of group homes are limited.”*
 - *“More community outreach to those who lack transportation resources, health insurance, education; meet people where they are.”*
 - *“More parenting skill training and communication/negotiation skills trainings.”*
 - *“Reasonable charges for visits/care beyond what insurance pays.”*
 - *“Specialties that take Medicaid products/insurances.”*
 - *“We seem to have a large number of people who need mental health services and I hear from clients that they have to wait a very long time to see a doctor and often appointments are rescheduled because the clinic doesn't have a doctor.”*
 - *“While there are outlets for physical activity, many cannot afford them.”*
 - *“Would like to see more female doctors, more culturally sensitive docs, more specialists.”*
-

Other Comments to Support Selection of Top Missing Community Resources

- *“Although many of these exist in some form, there is not enough access available to these services.”*
- *“Dental care that is affordable and available to those with no or sub-par insurance is lacking.”*
- *“Elderly care options are not good in the area. Families may prefer to keep loved ones at home, but have few affordable options.”*
- *“Health food options are costly, lots of fast food/high fat restaurants with large portions, no mass transportation and limited taxis/uber.”*
- *“I believe we have adequate resources, but the residents are not accessing them until it is a crisis situation i.e., use/overuse of emergency medical services and department for treatment.”*
- *“I do believe transportation or lack thereof is somewhat of a deterrent to seeking healthcare. However, it seems as if it is not much of a deterrent when it comes to doing other things that people want to do. They find a way....”*
- *“I think there are a lot of healthcare providers in the area but the long wait lists for visits, especially to specialists, can deter people from seeking healthcare.”*
- *“Local dental offices are not accepting Medicaid patients. CARS will only transport the child and 1 parent to a doctor's appt. (ex. if mother is home with 2 children, she can't take the other child along)”*
- *“Most people cannot afford to pay the doctor to receive care especially if the care requires more than an office visit. Prices are extremely high and people do not have much in the way of saving. While the emphasis is always on the poor, they often receive care for free. It is the middle class that doesn't have the access to care.”*

Other Comments to Support Selection of Top Missing Community Resources

- *“Pregnant mothers are really in need of oral healthcare. No local providers will accept them with Medicaid.”*
 - *“The clinic in this area is only open during daylight hours. It was set up to relieve the ER but seems to refer a lot of the drop-in patients back to the ER. It needs more equipment to function at a higher level and better hours.”*
 - *“There is only one eye doctor in Mifflin County that accepts Medical Assistance. No dentists accept Medical Assistance.”*
 - *“We need more support for families dealing with disabled and ill seniors or other family members, especially if they don’t qualify for Medicare or Medicaid.”*
 - *“While some of what I checked off are available in the community there are not enough options especially when it comes to mental health and substance abuse services to offset the number of individuals needing assistance.”*
-

Key informants were asked for open-ended feedback regarding how local and regional healthcare providers can better engage community members to achieve optimal health outcomes. Informants made the following recommendations:

- > Emphasize prevention through health promotion education and outreach both in the clinical and community setting, targeting low-income families and chronic disease patients (e.g., diabetes, heart disease)
- > Improve access to affordable self-pay healthcare services
- > Improve access to behavioral health services, including walk-in mental health centers and providers and programs to address community stigma
- > Improve access to group homes for individuals with complex health needs
- > Improve continuity of care for patients, accounting for changing/moving physicians
- > Improve transportation options for medical appointments
- > Integrate free and fee-based health services into community settings (stores, schools, churches, community centers)
- > Promote and support cross-agency partnerships to improve community health
- > Publish clinic locations and hours to improve access to appointments
- > Utilize Community Health Workers to bridge the gap between healthcare providers and community members

To determine existing resources within the community and opportunities for collaboration, key informants were asked to share information about health and wellness programs or initiatives that their organization offers now or plans to provide in the future:

- > Advantage Home Health Services: Advantage designed a specialized chronic care/caregiver model of care Striving Together Achieving Results (STAR) as well as health and wellness programs for independent living and assisted living facilities to improve caregiver training and patient engagement.
- > Alzheimer's Association: Each chapter offers five core services to support individuals with Alzheimer's and their families: information and referral; care consultation; support groups; safety services; and education. Some chapters offer special programs for people living with early-onset Alzheimer's, rural and/or multicultural outreach, care coordination services, and training programs for families and professionals.
- > East Kishacoquillas Presbyterian Church: Offer a parish nurse to constituents.
- > Jewish Family Service of Northeastern Pennsylvania: Offer self-improvement workshops to provide tools, strategies and experiences for healthy living.
- > Juniata County Head Start/Early Head Start: Offer mobile dentistry services at their location and medical appointment transportation services for families.
- > Lewistown Sentinel: Offer preventive screenings and weight loss programs.
- > LUMINA Center: Offer nutrition education for youth through Penn State Extension and weekend youth Power Packs for nutritious food options.
- > Mifflin Juniata Regional Services and Affiliates (MJCARS and MJAAA): Offer evidence-based health prevention and wellness programs at senior centers.
- > Penn State Extension: Offer multiple programs for youth and families: <https://extension.psu.edu/>.
- > Pennsylvania Psychiatric Leadership Council: Developing a plan to recruit and retain psychiatrists in rural PA.
- > Universal Community Behavioral Health-Crisis: Offer suicide prevention and mental health awareness programs tailored to community audiences.

Western Region Partner Forum Summary

As part of the Geisinger FY2019 CHNA, six Partner Forums were conducted across the 19-county service area, one each within the South Central and Western regions and two within the Central and Northeast regions. The objective of the forums was to share research to date and solicit feedback from community representatives. Participants were asked to share insight on priority health needs, underserved populations, existing community resources to address health needs, and gaps in services. The forum also served as a platform to identify opportunities for collaboration to address health needs.

Western Region Partner Forum Logistics

January 12, 2018, 8:30-11:00am
 The ComPASS Center, Lewistown, Mifflin County
 38 Attendees

Participants from the following counties were invited to the Central Region Partner Forums.

- > Centre County
- > Juniata County
- > Mifflin County

A list of forum attendees and their respective organizations is included in Appendix C.

Western Region Partner Forum Findings

A total of 38 people representing a diverse mix of community organizations attended the Western region Partner Forum. According to these participants, the cumulative ranking of health concerns in the Western region are 1) mental healthcare; 2) healthy lifestyles; 3) substance abuse; 4) access to care; 5) chronic disease management; 6) maternal and child health; and 7) senior health. It is worthwhile to note that in rating the health issues, the criterion of “scope” and “severity” tended to be rated higher, while “ability to impact” was ranked lowest. The voting and follow-up discussion illuminated the complexities of these issues and the myriad factors that influence our efforts to improve outcome measures for health needs.

Mental healthcare and substance abuse are the top identified health concerns for the community, but available resources are considered to be the most lacking. Among patients with mental healthcare conditions, therapy services and psychiatric care are missing resources. The community lacks providers who conduct psychiatric evaluations and inpatient psychiatric beds. Partners recommended advocating for better telepsychiatry services and partnering with Geisinger Medical Center to increase inpatient beds for patients at Geisinger Lewistown Hospital. Among patients with substance abuse conditions, Medication-Assisted Treatment, therapy, and counseling are missing resources. Medication-Assisted Treatment services are particularly needed for overdose patients in the Emergency Department to help facilitate a warm handoff to community outpatient services.

Healthy lifestyles and chronic disease management were identified as the top two health concerns for the community by Partner Forum participants. According to partners, the

community lacks awareness and access to services promoting healthy lifestyles. Partners recommended producing a service resource guide that is available both digitally and as a hard-copy. They also recommended developing farmers markets in underserved areas to address cost as a barrier to healthy eating. Lastly, partners recommended initiating structured physical activity programs at outdoor recreation venues. Partners suggested engaging local government leaders in these efforts to incorporate health and wellness into county planning initiatives.

A community culture of health is needed to improve healthcare utilization and healthy lifestyle behaviors. Partners identified maternal and child populations as targets for initiating a culture of health, noting the impact of prenatal care and early health behaviors on future health outcomes. Participants recommended engaging existing maternal and child health organizations, as well as “meeting people where they are” (e.g., soccer games, social media) to provide services.

Seniors are also a target population for improving healthcare access and outcomes. Partners recommended engaging congregate and home delivery meal providers to provide in-home services and increase awareness of services in the community. One of the most under-utilized services by seniors is “Call a Ride Service,” a shared-ride program.

Prioritization Process

The CHNA research findings to date, which included secondary data analysis and Key Informant Survey results, were provided to participants in advance of the forum and formally presented to attendees. Questions about the data were encouraged and clarified. At the conclusion of the data presentation, a list of six health topics were presented to the group to consider as the top health needs in the community. Participants were asked to offer suggestions for additional health needs not captured on the list. Discussion ensued about factors that impact health and subcategories within each of the health categories. Ultimately, the participants agreed that the following health issues accurately represent the top health concerns for the community:

Identified Community Health Needs (in alphabetical order)

- > Access to Care
- > Chronic Disease Management
- > Healthy Lifestyles
- > Maternal and Child Health
- > Mental Healthcare
- > Senior Health
- > Substance Abuse

To prioritize these health issues, participants were asked to rank the health issues by rating each need on a scale of 1 (low) to 4 (very high) for the following criteria.

- > **Scope (How many people are affected?)**
- > **Severity (How critical is the issue?)**
- > **Ability to Impact (Can we achieve the desired outcome?)**

Participants used their smart phones or paper ballots to rate each health issue. Voting results were compiled and shared with the participants as depicted in the following table.

**Priority Health Need Rankings – Mifflin County Partner Forum
(Rankings are based on a score of 1 (low) to 4 (very high))**

Overall Ranking	Identified Health Need	Scope of the Issue	Severity of the Issue	Ability to Impact the Issue	Overall Score
1	Mental Healthcare	3.3	3.3	2.2	8.8
2	Healthy Lifestyles	3.3	3.0	2.3	8.6
3	Substance Abuse	3.1	3.3	2.2	8.5
4	Access to Care	3.0	2.9	2.4	8.3
5	Chronic Disease Management	2.9	2.7	2.5	8.1
6	Maternal and Child Health	2.5	2.5	2.7	7.7
7	Senior Health	2.5	2.5	2.6	7.6

Small Group Discussion

Participants were divided into small groups based on their areas of expertise, knowledge, or interest in each of the health issues. The facilitators and table leaders led the small group dialogue, and worksheets were provided to guide and capture discussion.

Participants were asked to consider the following questions to identify community assets, missing resources, underserved populations, and recommendations for hospitals to address these health issues.

Existing Community Resources

- > What organizations are working on these issues?
- > What resources exist in the community that can help impact this issue?
- > Are there models of success or innovative partnerships around this issue?

Underserved Populations

- > What populations are most at risk or underserved related to these issues?
- > What barriers exist that keep people from accessing services?

Missing Resources

- > What do residents need to help them address this issue?
- > What additional services could help improve health around this issue?
- > What community inputs will be required?
- > What partners could help?

The following section summarizes key findings from the small group discussion focusing on the top three identified health needs. The issues of substance abuse and mental healthcare and healthy lifestyles and chronic disease management were discussed collectively. A list of assets as identified by the participants is included in Appendix D.

Substance Abuse and Mental Healthcare

Mental healthcare and substance abuse were ranked as the top health concerns in the Partner Forum and Key Informant Survey. Participants stated that there is an increasing need for services due to the opioid epidemic and prevalent mental healthcare conditions, but a lack of providers across the region. Social determinants of health also impact behavioral health issues, particularly in Mifflin County. “Mifflin County has lost many industries over the past 10 years and people have either become unemployed or have non-meaningful jobs, which leads to drug/alcohol use contributing to domestic violence and mental health issues.”

Partners identified therapy services and psychiatric care as missing resources to support patients with mental healthcare conditions. Children are the most underserved population for therapy services. The region has difficulty recruiting and retaining providers who specialize in child mental healthcare. Missing psychiatric services include providers who conduct psychiatric evaluations and inpatient psychiatric beds. Participants stated that it can take months for patients to obtain a psychiatric evaluation appointment. Patients in need of an inpatient psychiatric bed may wait in the emergency departments (ED) for days until a bed is available.

Partners provided two recommendations to improve access to mental healthcare for residents. They recommended advocating to state legislators for improved telemedicine services for inpatient psychiatric care. Telepsychiatry allows remote providers to diagnose and implement treatment plans in collaboration with onsite team members. Participants also recommended a partnership between Geisinger Medical Center (GMC) in Danville and Geisinger Lewistown Hospital (GLH) to allow patients at GLH to access inpatient psychiatric beds at GMC.

Substance abuse outpatient services, including medication assisted treatment (MAT), therapy, and counseling, were also identified as missing in the community. According to partners, Clear Concepts Counseling is the only provider of MAT services in Mifflin County. There is a need for more services in Mifflin County and across the region, particularly among overdose patients in the ED. Partners shared that the use of MAT in the ED can help facilitate a warm handoff to community outpatient services to reduce relapse.

Healthy Lifestyles and Chronic Disease Management

Chronic conditions are the leading cause of death and disability across the nation. Overweight and obesity were identified by Partner Forum and Key Informant Survey participants as leading drivers of chronic conditions in the Western region. Partner Forum participants identified services available within the community to address healthy lifestyles, but they stated that there is a need to improve awareness and access to the services in order to impact obesity and chronic condition rates.

Partners shared that residents are largely unaware of community services. They recommended producing a central resource guide for available services, to include organizations, programs, websites, and contact information. The resource guide should be available digitally and as a hard-copy so that it is easily distributed throughout the community.

Residents face a number of barriers in accessing community services, including cost, lack of structure, and technology limitations. Cost is primarily a barrier for residents accessing health services related to a chronic condition. Participants noted that lack of insurance or the “right insurance” limits availability of therapy and disease management programs. Cost is also a barrier to residents accessing healthy foods. “There is only one healthy restaurant in town and you can’t eat there every night.” Partners recommended engaging local farmers to develop pop-up farmers markets targeting food insecure areas and populations.

Participants identified a number of outdoor recreation venues like parks and trails, but they noted that the venues are under-utilized due to a lack of structured activities. Participants recommended initiating programs (e.g., walking clubs, youth sports, senior programs) at these locations that are led by a health coach. Structured activities should address transportation and child care barriers to promote access for all residents.

The region is comprised of rural areas with limited access to computers and broadband internet. Lack of technology limits awareness of services and inhibits access to online health promotion programs like smoking cessation classes. Partners recommended engaging county government agencies to advocate for better access. Partners also recommended working with local government leaders to incorporate health and wellness into county planning initiatives.

Access to Care

Partners identified the need to promote a community culture of health to improve healthcare utilization and healthy lifestyle behaviors, and to make health a priority. Partners shared that culture of health initiatives should target maternal and child populations, noting that prenatal care and early childhood health behaviors are drivers of future health outcomes.

Participants recommended partnering with Head Start, Federally Qualified Health Centers, WIC, and schools to improve preventative healthcare. They also recommended “meeting people where they are” to provide services (e.g., soccer games, social media). Priority service needs are nutritious and affordable food options, dental care, and telepsychiatry. One participant also identified the need for LGBT services to support children and their families.

Partners also identified seniors as a target population for healthcare service initiatives. Seniors are often socially isolated and limited by physical disabilities. These factors contribute to lack of adequate nutrition to prevent and manage health conditions, and lack of access to healthcare appointments and recreation opportunities. Partners recommended engaging congregate and home delivery meal providers to provide in-home services and increase awareness of services in the community.

One of the services under-utilized by seniors is Call a Ride Service, a shared-ride program available Monday through Friday. Many seniors are either unaware of the program or cannot afford it. The program can also be inconvenient due to the need to coordinate schedules for multiple riders. Partners identified the need for additional public transportation options, but noted that the community may not be able to support them financially.

Focus Group Research Summary

Background

As part of the 2018 CHNA, 12 Focus Groups were conducted in March and April 2018 within the CHNA hospitals' primary service areas. Focus Groups were conducted with seniors age 55 or older at local subsidized senior housing and senior centers. The objectives of the Focus Groups were to collect perspectives on individual and community-wide health issues, barriers and assets to accessing healthcare, preferences for healthcare delivery, and existing or needed community resources. A total of 137 people participated in the Focus Groups across the 19-county region. The following is a breakdown of the focus group locations and participants per region.

Central Region Focus Groups

Jersey Shore Senior Community Center, Jersey Shore, Lycoming County
10 Attendees

Lincoln Towers, Shamokin, Northumberland County
35 Attendees

Danville Area Community Center, Danville, Montour County
7 Attendees

Heritage House, Lewisburg, Union County
10 Attendees

Westminster Place at Bloomsburg, Bloomsburg, Columbia County
11 Attendees

Northeast Region Focus Groups

Daniel Flood Apartments, Kingston, Luzerne County
8 Attendees

Kingston Active Adult Center, Kingston, Luzerne County
13 Attendees

Linden Crest Apartments, Clarks Summit, Lackawanna County
4 Attendees

Abington Senior Community Center, Clarks Summit, Lackawanna County
8 Attendees

South Central Region Focus Groups

Susquehanna View Apartments, Camp Hill, Cumberland County
10 Attendees

Marysville-Rye Senior Center, Marysville, Perry County
13 Attendees

Western Region Focus Groups

Kish Apartments, Lewistown, Juniata County
8 Attendees

Unique Findings by Region

Central Region

- > Outside of the Danville area, participants were less likely to agree that providers—particularly specialty providers—are available close to home. Most travel to Danville for specialty care.
- > Seniors state they can generally get primary care appointments within one week if they are willing to see a Physician Assistant. The wait is upwards of two weeks if they want to see their physician.
- > Two groups brought up that Geisinger is closing adult dentistry services in Danville. They were concerned that the decision was “all about the money” and asked “Where else can we go for dental care?”
- > Participants at the Danville Area Community Center were most aware of the Silver Circle program. A few had signed up for the program, but none were actively using services. They thought other health education programs were provided by Geisinger, but were not aware of the programs or actively receiving information.

Northeast Region

- > More likely (with South Central) to have access to primary and specialty care close to home.
- > While transportation was seen as an issue in all groups, those in the Northeast groups seemed most impacted by transportation needs. “When you don’t drive, you are limited in everything.” On demand and reliable, advance reservation ride shares for seniors were recommended.
- > Only those in the Northeast groups mentioned having a difficult time understanding their medical bills. They would prefer itemized bills that show exactly what they are being charged.

South Central Region

- > These groups were more likely to say they had access to primary and specialty providers and multiple hospitals and health systems close to home.
- > The Marysville group was aware of changes to the local healthcare system, including the emergence of UPMC. They have access to multiple hospitals and thought all were reputable. The biggest impact on their community has been the loss of provider practices.
- > While seniors generally felt safe in their community, they were keenly aware of the increase of drug abuse and crime.
- > These groups were most willing to talk about mental health issues and to be forthcoming with experiences. The Susquehanna View Apartments experienced multiple suicides in recent years, which prompted residents there to be more aware of issues.
- > Participants in both groups were the least likely to consider transportation as a barrier to accessing services. Many still drove or used rabbittransit vans. Bus stops were nearby to the Susquehanna View Apartments and accessible.

Western Region

- > Social isolation among seniors was prominently discussed among this group. Participants affirmed that there are few activities for seniors within the Kish Apartments and the larger community. Residents seek more community engagement and recommended that school groups, Boy/Girl Scouts, and other groups visit or provide special events at Kish Apartments.

Common Discussion Themes

Where Seniors Live

The majority of participants have lived in their respective communities for most of their lives. Many recounted the ways in which the community had changed during their lifetime. About 20% of seniors in the groups had recently moved to the area to be closer to family as they aged. Nearly all participants living in an apartment downsized from a single-family home.

About 65% of focus group participants reside in senior apartments; 35% live in single family homes. Those seniors who participated in the focus groups held at senior centers were more likely to still own their home. Those who lived in a single family home included single and married individuals. Among those single seniors living in a house, most had family or other local support that checked on them and helped with needs. Those who were married seemed more confident in their ability to take care of their home, but also had local support when they needed it. Many had family, particularly adult children, living nearby.

Most participants who lived in apartments lived alone. Some had family members in the area, but many did not have family members that regularly visited them. These residents said that they “looked after one another,” although some residents are “loners.” Housing managers and social support staff also check in on residents regularly. Most participants valued these relationships and saw them as an important factor to choosing to live on their own rather than in a nursing home or personal care community. Participants recognized that social isolation is prevalent among their peers. Factors that increased isolation for residents included a lack of activities to engage residents, disability, and depression, often brought on by chronic conditions or loss of friends and family members.

“Most people are independent, but they need some help. We watch out for them.”

“People are sick or have medical conditions; that’s why you don’t see them.”

“Some residents don’t leave their apartments, not even for the fire alarm.”

“We have families, but they don’t check in with us.”

“We have formed a welcoming committee to introduce new residents and make them aware of the activities available.”

The groups discussed the availability of senior housing and services to help seniors age in place within their communities. Participants thought that subsidized senior housing was more readily available, but affordable housing for middle-class seniors is lacking. Home care and home health services are prevalent in larger communities, but lacking in rural communities.

“It’s hard to find help, even for someone to clean the house.”

“I’ve looked into home care agencies, but I don’t trust the caregivers.”

“The Meadows (senior living community) is lovely, but it’s expensive.”

“There is community in the low-income apartment complexes. The middle class doesn’t have options. What’s next?”

Transportation Options

Approximately 75% of the focus group participants living in senior housing no longer drive, while the other 25% living in senior housing own a car and drive regularly. Driving prevalence was consistent with health status and activity level. Those who owned their home predominantly had cars and drove regularly.

Those that do not drive rely on public transportation and friends and family members to drive them. While some used the bus, reserved senior rideshares through rabbittransit, Mifflin Juniata Call-a-Ride Service (MJCARS), and County of Lackawanna Transit System (COLTS) were more commonly used. In communities where there was public transportation, there was typically a bus stop at the senior housing location, which residents found convenient. Seniors can ride the bus for free. Rabbittransit provides reserved paratransit services in Adams, Columbia, Cumberland, Montour, Northumberland, Snyder, Union, Perry, and York Counties; MJCARS provides reserved services in Mifflin and Juniata Counties. Reservations for both services must be scheduled by noon on the previous day and can be made up to two weeks in advance. Rides can be scheduled for medical and non-medical appointments within the service area. Pick up windows can be from 1-3 hours depending on other riders and destinations.

Those who had used shared-ride options had differing opinions of the service. Some thought the service was inexpensive and helpful for disabled seniors. Others thought the services were inconvenient and unreliable due to the need for advanced scheduling, long wait-times for pick-ups or drop-offs, and missed stops. Some did not like that they were limited in how much groceries they could purchase by only what they could carry.

“The days I take rabbittransit, I call my ‘county tour’ days. I just leave enough time for the ride.”

“My mother is 96 years old. She can’t wait 30 to 40 minutes for a bus. I just take her.”

“Rabbittransit is convenient as long as it’s not an emergency.”

“Seniors can only carry a few bags at a time. Public transportation limits how much food you can buy.”

“Sometimes I am late to my appointments or miss them because the van is late.”

“Taxis are too expensive.”

“We need ‘old age Uber.’”

“We’re lucky to have rabbittransit. I don’t have another way to get around.”

“When I schedule transportation, they give me a three-hour window for a pick-up time. I have to sit in the lobby to make sure I don’t miss them.”

Activities in the Community

Seniors in the focus groups were most likely to participate in activities within their housing complex or at the senior center. Likely, those that participated in the focus groups more frequently partook of these activities than seniors who did not participate in the focus groups, particularly within in the senior housing.

All of the senior apartments hosted onsite activities most days of the week. Activities ranged from bingo and games to exercise to health and wellness talks. While these activities occurred daily and many of the focus group attendees participated in these activities, there was still a sense of wanting more organized activities or things to do. Many said they wasted the day watching television, talking with friends, playing cards, or “just watching the cars go by.”

The senior centers offered daily activities, although hours of operation were limited. Most close by early afternoon. Activities at the senior centers were similar to the senior apartments, including bingo and games, exercise, and health and wellness talks. Some senior centers also organized and helped prepare Meals on Wheels distribution. Others organized donations and provided free lunches for anyone in need to attend, including homeless.

Some focus group participants were active volunteers at their church, the local hospital, within the senior center, or at their senior housing. Those that are volunteers are very active in this capacity, listing dozens of activities they are involved with. Within all of the groups, fewer than 20% of participants were active at this level.

Participants were less likely to seek out other activities within the community, with the exception of those that participated in senior programs like Geisinger Silver Circle, Silver Sneakers, or other organized memberships. Awareness of these programs differed within the geographic locations of the focus groups with the Central and Northeast regions being most aware of Silver Circle. Those individuals saw the program as being a good source of health information. Some took advantage of discounted exercise programs available to members.

At least half of participants in the sessions were familiar with the Silver Sneakers exercise and wellness program. Silver Sneaker members regularly went to a participating gym to exercise and for socialization. Silver Sneakers was highly regarded by members in the focus groups.

The participants thought Geisinger Silver Circle and Silver Sneakers were good examples of senior-oriented programs to encourage healthy eating and exercise. They encouraged more programs that focused on nutrition education, particularly for those with chronic conditions, and senior-friendly physical activity. Water aerobics was specifically requested and not available in all communities.

“We have Geisinger, which is a real asset.”

“Evan (Evangelical Community Hospital) has a lot of great outreach programs.”

“Exercise makes me feel healthy. Silver Sneakers helped me get back on my feet.”

“I felt great when I went to the gym. My arthritis stops me now.”

“If I don’t have company, I sit and watch TV all day.”

“We need resources to support healthy aging.”

Community and Individual Health

Participants had opposing opinions when asked if they would describe their community as “healthy.” Those that affirmed their community as healthy, cited community assets like good healthcare, local universities, and a clean environment.

“People live a long time here. I think it has to do with the hard work ethic we all had.”

Many remembered their communities as being healthier “when we were young.” “You don’t see as many children playing outside as you used to.” Other participants noted that chronic conditions, particularly diabetes, are prevalent among local residents, as well as a lack of emphasis on healthy behaviors.

“The community is average. We have a lot of the same conditions as other communities: heart disease, diabetes, cancer.”

“You don’t see children walking or playing on the sidewalks anymore. When we were young, we used to walk from one side of town to the other. We played all day at the playground or pool. You didn’t come home until dinner. Now all the kids are on their screens inside and their parents are afraid to let them play alone.”

“We are right on the edge of coal country and there are a lot of health issues here.”

Asked about their own health, most described their health as “average” or in accordance with their age. “I’m as healthy as I can be at my age.” Other participants said they struggled to maintain their health, primarily due to chronic conditions. “I have a lot of health issues. I take 31 pills per day.” Participants attributed sedentary activity and poor diet as contributors to feeling unhealthy. Socialization and “activities that engage your mind” were seen by some as an important contributor to health.

“It’s important to get outside and get around people, keep busy.”

“The most exercise I get is walking from my apartment to the elevator.”

Participants are knowledgeable of what constitutes a healthy diet, but the majority of individuals described their diet as unhealthy. The seniors named living alone or “only cooking for one or two” among the top barriers to eating healthy. Most primarily cook with a microwave or eat out. Other barriers to eating healthy were “discipline to not eat unhealthy foods” and the expense of “healthy” foods. Fruits and vegetables were considered “available but expensive.” The region’s agricultural heritage was noted by some as a cornerstone to the “good nutrition we had growing up.” “I eat a lot more processed food now than I ever cooked for my family.”

For some their earlier food culture continues to influence what they eat today. Others have changed their diet because of a chronic condition, particularly diabetes. “I can’t just eat what I used to anymore; I need to watch my sugar.” Many struggle with knowing what foods are “okay to eat.” “It’s hard to know what you’re getting at a restaurant.” Some meet with a nutritionist that provides education and recommendations. Nutrition education and recommendations “to stretch food dollars” were requested by numerous focus group participants.

“Healthy food is expensive. The nutritionist tells me what to eat, but I can’t.”

“I don’t cook as much anymore, we eat out. If you want to eat healthy, you have to cook.”

“I eat frozen vegetables. They’re cheaper, last longer, and they’re just as good as fresh.”

“I know what a healthy meal looks like; it’s eating it that is hard.”

“I would like diabetes education. I just take my insulin. I would like to know what’s new and how I can take better care of myself.”

“My husband was diagnosed with diabetes. We eat healthier now.”

“We need healthy recipes that are easy to make for a single person.”

“We need help to stretch our Social Security dollars to be able to buy healthy foods.”

Participants get health information from a wide variety of sources. The primary sources are healthcare providers and the internet. Other sources include newsletters from the local health system or their health insurance plans, newspaper, TV, AARP, and senior centers. Bulletin boards or newsletters were seen as the best way to communicate health information, but some preferred email or Facebook. “I like having a link I can click on for more information.”

Participants most likely seek information about their health conditions, including signs and symptoms and how to better manage chronic conditions. “I want to know if there is new treatments or something else that could help me.”

Many participants noted the increased communication they received lately from their doctor and hospital. “They call you after your appointment to check in. They asked if I got my prescription and if I had any questions.” “After my recent hospital stay, I got calls from the hospital and my doctor’s office.” These follow up calls were generally appreciated and seen as good practice.

Access to Care

All of the focus group participants had Medicare and about 40% qualified for Medicaid. A few participants experienced being uninsured prior to turning 65 years old, typically when they were in-between jobs. Asked how being uninsured impacted their health, participants stated that they either did not go to the doctor or that they “just paid out-of-pocket.” While many reflected on healthcare “costing a lot less back then,” some still struggled to pay medical bills. A few participants had used free or reduced-cost clinics when they were uninsured and considered them to be an asset to the community.

“If you were uninsured, you just didn’t go to the doctor.”

“You just paid out-of-pocket if you were uninsured. You could afford to back then.”

“I had a baby when I was uninsured. It was a long time ago, so it was only a couple of hundred dollars.”

“When I finally got health insurance and was able to go to the doctor, he told me I had almost all of the risk factors for heart disease.”

Despite all participants having health insurance, some still struggle to afford healthcare costs. “Prescriptions are the toughest.” Some ask their providers to prescribe cheaper, generic prescriptions when possible. Others skip pills or cut pills in half to make them last longer and reduce costs.

Provider Relationships

All of the participants had a regular healthcare provider that they see. About 70-80% have been with their doctor for a long time. Some have needed to change doctors when local practices closed or doctors left. Participants agreed that they want their provider to be close to their home. Most thought 10-20 minutes was acceptable. Negative perceptions increased as distance of providers (both primary care and specialists) increased.

Most chose their primary care provider (PCP) based on reputation and word of mouth from friends or family members. Referrals from another professional or conducting a phone or internet search were also commonly mentioned. Insurance is a key determinant in choosing a provider.

Participants had differing opinions on their preference for the level of their primary care provider. Most went to practices that employed both doctors and advanced practitioners. Fewer had practices with only doctors, which generally had one to three physicians.

About half of the participants prefer to see a physician rather than an advanced practitioner. Experience and education level were top reasons for their preference. Most of those who had seen an advanced practitioner had good experiences. Those that preferred to see advanced practitioners noted “they are more personable,” “more up-to-date on medical practices,” and “easier to reach for follow-up questions.” The majority of attendees that had experience with both physicians and advanced practitioners agreed that within the same practice, they could get an appointment with a nurse or advanced practitioner sooner than with a physician.

“I have a doctor, but I can’t get in to see him. If I want an appointment, it’s with a P.A.”

“I prefer a doctor generally, but the physician assistant can be more on the ball.”

“I would rather see a doctor and have everything taken care of at once.”

“I would rather see a P.A. They explain things to me. The doctor doesn’t have time.”

“If I’m paying for a doctor, I want to see a doctor.”

“It doesn’t matter to me who I see, but I would like to see my PCP once in a while. I have to schedule with him one year in advance.”

The majority of participants have a good relationship with their healthcare provider. Participants described positive attributes as “someone who listens to me,” “asks and answers questions,” and “looks at me while we’re talking.” Participants also named quick service and follow-through as positive characteristics of a PCP office.

“My doctor explains everything to me. I can ask questions.”

“My doctor shakes my hand and smiles.”

Negative perceptions of providers included “he looks at the computer instead of me,” “I feel rushed during the appointment,” and “my doctor is always behind schedule.” Difficulty with scheduling appointments and understanding medical bills also negatively impacts participants’ perceptions of their PCP practice.

“I ask a question, but they’re writing and not listening.”

“I would like to receive an itemized bill that easily shows the fees I am being charged.”

“My doctor tells me he’ll see me in three months, but the schedule isn’t out yet at reception. I have to remember to call back when the schedule is out.”

“The wait for my appointment is terrible. I sometimes wait hours to see my doctor.”

“When I call for an appointment, I’m told nothing is available and to call back later. You have to be your own advocate and assertive.”

All participants have seen or are currently seeing a specialist provider. Participants in the South Central and Northeast regions generally agreed that specialists are available and there are multiple providers to choose from. Participants in the Western and Central regions were more likely to disagree that specialists are readily available, stating they travel to State College or Danville for care. Some rural communities in the Western and Central regions have clinics with specialists that are available one day per month, but appointments are difficult to obtain in a timely manner. Specialty practices that were identified as missing or lacking in the community include, cardiology, dermatology, dentistry, endocrinology, otolaryngology, psychiatry, rheumatology, and urology.

The majority of participants in the focus groups understand the written instructions provided by their doctor. “They are easy to read and in plain English. The prescriptions, too.” Those that navigate the appointment on their own feel most comfortable asking questions if they do not understand something. Many take notes during the appointment or rely on the “after visit printout” for follow-up needs. This group of seniors is more likely to use online resources like myGeisinger for information and to communicate with their providers.

“I’m comfortable asking questions, but many people are not.”

“I use myGeisinger a lot to ask questions.”

“If I don’t understand, I tell them, ‘Please speak English.’”

“My doctor asks me if I understand his instructions. I appreciate it.”

About one-third of participants take someone with them to their medical appointments. Within this group about half prefer to have support to make sure they heard and understand the conversation. Some of these individuals record the conversation and/or have their companion take notes. The other half require a high level of assistance to get to the appointment and need assistance communicating with their provider. Patient advocates were recommended as a way to assist more fragile or elderly patients.

“I take somebody with me. Once I hear bad news, I stop listening.”

“My son takes me to the doctor. I don’t know what they talk about.”

“I take notes. It’s helpful to have something to walk away with from the appointment.”

“We go to the doctor as a couple, one for the appointment and one to listen.”

“I take my dad. Otherwise he wouldn’t tell me what the doctor said.”

Health Behaviors

Nearly all participants have been advised at some point by their healthcare provider to change a health behavior related to diet, exercise, or smoking. “Every time I see my doctor, he tells me to lose weight.” Participants generally feel comfortable talking to their provider about lifestyle changes and view their provider as a trusted source for information. While participants have frequently received pamphlets or printed information, they generally agree that information alone is not enough for many to make a change. “Changing your behavior takes motivation and willpower.” Some participants more readily made changes, while others did not start to change their health behaviors until their daily activities were impacted. “People want to make changes on their terms.” Support groups, follow up from their providers, and support of family and friends were named as ways that helped participants make a behavior change.

“Discipline is hard. I go to the nutritionist and she tries.”

“I can’t make a change overnight; I need to work at it a little at a time.”

“If it’s not broke, I don’t fix it.”

“I’m too old to change what I’m doing now.”

“The doctor gives me instructions, but does anyone follow them?”

“I’m 98. The doctor said I should eat healthy. My son said I should eat anything I want!”

One area where the focus group participants were more likely to follow their providers’ instructions was for health screenings. More than 90 percent of the participants followed their providers’ guidance in receiving recommended health screenings. “The screenings are covered and it’s better to catch it early.” “I get my screening, whether I want to or not.”

Pain and Depression

About 50% of participants have been prescribed pain medication within the past few years by a healthcare provider. Participants said they received instructions on how to properly take their pain medication, most often from their pharmacist. In some cases, participants declined to fill the prescription or stopped taking the medication due to side effects, which were primarily dizziness or drowsiness. These individuals opted for over-the-counter pain medications. Participants were aware of alternative pain therapies such as exercise, but few individuals had tried the therapies.

“I had to cut back on my pain meds, they were too much. I’d rather feel alert.”

“Therapies can be helpful, but insurance only pays for so much and it is a lot of travel and driving.”

When asked about proper disposal of unused medications, the majority of participants stated that they had not received any instructions from their provider or their pharmacist. Some who knew about medication drop boxes at pharmacies and police stations had used these resources, while others flushed leftover medication in the toilet or kept it.

"I had to sign a paper that I wouldn't sell or share my pain medication."

"I received a flyer from Geisinger on where to take my old medications."

Participants said that loneliness, sadness, and depression are common among seniors. Nearly all attendees admitted to having these feelings some times. While participants were generally forthcoming in the focus group about their experiences or observations with depression, groups varied on their comfort level to talk openly about their feelings with their provider, family, or friends. Some groups concurred that they were comfortable talking to their provider about their "state of mind."

"I tell my doctor everything. We talk about it if I'm feeling depressed."

"My doctor asks me if I've been feeling sad or depressed. She wants to know."

"You can tell when someone's feeling down. They stay in their room. We check in on each other."

In more than half of the groups, participants said they were uncomfortable broaching the subject with their healthcare provider or admitting to having issues when asked. Those that avoid talking about feeling depressed gave different reasons.

"I deal with depression myself. I go for a walk, talk to people, or smoke a cigarette."

"My doctor asks me about depression every time I see him, but I wouldn't confide in him. I have friends I will talk to."

"Shame on me if I don't say anything to my doctor, but I need an established relationship."

"We were taught not to talk about our feelings."

"What's the use in talking about it, it doesn't change the situation."

Participants acknowledged that depression and other mental health issues are often not talked about. There is concern over "what people might think" or that "you can't manage on your own" and will "have to go to a nursing home." Others thought that more resources were needed to help seniors with mental health needs.

"Things spread. You have to be careful who you tell."

"We need education to identify conditions and available resources. Our families should be able to recognize changes and approach us."

"We need programs to help with stress management."

"They should post crisis numbers in the elevator and in the newsletter."

Prioritization of Community Health Needs

On February 15, 2018, the Geisinger CHNA Regional Advisory Committee met to review research findings and partner input from the FY2019 Geisinger CHNA. Common themes had emerged throughout the research that were consistent across the Geisinger service area (listing in alphabetical order):

- > Access to Care
- > Aging Services
- > Chronic Disease Management
- > Healthy Lifestyles
- > Maternal and Child Health
- > Mental Healthcare
- > Substance Abuse

In advance of the meeting, individual platform representatives were asked to review data provided to them that outlined specific health issues and health disparities within their hospital service area related to these broad health priorities. Platform representatives were asked to rate the local hospital's ability to respond to each need based on:

1. *Relevance: How well does this need align with our core competencies or mission?*
2. *Effectiveness: Can we have a measureable impact on this issue?*
3. *Feasibility: Do we have resources, capacity, capabilities, support, etc. to address this need?*

At the meeting, platform representatives shared their scoring based on the criteria provided and discussed contributing factors, including ongoing or new initiatives, community partners, and concurrent strategic initiatives related to population health. Common ranking of issues began to emerge across the platforms pertaining to prioritization of substance abuse, access to care, and chronic disease, while differences were identified in regard to maternal and child health, aging services, and mental health.

Each region was reviewed and platform representatives discussed their perspectives from the rating exercise. Each region and individual platform was discussed in depth to consider statistical research and community partner perspectives on the most pressing community health needs in each community.

At the conclusion of the prioritization meeting, the Regional Advisory Committee recommended the following priorities be adopted across the Geisinger service area with regional oversight of Implementation Planning and community benefit activities.

- > **Access to Care**
- > **Behavioral Health (to include substance abuse and mental health strategies)**
- > **Chronic Disease Prevention and Management (with a focus on increasing healthy habits)**

This approach was approved by Geisinger leadership for development of Implementation Planning.

Evaluation of Impact from Prior CHNA Implementation Plan

Background

In FY2016, Geisinger Lewistown Hospital completed a Community Health Needs Assessment and developed a supporting three year Community Health Implementation Plan (CHIP) for FY2017-2019 to address identified health priorities. The strategies implemented to address the health priorities reflect Geisinger’s mission and commitment to improving the health and well-being of the community.

Guided by the findings from the FY2016 CHNA and input from key community stakeholders, Geisinger Lewistown Hospital leadership identified the following priorities for FY2017-2019:

- > Improving access to healthcare
- > Addressing needs related to behavioral health and substance abuse
- > Improving healthy behaviors

FY2017-2019 Evaluation of Impact

Geisinger Lewistown Hospital developed and implemented a plan to address community health needs that leverages resources across the health system and the community. The following section highlights outcomes from the proposed action items.

Improving Access to Healthcare

Action Item 1: Reduce arrival/leave time in the ED.	
Objectives	<ol style="list-style-type: none"> 1. Educate the public on appropriate use of the ED versus urgent care and FQHC sites. 2. Improve EPIC proficiency and efficiency in use of electronic health record information. 3. Renovate current ED space to increase efficiencies.
Anticipated Impact	<ol style="list-style-type: none"> 1. A decrease in wait times. 2. Improved patient experience scores.
Collaborations/ Resources	<ol style="list-style-type: none"> 1. Mifflin Juniata Partners Advancing Tomorrow’s Health (MJ PATH) 2. Primary Health Network (PHN) 3. Human Service Agencies

Program Highlights:

- > In 2016, the hospital worked with a consultant to develop an action plan to improve patient flow and satisfaction in the ED. As a result of the plan, information sheets were developed in collaboration with ED staff and the Patient Advisory Council to provide patient follow-up information and instructions.
- > The ED renovation project was completed in August 2016. The ED is now licensed for 21 beds, an increase from 16 beds. The time that patients spent in the ED waiting to be triaged decreased from 10 minutes in August 2016 to nine minutes in February 2018.

- > In March 2017, a new ED patient liaison/advocate position was developed and hired to assist patients in navigating ED services and follow-up care. Since March 2017, the patient liaison has assisted 422 patients.
- > ED staff coordinated efforts with community behavioral health organizations to streamline care for high-risk patients. An initiative with Juniata Valley Tri-County Drug & Alcohol developed a "friendly hand-off" system to ensure ED patients seen for behavioral health issues received appropriate follow-up treatment. ED staff also fostered a relationship with the Tri-County MH/MR program to improve care for their clients.
- > The hospital provided subsidized ambulance transportation costs for patients meeting specified income qualifications.
- > A scribe program was implemented in October 2017 at the direction of the ED physician to improve entry of patient information into the EHR system. The program has demonstrated a decrease in median length of stay for both admitted and discharged patients.

Action Item 2: Increase number of primary care/behavioral health/dental providers.	
Objectives	<ol style="list-style-type: none"> 1. Partner with Primary Health Network. 2. Implement physician residency program. 3. Continue physician recruitment. 4. Collaborate with the Plain Communities in the Big Valley area.
Anticipated Impact	<ol style="list-style-type: none"> 1. Improved appointment wait times for patients. 2. Fewer patients accessing the ED and urgent care center inappropriately. 3. The development of the Big Valley Medical Center.
Collaborations/ Resources	<ol style="list-style-type: none"> 1. Primary Health Network (PHN) 2. Plain Communities, church leadership 3. Latino churches

Program Highlights:

- > The hospital recruited six primary care providers to the region. The providers serve patients at the Lewistown and Juniata Clinics.
 - o The hospital collaborated with the Family Practice Center (FPC) to improve provider recruitment. The FPC will serve as the Associate Director of the family practice residency program in July 2018.
 - o As of FY2016, Mifflin County has same-day access for primary care services; the hospital will continue to recruit providers to Juniata County to provide similar service.
- > The adult inpatient psychiatric unit is currently staffed by two locum psychiatrists. The hospital is recruiting for two recruited two pediatric behavioral health therapists and additional psychiatrists for the inpatient psychiatric unit.
- > In December 2017, Telederm technology was made available to residents. The program provides access to two advanced practitioners for dermatology services.

- > Geisinger Family Health Associates Big Valley Area Medical Center opened in December 2016 and is now accepting walk-in patients. The practice’s primary care providers include physicians that specialize in family medicine and advanced healthcare practitioners.
- > The Care Redesign Project was implemented in Mifflin and Juniata Counties to improve quality of care and outcomes for patients with comorbidities. The project entails systematic changes to primary care practices to improve the quality, efficiency, and effectiveness of patient care. The goal of the project is to provide 40 minute appointments for patients age 65 or older and decrease the need for follow-up appointments.
- > A mobile dental clinic to provide preventative and restorative services was implemented at a community church in Mifflin and Juniata Counties.
 - o The hospital maintains a list of dental providers, including providers who accept Medical Assistance insurance.

Action Item 3: Address community transportation needs.	
Objectives	1. Enhance and expand the Area Agency on Aging CARS program. 2. Partner with PHN to provide transportation services.
Anticipated Impact	1. An increase in affordable transportation opportunities for the community.
Collaborations/ Resources	1. Primary Health Network (PHN) 2. Regional Services Corporation 3. Area Agency on Aging

Program Highlights:

- > The hospital partnered with the Area Agency on Aging (AAA) to explore additional transportation services for seniors. The hospital also partnered with PHN to explore available transportation options for clients traveling to the hospital for appointments.
- > The hospital provided a letter of support for new regional transportation providers, including a wheel chair van based in Snyder County and Silver Star taxi service. Silver Star taxi service is no longer available.
- > The hospital is exploring opportunities for a collaborative transportation program based on a pilot at Geisinger Medical Center in Danville.

Action Item 4: Ensure patients have a medical home and understand managed care.	
Objectives	1. Identify and connect with other community partners. 2. Partner with PHN, FQHCs, and primary care providers. 3. Partner with local community health workers.
Anticipated Impact	1. Improved outcomes for patients with a chronic disease diagnosis. 2. Increased preventative healthcare use by community members.
Collaborations/ Resources	1. Managed care providers 2. State Health Center

Program Highlights:

- > The hospital implemented a Medical Home Program in partnership with Geisinger Health Plan to focus on preventive health measures for patients in the clinic and hospital settings. The Program builds upon the care redesign initiatives and incorporates several new resources, including a full-time social workers, a Community Health Assistant (CHA), and a full-time medical home assistant. The hospital also embarked on a new home-based care program, Geisinger at Home. The program will include multiple members of the extended care team who will deliver care at home, including extensive therapies not currently available in the traditional setting. Members of the care team include nurses, advanced practitioners, social workers, CHAs, EMTs, and regional physicians to provide oversight.
- > As of January 2016, the hospital and the clinic are part of the Keystone Accountable Care Organization (ACO). The ACO enhances the medical home process by adding resources for Medicare patients, case managers, community health assistants, and care coordination.
- > The COPD Proven Care Initiative was implemented at the hospital for patients with a primary diagnosis of pneumonia or COPD. The program provides care coordination services to patients from the inpatient to the outpatient setting.

Action Item 5: Improve health literacy among patients.	
Objectives	1. Increase literacy among patients by adjusting patient education materials and consent forms to appropriate reading levels. 2. Participate in a system wide committee to review patient education materials and consents to improve patient literacy.
Anticipated Impact	1. Improved patient education for procedure consents and patient understanding of disease management care instructions.
Collaborations/ Resources	1. Hospital staff 2. Director of patient experience

Program Highlights:

- > A system-wide health literacy committee was formed in 2015. The committee meets monthly to review patient education materials and consents with the goal of improving literacy for identified patient populations. In 2016, the committee attended a literacy seminar to include topics related to patient education, train the trainer, and literacy moments for providers.
- > Geisinger implemented new interpretive devices (Stratus) across all hospitals in the system.
- > All hospital patient documents were inventoried for available Spanish translation.
- > A flex pool was created for sign-language and Spanish speaking interpreters. The hospital is exploring opportunities to develop Spanish speaking clinics.
- > A health literacy awareness presentation was provided at the Wellness Grand Rounds in 2017.

Addressing Needs Related to Behavioral Health and Substance Abuse

Action Item 1: Increase access to behavioral health services.	
Objectives	<ol style="list-style-type: none"> 1. Identify and address gaps in behavioral health services. 2. Improve behavioral healthcare coordination among providers. 3. Increase the number of behavioral health providers in the community. 4. Explore the use of telemedicine to address provider shortages.
Anticipated Impact	<ol style="list-style-type: none"> 1. Improved knowledge of community resources. 2. Improved access to behavioral health services. 3. Improved care coordination among health and social services providers.

Program Highlights:

- > The hospital implemented a new program for tracking substance abuse comorbidities among patients with a mental health condition. Nearly 50% of patients admitted to the hospital for a mental health issue have a substance abuse comorbidity.
- > The Department of Psychiatry partnered with substance abuse providers to increase access to care in the region. A partnership was previously established and continued with White Deer Run to provide mobile assessments for inpatient treatment.
- > A grant from The Centers of Excellence for Opioid Addiction was awarded to Geisinger. The state initiative emphasized medication assisted treatment and care management. Funds will be used to expand the number of primary care providers that are certified to administer medication assisted treatment to patients.
- > Mifflin Juniata Path started an opioid community group that provided education and resources to homeless individuals. Geisinger Lewistown Hospital is an active member of Mifflin Juniata Path.
- > A community group in Lewistown donated funds to place medication disposal boxes across Mifflin and Juniata Counties. The boxes were installed at sites in Lewistown and Belleville and will be installed in Mifflintown and Geisinger Lewistown Hospital in 2018. The hospital website was updated to include the locations of the boxes and educational information was provided to staff, pharmacy representatives, and Silver Circle members to increase awareness of the program.
- > Geisinger implemented a medication take-back program in 2015 to include disposal boxes at several retail locations in central and northeast Pennsylvania. Four collection sites have been established within the GLH service area. Between 2015 and May 2018, approximately 236 pounds of unused or expired medicines were collected at the sites.

Action Item 2: Partner with Juniata Valley Tri-County Drug & Alcohol.	
Objectives	1. Identify and address gaps in behavioral health services. 2. Improve behavioral healthcare coordination among providers.
Anticipated Impact	1. Improved knowledge of community resources. 2. Improved care coordination among health and social services providers.

Program Highlights:

- > The hospital initiated a project to gather opioid overdose statistics from the ED and provide monthly reports to Tri-County Drug & Alcohol. Tri-County Drug & Alcohol is working with state authorities to improve access to NARCAN nasal spray by distributing the product to local community groups.
- > The hospital partnered with Juniata Valley Tri-County Drug & Alcohol to provide patient assessments in the GLH psychiatric unit. Tri-County Drug & Alcohol also added a case manager and redesigned its case management model to improve communication with patients and reduce barriers to entering and remaining in treatment. The organizations partnered to address a shortage in rehab beds for psychiatric patients.

Action Item 3: Partner with the evidence based Hub and Spoke model collaborative.	
Objectives	1. Improve social determinants of behavioral health issues. 2. Reduce crime, violence, and victimization in the community. 3. Improve community safety.
Anticipated Impact	1. Increased social service resources for at-risk populations. 2. Safer communities.

Program Highlights:

- > The hospital was an active participant in the Hub and Spoke collaborative, a national model for treating addiction. The collaborative met weekly with human service providers to discuss patient referrals to the program. The Hub and Spoke collaborative disbanded in 2016.
- > The GLH ED Administrative Team Coordinator is an active member in the community drug and alcohol taskforce. The mission of the group is to provide a process by which law enforcement, schools, EMS, and other agencies can refer individuals or families for targeted outreach efforts by a team of human service agencies and systems.

Improving Healthy Behaviors

Action Item 1: Implement a food bank, community wellness project for diabetic patients.	
Objectives	1. Address food insecurity and nutrition among diabetic patients.
Anticipated Impact	1. Improve outcomes for diabetic patients.
Collaborations/ Resources	1. Geisinger Health Plan

Program Highlights:

- > The Fresh Food Farmacy provides free foods that meet the American Diabetes Association's guidelines to food insecure patients and their families as long as the patient attends diabetes educational sessions. The Fresh Food Farmacy is expected to open in Burnham, Pennsylvania at the new Primary Health Network site in fall 2018.
- > A new website for the Farmacy launched in September 2017 to include a new patient/participant manual and outpatient success stories.

Implementation Plan for FY2019-2022

Geisinger Lewistown Hospital developed a comprehensive Implementation Plan to guide community benefit and community health improvement activities during the three year cycle for FY2019-2022. Goals and objectives of the plan are outlined below. The full plan is available on the Geisinger website at <https://www.geisinger.org/about-geisinger/in-our-community/chna>.

Access to Care

Goal: Ensure residents have access to quality, comprehensive health care close to home.

Objectives:

- > Increase the number of residents who have a regular primary care provider
- > Increase access to primary and specialty care physicians practicing within Medically Underserved Areas (MUAs) or Health Professional Shortage Areas (HPSAs)
- > Reduce barriers to receiving care for residents without transportation
- > Promote awareness of available options for assistance to pay for health care needs
- > Foster pursuit of health careers and ongoing training of health professionals
- > Promote partnerships with social service agencies to address socio-economic needs of residents

Behavioral Health Care

Goal: Model best practices to address community behavioral health care needs and promote collaboration among organizations to meet the health and social needs of residents.

Objectives:

- > Advance local and state dialogue to address behavioral health needs
- > Foster integration of behavioral and primary health care
- > Provide education to increase residents' awareness of Behavioral Health issues and reduce stigma associated with behavioral health conditions
- > Increase access to behavioral health services

Chronic Disease Prevention and Management

Goal: Reduce risk factors and premature death attributed to chronic diseases.

Objectives:

- > Encourage community initiatives that support access to and availability of healthy lifestyle choices
- > Initiate early stage interventions for individuals at high risk for chronic disease

Board Approvals and Next Steps

The Geisinger Lewistown Hospital FY2019 CHNA final report was reviewed and approved by the Geisinger Health Affiliate Boards on June 20, 2018 and the Geisinger Health Board of Directors on June 21, 2018. Following the Boards' approval, all CHNA reports were made available to the public via the Geisinger website at <https://www.geisinger.org/about-geisinger/in-our-community/chna>.

For nearly a century Geisinger has provided superior health care services to the communities we serve in northeast and central Pennsylvania. We are proud of our non-profit mission and work every day to ensure we meet the health care needs of the region, now and for years to come.

Appendix A: Public Health Secondary Data References

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Appendix B: Key Informants

A key informant survey was conducted with 47 community representatives. The organizations represented by key informants, and their respective role/title, included:

Key Informant Organization	Key Informant Title/Role
Advantage Home Health Services, LLC	Chief Executive Officer
Allied Services	VP Home Care Services
Alzheimer's Association	Vice President
Central Pennsylvania Food Bank	Health Innovations Coordinator
Centre Crest	Business Development Specialist/Admissions
CommunityAction	Administrative Assistant/ Receptionist
Central Susquehanna Intermediate Unit	WATCH Academic Specialist
Downtown Lewistown, Inc.	Executive Director
East Kishacoquillas Presbyterian Church	Pastor
Elmcroft Senior Living	Director of Business Development
Families United Network Inc.	Resource Family Specialist
Geisinger	Director, Patient Liaisons and Interpretive Services
Geisinger	Manager
Geisinger	AVP, Informatics
Geisinger	Senior Director Clinical Nutrition
Geisinger	Directory of Ambulatory Care Gaps & Best Practice
Geisinger	Systems Analyst
Geisinger	Director
Geisinger	Director, Corporate Communications
Geisinger Holy Spirit	Operations Manager
Geisinger Jersey Shore Hospital	RN, Employee Health, Cardiopulmonary, Infection Prevention and Control
Geisinger Lewistown Hospital	Chief Administrative Officer
Geisinger Lewistown Hospital	Community Advisory Board Member
Geisinger Medical Center	Manager, Vascular Services
Geisinger, CPIO	Research Project Manager/ Med Take Back
Juniata Valley Tri-Co Drug and Alcohol	Prevention Specialist
LUMINA Center	Director
Mifflin County Academy of Science and Technology	Administrative Director
Mifflin County Commissioners' Office	Commissioner
Mifflin County Library	Library Director
Mifflin-Juniata Career and Technology Center	Coordinator
Mifflin Juniata Human Services Department	Human Services Director
Mifflin Juniata Regional Services and Affiliates (MJCARS and MJAAA)	Executive Director
NuVisions Center	President/CEO

Key Informant Organization	Key Informant Title/Role
NuVisions Center	Administrative Assistant/Community Service Manager
Oliver Township	Secretary/Treasurer
PA Psychiatric Leadership Council	Senior Consultant
Penn State Extension	Senior Extension Educator/Registered Dietitian
Primary Health Network	Regional Director
Primary Health Network	Outreach
Shelter Service, Inc.	Executive Director
SUM Child Development, Inc.	Enrollment and Outreach Manager
The Sentinel, Lewistown	Publisher
TIU #11 Juniata County Head Start/Early Head Start	RN/Health Manager
Universal Community Behavioral Health - Crisis	Mobile Crisis Coordinator
Universal Community Behavioral Health - Crisis	Mobile Crisis Coordinator
United Way of Mifflin-Juniata	Success By 6 Coordinator

Appendix C: Partner Forum Participants

One partner forum was conducted with 38 community representatives. The participants and their respective organization, included:

Partner Forum Participants	Organization
Lisa Baumann	Geisinger Health Plan
Brenda Benner	Perry County
Belinda Black	UCBH - Crisis
Valerie Bulick	Locust Grove
Eileen Burke	Geisinger Health Plan
Patty Davis	Primary Health Network
Oksana DeArment	United Way
Mary Ann Demi	Mifflin-Juniata Regional Services
Joni Fegan	Geisinger Holy Spirit
Allison Fisher	Mifflin/Juniata Human Services Department
Kirk Gilbert	Penn State Extension
Leslie Goss	Mifflin Juniata PATH
Shelly Grassmyer	PA Department of Health
AJ Hartsock	GCH
Bob Henry	Juniata Valley Behavioral and Developmental Services
Dana Keeler	Centre Crest
Martha Leister	Tri-County Drug and Alcohol Abuse Commission
Katie Leister	United Way of Mifflin-Juniata
Wendy Melius	Center for Community Action
Susan Michalik	Mid Penn Legal
Phyllis Mitchell	Geisinger
Natalie Mochak	WIC
Marie Mulvihill	Primary Health Network
Robert Postal	Mifflin County
Lanette Potutschnig	Mifflin County
Deshaun Richards	Geisinger
Dawn Rosenbaum	Geisinger West Campus
Helen Sangrey	Penn State Extension
Faithe Soles	Elmcroft
Jennifer Stubbs	Community Care
Cindy Sunderland	Call a Ride Service
Erin Thompson	Lewistown Sentinel
Stacey Tice	Center for Community Action
Kirk Thomas	Lewistown Hospital
Maria Welch	Geisinger Health Plan
Mary Wolfe	PA Liquor Control
Cristy Yoders	Success by 6/United Way
Jim Zubler	Downtown Lewistown, Inc.

Appendix D: Existing Community Assets to Address Community Health Needs

The following community assets and potential partners in addressing priority health needs were identified during the CHNA.

- > Advantage Home Health Services, LLC
- > Alzheimer's Association
- > Area Agency on Aging
- > Brighter Visions Counseling
- > Call a Ride Services (CARS)
- > Case Management (UCBH, SAM, Northwestern High School)
- > Center for Community Action
- > Central Pennsylvania Food Bank
- > Central Susquehanna Intermediate Unit
- > Centre Crest
- > Chronic Disease Programs
- > Churches
- > Clear Concepts Counseling
- > Community Care
- > Community Services Group Mental Health Psychiatric Rehabilitation
- > Congregate and Home Delivered Meals
- > Crossroads Pregnancy
- > Downtown Lewistown, Inc.
- > East Kishacoquillas Presbyterian Church
- > Elmcroft Senior Living
- > Enlighten Psychiatric Services
- > Families United Network, Inc.
- > Federally Qualified Health Centers
- > Geisinger Center for Pharmacy Innovation and Outcomes
- > Geisinger Health Plan
- > Geisinger Holy Spirit
- > Geisinger Jersey Shore Hospital
- > Geisinger Lewistown Hospital
- > Geisinger Medical Center
- > Healthy Families America
- > Jewish Family Service of Northeastern Pennsylvania
- > Juniata County United Church of God/Food Pantry
- > Juniata County Head Start/Early Head Start
- > Juniata Valley Behavioral and Developmental Services
- > Juniata Valley Tri-County Drug & Alcohol Abuse Commission
- > Kish Apartments
- > Lewistown Community Health Center
- > Lewistown Dental Center
- > Lewistown Presbyterian Church
- > Lewistown Sentinel
- > Locust Grove

- > LUMINA Center
- > Meals on Wheels
- > Medication Therapy Disease Management Clinics
- > Mid Penn Legal
- > Mifflin County Academy of Science and Technology
- > Mifflin County Commissioners' Office
- > Mifflin County Library
- > Mifflin-Juniata Human Services Department
- > Mifflin-Juniata PATH
- > Mifflin-Juniata Regional Services and Affiliates (MJCARS and MJAAA)
- > Mifflin-Juniata Career and Technology Center
- > Mifflin-Juniata Regional Services
- > Mountaintop Area Medical Center
- > NuVisions Center
- > PA 211
- > PA Department of Health
- > PA Liquor Control
- > PA Psychiatric Leadership Council
- > Penn State Extension
- > Pennsylvania Psychiatric Leadership Council
- > Perry County
- > Physical Therapy Providers
- > Primary Health Network
- > Pyramid Healthcare
- > Quick Logics
- > Recreational Parks/Outdoor Trails
- > School Districts
- > Senior Centers
- > Shelter Service, Inc.
- > Silver Sneakers
- > Smoking cessation online tools
- > Solutionz (psychiatry)
- > Success by 6/United Way
- > SUM Child Development, Inc.
- > Telephone and Mobile Crisis Units
- > The ReDCo Group
- > TIU #11 Juniata County Head Start/Early Head Start
- > Trinity United Methodist Church
- > United Way of Mifflin-Juniata
- > Universal Community Behavioral Health - Crisis
- > WIC
- > YMCA